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Medical

Some Observations

CONCERNING WHAT IS CALLED

NEURASTHENIA.

By SIR A. CLARK, BART., M.D., LL.D., F.R.S.,
PHYSICIAN TO THE LONDON HOSPITAL.

WINNING its way in the face of a just but feeble opposition to general acceptance, the term Neurasthenia is at last to be found heading a chapter in almost every one of our systematic and clinical works. The state or assemblage of related and unrelated symptoms to which this name is given has been more or less fully recognised and described by every competent observer and writer from the days of Cheyne and Whytt until now; and in general works or in special monographs under such designations as the English malady, mimosis inquieta, the nervous state, nervous erethism, and others mentioned below,[1] there are to be found descriptions of it as clear, comprehensive, accurate, and distinctive as any that occur in the work of Dr. Beard on American Nervousness and Neurasthenia. For what good purpose, then, this term has been proposed, accepted, and employed I am unable to discover; and regarding it as at once vicious, inaccurate, and therapeutically misleading, I purpose submitting it to a brief critical examination.

The word "neurasthenia" means, on the face of it, nervous exhaustion; and applied to a certain assemblage and progression of symptoms, it further means that the whole and sole cause of them is to be found in this alleged exhaustion. Now this theory may be accurate or inaccurate; it may be good or bad; it may help or it may hinder the growth and use of knowledge; but in any case the employment of it in naming, and the introduction of it into a term whereby a given group of phenomena is hereafter to be known, violates a fundamental canon in the framing of a scientific nomenclature, and is, in the order of science, an unpardonable sin. For, however some may boast, there is not yet before us conclusive historical evidence of the finality of any theories. The highest, widest, and best of them are soon refuted, displaced, absorbed. Incorporated into terms applied to permanently recurring phenomena, they continue to suggest explanations when they have long ceased to have their place and use; they beget confusion; they originate and disseminate error; they make difficult, and at length impossible, the profitable discussion of ideas; and they do not merely hinder, they also throw back, the progress of true knowledge. It becomes, therefore, the plain and paramount duty of every observer and writer proceeding to name a distinctive group of closely related phenomena to avoid, in the naming, hypothetical explanations, and out of one or more of its exclusively physical qualities to frame the term by which the group is for the future to be known. In naming after this rule, the name given will remain, whilst the theories of the thing named will pass away; and thus, whilst keeping clear the various avenues to knowledge, and making plain the ideas requiring to be discussed, we shall also be giving loyal obedience to one of the supreme commandments of science. But the term "neurasthenia" as now employed is vicious not only in its scientific but likewise in its clinical relations, and it has multiplied the errors inseparable from the imperfect knowledge of earlier writers. It is in its nature defined to be an "impoverishment of nerve force resulting from imperfect metamorphosis of nerve tissue," and elsewhere as "deficient quantity and impaired quality of nerve force."[2] Now, setting aside questions of quality, for variations of which we have as yet no certain criteria, it is not to be doubted that such a state of "nervous debility" does exist; it is not to be doubted that when existing it will make itself manifest by more or less characteristic symptoms; and it cannot be denied that if those symptoms, due exclusively to mere defects of nerve force, were critically selected and arranged, they would constitute a group of nerve symptoms to which the term "neurasthenia" might be fairly, but, according to our canon, unscientifically applied. This, however, is exactly what has not been done, and what there is at present, I fear, small prospect that anyone will do.

When the symptoms set forth as characteristic of neurasthenia are carefully examined, it will be seen that they constitute an assemblage of incoherent indications of disorder borrowed more or less freely from inchoate forms of insanity, and from almost every disease of the nervous system; that they are not characteristic of any definite disorder; that divisions of them belong to disorders the most diverse; that no common law of treatment can be safely applied to them; and that, published with some parade as coherent and conclusive evidences of a state of "nervous debility," they exhibit defects of observing, reflecting, and critical powers unpardonable in those who court or claim the attention of the profession. But hidden within the signs described as characteristic of neurasthenia, and concealed under such terms as astraphobia, topophobia, agorophobia, claustrophobia, anthropophobia, monophobia, photophobia, mysophobia, pantophobia, and the like, there are symptoms, various but related, which anyone with sufficient experience and competent faculties of observation and critical analysis can easily discover, arrange into a well-defined group, and present to clinical medicine under the justifiable name of mere and shere nervousness. All persons exhibiting this group of symptoms have a tolerably uniform natural history, possess what is understood as the nervous temperament, and are said by members of our profession, as well as by the general public, to be sufferers from nervous debility. But it is more than doubtful if weakness, used in its ordinary meaning, is the sole or the chief characteristic of sufferers from nervousness. For the most part they present the appearances of health. Always excitable and sometimes depressed, they are often animated and joyous; procrastinating, fragmentary, and inconstant, there are, nevertheless, to be found among them the greatest workers of the times; talking occasionally for hours without fatigue, they are sometimes silent and grave; for the most part fastidious, refined, and cultivated, they fall occasionally under the dominion of sensuousness and the lower emotions; habitually tormented by a physical self-consciousness, they can yet efface themselves in their devotion to others; disposed to the flesh and the world, they often attain the greatest heights of the spiritual life; always ailing, they are seldom ill; often condemned to premature death, they live, as a rule, long beyond the average duration of life; and regarded by the hard, stolid, and superficial with feelings akin to contempt, it is nevertheless from them, far more than from any other class of persons, healthy or disordered, that we get all that is truest and highest, best and noblest, in science or letters, in art or song.

Such are some of the more prominent external characteristics of sufferers from nervousness. What the intimate nature of it may be, the present conditions and limitations of knowledge do not permit us to know; but I think myself on safe ground when I say that it cannot be a mere weakness of the nervous system.

If we engage in a critical study of the symptoms of nervousness with the view of coming to a nearer and clearer understanding than we now have of its nature, we must inquire into its internal characteristics and endeavour to discover among them what may be called the proximate constituents of that state of which nervousness is the main external expression. I say here, of set purpose, "the main external expression"; for doubtless the state expressing itself in nervousness has—through nutrition, secretion, and many dynamic conditions—manifold expressions of its presence which are neither comprehended nor considered among its ordinary symptoms. It is not within the scope or purpose of these remarks to supply an exhaustive and accurate statement of the proximate conditions of nervousness; but in order to make plain my meaning of at least one of the things needed for the further elucidation of this subject, I shall set down, just as they occur to me, the chief dynamic nerve states which, combined in various ways and degrees at different times, give rise to the symptoms of nervousness:—

1. A too rapid production and expenditure, together with an irregular distribution, of nerve force.

2. An abnormal sensitiveness and freedom of communica-

[1] In the second edition of Axenfeld the following terms are given as synonyms of neurasthenia: Cachexie nerveuse; maux de nerfs; diathèse nerveuse; marasme nerveuse; vapeurs; surexcitation nerveuse; nevrose proteiforme; faiblesse irritable du syatême nerveux; fièvre nerveuse; hyperthésie générale; neuralgie générale; neuropathie aiguë cérébro-pneumogastrique; nervosite neuroespasmie; nervosisme; état nerveux; maladie nerveuse. [2] Beard.

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tion throughout the whole nervous system, but chiefly in the basal ganglia, and in the parts below them.

3. An unstable equilibrium of the whole nervous system, especially excessive in the vaso-motor centres, whereby are brought about, in nervousness, the flushings, blushings, and pallor of tissues and organs.

4. Disturbances of the general regulatory or special inhibitory powers, arising, independently of localised nerve-centres, through mere augmentation, defect, or interference with each other of automatic or reflex nerve-discharges.

5. A recurring state of more or less intense physical self-consciousness, through which there come within the cognisance of the organism certain of its own states, disorders, and actions, which lie far beyond the ordinary area of the consciousness of average persons.

I have alleged that this term "neurasthenia" is therapeutically misleading, and I shall now endeavour to make good the allegation. If it be true—and, for my part, doubt is impossible—that under the term "neurasthenia" no clear, definite, and distinctive account is given of true nervous exhaustion; that the descriptions of neurasthenia, as written in books, are composed of symptoms of the most diverse diseases and disorders artificially framed into an incoherent whole; and that in this heterogeneous mob of symptoms we can discover at least one group, not mainly asthenic, but the reverse, sufficiently distinctive in its characters, course, and issues to warrant the bestowal of a separate name,—then there is no further need of argument to show that for such an assemblage of symptoms no single method of treatment can be rationally designed or even safely applied.

In the treatment of dynamic nerve disorders two great plans of treatment are pursued. The one consists of change of surroundings, separation from friends, abundant feeding, rest in bed, and massage; the other consists essentially in discontinuance of business, generous living, distraction, and travel. Each plan has its own group of suitable cases, and each can boast of its own successes, often brilliant, although often temporary. But there is one group of cases, the cases of mere and sheer nervousness, to which, in general, neither of these plans can be successfully or safely applied. One or the other failing, and too long followed, brings about on occasions, frequent enough to demand serious consideration, mental and moral disasters which are now and then irreparable.

In cases of mere nervousness unaccompanied by any conclusive objective evidence of weakness, the plan of treatment which empirical experience has shown to be the safest and the most successful differs widely from the other plans, is difficult to follow, and provokes the antagonism of the patient's friends, who are usually constrained by some fatal necessity to destroy those whom they love. It consists in placing the patient in the physiological conditions most favourable to the general health; in a simple but liberal mixed dietary, arranged in three daily meals; in an extremely moderate use of, or abstinence from, tea, coffee, tobacco, and alcohol; in cold or tepid sponging and warm clothing; in promoting without unduly stimulating the excretory organs; in full, regular daily purposive necessary work; in self-effacement and the repression of every form of physical self-consciousness; in cultivating the exercise and control of the will; and in encouraging, or even urging, the patient to do with his might and without fear whatsoever has fallen to his hand to do. By the following of some such plan as this, difficult and painful at first, but easy and pleasant at last, the sufferings of nervousness will be in most cases removed, and the sufferers, by their discipline, will be lifted to a higher level of physical and moral life.

Returning to my immediate purpose, I sum up these observations in saying that the term "neurasthenia" is unscientific, inaccurate, and misleading; that the descriptions given of it do not include a clear, concise, or distinctive account of genuine nerve exhaustion, and do include a mob of incoherent symptoms borrowed from the most diverse disorders; that for a malady thus constituted and containing antagonistic conditions, no rational principles of treatment are possible; that in the heterogeneous assemblage of disordered states ascribed to neurasthenia, there may be discovered a group of coherent and distinctive symptoms arising out of mere and sheer nervousness; that the general treatment proposed for neurasthenia and applied to this group of cases would prove probably unsuccessful and possibly disastrous; and that for the purely nervous cases as I have described them the most successful treatment, and also the highest, consists of diet and discipline, work and will. For even a delicate organism, the fullest regulated discharge of all its functions is the cardinal condition of its highest life.

ABSTRACT OF A

Clinical Lecture

ON

EXCISION OF THE KNEE-JOINT.

By A. F. McGILL, F.R.C.S.,

PROFESSOR OF ANATOMY IN THE YORKSHIRE COLLEGE, SURGEON TO THE LEEDS GENERAL INFIRMARY.

THE operation of excision of the knee is one which has only been recognised as a legitimate surgical procedure in comparatively recent years. Indeed, at the present time there are surgeons who object to it and do not practise it. It was performed for the first time a hundred years ago, but was entirely neglected till revived by Fergusson and Syme. The results at first obtained were not highly satisfactory, and the operation was condemned by many of the leaders of the profession. The fact that it was condemned by many distinguished members of the surgical world would naturally be very satisfactory to those who introduced it; for it is a remarkable fact that few notable improvements are introduced into surgical procedure without meeting with violent opposition from many of the most distinguished among us. Examples of this are not far to seek. The introduction of the ligature by Paré as a means of arresting hæmorrhage, in place of the barbarous cautery iron or boiling oil, was condemned by his more distinguished *confrères*, and was not generally practised till many years after his death. It might, however, be supposed that things are better now than in the sixteenth century, but we find the same thing still going on. The introducers of ovariotomy were threatened with prosecution for manslaughter, and yet the operation is one of the most successful practised in surgery. Antiseptic surgery has revolutionised surgery and has saved innumerable lives, and yet many surgeons now living objected to its introduction and derided the principles on which it rests; and within the last year one of the leading metropolitan Medical Societies has excluded from its Transactions a most valuable paper advocating the adoption of a new plan of treatment for uterine fibroma by means of an operation which gives every promise of success.

It is usual to consider excision of the knee from two points of view—the mortality which accompanies it, and the utility of the resulting limb. Though at one time it was seriously argued that the limb with an excised knee was in no way superior to an artificial or peg-leg fitted on to the stump of an amputated thigh, it is now unnecessary to discuss this subject. We have all had many opportunities of seeing patients with excised knees walking with a scarcely perceptible limp, the necessary ankylosis being the only respect in which the one leg was inferior to the other. We may therefore dismiss this part of the subject, and proceed to consider the mortality and danger of the operation. Statistics show that in its early days the death-rate after excision of the knee was far from satisfactory. Swain in 1869, collected particulars of 472 cases, and found that 116 died, a death-rate of 24·5 per cent. But it must be recollected that at that time all operative results were inferior to those met with at the present time. Since the new Leeds Infirmary was opened, in 1869, the operation has been performed 116 times. In the old infirmary ten cases only are recorded, with one death; but of the remaining nine two were amputations. Of the 116 cases eight died, a mortality of 6·9 per cent. This result is good, but if we take the last five years from the beginning of 1881 to the present time, we find there have been sixty-three cases with only two deaths, a mortality of only 3 per cent. One of the fatal cases occurred in a man who died at the end of a month from acute inflammation supervening in lungs already diseased, and containing small cavities of long standing; in this case the excision wound was almost healed. The other died of septicæmia, but the case was not

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an ordinary one, as the operation was performed for compound fracture into the knee-joint some time after the receipt of the injury; his general condition was unsatisfactory when the operation was performed; he did not improve after it; amputation was then resorted to, and death was the result. It might fairly be argued that in neither of these cases could death be fairly attributed to the operation, and we should then have sixty-one successive successful cases. But reckoning the mortality at 3 per cent., the result must be considered extremely satisfactory. It is only fair, however, to add that 10 per cent. of the cases failed as far as preservation of the limb was concerned; the limbs in these were amputated; but, with the exception of the case mentioned above, the second operation was successful in every instance.

[After describing the various methods which had been adopted in the performance of the operation, the lecturer proceeded to summarise the various steps of the operation, as follows.]

1. The incision is best made in a straight line from the posterior border of one condyle to a corresponding point on the opposite side over the centre of the patella, the joint being opened by dividing the bone with the saw, and removing the two portions separately. The advantages of this incision are that it enables the superior cul-de-sac of the synovial cavity to be thoroughly explored, that it facilitates the firm fixture of the limb on a splint, and that it makes the skin wound as small as possible. 2. The section of the bones must be made so that they will accurately fit when brought into apposition. This is best done by holding first the thigh and then the leg in a vertical position, exactly at right angles to the operation table, the saw being applied horizontally. It is found much easier to make the sections in this position than to hold the limb obliquely and trust to the eye for direction. 3. The whole of the diseased structures must be removed—all diseased pulpy synovial membrane by excision or scraping, all granulation tissue in sinuses by scraping, and all diseased bone with the gouge. It is specially needful that the superior cul-de-sac of the synovial pouch be thoroughly explored, as if this is not done secondary abscesses not unfrequently form in this position and give rise to much trouble. The thorough performance of this step of the operation is absolutely necessary if union by the first intention is desired. 4. The femur and tibia are sutured together, holes are made with a gimlet on each side of both bones, and a double thickness of No. 3 catgut passed through them and firmly tied. The catgut answers as well as wire, and does not require to be removed. 5. A drainage-tube is inserted on each side of the wound and brought out at the angles of the wound, or, if necessary, at more dependant openings specially made. Sutures are inserted to bring the edges of the skin wound into apposition, and the wound, being thoroughly irrigated with a 1·05 per cent. solution of corrosive sublimate, is dressed with dry antiseptic dressing. At the Leeds Infirmary salicylic silk or cotton-wool, and a large amount of iodoform, are generally adopted for this purpose.

The operation being thus completed, it is necessary to apply a splint, so that perfect rest may be ensured. Large numbers of appliances have been used for this purpose, many of them—as, for example, Fergusson's excision splint—being heavy and unwieldy. It is well to remember that it is always better to apply a splint to a limb than to apply the limb to a splint. In other words, the lighter the splint the better. In these cases nothing answers better than a piece of Gooch's splinting, cut out to fit the limb, and extending from the trochanter to the ankle. This, firmly applied with [illegible] down the thigh and up the leg to within an inch and a half or two inches of the wound, keeps the limb in perfect rest, and enables the patient to be moved, or, after a few days, to move himself about in bed without difficulty or discomfort. A large pad of [illegible] dressing being applied over all, the first dressing is complete. The question when the first dressing should [illegible] is next discussed. Should the limb be disturbed on the fourth or fifth day, and the dressings changed, and the drainage-tubes removed? or is it better to delay the first dressing for three weeks or a month? Cases were quoted [illegible] either proceeding may yield satisfactory [illegible] patients lately under treatment had not been [illegible] more than three weeks, and their wounds were [illegible] when the next dressing was applied three [illegible] in two other cases a thorough change, necessitated by the copiousness of the discharges, was made on the fourth day; in these cases also complete union was established without further change. We must be guided by the amount of discharge and the condition of the temperature, but in the majority of cases one early dressing seems to be advantageous, making the patient more comfortable and diminishing the risk of septic infection of the wound.

As regards the treatment of any particular case there are four courses open to us—non-operative treatment, erasion or arthrectomy, excision, and amputation. Amputation is required when the general condition of the patient is such as to render any minor proceeding inadmissible, when the patient is suffering from some organic lesion distinct from the local affection, or when, owing to the local affection, the temperature is much elevated. We are also occasionally driven to amputation in cases where there is extensive disease of the bones accompanying the joint mischief, or when the tibia is so far dislocated as to render it impossible to restore the limb to a straight position. The question between excision and time can only be answered by considering the various peculiarities of each individual case. It is generally stated that excision is a procedure more adapted for poor hospital patients than their richer brethren. It is no doubt true that many cases of joint disease, if favourably situated, will after months, or more frequently years, recover with a stiff limb, but even then they are no better off than the patient with the excised joint, who has recovered in a comparatively short time. In all cases, when, after a few months' treatment by the usual methods, no signs of amendment appear, operation should be recommended. The only question is whether the operation should be excision or erasion. Experience of the last operation on a large scale is as yet wanting, but it seems not improbable that in a few years many cases which are now excised will be erased, and that patients thus treated will recover with a slightly movable joint. Fortunately, the first step of the operation is the same in both cases, consequently the surgeon need not determine which procedure he will adopt until he has carefully examined the condition of the various tissues which form the joint. Should the disease be extensive, he will excise; should it be more limited and chiefly confined to the synovial membrane, he will erase. In this latter case the two fragments of the patella must be united by suture.

ABSTRACTS OF THE

Brown Lectures,

DELIVERED AT THE

UNIVERSITY OF LONDON,

BY VICTOR HORSLEY, M.B., B.S., F.R.C.S.,

PROFESSOR SUPERINTENDENT OF THE BROWN INSTITUTE, ASSISTANT SURGEON TO UNIVERSITY COLLEGE HOSPITAL.

LECTURE I.

RELATION OF THE THYROID GLAND TO GENERAL NUTRITION.

THE essential cause of myxœdema and cretinism had been shown last year by Horsley to be loss of the thyroid gland. He assigns the following functions to the thyroid gland: (1) regulation of the metabolism of mucinoid albumen by restoring certain waste products; (2) hæmapoiesis. The latter function is probably dependent on the presence of tissue like that contained in the spleen; the occurrence of anæmia after removal of the thyroid gland is sufficient proof of the hæmapoietic function. Examination of the blood from the superior thyroid artery and corresponding vein also showed that the vein contained 7 per cent. more red blood-corpuscles than the artery. The symptoms that follow removal of the thyroid body were discussed in three stages. The first, a *neurotic* stage, was characterised by the occurrence of a constant tremor having a definite rate of eight per second. To this constant tremor were subsequently added paroxysmal convulsions, contracture, and functional paralysis. Apparently young animals do not survive this stage, but succumb from failure of the cardiac and respiratory centres in the medulla oblongata. The duration of the first stage was variable; in dogs it lasted

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generally a week, in monkeys from two to three weeks. The second or *mucinoid* stage is marked by the deposition of mucin in the tissues and blood. The mental symptoms continue into this stage, the animals becoming imbecile, but the motor symptoms usually cease. This stage was only seen in perfection in monkeys. Since last year Mr. Horsley has found a most important determining factor in the survival of thyroidectomy by adult animals, and that is the employment of heat. By keeping the animals at an artificial high temperature Mr. Horsley has succeeded in prolonging the existence of the monkeys. With longer life they, however, become emaciated, losing their excess of mucin, and ultimately die of general failure, especially of the lower visceral centres. The third stage is therefore termed the *atrophic* or *marasmic* period. It is in a similar way that cretins appear to die if not carried off by some intercurrent disorder. This novel prolongation of life gives a close resemblance to cretinism. An autopsy by Bruno of a case of cachexia strumipriva failed to reveal any sign of mucoid degeneration, and Mr. Horsley suggests that this case had lived through the mucinoid period. In this connexion it is also well to remember that in some cases of myxœdema no great excess of mucin is found in the tissues after death.

Recognising to the full, as the lecturer does, the important part that the thyroid gland plays in the metabolism of the body, he adduces strong arguments to show that the symptoms of mere senility may be accounted for by loss of the functions of the thyroid body. Some men, he suggests, enjoy a "green" old age because their thyroid glands are in good working order. This suggestion is led up to by the fact that age exercises a great influence on the occurrence of symptoms after the removal of the thyroid body. In old dogs, removal merely leads to indolence and incapacity; whereas at the other extreme of life removal causes symptoms of violent sort, often terminating in rapid death. Age, therefore, is of the utmost importance. In old age the thyroid gland degenerates, there is an overgrowth of connective tissue, with fatty and pigmentary degeneration of the epithelia, and concentration with pigmentatory alteration of the contents of the vesicles. In myxœdema, Mr. Horsley states that there is a rapidly progressing form of the same atrophic cirrhosis that more gradually obliterates the glandular tissue in old age. As the question is almost purely one of loss of nutrition, it is plain that the previous state of nutrition as well as age must have some share in the production of symptoms. Cold, which has a marked depressant action in nutrition, takes a prominent place in the development of symptoms after the removal of the thyroid gland. Starvation and previous illnesses, and other like causes, damaging the general health and nutrition, must also be taken into consideration. As to the cause of the cirrhosis of the thyroid gland we know nothing, except the suggestion of Dr. Hughlings Jackson that it is dependent on disease of nerve nuclei of the floor of the fourth ventricle.

During the past year animals have been kept after operation at an average temperature of 90° F., and directly symptoms appeared the animal was put into a hot-air bath at a temperature of 105° F. The results of these experiments are very striking. The animals in this new series survive the operation four, five, and six months, whereas before they only lived as many weeks. Next to this increased longevity thus attained, the most noteworthy fact is the suppression of the leading symptoms of the first two stages, and especially of the first. The interval that elapses between the operation and the appearance of the first symptom was also increased; in the former series it was four days, and in the new series it was ten or more days. The beneficial effect of the hot-air bath in myxœdema is due to the influence of warmth in maintaining nutrition, and not to any action on the cutaneous secretions. The precise *modus operandi* of heat is a point for discussion. Mr. Horsley suggests that it spares the forces of the organism by preventing excessive loss; it is simply a saving of heat. In animals kept at a high temperature the mucous glands and parotid glands do not take on excessive action, this being the opposite of what was observed last year; a proof that the action of the heat is to modify powerfully the nature of the degenerative metabolic processes. Anæmia and wasting are the chief symptoms observed in the cases of artificial myxœdema treated by heat. The most delicate tissues feel the metabolic derangement most severely, and so rapid degeneration of the cells of the anterior horns of the spinal cord is observed; it was seen chiefly in the outer groups of cells. All stages of degeneration of the corpuscles could be traced. It is probable that the tissues of the female are more predisposed to degenerative errors of metabolism than those of the male. The relation of the thyroid gland to the uterus is witnessed during the catamenia and during pregnancy; this increased excitability probably renders it more liable to disease. Hence the greater liability of women to suffer from myxœdema.

Classification of the Symptoms that follow Loss of the Function of the Thyroid Gland.

Stages.	Duration.	Symptoms.	Remarks.
I. Neurotic.	One to two weeks in dogs; one to three weeks in monkeys.	Tremors, rigidity, dyspnœa.	Young dogs and monkeys alike die in this stage.
II. Mucinoid.	Half to one week in dogs; three to seven weeks in monkeys.	Commencing hebetude and mucinoid degeneration of connective tissues.	Dogs survive only to the beginning of this stage; monkeys die at the end, if not treated.
III. Atrophic.	Five to eight weeks in monkeys.	Complete imbecility and atrophy of all tissues, especially muscles.	Monkeys survive according to the temperature of the air-bath.

LECTURE II.

MODERN PATHOLOGY OF THE CENTRAL NERVOUS SYSTEM.

The "motor" region of the cortex is connected with other parts of the cortex by commissural fibres. Mérique has divided these without injuring the pyramidal tracts; the cortical centres thus isolated remained inactive for the reason that they received no afferent impulses to transmute into efferent energy. Schiff has taught that the posterior columns of the spinal cord are conductors of tactile sensation direct to the excitable area in the cortex; but Mr. Horsley shows that the results obtained by Schiff are to be explained by the injury that is unavoidably done to the motor tracts in the spinal cord. In other words, section of one posterior column does not by itself produce complete ataxia, does not produce the paretic position of the foot described by Schiff, and does not produce tactile anæsthesia of the same side. The view of Schiff and Munk that the so-called "motor" area is in reality a sensory one is therefore not supported by experiments, of which the results have been above given.

The fundamental rate of nervous discharge in nerve-centres, the mode of discharge from stimulated cortical motor centres, and the nature of the muscular contractions that follow stimulation of the cortex, corona radiata, and spinal cord were the next three subjects under discussion. In stimulation of the cortical centre of the muscle the following facts are observed: 1. A period of latency of varying length. 2. Tetanus followed by relaxation when the stimulus is shut off. There may also be seen with greater or less distinctness waves on the tetanic curve and further similar waves on the line of descent, and finally clonic spasms of gradually diminishing rate but increasing amplitude follow the tetanic stage; in fact, from the normal cortex it is possible to excite a typical epileptic seizure.

A more intense current is required to stimulate the exposed corona radiata so as to cause contraction in the muscle; the latent period is, however, shorter; the muscle rapidly passes into complete tetanic spasm, and the moment the current is shut off the lever falls to the base line. No epileptoid spasms follow, and it is exceedingly rare to observe any waves on the tetanic curve of the corona radiata.

The spinal cord is excitable and the curve obtained is somewhat like that obtained from the corona radiata. The uprise of the tetanic curve is, however, sharper and more rectangular; the level of the curve is better maintained and the fall is very sharp and sudden. Small waves are occasionally to be seen on the tetanic curve, but it is extremely rare ever to see anything resembling epilepsy. The wave rate of the tetanus resulting from stimulation of the peripheral end of a cut nerve exactly corresponds to the rate of interruption of the stimulus.

The tetanus from cortical stimulation is due to a fusion of discharges which are grouped together at intervals of twelve to thirteen per second; but frequently it is found that the rate of these discharges is eight per second. The subsequent clonic spasms also have a rate of eight per

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second at first, this becoming slower—four per second—as the result of fusion. Schäfer and Horsley regard the rate of eight to ten per second as the fundamental rate of discharge of motor cells in most mammalian animals. This is the rate given by Lovén from the spinal cord in strychnised frogs. A study of tremors resulting from disease leads Mr. Horsley to the same conclusion that the discharge from nerve centres proceeds at this constant rate, or some multiple or division of the same. In paralysis agitans, disseminated sclerosis, tremors of artificial myxœdema, and canine chorea, this law was found to hold good. Gowers some years ago showed that the rate of ankle-clonus was eight per second.

Dealing with the share that the motor corpuscles of the brain and those of the anterior horns take in the production of the tetanus and the other waves, Mr. Horsley suggests that the spinal motor corpuscles may become polarised, and merely act as transmitters of certain kinds of vibration originating in the cerebral motor cells. Schäfer and Horsley contend, in opposition to François Franck and Pitres, that, whatever be the rate of an adequate stimulus applied to the cortex, it causes the motor corpuscles to discharge at the fundamental rate of eight per second, or some multiple of it. The view of Franck and Pitres would reduce the cortical motor centres to the level of simple conductors. It is important to observe that stimulations from the cortex, corona radiata, cord, and nerve give very different modes of tetanic spasm. Experiment proves in Mr. Horsley's hands that the motor tract of the spinal cord is irritable to the interrupted current, for contraction of all the muscles on the *same* side followed stimulation of the lateral tract. This fact militates against the idea of intimate commissural union between motor centres in opposite sides of the spinal cord. Tracings from a case of traumatic epilepsy closely resembled those taken from experimental stimulation of cortical centres, affording further confirmation of the professor's view. He thinks that if a tracing from a muscle shows sustained tetanus, with a gradual fall and marked along its whole course by small waves, and finally followed by waves indicative of clonic spasms, the diagnosis of cortical discharge should be irrefutable. The fundamental feature of this lecture is the importance that he attaches to the different tracings obtained by stimulation of different parts of the motor tract. The tracing from cortical stimulation is, so to speak, pathognomonic, and cannot be confounded with that obtained from other parts of the motor path.

LECTURE III.

EMOTIONAL NERVOUS DISORDERS DUE TO LOSS OF THYROID GLAND AND PITUITARY BODY.

Disorder in the nutrition is the first event that happens in "functional" nervous disorders. In artificial myxœdema, tremors, clonic spasms, and paralysis were to be observed in this definite order, and constituting the stages of a typical progress of functional "dissolution." It had been shown in the first lecture that the hiatus produced in the continuous chain of metabolic processes caused by the loss of the thyroid started an increasingly defective state of nutrition, and that the motor nerve corpuscles were almost the first tissues in the body to evidence the defect. Mr. Horsley prefers also to invoke the aid of loss of inhibition to account for the occurrence of tremors or their nervous equivalent—rhythmical discharges. He, moreover, does not incline to the view that mere defect of nutrition leads to rhythmical action in nervous centres. He holds that each discharge is the result of actual irritation, in the form of ordinary constantly occurring stimuli. As confirmatory of his view he remarks that slight lowering of the external temperature increases the tremors or induces them. Tremors due to alcohol, mercury, and those occurring during convalescence, are also regarded as illustrations of his view, as well as confirmatory of the law of the rate of discharge from motor centres. Paralysis agitans and the tremor of senility have each the same rate of eight to ten per second. With Hughlings Jackson, Mr. Horsley thinks the cause of paralysis agitans should be looked for as the result of direct interference with general nutrition—i.e., of the centres governing general nutrition. This interference may be produced by disease of the apparatus of metabolism, or, as at first suggested, by trophic changes in the muscles themselves. Emotion may damage the nerve centres, in which the causation of paralysis agitans [illegible] may be regarded as an example. Removal of the thyroid gland means injury of the apparatus of metabolism. The lecturer next describes the results of stimulating the nerve centres, whose nutrition has been depressed by loss of the thyroid gland.

The curve of tetanus caused by stimulation of the normal cortex being borne in mind, that resulting from stimulation of the cortex of a dog suffering from the tremors of artificial myxœdema differs in the fact that the curve of tetanus drops immediately the stimulation ceases; in fact, the end of the tracing closely simulates that obtained from the cut corona radiata. The clonic spasms that marked the curve obtained from the normal cortex were very imperfectly marked, and altogether irregular. The first effect of stimulation of the cortex is to produce in the neurotic stage of artificial myxœdema a condition of hyper-excitability followed by rapid exhaustion. Stimulation of the other parts of the pyramidal tract evoke nothing of any importance, unless it be signs of rapid exhaustion. The tremors can be suppressed alike by stimulation of the cortex and of the corona radiata. Stimulation of the divided spinal cord up to the point of fatigue was practised in the hope that the rate of discharge of the spinal cord might be obtained; this turned out to be possible, for after the disappearance of the primary tetanus from fatigue the tonic fusion of course ceased, and so allowed the individual discharges from the spinal centres to come out; the wave rate of these discharges was found, as expected, to be from eight to ten per second. Mr. Horsley regards this fact as of great importance as a means of diagnosis. The same results are obtained from the dog as from the monkey. In patients suffering from myxœdema, the sluggishness of the movements is due to the affection of the nerve centres, and especially those of the cortex, for the delay in the latent period which was observed in the experimental stimulation is especially a feature of the curve obtained from the cortex; those from the spinal cord and muscle being fairly normal in this respect. The loss of energy therefore affects chiefly the cortical centres. The gradual loss of nutrition resulting from removal of the thyroid body shows itself, first, by diminishing the power of the cortical centre in maintaining the tetanic character of the movement it generates; and, secondly, by the gradual abolition of the tendency to epileptoid seizures. The final stage is apparently one of complete loss of function of the central nervous system as far as movement is concerned. Mr. Horsley points out that we cannot have a more illustrative example of disorder leading to total loss of function, due in this case to general disturbance of the whole metabolism of the body.

The pituitary body has resemblances to and relations with the thyroid body. Mr. Horsley has removed this structure twice successfully; the animals (dogs) lived five and six months respectively. During life no nervous or other symptoms were noticed. Experimental stimulation of the cortex of the brain showed in both the dogs that there was a great increase in the excitability of the motor region. Stimulation with a fairly moderate strength of faradaic current gave an enormous tetanus, followed by severe and prolonged epilepsy or clonic spasms, fully as long and as severe as he has ever seen in the traumatic epilepsy of man, and far more severe than he has ever seen from stimulation of the normal cortex, or from the cortex in cases where the thyroid gland has been removed.

It seems clear that the greater the dissolution the quicker is the rate of the rhythm. He observed a tetanus of the rectus femoris in a case of traumatic epilepsy to have a rate of twenty-four per second, and this rate is but rarely obtained; but it existed in the two dogs from whom the pituitary body had been removed. In the same dogs, if the stimulus to the cortex were kept up for a quarter of a minute, clonic spasms were found to appear on the falling curve of the tetanus. A further point noticed was the termination of epilepsy by the occurrence of one tremendous spasm, instead of a gradual dying out of the clonic spasms.

MEMORIAL TO THE LATE DR. LANCHESTER.—There has just been erected in the hall of the Croydon General Hospital a tablet to the memory of the late Dr. Lanchester. It consists of a latten brass tablet carved in bas-relief with a representation of the parable of the Good Samaritan, and bears the following inscription:—"This tablet is erected by members of the medical profession to perpetuate the memory of Henry Thomas Lanchester, M.D., F.R.G.S., Surgeon to the Hospital from its foundation—a highly-prized friend and a valued colleague, whose death, at the early age of 46 years, they deeply deplore. Born A.D. 1839. Died A.D. 1885."

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A NOTE ON CERTAIN MODIFICATIONS OF THE

SUPRAPUBIC OPERATION FOR STONE OR TUMOUR OF THE BLADDER.

BY SIR HENRY THOMPSON, F.R.C.S.,
SURGEON EXTRAORDINARY TO HIS MAJESTY THE KING OF THE BELGIANS, LATE PROFESSOR OF SURGERY AND PATHOLOGY TO THE ROYAL COLLEGE OF SURGEONS OF ENGLAND, CONSULTING SURGEON TO UNIVERSITY COLLEGE HOSPITAL, EMERITUS PROFESSOR OF CLINICAL SURGERY, ETC.

THERE is a modification of the suprapubic operation necessary when dealing with the female bladder, since it cannot, without very special apparatus, be permanently distended like that of the male. And the same condition occurs in that of the male also, if, after opening the urethra for the purpose of exploring the bladder for tumour, and finding one, it is deemed necessary immediately to operate above the pubes. This may happen when by means of the urethral opening it is discovered that the tumour is too large to be removed by the perineal route, or is so situated that it can be only safely attacked from above. In either case the distension of the rectum is to be fully made as usual; but as no fluid can be securely retained in the bladder in the circumstances described, the incision must be made on a director previously passed into the viscus. This director should be in the form of a well-curved hollow steel sound, with an open end, neatly closed by an olivary bulb attached to a strong stylet running through the instrument and capable of being fixed at the handle. Fig. 1 shows the sound, and Fig. 2 the stylet, with the bulbous end. At the extremity of the sound, a wide open slit, about three-quarters of an inch long, is made in the concave aspect. See Fig. 3, with the bulb in place. Fig. 4 shows the end of the instrument when the bulb is withdrawn.

FIG. 1.

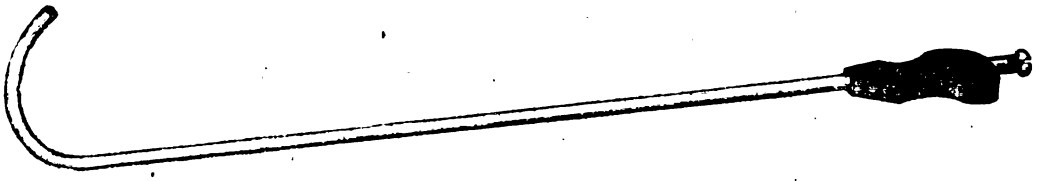


FIG. 2.

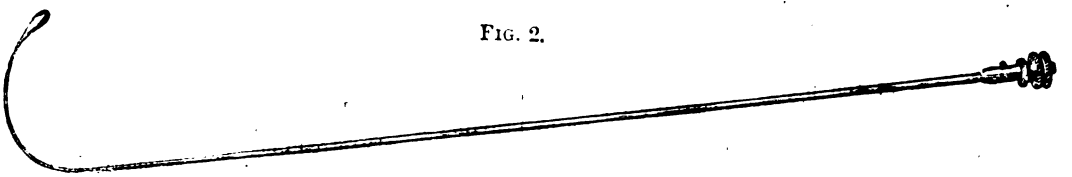


FIG 3.



FIG. 4.



The rectum being distended as before directed, no injection of the bladder takes place, but the sound containing the stylet is passed and retained in place by an assistant. The dissection is now carried on in the median line, as usual, until it has nearly reached the bladder, when the olivary end is plainly distinguished, and the stylet is withdrawn by the assistant. The end of the sound and the slit therein are now easily felt through the tissues by the index finger. When the fibres of the bladder are laid bare at and around this spot, the hook is passed deeply into the slit, so as to take up a portion of the vesical coat and hold it securely, while it is perforated by a scalpel in an adjacent spot. By this means the bladder is prevented from collapsing and slipping down out of sight or reach—an accident very apt to occur and to embarrass the operator if he opens the viscus on the end of an ordinary sound, which usually emerges by the opening, while the bladder disappears by contracting and shrinking around the instrument. In these circumstances it has often been found difficult to introduce anything into the cavity by the side of the sound, a dilemma which the little contrivance proposed above efficiently provides against. In the old method of operating on a staff, without distension of the rectum, this accident not infrequently happened, and I have little doubt that the endeavours to re-establish the route into the bladder sometimes occasioned disturbance of the cellular connexions around the neck, and so induced the infiltration there, formerly said to have been one of the risks of the operation.

Reverting to the use of the index finger-nail as a divider of tissue in the operation, and its marked superiority to the knife, it has occurred to me that a more generally applicable instrument might be constructed in ivory. Accordingly, Messrs. Weiss have made one to my design, of which the woodcuts Figs. 5 and 6 give a representation on a scale of exactly half the linear measurement. The lower, or slightly convex, end seen at Fig. 5 is very finely serrated, and acts as an artificial finger-nail; the hooked termination for drawing aside a vein is shown in a lateral view of the instrument at Fig. 6.

FIG. 5.

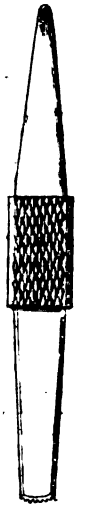


FIG. 6.



CONSEQUENCES OF NARROWING OF THE MITRAL VALVE WHEN OCCURRING IN CHILDHOOD.

BY SAMUEL WILKS, M.D., LL.D., F.R.S.,
CONSULTING PHYSICIAN TO GUY'S HOSPITAL.

IN the year 1844 my late colleague and teacher, Dr. G. H. Barlow, of Guy's Hospital, delivered the Gulstonian Lectures, having for their title "Diseases arising from Defective Expansion of the Lungs in Early Youth." The author illustrated this theme by examples of young persons who about the period of puberty exhibited symptoms of pulmonary obstruction, and often of dropsy, and in whom there was found after death a narrow chest, small lungs, a corresponding small trachea, and at the same time a heart diminished in size and the mitral orifice much contracted in calibre. He believed that if any cause existed which tended to contract the chest, pulmonary expansion would be impeded, the lungs would become small, and the mitral orifice, through which passed a diminished stream, would become proportionally contracted. There can be no doubt that a very interesting series of cases was observed by Dr. Barlow, but I have long thought that his reasoning about them was incorrect. His facts with reference to the relation between the organs of circulation and the attenuation of the body generally were no doubt true, and opened up a subject of great physiological interest, but I

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am inclined to think that in the majority of such cases as he described the prime cause was not to be found in the contracted chest, but in the heart itself. A valve simply diminished in size is sometimes met with, but according to my own experience this is very rare, the contraction being usually accompanied by some indication of a previous inflammatory process. It is a curious fact that in very many cases there is a corresponding narrowing of the tricuspid valve. This might appear to prove that an endocarditis had undoubtedly at one time been present, although on the theory of adaptation the narrowing of the two valves at the same time would not be so remarkable. Two or three years ago Dr. B. Fenwick brought before the Pathological Society a large number of cases of stenosis of the tricuspid valve, and in nearly all of them the mitral was similarly contracted. The fact is one of great interest as showing the relation between the orifices of the two sides of the heart, for even if a rheumatic endocarditis had been the starting-point for the change, I cannot but think the determination of the size given to the softened and contracting valve was fixed by and was a measure of the amount of blood passing through it. Now since stenosis of the mitral is only occasionally accompanied by a corresponding narrowing of the tricuspid, but a contraction of the tricuspid is nearly always associated with a similar condition of the mitral, it may be fairly argued that the one is dependent on the other. The explanation appears easy, since in most instances of stenosis of the mitral the blood is thrown back on the lungs and right side of the heart, so that the latter becomes large and the orifices retain their natural size; whereas in primary obstruction of the tricuspid, which allows only a small quantity of blood to pass into the right ventricle and lungs, a diminished supply is sent to the left heart, and in this way its cavities, with its orifices, would become reduced in size. If this is possible, there seems no reason why a primary cause in the lungs which diminishes the amount of blood circulating in them should not produce the same effect, and by such an argument we see a justification of Dr. Barlow's theory. I might here remark that my experience accords with that of Dr. Fenwick, that in nearly all such cases of narrowing of the auriculo-ventricular valves, and more especially when it occurs on the right side, the subjects are women.

The object of the present communication is to draw more particular attention to the fact that if mitral contraction occur at a very early period of life, whether as a primary affection or secondary to a corresponding narrowing of the tricuspid, other parts of the circulatory system become accommodated to it, and that the patient may reach adult life before the narrowing shall have produced any symptoms; or, as sometimes happens, such contraction may be found accidentally after death without a history of any cardiac symptoms whatever. I saw lately a lady of forty-five years of age, suffering from cardiac dropsy, who informed me that a mitral bruit was known to exist as long as she could remember; and she had grown up conscious of it as part of her being. In various ways the effects of heart-disease are different as occurring in the growing child and adult. After a marked endocarditis in the child, resulting in thickening and narrowing of the mitral valve, there may be observed great enlargement of the left auricle, with hypertrophy of the right side, becoming sometimes so great as to cause bulging of the chest. In these cases the pulmonary artery partakes of the hypertrophy of the ventricle, and is often found thicker than the aorta. Many years ago, when demonstrating this condition, I used to teach that in all probability the second sound of the heart was produced more by the pulmonary than by the aortic sigmoid valves, and this was before I became aware of the clinical fact pointed out by Skoda that the second sound was more accentuated over the pulmonary orifice in mitral disease. But in cases where there has been no history of endocarditis, although it probably might at one time have been present, where the valves have become contracted without much thickening, and therefore retained their efficiency, these secondary effects do not and need not occur. It is evident that the whole of the blood of the body coming back to the lungs and then passing again to the left side, is measured by the size of the mitral orifice. If this be small, the blood passing through it is diminished in quantity, and it becomes a gauge of the reduced circulation. The left ventricle is therefore small, and the whole heart correspondingly diminished in size. The lungs are small as well as the chest, and the respiratory process correspondingly lowered, and with this probably the whole body is impoverished; at all events, the organism is working with a diminished amount of blood. I admit that these simple cases of narrowing are exceptional, for most frequently with the contraction there is some thickening which in course of years manifests itself by symptoms denoting an imperfection of the valve.

It is, however, the exceptional cases to which I wish to draw attention, those in which the mitral orifice, when narrowed, acts first by producing a diminished stream of blood, the amount in the system being measured by the small mitral orifice, and then, as before said, by a shrinking of other parts of the circulatory system. During the present year I have seen two such cases on the post-mortem table. One was that of a woman of middle age who had died of some long-standing disease of the brain. In her body was found a very small mitral aperture, admitting only the point of the finger, but having its edges pliable and in every way efficient as a valve. The ventricle was very small and the whole heart was diminished in size, proving that no obstruction or regurgitation had occurred at the mitral orifice. The lungs were not indurated, nor did they show in any way the congestive conditions so well known in heart disease where the blood has been impeded in its course, nor did the other organs display any indications whatever of analogous congestive processes. A very intelligent student expressed his surprise at the absence of the well-recognised conditions usually met with in obstructive mitral and other valvular diseases, and that there was not the slightest appearance in the body suggestive of stenosis of the valves of the heart. My answer to him was that there was no disease; the mitral orifice was smaller than natural, but an effective valve. The contraction had no doubt occurred at an early period of life, and so reduced the amount of blood, of which it was the gauge; that the whole heart became in consequence reduced in size, and an entirely new state of things set up. This condition is very different from what occurs when a person is full grown and becomes the subject of a stenosed mitral valve, but even then the prolongation of life is due probably in some measure to the reduced amount of blood in the system. This probably was the case in the example of the woman with dropsy before mentioned, who reached middle age before the condition arising in infancy produced any marked results. The fact is well known to all careful observers that a mitral bruit may exist for a great many years without the presence of any marked symptoms, and in such cases it is rightly said that the hypertrophy of the left auricle and enlargement of the right side compensate for the obstruction. This is no doubt true; but I wish also to show in this communication that in some cases the narrow mitral orifice cannot be looked upon in the light of disease; it has so modified the circulation in amount and caused all other parts of the system to conform to it, that a fair amount of health has existed during a lifetime. In such cases, in all probability, no bruit has existed, but merely an imperfect first sound.

CASE OF

EXTRACTION OF THE BLADE OF A TOOTH-FORCEPS FROM THE RIGHT BRONCHUS.[1]

BY SIR WILLIAM MAC CORMAC.

PRISCILLA C——, aged twenty-four, a domestic servant residing at Barnstaple, was admitted on Nov. 23rd, 1885, into St. Thomas's Hospital, under the care of Sir William Mac Cormac. Seven weeks ago she determined to have several roots and teeth extracted previous to getting a new set of teeth. For this purpose chloroform was administered by Mr. Henry Jackson, of Barnstaple, on Oct. 13th, while she lay semi-recumbent upon a couch, the head being raised by pillows. Mr. Sanders, also of Barnstaple, extracted in succession the lower right wisdom tooth, five molar roots, one bicuspid root, and the upper right wisdom and upper right second molar teeth, ten pieces in all. A bicuspid forceps, one of Evrard's,[2] was then applied to the right upper second bicuspid tooth. Three outward and inward movements failed to shake the tooth, and the instrument

[1] From notes by Mr. W. F. Brook, dresser.

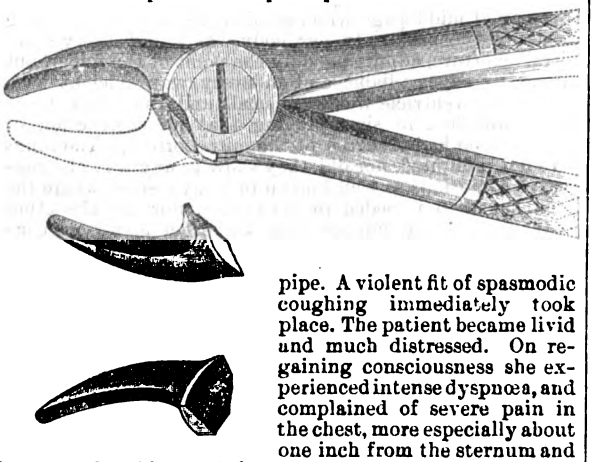
[2] Several dental surgeons who have seen the forceps are disposed to doubt that Evrard was the real maker, and from certain small differences in the forceps believe them to be a spurious imitation.

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slipped slightly over the crown. It was readjusted, and again three times a lateral movement applied, always with downward pressure, when suddenly the palatine blade of the forceps broke short off at the thickest part of the shoulder-joint. At the same moment the patient made two or three deep inspirations, and on looking immediately into the mouth the bicuspid tooth was seen to be intact, while the broken portion of the instrument had disappeared. (Fig. 1.) It had passed through the glottis into the wind-

FIG. 1.

Bicuspid tooth forceps and portion broken off.



pipe. A violent fit of spasmodic coughing immediately took place. The patient became livid and much distressed. On regaining consciousness she experienced intense dyspnœa, and complained of severe pain in the chest, more especially about one inch from the sternum and between the third and fourth ribs. Several unsuccessful attempts were made, by inverting the patient and shaking her, to remove the piece of steel. An emetic was also given. Since the accident the patient has remained in bed, suffering from fits of coughing, accompanied by a good deal of pain, and thick, yellowish expectoration, occasionally streaked with blood. On two or three occasions she believes she distinctly felt the foreign body move, and the sputum afterwards contained blood. Once a small clot of blood was brought up. Three weeks ago she attempted to move about a little, but the pain and other symptoms became much worse, and she had to return to bed. The cough and dyspnœa have always been worse after any movement.

On admission, the patient complained of distressing spasmodic cough, pain in the right breast, especially after coughing, radiating to the right shoulder, down to the elbow, and up the right side of the neck; much dyspnœa, especially after coughing. Respiration is accompanied by general rhonchi. A rough, harsh, whistling sound can be heard both with expiration and inspiration, and this most distinctly over the right second intercostal space, just outside the sternum, and posteriorly on the right side on a level with the spine of the scapula. Râles are to be heard over the rest of the right lung; the left is comparatively free. Both sides of the chest move freely and there is no dulness.

Nov. 24th.—The patient woke up last night with an attack of dyspnœa, which lasted about ten minutes. There was no cyanosis. The expectoration is not abundant.

25th.—The patient has been much troubled with cough, which keeps her awake at night. She thinks the pain gets worse and the shoulder more painful. From the history and the tolerably clear evidence afforded on auscultation, Sir William Mac Cormac concluded that the broken blade of the tooth forceps was probably lodged in the right bronchus, and that there was no chance of its spontaneous evacuation. The plan of treatment decided upon was first to open the trachea very freely, and then to try to extract the piece of steel with forceps, the chief difficulty expected being that it would probably be found embedded in the wall of the tube, and from its smooth surface, with little to catch upon, would be difficult, perhaps impossible, to extract. A pair of strong polypus-forceps, slightly bent laterally near the extremity, was selected, as most likely to hold, being chosen from a number of others by trying which of them would hold best on a tooth-forceps blade.

Nov. 26th.—The patient being under chloroform, Sir Wm. Mac Cormac performed tracheotomy. The shoulders were well raised, and the head thrown back and steadied by an assistant. The incision through the skin extended from the cricoid cartilage nearly to the notch of the sternum and was about three inches and a quarter long. On dividing the skin and fascia, two large anterior jugular veins were seen. Cutting between these, the fascia stretching between the sterno-hyoid muscles was recognised and divided, and these muscles separated. The sterno-thyroid muscles were also pulled aside. There was but little difficulty in exposing the trachea below the thyroid body. Above the isthmus there were many veins, some of which bled when attempting to divide transversely the fascia from the upper margin

FIG. 2.

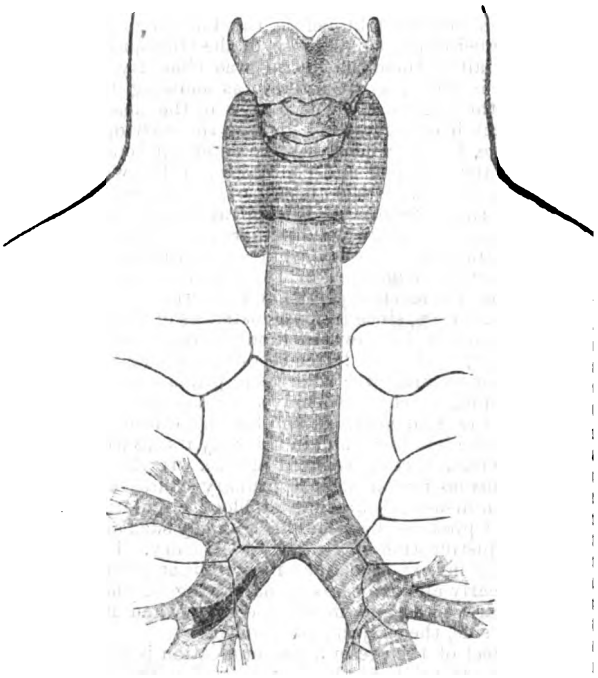


Diagram of the relations of the trachea in an adult female, half natural size, with the foreign body in the right bronchus, where it was believed to have become impacted.

of the thyroid. The trachea, therefore, was cleared in the lower part, and in order to give ample room it was decided to divide the thyroid isthmus. This was done by passing an aneurysm-needle, carrying a double silk thread, from below upwards, tying the tissue of the gland on each side and dividing between. It would have been otherwise impossible to manipulate the forceps, as was afterwards done. The isthmus of the thyroid was large, and covered three or four rings. As soon as it was divided the trachea became thoroughly exposed and accessible throughout its cervical portion. There was very little bleeding; several large veins had been seen and avoided, others clamped before division, and the wound was practically dry. A central incision was now made into the trachea from below upwards, an inch and a half long. Violent spasmodic coughing immediately ensued, but this failed to dislodge the forceps blade. A loop of silk thread having been introduced on each side into the margins of the tracheal incision, they could be widely drawn apart; the superficial soft parts were held aside by retractors, and it was possible to see some distance down the tube. The pair of forceps previously selected were then passed down the trachea; at first the blades were kept shut, and the instrument was used as a searcher. The septum at the bifurcation could be distinctly recognised, and the instrument passed on into the left bronchus, which felt empty. By reason of its curved extremity the forceps could be also readily passed into the right bronchus, and there it seemed to strike against the foreign body. At first the sensation was not distinct, the blade of the tooth-forceps being, it was believed, more or less buried in the wall of the bronchus, granulations having probably formed around it. Attempts to grasp it at this stage failed. A gunshot probe was introduced, and a metallic sound became audible to the bystanders, the body being struck about four inches below the wound. A series of unsuccessful attempts to extract the forceps blade was

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now made with every instrument available. It was seized by the forceps several times, but each time slipped out of their grasp, and this was evident both by sound and sight to those present. The blade could each time be reached at the same place; it did not change its position. Its proximal extremity was, so far as one could judge, an inch and a half below the bifurcation, in the right bronchus or one of its primary subdivisions, and, as previously mentioned, quite four inches below the lower extremity of the tracheal opening. (See Fig. 2.) There could be no doubt whatever as to the exact position of the body, for it was felt again and again, and the forceps introduced to extract it slipped again and again from its smooth surface. A piece of fine drainage-tube was slipped over one blade, in hopes that a better hold might be obtained on the piece of steel; but this failed. The patient had been placed in an almost inverted position, so that if loosened the piece of steel might fall towards the opening in the trachea. She was also well shaken, but without result. A wire loop was passed, in the hope of getting beyond and dislodging it, but this plan likewise failed, and the forceps were again resorted to. Urethral forceps and others were used, but with the same result as before, until the pair of polypus-forceps first selected were again introduced. This time they fortunately retained their hold, and the piece of steel was at length successfully withdrawn. The blades had grasped the narrow claw of the tooth-forceps; the larger end had probably lodged in the subdivision of the bronchus. The broken portion of forceps is shown in Fig. 1. It is about an inch long, with sharp margins and very irregular form. The weight is sixty-three grains. The position it was believed to occupy is indicated in Fig. 2.

Some trifling bleeding took place from the interior of the air-passage. It was decided, however, to close the wound. The loops of silk thread were withdrawn and the edges of the trachea brought accurately together by silk sutures; two drainage-tubes were put into the external wound, and the latter closed by four silk sutures and dressed with iodoform and iodoform gauze. All this time—about an hour and a half—the patient was kept partially under the influence of chloroform administered through the tracheal opening by a tube. She was conscious enough, however, to murmur thanks the moment the blade was extracted. When the patient was taken back to the ward a steam kettle containing water and some eucalyptus oil was placed at the head of the bed, which was screened off.

27th. — The patient had little sleep until early this morning, when a hypodermic injection of one-third of a grain of morphia was administered. When she coughs she complains of much pain and soreness in the right side of the chest, especially just above the level of the right nipple. She has coughed up a little blood and mucus. The wound was dressed, and presented a healthy appearance. At first air passed through it when the patient coughed; very little appears to pass now, and there is no emphysema of the neck. The tongue is clean; the pulse 112. Temperature at 8 A.M., 100·8°; respiration 20. She has a tranquil appearance: no anxiety or respiratory distress.

28th.—The patient slept well after two morphia injections, one at 4 P.M., the other at 10.30 P.M. She still complains of great soreness in the chest and right shoulder, especially on swallowing or coughing. There is no impairment of resonance over either lung; no difficult respiration, but scattered rhonchi are audible over both lungs, and moist sounds at the base of the right. There is but little cough; the expectoration is muco-purulent, and scarcely stained with blood. The temperature at 8 A.M. was 100·2°; pulse 112; respiration 21. The wound is looking healthy, but is gaping a little between the sutures below, and some air escapes through it. There is no emphysema.

Dec. 3rd.—The sutures were removed, and the upper part of the wound supported with strips of adhesive plaster.

5th.—Temperature, pulse, and respiration are reported normal. Expectoration very slight, with the merest trace of blood-staining. She feels well, and the wound is healing satisfactorily. Some air still escapes from its lower end, but there never has been any other trouble.

Very soon after the 11th, the wound was reported completely healed, save a very small opening below, through which a little air escaped. The patient seemed quite well.

The history of the case may be summed up very briefly. Except at the lower part the wound soon healed; here for a short time some air passed in and out, but by the middle of December the wound had all but closed, a slight amount of air gaining exit only on the patient coughing forcibly. The pain and other chest symptoms gradually and steadily abated, and had completely disappeared by December 10th.

Dec. 24th.—The patient may now be pronounced quite convalescent. The wound is perfectly closed, the cicatrix being linear. She has been up and about for the last week, and is enjoying her usual health. The chest sounds are normal. She says she feels perfectly well; her appetite is good; she sleeps soundly; and, in short, is in no respect different from what she was before the operation. Discharged.

Remarks.—This interesting case affords another example of the greater relative frequency with which foreign bodies in the air-passages find their way into the right bronchus. So far as I can learn, the accident here related is absolutely unique. Teeth have passed into the trachea, and tooth-forceps have broken many times before now, but the broken portion has fortunately not been inspired. The forceps in question has the imprint, at all events, of one of the very best makers. In this case the nature of the foreign body, its size, and pretty surely its exact position, were all known beforehand. This is very often otherwise in the case of foreign bodies supposed to be in the air-passages; the history is generally imperfect, the symptoms frequently obscure, or at times they may be altogether absent, so as to render the presence or absence of the foreign body doubtful. Yet, with all the knowledge we in this instance possessed, the extraction of the blade was only accomplished with the greatest difficulty. In an analysis of 1000 cases of foreign bodies in the air-passages, published in Vol. I. of the Transactions of the American Surgical Association, Dr. Weist states that "when the foreign body is impacted in one of the bronchi the chances of expulsion at the time of operation are small, and attempts at extraction by instruments generally end in failure." The measures at first employed in this case — inversion and emetics — cannot be regarded as free from the most serious risk of sudden death, unless the surgeon is prepared at once to perform tracheotomy; indeed, I consider tracheotomy should always be first performed before either is resorted to. Probably the body was in this case firmly impacted from the first, as it certainly was when attempted to extract it. The only means, I think, untried was a magnet, and that, although thought of, could not be obtained. I do not know of any other method more likely to succeed than by means of a forceps such as I first thought of, which ultimately proved successful. To this and the free opening of the trachea are due the credit of success. It is fortunate that so sharp and angular a body had not produced more serious ulceration. The air-passages bore the prolonged manipulation well, and the reaction afterwards was moderate, being limited to some localised broncho-pneumonia, that soon passed off. There was no hæmorrhage of any importance. The patient was kept under the influence of chloroform throughout, by a tube introduced from time to time through the opening in the trachea.

The drawing of the trachea and its relations is from the hand of my colleague, Mr. Anderson. It represents an average female trachea, half the natural size, and the position the body was believed to be in. The septum of bifurcation is from half an inch to three-quarters higher inside than it shows outside, so that the body is really much further from the bifurcation than the drawing apparently indicates. From the position it occupied between the blades of the forceps after extraction, it must, I think, have lain in the bronchus as it is represented in the figure, and its larger extremity had doubtless passed some distance into the principal subdivision of the bronchus, which is practically a continuation of the main tube.

Harley-street, W.

PATHOLOGICAL SOCIETY.—The following is the list of Officers and Council proposed for election for the year 1886:—President: Dr. Bristowe. Vice-Presidents: Dr. Charlton Bastian, Dr. Cayley, Dr. T. H. Green, Dr. George Johnson, Mr. Morrant Baker, Mr. Hulke, Mr. Sydney Jones, Mr. T. P. Pick. Treasurer: Mr. John Wood. Honorary Secretaries: Dr. Coupland, Mr. Butlin. Council: Dr. Carrington, Dr. Finlay, Dr. Goodhart, Dr. Hadden, Dr. Longhurst, Dr. Norman Moore, Dr. Semon, Dr. Seymour Sharkey, Dr. Charlewood Turner, Dr. Samuel West, Mr. Arthur E. J. Barker, Mr. Bowlby. Mr. Watson Cheyne, Mr. Henry Hugh Clutton, Mr. Frederic S. Eve, Mr. Golding-Bird, Mr. John Hammond Morgan, Mr. Henry Morris, Mr. Samuel G. Shattock, and Mr. Charters Symonds.

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ON CHOREA, WITH REFERENCE TO ITS SUPPOSED ORIGIN IN EMBOLISM.

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DR. ANGEL MONEY, in a paper, published in the current volume of the Medical and Chirurgical Transactions, relates some experiments in embolism which have an important bearing upon the origin of chorea. Dr. Money introduced minute artificial emboli, starch-globules, and grains of carmine into the hearts and arteries of rabbits, guinea-pigs, cats, and dogs, with the production of embolism of the brain and cord, and the supervention, when the cord was affected, of choreic movements—"involuntary movements indistinguishable from those of chorea." The embolic theory of chorea, fathered by Kirkes and espoused by Dr. Hughlings Jackson, has thus received a sort of confirmation—a confirmation by synthesis, one to which it is impossible not to attach significance. This introduction of a new fact makes it necessary for those who, like myself, have been opposed to the embolic theory to reconsider their conclusions. Clinically, while the connexion of chorea with acute rheumatism is consistent with, and probably suggested, the embolic theory, the no less frequent origin of the nervous affection in mental emotion, particularly fright, is inconsistent with that hypothesis. It is a familiar observation that though the chorea of mental origin continually becomes associated with a cardiac murmur, yet that the chorea precedes any alteration in the rhythm or sounds of the heart, as if the cardiac were the result, not the cause, of the nervous disorder. Again, chorea displays a preference for families in which insanity, epilepsy, neuralgia, or other neuroses have declared themselves, as if nervous structure rather than vascular accident were in question.

I have a number of sections from the nervous centres in chorea which helped to form the basis of a paper in the fifty-ninth volume of the Medico-Chirurgical Transactions. I have reviewed these with the help of Dr. Money's observations and ten years' additional experience on my own part, and will proceed briefly to state the facts as they now present themselves, and collect the light which they throw upon the nature of the disease.

The facts of morbid anatomy may be thus summed up. There is in fatal cases of chorea a remarkable fulness of both arteries and veins in the upper part of the spinal cord and in the brain between the top of the cord and the lateral ventricles. The veins are more generally filled than the arteries, though the filling of the arteries, being more exceptional, is the more significant. Usually the vessels, whether arterial or venous, contain blood in a recent or unaltered state; but notably in one instance an artery under the corpus striatum, apparently a branch of the middle cerebral, contained decolourised clot, whether an embolus or a thrombus. This did not necessarily indicate more than past stasis, whatever its cause. The arterial fulness in this position so closely resembles what I have figured as occurring with diabetes mellitus,[1] that it is to be inferred that what is the nature of the one is the nature of the other. Whatever difference of opinion there may be as to the origin of the diabetic congestion, I presume there is none as to its existence, nor can there be any suggestion that it is embolic. In many parts, both in the brain and cord, but most numerously in the cord, are seen the results of erosion, exudation, and hæmorrhage. I say nothing about the so-called miliary sclerosis, or punctiform degeneration of the nervous tissue, which was found in some cases in close relation to the bloodvessels, because it is doubtful how far this is post-mortem leakage—post-mortem leakage from the distended vessel possibly favouring a peculiar kind of cadaveric change in the adjacent substance. Speaking, therefore, only of the unequivocal consequences of vital action, distension, erosion, exudation, and hæmorrhage, these are distributed with some approach to regularity in the affected regions, with greater frequency in some parts than others, more in the grey matter of the cord than in the white, more in the lateral portions of the grey horns than elsewhere, and more in the lower parts of the brain than the upper. The changes frequently approach, and sometimes present with completeness, a condition of bilateral symmetry; they are often further advanced on one side than the other, but it is the rule rather than the exception to find that if there be a marked hæmorrhage on one side, as in one horn of the cord, a lesser degree of hæmorrhage, or possibly only vascular fulness, will show that the corresponding part on the other side is in a similar or allied condition.

I will dwell in a little further detail on this tendency to bilateral symmetry, because, though it is not unknown for embolic accidents to occur with some approach to similarity on the two sides of the body, yet, if this symmetry can be shown to present itself with anything like constancy, a cause which acts with more regularity than embolism must be suspected. First as to hæmorrhage. In one case a great hæmorrhagic extravasation was found occupying a large portion of the grey matter on one side of the cord, while on the other side, in the corresponding position, were remarkably distended vessels. At the same level blood was extravasated into the anterior fissure, close to the commissure. In another case were considerable extravasations in the grey matter of the cord, in both dorsal and lumbar regions, similarly placed at the same level on both sides, at what may be considered the junction of the anterior and posterior horns. Blood was also found in the anterior fissure. Thus the extravasation especially affects the grey matter—I have never seen it in the white,—and is apt to concern both sides symmetrically. This points to selection rather according to function than by chance.

In other cases were symmetrical changes of other kinds, which were even more conclusive against embolism. In that of a boy who died with heart symptoms while convalescing from a severe attack of chorea, which had set in nine weeks previously, were found remarkable tracts of translucent degeneration in almost exactly the same regions on both sides of the grey matter of the cord, accurately bounded so as to exclude the white. The grey matter, which was changed chiefly by a destruction and removal of the nervous elements, the fibroid remaining unaffected—the degeneration would probably be called sclerosis, but I avoid the use of the word, as it has been applied to changes of a different and somewhat equivocal nature,—was affected with certain differences at different levels, but at each level in such a way that one side of the cord was almost exactly the counterpart of the other. In the paper referred to I have given a drawing of one half of the cord in this case, which drawing would serve, *mutatis mutandis*, to represent with almost equal accuracy the other half of the section. The parts chiefly affected were the lateral regions of the grey matter, together with the outer portions of the posterior horns. It is to be observed that the parts thus affected were nearly those which in earlier cases were the seats of hæmorrhage.

To conclude the evidence of bilateral symmetry in the lesions of chorea, and of their incompatibility with an embolic origin, I will briefly advert to a case related and figured in the Medico-Chirurgical Transactions—that of an old woman who died of chorea, which had lasted for four years. In the cervical and upper dorsal regions of the cord were *masses* or *pools* of nearly structureless exudation, which formed striking objects under the microscope. I say "masses" or "pools" because, though the exudations presented themselves as solid after the action of chromic acid, it is possible that they might not have been so during life, but have consisted of serum, which the hardening agent coagulated. Solid or liquid, they were there, were symmetrical, and occupied much the places which were chosen by other choreic lesions. The intruded material was similarly disposed in each half of the grey matter, chiefly at its outer or lateral parts and at the beginning of each posterior horn; it was also found in the anterior fissure. The post-mortems upon which I have drawn were seven in number, of which, it will be observed, I have been able to appeal to four in evidence of a systematic placing of the lesions, which must be regarded as purposive rather than accidental.

In further regard to the pathology of chorea and of embolism, it is to be noted that, while the lesions of chorea are mainly in the cord, though not confined to it, this part of the nervous system rarely presents the known and admitted signs of embolism. We easily recognise the appearances which this accident gives rise to in the brain; they are often visible, even conspicuous, upon the pia mater; but we do not see them in the cord, excepting as pyæmia,

[1] Renal and Urinary Affections, part i., pp. 36 and 37.

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and then infrequently. It is true that the cord is less often exposed to view than the brain, but often enough to enable us to say at least that spinal embolism is rare, while chorea is common.

Again, if embolism of the cord ever occur, and no doubt it may without being found, it would probably be in those cases in which, together perhaps with evidences of embolism in many parts of the body, there is general and minute embolism of the brain. I have seen such cases, but never found chorea among their symptoms. Further, it may be stated as a general truth that where embolism is certified to after death by blocks, impactions, or other indubitable results of the process in one organ or many, there is no history of chorea. This statement will find confirmation in the experience of every physician who frequents the dead-house as well as the wards. But not to trust to impression or recollection, I will appeal to facts in detail as presented by the very complete post-mortem and case books of St. George's Hospital, together with those belonging to the Hospital for Sick Children, which are kept on the same plan.

I have examined the St. George's records from the time when I became curator in June, 1861, by which time embolism had become well understood, until October, 1885, comprising twenty-four years and 6787 examinations. One hundred and forty-seven of these gave evidences of embolism in the well-known shapes of blocks in the kidney, spleen, and liver, and plugging of arteries chiefly in the brain. From this enumeration I have excluded embolism confined to the right side of the heart and the pulmonary vessels, as the left side of the heart, and the systemic circulation only, can be supposed to be in relation to the nervous system. Among the 147 cases were but two in which there was any record of chorea. The subject of one of these was a girl of seventeen, whose chorea began with and was apparently due to illegitimate pregnancy. There was no history of rheumatism. The endocarditis and embolism succeeded upon the chorea and were apparently consequent upon it. There were blocks in the kidney and liver; there was no sign of embolism in the brain. The other case was that of a young woman who died at the age of nineteen, with heart disease and embolism, not cerebral. At the age of twelve she had had an attack of chorea, which, as far as was known, did not recur. These were the only instances of chorea among the 147 cases of embolism. The series included, generally many times over, every recognised result of embolism. There were thirty-four examples of cerebral embolism, together mostly with embolism elsewhere, and of these thirty-four were several in which the brain was permeated with "embolic dust"—emboli so finely divided and widely distributed as to promise any result which minute embolism general to the nervous centres could produce. To add to this the experience of the Hospital for Sick Children, I find that from January, 1860, to June, 1885, there were 1867 post-mortem examinations and eleven of embolism. Embolism, by this showing, is less frequent in children than adults. Chorea, as is well known, is far more frequent in children. In the eleven cases of embolism were two in which chorea was simultaneously present; one in which it had occurred, along with acute rheumatism, three years previously. Thus, of 158 cases of embolism from both sources, there were three in which chorea coexisted, two in which there was a history of it; at most, then, 5 cases of chorea in 158 of embolism. Thus, if chorea is a result of embolism, it must be a very infrequent one.

Let us take now another aspect of the question, and look at the co-evidence of embolism and chorea from the standpoint of chorea, these three cases in which embolism and chorea co-existed—the chorea displayed in the last illness and the embolism found afterwards—were the outcome of 27 cases of chorea, of which the post-mortems were recorded in the same books at the same time, 14 from St. George's, and 13 from the Hospital for Sick Children. Thus, in 27 cases of death with chorea, embolism was recognised but in 3. Considering the frequency of heart disease in chorea, whatever may be the nature of the association, embolism strikes one as occurring less often than might have been expected. Among these 27 cases of chorea, endocarditis was present in a recent state in 22 cases, with which in 5 pericarditis was combined. I have elsewhere discussed the nature of the connexion between heart disease and chorea. That embolism does not form the link is shown by its infrequency when endocarditis is present, and further by the exceeding infrequency of embolism when endocarditis is present. It is clear from the [illegible] that the endocarditis of chorea is often rheumatic; we do not as yet know how chorea is connected with rheumatism, though it is sufficiently obvious that it is so. In many cases where heart disease and chorea have concurred it has been manifest to clinical observation that the chorea has come first, the cardiac disturbance afterwards.

Table presenting concurrence of Chorea and Embolism in 8654 cases, with post-mortem examination: 6787 from St. George's, 1867 from the Hospital for Sick Children.

	St. George's.		Hosp. for Sick Children.		Total.		
	Male.	Fem.	Male.	Fem.	Male.	Fem.	Both sexes.
Embolism	83	64	8	3	91	67	158
Chorea	2	12	3	10	5	22	27
Embolism with chorea	—	1*	1	1†	1	2	3

* Besides this, there was one case in which a girl who died at nineteen with heart disease and embolism had had chorea at twelve.

† Besides this, there was a case of a girl in whom chorea and acute rheumatism had occurred three years before death, with embolism.

Human pathology, from whatever point of view we have as yet regarded it, gives no encouragement to the embolic origin of chorea; while it is almost conclusive against what is the same thing in a different light—chorea as a result of embolism. The clinical consequences of embolism are well known as gathered from cases in which the characteristic lesions have been found after death. Chorea has no place among them. Cerebral embolism often presents itself with sudden hemiplegia, which may be, but more often is not, briefly preceded by convulsive movements in the affected limbs, in no respect resembling the movements of chorea. The paralytic attack is usually without loss of consciousness; it is often on the right side, and with aphasia. Shivering, vomiting, pain in the head, sudden blindness, epileptiform convulsion,[2] drowsiness, delirium, and finally coma, are each occasionally present. Besides these, as the symptoms of the more chronic and localised shape in which the accident happens, there is an acute form in which "embolic dust" is widely distributed, which is characterised by symptoms which resemble those of meningitis or of one of the specific fevers—headache, vomiting, repeated rigors, high fever, and active delirium, but no localised paralysis. In this form the wide and probably general scattering would lead us to expect chorea, could this symptom result in the human subject from such a cause; but neither in the limited nor in the general form of the disorder is any such consequence to be recognised.

I will now apply another test to the supposed association of embolism and chorea as cause and consequence. It has been shown that chorea and the recognised manifestations of embolism have little tendency to present themselves together in the same individuals; do they concur in the same classes of persons as to age and sex? If the disease is a result of embolism, it is but likely that there will be some correspondence in the incidence of the two conditions—that where one is abundant there will the other occur with some frequency. Whether this is so, the following facts will show. Of the 147 cases of embolism from the post-mortem books of St. George's Hospital, 83 were in male and 64 in female subjects. This is of value as the experience of a large general hospital. Male admissions at St. George's Hospital are more numerous than female in the proportion of three to two. This does not rest on any inflexible hospital arrangement, but on the greater frequency with which men apply, owing, no doubt, to their greater share of accidents and exposure. The post-mortem books at the Hospital for Sick Children give 8 cases of embolism in the male and 3 in the female. Thus it appears that at every time of life embolism is the more frequent in the male. It must at least be allowed that this disorder does not fall upon the female with any preponderance. Now as to chorea, the proclivity of which for the female sex is almost too familiar to need illustration. A glance at the annexed summary of post-mortem results shows 22 deaths of females to 5 deaths of males from this cause; and clinical evidence tells in the same direction. At the Hospital for Sick Children I had charge for a time of both boys and girls—for a time of boys only, for a time of girls only. Putting

[2] See report of two cases of Cerebral Embolism by W. H. Dickinson, British Medical Journal, May 21st, 1881.

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aside the fatal cases which I have already spoken of, I was enabled to tabulate in the paper already referred to the particulars of attacks of chorea affecting 69 children. Of these, 50 were girls, 19 boys. To take the more recent experience of the same hospital, and as a whole, without distinction of physician, I have learned from Dr. Chaffey, the present registrar, that in the last seven years 472 patients were admitted with chorea—336 girls, 136 boys. Thus embolism and chorea differ in their incidence. One has little sexual preference. Of the other the sexual preference is strongly marked.

Next as to age. Embolism is connected with antecedent disease—rheumatism or other. Acute rheumatism is less frequent in childhood than in early adult life, and the other changes to which embolism is due are mostly more chronic and of still later occurrence. Thus embolism belongs rather to adult life than to childhood, while chorea belongs rather to childhood than adult life. At St. George's Hospital, where patients of all ages are admitted, the results of embolism were found on an average once in 46 post-mortems. At the Hospital for Sick Children, where the patients range from two to twelve, these results were found once in 169 post-mortems. Thus embolism is nearly four times more frequent in a mixed community than in a community of children. At St. George's the patients admitted with embolism varied in age, the males from 15 years to 74 years, the females from 3 years to 66 years. The average age of the males was 38, of the females 29, of both together 34. As to chorea, the ages of the two male subjects was in each case 11 years. That of the females varied from 7 years to 54 years, giving an average of 17, raised thus high by what may be termed the accidental or at least the exceptional inclusion of the case fatal at the unusual age of 54. The average of the male and female cases together was 16. Thus from the experience of a general hospital, where there is no exclusion on the ground of age, persons die with embolism at a mean age of 34, with chorea at a mean age of 16, the last figure being no doubt higher than it would commonly be owing to the exceptional case to which reference has been made. Chorea thus belongs to an earlier period of life than embolism.

To recapitulate the evidence which has been adduced for and against the embolic origin of chorea.—When chorea is associated with acute rheumatism, endocarditis often precedes the nervous affection. When chorea arises otherwise, as in fright, the nervous affection may precede any cardiac disturbance, the valvular lesion in such cases being, so far as clinical observation can show, not the first departure of the disease, but acquired in its course. Chorea is apt to occur in neurotic families. Pathologically, though the lesions of chorea are mainly vascular and perivascular, as are those of embolism, yet the parallelism does not extend into particulars. The distended vessels of chorea almost invariably contain blood-corpuscles, not fibrine; and the lesions have a bilateral symmetry, and proneness to repeat themselves in certain places functionally chosen—habits consistent with an origin in nervous disturbance, not with one in embolism and accident. After death with chorea the embolic process was found to have occurred in some part of the body in a tangible proportion of cases—3 in 27. But taking the frequent concurrence of valvular disease and chorea, however accounted for, the proportion of embolism is probably no more than would be reckoned on as due to the heart disease, even though it were presumed that the accident had no connexion with the nervous disorder. That there is no necessary connexion between embolism and chorea appears by the absence of the disease among the recognisable consequences of embolism. One hundred and forty-seven cases in which this lesion was found at St. George's gave but one of chorea; among children chorea presents itself with more frequency, but, nevertheless, 3 in 158 represents the total concurrence. Next, embolism is distributed between the sexes not very unequally, the male taking the larger share. Chorea is about three times more frequent in the female than in the male.

Finally, it has been shown that embolism selects a later time of life than chorea, the average difference being probably under-stated by that between thirty-four years and sixteen. This selection by chorea of females and the young, while embolism displays no such partiality, is not conclusive against their relation as effect and cause, though it tells in that direction. It is conceivable that female children may have a special susceptibility, in virtue of which they develop chorea from a cause which is insufficient to produce it in the male. Alcohol causes paraplegia in the female, seldom in the male; delirium tremens in the male, seldom in the female. It is not improbable that some of the causes of chorea may be presented equally to both sexes, but affect them unequally; and so it may be with embolism. But embolism is a coarse, mechanical accident, the consequences of which are not likely to be dependent on special susceptibilities. A storm of emotion may shake or shatter the more tender structure and leave the tougher unhurt; but we have no reason to attribute any such partiality of effect to the impaction of clots. The probability is that if chorea is a result of embolism, where embolism is there will be chorea. Putting all the evidence together, it appears to me to be conclusive against the embolic origin of chorea. Dr. Money's artificial embolism caused many varieties of abnormal or forced movement, of which chorea was one. If the right place be irritated, we have no reason to suppose that the irritant must always be the same. The irritation, for aught we know, may begin in one case in the vessel and affect the nerve, and in the other begin in the nerve and affect the vessel. The artificial process may be somewhat similar in its results to the natural one, and yet the *modus operandi* of nature and art be essentially different. In both we can recognise plugged or distended vessels, and must infer the irritation of certain motor centres, but we need not assume a resemblance in all particulars or identity of origin. It by no means follows that because choreic movements are among the results of artificial embolism in animals, chorea as a disease is the result of embolism in man. Dr. Money, in his valuable and judicious paper, carefully abstains from drawing this conclusion, and I venture to think that the facts I have adduced justify his caution in this respect.

Chesterfield-street, Mayfair, W.

NOTE ON

ANKLE-CLONUS AS A SYMPTOM IN CERTAIN FORMS OF NERVOUS DISEASE.

BY W. S. PLAYFAIR, M.D., LL.D., F.R.C.P.

I HAD not the advantage of being present at the discussion at the Medical Society at which Dr. Gowers read his very interesting paper on the "Diagnostic Value of the so-called Tendon Reflexes." In this Dr. Gowers maintains, but with more reservation than in his book on "Diseases of the Spinal Cord," that the occurrence of distinct ankle-clonus may generally be taken as a proof that a given case of hysterical paraplegia, as well as other cases of supposed functional nervous disease, is really of structural origin. If this fact could be relied on as a certain sign of such structural changes in the spinal cord as preclude the hope of permanent cure, or of such amelioration in the walking powers as is tantamount to it, it would be an immense help to those who have to face the almost insuperable difficulties of diagnosis which sometimes present themselves; for the symptom is one easily tested. The fact that I have chanced to direct attention in THE LANCET to the so-called "Weir Mitchell Method" of treating certain forms of functional nervous disease in women has given me the opportunity of seeing many obscure cases of this kind, and I have naturally had my attention directed very closely to this point in the hope of avoiding an error of diagnosis. In many doubtful cases I have had the advantage of consultation with Dr. Buzzard, as well as with other neurologists equally distinguished, and to some of these Dr. Buzzard referred in the discussion which followed the reading of Dr. Gowers' paper, when he said he had seen with me "ankle-clonus, quite indistinguishable from that which was characteristic of lateral sclerosis, occur in many cases of hysterical paraplegia, in which, on recovery, it ceased to be elicited." I am perfectly satisfied that if the presence of true clonus should always be taken as a contra-indication to a well-directed and systematic effort to cure certain cases of functional or "nutritional" nervous disease, as Dr. Gowers so wisely suggests they should preferably be called, then the serious error would be fallen into of leaving untouched cases quite within the possibility of cure. Dr. Gowers says: "I have never seen an unquestionable instance of it"; I can positively state, on the other hand, that I have

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seen not one but many cases in which, at first, a perfectly characteristic clonus was obtainable, and in which, under the improved nutrition and increased strength following systematic treatment, this symptom steadily and progressively diminished, being constantly tested from time to time, until at last it could not be elicited at all. In these I commenced treatment with doubt and anxiety on account of the presence of the clonus; and, had it not been for Dr. Buzzard's encouragement, some of them would have remained uncured to this day, so far as I am concerned. As was only natural, therefore, I paid very particular attention to this point, and I cannot be mistaken as to the issue.

It is needless to burden this note with cases, but I may refer, in illustration, to two marked examples which I well remember.

Mrs. D——, aged fifty-two, completely paralysed in her lower extremities for twenty-five years. Has never moved off her couch all this time except occasionally across the room on crutches. Exaggerated knee-jerk and distinct clonus. A year has elapsed since I last saw this patient, and then it was impossible to elicit any clonus at all. She has since remained perfectly well, is able to take long walks, to visit amongst her friends, &c.

Miss I——, aged thirty-five. Seventeen years practically bedridden. Here, again, clonus was quite distinct. Two years have elapsed since this patient was under my care.

I select these cases because Dr. Buzzard saw them with me, so that there can be no doubt that the clonus noted was not the "spurious foot-clonus" Dr. Gowers refers to.

Dr. Gowers says very pertinently: "Cases of hysterical paraplegia with excess of myostatic contraction get better, but do they get well? The patients regain the power of walking, but not of walking well; they remain what is popularly called bad walkers, soon tired, even with standing." This seems to me exceedingly probable, but it is obvious that if such patients can be made so far better that they discard their crutches, give up their beds, and cease to be the miserable invalids so many of them are, then they get, at any rate, well enough to justify any efforts at cure, in spite of the pre-existence of an excess of myostatic irritability. I by no means intend to under-estimate the grave import of this symptom; all I contend for is that it must not be too exclusively relied upon in settling the diagnosis of a doubtful case. I heartily wish, for the comfort of those who are responsible for the diagnosis, that it could. The solution of the riddle will probably be found in the direction of Dr. Gowers' suggestive remark: "That in many of these cases there must be a change, and a considerable change, in the nutrition of the nerve elements—sometimes, it may be, springing out of a mere functional derangement, but always maintaining and increasing that derangement." It is because of this, I believe, that the systematic treatment of these cases often has such surprising results. Beyond and above the moral effects of removal from unwholesome domestic surroundings, and the personal influence of the medical attendant, the improved nutrition of her whole body is such as no one can believe who has not seen the results, and with this increased nutrition comes the disappearance of the symptoms. But that there is always a considerable risk that in old-standing cases of this special form of neurosis the impaired nutrition of the central nervous system may have led to the establishment of progressively increasing structural disease is a fact which, I believe, increased experience in this very obscure class of disease will prove to be the case. This, I cannot doubt, is the true explanation of the occasional want of success in the treatment of cases in which the diagnosis of so-called "functional" disease was beyond question. This everyone who has tried to cure many of these cases must have met with; nor is it any reason why the attempt should not be made. Hitherto, when we have had to deal with a case of "hysterical" or "functional" disease, we have all been too much in the habit of simply establishing the fact, forgetting that patients come to us, not to be diagnosed, but to be cured. If the patient have the good fortune to come under a "faith cure," or to go to Lourdes, or to fall into the hands of anyone, whether a regular or irregular practitioner, who has sufficient moral influence over her, now and again a cure of this lamentable illness may occur in a hap-hazard sort of a way; otherwise she may linger on for half a lifetime, a burden to herself and all who come in contact with her, but no medicine will touch her case. Whereas, as a matter of fact, she is suffering from a class of disease which, rationally and scientifically treated, is more completely within the resources of our art than almost any of the diseases which "flesh is heir to," although doubtless the cure requires an enormous amount of patient work.

ON THE

IMMEDIATE OCCLUSION OF THE CORNEAL WOUND AFTER EXTRACTION OF CATARACT.[1]

BY DR. GALEZOWSKI.

THE operation of extraction of cataract has made of late very rapid progress, and the results obtained now are most satisfactory, failures being only seen in cases altogether exceptional, such as traumatisms, or when the general condition of the patient is extremely weak and broken down. The success of the operation depends, without doubt, on the manner of operating, as well as on the subsequent care and post-operative dressings. After the labours of Jacobsen, Mooren, and De Graefe, ophthalmologists throughout the world adopted the principle advocated by these eminent German authors—that, in the extraction of cataract, it was necessary to excise the iris, as by so doing the suppuration of the corneal flap was prevented; and they used to practise it either on the peripheral border (sclero-corneal) or on the sclerotic proper, thus enabling the wound to take almost linear form and become easy of coaptation. This was the opinion that prevailed among ophthalmologists, and which has been accepted until now by the majority of surgeons.

I was the first who, in 1882, had the idea of returning to the extraction of cataract without incision and avoiding the incision of the sclerotic and placing it altogether on the cornea, seeing that suppuration supervened after extraction in spite of previous excision of the iris, as recommended by Mooren, or the extraction proper. The results of this operation have been more favourable than those of De Graefe, as it has been demonstrated by my memoir to the Société de Chirurgie in 1882, and also by my report to the Société Française d'Ophthalmologie and to the Congress of French Surgeons. In all these reports I have tried to demonstrate three important points, and upon which I insist to-day more than ever. 1. That if I abandon the German method and incline myself to the French method, it is because there are in my incision and *modus operandi* other conditions of execution altogether peculiar, that allow me to consider it as my own special procedure. 2. That the excision of the iris cannot and must not be abandoned entirely, but must be reserved for cases altogether exceptional, such as when the iris is adherent, posterior synechiæ, when the lens is dislocated or the nucleus floating, when the capsule is opaque, and when it is to be extracted at the same time as the lens. 3. That the results of the operation depend as much on the manner in which it is practised as on the post-operative dressings. In a work I am now preparing, and which follows my studies on cataract in general, I intend to develop successively all the questions that relate to my first two points. My third proposition, which relates to the post-operative dressing plays a very important *rôle*, as I have already stated, and has engaged my attention for a long time. I was constantly endeavouring to ascertain the cause that brought on suppuration of the wounds in certain individuals without any plausible reason. The general hygienic conditions, atmospheric influences, and morbid constitutions have been analysed and computed successively, but nothing could explain these accidents, which arose sometimes where one least expected them. Returning to the principles of Pasteur, that suppuration could not be produced except by the poisoning of the wound by microbes, I thought that the tears might, even in normal conditions of life, contain microbes, and that in certain pathological conditions they could multiply and be brought into contact with the corneal wound, infect it, and bring on suppuration in it. This question could only be elucidated by delicate microscopical observation of the tears. I entrusted one of my pupils, Dr. Salterain, of Monte Video,

[1] Memoir read at the Academy of Medicine, Oct. 6th, 1885.

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to make a complete study of the microscopical composition of the tears. He has made it, with the kind help of Dr. Poey, of Monte Video, and here follows the result of their first research:—

"*Microscopical researches on the microbes of the tears.*—The result of the first experiments, which require to be repeated and controlled, were made at the Clinique d'Accouchements, and is described in the following manner. The direct examination of the tears by the microscope not having given any positive results, we took a drop and deposited it in one of the globes of culture used for these experiments. Three days afterwards the broth became turbid, and on examining the liquid we found in almost every instance (three were doubtful) monococcus, diplococcus, and masses of zooglœa. In one of the globes we also discovered some long chainettes well developed. The number of experiments has been fourteen, and, with the exception of three cases, we found the same elements in all."

What conclusions can we draw from these researches? Is it not that the same element that has been observed in purulent ophthalmia and in the pus of the lacrymal sac of dacryo-cystitis exists, though in smaller quantity, in the normal tears? The recent labours of Schmitt-Rimpler and of Satler have demonstrated that the pus of the lacrymal sac contains varied forms of micro-organisms. The existence, then, of microbes in healthy tears, mixed with the pus of the lacrymal sac, is no longer doubtful. It is easily understood that if the microbes multiply while the lids are closed, and the secretion of the ocular mucous membrane and of the sac increases and is retained, the corneal wound, remaining open and lubricated by the tears, more or less altered, suffers an imbibition and impregnation of the latter, the microbes penetrate the wound and develop an irritation, an infection of its borders, and a suppuration, with all its consequences. To remedy this danger I have sprayed the eye during and after the operation with phenicated vapours, that could not diminish the predisposition to the multiplication of germs. I employed, following the example of other authors, the antiseptic treatment of boric acid, of phenic acid, and sublimate; but all these means can only be of use when brought in contact with the wound, as they lose their action the moment the eye is closed and the lids are compressed by the bandages. The suppurative accidents took place, however, though less often than with the old dressing.

After all these unsuccessful experiments, directed especially against the microbes that I wanted to destroy, I thought that there would be more advantage in trying to protect the wound against the penetration of microbes, and to favour cicatrisation by first intention. My object was to apply a glutinous substance directly over the corneal wound. The problem was difficult to solve, as it was necessary to find an adherent substance which would not by its contact irritate the cornea or the conjunctiva. After numerous experiments I was able to compose a species of gelatinous plaster that can be easily borne by the eye, becomes adherent to the wound, melts gradually in the tears, and disappears at the end of ten or twelve hours. This preparation is no other than very thin sheets of gelatine, very flexible, and prepared for me by Mr. Wusk, the pharmacist. To employ with advantage these sheets of gelatine, and to keep them in position a sufficient length of time, they must have a certain thickness; those I use ordinarily are half a millimetre thick, but I think they can be made thicker. To enable the eye to resist better the gelatine, I have both surfaces of the sheet covered with a concentrated substance of cocaine, and I add also a weak solution of sublimate in the proportion of 25 centigrammes per 1000. One face of the sheet is also covered with a layer of special glue, that fixes it lightly on the cornea, and prevents its displacement by the friction of the lids. By calculating the amount of sublimate and cocaine employed in the preparation of the gelatine sheets, I may say that a square centimetre contains on either side, more or less, 0·01 of chlorhydrate of cocaine and 0·0005 of sublimate. I use habitually small squares of one centimetre and a half, with rounded angles, and in which I make small cuts on one of the sides. The pieces of gelatine, thus prepared, I take with a pair of thin and flat forceps, and after dipping them in warm water I insert the non-cut border under the upper lid; I place then the cut border under the lower palpebral border, and close the eye by applying a compressive bandage. The results of this dressing have been until now extremely satisfactory. I have applied it in many of my cataract patients, and the closing of the wound by first intention with complete coaptation of the borders of the wound have been most rapid. I usually open the eye from forty-eight to seventy hours after the operation, and I have always found the wound united and the eye almost completely cured; in this way I have been able to remove the bandage on the fourth or fifth day. I have never found in the eye the smallest trace of the gelatine sheet, which proves that it dissolves completely in the tears. Some of my patients have complained of some heat and prickings for half an hour to an hour after the operation; others have complained of grittiness the first night, but never so strong as to require interference. I have already used this gelatinous dressing in nineteen cases of extraction of cataract, in one case of conic pellucid staphyloma, and in one iridectomy made in a case of perforating ulcer of the cornea, and in all these cases I have obtained union by first intention, without the slightest trace of irritation. One of my cataract patients had an old suppurative dacryo-cystitis with double cataract. Living in the country, he could not wait to have his lacrymal complaint cured, so I was forced to operate on him in spite of the suppuration of the lacrymal sac, and the gelatine dressing gave in this case as satisfactory results as in the others. The wound was united by first intention after the fourth day, and I then removed the bandage and was able to resume catheterism of the nasal duct on the following day. The following is the clinical history of this case by my *sous-chef de clinique*, M. Desjagnets:—

"*Right cataract; operation; suppurative lacrymal tumour of the same eye; cure, with complete re-establishment of sight.*—Mr. T——, seventy-two years old, farmer at Gouvieux (Oise), had a left double complete cataract. This eye was operated on at the Clinique on Sept. 28th, 1875. The operation was performed by the method adopted by M. Galezowski for the last three years—upper corneal flap without iridectomy. The dressing was made with a sheet of antiseptic gelatine placed on the wound. The patient previously had lacrymation of the same eye, for which the inferior lacrymal point was incised and catheterism practised for eight days. The lacrymation and subsequent conjunctivitis had been sufficiently alternated to enable the operation of extraction to be performed. The day after the operation the bandage was not removed, as the patient complained of no pain whatever. On the second day the eye was examined and found in excellent condition. Good coaptation of the wound resulted, the anterior chamber was re-established, the pupil being very free, but the whole anterior region of the sac was red, swollen, and inflamed. By pressing lightly on this region pus exuded from the lower incised point. A lacrymal tumour had formed in the sac, which had been sounded eight or ten times previously. In spite of the recent extraction, a sound was again passed, and a compressive dressing applied. After that date the dressing was every day saturated with pus. When removed, the eye was found bathed in the same pus; nevertheless, the eye remained without inflammatory reaction and in a perfect state. Every day the sounding was made, and after emptying the sac twice a day the eye was washed with a carbolic solution of 1 per cent. After eight days the suppuration disappeared almost completely, and the cicatrisation of the corneal wound was almost complete. On Oct. 9th the patient was discharged with a splendid eye, the normal acuity being V=1."

It would be superfluous for me to insist further on the advantages of the gelatinous antiseptic dressing; these have been daily evidenced. The satisfactory results obtained until now make me think that it will soon become generally adopted, not only in the treatment of corneal wounds after the extraction of cataract, but also in the dressing of ulcers of the cornea, and wounds and burns of the cornea and conjunctiva; and also that different remedies can be incorporated with the sheet and brought into contact with the cornea, and act successfully in cases of perforating ulcers and other forms of keratitis.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.—The following officers have been elected for the Session of 1885-86:—President: Dr. Robert E. Carrington. Vice-Presidents: Messrs. C. H. Hartt and F. B. Jessett. Council: Mr. Brindley James, Mr. W. C. S. Burney, Mr. Hughes G. Cable, Dr. W. Collingridge, Dr. A. Forsyth, Mr. J. Marshall, and Mr. F. Moon, M.B. Treasurer: Dr. Prior Purvis. Secretary: Mr. H. W. Roberts. Librarian: Dr. J. B. Saundry.

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THE ETIOLOGY OF FOOT-AND-MOUTH DISEASE.

BY E. KLEIN, M.D., F.R.S.,
LECTURER ON GENERAL ANATOMY AND PHYSIOLOGY AT ST. BARTHOLOMEW'S HOSPITAL, LONDON.

FOR some time past I have been engaged in an inquiry into the etiology of foot-and-mouth disease carried out for the Medical Department of the Local Government Board, and I have ascertained that this disease is caused by a micrococcus, which I obtained by cultivating artificially the lymph taken from the vesicles of a sheep affected with this disease. This micrococcus is present in the lymph and in the tissue of the vesicles as dumb-bells and as chains. It grows well in alkaline peptone and broth, in solidified blood-serum, in solid agar-agar peptone broth mixture, in solid nutritive gelatine mixture (which is not liquefied by it), and in milk. Its mode of growth in solid media is so typical and characteristic that by the naked-eye inspection alone it can easily be detected. When any of the above solid media is inoculated with this micrococcus, after several days a thin limited film makes its appearance at and immediately around the point of inoculation; this film slowly spreads, but from the outset and afterwards presents a very characteristic appearance to the unaided eye, being in fact *a collection of closely-placed minute granules or droplets.* These gradually and slowly enlarge, and assume a whitish, translucent character. If the inoculation is made with the point of a needle or platinum wire, or of a capillary pipette, pushed into the solid medium, the channel of inoculation becomes, after several days to several weeks, marked as a linear aggregation of minute granules or droplets; in addition to this there is on the surface the above-mentioned film of granules starting from the point of inoculation. The growth of this micrococcus is extremely slow; in solid nutritive gelatine mixture, kept at temperatures from 18° to 22° C., the first traces of the growth in the shape of a small cluster of transparent granules visible under a lens are noticeable at the end of from five to eight days, or even later; in agar-agar mixture, kept at 35° to 38° C., it is of course sooner visible, but even after six or seven months, in all media and under all conditions, the growth remains of limited extent. Also in milk, kept at temperatures varying between 35° and 38° C., the progress of the growth is extremely slow; the milk retains perfectly its natural aspect and condition; no curdling occurs, although the reaction becomes distinctly acid.

In artificial media the micrococcus forms, besides dumb-bells (diplococcus), beautiful chains (streptococcus). These differ in length according to the number of micrococci composing them, the short chains being a linear series of four, six, or eight micrococci, the longer ones of more than eight up to thirty and more micrococci. The longer chains are always curved, and even convoluted. The above-mentioned characteristic granular appearance of the growth is owing to the presence of smaller or larger masses of chains matted together.

Subcutaneous inoculation with artificial cultivations produces no perceptible disorder, but by *feeding* sheep with [illegible] with a twentieth generation—*the typical disease has been reproduced*—viz., vesicles and ulcerations on the feet. From the vesicle of such an animal lymph was obtained which, on cultivation, yielded the same micrococci, characterised by the same slow growth and the same typical general appearance as those used for the experiment. There can, then, be no question about the identity of this peculiar micrococcus with the cause of the disease.

Five sheep have been subcutaneously inoculated with active cultivations of the micrococcus, but neither locally nor generally was there any definite perceptible change produced. Subsequent feeding of these same sheep with the active micrococcus had no result. I conclude from this that [illegible] subcutaneous inoculation with the micrococcus [illegible] animals with immunity against the disease. I hope [illegible] to be able to test this point on a larger series [illegible].

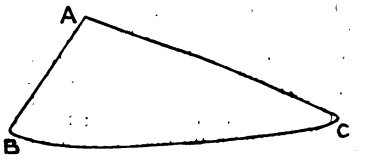
[illegible] inoculation of the same micrococcus into [illegible] produced no result; feeding was followed by [illegible] two to three weeks. Out of six animals [illegible] with their food a small quantity of milk containing the micrococci, three died—one from ulceration and perforation of the upper end of the duodenum, and two from ulceration and perforation of the large curvature of the stomach.

OSTEOTOMY WITH CHAIN-SAW FOR TALIPES EQUINO-VARUS OR VALGUS.

BY HORATIO P. SYMONDS,
SURGEON TO THE RADCLIFFE INFIRMARY, OXFORD.

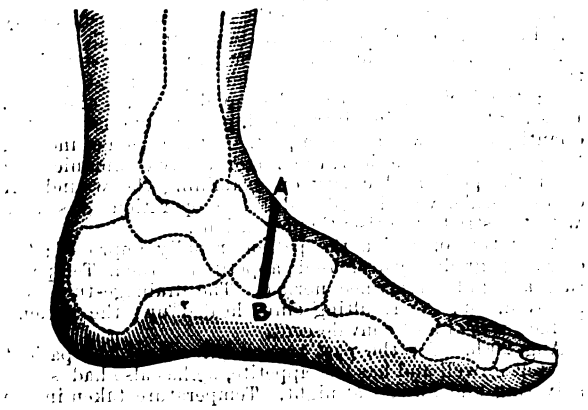
FOR some time, having noticed how exceedingly prolonged was the treatment of even a simple case of talipes—and I may add how bad sometimes was the result,—it occurred to me that if we were to divide the bones in the same manner in which we divide the tendons a far better result might be obtained; better because quicker, since many cases fail on account of the patient's lack of confidence through seeing improvement taking place so slowly. I may state that I have performed the wedge-shaped removal and pegging, as advised by Dove and Ogston, but did not find the result sufficiently satisfactory. The operation I perform in all severe cases of talipes is to pass a chain saw round the tarsus, in front of the astragalus. Taking the tarsus as a triangle, pass a metal-handled tenotomy knife through the sole of the foot in front of the os calcis, B C, commencing from the inner side (see Fig. 1).

FIG. 1.



Then let the chain follow the knife through the sole, and repeat the proceeding from the outside to the dorsum of the foot (A). Complete the skin incision (A B), and then cross the chain so that it can gradually work its way outwards. The inner wound is sewn up, no drainage being necessary. The foot is then fixed on to a Volkmann's splint for a fortnight, at the end of which time, after manipulating it into a good position, it is fixed in plaster-of-Paris for three months (see Fig. 2). I recently saw a case in which I had

FIG. 2.



performed this operation eight months previously, and the patient was then walking without apparatus of any kind, and the foot, which before the operation had been very markedly deformed, was restored to its normal position. I need hardly say that the operation must be done with strict Listerian antiseptics, particular attention being paid to the condition of the saw.

SIR JAMES SAWYER, M.D., was entertained on the 22rd ult. at a banquet, at Birmingham, by a number of his professional brethren who were desirous of showing their appreciation of the honour—that of knighthood—recently conferred upon him by the Queen.

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A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum propriis collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

SEAMEN'S HOSPITAL, GREENWICH.

THREE HEPATIC ABSCESSES; OPERATIONS; RECOVERY.

(Under the care of Dr. CURNOW and Mr. JOHNSON SMITH.)

FOR the following notes we are indebted to Mr. E. H. Booth, M.B. Lond., house-physician to the hospital.

Frederick W——, aged seventeen, sailor, was admitted on July 14th, 1885. He came to the hospital complaining chiefly of pain over the lower part of the right side of his chest, and of cough. The following were the chief points in his history. He had been quite well up to fifteen months ago, when he had a severe attack of dysentery whilst in Java. He recovered at the end of three months. His present illness commenced nine months ago; he attributes it to his getting wet through and remaining for some time in his wet clothes. Soon after he suffered from pain of an aching character over the lower part of the right side of his chest, together with a dry cough, occasional shivering, and perspirations, the latter being worse at night. These symptoms had persisted, and, becoming more severe, he had come to the hospital for advice.

On admission, he appeared to be well nourished, though somewhat anæmic. He had pain and tenderness over the lower part of the right side of his chest, the pain extending from the back round the side; he also had a troublesome dry cough. Tongue dry; no appetite; bowels constipated. Tenderness on deep pressure over the hepatic region. Liver slightly enlarged, the edge just being perceptible to touch beneath the margin of the ribs. His chest was dull over the base of the right lung, and some dry crepitations and a few crackling friction-sounds were heard. There was a slight deficiency of vocal fremitus, breath- and voice-sounds over the same area. Temperature 103°; pulse 104.

July 27th.—Patient remained in much the same condition up to this date; his temperature rising at night to 101° or 102°, with slight shivering and sweats, falling in the morning to 98° or 99°. The chest mischief remained stationary. A puncture with the exploring needle was made in the eighth intercostal space; the needle was pushed fully two inches into the liver and a little pus drawn off.

29th.—An anæsthetic having been given, an incision about two inches long was made in the eighth space, parallel to the ribs; the incision was carried deep down into the liver. Dressing forceps being introduced, pus freely escaped; the quantity let out was almost a pint. At the region of incision there were no adhesions, the finger freely communicating with the peritoneal cavity on examining the wound. A drainage-tube was introduced. The operation was done with the strictest antiseptic precautions.

After this operation the patient rapidly improved; the discharge gradually decreased; appetite returned. Temperature and pulse remained normal. The drainage-tube was removed, and the resulting sinus healed up; the patient, in fact, was almost convalescent.

Aug. 20th.—For the past two or three days the patient has felt unwell and has lost appetite, he has also had slight shivering and sweats at night. Temperature taken in the evening was found to be 100°.

25th.—These symptoms continued; evening temperature rising to 102°, morning temperature 99°. It was suspected that pus had reaccumulated in the old abscess cavity. An anæsthetic was given and the old sinus laid open, the incision being carried deep down—i.e., into the site of the old abscess. Only a little blood-stained serum escaped. On introducing the finger, the old abscess cavity was found contracted to the size of a walnut. Pus being suspected in some other region of the liver, an exploratory puncture was made in the tenth space behind, about one inch external to the erector spinæ, and pus was drawn off. An incision about two inches long was made in this region. This incision had also to be carried deep down before reaching pus, when about half a pint was let out. One finger introduced into this abscess cavity, and another finger into the old abscess cavity, showed that the two abscesses were distinct, the two fingers not being able to get near one another. A drainage-tube was introduced. This operation was also performed antiseptically, and, as in the first, the finger in the wound was in free communication with the peritoneal cavity.

The patient again rapidly improved and was almost convalescent, when, on Sept. 10th, he began to feel ill, shivered, and had perspirations. The temperature, which had been normal morning and evening since the day of the last operation, again went up to 102° at night. Under an anæsthetic, the sinus leading into this last abscess was opened up, but only a small quantity of blood and pus escaped.

Sept. 19th.—The symptoms continued. Temperature in the evening 104°. Patient getting very thin and unable to retain food, and during the last three or four days has had severe diarrhœa. On careful examination a very slight bulge was detected high up in the axillary region—i.e., over the fourth and fifth intercostal spaces. Exploration was made and pus drawn off. An anæsthetic was given and a free incision was made into this third abscess; about one pint of pus escaped. On introducing the finger, the abscess was found to be situated in the upper region of the liver, the layer of liver substance between the abscess and the diaphragm feeling obviously thin and flaccid.

The after-treatment in this case did not differ in any way from that following the two previous operations. The drainage-tube was removed on Oct. 13th. The patient visibly improved from the day of the operation, recovering appetite, diarrhœa ceasing, and rapidly gaining flesh. He was discharged from the hospital on Nov. 20th, convalescent.

Notes by Dr. CURNOW.—This case well illustrates—(1) That in all cases of suspected abscess of the liver, explorations should be made in many directions; fluctuation, bulging of the ribs or local œdema should not be waited for, otherwise an abscess may exist and not be found. (2) The advantages of the treatment by free incision with the strictest antiseptic precautions, over aspiration or partial evacuation. 3. The non-necessity of waiting for adhesions before operating; in fact, the difficulty is rather to find the abscess, than to treat it under the Listerian method when its existence has been proved. The case is further remarkable for the successive formation of three distinct abscesses, and must suggest the possibility of their being due to absorption from the colon, for this patient had previously suffered from dysentery, and this has been our invariable experience at the Seamen's Hospital.

ST. GEORGE'S AND ST. JAMES'S DISPENSARY.

CHOREA AND EPILEPSY.

(Under the care of Dr. FRANCIS HAWKINS.)

CASE 1. *Choreic movements in a boy five years old; recovery; purpura four months afterwards.*—Giles J——, aged five years, a schoolboy born in London, was admitted on Aug. 14th, 1885, complaining of having spots over his legs, and "pains" in both knees. His father, a tailor by trade, has very good health, the mother also is strong and well; there are four other children, two boys and two girls, older than the patient, all of whom are quite well. There is no history of any nervous disease or of rheumatism in the family, nor in any of the patient's ancestors. The house is comfortable, and much better than the majority of houses inhabited by the poor. The food has been fairly good, with the exception that no vegetables except potatoes have been eaten for some time. The patient has never had measles or scarlet fever, and was quite well until Dec. 24th, 1884, when the mother noticed that both arms "twitched" a good deal. The twitching continuing and increasing, the patient was taken to Middlesex Hospital on Jan. 13th, 1885, when the following note, taken from the out-patient card, was made:—"Slight choreic movements of both arms (more especially the left), which have existed for three weeks." The choreic movements gradually became less, and the patient ceased attending at the Middlesex Hospital on March 9th, 1885. The present illness began on July 22nd, when the mother noticed a number of small spots on both legs. The spots have continued to the present time (August 14th), but vary in brightness. The patient is well developed and fairly muscular. The hair is fair; face, lips, and gums are pale;

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teeth much decayed; temperature 99·3°; appetite good; thirst not excessive; bowels regular; fæces dark (the patient has been taking iron for the last ten days). Neither the lymphatic glands nor the spleen are enlarged. There is no cardiac murmur, nor are there any signs of lung disease. The skin is pale generally. Over both legs and thighs are a number of purpuric spots, varying much in size, distribution, and colour: the spots are larger in size and more numerous over the right leg, being small between the ankle and knee and large from the knee to the groin. With the exception of a few purpuric spots over the penis, none are higher than Poupart's ligament anteriorly, and, posteriorly, a line drawn horizontally across the posterior iliac spine. There was no blood or albumen in the urine.—August 16th: The feet and legs are swollen, and, with the exception of a few small patches of healthy skin, the whole leg below the knee is of a yellowish-green colour. Yesterday (15th) the child complained of a cough, and the mother applied a poultice to the right side of the chest, and now in the situation of the poultice are a number of purpuric spots. The pain in the knees is better. Temperature 99·8°. The child continued under observation until October 1st, during which time purpuric spots came and went in regular succession; but since September 1st gradually disappeared and were gone by October 1st.

CASE 2. *Chorea in three members of the same family; complete recovery in two members; chorea followed by epilepsy in the other.*—Florence S——, aged seventeen, of no occupation (owing to her having fits), born in London, was admitted under the care of Dr. Hawkins suffering from "fits," which have occurred at intervals for the last five years. The father and mother are quite healthy. There is no history of any nervous disease or of rheumatism in any member of former generations. There are two brothers and three sisters. One brother had measles when two years old, scarlet fever when eleven; he then became quite well, and when thirteen years old he had choreic movements in both arms and legs, which continued for three months, but have never recurred since. One sister had measles when five years old, scarlet fever when six; then became quite well, and when nine years old she had choreic movements similar to the boy above mentioned, which lasted for four months, but have never recurred. Her brothers and sisters are older than the patient. There is no history of any intermarriages in the family. The house is very good, as also the food, the people being in fairly good circumstances. The patient was quite well until she was seven years old, when she had chorea; the movements were "all over the body," and she could scarcely walk. This lasted for one year, when the patient became quite well. When nine years old she had scarlet fever; she recovered completely from this and remained quite well until she was twelve years old, when she had a "fit." In the morning her brother noticed that she was dull and stupid, and appeared strange in her ways. She then, without any warning or scream, suddenly fell down and foamed at the mouth. Arms and legs moved in a jerky manner, and during the fit the patient bit her tongue and micturated. During the fit the mother noticed that the face was drawn to the left side. This, however, was not noticed after the fit had ceased. The mother cannot say how long the fit lasted, for the patient went off to sleep, and remained so for some time. For two years the patient remained well; she then had some occasional twitchings, but these disappeared, and then in twelve months after she had another fit similar to the one described. The last fit was on July 7th, 1885.

CASE 3. *Epileptic fits followed by ecchymosis (purpura).*—Isabella A——, aged thirty, married for six years, and has four children. Was admitted complaining of fits, from which she had suffered for nineteen years. To the best of the patient's knowledge there have been no intermarriages in her family, neither is there rheumatism, nor has there been any nervous disease till the present generation—one brother had convulsions when a baby, now he is quite strong and healthy; one sister had a "paralytic stroke" some years ago, but the exact date and a more accurate description cannot be obtained. The patient has never had any other illness, and she attributes her fits to a fright on leaving home when eleven years old. A description of the fits at this time cannot be given with any accuracy; they occurred about two in a year. The patient began to menstruate at fourteen; this made no alteration in the fits. At twenty-four she was married, and after the birth of her first child the fits became more frequent, having had two in the first two months after the birth of her child, which she did not nurse. In thirteen months after the first child was born she had her second child; while carrying the child no fits occurred, but soon after the child was born she again began having fits. In one year and seven months after the birth of the second child she gave birth to another, and the fits were absent while carrying the child; soon after its birth the fits began to occur. In two years after the birth of the third child, another was born; this last is now four months old, and since its birth the patient has had three fits in six weeks. The following is a description of the fits from which the patient is now suffering. For about two weeks previous to the fit the patient noticed that her memory became bad, and a few days before the fit she had headache, and there was a feeling of swelling and bursting in both head and neck. Then, without any other warning, and usually at night, what the sister describes as a "strange" noise is made, and if standing or sitting the patient then falls, clenches her hands and her teeth, fixes her eyes, moves her arms in a jerky way, and bites her tongue; this last for two or three minutes, according to the idea of time of the sister who lives with her. After the fit, on first seeing any person, she always has the sensation of "dying," and for some days afterwards, when placing her hands in cold water, she feels as if touching ice. After the fit the patient has what she calls "blood spots" come out on the face, equally on both sides of the face, but only on the left side of the neck; these have shown themselves as long as the patient can remember, and they appear to be in proportion to the severity of the fit. On one occasion (a very bad fit) the patient, in falling, cut her nose, which bled very much; the spots were then very few in number, and the patient got over the feelings which she always has while in a fit quicker than usual. The spots usually disappear in a week or ten days. Eight years ago the patient micturated in a fit, but has not done so since.

Remarks by Dr. HAWKINS.—While there is nothing original to be mentioned in connexion with the above cases, they appear to be interesting not only in themselves but also taken as a series, for we have chorea followed by purpura, then chorea followed by epilepsy, and thirdly, epilepsy followed by ecchymosis. Taken separately, Case 1 is interesting from many points, but I will merely allude to the fact that there were choreic movements present for eighty-nine days, followed by complete recovery for 101 days, and then pains in the knee-joints and purpura manifested themselves, and continued for 105 days. While there is no history of rheumatism in the parents or other members of the family, we must, I think, regard the case as one of chorea and rheumatism, and it may be questioned whether it is always necessary to have the evidence of rheumatism to prove that the cause of chorea is similar to that which causes it when rheumatism is present. Indeed, lately I have been frequently asking myself whether rheumatism, heart disease, chorea, epilepsy, asthma, and phthisis are not merely different outward manifestations of a common basis, just as one soil, if left to itself, brings forth a variety of weeds differing from each other and yet peculiar to that kind of soil; but I must not enter into this at present. The fact of purpura occurring so soon after choreic movements suggests to one the question whether in this case a similar condition—in fact, a purpura of some parts of the nervous system—occurred and caused chorea? Case 2 is interesting in chorea having occurred in three members of the same family, recovering completely in two members, while in the third it was followed by epilepsy. And it appears to me worthy of notice that, in the two cases in which recovery took place, measles and scarlet fever occurred prior to the chorea, while in the third case there was scarlet fever afterwards, while she has never had measles. Case 3, while including no special point of particular interest taken by itself, yet taken with the foregoing cases it is interesting from the fact of an ecchymosis somewhat similar to the purpura occurring after the fits, and lasting ten days. Trousseau, Van Swieten, and others speak of the occurrence of ecchymosis after fits as being very common; while Trousseau found the ecchymosis, which lasted for so long a time as ten days, usually occurred in cases of paralysis after epilepsy; but in this case there was no paralysis, and the main interest is that we have chorea followed by purpura in 101 days, and we have an epileptic fit followed immediately by ecchymosis. Can we, then, trace any relation between the causation of these two diseases?

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NORTH STAFFORDSHIRE INFIRMARY.

TUMOUR OF SPERMATIC CORD SIMULATING HERNIA, CAUSING SLOUGHING OF SCROTUM; OPERATION; CURE.

(Under the care of Mr. SPANTON.)

FOR the notes of the following case we are indebted to Mr. R. Cann, assistant house-surgeon.

Isaac G——, aged fifteen, residing at Hanley, apprentice potter, was admitted into the North Staffordshire Infirmary on July 14th, 1885. The patient, a strong healthy boy, had observed some months before admission a swelling in the right groin, sometimes reaching into the scrotum, at others passing up the inguinal canal out of sight. The tumour had all the usual characters of an omental hernia, was evidently solid, passed into the inguinal canal when gently pressed up, and descended on coughing or straining. It was apparently attached to the spermatic cord. For some time this remained in much the same condition, causing no trouble, until one day, a few weeks before admission, sickness came on, with great pain in the neighbourhood of the tumour, and constipation. Added to this the tumour could not be reduced as formerly. The scrotum became œdematous, the induration around the cord increased, and everything seemed to indicate an inflamed and strangulated omental hernia. He was advised to go to the infirmary for operation. On admission the right side of the scrotum was inflamed and œdematous; the testicle could not be felt. Under chloroform Mr. Spanton made an incision over the right spermatic cord, and the subcutaneous tissue was found sloughy for some distance. On dissecting this away, a hard firm mass occupying the position of the cord came into view, extending up to the external abdominal ring, about two inches in length, and about the size and shape of a large pigeon's egg. A ligature was applied as high up as possible on the cord, and the whole mass with the right testis dissected away. Sublimate gauze dressing and silver wire sutures were used, and the wound rapidly healed. The growth, when cut into, was of almost cartilaginous hardness, and consisted of dense connective tissue. So long as it was small enough to slide up and down the inguinal canal it caused no trouble; but as soon as the inflammatory swelling occurred in and around it, the vessels in the cord were so much compressed as no doubt to interfere with the vitality of the parts below, and hence led to the rapid sloughing which took place. The case is one more illustration of the wisdom of the old maxim, "When in doubt, operate."

Medical Societies.

MEDICAL SOCIETY OF LONDON.

Aneurysm of Innominate Artery.—Chronic Poisoning by Bisulphide of Carbon.

The last ordinary meeting of the year of this Society was held on the 21st ult., Dr. W. M. Ord, President, in the chair.

Dr. B. W. RICHARDSON read a paper on a case of Aneurysm of the Innominate Artery. The aneurysm was of the dissecting variety. The external indications of the aneurysm were remarkably variable. The patient was a woman aged sixty-two, in whose personal and family history there was but little that had any bearing on her final history. Twelve years ago she had suffered from an abscess of the antrum, for which surgical treatment was sought. In October, 1884, a large pulsating tumour the size of an orange was found in the right infra-clavicular region. The right radial pulse was feeble; there was a systolic bruit, but no thoracic symptoms. The patient was ordered absolute rest, and she was not heard of again till May of the present year, when the pulsating tumour had disappeared, and the patient declared that she was quite cured. There was, however, dulness, a systolic bruit, and a small pulse on the right side. In June three pulsating tumours had appeared: one was situate above the clavicle, and two below that bone; the inner one was over the sternum. The tumours pulsated synchronously, and with the right radial artery. By September the outermost tumour below the clavicle had subsided under the influence of complete rest. From this time onward the patient was carefully watched. On October 23th, blood escaped from two small openings in minute quantities. Cotton-wool soaked with perchloride of iron formed a protective covering. A few days later a large opening had formed which measured three-quarters of an inch long and half an inch across, and was blocked by clotted blood. The patient died, without a struggle, hæmorrhage, or pain, on November 30th. The parts concerned were preserved in vapour of ammonia in a box, to which Dr. Richardson drew special attention. The aneurysm springing from the arch of the aorta caused absorption of bone of the first and second ribs and inner end of the clavicle. The tumour had pressed on the œsophagus, and displaced it to the left. There were grooves in the last two cervical and first dorsal vertebræ due to absorption of bone. The chief sac was filled with laminated fibrin. There were two pouches; one that followed the course of the right common carotid, and the other from which the blood came. No exciting or predisposing cause could be made out. The patient had suffered in early life from a goitre, and there might be some kind of relation between that goitre and the occurrence of aneurysm. The absence of dyspnœa, dysphagia, and other symptoms of pressure on the various organs included within the thorax was commented on. The long continuance of life was remarkable, since the only separation between life and death lay in the thin covering that protected the opening into the aneurysm.—Dr. Low remarked on the interest of the clinical and anatomical features of the case. He considered that retrocession of an aneurysmal tumour was a sign that lamination of the blood-clot had occurred.—Dr. DE HAVILLAND HALL spoke of the beneficial effect of very large doses of iodide of potassium combined with rest and strict limitation in the quantity of fluids taken. In reply to the President, he said he could not explain the mode of action of iodide of potassium.—Dr. ANGEL MONEY admitted the immense value of iodide of potassium, and thought its mode of action was probably of a sedative and depressant nature.—Dr. W. B. HADDEN was very sceptical of the action of iodide of potassium in aneurysm.—Mr. W. ADAMS remarked on the atheromatous state of the ascending arch of the aorta.—Dr. KINGSTON FOWLER had no doubt of the value of iodide of potassium in the treatment of aneurysm.—Dr. ORD asked for information as to the reasons for regarding the aneurysm as dissecting in nature. Iodide of potassium was useful probably because syphilis was frequently operative in the production of aneurysm; moreover, it had a remarkable power of absorbing inflammatory deposits.—Dr. RICHARDSON, in reply, said he was not sure that the subclavian artery was completely blocked. He had given iodide of potassium on Balfour's plan, and not with any idea that syphilis had been in existence. He thought the mode of action of iodide of potassium was still doubtful. He considered that we could by means of the sphygmograph distinguish an aneurysmal tumour from one which pulsated merely by contact with an artery. The aneurysm was not really "dissecting" but "wandering" in kind.

Dr. W. B. HADDEN read a paper on a case of Chronic Poisoning by Bisulphide of Carbon. The patient was a man aged forty-five, who was employed at an indiarubber factory, where he had to inhale the vapour of bisulphide of carbon and chloride of sulphur. The main symptoms were loss of power over the extremities, with a tendency to stagger and incoördination generally. He had no defect of vision. His fellow-workman had also been under treatment at St. Thomas's Hospital with general muscular weakness and visual defect with colour-blindness. The case was reported in the Ophthalmological Transactions, vol. v., in which the report of the Special Committee would also be found.—Dr. RICHARDSON said that pure bisulphide of carbon was a powerful anæsthetic, and caused painless death. He had frequently used it to destroy dogs. Delpech, in 1866, was the first to describe the effects of chronic poisoning by this agent. This form of poisoning was more common in France, but even there it had diminished with improved hygiene of the workshops.

ACADEMY OF MEDICINE IN IRELAND.

Double Fœtal Monster.—Recent Progress in Obstetric and Gynæcological Medicine.—Axis Traction in Instrumental Delivery.—Fibro-myomatous Polypus.

AT the meeting of the Obstetrical Section on November 27th, 1885,

Dr. KIDD showed a Double Fœtal Monster, aged about five months, which had been forwarded to him by Dr.

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Keeper of Armagh. The specimen had been retained in utero for some time after its death, and upon delivery was already somewhat lacerated and decomposed. There were four upper and four lower limbs, and a single head. Two completely formed bodies were united to one another along the line of the sternum and the anterior abdominal wall, and a single funis was attached to the lower part of the abdominal wall. It was therefore one of the most common forms of a double monster. For very many years the formation of such monsters had puzzled pathologists—some affirming that they originated in the partial cohesion of separate embryos, thus indicating duplicity tending towards unity; and others affirming, on the contrary, that they resulted from the double formation of individual parts in a single embryo, being thus the expression rather of unity tending towards duplicity. The researches of Dr. Allen Thomson had settled this question in favour of the latter hypothesis, which was now the theory almost universally believed to be the true one.

The President of the Section, Dr. T. MORE MADDEN, then delivered his opening address on "Recent Progress in Obstetric and Gynæcological Medicine." He said: "The consideration of those points in the history of the recent developments of obstetric and gynæcological science on which I shall venture to address you this evening will supply much reason for congratulation on the modern advancement and present position of these twin sciences, as well as solid ground for hope in their still greater progress in the near future. Thus, for instance, childbirth has been largely divested of its former sufferings and dangers. By the more general employment of anæsthetics the throes of labour have been rendered endurable. By the earlier and more judicious use of the forceps, and the other recently improved methods of affording assistance in all cases of difficult parturition, the duration and risks of that formerly too often protracted period of agony and danger have been diminished. By the aid of the means now available for the prevention and treatment of post-partum hæmorrhage, that cause of obstetric mortality has been almost completely removed. By those antiseptic prophylactic measures now taken for obviating puerperal fever, the occurrence of that whilom most frequent and most serious of the dangers consequent on childbirth has been strikingly lessened. If, however, as still may happen, notwithstanding these precautions, septicæmic puerperal disorder should supervene, we are now armed with effective and rational therapeutic resources for its treatment, and are no longer, as of old, in the position of helpless spectators of the irresistible course of disease to an inevitably fatal termination. Lastly, by the general substitution of version, the induction of premature delivery, and other methods of practice compatible with the safety of both mother and child, in cases where formerly embryoplastic operations were unhesitatingly, and too often recklessly, resorted to, the proportion of cases in which such procedures are now employed has become so minimised as to lead to a confident expectation that in the still more perfect midwifery practice of a not distant future the great objects of obstetric science—viz., the delivery of living children with safety to their mothers—will be yet more generally realised than even at the present time is the case. This expectation is fully justified by the steady annual diminution of late years in the mortality of childbirth and the puerperal state, as recorded in the successive reports of the Registrar-General. Thus, in the ten years from 1861 to 1870, the deaths from childbirth and puerperal fever in England and Wales averaged 60 in every 100,000 women living between the ages of twenty and fifty-five; whilst during the five years from 1876 to 1880 they fell to 53 in the same number. Not many years have elapsed since it was estimated by Dr. Matthews Duncan that the average mortality in connexion with childbirth in these countries was something like 1 in every 120 women confined. Now, if we turn to the most recent report of the Registrar-General—that issued this year,—we find that in 1883 the maternal death-rate in England and Wales from all causes in connexion with parturition was about 1 in 230 births. In the Dublin Lying-in Hospital the same happy result of modern science is equally well proved. Thus, in the seven years which ended in 1864 there were 8224 births in the Rotunda Hospital, with 252 maternal deaths, or 1 in 32; whilst in the same institution, according to the recent report of the Board of Superintendence, the total last year was 1148 and only 9 maternal deaths, or 1 in 122. And finally, from the report of the Irish Registrar-General we learn that the death-rate from puerperal fever in this country last year was only 300, being 70 below the average mortality from the same cause during the preceding ten years. In the discovery and practical application of the various improvements in obstetric art which have so happily conduced to its advance, and to the saving of life and diminution of suffering thereby, the Dublin School of Midwifery has taken a foremost part ever since the foundation, 140 years ago, by Bartholomew Moss, in this city, of the first British lying-in hospital. And as the credit of some of these improvements has been claimed by recent authorities in Germany, France, and elsewhere, I may remind the Academy that it was here that the practice of delivery by version as a substitute for craniotomy in cases of pelvic contraction was first suggested by Dease, and revived by M'Clintock: it was here that by Beatty and Johnson the advantages of the timely, judicious, and more frequent use of the forceps were earliest recognised and demonstrated; it was here that the method of following down the uterus for the prevention of hæmorrhage and for the expulsion of the placenta, with which the name of a modern German authority is now incorrectly associated, was first introduced by M'Clintock, and has been carried into effect by every obstetrician educated in the Dublin School for a century before the birth of Steele. It was in this city that the so-called modern methods of obviating perineal laceration and of their immediate reparative treatment were first suggested and have been since constantly acted on. Turning now to the second of the two branches of medicine with which this section of our Academy is especially concerned, it will be apparent that, remarkable as has been the recent progress of the obstetric art, still more wondrous has been the contemporaneous development of gynæcology. To illustrate the recent change which has taken place in this department of medical practice I shall briefly contrast the imperfect diagnosis and unsatisfactory treatment of various utero-ovarian diseases some twenty years since with the results now attained by the modern science by which the defective gynæcological knowledge that then prevailed has been so happily replaced. At that time the cavity of the living uterus was a sealed book—a *terra incognita* to uterine specialists then unprovided with any efficient means for exploring its condition, or with any trustworthy method of dealing with those intra-uterine disorders which, thanks to the procedures suggested by Hagar, Kidd, Atthill, and Ringland, may now be easily recognised and effectually treated. In the pre-antiseptic surgical period to which I refer it would obviously have been impossible to foresee the successful results which in so many instances are now attained in the removal by abdominal section of ovarian and uterine tumours and other intra-peritoneal and pelvic morbid conditions. Nor was it merely subperitoneal tumours that were then generally looked on as being outside the range of operative assistance; those interstitial and intra-uterine submucous fibro-myomata which are successfully treated by every modern gynæcologist were, only twenty years since, too commonly regarded as beyond the possibility of removal. In those days, too, the reparative treatment of vesico-vaginal fistula was more frequently a failure than a success; and, notwithstanding that Simpson had previously done much to prove their curability, it was not until the subsequent adoption of the variously modified plastic operations introduced by Marion Sims, Bozeman, Goodell, and, above all, Emmet, that women suffering from extensive disruptions of the vesico-vaginal walls ceased to be abandoned to lives of hapless misery. Fifteen years ago, when attention was recalled to this subject, the pathological importance and frequency of uterine displacements were unrecognised, and their treatment remained unsatisfactory. In the same way the physiology and pathology of menstruation have only of late become understood as the result of the labours of Williams and Wiltshire; the management of its abnormalities was previously largely empirical. The bearing of cervical laceration on pelvic disorders was ignored until the subject was elucidated by Emmet. Lastly, many of the morbid conditions of the uterine appendages, such as salpingitis, pyo-salpinx, and hydro-salpinx, to which so much importance is now attached, were wholly unknown in the student days of the majority of those I have now the honour of addressing."

Dr. NEVILLE detailed the various instruments by which it had been attempted to give effect to the principle of Axis

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Traction in Instrumental Delivery. To Tarnier should be given the credit not only of having exposed with freshness and clearness the defects of the ordinary forceps, but also of having been the first to construct one which answered to the true demands of theory. The main defects of Tarnier's most recent model consisted in its complexity, amounting to clumsiness, and its cost, which is prohibitive to a general practitioner. Some of the chief modifications of Tarnier's forceps were exhibited and explained, Professor Simpson's being that best known in this country. The alleged advantages and defects of these instruments were critically considered, the true requirements being stated to be that the forceps should be constructed so as to allow of the whole force employed being exerted in the axis of delivery, and so as to leave the spontaneous movements of the head uninterfered with. So far as the author knew, all those who had hitherto devised a true axis-traction forceps had adopted Tarnier's plan of using steel traction rods, permanently attached by pivot joints just below the fenestræ of the blades. Yet such rods were certainly open to many objections which would make it very desirable, if the same results could be otherwise attained, to do without them. They add to the cost and complexity of the instrument, make it more difficult to introduce, prevent the shanks being passed well back towards the perineum without danger of injuring it during delivery, and introduce the chief difficulty in all these forceps—that of securing them in some neat and effective manner to the rest of the traction apparatus. The forceps which he exhibited was without such traction rods, but he had the very high scientific sanction of Mr. G. F. Fitzgerald, F.T.C.D., for stating that mechanically it gave the same results in another way. The forceps to which the traction apparatus is applied may be Barnes', Simpson's, or other double-curved forceps, according to individual preference; but the author on many accounts preferred the first-named. Immediately beneath the lock a curved steel bar is fastened rigidly to the handles, and projects backwards sufficiently far to reach the imaginary continuation of the axis of the blades. At this point a pivot joint, admitting of free motion in the horizontal plane of the forceps, connects the traction bar with another short one which terminates in a joint so arranged as to permit motion in a plane perpendicular to that allowed by the first joint. From this point the traction apparatus is continued onwards into a transverse traction handle, with which it is connected, exactly as in Simpson's axis-traction forceps, by a rotatory joint. The advantages claimed by the author for this instrument were that it is much simpler, cheaper, more portable, and easier of application than any of the modifications of Tarnier's forceps, while possessing all their merits; that it gets rid of the disadvantages of traction rods within the vagina; that the traction apparatus consists of one piece, which can be immediately applied after the blades have been locked; and that the same instrument may, by means of this apparatus, serve either as an axis traction or an ordinary double-curved forceps.—Dr. MACAN thought Dr. Neville gave too much credit to Dr. Tarnier and too little to Hubert, Hermann, and others, who had been working at the same problem of axis traction before him. He did not attribute the same importance as Dr. Neville did to the special construction of Tarnier's forceps allowing of rotation, because he believed that rotation could, and often did, occur within the blades of the forceps without their partaking in it. He had himself used Dr. Neville's forceps in several cases in the Rotunda Hospital, and found it answer extremely well. The elimination of traction rods he considered an immense improvement, and the ease with which the traction apparatus could be applied, as well as its portability, were distinct improvements. It would be an advantage if it had some kind of indicator which would show the exact direction in which to apply traction.—Dr. ATTHILL said that the instrument devised by Dr. Neville appeared to him to be the best and simplest axis traction forceps he had yet seen. He was not, however, an advocate of axis-traction forceps. He objected to the compression screw, which seemed a necessary part of them all. It might cause such a pressure on the child's head that death would follow. He had used Tarnier's first model when he was Master of the Rotunda, but founded it so complicated and difficult to apply when the head was above the brim that he had abandoned it.—The PRESIDENT doubted whether axis traction would long continue to be practised. Tarnier's instrument he considered entirely too complicated.

Dr. KIRKPATRICK exhibited a Fibro-myomatous Polypus removed from a multiparous woman in Sir P. Dun's Hospital. The patient had been suffering from symptoms of a uterine tumour for over two years, and of late had frequently had alarming hæmorrhages. The tumour had several times protruded from the vagina, and had been replaced by the patient herself. When about to remove the polypus he had found it separated by a very distinct pedicle from a completely inverted uterus. He removed it with an écraseur, and some vessels were tied in the stump, which was afterwards seared with an actual cautery. He had not since had an opportunity of examining the parts. The tumour, examined microscopically by Dr. H. Bewley, proved to be most unusually vascular.

Dr. MACAN showed a somewhat similar Polypus removed from a patient under his care in the Rotunda Hospital. He also exhibited an eight months' fœtus with general anasarca and curious folds on the skin.

Reviews and Notices of Books.

The Principles and Practice of Medicine. By the late CHARLES HILTON FAGGE, M.D., F.R.C.P. Two vols. London: J. and A. Churchill. 1886.

[FIRST NOTICE.]

FEW works have issued from the medical press of late years which will receive a more hearty welcome than the one before us; and deeply as we deplore the fact that he who wrote it is no longer with us to accept the reward of his labour, it must be a source of gratification and solace to his wide circle of friends to feel that they possess in these writings the sum of his learning and experience. It is true that, knowing how ardently he devoted himself to medical science, much has been expected from him in this long-looked-for work; but we venture to think that it will fully come up to these expectations. We do not mean to say that it is free from defects, or that its author would himself have felt satisfied with it, for we are told in the preface how great was the care he expended in writing and rewriting it, so as to render it as complete as possible. A perusal of its pages shows that it is one of the most scientific and philosophical works of its kind, being in truth a mine of clinical and pathological facts, which are dealt with in so masterly a manner that we know not which to admire most—the patient labour and thought expended in bringing them to light, the learning and acumen that illustrate them, or the calm and judicial spirit in which they are estimated and criticised.

It would be an impossible task within the limits of a review such as this to convey an adequate idea of the contents of these volumes; and we must fain be content with such an outline as will, we hope, excite the desire of our readers to study the work for themselves. The introductory chapter contains, in the remarks upon the essential features of diseases, the principles upon which a nosology should be based, and the true light in which so-called "predisposition" should be regarded as an etiological factor, that stamp of independence and freedom of thought which characterises the whole book. It is this which will make it so highly valued, for it not only gives to it an abiding interest, but serves to stimulate thought in the reader by presenting him with facts in a new light. Again, in the same chapter there is an extended discussion upon the modes of dying which deals with the matter in a far more rational way than is met with in text-books. Bichat's triune division has done service so long that it is refreshing to find it clearly demonstrated that it is incorrect, and that, strictly speaking, there are only two distinct modes of dying—viz., by the lungs and by the heart. Under the former head Dr. Fagge distinguishes between arrest of respiration by sudden paralysis of the respiratory centre in

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the medulla, and the more gradual process of asphyxia, a distinction which is strictly true, but seldom fully recognised; whilst death by failure of the heart's action may be sudden, from cardiac paralysis or spasm, or "shock" producing fatal inhibition, or more gradual, as in syncope, or from hæmorrhage or collapse. At the same time there remains that exceptional form of death which may almost be termed "natural," where "all the vital functions are brought to so low an ebb before any one of them is absolutely arrested, that to determine the order in which their ultimate extinction takes place is superfluous, even if it be not impossible." The subject of Contagion is next discussed, the definition of *specific* diseases being "those diseases which have a definite cause arising from without, but acting within the body, distinct from the causes of all other diseases," and the classification of such diseases into—(1) miasmatic, (2) contagious, and (3) miasmatic-contagious, is adopted. The germ theory and the part played by microzymes in infection are adequately discussed, the evidence in favour of a *de novo* origin of infective disease being held to be insufficient. The remarkable fact of acquired immunity is assumed to be due to the blood or tissues undergoing such a change in the course of the disease as to no longer afford the conditions requisite for the development of the special microzyme; and it is pointed out that otherwise an individual might constantly reinfect himself. As regards protective measures, Dr. Fagge points out the inutility of measures of quarantine, doubting even if it be right to speak of the diseases as "preventable"; but he looks forward to a future in "vaccination," going so far as to say, "One could not render a greater service to humanity than by discovering how to transmit the contagion of scarlet fever through any of the lower animals in such a way that when reintroduced into the human subject it should carry protection without risk. I am not sure whether it might not be well to expose children on purpose to infection from this disease, when it happens to be epidemic in a mild form." Although the tendency of modern investigation does, indeed, point in this direction, we confess to be unwilling to contemplate the extension of protective inoculations with equanimity; and rather hope, before the time arrives when the "attenuated virus" of each of the contagious diseases shall have been isolated, that some other, but equally efficacious, method of its introduction into the system shall be discovered. The modes of entrance of contagion into the body are next discussed, Naegeli's views being for the most part accepted, and the chapter concludes with some practical directions upon disinfection.

The interesting problem of Fever forms the next chapter, opening with some observations upon clinical thermometry. Liebermeister's doctrine of pyrexia is accepted to the effect that pyrexia follows the same laws as the physiological regulation of the heat of the body, only that there is an alteration of the point at which this regulation is set. The subjects of Inflammation, Tubercle, and Tumours are, as can well be imagined, treated by the author in a manner which will be sure to attract attention, for, as a pathologist, Dr. Fagge had earned a high reputation. He adopts Cohnheim's doctrines upon inflammation, but with an important addition, in the view that the damaged cells of the injured part are removed by the exuded leucocytes. This view, he points out, was substantially held by Goodsir, and it makes of the inflammatory process something more than a merely physical effect of damage to vessel walls. In speaking of the various inflammatory exudations, Dr. Fagge shows how different the catarrhal is from the fibrinous, owing to the great production of epithelial cells, probably from the increase of pabulum; and he suggests that the absence of fibrinogen in pus may be due to the leucocytes using up that material for nutriment. That croupous and diphtheritic exudations depend upon local death of the epithelium and tissue upon which they occur, as believed by Cohnheim, is apparently accepted by Dr. Fagge, who, however, points out that no one has yet suggested that the endothelium of a serous cavity must die before plastic lymph can form upon it, which logically should follow Cohnheim's explanation of fibrinous deposits—viz., that exudations do not coagulate within living tissues. Upon the subject of Tubercle, Dr. Fagge says that he has always been in accord with Laennec's teaching, which says much for his clearness of vision; for since Laennec's time we have witnessed a widespread tendency against these views, culminating in a no less remarkable reaction towards them. Dr. Fagge, perhaps rightly, assigns much of the waywardness of doctrine to the histologists, and asserts, *inter alia*, that a fictitious importance has been given to the giant-cell. His own view is explicit enough, for he believes that "tubercle" is a modification of the inflammatory process due to a special irritant, and therefore he sees no difficulty in accepting epithelial proliferations as well as granulation tumours as tubercular according to the nature of the tissue exposed to the irritant. It is needless therefore to remark that he is a strong upholder of the doctrine of the unity of phthisis, and even would admit as tubercular such destructive lung disease as occurs in those exposed to the inhalation of dust. He finds also in the discovery of the tubercle bacillus a confirmation of those views, for it supplies the missing link in the chain of evidence that there is a specific irritant at the root of all tubercular processes. It is interesting to read his criticism upon the earlier work on "artificial tubercle," where he foretells with accuracy the fallacies, since admitted, that underlie such inoculation experiments with non-tubercular substances. He doubts the possibility of distinguishing bovine tuberculosis from the human disease; and the fact that the bacillus is found in both goes far to substantiate this. Nevertheless, he hesitates to accept the doctrine of contagion of tubercle from without, seeing how scanty is the clinical evidence in support of it. We must confess that the alternative with which he presents us is not very satisfactory, especially in view of the doubts thrown upon Buchner's once famous discovery of the conversion of a pathogenic into a non-pathogenic bacillus. Dr. Fagge, after speaking of the difficulties associated with accepting either the view that the tubercle bacillus is constantly finding access to the body, and only implanting itself when the tissues have their local resistance lessened by inflammation, or the other view that the bacillus may remain long latent in the body until some accidental circumstance calls it forth into activity, goes on to say: "It seems to me there is a third possibility—viz., that under certain unknown conditions the occurrence of what is at first a simple inflammatory process may cause microzymes, already existing in the body, to acquire specific properties that they did not previously possess, and to convert the simple inflammation into a tuberculous one. For this hypothesis there are abundant analogies among the acute infective inflammations." The chapter on Tumours calls for little remark; it is a thoroughly scientific review of the subject, and among its more interesting and original contributions are the details of cases of multiple sarcoma, and the bold attempt to transfer the term epithelioma to its more appropriate place as significant of all epithelial new formations, and to consider carcinoma to include the following varieties: (*a*) simple; (*b*) keratoid—i.e., "squamous epithelioma" of writers; (*c*) columnar. Cohnheim's doctrine of embryonic relics being the starting-point of new growths, is held to be inapplicable universally, although it is manifest that Dr. Fagge believed that the generalisation contains probably a good deal of truth.

Passing from these preliminary chapters, the descriptions of diseases open with one upon Syphilis. It contains an

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impartial discussion upon the question of the nature of the soft chancre, and the opinion is expressed that one commonly sees mixed forms of the combined local and infective sore, the suggestion being further made that the ulcerative process in the former may in some cases destroy the syphilitic virus which has been inoculated at the same time. The description of the syphilides is excellent; and throughout the article it is obvious how careful has been the study of the writings of Hutchinson and other syphilographers. It is interesting to note that Dr. Fagge expresses some doubt as to the fibrous testis being an unequivocal sign of previous syphilis, for it often happens that this is the only lesion present in the body. In the section on congenital syphilis we note that cranio-tabes is regarded as being due to concomitant rickets. Each of the specific diseases is then discussed in turn, especial prominence being given to their etiology and pathology. The *de novo* origin of enteric fever is rejected, and it is pointed out with full illustration that the virus of this disease can be communicated in four different ways—viz., by aerial infection, by drinking-water, by milk, and by meat. Irvine's views upon the relapse of enteric fever are stated. But in this—as, indeed, in each of the articles devoted to the infective diseases—the section on treatment is somewhat inadequate. Antipyretic methods are referred to, but hardly discussed; whilst as regards such affections as scarlet fever and small-pox, the details of treatment are decidedly deficient. The article on Rötheln is devoted to a criticism upon prevailing views, in which discrepancies are prominently brought into view, and the conclusion arrived at is that the evidence is not sufficient to warrant its being regarded as an independent affection. In Dr. Fagge's opinion, rötheln is only an ill developed or anomalous form of measles, and he does not consider this view invalidated by the occasional supervention of a second attack of measles in the individual. Ague, erysipelas, and diphtheria are dealt with in an admirable manner; and as regards diphtheria, Dr. Fagge asserts that a primary laryngeal affection is rare, for, in his opinion, this disease is not identical with sporadic membranous croup. The etiology of cholera is illustrated by the evidence afforded in the epidemics in this country. It is held that Pettenkofer's "ground-water" theory, ingenious as it is, requires more proof before it can be accepted; whilst, at the same time, it does not (when modified by Naegeli's hypothesis) negative the occurrence of direct contagion, which Dr. Fagge thinks sometimes indubitably occurs. The two years that have elapsed since the author's death have, as we all know, revived the cholera question with renewed intensity; but although, in consequence, this book contains no discussion upon the comma bacillus, its perusal shows how very little we have really advanced beyond the position arrived at when Dr. Fagge wrote.

Eminent Doctors; their Lives and their Work. By G. T. BETTANY, M.A., B.Sc. Lond., F.L.S. In Two Volumes. London: John Hogg.

BIOGRAPHY is a branch of literature or of knowledge which every wise man will cultivate alike for the pleasure and for the instruction which it yields. The true remedy for much of the poor trashy reading which we see, and the poorer lives which so many of us lead, is in good sound conscientious biography. At a season like this especially it is valuable, and we do not know that any wise father designing a good Christmas present to his son could do better than give him the book which we are now noticing. If both the father and son be of the great medical calling, so much the more appropriate will be the present; but we should by no means restrict our suggestion within such limits. Medical science is becoming every day a thing with which every intelligent man should become more familiar, both because it is a part of the great field of true science, and because of its enormous human interest. Besides, in any selected group of members of our profession, such as are included in these volumes—numbering about fifty-six—it is impossible not to be struck with the force and variety of character in one direction or another of a profession which includes Sydenham and Jenner, Liston and Corrigan, Cullen and the Hunters, Stokes and Alison, Parkes and Simon, Paget and Lister. It is one good feature of these volumes that they are not written by a medical man, but by one who views medical work from a scientific standpoint. Such a writer may occasionally be at fault, and may fail to observe points which a medical critic would regard as important, but there is an advantage in seeing ourselves as "others" see us, and that advantage we have in these volumes, which we have perused with much interest.

We do not always approve of the selection of the lives. There are some great omissions—as, for example, the life of Professor Alison, who, though incidentally noticed as the influential teacher of Williams, Stokes, Watson, and others, and characterised by so high a judge as Stokes as "the best man I ever knew," is not honoured with a special chapter. Amongst other conspicuous omissions which occur to us is that of Dr. Fothergill, who was an admirable representative of the profession in the last century, both in medical and public respects. It would be possible, too, to criticise the author in regard to his selection of living members of the profession. The book would have been very much less valuable and interesting than it is if he had excluded living medical men, who, it is gratifying to think, have carried the torch of truth far beyond the point at which they received it. But it would be difficult to justify all the author's living selections, and one or two of the gentlemen honoured with a biography would certainly have suffered nothing by waiting a little longer to see their literary portrait. But the book is worthy of much praise and careful reading. Men of all schools will find their heroes recognised. Certainly the Edinburgh school has no right to complain, for the chapters on the Munros, Cullen, the Gregorys, and John Bell are among the best in the book; and the enormous influence of the Hunters on the London school, and of the Edinburgh University on the last generation of London teachers—Cooper, Abernethy, Williams, Bright, Addison, Marshall Hall, &c.—is well brought out. Though we have questioned the ripeness of two or three lives selected for notice, we repeat that there are chapters on living leaders—notably those on Paget, Wells, Lister, and Jenner—that are very well worthy of the study of all the members of the profession, and of the public too. The chapters are not only entertaining reading, but suggestive. The enormous industry of our leading men is well shown. The heroes of medicine are not all saints, though in most of them there is that deep reverence which is far removed from the atheism with which we are too often credited by superficial people; but they have their faults and their quarrels and jealousies, which are not spared in these volumes. Those of the Edinburgh school especially are faithfully reproduced, and show how a sort of Billingsgate corner often exists in the greatest minds. There was one even in Milton. It is gratifying to believe that this corner of great minds becomes more and more attenuated both in Edinburgh and London, and doubtless elsewhere, under the influence of larger truth and widening temper. We must not trust ourselves to go into minute notices of individual lives. We are grateful to Mr. Bettany for reproducing from our own columns almost forgotten passages of forecast, which it is pleasant to us to see again. His book shows well the great problems of science and humanity with which our profession has to deal, and is dealing, with ever-increasing effect.

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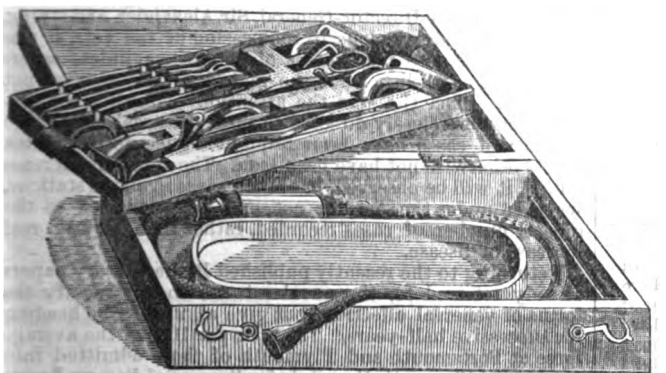
Medical Book-keeping.—MR. C. M. KEMPE, Chantry House, New Shoreham, sends us specimen pages for the General Practitioners' Visiting List, Journal, Almanack, and Memorandum Book, which is said to facilitate posting. The signs look a little complicated, but the plan seems calculated to save time and trouble. The author alleges that the posting into a ledger of a large practice can be done "in four or five hours a month." The forms are published by Silverlock, 22, Blackfriars-road, S.E.

Diaries, &c.—MESSRS. LETTS and Co.'s series of Memorandum Books, Diaries, Account Books, &c. for 1886 exhibit their usual excellence. They are of all sizes, and are made to suit the convenience of professional and commercial men in the various details of their work. It is difficult to conceive how the onerous duties of medical practitioners could in these days be carried out without the aid afforded by such books as those under notice.

New Inventions.

SWAIN'S EMERGENCY TRACHEOTOMY CASE.

THERE are few operations in surgery which the practitioner is more frequently called upon to perform in a hurry than tracheotomy. The hospital surgeon, the busy general practitioner in town, or the country doctor remote from all help, may suddenly be required to open a windpipe when the loss of moments may involve the sacrifice of life. As a rule, the best provided surgeon, when so called, rushes to his instrument cabinet. He picks out a tube here, a box of scalpels there, retractors in another place, and in the end gets to his case with perhaps something of importance left behind. Mr. Paul Swain has therefore conferred a benefit on the profession at large in having caused Messrs. Meyer and Meltzer to construct a tracheotomy case which appears to contain every possible requirement for the operation The following are the contents of the case, and are mentioned as nearly as possible in the order in which the various instruments are used in the course of the operation; 1. Two scalpels. 2. Two double-pronged blunt retractors. 3. Pair of blunt-pointed scissors. 4. Two pairs of ordinary dressing forceps. 5. Sharp hook. 6. A scissor-shaped



dilator. 7. Three tracheotomy tubes, of Parker's pattern. 8. Pair of artery forceps. 9. Dilator to be retained in trachea in cases in which a foreign body remains impacted. All these instruments are fitted into a tray, whilst underneath is Parker's suction instrument for removing blood or false membrane. There is also a place for ligatures, tape, needles, &c. The whole is contained in a strong, neat, unpolished mahogany box.

A NEW BED-LIFT.

DR. BATSFORD, of St. John's, New Brunswick, forwards [illegible] adapted for the lifting of patients, in order to examine the head and other purposes. It consists of a framework the size of the bed or mattress, the sides of which are made of wooden bars, and the end pieces of plate iron an inch and a half wide and three-sixteenths of an inch in thickness, pivoting in the centre. These are so contrived that when the lift is placed on the bed the framework falls on each side, the canvas is slackened, and the patient rests on the mattress or bed provided for him; but when the framework is lifted a catch prevents the pivot acting beyond a straight line. Transversely across this framework canvas is securely stretched, excepting for about the middle fourth; here one or more wide strips are fastened by hooks, and are readily removable. Strong cords are fastened to the framework of the lift by means of hooks and rings, four in number, and are attached to a ring through which the hook at the end of a lever six or seven feet long is passed. This lever has a second hook, which is attached to the end of a chain suspended from the ceiling, and at its extreme end is a chain which can be fixed to a staple or some secure hold whilst the patient is being attended to after having been lifted from the bed. This lift, which can be easily and cheaply made, has been tried by Dr. Batsford at the Marine Hospital of St. John's, and would be very useful in cases where the medical man was short-handed and the patient required much nursing.

PECK'S AMBULANCE.

THIS, which would probably be more correctly termed a stretcher, appears to be well adapted for the purpose of removing cases of severe injury, especially accidents which occur in mines or pits. It possesses the advantages of portability, lightness, and strength, combined with moderate price. It may be used as a hand stretcher, or borne upon the shoulders of two men, and may also be slung in a carriage or cart by means of straps and spiral springs in such a manner as to obviate jolting. We consider it to be a good workable means of transport for the sick or injured.

THE CONTAGIOUS DISEASES ACTS.

THE Select Committee of the House of Commons reported favourably, as we have seen, of the Contagious Diseases Acts. They expressed an opinion that by their means venereal diseases had been diminished, and that the efficiency of the army had been increased. They declined to recommend their repeal, and they recommended the maintenance of the periodical examinations of prostitutes. In spite of this, however, these latter were discontinued shortly after the passing of Mr. Stansfeld's resolution on April 21st, 1883. It will therefore be both interesting and important to ascertain, so far as we can, whether any, and if so what, increase of disease has occurred among the soldiers in the various localities formerly protected by these Acts in which these periodical examinations were regularly enforced, which are still for convenience termed the protected stations; for although the Acts are in abeyance in these localities, they are not repealed; this cannot be effected without another vote of the House of Commons. Three Parliamentary papers, dated respectively March 7th, 1884, May 22nd, 1885, and August 6th, 1885, enable us to give some of the effects of the abolition of these periodical examinations. It will be remembered that the Acts were fairly in operation at all the fourteen stations from the commencement of 1870, but the promulgation of the order stopping the pay of men in hospital for primary venereal affections in 1873 led to considerable concealment of disease, and rendered the returns untrustworthy for the time. This order was cancelled late in 1879, and its repressive influence on the admissions removed. Early in 1883 (as we have seen) compulsory examinations of women were suspended, and their admission to hospital became voluntary on their part. There were thus two periods of three years each—1870–72 and 1880–82—in which the Acts were fairly in operation without either influence interfering with the results. The millesimal ratio of admissions for primary venereal sores, secondary syphilis, and gonorrhœa, at the fourteen stations under the Acts, at the fourteen never

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under them, and at all the stations never under the Acts, for these two periods, with their percentage of increase or decrease, are given in the following tables:—

Stations.	Period.	Primary venereal sores.	Secondary syphilis.	Gonorrhœa.
Fourteen protected stations ...	1870–72	53·1	20·3	106·7
Do. do. do. ...	1880–82	75·6	26·6	98·9
Increase or decrease %	—	+42	+31	−7
Fourteen unprotected stations	1870–72	109·8	31·7	103·4
Do. do. do.	1880–82	175·9	38·7	128·2
Increase or decrease %	—	+60	+22	+24
All unprotected stations	1870–72	87·8	27·7	98·3
Do. do. do.	1880–82	123·0	32·5	110·5
Increase or decrease %	—	+40	+17	+12

These facts show that primary sores and secondary syphilis were much more frequent in all the groups in 1880–82 than in 1870–72; the increase at the protected stations was 42 per cent. for the primary sores, and 31 per cent. for the secondary form of the disease, as against 60 per cent. and 22 per cent. for the fourteen unprotected stations; or, if all the unprotected stations be included, the increase for primary sores was 40 per cent., and for secondary disease 17; but it must be observed that at both the lower ratios of 1870-72 were much in excess of the higher at the fourteen protected stations in 1880-82. As regards gonorrhœa, there was a decrease of 7 per cent. in 1880-82 at the fourteen protected stations, while in the other groups there was an increase of 20 and 12 per cent. in the same period. It is obvious from these details that the operation of the Acts limited the prevalence of venereal affections in a very marked manner, as compared with their frequency in other parts of the country where they were not enforced.

In THE LANCET for October 31st it was shown how the admissions of women into the certified hospitals began to fall off immediately after the compulsory examinations ceased in consequence of the vote in the House of Commons. The number now admitted is less than half that of former years, but this does not convey an adequate idea of the evil done. The women are admitted now on their own voluntary application, and the consequence is, as it has always been, that they do not apply in the early stage of disease, but later on, when from physical suffering they can no longer continue their calling. This circumstance explains the enormous amount of disease which is spread by these women when their diseases give them little or no suffering, while it also shows how much of this can be prevented by compulsory examinations.

We have seen how the Acts prevented disease among the troops stationed in those districts where they were enforced prior to 1883. Let us now see what effect the suspension of compulsory examinations had upon the men in the years 1883 and 1884. The admissions for primary venereal sores, secondary syphilis, and gonorrhœa among the troops in these years in the respective groups of stations already mentioned were per 1000 of strength as follows:—

Stations.	Period.	Primary venereal sores.	Secondary syphilis.	Gonorrhœa.
Fourteen protected stations ...	1883	109·5	25·2	99·4
Do. do. do. ...	1884	138·3	25·6	100·6
Fourteen unprotected stations ...	1883	188·3	44·3	133·7
Do. do. do. ...	1884	159·9	49·1	136·6
All unprotected stations	1883	116·5	28·5	105·0
Do. do. do.	1884	125·2	30·2	105·4

So that at the fourteen protected stations in 1883, when the operation of the Acts had been suspended for eight months, the admissions for primary venereal sores rose 45 per cent. above their average for 1880–82; and in 1884 there was a further rise of 38 per cent., when the ratio was 138·3, which was almost as great as it was at these stations in 1860 and 1861, when it was at its highest for the last twenty-five years. There was no corresponding increase elsewhere at the fourteen unprotected stations; the admissions for primary venereal sores in 1883 were only 7 per cent. higher than the average of 1880–82, and in 1884 they diminished sensibly; and if all the unprotected stations be compared, the ratio of 1883 shows a reduction of 5 per cent. on the average of 1880–82, though it regained this in 1884. Secondary syphilis presented little change in the last two years from what has been met with from 1880-82 at the fourteen protected stations, but in the fourteen unprotected there was a marked increase in 1883, which went on in 1884. When all the unprotected stations are taken together, however, the fluctuation is considerably less. Gonorrhœa has altered very little in the respective groups, but has remained most frequent at the fourteen unprotected stations.

In an early part of their voluminous report the Select Committee stated: "The extent of the subject induced your committee to exclude from their hygienic inquiry any special investigation into the effects of the Acts on the navy, and to direct their attention principally to the army, which affords adequate basis for observation and inference." We have already seen that the Royal Commission of 1870 reported favourably of the Acts in reducing syphilis in the navy, though there was an increase of gonorrhœa probably more apparent than real. In 1877 a Parliamentary paper was published giving a return showing the ratio of venereal disease in the crews of ships stationed at five home ports under the Acts, and at five home ports not under the Acts, from 1860 to 1875. The ports under the Acts are Dartmouth, Plymouth, Portsmouth, Queenstown, and Southampton. The ports not under the Acts are Greenock, Hull, Kingstown, Leith, and Liverpool. The result as regards the diminution of syphilis corresponds very closely to that obtained in the army. Thus in the years 1860-63, before any Acts were passed, the average annual ratio of syphilis was 75·02 per 1000 at the five ports since placed under the Acts, and 70·05 per 1000 at the five ports not placed under the Acts. In the years 1870-75, with the Acts in full operation, the average annual ratio was 43·52 per 1000 at the protected and 96·37 per 1000 at the unprotected stations; so that, latterly, the amount of disease at the former has been considerably less than half that recorded at the latter. The ratio fell 31·45 per 1000 at the one, but rose 26·32 per 1000 at the other. The cause of this rise at the unprotected stations, whatever it may have been, was probably also in operation at the others, and would have shown itself in them had it not been kept in check by the influence of the Acts, which should be credited, therefore, with the prevention of the rise as well as with the positive diminution. The difference, therefore, comparing the two sets of stations before and after the Acts, amounts to 57·77 per 1000 in favour of the protected stations.

As regards gonorrhœa the result is not so satisfactory, for there has been a very considerable rise in recent years. Thus, the ratio of gonorrhœa, which at the ports now protected was only 26·51 per 1000 in the years 1860–63 before the Acts, was as high as 63·08 in the years 1871–75, and at the unprotected ports it rose from 29·34 in the former to 52·36 in the latter. This increase of gonorrhœa is explained by the Director-General, Sir Alexander Armstrong, by the fact that, previous to the passing of the Acts, it was not the custom to place cases of gonorrhœa, unless severe ones, on the sick list; thus the majority of cases were not recorded. Since the Acts the attention of medical officers has been more closely directed to these diseases, and a large number of cases have been brought under notice which would otherwise not have been seen. The apparent increase which, it will be observed, has taken place at all the stations, whether under the Acts or not, may be attributed to the greater number of cases recorded, rather than to any real increase of disease.

Returning to the recently published Parliamentary papers already referred to, the naval returns do not specify the forms of venereal affection, but give all under one heading for successive half-years. The ratio per 1000 of the average force at Portsmouth and Plymouth of those admitted into Haslar and Plymouth Hospitals for "venereal diseases" were for the half year ending

	Haslar.	Plymouth.
June 30th, 1882	192·4	125·0
December 31st, 1882	191·7	104·1
June 30th, 1883	235·5	149·9
December 31st, 1883	283·7	230·7
June 30th, 1884	322·0	163·3
December 31st, 1884	312·7	156·1

Here, as in the case of the troops at the protected stations, the increase of the admissions after the suspension of the compulsory examination of the women (May, 1883) is very marked.

It has been therefore conclusively shown that the Acts were instrumental in preventing disease, and also that the abolition of their most important feature—the compulsory medical examination of prostitutes—has resulted in the reduction of women admitted into the certified hospitals, and in the increase of disease among the troops and among naval seamen.

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THE LANCET.

LONDON: SATURDAY, JANUARY 2, 1886.

Anno exeunte a sober-minded retrospect becomes classes or bodies of men not less than individuals. There is always much to sadden in looking back; if it be only to think of the opportunities lost or inadequately utilised, or to compare performances with promises, the work actually done with that we intended to accomplish. *Anno ineunte* it is not less wise to think and speak soberly, but there is withal sound policy in taking a fairly rosy view of life and its prospects, if it only be to enable the mind to call into action its utmost energies for the initiation of good enterprise. We wish we could say that the outlook in medical science, and politics were even reasonably hopeful. It is far from our wish to pose as cynics or pessimists. We are, above all things, anxious to cherish a spirit of hopefulness. Nevertheless, it must be confessed, in all honesty, that the outlook *anno ineunte* is not of a nature to inspire cheerfulness.

In respect to medical politics—always distinguished from the politics of medical men—there is no good hope, or reasonable ground to anticipate, that the year upon which we are entering will differ widely from those which have immediately preceded it. Unless some great change should come over the spirit of the country and the Legislature the attention of public men will be so engrossed with matters of state policy at home and abroad, that very little, if any, time and thought can be spared for those concerns of the art and profession of healing and health-preservation which, while they really constitute the *conditions* of national prosperity, are readily crowded out of sight and forgotten when more clamorous business demands the lead. It is useless to cheat ourselves with the anticipation that the present or any other Parliament charged with such seemingly weighty matters as the pacification of Ireland, the reorganisation of Egypt, and the establishment of peaceful relations with the Powers of Europe and the world in general, to say nothing of such near future questions as that of the disestablishment of the Church, will have time or be in a mood to busy itself with the intricate questions of medical reform. If it should happen that these subjects are brought under the notice of Parliament, it will be at odd moments and, so to say, in the cuttings and parings of time. Clearly recognising this fact, we ought at once to perceive the immense practical importance of settling all disputes and adjusting differences *among ourselves*, so that any proposals that are made to the Legislature shall take the form of carefully drafted agreements, asking only the seal of authority to make them binding. It is useless, and would be fatuous, so far as any intelligible policy except that of delay is concerned, to go to the Government or to the Houses of Parliament with measures still in dispute. There cannot possibly be time for debate. If we are to get anything, it must be in direct reply to a special request. This applies to all questions of medical reform, whether general or special. It is simply puerile to expect the discussion of any measure in Parliament. The utmost that can be accomplished is the passing of some Bill agreed upon between ourselves, and so perfected that nothing remains to be done for us by the Legislature. If medical reformers of abuses will take this for granted, something may possibly be accomplished by their endeavours, but failing the perception of this fact there can be no progress.

For example, if London is to be placed on the same footing with other large cities in respect to the facilities afforded to students for obtaining degrees in medicine, there must be a final agreement as to the bases of any change which may be legally necessary before the question at issue is raised in Parliament. It will be worse than useless to send up vague prayers to the framers and makers of public law, because these gentlemen will be far too busy to hear us and answer our petitions. It is beyond question a scandal that residents in the metropolis should be compelled to go to the provinces or even into other divisions of the United Kingdom, for qualifications which ought to be obtainable at the fountain-head of authority. The admittedly grand *rôle* of the so-called University of London as an examining board is all too grand for the majority of students and practitioners. The degrees it confers are unquestionably proofs of learning on the part of those who receive them; but the efforts to obtain these high honours are out of all proportion to the exigencies of every-day life and practice. Both as regards the time they take and the work required, the game is not worth the candle to the many, and even to some who, perhaps, *could* gather the golden fruit if it seemed likely to repay the trouble of climbing so high for it. It is easy to understand that the medical graduates of the London University—to whom all honour—should be unwilling that the distinction which they have expended much time and thought to win should be placed within reach of the less ardent. This is not only perfectly natural, but right and just. Men with any self-respect who have not now that degree, which is practically an "honours" degree, would, we must believe, be averse from taking it if the conditions of its attainment were lowered. There is therefore obviously nothing left, save to meet the urgent need of a degree within reach of the average student in London by creating a more popular, and in a sense more genuine, university in the metropolis; and it seems clear to us that the only way of accomplishing this purpose is to bring about an affiliation of the existing schools in London, with a central body constituting a Senatus, thus creating out of the existing excellent materials a metropolitan university. There ought not, so far as we can see, to be any insuperable difficulty in carrying out this scheme. As far as a medical faculty is concerned, individual schools of medicine could be effectually represented by the conjoint Colleges of Physicians and Surgeons.

The prospects of medical reform in Parliament are *nil*; but medical reform may and will be attainable, even in the busy year before us, if only there be *substantial* and *detailed* Bills before the Legislature, the opposition to which has been previously threshed out and broken down, by the parties interested among themselves. If we will learn from the past, we shall succeed. Medical reform would have been easily accomplished two or three years

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ago, but for the opposition offered by unsatisfied parties when measures came before Parliament. It is perfectly useless expecting to pass any Medical Bill for some years to come, unless opposition is averted. If medical reformers will lay this to heart and arrange accordingly, disappointments and unavailing regrets may be avoided.

THE moral success was complete of the meeting of Fellows and Members of the Royal College of Surgeons of England, held on the 17th ultimo, whatever may be its immediate effect upon the Council. A report of the meeting was published in our last issue, though the statement of the Council which was then formally presented had already appeared in our issue of Nov. 28th as a part of the report of an extraordinary meeting of the Council which was held on Nov. 24th. So far as it is possible to discover any meaning in the jumble of contradictions, inconsistencies, and sophistries of which the "statement" of the Council is composed, it would perhaps, on the whole, be more correct to say that the reiterated demand of the Fellows and Members for a larger share of the management of the College is evaded rather than refused. It was therefore merciful and pitiful to give the Council one more chance of redeeming its reputation and of saving its dignity by abandoning a position never secure, but now altogether untenable. Mr. HOLMES, as the spokesman of the Association of Fellows, moved the following resolution:—"That the answer of the Council is not satisfactory, and that the Council be respectfully requested to reconsider the subjects (1) of the representation of Members of the Royal College of Surgeons, and (2) of submitting for approval any alterations proposed to be made in the constitution, or in the relations of the College, or in any of its bye-laws, to a meeting of Fellows and Members." This was seconded by Mr. GAMGEE, as the mouthpiece of the Association of Members, and after a long, intelligent, and earnest discussion, was carried by an overwhelming majority. It is indeed both noteworthy and significant that, while several persons, including both Fellows and Members, spoke cordially in favour of the resolution, only two persons could be found, in a large and crowded meeting, to give utterance to the semblance of a contrary opinion, and neither of these ventured to move an amendment. Of these two speakers, one seemed to base his opposition upon an insurmountable dislike to changes of any and every kind; the other, on an apparent belief that, as the rights of Fellows and Members were defined by the Charters of the College, nothing could be done to alter them. This assumption implies ignorance or forgetfulness of the fact that the ostensible motive of the present agitation was the proposal of the Council to obtain certain alterations in the Charters. It was because the proposals of the Council did not go far enough that the resolutions were proposed and carried at the meeting of March, 1884. The history of the College furnishes several disproofs of the assumed finality and inalterability of a Charter. For instance, the notorious Charter of the year 1843 did materially alter and disturb the constitution of the College as founded by the Charter of the year 1800, and did gravely modify the rights, status, and relations of all Members of the College. If the Charter of the year 1843 could create a new order of Members to be called Fellows, and if it could confer upon these Fellows certain exclusive rights and privileges, it does not require much perspicacity to conceive that a Charter may be granted in, say, the year 1886, which will, among other things, provide for adequate representation of the Members of the College in the Council. What the precise nature and extent of the representation should be may still have to be definitively settled; though it is satisfactory to learn that the Association of Members has practically, and in the main, accepted the principle laid down at the general meeting of the Association of Fellows held last May—namely: "That it would conduce to the welfare of the Royal College of Surgeons, and would tend to promote the interests of medical polity and education, if Members of the College were empowered to take part in the election of members of the Council, provided, first, that no Member shall be eligible to vote until he have been such Member for a period of at least ten years; and secondly, that the number of members of the Council elected by the Members of the College shall not exceed one-third of the whole Council." (See THE LANCET, May 23rd, 1885, p. 963.)

Mr. RIVINGTON, in his sensible and appropriate observations on the resolution proposed by Mr. HOLMES at the general meeting held in the College last month, suggested that the Council should take steps to ascertain the individual opinions of the Fellows and Members on the points at issue. This is a practical and practicable way of proceeding. If the Council is really actuated by the lofty and disinterested sentiments it so persistently professes, let it issue the resolution of the Association of the Fellows and ask each Fellow and Member to signify his approval or dissent by the word "Yes" or "No."

THE charitable world has been startled by the proposal of "A Middlesex J.P." that every subscriber to a hospital should contribute on the condition that 25 per cent. of his subscription shall be given to the payment of current expenses, and 75 per cent. invested—that is, that a quarter shall go for the present wants of the hospital, and three-quarters for the future. We find it difficult to speak with proper patience on such a suggestion, which has met with telling replies from Mr. HENRY C. BURDETT and from Mr. F. C. CARR COMM, chairman of the House Committee of the London Hospital. The principle advocated by "A Middlesex J.P." is the very contrary of that generally approved by the intelligent supporters of hospitals, who rightly argue that the main duty of every generation of subscribers is to make generous provision for the sick poor of its own day, and leave to the benevolent of a future day the duty and the pleasure of providing for the sick of its own period. No doubt it is reasonable in the administrators of a hospital, large or small, to have a little reserve against a rainy day—for "some days must be dark and dreary"—like those we have at present. But that it is the duty of the present subscribers of hospitals to lay by 75 per cent. of their contributions for the benefit of future patients or a future generation is one of the most curiously wrong notions which we remember to have met with. The case would be different if we had met the misery which exists with adequate generosity—if we had subscribed enough "and to spare." But this is notoriously not the case; many

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a poor man, woman, and child are suffering in straitened homes for want of a bed in a hospital, which the slightest curtailment of our luxuries would suffice to supply. Criticism has taken in many minds the place of charity. A keen eye for abuse has taken the place in them of a keen eye for suffering, and any charge against hospitals is entertained: "they are sectarian," "they are abused," "they are extravagant," "unfit persons gain admittance," and half a dozen other things are said of them, which damp enthusiasm, and serve as an easy excuse for not sending the subscription which every benevolent man feels disposed in his best moments to send, and which he would double if he could actually see the great care and skill with which the suffering are treated in any of our hospitals. We are not denying the occasional abuse of hospitals. We see by the *Newcastle Daily Leader* that Mr. JEAFFRESON, of Newcastle-on-Tyne, has been giving instances from his own experience. There is something in the retort of our contemporary that there is sometimes a want of accommodation in hospital surgeons to humbler patients in the matter of fees. It is also true that it is impossible to judge every case by a mere wage test or a rent test; and, further, it is true that many people avail themselves of hospitals for a big or occasional misfortune who ordinarily pay their medical man pretty well, and more than they would pay in any ordinary provident arrangement. But we do not doubt the existence of a considerable amount of abuse, though it has apparently been exaggerated. The abuse ought to be eliminated, but it is impossible to deny that our existing hospitals are inadequate to the charitable and kindly treatment of the really poor; and if Christianity itself is not to be discredited, if its favourite boast is not to be disproved, we shall have to exhibit far more generosity in hospital subscriptions and donations, and far less carping criticism. Let any humane man think of what the closing of wards of hospitals means in a community like London, and he will see the force of Mr. BURDETT'S and Mr. COMBE'S arguments in favour of more support for them. And the benevolent will not do badly if they consider that hospital the best whose expenses of administration are least, and which expends its money, not in investments, which, indeed, are now very attenuated in most London hospitals, but in receiving and relieving urgent cases of pain and disease.

A RECENT trial before the Lord Chief Justice, memorable alike for the forensic talent with which it was conducted and the weighty medical testimony with which it was supported, furnishes matter for serious contemplation of the physiological and pathological features of two complex functional disorders—diabetes and disturbed cardiac dynamism. It was admitted by the defendant company that an accident had occurred; but they denied, firstly, that the immediate injuries were as severe as alleged by the plaintiff, and, secondly, that neither the weakness and irregularity of the heart nor the glycosuria was the result of their negligence. Now, there is both experimental and ordinary pathological evidence that diabetes may be induced by injury to the cerebro-spinal system, and that part of it in particular which is known as the floor of the fourth ventricle. In fact, CLAUDE BERNARD demonstrated, and the observation can easily be verified, that puncture of the medulla oblongata at a certain spot—the so-called diabetic centre—is followed by the appearance of sugar in the urine. If the animal be left at rest, the glycosuria disappears in a few days, and, other injuries apart, it regains equilibrium of the glycogenic function. So, too in the human subject, it is not rare to find the urine of persons who have recently met with severe injuries to the skull to contain a trace—and it may be more—of glucose. With appropriate treatment, however, this chemical evidence of disordered innervation, vascular and special, vanishes in the great majority of cases, although it is certain that now and then, instead of being transient, it remains permanent. We are acquainted with a case of a man who was the subject of a very severe injury to the head, which produced a lasting crossed paralysis, palsy of the facial nerve, and hemiplegia on opposite sides. Twenty-seven years after the accident his urine was found to be loaded with sugar, and at the post-mortem examination a calcareous nodule, the size of a pea, was found in the medulla oblongata, and around it a tract of sclerosed nerve tissue. We imagine there can be little doubt that the lesion in question was the cause of the diabetes; to say the least, such an inference would have been considered by most medical men a fair interpretation of the facts, and one which a court of appeal would not be ready to set aside as "against the weight of evidence." We cannot subscribe to an assertion made at the trial recently concluded—viz., that because insensibility did not, as alleged, ensue upon the injury, that therefore the latter could not have produced diabetes, for the puncture experiment before referred to negatives such a conclusion. It seems to us that it is impossible to say with certainty that any one factor is the cause of diabetes in a given case. The decision must be grounded on the results of a balancing of probabilities, and this in the subject before us is necessarily a delicate procedure, for several theories may be found to fit the facts almost equally well. Diabetes in its minor degrees may certainly exist without the patient, or even his medical attendant, being cognisant of it. Nor need its existence cause any serious departure from accustomed health. The deaths from acetonæmia, which now and then occur without previous warning, support our contention.

Annotations.

"Ne quid nimis."

DECREASE OF ZYMOTIC DISEASES.

THE Supplement for the decennial period 1871–80, which has been recently issued by the Registrar-General, affords a remarkable confirmation of the value of the sanitary measures which now form so important an element of imperial and local administration in England and Wales. According to Dr. Ogle, the general rate of mortality has, when compared with that which prevailed during the ten years 1861–70, so far lessened as to exhibit a saving of 1144 lives annually to each 1,000,000 persons living; and the saving has to a large extent been effected by a decrease in the more preventable of the zymotic diseases. The scarlet fever mortality fell considerably, the annual deaths per 1,000,000 having diminished from 972 to 716; diphtheria exhibited a decrease from 185 per 1,000,000 to 121, but the

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loose nomenclature used in connexion with this disease makes the returns under this heading unsatisfactory. The deaths from "fever," a term which includes typhus, enteric fever, and the ill-defined forms which are placed under such headings as "simple continued fever," fell from an annual average of 885 per 1,000,000 to 484. Enteric fever is essentially our English fever; it is the disease of all others the mortality from which affords a test of efficient sanitary administration, and a fall of no less than 45 per cent. is a testimony to a vast amount of excellent work. The deaths from diarrhœa also fell from an annual rate of 1076 per 1,000,000 to 935; in other words, there was an annual gain of 141 lives for each 1,000,000 persons living. The diminution in measles and whooping-cough was much less marked, and these are diseases which are hardly subject to such sanitary control as can be exercised. One disease, however, forms an exception to this general decrease—namely, small-pox, the mortality from which rose from 163 per 1,000,000 to 236. This rise was largely due to the fact that the serious epidemic of 1871 and 1872 is included in the decennial period referred to; but it has been partly due to an increase in adult small-pox amongst persons who have not been revaccinated, a subject to which we referred at length in our recent comments on the last annual report of the medical officer of the Local Government Board. This increase too, occurring as it has done in the face of a general decrease in the zymotic diseases which are essentially preventable ones, shows how incorrect it is on the part of those who deny the value of vaccination to assert that the general diminution of small-pox since the Vaccination Acts came into operation has been the result of improved sanitary administration. Apart from the protection afforded by vaccination and revaccination, small-pox is as deadly a disease as it ever was.

THE HOMES OF THE WINDSOR POOR.

WE have seen with much satisfaction that the opinion that Windsor must make a determined effort to improve the homes of its poorest inhabitants is gaining strength. In a leading article *The Times* has well urged the need of the improvements for which we have pleaded; and the Rev. Arthur Robins has in a letter which was published in that journal on Christmas Day again shown that the only effectual remedy which can be applied is the complete demolition of the worst areas, and the erection on their sites of habitations suited to the health and moral requirements of the people. Sir Henry Ponsonby has, at the instigation of the Duke of Connaught, promised to bring to the notice of the Queen the fund which Mr. Robins proposes to create, on condition that "the plan should be fully matured in conjunction with the authorities of the borough"; and we now learn that the Mayor has promised to meet Mr. Robins and his friends immediately after Christmas in order that they may take counsel together. There is, then, every prospect that a substantial beginning will be made of the steps which are necessary for the completion of the scheme. The purchase of the sites and the existing buildings can only be undertaken by the goodwill of the present owners. Unfortunately, the worst houses are those which remunerate most largely their owners. The poor invariably pay a rental which is altogether out of proportion to the character of the accommodation which is afforded them and of the money value of the property. A recent decision of an arbitrator of the Local Government Board, appointed to assess the value of certain insanitary buildings in St. Pancras, allowed no premium for compulsory sale, and had full consideration for the condition of the property. Proceedings taken under Torrens' Act by the local authority would, therefore, enable all houses which could be demolished under this Act to be removed at a reasonable cost. We presume, however, that arrangements will, if possible, be made for the clearance of sites without recourse to this measure, and, under these circumstances, it is earnestly to be hoped that the owners will meet the would-be purchasers in a liberal spirit. There should be no difficulty in the way of raising a considerable sum of money for the purpose of doing honour to the Queen and of improving the condition of the Windsor poor at the same time.

HOSPITAL PROVISION FOR INFECTIOUS DISEASES IN SALFORD.

THE relations that subsist between the guardians of the poor and the Town Council of Salford, as the sanitary authority for that borough, with reference to the expense incurred for the hospital isolation of infectious diseases, are just now under discussion in the General Health Committee of the Council. At the request of this Committee the medical officer of health (Dr. Tatham) has prepared and issued a special report on the subject, which has far more than local interest. In the provision of efficient hospital accommodation for the isolation and treatment of infectious diseases, Salford has taken a prominent place among the large towns of England. The local sanitary authority, at its Wilton Hospital, possesses 100 beds, which, as Dr. Tatham remarks, "*under ordinary circumstances*, will probably be sufficient for the isolation of such infectious cases as are likely to require removal, *with the one exception of small-pox*, which cannot safely be treated in close proximity to our present fever hospital." This hospital accommodation is supplemented by an arrangement with the authorities of the Monsall Hospital to receive such cases of infectious disease, including small-pox, as the Health Committee are unable to accommodate in Salford. Wilton Hospital was established in 1876 for the "isolation of such patients *other than paupers*, as could not be treated at home without risk"; but within a year of the hospital being opened an arrangement was made between the guardians of the poor and the Salford Town Council, by which paupers were admitted to the hospital on payment of a guinea a week by the Poor-law authority; and during the period from 1876 to the end of 1882 more than 37 per cent. of the patients treated in the hospital were paid for as paupers. In fact, during that period most of the patients were admitted on the order of the relieving officers. In 1883, however, the compulsory notification of infectious diseases came into operation in the borough, and through this agency the "sanitary inspectors received information of infectious sickness as early as, if not earlier than, the relieving officer, and consequently the patients were, in many cases, removed and their homes disinfected before application could be made to the Poor-law authority for relief." Under these circumstances the proportion of patients paid for as paupers declined to 6 per cent. in the two years 1883-84, although the proportion of patients in a position to contribute to the expenses of the hospital showed no increase. A deputation from the Health Committee therefore waited upon the guardians, and made such representations on the facts above referred to, that the guardians agreed to grant an annual sum of £500 to the Health Committee as a "contribution towards the treatment and maintenance in hospital of poor persons suffering from infectious disease." This arrangement received the sanction of the Local Government Board, and has since been in operation. The point now under the consideration of the Health Committee of the Town Council is an application to the guardians for an increased subsidy. Bearing in mind the large expense incurred by the maintenance of the hospital, and the undoubtedly economical

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bearing of its operation upon the expenditure of the guardians in respect of out-door relief, it may be earnestly hoped that, in the interest of public health, as well as of Poor-law expenditure, the guardians will take a large and liberal view of the question, and of the request for an increased grant in aid of the expenses connected with the Wilton Hospital.

THE GOVERNMENT OF LONDON.

THE Parliamentary and General Purposes Committee of the St. Pancras Vestry have presented a report, which the vestry have adopted, upon the scheme which the Corporation of the City devised for the better government of London, and which is based on the principle of the establishment of a series of municipalities throughout the metropolis. The report agrees with the corporation scheme so far as it recommends that there should be a central body for common or metropolitan purposes, but disagrees entirely with the idea of ten separate municipalities. The committee are of opinion that there should be local municipal boroughs, each of which should have a council, which should manage all its local affairs, and the duties and powers of such local councils should be clearly defined in the Act; and also that there should be one central authority either elected from such local councils or by the ratepayers direct, and if direct, that they should be elected at the same time as the local councils, and those having the highest number of votes should be members of the central as well as of the local councils. The central council should have conferred upon it duties now performed by the Metropolitan Asylums Board, the School Board, and the Metropolitan Board of Works, so that there should be only one authority for metropolitan purposes, instead of the numerous and often conflicting authorities as at present. The new London government, the Committee think, should also deal with all questions of Poor-law administration. We observe in these recommendations the thoughts of Mr. T. Eccleston Gibb, the vestry clerk for St. Pancras, who has recently been elected M.P. for the Eastern Division of that borough. Mr. Gibb's presence in the House will materially strengthen the hands of any party seriously undertaking the reform of London government, and it may be expected that any legislation in which he takes part will have full regard for the health requirements of the metropolis.

FURTHER RESEARCHES ON MALARIA.

IN the current number of the *Fortschritte der Medicin* there appears a translation from the Italian of some further researches on malaria by Professor Marchiafava and Dr. Celli. The chief results so far obtained are thus summed up:—1. In the blood of individuals suffering from malaria there may be found in the interior of the red blood-discs minute organisms, composed of homogeneous protoplasmic particles, which are endowed with lively amœboid movements, and can be distinctly stained. These organisms are only found in the blood in cases of malaria, and are termed plasmodes or hæmoplasmodes of malaria. 2. In the interior of these units reddish or black pigment may be detected; but it is not an essential constituent, being merely derived from the hæmoglobin of the red disc. According as this pigmentation does or does not take place we have or have not melanæmia. 3. The hæmoplasmodes may be transformed by a process of fission into a group of granules which do not possess amœboid movements. This fission may occur in the pigmented as well as in the non-pigmented plasmodes, and it is most probable that this is the ordinary mode of multiplication within the human organism. Infection may occur as the result of the intravenous injection of malarial blood, as is shown not only by clinical experience, but also by the fact that in the blood of the receiver the hæmoplasmodes may be discovered. The units further increase as infection progresses, and diminish, until they disappear, as infection ceases, whether naturally or under specific treatment. The authors, in determining some of the last points, made experiments on a man aged forty-three, who was suffering from paralysis agitans, but who had never had any malarial fever. The blood was taken from a malarial subject during his apyrexial period, and the febrile movement commenced in the receiver the same evening.

A HIDDEN DANGER.

THE risk of conveying parasitic disease by means of the brushes and combs used in hair-dressing is not an imaginary one. It is no doubt much reduced in the better-class establishments by careful attention to cleanliness of the implements used, but even in them accidents are liable to occur at times from forgetfulness or neglect. A rush of customers cannot always be controlled, and there may not be time in each case to provide against the transference of contagion, which, perhaps, may be exceptional, and, as a rule, unlooked for in the course of a given business. Such unusual circumstances have nevertheless to be considered and dealt with. Some will insist that a good supply of brushes in permanent use, with regular cleansing, is the only reliable guarantee for all emergencies. Against the grounds of this argument nothing can, of course, be said. If the plan is borne out in practice, no ill can come of it. At the same time further suggestions are both admissible and welcome. Among such it may be well to note a method—in favour of which all others have been discarded—by a Liverpool operator. This consists in supplying each customer with a separate and personal brush, which is, in ordinary phrase, "given in" with the hair-cutting. The plan appears to pay, and we may readily believe the assurance of its originator—that by its employment the fear of parasitic troubles is reduced to a minimum. A comb is not mentioned as being given along with the brush; but this, again, can be much more easily and rapidly disinfected as required, and practically, we suppose, may be left out of account. Certainly the novel arrangement with regard to brushing is a gain on the side of healthy practice.

SANITARY SURVEY OF ST. LOUIS.

THE present and past sanitary history of St. Louis forms the subject of a volume by a number of contributors, the whole being a reprint from the Transactions of the American Public Health Association. The topography, climate, and sanitary administration are first entered into, and then come chapters on the sewerage and water-supply, and it is interesting to note how marked an effect proper sewerage and drainage schemes have had in reducing the mortality in those portions of the town which have been fully dealt with; but the absence of sewers in some localities leads, in this comparatively small town, to a mortality which exceeds that of London. All this is, however, in course of remedy, and in such details as the through ventilation of house-drains efficiency is now insisted on. The paving of the streets and minor thoroughfares, and a description of the milk service next follow, together with a review of the local industries, and of the chief local factors in the causation of disease. In an appendix is a brief account of the visitations from cholera which St. Louis experienced in 1849, from 1850 to 1854, and in 1866, and it is further shown how the sanitary organisation of that year led to a control of this disease in 1867, and to a rapid disappearance of the epidemic when it appeared for the last time in 1874. The last paper reveals one of the greatest dangers to which St. Louis is subjected—namely, the fact that the population resort to a

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large number of local wells for water. Many of these wells are known to be foul, but we read of one sunk in a portion of the town which is thickly covered with old buildings, and from which the water is taken which provides the main manufacturer of soda-water. On three sides of the establishment are sewers, and close by is a filthy alley. So, also, this very block is described as a cholera centre thirty years ago. The detailed account of the public water service of St. Louis shows that it is not above suspicion either as regards its source or the quantity available for the population, but remedial measures were in contemplation when the report was written, and it is to be hoped that by this time further action has been taken in respect of this and other sanitary measures which are shown to be called for. It would be well if every city and town could refer to such a document for information as to its sanitary advantages and defects.

POISON FOR TWOPENCE.

THE evidence given at an inquest held last week by Mr. Bedford, the coroner for Westminster, serves to illustrate very strikingly the ease with which large quantities of deadly poison may be purchased without inquiry or restriction of any kind. It was stated that the deceased, a man named Winter, employed in the Catalogue Department of the British Museum, had suffered from periodical attacks of nervous prostation for some considerable time, probably for nearly six years; that he was of an excitable disposition, and would frequently absent himself from home for days together. About 11 o'clock on the morning of the 18th inst. he was seen to drink something from a tumbler, and on being questioned by his niece admitted that it was oxalic acid. He was removed to the Westminster Hospital, and died ten minutes after admission. We are not told how much was taken, nor what antidotal treatment was resorted to, but Mr. Swain, the house-surgeon, is reported to have stated in evidence that *for twopence enough poison could be purchased to kill two people.* This is an assertion which cannot be allowed to pass without inquiry and investigation. That deadly poisons are sold in this reckless way is almost inconceivable. If the Poisons Act permits the sale of oxalic acid to any and every chance comer, the sooner its powers are strengthened the better for all concerned. It is generally admitted that of late the responsible authorities have been slow to exert their powers.

BURNED TO DEATH.

IT is not less humiliating than terrible to think that for the want of obvious measures of safety ladies of position and refinement should succumb to "accident" by burning from the simple fact of a dress taking fire from a fallen candle, or in some similar fashion. Mingled with the very deep sympathy we feel for the victims of the last calamity of this sort—that which has just occurred at Stoke, near Devonport—there must needs be a deep sense of the grievous mistake so strangely made by even the most enlightened and well-informed in omitting to have dresses of the "light material" worn at balls so prepared as to render them non-inflammable. The initial fault, of course, lies with the manufacturers, who ought of their own forethought—or, if they will not, should be compelled by Act of Parliament—so to prepare the fabrics of which ball dresses are made that they shall be free from the peril of fire. That there is no insuperable difficulty in this process we all know, and it is one which ought to be generally adopted. It is idle to prescribe carefulness in the act of dressing or while wearing clothes of these specially light materials. "Accidents will happen" is an adage which none can gainsay. Nor is it possible to pen one word, except of regret, for the fate of the victim, whose impulse, fatal as it proved, was to run to the aid of the first sufferer. It is no use now to argue that the wearer of a similarly inflammable dress ought to have kept away instead of seeking to lend assistance. What would the world have thought of the poor lady if she had done the right and prudent thing in the emergency? The victim of her own good but impolitic impulse must be mourned by all generous hearts with respect rather than censure. The presence of mind shown by the step-father—who, happily for one at least of the sufferers, was at hand—is also to be highly commended; but it is heart-rending to think that not only might death and suffering have been prevented, but that the accident would not have occurred, if only the precaution had been taken to render the materials of which their dresses were constructed non-inflammable, by the manufacturer in the first instance, and by the laundress afterwards.

ALCOHOL IN INFIRMARIES.

MR. THOMAS ROBINSON, the secretary of the Sunderland Infirmary, has published a correspondence between himself and Dr. Philipson, of Newcastle, on the Consumption of Alcohol in the Sunderland Infirmary. He points out that the average cost per bed in Sunderland is 3*s.* 11*d.*, and not 9*s.* as stated by Dr. Philipson, the amount spent on alcohol in the Infirmary of Newcastle being 28*s.* per bed. Dr. Philipson, in reply, attributes the difference to the large proportion of severe surgical cases in the Newcastle Infirmary compared with that of Sunderland, and suggests that the mortality of such cases is less in the Newcastle than in the Sunderland institution. Mr. Robinson retorts in numerous letters, and with various statements. The chief of these is to the effect that in regard to medical cases the number of cures in the Newcastle Infirmary has steadily fallen in ten years from 58·80 to 24·86, and the death-rate has risen from 8·47 in 1875 to 12·01 in 1884; whereas in Sunderland the decrease was only that represented by 51·78 per cent. in 1885, and 64·37 in 1876. The average death-rate of surgical cases (including accidents) in Newcastle for ten years was 5·58 per cent., in Sunderland 2·45 per cent. Of capital operations in Newcastle, the average death-rate was 4·0 per cent., in Sunderland 2·43 per cent. We must say that we regard such wholesale statistics with very little confidence. It is scarcely conceivable that the mortality of medical cases in both the Newcastle and Sunderland Infirmaries is greater than it was ten years ago, and the cures less. We think the medical use of alcohol a question of great scientific and moral importance, but it is not to be settled by vague letters of this kind.

"RELIGIOUS HALLUCINATION."

WHAT is known as *religious hallucination* is really either the special development of a general morbid state—in other words, ordinary insanity putting on a particular type probably determined by the environment,—or it is a variety of hysterical excitement. There is in the weak and unstable minds of women a natural tendency to ecstatic engrossment with the subject of religion. This is fully accounted for by the fact that religious beliefs are the only remaining forms of mental excitation about the unknown and mysterious. The belief in fairies and witches and ghosts of all kinds has already died out in the minds of educated folk. No note need be taken of the lingering trace of these old phantasies which we find in the spiritism of the few who still cleave to the love of mystery. When the feminine mind, or the masculine mind of feminine grade, is perturbed, it naturally busies itself with the affairs of some other world. There is nothing in the least degree remarkable from a physiological point of view in this notorious fact. Nor is there anything strange in this particular form

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of excitement, and others like it, being found to spread from one individual to another—in short, becoming epidemic. Just as stringed instruments are attuned to each other when long played in concert, and sensitive flames respond to vibrations propelled through the atmosphere, brains of like or "sympathetic" physical structure and organic habit are mutually responsive. The special features of any local or social development of the perturbation called "religious hallucination," are doubtless determined by the type of the class affected, and this, as we know, is determined by the conditions of heredity, life, growth, and education. There is nothing whatever wonderful in these phenomena. They are simple facts in the light of physiological science, and can be fully and clearly understood in this light only. The remedy for such visitations is further enlightenment. The time is probably not far distant when disturbances and phantasies of this sort will be wholly and everywhere things of the past.

STATE MEDICAL MATTERS IN VENEZUELA.

THE Venezuelan journal *El Ensayo Medico* mentions several reforms which seem greatly needed in Caracas, the capital of the republic. So many urgent cases occur in the night amongst people who are either so poor or so ungrateful that they do not pay a doctor when they summon him, that it is of great importance for the Government to establish a night service for providing medical aid to those in need of it. Again, there is, it seems, but one "municipal medical officer," who has long distances to travel and plenty of work to do; so that very frequently when he is urgently needed he cannot be found. The editor of *El Ensayo* mentions that people often come to him imploring him to go and look at a corpse, so as to give them a death certificate to enable burial to take place. Sometimes the case is of an infectious nature, and it is of the utmost importance that it should not be retained in the house; but it is impossible for a single municipal medical officer to be always able to attend to such cases without delay—and this, of course, is dangerous to those still alive. It is to be hoped that the city will see its way to making some better arrangements, whereby this delay may be avoided. A horrible system, too, is in vogue of taking the bodies from hospitals and the houses of the poor to the cemetery in shells, which, instead of being buried, are brought back and used repeatedly. These shells can hardly fail to be in many instances vehicles of contagious disease of various kinds from the dead to the living. There is one other point worth mentioning, and that is that the habit of going to church, especially on feast days, to pray for relatives who are sick or dead of an infectious fever, leads to the churches being in many cases dangerous hotbeds of infection. The editor has frequently seen people who have just been nursing yellow fever patients—feeding them, emptying their dejections and black vomit—praying in church, surrounded by numbers of other citizens. Surely medical men might do something towards minimising this danger by explaining certain necessary hygienic precautions to the families of patients afflicted with infectious disorders.

AZOTURIA.

AN estimation of the amount of urea discharged in a given time has been long regarded as a scientific means of diagnosis, not only in renal disease, but in other disorders which disturb the normal exchange of material. Within the last two or three years M. Rommelaere has made certain statements which, if true, would certainly afford additional help in the differential diagnosis of gastric diseases. Azoturia is a convenient term to signify the normal discharge of nitrogen in the urine. It used to mean hyper-azoturia, and we now also speak of hypo-azoturia. But difficulties still exist in the way of nomenclature, for no one knows the normal discharge of nitrogen. It is asserted in text-books of physiology that 500 grains of urea are the normal amount discharged by an average healthy man in the twenty-four hours. But this seems to be an arbitrary standard. The objections that have been raised against Rommelaere's conclusions (*vide* THE LANCET, p. 604, vol. ii., 1884) are four in number:—1. The estimate of thirty-two grammes for the normal azoturia is too large; in France it is given as twenty-one grammes. 2. Azoturia is proportional to the kind of diet. 3. A patient who is not fed, or who vomits his food, has hypo-azoturia, no matter what his disease. 4. Cancers may be associated with hyper-azoturia. Rommelaere admits the force of the first two objections, though he thinks his own conclusions are not perceptibly altered thereby. Theoretically there are objections, but not practically. He adduces evidence to show that the degree of azoturia is not in direct relation with the quality and quantity of the food in acute diseases, nor even in chronic affections.

THE BLACKWATER VALLEY.

THE stream into which some of the sewage of Aldershot, and the numerous hamlets along the marshy valley between Aldershot and Swallowfield, ultimately finds its way is, as we have already pointed out, in a very insanitary condition. Diphtheria has become almost naturalised along the line of this stream, and sporadic cases of typhoid occur from time to time. The surrounding district above the level of the valley is, with a few exceptions, very healthy. The soil of the higher ground is sandy, and permits filtration to take place to the lower ground, making this an unhealthy morass. A scheme is in contemplation for cleansing the Blackwater stream and lowering its level, so as to enable the valley to be drained. There is at present some want of unanimity among the local sanitary authorities interested in this matter. But it is a subject of far more than local interest; for adjacent to this valley, and more or less affected by its condition, stand the military schools of the country, as well as the military camp at Aldershot.

DIGESTIBILITY OF CHEESE.

THE digestibility of cheese depends a good deal, according to Klenze, on its physical properties. All fat cheeses are dissolved or digested with great rapidity, because the molecules of casein are separated only by the fat, and so the solvent juice can attack a large surface of the cheese at one time. Whether the cheese be hard or soft does not appear to matter, and there is no connexion between the digestibility and the percentage of water present in the cheese. The degree of ripeness and the amount of fat have, however, considerable influence, for both these conditions render the cheese more friable, and so allow of intimate contact of the juice. Cheddar took the shortest time to digest (four hours), whilst unripe Swiss cheese required ten hours for solution.

MEDICAL AGENCY.

AN important action has been tried in the County Court, Newport, in which Mr. Tritton, librarian of King's College, sought to recover £30 of Messrs. Elkington and Baddeley for introducing to them a partner—Mr. Morgan. It was not denied that Mr. Tritton had introduced Mr. Morgan, but it was contended that he was not a commission agent, and was not appealed to as such; and the defendants, while quite ready to pay a gratuity, objected on principle to pay Mr. Tritton as if he were a regular agent. In the end the jury decided that the defendants employed the plaintiff to

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introduce a partner, and secondly, that the plaintiff did introduce Mr. Morgan. But they left it an open question whether the plaintiff should be paid for his services; and on being asked by the judge to say what would be a reasonable sum for his services, said £15, and judgment was given for that amount, each side to pay its own costs. Mr. Tritton would have done better not to have assumed the office of a medical agent. It is clearly not desirable that the officials of our medical schools should practise the callings of medical agents.

THE METROPOLITAN PUBLIC GARDENS ASSOCIATION.

THIS Society, in a circular issued a few days ago, has shown good reason why the sum of £4000 which is asked for in aid of its work should not prove too much for public liberality. Since its establishment in 1882-3, the Association has been engaged in 233 undertakings connected with the formation of playgrounds, public gardens, resting-places in thoroughfares, and gymnasia. Of these, eighty-three have been successfully carried out, eighty-five have been unsuccessful, and sixty-eight are now in progress. The year 1885 has seen the formation of twelve new spaces for recreation. The cost incurred on this head has varied from £46 to £1030 in different cases. For the payment of these amounts the Association has, in several instances, been much aided by the generosity of individual subscribers; in others, the weight of expense has been borne by its own funds. Another point worth noting is, that most of the labour devoted to these works has been sought for among the ranks of the "unemployed" labouring class. Trees have been planted in two thoroughfares, and seats provided where necessary. Money has been advanced to six public gymnasia in sums ranging from £10 to £100. The Public Gardens Association is not sectarian or illiberal in its aims or its donations. A part of its funds has gone to strengthen the efforts of other bodies working on the same lines as itself. Nor do its benevolent exertions take effect on any specially favoured metropolitan area. Islington, Battersea, Bethnal-green, Mile-end, Holborn, Clerkenwell, Westminster, and many other quarters, can bear testimony to the enlightened zeal of its members. The opening up of Highgate Woods and the formation of a public park at Kilburn are partly due to its representations. Much more work of a like kind remains to be accomplished in and around the crowded parts of London. That perfect success is hardly possible will appear from the failures which have mingled with the past achievements of the Association; but after making every deduction we may rest assured that the total sanitary gain from these improvements will repay a considerable outlay upon them.

HYGIENE IN POLAND.

THE medical faculties and press of Poland are deservedly renowned, especially, of course, in countries such as Russia and Bohemia, where their language is read. There has not, we believe, hitherto existed any popular journal in Polish dealing with sanitary matters from a scientific point of view. This want is now being met by the publication of a new monthly journal entitled *Zdrowie* (Health), the first number of which contains several interesting and instructive articles, among which we may mention the following. "On the Bath and its proper use in the case of both New-born and other Children." The writer describes the action on the skin, explains the importance of cleanliness, and alludes to the danger of employing water at too high a temperature. He also speaks of the use of salt-water bathing in rickets, which he terms the English Disease, and of which he explains the etiology and symptoms, with general directions for dealing with rachitic children. In an article on Mortality in Galicia are exhaustive tables and two excellent maps, showing by colours at a glance that the south-eastern portions of that province are the most unhealthy. The district in which the highest mean death-rate for five years (1878-1882) is noted is Horodenka, where it was 50·8 per mille, the lowest (26·8) being presented by Grybow. There are also articles on the Milk-supply of Warsaw, and on School Desks; likewise one on Cheap Dinners for Elementary Schools, in which an account is given of the English penny dinners at Board schools. A similar plan was tried in Warsaw, and it was found that they could be supplied at about the same price. We may be allowed to express a hope that this excellent journal will not suffer the same fate at the hands of the Russian censorship as its St. Petersburg namesake, to the suppression of which we have already alluded.

TESTING FOR COLOUR-BLINDNESS.

CONSIDERABLE dissatisfaction is, and we think with reason, expressed by the men engaged on various lines of railway, at the mode in which the test experiments for colour-vision are conducted. It is stated that many of these trials, in which specimens of wool are used, are made by gas-light. But the large proportion of red and yellow rays in the light produced by the combustion of gas renders it extremely difficult to distinguish between shades of blue and green. Magenta, again, which is of a reddish colour by day-light, is of a deep violet tint by lamp- or gas-light. So far therefore as the testing is exercised on wool, day-light should invariably be used, but it is different in the case of light, whether from gas or oil, which is transmitted through coloured glass. Such light is that which is ordinarily employed for signalling, and no complaint could be made if the guards and drivers were required to recognise various shades of blue, green, and red afforded by the light of an oil-lamp or of a gas-jet transmitted through such medium.

THE TEMPERANCE ESSAY PRIZEMAN.

THE Council of the Medical Temperance Association, on breaking the seal of the envelope marked with the motto to which their 100 guinea prize was last week awarded, found that the successful essayist was Mr. H. A. W. Coryn. The prizeman is a student of Charing-cross Hospital, and is a son of Mr. W. J. Coryn, M.R.C.S., of Acre-lane, Brixton. Three other competitors received from the adjudicators honourable mention—namely, Mr. R. W. Boyce, of University College; Mr. A. E. Norburn, of Guy's Hospital; and Mr. Hastings Gilford, also of Guy's Hospital.

THE PROSECUTION OF HERBALISTS.

LAST week, at Croydon, a herbalist calling himself "Professor" Stephen Jarrett was summoned at the Police-court, at the instance of the Commissioners of the Inland Revenue, for selling certain medicines without paying duty on the same, contrary to the statute. Four informations were laid against him, each for a penalty of £10. It appeared in evidence that an officer of the Inland Revenue purchased at the defendant's shop a bottle of "neuralgic mixture" and a packet of worm powders. On a subsequent occasion a second bottle of neuralgic mixture was bought, and also a box of dandelion pills. It was contended that all pills held up and recommended in any way as specifics to relieve any disorder were amenable to the Act. The defendant, on the other hand, urged that as he did not profess to practise any particular art in compounding the neuralgic mixture, which consisted only of one simple thing diluted with water, he was not liable. The Mayor, after fully considering the evidence, and after hearing the arguments

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adduced on either side, decided that there had been a distinct infringement of the Act, and fined the defendant £1 and 13s. costs on each summons—in all £6 12s. We must confess that we have little or no sympathy with the provisions of the Medicines Stamp Act, but this is clearly an exceptional case, and we are glad to find that its provisions have been enforced. The number of so-called herbalists is greatly on the increase all over the country, and it is satisfactory to learn that steps are being taken to check their powers of doing mischief.

COTTAGES FOR RURAL DISTRICTS.

MR. WILLIAM MENZIES is the author of a book (published by Welham Clarke, Windsor) which contains a number of plans of cottages for the working classes, foremen, bailiffs, and head gardeners, with the necessary specifications. The work has been carefully done, but is nevertheless, we think, capable of some modification and improvement. Thus, in the plan of a single cottage and of a double cottage, rooms are shown which possess no fireplace. The single cottage, which is suitable for a foreman, does not appear to be provided with either an earth-closet, a watercloset, or a coal-cellar; in that suitable for a bailiff or head gardener no coal-cellar is shown, and there is an absence of cupboard accommodation which would be required for a house of that size. The linen-closets shown in a plan of double cottages and of a row of four cottages should, we think, have a window in the external wall. A few other points may be noted. In the specifications the concrete foundations are required to be one foot in depth; it is, however, obvious that the depth must vary with the character of the subsoil. Again, there is no provision for the trapping of the sink waste-pipe. It is true that the pipe is required to discharge over a gully-trap on the outside of the house, but in course of use it must necessarily become foul, and, without a trap, perhaps somewhat offensive. Altogether, however, the cottages are well planned, and the book, which contains drawings of cottages of all kinds, will doubtless be found useful to those who are proposing to erect dwellings of this character.

MITRAL STENOSIS AND LEAD-POISONING.

THE influence of saturnine intoxication on the various tissues of the body is a subject that merits even further attention than it has yet received. Neurologists are acquainted with a variety of nervous diseases clearly the outcome of lead-poisoning; and Dr. Gowers has, we believe, asserted that no symptom of nervous disease may not be due to lead. Vascular lesions have long been known to be caused by the prolonged action of this metal; and now M. Duroziez suggests that a limited lesion of the heart—mitral stenosis—may in a certain number of cases be due to the same far-reaching cause. The suggestion arises from his having observed several cases of mitral obstruction in house-painters, compositors, and certain polishers.

LAMPS IN BEDROOMS.

DR. LEY, of Newton Abbott, Devon, attributes a recent case of death by suffocation to the fumes of a lamp burnt during the night in a small bedroom. This is a most perilous way of lighting an apartment of limited capacity, and where there are no means of ventilation the use of lamps ought to be wholly interdicted. The naked flame of a candle is naturally dreaded in any room so full of light fabrics as a bedroom. Gas renders the atmosphere impure and overheated. It is difficult to make a useful suggestion, but clearly a lamp is full of peril. After all, perhaps the candle, protected by a glass shade or chimney, is the least objectionable of common appliances.

PRINCESS CHRISTIAN.

IT is satisfactory to find that Her Royal Highness Princess Christian has sufficiently recovered from her protracted illness to move from her bed to the couch, though at present the improvement is not sufficient for change into another room. The prostration of the nervous system from which it is believed the Princess has mainly suffered is a malady very slow of repair, and frequently arises from causes which are difficult to eradicate. Cumberland Lodge, the permanent home of Prince and Princess Christian, is a somewhat gloomy abode for a patient to whom a change of scene and habits of life are among the most important means of relief. A Royal personage is somewhat unfavourably circumstanced for efficient medical and general treatment. A limited acquaintance and few really intimate friendships preclude the possibility of social change and relaxation such as are within the range of less distinguished persons. Moreover, a change from home, with all appurtenances of Royalty, is an expensive undertaking, and the country has not been too liberal to this branch of the Royal family.

PARENCHYMATOUS NEURITIS IN TYPHOID FEVER.

THAT parenchymatous neuritis should occur in typhoid fever ought not to be regarded as altogether remarkable. M.M. Pitres and Vaillard have found changes in peripheral nerves which must be ascribed to neuritis. They do not indicate the frequency of such inflammatory changes in cases of typhoid fever, but they remark that the neuritis may be slight and transitory, or profound and lasting, when the key may be given to the explanation of certain paralyses occurring after typhoid fever, and which have not unfrequently been ascribed to lesions of the central nervous system. It has recently been shown that nervous changes are very frequently present in severe cases of typhoid fever, and indeed in any continuous fevers that are of much severity; also that there is some kind of alteration in the electrical reactions of the muscles. It is possible that the symptoms observed ought to be attributed to the actual presence of a fugacious and slight parenchymatous neuritis.

THE ABERDEEN INFIRMARY.

THIS knotty question has been the subject of a long discussion in the quarterly court of governors, but without receiving any satisfactory solution. A motion by Dr. Struthers, proposing to remit back to the committee instructions to proceed with the consideration of the reconstruction of the present building or to get plans or sites for a new one, was lost, and one by Sheriff Wilson of a temporising character, committing the governors to nothing till the managers have decided on the exclusion of contagious diseases and the number of patients to be provided for, and requesting further reports from the Committee of Management was carried.

"CHRISTMAS DAY IN A MADHOUSE."

UNDER this heading our contemporary the *Globe* gives a piquant account of the visit of one of its "amateur" contributors to St. Luke's Hospital on Christmas Day. There is nothing remarkable in the sketch—which is pleasantly written—except it be the *naïveté* of the amateur's profession of awe at entering an asylum, we must premise for the first time, and of his surprise at not finding the place a pandemonium and its officials ruffians trusting to physical force for the enforcement of discipline. It seems that a certain section of the public have yet to learn that insanity is a *disease*, or rather a class of diseases; and that the symptoms vary with the case. The worst patients, and those who

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are capable of doing the greatest mischief if left to themselves, are often the quietest, and to the unskilled observer commonly the most sane. The days have long passed in which a "madhouse" meant a menagerie of raging lunatics, with "keepers" armed with instruments of coercion, or even torture. Nowhere, in this country at least, will the "amateur" find anything to "shock his feelings," or of which *he* is likely to make indignant complaint.

CHOLERA INTELLIGENCE.

SOME two weeks ago cholera was reported to be present in the neighbourhood of Venice, and during the past eight days stokers on board the Austrian Lloyd steamships between Venice and Trieste have conveyed the disease to the latter port, where at least two cases have terminated fatally. Considerable precautionary measures are being taken by the Trieste authorities, and, subject to the approval of the Austrian Government, all intercourse with Venice, whether by land or sea, will be prohibited. The most important feature of these appearances of cholera in the northern Adriatic ports lies in the prospect of a recrudescence of the disease next summer. The outbreak on board the steamer *Dorunda*, which conveyed emigrants to South-Western Australia, has not yet finally ceased, but news from Brisbane is to the effect that it is rapidly disappearing.

COTTON-WOOL AS A SURGICAL DRESSING.

As President of the Academy of Medicine and one of the honorary surgeons to the Hôtel Dieu of Paris, M. Alphonse Guérin has lately published a volume of 400 pages on Cotton-wool Dressing and its application to Surgical Therapeutics ("Du Pansement Ouaté et de son Application à la Thérapeutique Chirurgicale." Baillière. 1885.). The historical interest and practical merit of the work are unequal. Its claim to priority cannot be conceded without injustice to Burggraeve and other authors; but Guérin is an enthusiastic advocate of elastic compression, immobility, and infrequent dressing. He employs a large quantity of cotton-wool and many bandages, and attributes great importance to filtering the air so as to deprive it of germs, in which he appears to be as great a believer as Pasteur himself.

UNILATERAL ŒDEMA.

A CASE is reported by Dr. Bassi in the *Rivista Inter. di Med. e Chir.*, in which an hysterical young woman presented the curious phenomenon of a unilateral œdema that appeared with each menstrual period. There was no other derangement of general health, although the patient is described as delicate. The œdema was absolutely limited to the right half of the body, but there was no alteration in the colour, the temperature, or the sensitiveness of the two sides, although less irritation was necessary to produce reddening of the skin on the right side. Concurrently with this temporary œdema there were signs of congestion of the lung on the same side, and the right ovary was painful. Complete anæsthesia of both cornea and of the fauces was observed.

THE CORONERSHIP OF NEWCASTLE-ON-TYNE.

WE regret to see that the just claims of the profession in Newcastle to the office of the coronership are likely to suffer at the approaching election by the fact of two medical men competing. Both are men of standing, and either will make a good coroner. But for both to go to the poll is to ensure the defeat of the profession. Let us hope that one will give way. As our Newcastle correspondent says, Alderman Newton's public claims are very strong, and it would be a gracious act in Mr. Hardcastle to withdraw.

MENINGO-ENCEPHALOCELE.

A REMARKABLY large meningo-encephalocele springing from the region of the anterior fontanelle, in a female child aged two months and a half, was shown before the Medical Society of the Mauritius by Dr. Laurent, a graduate of the University of London. The shape of the tumour was reniform, and it had somewhat the aspect of an elephantoid scrotum, and was pediculated. It was twice the size of the fœtal head. The tumour was removed with strict antiseptic precautions, but the infant collapsed. The mother of the child had been shocked, when she was in the second month of pregnancy, at the sight of an elephantoid scrotum exhibited to a crowd by a drunken man.

OVARIOTOMY IN CAGLIARI.

THE first ovariotomy in the capital of the island of Sardinia was performed on Sept. 2nd by Dr. Angelo Roth. The patient, aged twenty-three, single, had suffered for six years from a right ovarian cyst. This contained twenty-two litres of thin liquid, and was removed through an incision ten centimetres in length. The pedicle was tied in three portions and dropped into the cavity. No drainage-tube was used, but toilette of the peritoneum preceded the use of sutures. Under an antiseptic dressing cicatrisation was complete on the seventh day.

PRURITUS.

SOME cases of pruritus of the vulva and anus are of very obscure origin. Neither local mischief, intestinal, vaginal, hepatic, renal, neurotic, or other disorders can be made to account for them. M. Brown-Séquard believes that coffee may have something to do with the production of the condition in some cases, since he has seen relief follow the removal of coffee from the dietary in two instances.

FROM the report of the examination made by Colonel Sir Francis Bolton of the water supplied by the several metropolitan water companies during the month of November, 1885, it appears that the Thames water sent out by the Chelsea, West Middlesex, Southwark, Grand Junction, and Lambeth Companies contained a larger proportion of organic matter than in any month during the last three years. This sudden change in the quality of the supply is due to the prolonged floods which have prevailed in the river. The water drawn from the Lea and distributed by the New River and East London Companies also exhibited a marked increase in organic matter, the proportion, however, being less than in any of the Thames waters. All the samples, with the exception of that of the Grand Junction Company, which was slightly turbid, were clear and bright on delivery. The number of micro-organisms found by the gelatine process in one cubic centimetre of the waters of the various companies was as follows:—Chelsea, 3; West Middlesex, 5; New River, 11; East London, 14; Lambeth, 26; Southwark, 32; Grand Junction, 40; River Lea (unfiltered), 954; River Thames (unfiltered), 1866.

THE death is announced of Dr. Albert H. Smith, of Philadelphia, which took place on Dec. 14th. Dr. Smith was in his fifty-first year. He was one of the founders of the Philadelphia Obstetrical Society, and contributed largely to the literature of midwifery and gynæcology.

THE Moscow popular medical journal, *Doktor*, will next year change its name to *Novosti Terapii* (Novelties in Therapeutics), and will deal with the progress of therapeutical science and with the literature of the subject.

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THE Russian Red Cross Society is sending to Bulgaria and Servia two "sanitary corps," each of which consists of six military surgeons, six feldschers (hospital sergeants), and twelve Sisters of Mercy. These last belong to the George and Alexander sisterhoods, and most of them served in the Russo-Turkish campaign, and have therefore considerable practical experience.

THE Russian *Viedomosti* reports that the local administrative body of a division or county of the province of Kursk have dismissed two female doctors it had engaged, because the Provincial Medical Committee informed it that female practitioners were incompetent to take charge of a district, being only allowed to treat women and children.

THE first Lettsomian Lecture will be delivered at the Medical Society on Jan. 4th at 8.30 P.M. Mr. Jonathan Hutchinson will treat of the mutual relationship of different forms of primary venereal sore, the causes of phagedæna in primary sores, recurring chancres, and different forms of bubo.

A PRESENTATION of plate has been made to Dr. Protheroe Smith by the medical staff of the Hospital for Women, Soho-square, on his retirement as Physician and appointment as Consulting Physician to the hospital.

IN the *Gazzetta degli Ospitali* (Nov. 18th), Dr. Miliotti relates two cases of rapid cure of sciatica by congelation with ethylic ether.

DR. WEBER LIEL, Professor of Otology in Jena, has been obliged by ill health to resign his post.

DR. METZGER of Amsterdam has been to Rome to give the Pope the benefit of his advice.

Pharmacology and Therapeutics.

THE ELIMINATION OF BISMUTH.

M. HANS MEYER has poisoned mammals and birds by injecting under the skin or into a vein large quantities of the salts of bismuth. At the necropsy the large intestine and its surroundings were seen to be of an intense black colour; often there existed also large tracts of necrosis of the mucous membrane of the large intestine, whilst the stomach and small intestine preserved their normal appearances. Chemical analysis of the wall of the intestine and of the contents has demonstrated that the digestive tube all along serves as an excretory surface for bismuth, but that this elimination takes place much more actively at the surface of the large intestine, and that the metal is excreted in the form of a sulphide. By previously making the animals ingest preparations of sulphur, the elimination of bismuth was augmented in the stomach and small intestine, and the wall of the stomach became pigmented of a deep black colour. The author concludes from these facts that the presence of sulphuretted hydrogen favours the elimination of the bismuth by precipitating the metal from the capillary circulation of the intestine in the form of the insoluble sulphide, which plays the part of a foreign body. If this precipitation does not take place, the metal re-enters the circulation, and is eliminated largely by the kidneys. As the necrotic tracts and ulcerations are met with almost exclusively in those portions of the digestive tract where the pigmentation obtains its greatest intensity, the conclusion is naturally arrived at that the precipitation of the bismuth in the thickness of the intestinal mucous membrane has caused the necrosis and ulceration by the precipitate blocking the capillaries and vessels of the parts concerned. Further, if the animals are made to ingest simultaneously salts of bismuth and substances that disengage sulphuretted hydrogen, neither necrosis, ulceration, nor pigmentation of the intestine occurs, evidently because the bismuth and sulphuretted hydrogen in combining mutually neutralise each other. According to Hans Meyer, also, it is probable that in mercurial poisoning the inflammation and necrosis of the gastro-intestinal mucous membrane depend, in a similar manner, on putrid fermentations which disengage sulphuretted hydrogen. It is well known that the prevention of mercurial stomatitis by the use of dentifrices and antiseptic lotions is due to their property of preventing the processes on which the development of sulphuretted hydrogen is dependent.

TSUCHIAKABI.

This drug is the fruit capsule of an orchid indigenous in Japan, and used there for a long time past. The capsules possess an acid and bitter taste, and contain a substance which is largely soluble in water. By treatment with spirit, an extract can be obtained which has a sharp but not unpleasant taste. It is composed of a resin, acid and glucoside, to which is probably to be attributed its medicinal properties. The urinary bladder and passages are the parts of the body on which the medicament exerts its special action. The Japanese employ a watery extract of this drug, which would be administered in those cases for which cubebs and copaiba are prescribed, with the advantage of the absence of the disagreeable odour of the last-named drug.

CASCARILLA BARK.

An alkaloid almost identical with choline has been discovered in the bark of cascarilla by Professor Boehm. The bitter crystalline cascarillin may be converted into an amorphous resin that still retains the poisonous properties of the crystalline substance, which is a nerve poison. The essential oil of cascarilla is a third constituent of the bark, but it has no noteworthy physiological action.

CORROSIVE SUBLIMATE FOR HYDROCELE.

Sarrazin reports on five cases of hydrocele that he has treated by injection of a solution of corrosive sublimate of the strength of 1 in 1000. The advantages are the harmlessness of the solution, and the circumstance that suppuration is never excited, a simple form of adhesive inflammation being provoked. All the five cases were completely successful.

GEOLINE.

Geoline is very much like Vaseline in general appearance, and it is employed for much the same purposes. It is said never to turn rancid. We have examined a sample of this product of petroleum, and it appears to us to possess all the advantages that are claimed for it; under most favourable circumstances for decomposition we have found it to retain its purity.

THE INTERNATIONAL MEDICAL CONGRESS.

THE special announcement of this Congress has reached us. It is issued by the executive committee, who intimate that they have nearly completed the arrangements for the meeting, and anticipate the hearty co-operation of the profession everywhere in developing "this great scientific and humanitarian assembly."

The following letter has been addressed by Dr. Sayre to F. S. Dennis, M.D., Associate Secretary-General of the Congress:—

"285, Fifth Avenue, N.Y., Dec. 1st, 1885.

"DEAR DOCTOR,—I have just been informed that there is a current rumour that I have resigned from the International Congress, and that I have refused to have anything to do with the meeting. This statement is so absolutely untrue that I write you at once, and request you to correct the erroneous impression as far as possible. I resigned from the committee of arrangement on account of my health not permitting me to perform the arduous duties connected therewith; but I have gladly accepted the position of vice-president, and am delighted to know that there is every prospect of a most successful meeting.

"Very respectfully,

"LEWIS A. SAYRE."

The following is the list of officers nominated for election by the Congress:—President of the Congress, Austin Flint,

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M.D., LL.D., New York. Vice-Presidents of the Congress: W. O. Baldwin, M.D., Montgomery, Alabama; Wm. Brodie, M.D., Detroit, Michigan; W. W. Dawson, M.D., Cincinnati, Ohio; E. M. Moore, M.D., Rochester, N.Y.; Tobias G. Richardson, M.D., New Orleans, Louisiana; Lewis A. Sayre, M.D., New York, N.Y.; J M. Toner, M.D., Washington, D.C.; the President of the American Medical Association; the Surgeon-General of the United States Army; the Surgeon-General of the United States Navy; the Supervising Surgeon-General of the United States Marine Hospital Service. Secretary-General of the Congress: Nathan S. Davis, M.D., LL.D., Chicago, Illinois. Associate Secretary-General: Frederic S. Dennis, M.D., New York, N.Y. Treasurer of the Congress: E. S. F. Arnold, M.D., New York. Chairman of the Finance Committee: Richard J. Dunglison, M.D., Philadelphia.

We are glad to note a decidedly different tone and spirit in several of the leading medical journals of the States in this matter, expressing a wish for the settlement of differences and a willingness on certain conditions for hearty co-operation. This does not surprise us. Our estimate of the good sense and feeling of our Transatlantic brethren has never permitted us to believe that such a catastrophe and discredit as the failure of the Congress on its removal to Europe could happen. There seems now every prospect that differences will be adjusted, and adjusted at home, by a little giving and taking on each side, of a controversy in which both sides have meant well.

WILLS OF MEDICAL MEN.

THE will and codicil of Stephen Monckton, M.D., late of Maidstone, Kent, who died on September 30th last, were proved on Nov. 21st by Mr. Robert Monckton, the brother, Mr. Joseph Arthur Burrell, and Mr. Stephen Launcelot Monckton, the son the executors, the value of the personal estate amounting to upwards of £29,000. The testator bequeaths £100 and all his furniture and effects to his wife, Mrs. Maria Monckton; the goodwill and benefit of the connexion of his practice as a medical practitioner, with all his books and professional appliances, to his son, Henry Holland Monckton; £1000 upon trust for his sister, Miss Maria Monckton, for life, and then for the lineal descendants of his father, Mr. Jonathan Monckton, as she shall appoint; and £50 to each of his executors. The residue of his real and personal estate is to be held upon trust to pay the income to his wife for life, and then for his son, Stephen Launcelot Monckton, absolutely. The provision made for his wife and children is in addition to that made for them by his marriage settlement, which he confirms.

The will and codicil of Mr. John Gay, F.R.C.S., formerly of No. 34, Finsbury-pavement, but late of No. 51, Belsize-park, Hampstead, who died on September 15th last, have been proved by Mrs. Elizabeth Gay, the widow, and Mr. John Gay, the son, two of the executors, the value of the personal estate amounting to over £23,000. The testator bequeaths his plate, jewellery, pictures, furniture, effects, and all his money at the Union Bank, to his wife; £1000 to his daughter, Florence Elizabeth Gay; and legacies to two servants. The residue of his real and personal estate he leaves upon trust for his wife for life or until she shall marry again, and then as to one-third for each of his three children, John, Arthur William, and Florence Elizabeth.

The will of David Chalmers, M.D., late of Liverpool, who died on August 21st last, at Lambeth-road, Southwark, was proved on the 25th ult. by Mr. Anthony Wigham Chisholm, the brother, and Mr. Thomas Chilton, the executors, the value of the personal estate amounting to over £18,000. The testator gives £200 to his wife, Mrs. Ellen Chalmers, and all his plate, pictures, books, furniture, and household effects, and £400 per annum to her for life. The residue of his real and personal estate, including the considerable real estate purchased by him in Colorado, he gives to his three children, Thomas Dodson, Harriet Weatherhead, and Harold, in equal shares.

The will of Francis Harris, M.D., late of No. 24, Cavendish-square, and of The Grange, Lamberhurst, Kent, who died on the 3rd September last, was proved on Nov. 10th by Mr. Charles Edward Harris and Mr. Charles Quincey Roberts, the nephew, the executors, the value of the personal estate exceeding £15,000. The testator bequeaths the cash at his bankers, his residence, No. 24, Cavendish-square, and all his jewellery, plate, pictures, furniture, effects, wines, horse, carriages, live and dead stock, to his wife, Mrs. Marianna Harris; £200 to each of his executors; and £4000 Government stock upon trust for his brother, Joseph Robert Harris, for life. His real estate at Lamberhurst, subject to a right given to his wife to use and occupy the mansion-house, The Grange, for life, he devises upon trust for his son Owen. The residue of his personal estate he leaves upon trust for all his children in equal shares.

The will of Mr. Augustus Law, Surgeon in the Peninsular and Oriental Company's service, late of No. 14, Woburn-place, who died on October 10th last, has been proved by Miss Sarah Matilda Law, the half-sister, and Mr. Stephen Hugh Grestock, the executors, the value of the personal estate amounting to over £4,000. The testator bequeaths £400 each to his step-mother, Mrs. Sarah Ann Law, and to his god-daughter, Florence Harriet Hogg; £500 to Mrs. Mary Annie Harriet Quayle; £300 to his niece, Mrs. Eliza Phillips; and a complimentary legacy to his executor, Mr. Grestock. All his real estate, if any, and the residue of the personalty, he gives to his said half-sister.

The following legacies have recently been left to hospitals and other medical institutions:—Mr. Abraham Altham, of Burnley, Lancashire, tea merchant, £500 towards erecting a children's ward at the Victoria Hospital, Burnley, and £500 to the endowment fund of the said hospital, if he has not given such sums in his lifetime.—Mr. William Augustus Guy, M.B., F.R.S., F.R.C.P., of No. 12, Gordon-street, Gordon-square, £250 each to King's College Hospital, and King's College Hospital Convalescent Institution; and on the death of his wife, or twenty-one years after his death, which shall first happen, one half of a moiety of the residue of his real and personal estate, which is left upon trust for accumulation in the meantime, to King's College Hospital Convalescent Institution.—Mr. William Hunt, J.P., formerly Mayor of Bath, late of No. 72, Pulteney-street, Bath, £25 to the Bath Royal United Hospital.—Mrs. Mary Blackden, of No. 6, Norfolk-crescent, Hyde Park, £300 to the Convalescent Institution, Walton-on-Thames; and £200 to St. Mary's Hospital, Paddington.—Mrs. Louisa Brooke Blake, formerly of Andersey, St. Mary Church-road, but late of Sunnylands, St. Mary Church, both in Torquay, £100 to the Torbay Infirmary and Dispensary.—Mr. Joseph Stevens, of the firm of Whiteley, Stevens, and Co., lace merchants and manufacturers, late of Stapleford and Nottingham, Nottinghamshire, and of Sandiacre, Derbyshire, £1000 to the Nottingham General Hospital; £500 to the Midlands Institution for the Blind, Nottingham, and £100 each to the Nottingham and Midlands Eye Infirmary, Nottingham, and the Nottingham Dispensary, Broad-street, Nottingham.—Mr. Henry Aste, of Castle-hill Lodge, Norwood, £200 to University College Hospital; £100 each to the North London Consumption Hospital and the Royal Hospital for Incurables, Putney; and £20 to the Margate Sea-bathing Infirmary.—the Right Hon. Katherine Anne Viscountess Cranley, of No. 2, Downe-terrace, Richmond, one moiety of £1000 consols to the Hospital for Consumption, Brompton.—Miss Maria Hebden, of No. 15, Compton-terrace, Islington, £100 each to the Holloway Dispensary, Islington, and the Society for Incurables, Clapham-rise.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Portsmouth Urban District.—The account which Dr. Sykes gives of Portsmouth is in several important respects one of considerable gravity. The past year is stated to have been a more favourable one, as regards enteric fever than any in the sanitary history of the borough. Yet 539 cases were notified, and 58 deaths occurred. And unfortunately the conditions ensuring the maintenance

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of this disease remain. There has been a bye-law in force since 1870 which provides that every cesspool shall be made water-tight, properly covered in, and ventilated; and yet Dr. Sykes says he has failed to find one such properly constructed receptacle in the borough, and the consequence is that building which is going on in the undrained portions of the district is leading to a pollution of the soil which, at the very least, must last for many years to come. Diphtheria, too, has been very prevalent, 174 cases having come to the notice of the sanitary department. And this is not all. In this borough, which may at any time receive the infection of cholera from abroad, we read not only of soaking and ill-constructed cesspools and of undrained areas, but in parts of the town the old-fashioned and highly objectionable pit-privy exists, the hole being emptied at rare intervals only, and the fluid escaping at times under the foundations of the houses to which the structures belong. Last year, H.M.S. *Crocodile* arrived at Portsmouth having had cholera on board, but fortunately the disease was over long before she entered the port. The same good luck may not attend the next arrival, and the conditions we have described will, unless speedily removed, go far to aid in the spread of the infection. Fortunately a great scheme of sewerage is in contemplation. Portsmouth has a hospital for infectious diseases, but, to say nothing of a large prevalence of measles, there were 974 cases of the other infectious fevers notified to the authority, and yet only twenty-two cases were admitted for the purposes of isolation. Surely, something is very wrong here, either in the way of restrictions to admission, or else in the failure to remove some cause which deters people from allowing first cases of infectious disease to be properly isolated. The annual death-rate for 1884 was 19·2; the average for ten years having been 19·8.

Birkenhead Urban District.—This borough, with a population of 90,870, had in 1884 a birth-rate and death-rate of 38·06 and 19·46 per 1000 respectively, the latter comparing favourably with the large cities and towns of England. The zymotic rate was 2·2 per 1000, which is also by no means unsatisfactory. Small-pox was epidemic in Liverpool during a considerable portion of the year, and communication between the two places is all but continuous; the disease was again and again imported, and some ninety cases were removed to the isolation hospital, but the prevalence did not make any considerable headway. Of the vaccinated 3·4 per cent. died, the fatality amongst the unvaccinated being at the rate of 38·0 per cent. Under the system of compulsory notification in force, 1463 cases of infectious disease came under notice. Uncertified deaths are unfortunately on the increase in the borough, and, as a natural consequence, the public have no guarantee as to the proceedings which preceded death. A very large amount of valuable sanitary work is steadily in progress in the borough; but as regards overcrowding in common lodging-houses and night occupation of cellar-dwellings, Mr. Vacher very properly points out that, in the absence of a night inspector, his department cannot regard the supervision exercised as in any way complete. The isolation hospital did good service during the year; the compulsory notification system has not led to the secreting of cases, and so to the production of an apparently increased death-rate; and a considerable amount of disinfection of dwellings and of infected articles was carried out by competent officials. Under the Birkenhead Improvement Act of 1884, cowkeepers and others are required to furnish lists of customers in certain cases, and the authority are empowered, when notifying to a person to abate a nuisance, to prescribe the description of the acts or work required to be done or of the materials to be used. Provisions of this sort are of the utmost importance to efficient sanitary administration, and, provided they are surrounded by a reasonable amount of safeguard, they ought to, and probably will some day, be included in an Act which shall have universal application.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 4543 births and 3289 deaths were registered during the week ending Dec. 26th. The annual death-rate in these towns, which had been 20·3 and 23·0 per 1000 in the preceding two weeks, declined last week (owing in great measure to delay in registration due to the Christmas holidays) to 19·3. During the first twelve weeks of last quarter the death-rate in these towns averaged only 19·6 per 1000, and was 2·8 below the mean rate in the corresponding periods of the nine years 1876-84. The lowest rates in these towns last week were 13·6 in Brighton, 14·2 in Leicester, 15·1 in Hull, and 16·0 in Norwich. The rates in the other towns ranged upwards to 25·8 in Cardiff, 26·3 in Birkenhead, and 28·4 in Bolton. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 352 and 419 in the previous two weeks, declined again to 395 last week; they included 126 from whooping-cough, 122 from measles, 55 from scarlet fever, 34 from diarrhœa, 30 from "fever" (principally enteric), 24 from diphtheria, and 4 from small-pox. No death from any of these zymotic diseases was recorded last week in Wolverhampton, whereas they caused the highest death-rates in Liverpool, Salford, and Bolton. The greatest mortality from whooping-cough occurred in Brighton and Bolton; from measles in Birmingham and Nottingham; from scarlet fever in Leicester, Sunderland, and Preston; and from "fever" in Salford. The 24 deaths from diphtheria in the twenty-eight towns included 14 in London, 2 in Liverpool, and 2 in Salford. Small-pox caused 3 deaths in Liverpool and 1 in Bristol; but no death from this cause was registered in London and its outer ring, or in any of the twenty-five other provincial towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had declined in the preceding seven weeks from 90 to 50, had further fallen to 48 on Saturday last; the small-pox cases admitted to these hospitals, which had been 6 and 13 in the previous two weeks, fell again to 9 last week. The deaths referred to diseases of the respiratory organs in London, which had increased in the preceding two weeks from 413 to 503, declined again last week to 384, and were 153 below the corrected average. The causes of 85, or 2·6 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Brighton and Plymouth. The largest proportions of uncertified deaths were recorded in Oldham, Halifax, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 24·4, 23·7, and 24·1 per 1000 in the preceding three weeks, declined to 22·9 in the week ending Dec. 26th; this rate, however, exceeded by 3·6 the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 10·6 in Leith and 18·7 in Dundee, to 24·9 in Glasgow, 26·6 in Perth, and 35·2 in Paisley. The 560 deaths in the eight towns showed a decline of 28 from the number in the previous week, and included 12 which were referred to whooping-cough, 9 to scarlet fever, 9 to diarrhœa, 6 to diphtheria, 4 to measles, 2 to "fever" (typhus, enteric, or simple), and 1 to small-pox; in all, 43 deaths resulted from these principal zymotic diseases, against 56 and 51 in the preceding two weeks. These 43 deaths were equal to an annual rate of 1·8 per 1000, which was 0·5 below the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 12 and 7 in the previous two weeks, rose again to 12 last week, and included 9 in Glasgow and 2 in Aberdeen. The deaths from scarlet fever, on the other hand, which had been 9 and 15 in the previous two weeks, declined again to 9, of which 5 occurred in Glasgow and 2 in Edinburgh. The 9 deaths attributed to diarrhœa showed a further decline from recent weekly numbers, and included 3 in Edinburgh, 2 in Greenock, and 2 in Perth. Both the deaths referred to "fever" and 5 of the 6 fatal cases of diphtheria were returned in Glasgow. The 4 deaths from measles included 2 in Paisley, and exceeded the numbers in recent weeks. The reported death from small-pox was a death referred to chicken-pox in Aberdeen. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 178 and 175 in the preceding two weeks, further declined last week to 151, and were 27 below the number in the corresponding week of last year. The causes of 90, or more than 16 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 24·7, 31·0, and 34·4 per 1000 in the preceding three

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weeks, declined to 22·8 in the week ending Dec. 26th. During the first twelve weeks of last quarter the death-rate in the city averaged 26·1 per 1000, the mean rate during the same period not exceeding 19·0 in both London and Edinburgh. The 154 deaths in Dublin last week showed a decline of no fewer than 79 from the high number returned in the previous week; and included 16 which were referred to the principal zymotic diseases, against 15, 23, and 28 in the preceding three weeks. Of these 16 deaths from zymotic diseases, 10 resulted from whooping-cough, 4 from "fever" (typhus, enteric, or simple), 2 from scarlet fever, and not one from small-pox, measles, diphtheria, or diarrhœa. These 16 deaths were equal to an annual rate of 2·4 per 1000, the rate from the same diseases last week being equal to 2·6 in London and 1·2 in Edinburgh. The fatal cases of whooping-cough, which had increased from 5 to 15 in the previous four weeks, declined again last week to 10. The deaths referred to "fever," which had been 7 in each of the previous two weeks, declined to 4 last week; and the 2 fatal cases of scarlet fever also showed a decline from the numbers in recent weeks. Five inquest cases and 5 deaths from violence were registered; and 39, or more than a quarter of the deaths, were recorded in public institutions. The deaths both of infants and of elderly persons showed a considerable decline from the numbers in the previous week. The causes of 25, or 16 per cent., of the deaths registered during the week were not certified.

Correspondence.

"Audi alteram partem."

DR. MACGILLIVRAY'S CASE OF REMOVAL OF AN ENFIELD BULLET (CRIMEAN) WHICH HAD LODGED FOR MORE THAN THIRTY YEARS IN THE INTERNAL CONDYLE OF THE FEMUR.

To the Editor of THE LANCET.

SIR,—A very interesting report appeared in THE LANCET of Dec. 12th (p. 1087) by Dr. MacGillivray of a case in which he removed half an Enfield bullet from a deep position in the internal condyle of the femur of a sergeant of the Rifle Brigade, after being lodged there more than thirty years. According to the account given, the man had been wounded in the Crimea while he was with a party who were reconnoitring before Sebastopol, and, shortly after the injury, was removed to the Valetta Hospital. The knee-joint was said to have been opened at the time of the injury, and this alleged fact is contrasted in the report with an observation of mine, published in Holmes's System of Surgery, that "I did not think any instance occurred during the Crimean war in which the synovial capsule of the knee-joint was manifestly penetrated, and the ends of the femur or tibia fractured, where the wounded limb and life of the patient were preserved."

On reading the report I communicated with Dr. MacGillivray, and asked him whether the sergeant's name was not John S——, as I was in possession of some notes of the wound to which his knee had been subjected, written when he was in the Brompton Hospital at Chatham in Sept. 1856. The identity of Dr. MacGillivray's patient, who had asked him not to mention his name when reporting the case, and of the patient referred to in my notes, was sufficiently proved in our correspondence; but, that no source of doubt might remain, the records of the Rifle Brigade have been searched for me at the depôt at Winchester, and the conclusion previously arrived at fully confirmed. The fact is this sergeant was never in the Crimea at all. He received his injury in Malta while at rifle practice, in May, 1856, many months after Sebastopol had fallen, and after the British troops had quitted the Crimea. The sergeant only served two years and four months in the army, and his total foreign service was five months at Malta. He was discharged at Chatham on the 6th of November, 1856, the knee-joint being ankylosed at the time, but there still being a sinus leading down to bone. In giving the history which he did to Dr. MacGillivray, he no doubt thought it would excite more interest in his disability if he traced its origin to military operations in front of an enemy, instead of more peaceful circumstances, such as musketry practice at Malta. Had the man been more intimately acquainted with the state of things in the Crimea, he would not have told his surgeon that he had been injured while his company was reconnoitring before Sebastopol in May, 1855, when all the ground before the place was occupied by the trenches and works of the besiegers; nor would he have said that after the fourth day of the injury, on account of its severity, he had been removed to the Valetta Hospital, instead of to the Castle Hospital at Balaklava or Scutari. All surgeons are liable to be deceived by patients in the histories they give of occurrences long antecedent, and in making these remarks I do not of course intend to attach any blame to the reporter, or in any respect to depreciate Dr. MacGillivray's operation, which was obviously a very thorough and successful one, and of immense service to the patient.

So far as the abstract notes of the case in my possession are concerned, they tend to show that the articulation was not opened at the time of the original injury, but that the lower part of the femur was penetrated from the outer side and posteriorly, and that ankylosis occurred from the results of inflammatory action indirectly induced. Many changes must have occurred in the parts surrounding and adjoining the injured knee during the long interval since his discharge from the army in 1856, owing to irritation arising from the lodged fragment of lead, suppuration, and their consequences, which would make it very difficult at this day to determine the exact nature of the damage done at the time of the original wound. Whether, however, the joint was or was not opened at the time the injury was inflicted, so far as this particular instance is concerned—and this is the chief purpose of my letter, which I send with Dr. MacGillivray's assent—it does not militate against the observation of mine which Dr. MacGillivray quoted, for that observation had reference only to gunshot wounds of the knee occurring in time of war, and, further, under the special conditions which existed at the time of the Crimean war. I need hardly say that I am aware of many cases in which wounds with penetration of the capsule of the knee-joint have been recovered from without amputation under other conditions.

I am, Sir, your obedient servant,
THOS. LONGMORE,
Surgeon-General (R.P.), Professor of Military Surgery.
Netley, Dec. 28th, 1885.

WINTER COMFORTS FOR MEDICAL MEN.

To the Editor of THE LANCET.

SIR,—The setting in of winter weather reminds me of an old promise to write a letter on this subject. Next to food, perhaps few things contribute more to the preservation of health than the conservation of bodily heat. Feeling the importance of the question, and having a lively conviction of the frequency with which the principles of dissipation and storage of heat are violated by English people, I venture to lay before my medical brethren a few hints which may be of value to themselves in the first instance, and indirectly through them to the public. Most medical men visit their patients either on horseback or in an open carriage, or in a brougham or by railway. There is one source of loss of bodily heat common to all classes—viz., the feet. The leather of our boots allows the heat to escape like water through a sieve. Travel as we may, when the temperature is below freezing point, as a rule our feet become cold in a very short time. When the feet are warm the whole body is warmer, and we can more readily bear exposure of the face or hands, no slight matter for those who read or write when travelling. How then are we to keep the feet warm? There are two very excellent methods. The first is the adoption of Dr. Jäger's "Sanitary Boots."[1] They are made of woven woollen material, lined with flannel, soled and tipped with leather. They lace high up above the ankle, and fit easily, so as not to interfere with surface circulation. The other method is the adoption of American snow-boots, which in this district are known as "Jemimas," and are very popular with my medical brethren. They are made of felt throughout, and are shod like a golosh. They are easily put on over ordinary walking boots and are fixed by a buckle. They cost about 7*s.*, and

[1] Jäger Clothing Company, 42, Fore-street, E.C.

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can be bought at an indiarubber shop. I have given a pair to my coachman, much to his comfort in frosty weather. In a long railway journey, or in walking in snow, their value is inestimable. They are almost equivalent to an additional coat.

A medical man who visits his patients in an open gig or carriage, whenever he enters a house, leaves a warm seat, and on returning in ten or fifteen minutes finds the cushion and rug cold. By the time he reaches the next house the seat and rug are warm again, and out he gets, to let them cool down before his return; in other words, he is perpetually parting with bodily heat, which in severe weather he can ill spare, and is warming up, to very little useful purpose, inanimate material. This may be obviated by having either a hot-water bottle (of stoneware, not of metal), or one of the still more convenient indiarubber hot-water bags with a woollen cover. On his entering a house the warmer is placed on a cushion and is covered by his rug; it is placed at his feet when he returns to his carriage. If he drives in a brougham, or in a carriage in which the driver is not at his side, it is better that the hot-water bottle should be pushed to one side, or kept on the seat, protected by the rug. Such an artificial source of warmth is of more value on the seat than at the feet. To those travelling long distances by railway in cold weather it is often well to place the foot-warmer on a cushion for ten minutes, covered by the rug. This gives a good start. If the journey be at night, say, with a temperature at 20°, and the traveller lies his whole length on the seat, the foot-warmer may be placed edgeways against the back of the seat, and the traveller may lie against it, receiving warmth himself and also retarding the cooling down of the hot water.

Another point akin to this subject is to have a "window ventilator" in the roof of the brougham. This is described at the end of my book, "Dangers to Health." With the roof ventilator open there is no draught, there is no need to have a single ordinary window open, even with two or three persons in the carriage, and the brougham is kept perfectly fresh. The current of air sets steadily outwards through the ventilator when the brougham is "going," except when there is a strong gale from the rear. By this combination of the roof ventilator with a warm seat, a medical man's brougham would tend to preserve, and not, as is often suspected, to impair health.

Let me urge another point upon medical men who are liable to be called up in the night—viz., that they should in severe weather have a fire in their bedroom. When called in the night they should leave their house with plenty of warmth stored up in their clothes, great-coat, rug, &c., and they should not face a chilly night, and perhaps a patient's chilly bedroom, chilled themselves at the start. Keeping this point in view, let them have a fire in their bedroom as soon as cold weather sets in, and let them take care that their fireplace is constructed on right principles. The main points are these:—1. Have no iron at the back or sides, brick or firebrick only. 2. Let the sick lean over the fire, not lean away from it, as is the case with most fireplaces out of ten. 3. Close the chamber [illegible] fire by a movable shield or "economiser." The use of the "economiser" is now becoming well known, and in many towns ironmongers and blacksmiths, have learnt how to make them. With very little trouble a fire can be so [illegible] 11 P.M. as to keep in all night. One pennyworth of coal ought to make a fire capable of lasting eight or nine hours. There is one precaution that should be taken. Seeing that the "economiser" makes the chamber under the grate, and the hearth, hotter, if there is a cracked hearth-stone or doubt whether there be a wooden beam directly under the fireplace, it will be well to have a small ash-pan, rather a grate, from or attached to the "economiser." Given a fire, the place for great-coat and rug would be in the room and before the fire, not in a chilly and often damp entrance-hall.

The knowledge of the properties of heat will supply us with hints to guide us in our management of the sick room. Bearing in mind that radiated heat passes through air without warming the air, to reach objects to which it imparts heat, why do we allow a patient, say with bronchitis, in a room with a bright fire, to lie in a sort of Arctic region of a bed, the radiation of the fire being arrested by a high foot-board, which sometimes gives evidence of the heat it receives by splitting? Let our patient *see* the fire as he lies in bed, and, if necessary, screen the off-side of the bed by a blanket stretched on a clothes-horse, which not only will [illegible] but stores and gives off again the radiant heat of the fire. Another hint let me give about chilly beds. When in Scotland in a cold April, on a fishing holiday, night after night I could hardly get warm in bed. At last I found that the only protection against a rapidly conducting mattress was an extremely thin worn-out blanket. The ample non-conducting upper blankets and rug were of little avail against the rapid loss of bodily heat downward to the mattress. I learnt a lesson, and added a blanket over the mattress, and no more felt the cold.

I remain Sir, yours, &c.,

Leeds, Dec. 19th, 1885. T. PRIDGIN TEALE.

CRIME AND RESPONSIBILITY.

To the Editor of THE LANCET.

SIR,—On Wednesday last, at the Central Criminal Court, Henry Patrick, aged twenty-four, was put upon his trial, convicted without remark by the jury, and sentenced to death, for the "wilful" murder of Rachel Bayley. The circumstances of the crime are not in my recollection, and I cannot, therefore, make any intelligent or useful reference to the mental condition of the criminal at the time when the deed was done, but in the report of the trial it is stated that during its progress the wretched man was seized with a violent epileptic convulsion which interrupted the proceedings for about half an hour, and also that he was again seized in a similar fashion at the conclusion of the sentence. The counsel for the defence stated that his client had been for some time suffering from epilepsy, and urged that he should not be held responsible for his acts. Dr. Morgan, of Clerkenwell Prison, stated in evidence that although the man had had several epileptic seizures, he nevertheless considered him to be a man of sound mind and understanding. Had it not been for this evidence I should have said that the plea put forward by the counsel was an unanswerable one, and that the sentence was monstrous and unjust. The case, however, is one which demands the serious consideration of the authorities. The convict, although young in years, is probably old in the disease which has driven him with ruthless haste into the condemned cell, and which may have been the result of an ignorant rather than a conscious disregard of the unwritten laws of nature. From step to step this unhappy wretch may have descended from the thoughtless innocence of childhood to an equally thoughtless manhood of vicious crime. Perhaps every circumstance of life confirmed and strengthened an inherited criminal tendency. I do not know, as I have said, the circumstances of the crime, and I have the evidence of a medical practitioner who had the opportunity of observing the conduct of the convict for some time, but there seems to me to be a mistake somewhere. A prisoner gives clear and unmistakable evidence to the judge and jury that the machinery of his mind is radically deranged, and that he is suffering from a disease that is certainly at times attended by fits of distinct mania, during the occurrence of which the patient is hopelessly mad, and yet he is treated as a man of sound mind and condemned to death.

The question which arises out of such cases as that of Henry Patrick is of much interest, and great importance. The difficulties that surround it on every side are not easily overcome. Mental science, is, perhaps, of all sciences the most inexact and indeterminate. Our knowledge of the manner in which the machinery of the mind works is, with the exception of a few well-founded facts, indefinite and unsubstantial. For practical purposes the somewhat misty idealism of those who, for lack of a more expressive phrase, may be termed immaterial philosophers, is of little or no avail. What is wanted is an intelligent and careful extension of the scientific examination of material change for the purpose of assigning to each mental expression its material cause. It may be that for a time religious prejudice and superstitious fear will stand in the path of the scientific explorer, but these sentiments must fall before the irresistible force of scientific sense. At present the tests by which a man's soundness of mind is estimated are not trustworthy, because they are founded upon hypothetical assumptions and assertions which have little or no foundation in fact. A man may engage in the ordinary affairs of life, and display a fair amount of intelligence, and yet have moments of insanity when his reason is powerless to control the action of his more animal instincts. In process of time, however, the scientific explorer may

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discover the physical cause of anger, of hate, and of sensuality. The brain of the man of cool and deliberate action must differ in its intimate physical elements from the brain of the man whose outbursts of passion are notorious, and whose actions are the results of impulses that are often beyond the control of the will. By patient inquiry in practical medicine, pathology, and morbid anatomy, much may be done in the direction of referring each phase of morbid mental action to its physical cause—to some hereditary defect or material change of structure that time and habit have effected. In the case of Henry Patrick there must of necessity be some deviation from the normal structure, some radical defect that interferes at stated periods with the natural movement, not only of the brain, but of the whole nervous machinery by which thought, speech, and action are maintained and directed. The answer to the question as to whether this man should or should not be held responsible for his acts ought not, in my opinion, to depend upon his every-day conduct, but upon a strict investigation into the facts of the disease from which he suffers. This may have already been made. I think, however, it should be laid down as a rule that no man who suffers from a disease which clearly and without doubt implies that his brain is more or less damaged should be held responsible for his acts.

I am, Sir, yours truly,

Bath-street, Glasgow, Dec. 21st, 1885. ROBERT MACPHERSON.

THE GOVERNMENT OF THE COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—As a Member of the Royal College of Surgeons, an disconnected with either the Press or the Society of Members of the Royal College of Surgeons, I should like to make a few remarks respecting the meeting of the Fellows and Members on the 17th ult. First, respecting the charge made by Mr. Brudenell Carter, that the meetings were the outcome of agitations of the Medical Press, I will only say that this statement was distinctly and emphatically refuted at the meeting; and if this refutation is insufficient, I am quite sure the Medical Press is strong enough for its own protection. Secondly, it has been stated by a writer in your journal that when a man takes the Membership of the Royal College of Surgeons of England he pays the fees for the diploma only, and has no more right to a voice in the government of the College than he has in indicating how his butcher or baker should conduct business. This idea is rather crude. But I will endeavour to refute it. If the butcher or baker be a man of respectability, every customer has a distinct voice as to the manner in which business shall be conducted, for if the business is not managed to the satisfaction of the customer, he at once withdraws his patronage and deals elsewhere. Again, when the butcher or baker sells so much meat or bread, the customer is at liberty to deal with it precisely as he pleases. Now, in the case of the diploma of the Royal College of Surgeons there is no analogy. For once a Member, and you are then a Member or Fellow for life, and the College very properly reserves the right of supervising your conduct and the manner in which you degrade or elevate its diploma. Now, if a man can degrade his college, surely he has an equal right to elevate it. Hence it follows that the College clearly recognises the power of its Members to degrade or elevate the College by the manner in which its individual Members conduct business. Deep degradation is usually visited with severe and speedy punishment, frequently too severe. But there are an infinite number of minor ways in which the College is degraded every day, such as shielding unqualified persons, retailing professional skill (?) for sixpence, keeping open retail establishments, making a charge for seeing the poor and needy at our hospitals, and this, too, by those who should set a higher and brighter example, and many other matters which are beneath the notice of the College; all of which minor offences do more to degrade the College and to undermine the position of its individual members than do some of the more serious offences which are usually visited with the rigour of the law. On the other hand, members who elevate the College all over the world by their own personal skill and indomitable perseverance are too frequently passed by without either recognition or reward. Thirdly, Mr. Rivington hit the right nail when he asked the question wherein the superiority of the diploma lay, when the College charged several guineas more for its diploma than do other colleges which convey equal rights and privileges, and often, I may add, superior advantages. Nowadays the value of a thing depends on how much the article will fetch in the open market. It is a notorious fact that a man from over the Border with a double diploma, costing less than the single diploma of the Royal College of Surgeons, which most unjustly entailed a double examination, can command better and more remunerative appointments. And further, without the consent of the Members of the College the Royal College of Surgeons has now combined with the Royal College of Physicians to grant a double diploma, and they seek also to confer the degree of M.D. upon those of their Members who have obtained their conjoint diploma; thereby excluding the 15,000 or 16,000 Members who have already passed the examinations of the College, not only in surgery, but many of them in medicine also. In case the combined Colleges ever obtain the powers to grant the degree of M.D. to their examinees, the time is not far distant when a Member of the Royal College of Surgeons will be practically and legally unqualified. A far more graceful act on the part of the combined Colleges would have been to have conferred the diplomas of the Conjoint Board upon all of the Members of the Royal College of Surgeons or Licentiates of the Royal College of Physicians who could produce evidence of having passed a satisfactory and complete examination in medicine, surgery, and midwifery, such diploma to be conferred without further fee or examination.

I am not one of those who would seek in any way to lower the standard of examinations or the qualifications required for the sweets of office, but the contrary. I would have but one high standard of examination, one fee, and one portal of admission to the profession for each division of the kingdom, and by such means do away with most of those petty jealousies and annoyances which one so constantly hears of, such as, "He is not a regular doctor," or "He's more than a doctor, he's a physician," &c. After all, Mr. Editor, it is not colleges nor universities of universities which make men, but it is men who make colleges, aye, and universities too, all that they ever are, ever were, or ever will be.

I am, Sir, yours truly,

Kennington-park, Dec. 21st, 1885. ALBERT S. MORTON.

"DISEASED MEAT."

To the Editor of THE LANCET.

SIR,—In reply to Professor Walley, of the Royal Veterinary College, Edinburgh, I may say that my authority for the statement that domestic animals produce no sputum is Koch, who says:[1] "Die Thiere produciren bekanntlich kein Sputum, so dass von ihnen während des Lebens aus dem Respirationswegen keine Tuberkubacillen ins Freir geliefert werden." And though I fully recognise the truth of Professor Walley's remarks, I still think that the excreta of domestic animals play a very small part in spreading tuberculosis among human beings. Professor Walley is, of course, specially qualified to speak with authority as to the frequency of tubercular mammitis in cattle. I had not seen Professor Bang's article, and I based my opinion on the statement of Koch:[2] "Da aber Perlsuchtknoten im Enter nicht sehr oft vorkommen." I may also mention that one of the leading veterinary surgeons of this town has for the past year been looking out for a case of tubercular disease of the udder, and has hitherto failed to meet with an undoubted one, though he frequently finds tuberculosis of other organs. I am therefore driven to the conclusion either that tubercular disease of the udder is not very common, or that a capable veterinary surgeon may fail to recognise it. It is not without significance in this connexion that tubercular disease of the human mamma is a very rare affection. Sir Astley Cooper, I believe, described a scrofulous disease of the breast, but I have not been able to refer to his original description. I can find no reference to tubercle of the mamma in the last edition of Holmes' "System of Surgery." In Cornil and Ranvier's "Pathological Histology"[3] the passage occurs: "We know of no example of tubercles occurring in

[1] Koch: Die Ätiologie der Tuberculose. Mittheilungen aus dem Kaiserlichen Gesündheitsamte. Berlin, 1881, p. 81.
[2] Ib., p. 82.
[3] English edition, translated by Shakespeare and Simes, 1880, p. 710.

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the mammary gland." Payne[4] says: "Tubercle has not been observed to occur in the breast."

While remaining of the opinion that tubercle bacilli and their spores may, and frequently do, pass through a healthy alimentary canal without producing disease, I still recognise (especially since the report of Drs. Klein and Heneage Gibbes' experiments[5]) that the consumption of tubercular flesh involves a risk to which the public ought not to be exposed; and I am only too glad to add my voice to that of Professor Walley in asking for further legislation regarding the sale of milk, and for a more efficient system of meat inspection. The latter will never be attained until public abattoirs are provided in all towns and the numerous and scattered slaughterhouses are abolished.

I am, Sir, yours truly,

Nottingham, Dec. 23rd, 1885. H. HANDFORD, M.D.

ANATOMICAL ANOMALIES.

To the Editor of THE LANCET.

SIR,—In THE LANCET of the 19th inst. your Dublin correspondent notes an instance of a rare irregularity of the vertebral artery—namely, that in which it springs from the transverse part of the arch of the aorta. I have seen three cases of this within the last twelve months in the dissecting-room of Trinity College, the abnormality in each instance occurring in connexion with the left vertebral.

It may, perhaps, not be uninteresting to your readers if I should mention two very rare nervous anomalies which I had the good fortune to come across of late. The first was a case in which the communicans noni arose from the pneumogastric, and may probably be explained by the fact that the branch of communication between the second cervical nerve and the pneumogastric was unusually large. The descendens noni is not unfrequently found arising from the latter, but it is very rare for the communicans to do likewise.

The second is an anomaly which, so far as I am aware, has not been observed before. The nerve to the rhomboids, which arises from the fifth cervical, gave off a slender branch, descended behind the brachial plexus, and supplied the upper digitations of the serratus magnus muscle. As the rhomboid nerve usually gives one or two branches to the levator anguli scapulæ, the above abnormality derives special interest from the fact that in certain of the lower animals the serratus magnus and levator anguli scapulæ form one continuous muscle, the portion which is deficient in man being supplied by slips from the three lowest cervical vertebræ. I am, Sir, your obedient servant,

JOHN P. HENRY, B.A.,

Dublin, Dec. 21st, 1885. Assistant Demonstrator of Anatomy, T.C.D.

"ARTHRECTOMY."

To the Editor of THE LANCET.

SIR,—I notice in THE LANCET of December 26th a remark of Mr. Mayo Robson's, at the Leeds Medico-Chirurgical Society, in a discussion upon so-called "arthrectomy" of the knee. He states that, according to reports of mine, ovasion, as I prefer to call it, succeeded only once in sixteen cases. As I think the operation in suitable cases a valuable one, I desire to correct this statement. In only one instance was a perfect and movable joint preserved, but in five other cases a sound though stiff limb resulted, and two more have since healed; making eight cases in which a result was obtained as good as excision in other ways, and better, in that there is an absence of shortening from removal of bone. These limbs are very difficult to keep straight among the poorer classes; but the same objection applies to excision in young children, and it is as a substitute for excision that I have brought my cases forward. I claim that half my cases have been successful, and in suitable cases the percentage will, I believe, be much greater in the future. My notes were published in the *Medical Chronicle* for July, 1885.

I am, Sir, yours faithfully,

[illegible], Dec. 29th, 1885. G. A. WRIGHT.

[illegible] and Ziemssen's Pathological Anatomy, edited by Payne, 1875, [illegible] of the Local Government Board, and THE LANCET, Nov. 28th, [illegible].

LIVERPOOL.

(From our own Correspondent.)

DEPRESSION OF TRADE AND THE MEDICAL CHARITIES.

THE long-continued depression of trade and commerce has had a very serious effect upon the finances of our local medical charities. The Eye and Ear Infirmary, though most economically conducted, is seriously crippled in consequence of its diminished income, and an urgent appeal has been issued to the public. The same observation applies, with some modification, to all the hospitals, and especially the Royal Southern Hospital.

THE MAYOR AND CHRISTMAS DINNERS.

Alderman David Radcliffe, the re-elected mayor, is repeating the noble munificence he showed last year. One thousand hot pots, each sufficient for a large family, are to be distributed by him, together with three hundred more contributed by friends. These will be given through the Rev. Messrs. Lester and Postance, Father Nugent, and H. G. Brown. Other seasonable gifts will probably follow.

RECENT CASES AT THE CITY CORONER'S COURT.

An inquest was held on the body of a female infant twelve days old, which had died while under the care of a midwife with symptoms of opium poisoning. She was the illegitimate daughter of a widow residing at a distance from Liverpool, and was sent to the midwife to be nursed. This was accomplished, according to her own admission, by feeding it with boiled arrowroot mixed with milk, and, because the child was a very cross one, giving it a drop of laudanum on a piece of sugar. Dr. Leigh, who was called in to see the child, and who subsequently made a post-mortem examination, gave it as his opinion that death resulted from laudanum poisoning. The jury returned a verdict of "Death by misadventure," and censured the mother of the child, as well as the midwife, for their conduct. On the same day, an inquest was held on the body of a newly born male child, found in the coal cellar of a temperance hotel in the north part of the city. A young woman, who had been a domestic servant in the hotel, had been committed for trial on a charge of concealing the birth of an infant whose decomposed body had been found in her box. She had been observed to show signs of advanced pregnancy, and about the 10th ult. there were appearances indicating that she had been recently delivered. On the 1st inst., after her committal, the body of the deceased was found in the coal cellar by the servant who took her place. It was fully matured, and had a man's neck-tie tightly tied round its neck. It was examined by Dr. Wilde, the resident surgeon at the North Dispensary, and subsequently by Mr. F. T. Paul, lecturer on medical jurisprudence, and Mr. F. W. Lowndes, surgeon to the police. From the condition of the funis, the terminal end of which was in a dry, gangrenous state, and the state of the lungs and heart, it was clear that the child had survived its birth some hours; and the appearances of the neck, mouth, and tongue pointed to strangulation as the cause of death. A verdict of "Wilful murder" was returned against the servant.

HEALTH OF LIVERPOOL.

At the last meeting of the Health Committee on the 17th inst., the medical officer (Dr. Stopford Taylor) reported that the death-rate was equal to 24·5 per 1000 of the estimated population. There were 2 deaths from small-pox (one vaccinated and one unvaccinated), 14 from measles, 4 from scarlatina, and 4 from fever. The inquest cases amounted to 17, of which 2 were due to excessive drinking and 3 (under one year of age) to suffocation. The number of uncertified deaths was 11. There were also reported to the medical officer 9 cases of fever, 6 cases of small-pox, and 33 cases of scarlatina. There were on the 17th inst. 50 cases of small-pox in the city hospital.

LADIES' CHARITY AND LYING-IN HOSPITAL.

A bazaar was recently held in aid of this charity, and resulted in the handsome balance of £1594 (after all expenses had been paid) for the building fund. The charity is doing a very useful work among the poor at this inclement season, and deserves every encouragement. By its means poor married women are provided with skilled attendance in their confinements, with certain medical and other comforts, and skilled obstetric assistance in difficult

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cases. There are wards with twelve beds for the reception of in-patients, and so perfect are the arrangements that all danger of fever is as effectually guarded against as in our present state of knowledge they can be. There is a large out-door department, which comprises the whole of the city, and affords practical instruction to students attending the obstetric class at the Medical Faculty of University College.

Liverpool, Dec. 22nd.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

THE CORONERSHIP OF NEWCASTLE-ON-TYNE.

THROUGH the death of Mr. J. T. Hoyle, a member of the legal profession, a vacancy has taken place in the office of coroner for the city of Newcastle-on-Tyne. Mr. Hoyle held the office for a long series of years, and was highly respected by all classes of the community. The duties have been performed of late years by his son, who is also a member of the legal profession and is a candidate for the vacant office. The office is understood to be worth, after expenses are defrayed, about £400 per annum, and can be very well filled by a medical practitioner, the inquests as a rule taking place in the evening, and so not interfering with other duties. Besides Mr. Hoyle, I hear that there are three other candidates in the field—namely, Mr. Alderman Barkas, who is not a member of either profession; Mr. Alderman Newton, who is well known and respected here as a practising surgeon; and Mr. N. Hardcastle, who is also a surgeon of long standing here, holding the surgeoncy of the gaol and other important appointments. It is to be hoped, however, that before the day of election one of these gentlemen may retire, and use his influence so as to have the election of a medical coroner carried. There is, I know, a good feeling towards the profession in the City Council, who hold the election in their hands; but it would be well to strengthen this by all legitimate outside influence that can be used, as the legal influence is very strong in the Council. The Council have elected Mr. Hill Motum, the Town Clerk, to hold the office pending the election, which has been fixed to take place on the first week in January next. It is very soon, but the Act of Parliament requires the vacancy to be filled in ten days. It may be remarked that two of the gentlemen before mentioned as candidates will have to resign their aldermanic honours, as the act says that the coronership may not be held by any member of a municipal council. Seeing that the office has been so long held by a lawyer it is thought by many here that it would be but a graceful act for the Council to appoint a member of our profession on this occasion. There is another point which I might allude to—namely, that honours come very tardily to our profession in the north of England. Now, it is very well known that on the occasion of the late Royal visit to Newcastle Mr. Alderman Newton acquitted himself in a way to merit the esteem of all classes of the community. The Council now has an opportunity of showing its appreciation of one of its most esteemed members, and a worthy member of our profession, by appointing Mr. Alderman Newton to an office which has been shown to be eminently adapted to the medical profession.

DURHAM COUNTY HOSPITAL.

Dr. Seeker Walker, son of Dr. Walker, of Wakefield, has been appointed house-surgeon to the Durham County Hospital. The post is one usually coveted by young surgeons. This time, I understand, there were about forty applicants for the post, which was rendered vacant by the resignation of Dr. Robertson; four of this number were selected, and Dr. Walker was chosen by a majority of three votes.

A NEW SUICIDE MANIA.

During the last few weeks there have been several cases of poisoning by matches in our police-courts, and sometimes before the coroner. They have all been in females. The *modus operandi* is as follows: they purchase several boxes for a few pence, cut off the lighting ends, and after steeping these in water make a *haustus* of the solution. The usual symptoms of poisoning by phosphorus set in, and frequently after several hours' extreme suffering death ensues. All the cases seem to have sprung out of one—in the way of imitation—which was very fully reported in our halfpenny newspapers a few weeks since.

Newcastle-on-Tyne, Dec. 30th.

IRELAND.

(From our own Correspondent.)

KELLS UNION.

THE sanitary condition of the Workhouse and Fever Hospital of Kells Union was some time since very bad, and the attention of the guardians was directed to this matter on more than one occasion by Dr. Ringwood, the medical officer. At length, after repeated complaints, a committee was appointed to report on the subject. This committee, after making an inquiry, contradicted the statements of Dr. Ringwood, and recommended that that gentleman should vacate the post he held. On the 21st of last November a meeting of the guardians was held, and a resolution was adopted calling on their medical officer to resign, and in due course the matter came under the consideration of the Local Government Board. That body, having fully considered the subject, wrote on December 12th to the guardians, refusing to ratify the resolution in question. Dr. Ringwood, the efficient medical officer of the Workhouse and Fever Hospital, during his long service has never been accused of neglect of duty, and the only apparent reason given for the action of a majority of the Board of Guardians is that he treated his patients too well, thereby increasing the cost of maintenance of the inmates of the workhouse. This charge of extravagance has proved to be untenable, and it is generally believed that the real reason for the hostile attitude of the guardians is because Dr. Ringwood differs in his political sentiments from the Nationalist members of the Board of Guardians. That he has not been sacrificed at the dictates of a narrow-minded clique must be a subject of congratulation to all law-abiding citizens.

BELFAST MAIN DRAINAGE.

The Bill for Parliamentary powers to carry out the Belfast main drainage system has been lodged, and it is intended that it shall be brought before Parliament early this session. The preamble to the Bill refers to the insanitary condition of the Lagan, and the Corporation of Belfast seek powers to purify the river. In carrying out the necessary works, it is necessary that a weir in the Milewater stream should be removed and placed elsewhere, and that the level of the banks and bed of a portion of this stream should be altered and raised, and that the Corporation should be empowered to take certain tidal or slob lands in Belfast Lough and other lands, and construct the required works. The Corporation also, as the Burial Board for the borough, seek to make bye-laws for the management of their cemeteries and obtain the necessary powers to carry out the requisite works. The Bill, which may be styled the "Belfast Improvement (Purification of the Lagan) Act, 1886," will contain the following heads:—(1) Purification of Lagan and sewerage; (2) buildings; (3) sanitary provisions; (4) infectious diseases; (5) markets; (6) cemeteries; (7) fires; (8) telegraph wires; (9) police; (10) financial.

WOMEN AND CHILDREN'S HOSPITAL, CORK.

A Russian Fancy Fair, of a very successful kind, was held recently in aid of the Building Fund of this hospital, so as to help to pay off a debt of some £600 still due. The institution is admirably worked, and well deserves the support of the charitable.

His Excellency the Lord Lieutenant has approved of an expenditure of £4000 in additions and repairs at Armagh District Lunatic Asylum.

Dr. Mc Causland has been elected house-surgeon to Steevens's Hospital, Dublin. Dr. McCausland is a graduate of Trinity College, and obtained a first gold medal at his moderatorship examination.

Dublin, December 29th.

EGYPT.

(From our own Correspondent.)

EGYPTIAN PHARMACOPŒIA.

THE native hospitals have just had served out to them a small and very complete Pharmacopœia in Arabic and English, and the very needful permission has been obtained from the Government to employ in this little book the metrical system, instead of the very complicated and quite

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inaccurate weights and measures which are in use in the other Egyptian administrations. The Pharmacopœia is the first of its kind in this country, and contains 104 preparations, which include iodoform bougies and pessaries, and all the approved pills, powders, mixtures, and ointments, including a very favourite aperient of carbonates of ammonia, magnesia, iron and soda, with ginger and liquorice, which the natives have christened "divine powder."

OPERATING THEATRE.

Until this year the operations in Cairo Hospital were always performed in a small room without convenient appliances, on no fixed day, and with a throng of eager students crowding round the table. Improvements have gradually taken place, and now notices of important operations are regularly sent to the hospital staff. Sundays and Thursdays are the appointed days. Tiers of seats for 100 students are railed off at one end of an airy well-lighted room, and hot water and gas are laid on in this and in an adjoining anteroom. Facing the rows of light-brown eager faces of the boy-students, there stand, with head, face, and body closely veiled in white, the midwife and her assistants, presiding over a supply of sponges, bandages, sublimated sawdust bags, and other necessaries; while the professors sit on chairs near the table; the operator and his dressers work unimpeded; an English instrument man stands by to anticipate their wants; and visitors may, if they choose, look across the newly made botanical garden to the wondrous citadel of Saladin, to the rows of windmills which Napoleon built to supply his troops with bread in 1798, or to the hills of rubbish which now alone mark the site of the old capital of Egypt of 1200 years ago.

RECORD OF OPERATIONS.

There are usually 450 patients in this hospital, of whom some 350, including prostitutes, are in the surgical wards, for natives invariably prefer the tangible results of surgery to the apparently less satisfactory treatment of the physicians. The out-patient department also furnishes forty-five new patients every day, of whom many require surgical aid. During the last two months the following operations have been successfully performed by the native surgeons, in addition to several of minor importance: median lithotomy on a man aged thirty-five with four stones, and also on two men aged fifty and thirty-two; bilateral lithotomy on three men, aged respectively sixty-five, forty-five, and thirty-six; necrosis of tibia; three cases of elephantiasis of scrotum; and Lisfranc's amputation through the metatarsus. Dr. Milton's operations are chiefly on women, children, and accidents, and during the same period include the following, which are now doing well: lithotomy on two male children, each under two years; lithotrity, in one sitting, on a man, aged twenty, from whom 915 grs. were evacuated; lithotrity on a female child aged eighteen months, the only difficulty in this case being caused by the impossibility of washing out the bladder owing to its diminutive size; three amputations of thigh, two of leg, and one of forearm; excision of a strumous elbow-joint; removal of a naso-pharyngeal polypus, the size of a very large orange, projecting forwards and hiding a third of the man's face, which was found to be attached to the junction of the frontal and ethmoidal sinuses, and necessitated the cutting away of the upper three-fourths of the nose; vesico-vaginal fistula; recto-vaginal fistula, such cases being very common here among prostitutes who have never become mothers; removal of polypus of uterus; two cases of fibroma removed from the buttock; strangulated hernia in a male child aged three; two cases of tracheotomy for syphilitic laryngitis; excision of small elephantiasis of both vulvæ, of more than a year's growth, in a prostitute, being the fourth case operated upon this year; paracentesis for empyema, with resection of the eighth rib, and subsequent washings out with salicylic lotion; caries of palate, in which the fistulous opening was found to contain two plugs of lint, which had been there for some weeks; and thirteen cases of excision of cervical glands, besides one of femoral and one of axillary glands. These gland operations are very common here, and are undertaken partly to cure the great disfigurement, and partly on account of suppuration and pain caused by pressure on nerves, or to prevent secondary infection. During the last fifteen months there have been 115 such operations, all successful excepting two cases, in which the enlarged glands recurred. The unsuccessful major operations of the last two months have been three in number—namely: A vesico-vaginal fistula, in which the failure was due to a temporary omission of the catheter. An amputation at the hip-joint in a convict, six hours after a mass of stone, in a blasting operation, had laid bare Poupart's ligament, fractured the femur just below the great trochanter, wounded the femoral artery, and traversed the fleshy part of the leg like a fragment of a Krupp shell; he lost no blood during the operation, but died of collapse an hour afterwards. The third case was a man, aged twenty-six, with a greatly enlarged but not pendulous thyroid gland, causing alarming attacks of dyspnœa, which necessitated operative interference. The isthmus was divided by double ligature and thermo-cautery, and this was followed on the second day by extreme enlargement and congestion of the halves of the divided thyroid, which, though temporarily relieved by three dozen leeches, produced continued obstruction of breathing, and suddenly caused death on the fifth day after the operation, while preparations were being made for tracheotomy. At the necropsy great pulmonary congestion and pneumonia were recorded, while the thyroid was extremely vascular, and contained much new inflammatory tissue.

PAPYRACEOUS FŒTUS.

An Egyptian woman was brought to the hospital by the police three weeks ago with a history of having being kicked by her husband while in her eighth month of pregnancy. Accompanying her was a paper parcel containing (1) the body of a dead male child, small and well nourished, which had lived for a few hours; (2) a round, flatly-compressed placenta, with a diameter of three inches, attached by a tape-like cord to (3) a perfectly flattened papyraceous fœtus four inches in length. The placenta and cord which had been attached to the full-grown child were not brought to the hospital. There was no history of accident or otherwise to account for the death of the fœtus *in utero*.

ROYAL VISIT TO HOSPITAL.

H.H. the Khedive, attended by his suite, made an official inspection of Kasr-el-Aini Hospital this morning, being the first time that he has done so since his praiseworthy visits during the cholera of 1883. His Highness was so pleased with all he saw that he sent for Dr. Milton to the palace in the afternoon, and, with many laudatory words, decorated him with the order of the Osmanieh of the Fourth Class. This unexpected mark of approval has given the greatest satisfaction to both Europeans and natives.

Cairo, Dec. 1st.

THE SERVICES.

Deputy Surgeon-General J. O'Nial, Principal Medical Officer of the Army of Occupation, has proceeded up the Nile to join the staff of General Stephenson at the front.

WAR OFFICE. — Army Medical Staff: Surgeon-Major Thomas Jerram Orton has been granted retired pay, with the honorary rank of Brigade Surgeon; Surgeon Michael Edward FitzGerald resigns his commission.

INDIA OFFICE.—The Queen has approved of the retirement from the service of the undermentioned officers of Her Majesty's Indian Military Forces:—Brigade Surgeon Thomas Beaumont, M.D., of the Madras Army; Surgeon-Major George Grant, of the Bengal Army; Surgeon-Major Edwin Clement Bensley, of the Bengal Army; and Surgeon-Major John William Strong, of the Madras Army.

The under-mentioned officers have been granted a step of honorary rank on retirement:—Brigade Surgeon Robert Rouse, of the Bengal Army, to be Deputy Surgeon-General; Surgeon-Major George Grant, of the Bengal Army, to be Brigade Surgeon.

ADMIRALTY.—The following appointments have been made:—Surgeon John Ottley, to the Cape of Good Hope Hospital; Joseph D. M'Feely, to be Surgeon and Agent at Killybegs; Fleet-Surgeon Henry N. M. Sedgwick, to the Portsmouth Yard; Fleet-Surgeon James J. O'Malley, to the *Excellent*; and Fleet-Surgeon Ernest D. E. Winter, to the *Indus*, additional, for the *Woodcock*.

Surgeon Adam Garratt Mitchell has been appointed to the *Rohilla*, Peninsular and Oriental Company's Service.

ENGINEER VOLUNTEERS.—1st Gloucestershire: Surgeon William Fitzwilliam Carter resigns his commission.

RIFLE VOLUNTEERS.—2nd Volunteer Battalion (the Lincolnshire Regiment): James Pickering Stewart, Gent., M.B., to be Acting-Surgeon.

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Obituary.

SAMUEL SUMNER DYER, M.D. ST. AND., L.R.C.P.L., &c.

WE have to record the death of this well-known and most estimable member of our profession, which occurred on Sunday, Dec. 20th, after a short illness. Samuel Sumner Dyer was born in 1823 in the house where he died, being the eldest son of the late Mr. Thomas Dyer, who had practised his profession for a period of forty years in the town of Ringwood. He received his general education at King's College, entering the medical school in 1843, when King's College was at its zenith, under the auspices of such teachers as Budd, Todd, Fergusson, Bowman, and Simon. This year was marked by the number of students who afterwards distinguished themselves, and amongst them Dyer was noticeable for devotion to his studies and for his high character. After having obtained his surgical diploma, he was elected to the post of house-surgeon to the hospital, and in that office he gained that practical knowledge of which he made such good use in after life. As soon as he had completed his education, he joined his father at Ringwood. When the latter died, some few years afterwards, he conducted, with the help of an assistant, the whole of the practice of the town and of the neighbourhood for many miles around, working laboriously day and night, and devoting the whole of his energies to the arduous duties of his profession for a period of more than twenty years, when he was joined by his brother, Dr. Henry Dyer, by which event his labours were somewhat lightened. During this period his reputation had become established to such a degree that he was consulted by all around, rich and poor, and in cases of difficulty and urgency his opinion and advice were repeatedly sought by his medical brethren in the neighbouring towns. He was the very type of what a good provincial practitioner should be. He was a sound physician, a well-practised obstetrician, and a skilful surgeon, particularly evincing the qualities of the latter in the large number of severe operations which he performed with great success, his skill and dexterity being the result of the teaching of his old friend and master, Fergusson, who took much and especial notice of Dyer whilst a pupil at King's College. Although his time was so much absorbed in the duties of his large practice, Dr. Dyer was enabled to keep pace with the times and to make himself well acquainted with the improvements in medicine and surgery. He made a point of snatching a brief holiday every year for the purpose of attending the annual meetings of the British Medical Association and of the branch meetings, at one of which he was lately president. Apart, however, from the professional aspect, Dr. Dyer was endowed with qualities which gained the esteem and affection of all who came in contact with him. Possessed of a singularly gentle and amiable temper, he was rarely ever known to say a harsh word to anyone; and yet when occasion occurred he was firm of purpose and strictly regardful of truth and justice. All these qualities were enhanced by his strong religious faith. A firm believer in the truths of Christianity, he preached its precepts in his daily life simply, steadfastly, yet without the least ostentation; and it is not to be wondered at that his influence on all around him was very great. In all matters connected with the town and its neighbourhood, civil and religious, he took the most prominent lead, and it will be difficult to fill the wide gap which his loss has occasioned. Death smote him literally "like a thief in the night," for he retired to rest on the night of Tuesday, the 15th, and was found shortly afterwards suffering from the symptoms of hæmorrhage in the brain. He lingered until the 20th, when he passed away. He was assiduously attended to by his brother, Dr. Henry Dyer; his old friend and former pupil, Dr. Wyke Smith, of Wimborne; Dr. Lush, of Weymouth; and his old fellow-student and friend, Mr. Henry Smith, of King's College.

Dr. Dyer married the sister of the late Dr. Monckton of Maidstone, who died a few weeks ago, but left no issue.

The funeral of Dr. Dyer took place on the 24th ult., and was of a most impressive character. The whole town was in mourning, and, although it was Christmas-eve, business was almost entirely suspended. The fine old and spacious church was crowded by a large concourse of the inhabitants of the town and its neighbourhood, of every grade of life. The service in the church was most effectively rendered by the vicar, assisted by several of the neighbouring clergy and a full choir. From thence the procession, accompanied by large numbers of people, moved on to the cemetery, where the interment took place, the coffin and the edges of the grave being covered and surrounded by a mass of beautiful wreaths. Many professional friends were present, some coming from long distances to pay this last token of respect to the memory of their lamented colleague; and it was impossible for those assisting at the ceremony to resist the conviction that the great gathering around them was not only a tribute to the worth of him whom they were mourning, but that it was a mark of appreciation of the profession of which the late Dr. Dyer was so truly an ornament.

R. W. GREENISH, F.R.C.S.

MR. GREENISH, whose early death after a tedious and often very painful illness we have to deplore, was in the active practice of his profession in the north of London. He commenced his studies at University College Hospital in 1872; these were interrupted for six months by a very severe attack of blood-poisoning. He passed his M.R.C.S. in 1876, and in the same year became L.R.C.P. Lond. He held successively the offices of obstetric assistant, University College Hospital; resident clinical assistant, Consumption Hospital, Brompton; junior house-surgeon, Huddersfield Infirmary; and house-surgeon, Ashton-under-Lyne Infirmary. In the autumn of 1881 he went to Vienna, and for twelve months worked at normal and pathological histology under Professor Weichselbaum, and also attended courses of lectures and demonstrations on pathology by Dr. A. Zemann. At this time he published, in conjunction with Professor Weichselbaum, two papers of scientific research: "Ueber das Adenom des Leber," and "Ueber das Adenom der Niere." In 1883 he contributed to the *Journal of Anatomy and Physiology* a "Case of Primary Sarcoma of Pleura," and subsequently a series of papers on the "Outlines of Pathology and Pathological Anatomy" to the *Medical News*. His last illness, which depended upon the secondary results of renal calculus, interfered greatly with his professional occupation, to which he was much devoted, for the last two years of his life. He struggled manfully, however, against these difficulties, and showed remarkable fortitude under the distressing circumstances arising from the disease from which he suffered. Several days before the attack proved fatal he expressed a wish that a post-mortem examination should be made to elucidate some doubtful points in his own case, which he had narrowly watched, and this was his last contribution to the science he loved so well.

JAMES GORDON, M.A., M.D.

ON the 23rd ult. the death occurred, after a short illness of Dr. James Gordon, of Old Aberdeen. Deceased studied and graduated as Master of Arts at King's College, and subsequently studied medicine at Edinburgh and Paris, at the former of which universities he took the degree of M.D. in 1833. Previously to this, in 1831, he had obtained the licence of the Royal College of Surgeons. Dr. Gordon was medical officer to the Oldmachar Parochial Board, and enjoyed the highest confidence of the poor in the district of which he had supervision. He was connected with several public institutions in Old Aberdeen, and, besides acting as town councillor, had held the position of Provost. He was greatly respected by all with whom he was brought into contact, and his death, which occurred in the seventy-sixth year of his age, is much regretted.

TREATMENT OF EPILEPSY.—The prize of 8000 francs offered by the Belgian Academy of Medicine for an elucidation by clinical facts of the pathogenesis and treatment of diseases of the nervous centres, and principally of epilepsy, has not been awarded; but a sum of 500 francs is offered by way of encouragement to the author of the essay bearing the motto, "Traditionem pondero, doctrinam respicio, sequor veritatem," on condition that he allow his essay to be printed in an abridged form with the criticisms of the Commission.

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Medical News.

UNIVERSITY OF LONDON.—The following candidates have passed the recent B.S. examination for Honours:—

FIRST CLASS.

Berry, James (Scholarship and Gold Medal), St. Bartholomew's Hospital.
Robinson, Henry Betham (Gold Medal), St. Thomas's Hospital.
*Price, Alfred Edward, Guy's Hospital.
Carr, John Walter, University College.

SECOND CLASS.

Green, Charles David, St. Thomas's Hospital.
Targett, James Henry, Guy's Hospital.
Brock, James Harry Ernest, University College.

THIRD CLASS.

Hinds, Frank, University College.

* Obtained the number of marks qualifying for a Gold Medal.

SOCIETY OF APOTHECARIES.—The following gentleman passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received a certificate to practise, on Dec. 24th:—

Mariette, Ernest P. Alphonse, St. Stephen's-square, Bayswater.

The following passed the examination in the Science and Practice of Medicine, and received certificates to practise:—

Adye, W. J. Alexander, M.R.C.S., Bradford-on-Avon, Wiltshire.
Cottell, R. J. Cope, M.R.C.S., Cheyne-row, Chelsea.
Burns, Alfred Hugh, Caroline Villas, Hanwell.

THE late Mr. Vanderbilt's bequests include one of $100,000 to St. Luke's Hospital, and one of $50,000 to the Home for Incurables.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The library of this institution will be closed on Tuesday, Wednesday, Thursday, and Friday, the 5th, 6th, 7th, and 8th of January, for the purposes of the examinations.

LADY DOCTORS IN ITALY.—The first official recognition of female medical practitioners has just been made in Rome. The recipient of this distinction is Signorina Terne, M.D., whom Queen Margherita has appointed one of her physicians in ordinary.

ROYAL MEDICAL BENEVOLENT COLLEGE.—On Thursday, January 7th, at 7.30 P.M., a special service will be held at the Church of St. Mary Bishophill Senior, York, when a sermon will be preached by the Venerable Archdeacon Blunt, D.D., and a collection made on behalf of the Epsom College.

SANITATION AT SOUTHAMPTON.—The important sanitary works recently sanctioned by the Corporation of Southampton, involving the erection of the new destructor works at Chapel for the cremation of the town refuse and the treatment of a large section of the sewage of the borough by precipitation, were successfully inaugurated on Dec. 11th.

RUSSIAN REMEDY FOR HYDROPHOBIA.—The alisma, or water plantain, is lauded in Russia as a remedy for hydrophobia. The plant flowers during the summer, and should be collected during August. The roots must be dried and grated, then spread on bread and butter, and a good dose taken night and morning. Two or three doses are said to be sufficient to effect a cure.

SUICIDE OF A PHYSICIAN.—On the 29th ult. an inquest was held at Kensington, on the body of Henry Wotton, M.D., who died on Christmas Day, under distressing circumstances, from the effects of a self-administered dose of prussic acid. After hearing the evidence of several witnesses the jury returned a verdict of "Suicide whilst in a state of unsound mind."

THE HOSPITALS ASSOCIATION.—The second general meeting of the Session 1885-6 was held on Dec. 16th, 1885, at the rooms of the Social Science Association, 1, Adam-street, Adelphi, W.C., Dr. Bristowe, F.R.S., in the chair, when a paper by Mr. G. Sturge, on "The Use of Alcohol in Hospitals," was read by Mr. Burdett (Mr. Sturge being unable to be present), in which was indicated the urgent need of attention to the diet tables of hospitals, on account of economy, and much more in order to overcome the [illegible] in the present hospital practice that [illegible] drinks contribute to health. It is well [illegible] Mr. Sturge, that in the General Provident Life [illegible] they have two classes of insurers, one class [illegible] alcoholics, the other non-abstainers. From the published statistics from 1866-1882 of this institution, according to the ordinary tables of mortality, 2644 deaths should have taken place, but only 1861 occurred in the Abstaining Section; while of 4408 expected deaths in the Non-abstaining Section, 4339 took place, or only 69 less, or 1·2 less than the expected result. In the opinion of the author the time has come in which the Hospitals Association might profitably consider whether any hospital, supported by charity, could be justified in applying its funds to buy alcoholic luxuries for the use of its doctors, servants, or patients.

MEDICAL MAGISTRATE.—Mr. A. R. Ticehurst, M.R.C.S. L.S.A., has been put upon the Commission of the Peace for the borough of Hastings.

EDINBURGH FEVER HOSPITAL.—The Public Health Committee, who have the charge of the city Fever Hospital, have recommended the Town Council to appoint a visiting physician for that institution. This is to be a preliminary step towards a permanent arrangement for clinical instruction in fevers, the necessity for which has been lately urged by the various medical authorities, in memorials addressed to the Town Council.

DEATH WHILE UNDER CHLOROFORM.—An inquest was recently held at Newcastle-on-Tyne, touching the death of a young man who died suddenly on the 19th ult. after undergoing an operation on his eye. Dr. Heath, who performed the operation, having given evidence, the jury returned a verdict to the effect that deceased died from failure of the heart's action, after undergoing an operation under the influence of chloroform.

PRESENTATION.—On the 24th ult. at Bridge of Allan Dr. Paterson was presented with a cheque for £340 enclosed in a silver casket bearing the following inscription:—"Presented to Dr. Alexander Paterson, along with a cheque, given by 260 subscribers over the whole country, in testimony of their regard for him as a successful physician, a kind friend to the poor, and a public benefactor to the inhabitants of Bridge of Allan."

HACKNEY MORTUARY.—On the 23rd ult., during an inquest which was being held at Hackney, the coroner, the medical witness, and the jury complained of the disgraceful accommodation provided at the mortuary, one of the speakers stating that in his opinion it was not fit for the backwoods of America. The coroner advised that the attention of the medical officer of health for the district be called to the matter.

A VICIOUS APPETITE.—On the 28th ult., at an inquest held at the Earlswood Asylum for Idiots, on the body of a man who died in that institution on the 23rd ult., it was stated that a post-mortem examination of the deceased showed the stomach to be very much enlarged, and in it was discovered a large roll of foreign substance, consisting of human hair, horse hair, and cocoa-nut fibre, and a few dead leaves, the whole weighing two pounds and a quarter, and completely blocking up the stomach.

THE MADRAS VICTORIA CASTE HOSPITAL.—The temporary buildings of this institution, which is intended for the reception and treatment of Caste and Gosha women, were formally opened on the 8th ult., by Mrs. Grant Duff. A grant has been made to the hospital by Government, and the donations already amount to over 100,000 rupees. The lady superintendent is Mrs. Scharlieb, under whose supervision careful arrangements have been made for respecting the feelings of the patients by the strict maintenance of their caste or gosha.

CLINICAL SOCIETY.—The subjoined list gives the names of those gentleman who have been proposed for election as officers and members of Council for the ensuing year:—President: Mr. Thomas Bryant. Vice-Presidents: Dr. James Andrew, Dr. Cayley, Dr. Wilks, Mr. Sydney Jones, Mr. Thomas Pickering Pick, and Sir Henry Thompson. Treasurer: Mr. Christopher Heath. Council: Dr. Carrington, Dr. Coupland, Dr. Drewitt, Dr. William Ewart, Dr. Hadden, Dr. F. de Havilland Hall, Dr. Felix Semon, Dr. Tyson, Dr. John Williams, Mr. Henry Hugh Clutton, Mr. Davies-Colley, Mr. Harrison Cripps, Mr. Clinton T. Dent, Mr. A. Pearce Gould, Mr. Warrington Haward, Mr. Henry Morris, Mr. Walter Rivington, Mr. John Wood, F.R.S. Honorary Secretaries: Dr. Stephen Mackenzie, Mr. Rickman Godlee

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MARY MAGDALEN HOSPITAL, ST. PETERSBURG.—At a meeting of the German Medical Society of St. Petersburg, Dr. Lingen mentioned some statistics of the practice of the Mary Magdalen Hospital during the four summer months of 1885. There were 124 cases of typhus, the mortality of which was 12·2 per cent. The mortality of typhoid was 13·4. Both these rates were below those for the corresponding period of the previous year. The number of cases of pneumonia was 54, though in the previous summer it had been only 33. The mortality was, however, only 9·6 per cent., against 13 per cent. in the summer of 1884. Ninety-five cases of phthisis were admitted, with a mortality of 44·4 per cent., the deaths from this cause accounting for a third of the total deaths. There was no diphtheria. A case of acute glanders was fatal on the tenth day. A case of malignant pustule on the chin was cured by excision and subsequent cauterisation. In the surgical wards there were 283 cases, mostly injuries, wounds, and fractures. The mortality in this department was 5 per cent.

BOOKS ETC. RECEIVED.

BIBLIOTHÈQUE MÉDICALE INTERNATIONALE, Bureaux de la "Semaine Médicale."
Diagnostic et Traitement Chirurgical des Tumeurs Abdominales. Par Sir Spencer Wells. Edition Française publiée avec le Concours du Dr. J. Keser. pp. 390, avec 55 Figures dans le Texte.

CALCUTTA PRESS.
A Manual of the Diseases of the Eye. By C. Macnamara, F.R.C.S.Eng. Translated into Bengali by Lal Madhub Mookerjee, L.M.S., F.C.U.

CASSELL & Co., Limited, London, Paris, New York, and Melbourne.
The Surgical Diseases of Children. By Edmund Owen, M.B., F.R.C.S. pp. 518, Illustrated with 4 Chromo-lithographs, and 85 Engravings. 9s.
Fractures and Dislocations. By T. Pickering Pick, F.R.C.S. pp. 524, Illustrated with 93 Engravings. 8s. 6d.
Surgical Diseases of the Kidney. By Henry Morris, M.A., M.B., F.R.C.S. pp. 548, with 6 Chromo-lithographs, and 40 Engravings. 9s.

CHURCHILL, J. & A., New Burlington-street, London.
The Principles and Practice of Medicine. By the late C. H. Fagge, M.D., F.R.C.P. In Two Vols. pp. 1024-836.
The Pocket Formulary. By Henry Beasley. Eleventh Edition. pp. 517.
The Influence of Sex in Disease. By W. Roger Williams, F.R.C.S. pp. 39.
A Manual of Animal Vaccination. By Dr. E. Warlomont. Translated and Edited by A. J. Harries, M.D. pp. 168.
Descriptive Catalogue of the Pathological Specimens contained in the Museum of the Royal College of Surgeons of England. Vol. IV.
How to Use a Galvanic Battery. By Herbert Tibbits, M.D. Third Edition. pp. 96, with Illustrations.

HARRISON & SON, St. Martin's-lane, London.
Proceedings of the Medical Society of London. Edited by Dr. J. K. Fowler and Mr. J. H. Morgan. Vol. VIII. pp. 305, with Illustrations.

HIRSCHWALD, A., Berlin.
Die Physiologische und Therapeutische Wirkung des Schwefelwasserstoffgases. Von Dr. H. Stifft. S. 168.
Leitfaden zum Gebrauch des Augenspiegels. Von Dr. Med. Adolf Vossius. S. 73, mit 22 Holzschnitten.
Die Bakterien-Aetiologie der Infections-Krankheiten. Von Dr. Hugo Mittenweig. S. 135.

KEGAN PAUL, TRENCH, & Co., Paternoster-square, London.
Sunshine and Sea: a Yachting Visit to the Channel Islands and Coast of Brittany. By a Country Doctor. pp. 266, with Illustrations.
The Mammalia in Relation to Primeval Times. By Prof. Oscar Schmidt. pp. 308, with 51 Woodcuts.

LEWIS, H. K., Gower-street, London.
A Handbook of Therapeutics. By Sydney Ringer, M.D. Eleventh Edition. pp. 668
The Science and Art of Midwifery. By Wm. Thompson Lusk, A.M., M.D. pp. 763, with numerous Illustrations.
Illustrations of the Unconscious Memory in Disease. By Chas. Creighton, M.D. pp. 212.
Gout, and its Relations to Disease of the Liver and Kidneys. By Robson Roose, M.D. Second Edition. pp. 160.
Rome in Winter, and the Tuscan Hills in Summer. By David Young, M.C., M.D. pp. 288.

LONGMANS, GREEN, & Co., Paternoster-row, London.
Transactions of the Clinical Society. Vol. XVIII. pp. 427, with Coloured Plates and Woodcuts.
Strength and Happiness. By Richard A. Proctor. pp. 283, with Illustrations.
Select Methods in Chemical Analysis. By William Crookes, F.R.S., V.P.C.S. Second Edition, Rewritten and greatly Enlarged. pp. 725, with 37 Woodcuts.

MATHIESON, F. C., & SON, Bank, London.
Mathieson's Vade-Mecum for Investors for 1886. pp. 444. 4s.

PENTLAND, YOUNG J., Edinburgh.
Atlas of Venereal Diseases. By P. H. Maclaren, M.D., F.R.C.S.E. Fasc. II. 6s.

PHILIP & SON, Fleet-street, London.
Healthful Exercises for Girls. By A. Alexander. pp. 92, with 200 Illustrations.

PUTNAM'S SONS, New York & London.
Psychiatry: a Clinical Treatise on Diseases of the Fore-brain. By T. Meynert, M.D. Translated by B. Sachs, M.D. Part I.: Anatomy, Physiology, and Chemistry of the Brain. pp. 285, with Illustrations.
A Manual of Microscopical Technology. By Dr. Carl Friedländer. Translated by S. Y. Howell, M.A., M.D. pp. 249.

SAMPSON LOW, MARSTON, & Co., Crown-buildings, London.
Orient Line Guide. Edited for the Managers of the Line. By W. J. Loftie, B.A., F.S.A. pp. 254, with Plates and Maps. 5s.

SANITARY INSTITUTE OFFICE, Margaret-street, Stanford, Charing-cross.
Vital Statistics: a Memorial Volume of Selections from the Reports and Writings of Wm. Farr, M.D., F.R.S. Edited for the Sanitary Institute of Great Britain. By Noel A. Humphreys, F.S.S. pp. 563.

SMITH, ELDER, & Co., Waterloo-place, London.
Transactions of the Pathological Society of London. Vol. XXXVI. pp. 575, with Plates and Woodcuts.
Von Ziemssen's Handbook of General Therapeutics. Vol. IV.: Treatment of Disease by Climate. By Dr. Hermann Weber.
General Balneotherapeutics. By Prof. Otto Leichtenstern. pp. 496.
Dictionary of National Biography. Edited by Leslie Stephen. Vol. V.: Bicheno-Bottisham. pp. 448.

SPON, E. & F. N., Charing-cross, London.
Lightning-Conductors, their History, Nature, and Mode of Application. By R. Anderson, F.C.S., F.G.S. Third Edition, Revised. pp. 470, with Illustrations.

TRAILL, Dr. M., Calcutta.
The Landmarks of Snake-Poison Literature. By Vincent Richards, F.R.C.S.Ed. pp. 176.

VAN VOORST, JOHN, Paternoster-row, London.
Chemistry, General, Medical, and Pharmaceutical, including the Chemistry of the British Pharmacopœia. By John Attfield, F.R.S. Eleventh Edition. pp. 870, with Illustrations.

Illustrated Stable Maxims, 4s., on Roller. (Longmans.)—Intubation of the Larynx; by F. E. Waxham, M.D.—The Paris Guide and Directory; compiled by Stickney & Co., Paris.—A precise Investigation of some Micro-organisms and Soluble Ferments; by C. T. Kingzett, F.I.C., F.C.S.—Uber die Trägheit der Netzhaut und des Sehcentrums; von J. McK. Cattell.—Calvert's Mechanics' Almanack for 1886.—Variations de Composition et Réactions Chimiques des Humeurs Normales et Morbides de l'Appareil Génital de la Femme; par le Dr. F. Ménière.—Effects of the Use of Tobacco; by Hobart A. Hare, M.D. Philadelphia.—Peste de Cadeiras, ou Epizootia de Marajó; pelo Dr. J. B. de Lacerda.—The British Pharmacopœia and its Critics; by Prof. Attfield, F.R.S.—Engravings of A. Vesalius and N. Tulpius, 4s. 6d. each. (Williams and Norgate.)—Health Almanack, 1886. (J. Clarke, Edinburgh.)—On Inflammation of the Attic of the Tympanum, and two Fatal Cases of Ear Disease in Infants; by Dr. S. Sexton, New York.—Purity Meetings—a Protest; by Wilbraham Taylor.—Index Medicus, Vol. VII. No. 2.—A Plan for erecting a Healthy City on the South-West Gulf Coast of Florida.—The British and Colonial Druggists' Diary, 1886.—The Educational Almanack, 1886.—Good Words, Sunday Magazine, January, 1886. (Ibister.)—Leisure Hour, Sunday at Home, Boy's Own Paper, Girl's Own Paper, January, 1886. (Tract Society.)—Future Careers for our Sons and Daughters. (Segg & Co.)—Prof. A. Jacobelli: Prelezione al Corso Ufficiale di Atmiatria nella Regia Università di Napoli.—Report of the Spina Bifida Committee of the Clinical Society of London.—The Medicines and Medicinal Agents of the British Pharmacopœia, 1885; by Clay and Abraham.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BIDEN, CHARLES W., M.R.C.S., L.R.C.P., has been appointed Resident Obstetrical Officer to Charing-cross Hospital.

BUXTON, DUDLEY WILMOT, M.D., L.R.C.P.Lond., M.R.C.S., Anæsthetist to University College Hospital, has been appointed an Assistant Anæsthetist to the Dental Hospital of London.

FOOKS, H., M.R.C.S., L.S.A.Lond., has been appointed House-Surgeon to Charing-cross Hospital.

FREEMAN, CHAS. D., L.S.A.Lond., has been appointed House-Physician to Charing-cross Hospital.

HUNTON, A. W., M.R.C.S., has been appointed Senior House-Surgeon to the Ancoats Hospital, Manchester, vice G. A. Bolton, resigned.

IRVING, CHARLES, L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer for the Fosten District of the Newark Union, vice Burrows

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LYNES, JOHN, M.R.C.S., L.S.A.Lond., has been appointed House-Surgeon to Charing-cross Hospital.

MAY, FREDERICK, L.A.H.Dub., has been appointed Medical Officer for the South District of the Stratton Union, vice Stuart.

PARKER, GEORGE, M.A., M.D.Camb., M.R.C.S., has been appointed House-Surgeon to the Paddington-green Children's Hospital.

POLSON, JAMES RONALD, L.R.C.P.Lond., M.R.C.S., has been appointed Assistant-Surgeon to the Worcester Friendly Societies' Medical Association.

ROULSTONE, WILLIAM, M.D., M.Ch.Q.U.I., has been appointed Medical Officer to the Workhouse, Wakefield Union, vice Horsfall, resigned.

STEDMAN, F. OSMUND, M.R.C.S., L.S.A.Lond., has been appointed House-Physician to Charing-cross Hospital.

WALKER, H. SECKER, M.R.C.S., L.R.C.P.Lond., has been appointed House-Surgeon to the Durham County Hospital, Durham, vice Murray Robertson, M.B., resigned.

WETHERED, FRANK J., M.B.Lond., M.R.C.S., L.S.A.Lond., has been appointed House-Physician to the London Hospital.

WILSON, JOHN, L.R.C.P., L.R.C.S.Ed., has been appointed Medical Officer of Health for the Pudsey Urban Sanitary District, vice Mumford.

WILSON, THOS., M.D.Lond., B.S., M.R.C.S., has been appointed House-Physician to the National Hospital for the Paralysed and Epileptic, Queen's-square, W.C.

WINTER, J. T., M.R.C.S., has been appointed Junior House-Surgeon to the Ancoats Hospital, Manchester, vice W. Arnold, resigned.

Births, Marriages, and Deaths.

BIRTHS.

EMBLETON.—On the 22nd ult., at St. Wilfrid's, Bournemouth, the wife of Dennis C. Embleton, L.R.C.P., M.R.C.S., of a daughter.

INKSTER.—On the 27th ult., at Fulwood-road, Sheffield, the wife of S. Macaulay Inkster, M.D., of a son.

LAING.—On Nov. 29th, at The Adyar, Madras, the wife of Surgeon-Major Jas. Anderson Laing, of a daughter.

SMITH.—On the 25th ult., at Cedar Lawn, Burbage, Hinckley, Leicestershire, the wife of R. Bradshaw Smith, Surgeon, of a daughter.

THOM.—On the 29th ult., at High-street, Crieff, N.B., the wife of Alex. Thom, jun., M.A., M.D., and C.M., of a son.

MARRIAGES.

BARRETT—GLASSFORD.—On the 23rd ult., at 13, West Prince's-street, Glasgow, by the Rev. John Orr, Tron Church, assisted by the Rev. Dr. Cameron, of Dunoon, William H. Barrett to Kate, second daughter of the late A. M. Glassford, Liverpool and London.

DALLAS—READ.—On the 30th ult., at the Oratory, Brompton, by the Rev. J. B. Rowe, assisted by the Rev. A. D. Beste and the Rev. S. Bowden, John Henry Langford Dallas, Esq., R.A., to Emma Jane, second daughter of S. Laurence Read, Esq., of Petersham-terrace, Queen's gate.

FRANKS—BROMHEAD-BUTT.—On the 23rd ult., at St. Philip's Church, Earl's-court, S.W., Kendal Franks, M.D., of Fitzwilliam-square, Dublin, to Gertrude Jane, fourth daughter of the late Colonel T. Bromhead-Butt, 79th Highlanders.

GRAYLING—CHRISTIAN.—On the 22nd ult., at St. Mary Magdalene's, Munster-square, Frank, only son of John Grayling, M.D., Sittingbourne, to Mary Maud, widow of the Rev. R. Cuthbertson Christian, M.A., late of Rossory, Co. Fermanagh, Ireland.

[illegible]NEY—BRAITHWAITE.—On the 29th ult., at the Friends' Meeting-house, Mercers-road, Holloway, N., Willis Norton Whitney, M.D., a member of the United States Legation at Tokio, Japan, to Mary Caroline, third daughter of Joseph Bevan Braithwaite, of Camden-road, N., and New-square, Lincoln's-inn, Barrister-at-law.

DEATHS.

[illegible].—On the 23rd ult., after a short illness, at his residence, Fisher-gate, Preston, Richard Allen, M.R.C.S., and Surgeon-Major to the Royal North Lancashire Militia, youngest son of the late Barten Fletcher Allen, of Preston.

CROFTS.—On the 28th ult., at Church Gresley, Burton-on-Trent, Ellen, the beloved wife of William Carrick Crofts, M.R.C.S., &c., aged 57.

[illegible]MAN.—On the 21st ult., at Priory-road, Kilburn, Henry Pettener Freeman, M.R.C.S., L.S.A.Lond., formerly of Fulham, aged 66.

GREENISH.—On the 26th ult., after a short illness, with much suffering, Robert William Greenish, F.R.C.S., of Somerfield-road, Finsbury-park, second son of Thomas Greenish, of New-street, Dorset-square, in his 33rd year.

[illegible].—On November 5th, at his residence, 2, Oxford-street, Oldham, Robert Bryden Hill, M.D., B.Sc.Edin., aged 32.

[illegible]ON.—On the 26th ult., at South-hill, Bromley, Kent, Francis Jackson, Surgeon, formerly of Guildford and Chertsey, aged 75.

[illegible].—On the 26th ult., at Bognor, Sussex, after a short illness, Mr. Charles Osborn, in the 76th year of his age.

[illegible].—On the 26th ult., at his residence, Lincoln, James Marr Snow, M.R.C.S., L.S.A.Lond., aged 77.

[illegible]ON.—On the 26th ult., suddenly, Henry Wotton, M.D., of Notting-hill-terrace, eldest son of the late Henry R. Wotton, Esq., of Devonshire-square, aged 49.

[illegible] A Fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, January 4.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M., and on Tuesdays at the same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M. Also on Thursdays at 2 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Jonathan Hutchinson, F.R.S.: Some Moot Points in the Natural History of Syphilis (Lettsomian Lecture).

Tuesday, January 5.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Dewar: The Story of a Meteorite.
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Eve: (1) Two cases of Sarcoma of the Tongue; (2) Ectopia of Crop of Pigeon (card); (3) Large Calculus passed spontaneously by Female Child (card).—Dr. Price: Malignant Disease of the Œsophagus.—Mr. Sutton: Joint Disease in Animals.—Dr. Norman Moore: Cases of New Growth in Heart and Viscera.—Mr. Fenwick: Tubercular Exfoliating Cystitis.—Dr. Samuel West: Aneurysm of Mitral Valve.—Dr. Hale White: Meningeal Hæmorrhage extending to Sheath of Optic Nerve (card).—Mr. Lane: (1) Anatomical Variations in Pelvis (card); (2) Fracture into Ankle-joint without Displacement (card).—Mr. Swinford Edwards: Carcinoma of the Bladder. At 9.30, Annual election of officers and Council.

Wednesday, January 6.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department 9.30 A.M., on Tuesdays and Fridays.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department: 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.

Thursday, January 7.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Dewar: The Story of a Meteorite.
HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Dr. W. H. Blenkinsop: On Inhalations in Pulmonary Diseases.—Mr. T. Pickering Pick: Spreading Traumatic Gangrene.

Friday, January 8.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—8 P.M. Specimens will be shown by Mr. Percy Dunn.—Mr. Barratt: Case of Extroversion of the Bladder after Operation; Water-colour Drawings of the same in a Female.—Dr. Savill: Two cases of Myxœdema.—Dr. Pickett and Mr. Keetley: On a case of Obstruction of the Bowels, with Gangrene of the Left Leg.—Mr. J. R. Lunn: On three cases of Excision of the Tongue.—Dr. J. B. Ball: On a case of Infantile Scurvy.
CLINICAL SOCIETY OF LONDON.—8.30 P.M. Annual general meeting for election of officers and Council. Sir Andrew Clark: On a case of Desquamative Prostatitis accompanied by the Discharge of Hyaline Tube-casts.—Mr. Barker: Ununited Fracture of the Clavicle producing Writer's Cramp and Pain, Resection of the False Joint and Wiring of the Fragments, Complete Union and Relief of the Nerve Symptoms.—Mr. Clutton: Large Cervical Spina Bifida undergoing Spontaneous Cure.—Dr. Pringle: Symmetrical Guttate Scleroderma (living specimen).—Mr. Sympson (Lincoln): Multiple Cartilaginous Tumours (living specimen).

Saturday, January 9.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
MIDDLESEX HOSPITAL.—Operations 2 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Dewar: The Story of a Meteorite.

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, Dec. 31st, 1885.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Dec. 25	30·43	W.	37	34	...	43	32	...	Hazy
,, 26	30·32	S.E.	42	40	...	43	35	...	Foggy
,, 27	30·49	S.	39	37	...	44	33	...	Foggy
,, 28	30·09	W.	42	40	...	50	37	...	Raining
,, 29	29·93	N.W.	39	35	...	41	34	·16	Cloudy
,, 30	30·15	N.W.	31	...	...	46	29	·03	Overcast
,, 31	29·90	W.	46	45	...	50	35	·24	Overcast

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

MEDICAL ETHICS IN THE ORANGE FREE STATE.

A CORRESPONDENT writes us that in twenty-seven years' practice at home and abroad he has always been on the best of terms with his brother practitioners. We congratulate him on such a fact, creditable alike to him and to the profession to which he belongs. He has now, however, to complain of unprofessional methods in a medical brother, who thinks it right to foist his advice and medicines on the patients of other practitioners, offering them even for nothing at first. We cannot believe that such practices will be persisted in or that they will be found to succeed. They are entirely undignified and unjustifiable.

It is never too late to Learn.—1. Our correspondent must be aware that there have been many theories put forth to account for the origin of chronic rheumatism, and that pathologists are not agreed as to the existence of a definite poison in the disease.—2. Massage seems to be the prominent feature of the treatment employed by the specialist mentioned.

Mr. J. Jeffery.—It would be contrary to our rule.

DIPHTHERIA AND DEFECTIVE DRAINAGE.

To the Editor of THE LANCET.

SIR,—It would seem to me to be very foolish to ignore altogether the idea that road-level sewer ventilators may have something to do with the various outbreaks of diphtheria simply because certain defects may have been found in some of the houses where the disease has arisen, and because sewer ventilation acts as a kind of safety valve to the house drainage; and, moreover, oxygen is one of the best antiseptics known. I can say, without fear of contradiction, that some of the worst cases of diphtheria in this neighbourhood have arisen at different times opposite some of the worst of these stinking ventilators, and many a time have the persons residing near them had to close their windows when the wind has been blowing in a certain direction. No doubt, where the sewers have all been laid upon properly graduated levels, and there is consequently no stagnation of sewage, these road-level ventilators act perfectly well; but where the levels are altogether irregular it would seem to me that the only safe method is to run shafts up the sides of a certain number of houses, and so convey the effluvium into the upper air. If these road-evel ventilators are not a nuisance and a danger, why have the uthorities gone to the expense of making fresh openings in the centres of the roads when they could so easily have untrapped the gratings which carry off the rain-water at the sides? In conclusion, I would say that one of our chief London consultants told me he had distinctly traced some cases of diphtheria in the north of London to these road ventilators. Such being the case, there can be no question that fresh inquiry is needed. I am, Sir, your obedient servant,

Surbiton, Dec. 28th, 1885. F. P. ATKINSON.

AMOY PRESBYTERIAN MISSION HOSPITAL.

IN the report of the Mission Hospital at Amoy, by Mr. Archibald Macleish, M.A., M.B., C.M., for the past year, an interesting account of various cases, surgical and medical, is given, from which we extract the following as an instance of a not very common affection—viz., lymphocele:—

> "The patient had a collection of milky fluid in the tunica vaginalis, presenting the microscopic characters of chyle, coagulating quickly, and containing large numbers of active filariæ (filaria sanguinis hominis). He was thrice tapped. The first time eight ounces of this fluid were drawn off, and no injection made. The fluid rapidly accumulated, and eighteen days later the same quantity was removed, and a drachm of pure, liquefied carbolic acid injected, causing considerable pain and faintness. The fluid again accumulated, though more slowly. Twenty-six days later five ounces were drawn off, and eighty minims of carbolic acid injected, with only slight pain and no inflammatory reaction. Four months later the testicle was much reduced in size, and when last seen (about ten months after the last operation) was almost normal. Presumably, obliteration of the sac had taken place. The collection of fluid had always been larger in the evening than in the morning, and in summer than in winter. The glands in the groins were not enlarged; and the patient had never suffered from fever, or anything pointing to constitutional disturbance from the presence of the filariæ, which were found also in the blood."

This is the second case of filarious lymphocele that Mr. Macleish has treated. In the previous case, on tapping the second time, sufficient inflammatory reaction was set up, without injection of the sac, to effect obliteration and cure. During the ten months and a half the hospital and dispensary were open 1665 individuals received treatment. On these, 113 surgical operations were performed. The average number of visits to the dispensary by each patient was about five, which, as a Chinaman expects to receive manifest benefit from his first visit, and if he does not get it is but little inclined to persevere, tends to show that the results were very satisfactory.

Mr. J. West Walker should apply to the Volunteer department, War Office.

"PERSISTENT CONSTIPATION."

To the Editor of THE LANCET.

SIR,—I beg to thank all those gentlemen who kindly gave me through THE LANCET the benefit of their advice in the treatment of the above disease. Having adopted Mr. Blenkarne's prescription, I am glad to say that it has, so far, proved successful.—I am, Sir, yours obediently,

December, 1885. PHYSICIAN.

To the Editor of THE LANCET.

SIR,—Having read an excellent annotation on "The Treatment of Constipation" in your issue of Dec. 12th, I beg to ask you to kindly supplement it with a list of aperient vegetables and fruits (obtainable at this season) that are most useful in this obstinate and common ailment.

I am, Sir, yours faithfully,

Dec. 18th, 1885. ADSTRICTUS.

*** Every kind of green vegetable obtainable at this season is of use in relieving constipation. Vegetable soups are particularly appropriate. Among fruits, pears, apples, prunes, and figs are the most effectual, whether cooked or in the raw state. The infusion of preserved tamarinds is doubly valuable from the action of the fruit and from the volume of fluid thus introduced. It also forms a very agreeable drink. It should not be forgotten that, in order to obviate a costive habit, these various substances must, one or other of them, alternately if desired, be habitually taken. In addition to the means recommended in our recent annotation, we may mention that benefit is often derived from friction and massage of the abdominal walls.—ED. L.

THE MEETING OF DEC. 17TH, 1885, AT THE ROYAL COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—May I ask the favour of a correction of your report of the above meeting? Your reporter, possibly from failing to catch the word "not," and in his laudable endeavour to compress my remarks, has made me say the opposite of that which I did actually say. I quote from your report, inserting in brackets the words necessary to make my meaning clear:—"It had been said that the College was [not] simply a corporation [that it was something more], but from that he ventured to dissent. It was a body having [high and noble objects and] great responsibilities both to the profession and to the public, [but still nothing but a corporation, and as such the creature of the Charter which created it]." These remarks were directed against certain mischievous delusions which appeared to prevail in the minds of a number of members—namely, that the Council could if they pleased set aside their Charter; that they ought to do so at the bidding of the members; and that on the present occasion they were, as one speaker expressed it, sheltering themselves behind their Charter. The misprint at the end of my remarks of "qualified himself to become," instead of *by becoming* "a Fellow," is so obvious as scarcely to require notice.

I am, Sir, yours obediently,

St. James's-square, S.W., Dec. 26th, 1885. WILLIAM HAUGHTON.

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THE NEWARK BOARD OF GUARDIANS.

MR. CHARLES IRVING was elected for the Foster District of the Newark Union, in spite of a strange speech by the clerk of the board on the absence of his diplomas. Mr. Irving is a duly registered practitioner; the locality of his diplomas is quite irrelevant.

House-surgeon.—It is certainly customary for the coroner's officer to give notice to the authorities at infirmaries when inquests are going to be held at such institutions. We imagine in the cases referred to by our correspondent the failure must have been from inadvertence, and not intent. It is highly desirable that the resident surgeon of an infirmary should be called to give evidence concerning the deaths of inmates who have died whilst under his care.

J. F.—Our correspondent is entitled to dispense his own medicines, like every other registered practitioner.

Mr. E. Donaldson.—Yes, in an early number.

MISCARRIAGE; DECAPITATION.

To the Editor of THE LANCET.

SIR,—The following case will perhaps be considered sufficiently interesting to merit insertion in your columns.

On the 12th inst. I was sent for at 4 P.M. to see a lady who was then being attended by a midwife. On my arrival I found a young woman, aged twenty-one, primipara in her sixth month, being threatened with miscarriage. I was asked for my opinion, but not requested to take charge of the case. I gave my opinion that the miscarriage would surely occur, and to have the midwife (who lived close by) at hand. I retired, and at midnight I was called again, and was told by the messenger that a foot of the child was born, but no more. On reaching the house the midwife informed me that the child was born "all but the head," that it was a foot presentation, and that when the head was about being delivered "the patient gave herself a sudden jerk and the head went back." I thought it strange that there should have been any delay in delivering the head of such a small-sized child, but lost no time in asking questions, and immediately examined into the state of the affair. I found the headless body of the child on the bed, the cord protruding from the vagina, and on introducing my hand found for a presentation the foramen magnum, with the placenta in immediate contiguity. When my hand was well introduced into the os, a pain supervened, and the placenta came away. I kept my hand in the uterus and got the head pretty well into my palm, and delivered it. Not being present at the time the body was delivered, I cannot say anything about the "jerk" referred to, but I think the mother was hardly responsible for it.

I am, Sir, yours truly,

CHARLES J. S. DIGGES, M.R.C.S.

St. Louis, Mo., U.S.A., Oct. 29th, 1885.

Alpha.—Our correspondent does not tell us his previous or usual professional relation to the lady in question, or that of the gentleman called in after him, but he seems to have been treated with scant respect.

Lympthill has not enclosed his card.

HOSPITAL ACCOMMODATION FOR RESIDENT MEDICAL OFFICERS.

To the Editor of THE LANCET.

SIR,—The question of proper accommodation for men holding honorary appointments in our hospitals is one which I have frequently seen advocated in your valuable journal, and with others, more directly interested in the matter than I am myself, I trusted the hints and warnings would have a salutary effect on those to whom they were indirectly addressed. It is only by the intervention of painful experience that some minds seem to be capable of being roused to a proper sense of their duties towards their fellow-men; and now that an opportunity offers for reopening the question through the untimely demise of a bright and promising young house-surgeon at one of our great hospitals, I think this the fitting occasion respectfully to urge on those who represent the ruling authority the absolute necessity of studying more closely than they have heretofore done the welfare and comfort of those who fill the important and onerous posts of resident officers in our large charities.

I will as briefly as possible lay before you some incontestable facts which stand as a lasting disgrace to one of our noblest institutions. In one of our large hospitals each resident, with the exception of the resident assistant-surgeon and physician, is accommodated with only one room, wherein he is to sleep, rest, smoke, entertain his friends, and, as so often happens, read for his higher examinations. This is the first item that requires reform. Moreover, there is absolutely and entirely no means of recreation within the hospital, and all that the hard-worked house-surgeon or physician can do during the hour or so he has to himself between the end of his labours for the day and his evening meal, is to sit in that ever-occupied room and smoke; and what is the consequence? No sooner do men come on duty as residents than their health begins to fail; they become pale and languid, and it requires but the presence of some infectious disease to lay them on a bed of sickness, from which, as in the case above quoted, they may never rise again. I myself as well as others have noticed how severely the smallest ailments affect men who have been on duty some time; tonsillitis always attacks severely, and scarlet fever, as in the case of at least four house-surgeons in my own recollection, has incapacitated men for months subsequently from occupying the posts which they have obtained with some difficulty, and which they are always anxious to fill efficiently. From nine to ten hours a day of rushing about this huge building while on minor duty, and the constant hard work from 9 A.M. to 2 A.M. while on major duty, suffice ere long to exhaust the strongest man. When he is treated to this scanty and inefficient accommodation, and is absolutely debarred from any healthful open air relaxation, he is placed at a much greater disadvantage when he encounters some dangerous infectious disease, than one in healthier surroundings. But these are not the only evils that require reform. The action of those who have framed the rules for the conduct of house-surgeons has absolutely vetoed his leaving the hospital for out-door exercise, without going through an absurd and unnecessary form of obtaining leave. He has to obtain permission from two, and give due notice to three other officials, by means of printed forms, before he can indulge in the luxury of a walk away from the hospital and its surroundings. Now, Sir, what is the unfortunate victim of this uncalled-for officiousness to do? Close attention to his work, no time for recreation, either mental or physical—living ever in the close, stuffy, germ-laden atmosphere of a London hospital—surely when disease in any shape seizes on him he is struck down with a heavier blow than he would be were he in perfect health, and now and then he becomes the victim directly, it is true, of the disease which asserted itself, but indirectly also of that wretched provision for his comfort and well-being which rendered him so easy a prey. Can you not, through the columns of your widely circulated and valuable journal, advocate the cause of the unfortunate resident? Cannot you urge on those who are responsible the necessity of providing better accommodation for him—a racquet court, a lawn tennis court, or a billiard table—to relieve him from the mental and physical strain to which his work puts him daily? Surely the school and college will gain in the esteem of the public and the profession when they evince such an interest in the welfare of those who serve them so conscientiously. The lesson those who are in authority have to learn, a lesson they have unfortunately learnt before, but have not heeded, is to be less severe and more generous to and thoughtful of those who toil day and night for the good of their fellow-men. Trusting some good may come from this appeal, and apologising for trespassing on your space so largely,

I am, Sir, yours truly,

December 15th, 1885. MEDICUS.

Dr. A. Boggs (Paris).—Full details on the subject will be found in Dr. Parkes' Manual of Practical Hygiene, book ii., chap. 2, sect. 2, "The Food of the Soldier."

HOTTENTOT PATHOLOGY: A REMARKABLE SUPERSTITION.

To the Editor of THE LANCET.

SIR,—It may be interesting to your correspondents who wrote on the above subject in your issues of June 13th and 27th, 1885, to know that the idea about the "uterus flying upwards after parturition" prevails universally among the native Singhalese of Ceylon. The midwifery practice among them is entirely in the hands of their midwives, whom I have seen tightly grasp the funis by twisting it round the index-finger to prevent the after-birth going up about the chest and obstructing the respiration.—I am, Sir, yours faithfully,

W. WIJCYESAKERE,
House-Surgeon to the Government Civil Hospital,
Dec. 4th, 1885. Galle, Ceylon.

L.R.C.P.E.—The proceedings at the meeting referred to were not declared to be secret.

D. L.—Undoubtedly the case can be, and should be, dealt with by the authorities of the College whose licence is thus disgraced.

GARROD'S "MATERIA MEDICA."

To the Editor of THE LANCET.

SIR,—In consequence of the recent publication of numerous corrections in the British Pharmacopœia, certain alterations have been found necessary in the new edition of Garrod's "Materia Medica." Will you kindly announce that a printed list of these can be obtained from the publishers, Messrs. Longmans and Co., or from myself.

I am, Sir, yours faithfully,

NESTOR TIRARD, M.D.,
(Editor of Garrod's "Materia Medica.")

Weymouth-street, W., Dec. 22nd, 1885.

Enquirer (Camp Dolan) will find information on the subject in THE LANCET of Oct. 10th last, page 680.

INCISION OF OS AND CERVIX BEFORE REDUCING THE INVERTED WOMB.

To the Editor of THE LANCET.

SIR,—In your issue of Dec. 26th, 1885, p. 1183, Dr. Arbuckle describes this operation as due to Dr. Barnes. A glance at the "Medical Digest," Section 1137: 6, will show that Dr. Pratt of Fife contributed a paper to the *Medical Times and Gazette* in 1868, in which he asserts that Wassiege of Liége is the sole originator of this most effectual plan.

I am, Sir, yours obediently,

Boundary-road, N.W., Dec. 28th, 1885. R. NEALE, M.D. Lond.

Mr. H. Raymond.—The term is not commonly employed; but, if used, it would be perfectly correct.

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UNIVERSITY OF LONDON.

FROM our list of medical members of the special committee to consider Lord Justice Fry's scheme (see vol. ii., 1885, p. 1116) the name of Dr. Baines was inadvertently omitted.

Mulcted.—Possibly the Medical Defence Union, Bedford-row, might assist our correspondent.

"FÆCAL ACCUMULATION."

To the Editor of THE LANCET.

SIR,—I have read with much interest the able article in THE LANCET under the above title, by Mr. Fred. Treves, F.R.C.S., of the London Hospital, and although able to agree with the writer upon some points, yet I cannot endorse his remarks upon the secondary importance of constipation—viz., that the daily evacuation of the colon and rectum is unnecessary, or that a full colon involves (in moderate constipation) no material alteration in the contents. As to the latter, he seems to ignore the fact of organic decomposition and generation of carbonic dioxide gas, with consequent flatulence and its attendant evils, as pressure upon surrounding viscera and nerve plexus, &c. That drastic, or even mild, purgatives and the largely increasing exhibition of saline waters are evils there can be little doubt, and that to fly for the relief of any symptom to such remedies is both unscientific and baneful. But what I am most anxious to draw attention to is another aspect of the question—viz., the daily use of what I should like to term "natural food," notably bread and pastry made from wheaten flour in its entirety and more or less finely ground. I have for the past two years abandoned the use of white bread and pastry altogether, and, unless visiting at the house of a friend, never take it; the result has been a daily evacuation of the intestines, instead of constipation as formerly, and a condition of health, both of mind and body, never before experienced. This has nothing whatever to do with mental bias, to which Mr. Treves refers, but is a practical outcome resulting from improved dietetic habits alone. Again, I never suffer from thirst, and often forget to drink at dinner; and unless my attention is drawn thereto by others, I should scarcely drink at all at meal-time. A withdrawal of water from the system either by the skin or kidneys means usually thirst as a resultant; but with me, the amount of water passed with the fæces being but small may account for this phenomenon, thus forming a marked contrast to what would ensue were I to take aperients for relief of constipation. The woody fibre in the proportion found in entire wheaten flour is, in my opinion, enough, and only enough, for the healthy stimulation of peristalsis; and, moreover, the additional amount of nutriment—as bone phosphates and albuminoids—contained in the bran-cells more than compensates for any supposed physiological waste to which Mr. Treves refers. By observing such simple and pleasant rules as those to which I have alluded aperients become a "dead letter," and constipation, whether it be moderate or excessive, is avoided; and not this only, but a more perfect digestion takes place, and a perfect assimilation also, thus avoiding one of the chief causes of gastric and intestinal trouble.

I shall feel obliged if you will insert this brief reply in your next issue, trusting that the question of "natural food" may be better considered by the faculty.

I am, Sir, yours truly,

December, 1885. PATHOLOGIST.

"ITCHING OF JAUNDICE."

To the Editor of THE LANCET.

SIR,—For this distressing complaint I have used on two occasions during the past month hypodermic injections of pilocarpine in doses of one-tenth of a grain. The immediate effect is to intensify the suffering; but when diaphoresis occurs, relief is rapidly obtained, and lasts from twenty-four to thirty-six hours. It is occasionally advisable to give the patient a little brandy before injecting the pilocarpine.—Yours truly,

Dec. 28th, 1885. J. J.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir Andrew Clark; Sir W. Mac Cormac; Dr. Dickinson, London; Dr. McGill, Leeds; Dr. Wilks, London; Mr. Godlee; Dr. Klein; Dr. Casper, Berlin; Dr. Kent Spender, Bath; Dr. Handford, Nottingham; Dr. Sturges, London; Dr. Fairbank, Doncaster; Messrs. Burgoyne, Burbidges, and Co., London; Mr. Jalland, York; Mr. C. S. Jeaffreson, Newcastle-upon-Tyne; Miss St. Aubyn, London; Dr. Williams; Messrs. Hepton Bros., Leeds; Mr. Cannon, London; Dr. Rentoul; Dr. Dickinson, London; Mr. F. A. Eaton, London; Mr. W. Browne, London; Mr. W. Haughton, London; Mr. R. H. Barker, London; Dr. Amand Routh, London; Dr. G. C. Roy; Dr. Playfair, London; Dr. Macpherson, Glasgow; Mr. R. Neale, London; Prof. Longmore, Netley; Dr. R. H. Coombe, Redburn; Mr. Hughes, London; Dr. G. C. Smith; Dr. F. P. Atkinson, Surbiton; Dr. J. H. Douty, Powick; Mr. Wijeyesakere, Galle; Mr. F. A. Cox, London; Dr. Davidson, Bombay; Dr. J. K. Fowler, London; Dr. Mitchinson, Lincoln; Mr. Dawe; Dr. H. Blanc, Cannes; Messrs. Condy and Co., London; Messrs. Matthews, Smith, and Co., Birmingham; Dr. M'Naughton, London; Messrs. Wyleys and Co., Coventry; Mr. Cripps, London; Dr. Kerr, London; Dr. T. Cook, London; Mr. Bell, Toronto; Mrs. Rahn, Ipswich; Dr. Haven, Portsmouth, U.S.A.; Messrs. Dawson Bros., Montreal; Mr. Cresswell, Dowlais; Mr. Newton, Brisbane; Mr. Jones; Dr. Jesyaroosawmaya, Bangalore; Mr. Meigham, Glasgow; Mr. Menzies, Glasgow; Dr. Adam, West Malling; Dr. Walker, Middlesbrough; Mr. Parkinson, Manchester; Dr. Malita, Batala; Mr. Cariot, London; Messrs. Smith and Son, Dublin; Mr. Feltham, Llandudno; Messrs. Cassell and Co., London; Mr. Morton, London; Mr. Horsfall, Wakefield; Mr. Birchall, Liverpool; Mr. Wood, Fulham; Mr. Hulme; Mr. Mudd; Miss Dickie, Great Malvern; Dr. Lytle, Maghera; Mr. Hodge, London; Dr. D. Squire, London; Dr. Thom; Mr. Parkes, London; Dr. Wynne, Sheffield; Dr. Welch, Blackpool; Messrs. Black and Co.; Mr. J. Taylor, London; Inspector-General Shaw, Anerley; Messrs. Keith and Co., Edinburgh; Dr. Scott, Florida, U.S.A.; Mr. Vickers, London; Mr. G. A. Wright, Manchester; Mr. Cornish, Manchester; Dr. Norman Chevers, London; Mr. Priestley, London; Mr. Rideal, London; Mr. Frederick Page, Newcastle; Dr. Lavers, London; Dr. Whitmarsh, Hounslow; Mr. E. E. King, London; Dr. Mantle, Stanley; Secretary, Lying-in Institution, Brighton; House Surgeon; S.Sc.Cert. Camb.; Alpha; A. B.; B. G. G.; L.R.C.P.E.; Nostalgia; M.B.; Mulcted.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Ripley, Southport; Miss Boddy, Crediton; Mr. Rice, Derby; Mr. Copper, Switzerland; Miss Sidney, Brighton; Dr. Rake; Messrs. Porteous and Co., Glasgow; Mr. Ricker, St. Petersburg; Mr. Davies, Newport; Dr. Skerrett, Bristol; Mr. Knightley, London; Dr. Bradford, Liverpool; Mr. Norman; Mr. Hill, Oldham; Mr. Birch, Bournemouth; Mr. Morgan, Clevedon; Mr. Hankyard, Leeds; Mr. James, Clapham; Mr. Payne, Tasmania; Mr. Davey, Holloway; Dr. Jones, Dowlais; Messrs. Reynolds and Co., Leeds; Mr. Trecise, Burton-on-Trent; Mr. Yeates, Newhaven; Dr. Weir, South Shields; Mr. March, Hindley; Dr. Ridge; Mr. Smith; Mr. Osborne; Mrs. James, St. John's Wood; Dr. Mackay, Esk; Mr. Morgan, London; Medicus, Leeds; F T., Little Hampton; Bona Fide; J. E. J.; X. Y. Z., Matlock Bridge; H. H.; P.; Hon. Sec., Hitchin Infirmary; Medicus; Alpha, West Bromwich; J. H.; G. A. M.; C. F. B.; C. E.; Carpus, Liverpool; Medicus, Liverpool; H., Macclesfield; Student; Medicus, Abergele; B., Stockport; Beta; M.B., A.B.; M.R.C.S., Forest Gate.

New Yorker Medizinische Presse, South Wales Daily News, The Housewife, Methodist Times, Newcastle Daily Leader, Newark Advertiser, Bridge of Allan Reporter, Birmingham Daily Times, &c., have been received.

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Lectures
ON THE
SURGICAL TREATMENT OF EMPYEMA.

Delivered at the Hospital for Consumption and Diseases of the Chest, Brompton.

By RICKMAN J. GODLEE, M.S., F.R.C.S.,
SURGEON TO THE HOSPITAL, AND SURGEON TO UNIVERSITY COLLEGE HOSPITAL.

LECTURE I.

GENTLEMEN,—Statistics are most misleading. Perhaps they are never more so than when they are compiled from the material which is met with at a special hospital. I must, however, present you in the first place with a tabular statement—I fear not quite a complete one—of the cases of empyema which have occurred during the year that I have been officially connected with the hospital, and of a few others that were under my care before that time. A glance at the list will show that it is a record of a very promiscuous series of cases. It was difficult to arrange them in any illustrative manner, and I have accordingly placed them in the order of age. Such a table is a good illustration of the fallacies to which the study of statistics may lead; for although the actual mortality cannot be said to be high—five out of twenty cases having died, two of which were after leaving the hospital—it will be noted that the number of perfect cures is comparatively small; and anyone who formed his opinion as to the results of the treatment of empyema from the statistics of this hospital might conclude that the treatment of the disease is far from encouraging, so many of the cases having left the hospital still wearing the tube, with the remark appended to their case, "improved"—often merely a euphemistic rendering of *in statu quo*. But if he happened to formulate his views from observations made at another institution with which I have the honour to be connected—the North-Eastern Hospital for Children—he would conclude that empyema is one of the most curable of diseases, for by referring to this other table it will be seen that amongst thirty cases there has only been one death (that of a markedly tubercular infant, who had an empyema upon the opposite side); and that very few left the hospital unhealed, while the majority were completely cured in a very few weeks, and even those whose recovery was more protracted ultimately, with one exception, healed completely.

I will not dwell upon a third class of cases which might supply material for statistical tables—namely, those which are met with in private practice, though perhaps it might be shown that similar cases to those we meet with here have a better chance of recovery under the more advantageous conditions of a good home than the undoubtedly very favourable one that we are here able to offer them. Nor will I give you a list of cases from a general hospital, though these would probably afford the most trustworthy basis for an argument; but I will shortly point out a few of the reasons for the different results obtained at these two special institutions. Some at least of these must be at once apparent, the principal ones being the difference in the age of the patients, and the fact that many of those who come here are either quite chronic cases or the subjects of more or less advanced tubercular disease. It may of course be said, and with truth, that the majority of the cases of empyema at a children's hospital have in a marked degree the appearance which we are in the habit of describing as "tubercular": that is, they are thin, with delicate features and narrow chests; they have downy skins and notably hairy foreheads, and long dark eyelashes; and not infreqently we can discover a family history of tubercular or strumous affections. But, on the other hand, they are not as a rule pulled down by chronic phthisical changes; their lungs are not, as many of those we meet with here, consolidated and inexpansible, and if actually tubercular, this is the first manifestation of the disease in an otherwise comparatively healthy body. The question of age, however, is probably the most important one. It implies, besides the difference of recuperative power so marked between children and adults, a difference in the most important factors concerned in the closing of an empyema. To begin with, the tissues of a child have apparently a greater faculty than those of an adult of absorbing not only serum but pus; and I cannot doubt that a certain number of empyemata in children are really made away with by simple absorption, without surgical interference. This is illustrated by the fact that acute suppuration of joints and large intermuscular abscesses may be satisfactorily treated in infants by means of a much smaller incision than would be considered at all adequate for an adult. That the pleura may deal with pus in this way, even in adults (though perhaps only in young adults), is illustrated by two cases which have occurred here (Nos. 7 and 10, Table II.); for it must be remembered that when an empyema is aspirated, it is generally, if not always, impossible to extract to the last drop the pus contained in the chest, as such a complete evacuation would imply the perfect adaptation to each other of all the walls of the cavity in which the pus was contained, and therefore almost necessarily the complete expansion of the lung—a result which must be very rarely met with. But the question of age tells in a more marked way after the chest has been opened by a free incision. Let us consider the manner in which a cure is effected under such circumstances. The lung, unless it has previously become adherent to the chest walls, at some points, is lying at the back of the thoracic cavity, occupying the hollow formed by the angles of the ribs, and perhaps adherent also to the structures in the middle and posterior mediastina. The process which has to take place in order that the opening may close is a bringing together of the walls of the cavity and the surface of the lung. Now it is quite impossible for the lung to be distended by any inspiratory efforts; this would be opposed to the laws of physics; and no suction power is available as long as there is a free opening into the chest, yet somehow the closure of the cavity is brought about. The only possible power by which this can be accomplished is illustrated by Figs. A and B. The whole interior of the pleura which has suppurated becomes lined, if not with actual granulations, at least with a material which, like them, in its advance to a more highly organised condition, necessarily undergoes a process of contraction; and that which occupies the angles, shown in the figures between lung and chest walls, lung and diaphragm, lung and mediastinum, and diaphragm and chest-walls, is constantly drawing these structures towards one another. Thus the chest walls fall in, causing approximation of the ribs and a lateral curvature of the spine, with its dorsal concavity, towards the affected side and slight compensatory curves, in the opposite sense, in the lumbar and cervical regions; the diaphragm comes up, the mediastinum is drawn over with an accompanying expansion of the unaffected lung, and the affected lung is also drawn out and made to expand. Now, in a child the lung is more expansible, and the chest wall is much less rigid than in the adult, and thus the possibility of the completion of this process of closure is much greater. Perhaps it may sometimes happen, after the pleura has regained its healthy condition, if the opening in the chest wall has closed, that a cavity may remain containing a small amount of serous fluid, and that the final process may be the absorption of this fluid; but this, if it ever occur, is the exception, and not the rule. In the case of an adult such as J. F. (Table II., No. 18), a time is reached when the rigid chest walls have fallen in to their uttermost possible extent, the diaphragm has risen as high as it can, and the collapsed lung, coated with its thickened pleura, has been drawn out to the furthest possible extent. Then nothing further can take place, and nothing more remains to be done, except to let the patient go home with a permanent fistulous opening, or to adopt some of the methods to be mentioned in the next lecture to render the chest walls less rigid and more collapsible.

These, then, I think, are the most important considerations in accounting for the different results at these two hospitals, and they are sufficient to justify the position that any general assertions as to the treatment of this disease must, if they are to be of any value, be founded upon a very wide experience of all classes of cases. For this reason I refrain at present from attempting to draw any such conclusions.

It may be deduced from what has been said as to the method by which an empyema closes, not only that those

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TABLE I.

THIRTY CASES OF EMPYEMA TREATED AT THE NORTH-EASTERN HOSPITAL FOR CHILDREN.

No.	Name.	Age.	Duration.	Variety.	Treatment.	Result.
1	John E.	1 year.	3 months.	Left, localised, tubercular.	Aspirated, Jan. 9th, 1883, 1 pint; Jan. 23rd, 6 oz.; Jan. 30th, 4 oz. Opened, Feb. 10th, behind; rib removed.	Death. Empyema on opposite side.
2	Mabel P.	1 4/12 ,,	1 month.	Left, general.	Aspirated, July 11th, 1884; opened, July 26th; part of 8th rib removed behind.	Cured in 6 weeks.
3	J. Joseph M.	1 10/12 ,,	3 weeks.	Right, localised.	Opened, Nov. 23rd, 1881, behind; tube out, Dec. 13th.	Cured in 5 weeks.
4	Rosie R.	2 years.	6 weeks.	Left, localised.	Opened, Aug. 1st, 1885; rib removed behind; tube out, Aug. 13th.	Cured in 4 weeks.
5	Frederick E.	2 4/12 ,,	9 weeks.	Right, general (?). Subcutaneous rupture outside and below nipple.	Aspirated, July 4th, 1885; opened through abscess, July 7th; tube removed, July 15th. Part of 7th rib removed; tube put back, Aug. 7th; finally removed, Aug. 15th.	Cured in 9 weeks.
6	George R. G.	2 5/12 ,,	14 days.	Left, general (?).	Aspirated, Aug. 14th, 1883; opened, rib removed behind, Aug. 17th; tube removed, Sept. 1st.	Cured in 5 weeks.
7	Elizabeth L.	2 6/12 ,,	8 months.	Left, localised.	Aspirated, Feb. 9th, 1885; opened, rib removed behind, Feb. 28th; tube replaced twice; counter-opening, June 17th.	Left in September, not quite healed.
8	George M.	3 ,,	2 months.	Left.	Aspirated, Aug. 20th, 1883; opened, Aug. 24th; rib removed behind; tube removed, Oct. 2nd.	Practically cured in 8 weeks.
9	Florence E.	3 ,,	(?)	Left, general.	Aspiration failed; opened, Nov. 14th, 1883; rib removed behind.	Cured in 10 weeks.
10	James D.	3 ,,	6 weeks.	Right, general (?).	Aspirated, Nov. 25th, 1884, 5 oz., very thick pus.	Cured by one aspiration.
11	Frederick D.	3 ,,	5 months.	Left, general.	Aspirated, Dec. 3rd, 1883, 2 oz.; Dec. 4th, 1 oz. Opened, rib removed behind, Dec. 7th.	Practically cured in 7 weeks.
12	Florence P.	3 4/12 ,,	3 weeks.	Right, localised.	Aspirated, May 12th, 1885, 4 oz.	Cured by one aspiration.
13	Florence S.	4 ,,	(?)	Left, general (?).	Aspirated, Oct. 31st, 1884, 29 oz., sweet; Dec. 8th, expectorated, 2 oz., fetid. Opened, Jan. 25th, 1885; rib removed behind; pus fetid.	Cured in 8 weeks.
14	Helena B.	4 ,,	3 weeks.	Right, localised.	Aspirated, April 28th, 1884, 1 syringeful.	Cured by one aspiration.
15	John W.	4 ,,	2 weeks.	Right, general.	Aspirated, Aug. 9th, 1885. Opened, Aug. 5th; rib removed behind. Tube removed, Aug. 26th; put back, Aug. 31st; finally removed, Sept. 16th.	Practically cured in 5 weeks. Tube removed too soon.
16	Ada L. H.	5 ,,	(?)	Left, general (?).	Aspirated, April 7th, 1882, 10 oz.; April 9th, 7 oz.; opened, April 10th; tube reinserted, Sept. 9th.	Practically cured in 6 months.
17	Sydney N.	5 ,,	(?)	Left, general (?).	Aspirated July 21th, 1883, 4 oz.; July 26th, 11 oz. Opened, Aug. 12th; rib removed behind; tube left out, Aug. 29th.	Cured in 4 weeks.
18	Daisy M. H.	5 ,,	1 month.	Left, general.	Expectorated two months after commencement of illness.	Cured.
19	Eliza C.	5 ,,	5 months.	Right, general (?), opening in 7th space.	Part of 7th rib removed, and tube put in, Feb. 17th, 1883; left out, March 27th.	Cured in 6 weeks.
20	Florence C.	5 6/12 ,,	2 weeks.	Left, general.	Aspirated, April 3rd; opened, 10th; rib removed behind.	Cured in 8 weeks.
21	Henry E.	5 6/12 ,,	10 days.	Left, general.	Aspirated, June 16th, 1882, 26 oz.; opened July 1st, 7th interspace; July 7th, rib removed; tube left out, Sept. 2nd.	Cured in 14 weeks.
22	Joseph W.	5 6/12 ,,	4 days (?).	Left, general; lung solid.	Aspirated, May 12th, 1884; opened, 27th; rib removed; July 13th, second opening further back.	General health good, but sinus remains, Sept., 1885.
23	Alfred J.	6 ,,	5 weeks.	Left, general.	Aspirated, Jan. 29th, 1885; subcutaneous rupture near nipple, Feb. 7th; opened through abscess, 6th interspace; no rib.	Cured in 8 weeks. Trouble with tube.
24	Gertrude S.	6 ,,	4 months.	Left, general.	Aspirated, Jan. 10th, 1885; opened, rib removed behind, 26th.	Small cavity remaining for 3 months.
25	Mary C.	6 ,,	4 months.	Left, localised.	Aspirated, Nov. 18th, 1884.	Cured by one aspiration.
26	William D.	6 ,,	6 weeks.	Right, localised.	Aspirated, July 7th, 1885; opened, rib removed behind, 17th; tube removed, 29th.	Cured in 3 weeks.
27	Lydia S.	7 ,,	3 weeks.	Right, general (?).	Aspirated, Aug. 24th, 1883; 27th, 4 oz.; Sept. 1st, 9 oz. Opened, rib removed behind, Sept. 8th; tube left out, 20th.	Cured in 3 weeks.
28	Ada B.	8 ,,	(?)	Right, general, putrid.	Aspirated, April 10th, 1882; opened, 21st, 7th interspace; no rib.	Cured in 4 weeks.
29	Cornelius S.	9 ,,	9 days.	Right, general.	Aspirated, May 2nd, 1882, 3 oz.; 5th, 22 oz.; 19th, 20 oz. Opened, 23rd; no rib. Tube removed, July 19th.	Cured in 9 weeks.
30	Maria C.	10 ,,	12 months.	Left, general (?). Subcutaneous rupture near nipple.	Opened through abscess in 7th interspace; no rib, March 31st, 1883. Pus vomited during operation.	Practically healed in 7 weeks.

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TABLE II.

TWENTY CASES OF EMPYEMA TREATED AT THE BROMPTON HOSPITAL.

No.	Name.	Age.	Duration.	Variety.	Treatment.	Result.
1	Alice C.	5½ years.	5 months.	Right, stinking, localised.	Sept. 6th, 1883, piece of 6th rib outside nipple removed; healed. Reopened, Nov. 30th.	Never completely healed. Died afterwards of bronchitis. (A very delicate child).
2	Charles W.	6½ ,,	3 months.	Left, general.	June 18th, 1885, incision.	Healed in 3 months.
3	Elizabeth A. M.	7 ,,	1 month.	Left, general.	Aug. 22nd, 1884, part of 7th rib removed behind.	Healed on Sept. 23rd (under 5 weeks).
4	James H.	10 ,,	5 years.	Left, general. Two sinuses, one 2nd interspace near sternum, one near nipple. Much contraction.	Dec., 1883, openings dilated; Feb., 1884, parts of 5th, 6th, 7th, and 8th ribs removed; July 11th, several other pieces of rib removed; Nov. 20th, opening into 1st intercostal space.	Much improved. All closed but a minute cavity, into which a straight celluloid tube, 2½ in. long., was inserted.
5	William B.	11 ,,	7 months (?) or more.	Right, localised.	July 2nd, 1885, incision; closed in six weeks; then reopened, Sept. 28th,	Still discharging.
6	Emily C.	16 ,,	6 months.	Left, localised. Rupture of 2nd interspace; lung adherent in front.	Dec. 11th, 1884, part of 9th rib removed behind; tube left out, Feb. 6th, 1885.	Healed in about 8 weeks. ? Tubercular.
7	Giuseppe D.	17 ,,	A few days.	Right, large effusion.	June 26th, aspirated, 52 oz.; July 25th, aspirated, 26 oz.	Cured.
8	William S.	20 ,,	6 months.	Left, general.	June 18th, 1885, incision; part of 6th rib removed.	Commencing phthisis. Still discharging.
9	Louise G.	20 ,,	9 months.	Left, general. Subcutaneous rupture of 7th interspace.	Sept. 17th, 1883, abscess opened; piece of rib removed in mid-axillary line.	Healed on Dec. 4th. (About 11 weeks.) ? Tubercular.
10	W. James S.	21 ,,	6 months (?)	Right, large effusion.	Feb. 4th, 1885, aspirated, 90 oz.	Cured. Effusion had just become purulent.
11	Edward J.	22 ,,	4 months.	Right, general (?) Rupture of 5th interspace.	Aug. 7th, 1884, opening enlarged; part of 5th rib removed.	Healed, 8th Oct.; well, Oct., 1885.
12	Francis S.	23 ,,	2 years.	Right, localised. Burst into bronchus.	Sept. 6th, 1883, opened; rib removed in axilla; healed. Nov. 15th; refilled, and opened again, Dec. 7th; 3 in. of two ribs removed, Jan. 28th, 1884.	Left, with tube. Healed after a second opening by Mr. Cross, of Clifton.
13	Frederick G.	27 ,,	10 months.	Right, general.	Nov. 23rd, 1883, opened; second opening, Feb. 7th, 1884, 10th interspace; never drained properly.	Death. Tubercular.
14	James L.	(?)	6 months.	Left, general.	Nov. 23rd, 1883, incision, 8th interspace behind; condition doubtful; lung incised.	Death from abscess of brain. ? Tubercular.
15	Alfred M.	31 ,,	6 months.	Left localised. Subcutaneous rupture of 2nd interspace, and into bronchus.	July 31st, 1884, abscess incised, opening in 8th interspace behind (no rib); healed, Aug.; reopened after several months.	Practically healed on Nov., 1885.
16	Harriet B.	36 ,,	1 year.	Right, general.	Oct. 28th, 1884, aspirated, serum; Nov. 4th, opened (no rib); stinking pus.	Death. Tubercular ulceration of intestines. Peritonitis.
17	Alfred D.	36 ,,	Old.	Left, localised (?)	A long piece of one rib removed.	Under treatment.
18	Joseph F.	37 ,,	14 weeks.	Right, general.	Aug. 16th, 1884, aspirated, serum; Aug. 29th, opened behind (no rib); stinking pus.	Very gouty. Left, with a large cavity.
19	Robert C.	45 ,,	3 years (?)	Right, general. Spontaneous rupture of 4th interspace outside nipple.	Sept. 22nd, 1883, opening enlarged; second opening in 7th interspace.	Improved. Left, wearing a tube.
20	Harriet A.	49 ,,	1 year.	Right, localised. Much pus expectorated.	Aug. 20th, 1884, incision, low axilla (no rib).	Perhaps a pulmonary abscess. Left, with tube, much improved. Died, March, 1885.

Summary of Table I.

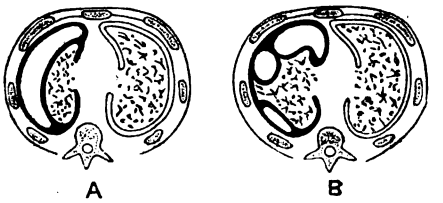
Number of cases, 20. Average age, 4½ years. Males, 14; females, 16. Right side, 11; left, 19. Localised, 8 (right, 4; left, 4). Healed after opening, 18. Average time, 6 weeks. Cured by an aspiration, 4 (right, 3; left, 1; all localised). Left with a sinus, 4. Died, 1. Spontaneous rupture, 4 (1 in 7th right interspace; 1 in 5th left interspace; 1 in 5th or 6th right interspace; 1 in 5th or 6th left interspace).

Summary of Table II.

Number of cases, 20. Average age, 23½ years. Males, 14; females, 6. Right side, 11; left, 9. Localised, 7 (right, 4; left, 3). Healed, 6. Average time, 3 weeks (1 reopened afterwards). Cured by aspiration, 2 (right, general). Left with a sinus, 9 (1 healed after leaving). Died, 3 in hospital, 2 subsequently. Spontaneous rupture, 6 (5th right interspace; 2nd left interspace; 7th left interspace; 2nd left interspace; 4th right interspace; 2nd [illegible] left interspace).

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who have rigid chest walls and a dense inexpansible lung are in a very unfavourable condition, but also that those in whom the empyema is localised, or in whom the lung has contracted adhesions at one or more points to the chest walls, have a better chance of recovery than those in whom the empyema is general. For here there is not only a smaller cavity to fill up, but there are more angles in which the contracting power of the lowly organised material which has been referred to can exert itself. (See diagrams.) Thus in



Diagrammatic section of cases of empyema, to illustrate the manner in which the contraction of the granulation lining the pleura (represented by the thick black line in both figures) draws the lung and chest wall together.—A, General empyema, with lung collapsed against mediastinum. B, A case in which the lung is adherent to the parietal pleura at several points.

the case of E. C. (Table II., No. 6), the lung was adherent in front except at the apex, so that when the finger was introduced through the spontaneous opening in the second space in front, it passed over the apex into the upper part of a cavity behind the lung. Into the extreme lower part of this a drainage-tube was inserted by making a second opening behind, and the patient recovered completely in two months. So in the case of A. M. (Table II., Case 15), where an almost precisely similar condition presented itself, and a corresponding rapid healing was effected, though his condition on admission was so bad as to appear almost desperate. This case raises a very interesting question, to which I wish to direct your attention, though I cannot supply a very definite answer to it. He left the hospital cured, and returned to work, as was supposed, with his pleural cavity completely obliterated. He continued at his work in a good state of health for several months, and then returned with both the upper and lower openings re-established, necessitating the dilatation of the posterior one and the reintroduction of a tube, which he is still wearing. It is not a very unusual occurrence for an empyema to close completely, or at least for the outer opening to close, and for a reaccumulation to occur almost at once, no doubt because the deep part has never become solidified; but I do not think it is very common for the patient to remain in good health for many months, and then for a fresh discharge of pus to declare itself. I have under my care now a gentleman whom I first saw in March, 1884. He was then much reduced by an empyema, following an attack of pneumonia, from which he had been suffering for a considerable time, which he was expectorating and which had ruptured through about the seventh space in the left axilla, forming a large collection under the skin. Though his case appeared most unpromising, he made a most excellent recovery in two months. A second accumulation occurred very soon—i.e., about a month after,—which was opened at the same place and rapidly closed; he then remained in robust health for five months, returning to his business and feeling perfectly well, when after exposure to cold the accumulation of matter again occurred. Again it closed rapidly, and again he was perfectly well for another five months, when, without any warning, the process repeated itself, and he is now performing one of his rapid feats of recovery.[1] It is interesting to speculate as to the state of the pleura in these two patients during their periods of apparently absolutely good health. The question arises whether in these cases there is left a small cavity containing perhaps serum, or possibly even pus, in which at last the effect of *tension* is felt in the production of acute inflammation; or whether it is this lowly organised material which, under the effect of some unusual stimulation, accompanied perhaps by an impaired state of the general health, becomes inflamed and suppurates. The latter suggestion seems the more probable; it may be illustrated by what occurs in the neighbourhood of the cæcum of a patient who is the subject of repeated attacks of perityphlitis; or by the condition of one who has a chronic stricture or long-standing enlargement of the prostate, in whom an apparently trivial irritation may light up acute inflammation and suppuration in the products of the chronic interstitial inflammation that has taken place in the kidney. The observations of any who may have the chance of making post-mortem examinations on cases of cured empyemata would be of great value in clearing up this question.

(To be concluded.)

1 The opening has now been completely closed for two months.

ABSTRACTS OF THE

Brown Lectures,

DELIVERED AT THE

UNIVERSITY OF LONDON,

By VICTOR HORSLEY, M.B., B.S., F.R.C.S.,

PROFESSOR SUPERINTENDENT OF THE BROWN INSTITUTE, ASSISTANT SURGEON TO UNIVERSITY COLLEGE HOSPITAL.

LECTURES IV. & V.

CANINE CHOREA.

CANINE CHOREA frequently follows an acutely infective specific malady—distemper. A parallel was drawn between the nervous phenomena that followed diphtheria and canine chorea. In both these cases the original diseases—diphtheria and distemper—were frequently of slight intensity. It was difficult to ascertain with certainty the interval of time that elapses between the first stage of the distemper and the first spasms of canine chorea. The period was, however, assumed to be from two to three weeks. Occasional uncertainty in the movement of a limb was sometimes the first symptom observed. When the animal is at rest, the limb would be found to twitch very regularly and comparatively slowly. As soon, however, as the animal made a movement, when we must suppose that some interference ensued as the result of excitation of the cerebral cortex, the tremors or twitchings were suppressed. As the case progresses the twitchings become more and more marked. A graphic record of the movements shows how they become superadded to the voluntary curve of the muscles of the limb investigated. The twitchings may affect opposite limbs, or all four limbs equally, or "crossed opposite" limbs. The final stage of the disease is one of paralysis that spreads upwards to the vital centres in the medulla oblongata. Mr. Horsley could not concur in the statement of Legros and Onimus that the sensory functions are affected. They formed their conclusion as the result of removal of the posterior cornua and columns; for they found that the movements became markedly weaker in the limbs corresponding to the part of the cord removed. This simply meant that the functions of the anterior cornua were depressed by the shock (if nothing more) of the removal of the posterior cornua. It was difficult to test the state of the reflex actions; but, so far as could be ascertained, there was no change until towards the end of the disease. This circumstance was regarded as another proof that the posterior cornua were not the seat of the disease. In a young mongrel terrier the left fore-limb was in a remarkable state of contraction; there were flexion at the elbow and adduction of the limb to the chest. The contracture could be overcome by extending the elbow with considerable force; but this effort gave the animal no pain, and thus differed from the "breaking-down" of contractions dependent on cortical irritation. Mr. Horsley was of opinion that the discharges that maintained the contracture probably emanated from the corpuscles of the anterior cornua, and examination proved these corpuscles to be diseased. Necropsies showed that the emaciation observed in the dogs suffering from canine chorea was due principally to loss of fat. Anæmia and atrophy of muscle were always present. The other general conditions—such as fall of blood-pressure, loss of appetite, &c.—advanced *pari passu* with the exhaustion of the whole system. Speaking of the differences of human and canine chorea, Mr. Horsley said that graphic records of the muscular movements showed the differences very plainly. In human

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chorea, a large wave was the distinctive feature, and this was followed by smaller waves, but there was no regularity in the recurrence of the large waves; in canine "chorea" there were perfectly regular waves repeated at definite intervals. Although human chorea might be the result of defective nutrition, possibly brought about by capillary embolism, as Dr. Angel Money's experiments tended to show, still the constancy of the movements of canine chorea made it impossible that the spinal cord could to the same degree be the seat of the lesion in human chorea. Regularity and constancy of action were the characteristics of a lower centre. The movements of canine chorea were compared with those of disseminated sclerosis, paralysis agitans, and tremors of (?) incipient sclerosis occurring in one limb in young men. It was true that the movements in canine chorea were diminished when a volitional movement was made, and that those of disseminated sclerosis were developed by volitional movements, but there was not so much difference between these conditions if we carefully inquired into them. In disseminated sclerosis, if the movement were a powerful one, such as grasping an object, the tremors did not appear until the grasp was relaxing, and the same thing could be observed in canine chorea. Both in the human diseases and in a bad case of canine chorea there were two distinct kinds of twitchings: one a constant rhythmical series of clonic spasms coming on first after a voluntary effort when the limb was more or less at rest, and the other an incoördinated series of twitchings which disturb the direction and force of the volitional act itself. Canine chorea afforded an illustration of the general proposition adverted to in the second lecture, that the fundamental rate of nervous discharges from the spinal cord was from eight to ten per second. Stimulation of the uncut nerve going to the choreic muscles in no way alters the occurrence of the spontaneous spasms, for they may still be seen on the top of the curves of tetanus due to the artificial stimulation. This circumstance, and the fact that the movements do not continue after section of the nerve, even though a gentle stimulus be used to keep up the muscular tonus, prove that the disease is situated in the central parts of the nervous system. The rate of the spasm and the absence of facial spasms go to prove the dependence of the spasms on disease of the spinal cord. Section of the spinal cord above the seat of the spasms does not hinder their occurrence, or only for a short time. Stimulation to fatigue of the cerebral cortex increases the strength of the choreic movements, and the same result was observed after stimulation of the spinal cord. In a dog, with movements only in the right fore-limb and left hind-limb, stimulation of the cord caused the appearance of movements in the left fore-limb. This was no doubt due to exhaustion and etherisation; the unaffected parts were on the point of becoming choreic, and only required some lowering of their nutrition to induce the spasms.

Stimulation of the cerebral cortex produces more or less tetanus of the affected muscles proportional to the degree of disease. In some instances the lever in writing the line of tetanus scarcely rose above the abscissa; the cortex soon became exhausted, and then apparently acted merely as a conductor. Stimulation of the spinal cord has greater or less influence, also, according to the progress of the disease.

Influence of cortex.—If ether be administered so as to abolish sensation, but not to prevent the choreic movements, stimulation of the cortex will be found invariably to double the rate of the choreic rhythm. The degree of tetanus due to cortical stimulation varied directly with the stage of the disease. As a rule, tetanus set in slowly after a long latent period, and then after a short interval began to fall before stimulation ceased; it was also sometimes prolonged one or two seconds after the cessation of stimulation. The chorea could be frequently seen to return at its original rate on the curve of tetanus before even the stimulation was stopped. The choreic waves are seen to be doubled in rate on the first part of the curve of tetanus, but this doubling soon disappears as the tetanus falls and the original choreic rate reappears, continuing, of course, after cortical stimulation has ceased. The second remarkable effect on the twitchings produced by cortical stimulation when it did not cause tetanus is an increase in the amplitude of the twitchings; this increase may be four- or eight-fold. Prolonged stimulation of the centre did not cause diminution of the rate, but a slight gradual fall of energy as the centre became exhausted; that is to say, the doubling of the rate was not prevented, but the amplitude was diminished considerably below the original level.

Cortical stimulation has a twofold effect, increasing the *frequency* as well as the *amplitude* of the muscular spasms. Probably increase in the amplitude is dependent on the energy discharged from the cerebral cortex, and this being so, it was easy to understand how the effect should soon pass away, for the energy in the irritated cortical centre would soon be dissipated. Stimulation of the corona radiata in the majority of instances exerted no influence on the rate of the chorea. This observation is not conclusive, for in one instance a doubling and in another no alteration was noticed. Stimulation of the cervical region of the spinal cord caused doubling of the rate of the spasms, but diminished by one-half the amplitude of the contractions. So that it would seem impossible at the same time both to increase the frequency and the amount of nervous discharges. Much stress was laid on the conclusion that the amount of energy discharged cannot be increased when the same strength of current is employed. This observation served as a further illustration of the law that motor nerve centres discharge their energy about eight times per second.

Mr. Horsley has frequently observed that, whether the nerve corpuscles of the cord be fatigued by repeated stimulation or depressed by asphyxia or etherisation, the recovery of the former rate of nerve discharge (as determined by muscular twitchings) is not attained by a steady increase in rate and amplitude. The return to normal commences with a pause after the cessation of stimulation, that lasts a varying length of time, but not longer than two seconds; then comes a small contraction, next a shorter pause, then a series of large choreic twitches, about one every second; after these have lasted a few seconds, the chorea somewhat abruptly assumes the normal rate and the contractions their average strength. The return of energisation was not a direct return to the natural rhythm, but a kind of storage of energy even beyond the level at which, were the cell not fatigued, discharge would occur. Poisoning as in asphyxia appeared to double the rate of the chorea, but diminished the amplitude by one-half of the contractions. Powerful stimulation of an afferent nerve, like powerful stimulation of the spinal cord, causes such tetanus that the twitchings are lost in the general fusion of contractions.

Investigating the general question of the total discharge of energy by the spinal cord, by which is meant the fused or summated discharges that produce tetanus of the muscle, Mr. Horsley pointed out that the commencement of the tetanic curve was very frequently a sharp and extensive spasmodic contraction, succeeded by the rest of the tetanic contractions of varying height. With a weak current the tetanic wave was found to fall very rapidly towards the abscissa; with stronger currents this fall was prevented, but the initial spasm was almost always the highest point in the curve. So soon as the stimulus becomes adequate, the tetanus is perfect, the fall as sharp as the rise, so as to imitate the characteristic curve from the normal spinal cord.

Studying the shape of the curves caused by the choreic twitchings, Mr. Horsley concludes that the normal mode of action of the nerve centres is a small discharge followed by a more powerful one; so that the curve presents a notch in its upward stroke. Theoretically, this is what we should have expected, for an automatic mechanism usually gives a minimal discharge in response to ordinary needs, and produces a more powerful discharge as the result of later stimulation. Repeated stimulation was found to exaggerate the normal mode of action just referred to. Another effect of continuous stimulation is to equalise the rhythm and amplitude of the chorea in a remarkable manner. Asphyxia first diminishes the amplitude of the contractions, and finally abolishes them. On the restoration of respiration the chorea returns, and is observed to be more equable as the result of the previous total arrest. The effect of etherisation is similar.

Professor Wood had shown that stimulation of the sciatic nerve lessens the size of the contractions. Mr. Horsley confirms this statement, and supplements it by the observation that, whilst the amplitude of the twitchings is diminished by one-half, the rate of the chorea is doubled; thus further illustrating the principle, already mentioned, that there appears to be a very definite law controlling the influence of external circumstances upon the pathological discharges from the diseased nervous centres.

Legros and Onimus have shown that a descending current diminishes the movements in canine chorea, and an ascending one increases both their rate and amplitude. It appears to Mr. Horsley that it is more a question of the degree of effect

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produced than of the kind of difference brought about by the varying position of the anode and cathode, for in both instances the rhythm was increased in rate.

Coming to the morbid histology of the disease, the lecturer referred to the lesions found by Gowers, Sankey, and H. C. Wood. His own preparations agree with those of the last-named observer, and he adduced reasons for believing that the changes observed should be regarded as of the nature of disseminated sclerosis.

INJURIOUS SCHOOLING AND ITS REMEDY.

By OCTAVIUS STURGES, M.D.,

PHYSICIAN TO THE WESTMINSTER HOSPITAL AND THE HOSPITAL FOR SICK CHILDREN.

JUST twelve months ago, as an appropriate exercise for the season, I invited attention through the columns of THE LANCET to certain events and circumstances of school life which, during the year that was then closing, had within my own experience given origin to St. Vitus's dance. The case of a child now in the Children's Hospital brings the subject once more to my mind. Like those which I related last year, it serves to illustrate the occasional hardship and even cruelty of school teaching. It would not be true, however, to represent cases of this precise pattern as common. Out of nineteen examples of chorea which fell under my care during the present year at Great Ormond-street, some three or four may be in part attributable to schooling, but only this one belongs to the category I have now in mind. The strain of mental application (especially when the learners are underfed), the excitement of competition, the fear or the grief of punishment—these are almost necessary incidents of school life, and from time to time they will prove injurious by exciting chorea; yet if in such case the earliest symptoms of the malady are recognised and rightly interpreted, that is as much as can be expected. The child is removed from school, obtains a welcome rest at home or hospital, and will presently return to work the better in health and in flesh for the holiday. But the chorea I am now thinking of belongs to another class, a class which, as I believe, is happily decreasing so far as London is concerned. It has its origin in what may fitly be called "injurious schooling." It is injurious in the sense of being, as Johnson defines injury, "hurt without justice," or, as the children themselves would say, it is "such a shame."

So far as the London School Board is concerned, I thankfully acknowledge the active interest which its late chairman, Mr. Buxton, has shown in this matter. There is reason to hope that, at the Board schools at least, precautions are now taken to ensure the early recognition of St. Vitus's dance in children, and this without any parade of medical inspection or supervision. That it is not so everywhere let the following example bear witness.

The child in question is at this moment in the Hospital for Sick Children, but was lately at a national school of a well-known and wealthy parish of the West-end. She is the subject of rather severe general chorea, and is a pale, thin girl of eleven, cheerful and intelligent, and by no means disposed to dwell on her past woes. The account given of her (which is borne out by the child's own story) is to the effect that before chorea began she was observed to be restless at night, crying out in her sleep, or sitting up and rambling about her lessons. She was always eager to be at her books, and would bring home school-work to be prepared overnight. Owing, however, to the pressure of domestic matters the lessons were often left undone, and as a consequence the girl was "kept in" and otherwise punished. For some time the strange movements of the child had been noticed at home, but nothing was thought of them, and no change was made in the routine of her life. It was ascertained (and here is one point of the story) that there had been no intentional unkindness either at school or at home. The child was anxious to learn, but too little allowance was made for her scanty opportunities of mental culture, and she thus fell into undeserved disgrace. "Do they cane at your school?" I ventured to ask, when we had become sufficiently acquainted. "Please, sir, they slap us." "But if you learnt your evening lessons you wouldn't be slapped?" "Please, sir, I have to run mother's errands." "Do you tell them so at the school?" "Yes; and teacher says I ought to get up early in the morning." "And why not? What time *do* you get up?" (severely, the season being the Vigil of St. Thomas) "At half-past six, please, sir; but I have to help mother cleaning out the place."

It was strictly true. The mother is in charge of solicitors' offices; but she is not equal to much, having some chronic illness, so that sometimes all the morning cleaning falls to the child. The father is out of work and laid up in hospital. It is a cheerless picture enough. Up at half-past six on these winter mornings "cleaning out the place for mother"; then to school, to be slapped and "kept in" for no real fault; next, an evening of errand-running in the dark streets; and finally, after joining in such pleasures of the table as fall to the lot of labouring people out of work, back once more to the dismal dreams and anticipation of new punishment in the morning. And all the while her disease growing, and with it the feeling of daily increasing inability to meet the demands made upon her. And such-like is the life of many a poor child, notwithstanding that, with the exercise of a little intelligent observation, it is all preventable. I say without hesitation, and after many years' experience, with unusual opportunities for studying this particular nervous affection of poor London children, that it is very rarely indeed that the malady is recognised at the beginning. The rule is that for weeks or for months what is really disease is taken for carelessness or perversity, and a condition which needs for its cure the utmost tenderness and allowance is thus aggravated by repeated punishment.

And where is the remedy? School teachers and people who take benevolent interest in school work often ask in bewilderment, "What *is* chorea? How am I to know it? What should I look for?" It is one of the most remarkable instances, I think, of the extreme diffidence which is prevalent in regard to medical facts that children are often brought to us wriggling and grimacing in a way that is sometimes grotesque and sometimes pitiful, while the parents blankly inquire, "What is the matter? What ails the child?" I believe that this would no longer be the case if we were to abolish the term "chorea" altogether, and adopt some simpler name. There is little enough of sense in the word; all sorts of foolish superstition cluster round it; and although the term "St. Vitus's dance," which I would substitute, is so far in much the same plight, yet this latter expression has the great advantage that everyone knows, in a sort of way, what it means. It occurs in our common talk and in general literature, and in such reference as implies that there is a popular knowledge of its main features. Chorea, on the contrary, is a word never used save by doctors and pedants.

As an illustration of what might be hoped for by this change of name, let me take the case of a kindred disease—hysteria. Everybody knows (pretty much as well, that is to say, as we do ourselves) what hysteria is. We meet with it in speeches and leading articles in such apt use as to make it plain not only that there is a wide knowledge of its common modes, but even that its pathology is well understood by these speakers and writers—better, it may be, than by some specialists. And observe that this just appreciation of the nature of hysteria supplies the proper direction for its treatment. Every efficient governess and all wise mothers, gentle or simple, are on the look out for the earliest symptoms of emotional outbreak in growing-up girls. When the laughter is too loud or the game too boisterous, it is dexterously repressed before self-control is altogether lost. There is an accurate and a widespread knowledge of the nature and incentives of hysteria, and it is utilised, and transmitted from one generation to another in every well-ordered family. Habitually, mothers prove most efficient in the correction of hysteria; habitually, they help to maintain and to aggravate chorea.

Why should it not be the same with over-movement as with over-emotion? One chief reason is, I am persuaded, that we make a mystery of a very common infirmity by calling it by a strange name. The factors of chorea (or let me say, to avoid controversy at this season of the year, *some* factors of chorea) are not less plain than the factors of hysteria. No one whose privilege it is just now to be living with children home for the holidays needs to be told that restlessness and love of movement are characteristic of that time of life. It is superfluously obvious. And there needs but a slight enlargement of that observation to perceive that mental strain and school worry, no less than the joys of home and freedom, will sometimes provoke a similar restlessness, which is even less within control, a condition rendering the limbs

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for the while disobedient as well as restless, and under the influence of which the higher muscular acts—walking, writing, handling, speaking—become awkward, difficult, and uncertain. Here is an affection which is all one with the so-called "St. Vitus's dance" of the vulgar, the so-called "chorea" of the learned. And, looking at it from this point of view, we obtain, just as in the case of hysteria, not merely a picture of what it is like, but a suggestion as to its management.

But in spite of the pleadings of common sense, there is small hope of change. Not in chorea alone, but in other diseases as well, there is the common speech on the one side and our technical "nomenclature of disease" on the other, and as yet they show no tendency to come together or to hold parley. The inconvenience and inaccuracy of the word *typhoid* have often been pointed out, yet no non-professional person will speak of "enteric fever" or even comprehend what it means. The identity of scarlet fever and scarlatina we are for ever insisting upon, yet, in spite of all protest and to their own danger, the people persist in maintaining a distinction between the two. And similarly, it is to be feared, we shall still cherish our own professional chorea and marvel at the blindness of the community in respect of it; the people will still speak of St. Vitus's dance, associating it less with their own nurseries than with burlesque descriptions in books or the miracles and fanaticism of the Middle Ages. Yet, surely, in no department of medicine is this want of touch and sympathy more mischievous than in the functional nervous disorders of the young. What is needed for the alleviation, and still more for the diminution, of these common diseases of civilisation, singularly bare as they are of drug remedy, is first an intelligent understanding among the people of their real source and nature, and next the co-operation of parent or teacher on the one hand and medical man on the other with a view to their prevention or cure. But no such understanding or co-operation is possible so long as this pernicious barrier between ourselves and the community is allowed to exist. It was set up ages ago to shelter mystery and pretence, and whether from the one side or the other, be he layman or doctor, he does a good and a seasonable work who will help to pull it down.

Christmas Eve, 1885.

A SUCCESSFUL CASE OF

GASTROSTOMY FOR THE REMOVAL OF A LARGE MASS OF HAIR FROM THE STOMACH.

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I HAVE waited to publish the full details of this very remarkable case until sufficient time has elapsed for any after-troubles to declare themselves; none have appeared, and the patient has enjoyed good health since the operation, and still continues to do so. In reply to a letter of inquiry, she writes: "I have no discomforts that can be attributed to the operation."

Early in 1884, C. H. J——, aged eighteen, single, was sent to me by my friend Mr. Symonds, of Oxford, for an opinion as to an abdominal tumour from which she had for some time suffered. She had already been seen by several other medical men, and very various views had been expressed as to the nature of the tumour, perhaps the most common one being that it was malignant. After in vain attempting to get any satisfactory history from either the patient or her mother, I made a very careful examination, and came to the conclusion that it was an accumulation in the colon. I therefore advised frequent doses of castor oil and the use of very large enemata. This treatment was thoroughly tried by Mr. Symonds, with the result of giving her much pain and pulling her down a good deal, but without reducing the swelling. She therefore came to see me again, and brought with her a small concretion of hair and faecal matter which she had passed while under the above treatment. A [illegible] confirmed my original opinion, and she mentioned to me that for some years she had been in the habit of eating the combings of her hair and her sewing-[illegible] to [illegible] her tongue." The question now arose, Is this mass in the stomach or transverse colon? She had suffered to some extent from indigestion, but there had been no very marked sickness or pain, and, moreover, there was the small concretion of faeces and hair. I concluded that the mass was in the colon, and advised another prolonged attack upon it with castor oil and enemata, promising, if they failed, to take her into the Samaritan Hospital and perform abdominal section. I thought it was possible, if the mass were in the colon, that after opening the abdomen it might be gradually forced along into the rectum and extracted; at the same time I was quite prepared to open either the stomach or colon if necessary.

The treatment failing to produce any result, and the patient being much weakened by the purging and enemata, her friends earnestly begged for operation, and she was admitted under my care on May 2nd, 1884. A fresh examination revealed no change in the size or position of the mass, and accordingly on May 6th, after the administration of methylene by Mr. Malcolm, I proceeded, with the assistance of Mr. Meredith, and in the presence of Mr. Symonds, Dr. John Homans of Boston, U.S., and many others, to perform the following operation:—Parietes incised in the middle line, the incision beginning two inches above the umbilicus and passing on its left to one inch below it. Stomach exposed, greatly distended by solid mass, which was evidently moulded to the shape of the viscus. Some omentum adherent to the surface of the stomach and to the parietes separated and ligatured. Incision extended two inches further below the umbilicus. Space between distended stomach and parietes carefully packed all round with carbolised sponges. Anterior surface of stomach grasped and a large fold of the great curvature brought out between the lips of the abdominal incision. Another layer of sponges packed over the raw edges of the wound round this fold. The fold transfixed and incised by a transverse incision five inches long, care being taken to avoid vessels as far as possible; a few spouted, but were easily controlled by pressure forceps. The mass of hair was at once seen, filling and distending the stomach, and was extracted by a vulsellum with a slight turning movement. The mucus was carefully wiped away all round, as the mass came out, with carbolised sponges, and the cavity of the stomach was at once thoroughly cleansed with them. A large carbolised sponge was then laid in the stomach to keep the edges of the wound in position for suture and prevent accumulation of blood in the organ. Fifteen sutures of fine carbolised silk were then introduced through all the coats, the needle being slanted through the wall so as to come out just at the inner edge of the mucous membrane, which was much inclined to curl. These interrupted sutures were passed so as to control the cut vessels, and no ligatures were used. Another row of similar sutures was then passed between each of the deep sutures, but only through the peritoneum. The deep sutures entered the peritoneal coat about a quarter of an inch from the edge of the incision, and were a third of an inch apart; the superficial sutures were entered at about the same distance from the edge, and ran along just under the peritoneum. When these were all in place the sponge was removed from the stomach, and they were tied, the deep first and then the superficial. These two rows caused some inversion of the peritoneum, and the two outer and upper peritoneal edges of the depression thus formed were brought together by a continuous suture of very fine carbolised silk. There had been no escape of blood or other material into the peritoneum, and no exposure of its contents to chill from the spray. The closed wound measured exactly three inches. The sponges used for the mucus and for the interior of the stomach were kept quite separate from those used for the peritoneum. During the suture of the external wound the nurse was made to count the sponges aloud, my usual custom in ovariotomy. The usual gauze dressing, with straps, was employed. There was no drainage. When the patient was placed in bed, after a two hours' operation, the pulse was 100, and the vaginal temperature 98·2°.

The after-treatment differed in no way from that which I adopt after ovariotomy and similar operations, except that the stomach-feeding was only commenced on the afternoon of the second day—i.e., forty-eight hours after operation—and was then one teaspoonful of ice-water and milk, equal parts, every half hour. The quantity was gradually increased till the afternoon of the next day, when she was able to take two ounces every hour. On the sixth day three ounces were given every two hours. On the fourteenth day cornflour was added to the diet, on the fifteenth day some crumbled bread, and then gradually an ordinary light

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diet was allowed. During the first week three ounces of beef-tea were injected into the bowel every three hours, with twenty drops of laudanum every six hours, and during certain complications now to be described port wine and quinine were added to these injections.

In the early morning of the day after the operation there was some retching, which occasioned unusually severe pain about the umbilicus; later in the day, hiccough, with vomiting of some brownish fluid, took place; the temperature rose to 100·6°, and the pulse to 126. She still complained of great pain about the umbilicus, which the opium failed to relieve. I had heard in the course of the morning that the nurse who had charge of the sponges had, in spite of the counting at the operation, found her number one short on the previous evening. I now began to have some doubt myself, failing to recollect the removal of a sponge which I had placed under the upper part of the incision while tying the lower parietal sutures. At 2.30 P.M. Mr. Meredith gave the patient some methylene, and under the spray I removed a few sutures, and at once came upon the missing sponge full of dark serum and firmly adherent to the surfaces with which it was in contact. On examination afterwards, and on section, it was found to be already, in less than twenty-four hours, permeated to some depth with organising lymph. Before again closing the incision I passed sponges into the pelvis, and into both loin pouches, and found all dry and clean. I also examined the wound in the stomach, and found it perfectly quiet and free from redness or swelling. The external wound was closed and dressed as before. At the conclusion of this second operation the vaginal temperature was 101·4°; pulse 120. Pounded ice in mackintosh was placed on the head, and next morning the temperature was 99·6° and the pulse 104. All went well after this till the morning of the fourth day, when the ice was removed from the head, the temperature being 98·4° and the pulse 84. In the course of the day she began to complain of pain in the right side of her neck, and the parotid swelled. Later there was soreness of throat on that side and difficulty in swallowing. The evening temperature was 101·4°; pulse 120; respiration 22. The ice-water cap was put on. On the following morning glycerine and belladonna were applied on cotton-wool all over the swelling. Temperature 101·8°; pulse 112. In the afternoon the pain and swelling had become so great that I incised the gland, under the spray. There was no pus, but free oozing of blood and serum reduced the swelling and pain. Evening temperature 102°; pulse 120. The following day (the sixth after operation), the temperature rose to 103°, and pulse to 128. The left parotid began to swell, and was at once covered with glycerine and belladonna. On the following day (the seventh) the bowels were well cleared by enema, and on the eighth day the abdominal wound was dressed and the sutures removed, the whole wound having united perfectly by first intention. The right parotid, which had been dressed daily, began on this day to discharge a little pus. The swelling had entirely disappeared, but the left gland, which had not been incised, remained swollen and painful. On this day there was a sudden increase in the quantity of urine, nearly five pints being passed in twenty-four hours; doubtless this was hysterical, the hair-eating being another manifestation of the same complaint. From this time improvement was rapid, the only trouble being occasional attacks of polyuria. At the end of the second week the swelling of the left parotid had quite gone, and on the following day my incision into the right one healed. She was moved into the convalescent ward on the twentieth day, with a normal pulse and temperature, and was up four days later, leaving the hospital twenty-nine days after the operation quite well. From first to last she had no unfavourable symptom or pain in the abdomen, and when she left there was no tenderness on pretty firm pressure in the epigastrium. Now she is strong and well, and has quite given up eating hair. The mass removed from the stomach was almost entirely matted hair, moulded into the shape of the organ, and it weighed two pounds.

I have never been able to make up my mind whether to attribute the parotid swellings directly to the operation, or whether to look upon them as a chance attack of mumps, from which she had not previously suffered. Most of the cases of this kind which I have either seen or heard of have been distinctly of septic origin; but in this case, certainly, there were no other symptoms pointing in this direction, and I do not believe that the right gland would have suppurated any more than the left, had I not been in too great a hurry to incise it and put in a rubber drainage-tube. Moreover, I have had two other cases in my own practice, which have got quite well without the patients suffering from other symptoms of septicæmia, one case rapidly subsiding without treatment, and one suppurating and requiring incision and drainage. On the other hand, in the particular case under consideration, it would not be at all surprising if the swellings were of septic origin, for many of the sutures in the stomach passed through the edge of the mucous membrane and must have been exposed to the absorption of septic material. The sponge incident is one more to be added to the long list of cases in which foreign bodies have been left in the abdomen in abdominal surgery; it is the second time the accident has happened in my own practice, and in both cases it was fortunately discovered in time to save the life of the patient.[1] When I hit upon the plan of making the nurse count the sponges aloud, I thought I should in future be quite safe, but it seems that the only way in this case, as in many others, is to do it oneself, if one wants to be sure that it is well done. Had I been as responsible as she was, I certainly could not have gone placidly to bed and slept comfortably as she did, telling me casually of the lost sponge eighteen hours after she missed it. The freedom from serious hæmorrhage while making so large a wound in the stomach, and the immediate closure of the wound without any after-troubles from the presence of such a number of silk sutures in the stomach wall, would be surprising had we not already learnt from the resections for malignant disease how much surgery this organ will tolerate.

Shortly after the recovery of my own case I heard that Dr. Schönborn of Königsberg had published a somewhat similar case in Langenbeck's Archives (1883, vol. xxix., p. 609). His incision into the stomach was about the same length as mine, and was closed by two rows of silk sutures. They must have been very close together, for he used sixty-five, and I only used thirty. The operation was thoroughly antiseptic, salicylic spray being used. The patient was quite well in three weeks, and able at that time to eat and digest any ordinary food, even beefsteak. The mass of hair removed was much smaller than in my case, only weighing nine or ten ounces. He gives an engraving of it, natural size. Illustrations of the masses accompany several of the records of cases in which similar masses were discovered after death, and they are all more or less moulded into the shape of the stomach. Schönborn notes in his case that the mucous membrane of the stomach was quite healthy, as it was also in my case. It is very strange it should be so, after long distension with these great rough foreign bodies. The cases of Professor Schönborn and myself are, I believe, the only two which have been successfully treated by operation. Several other cases have been described from post-mortem examination, most of the patients having died from peritonitis, which was in some of them due to ulceration and perforation. Bandamant published a case in the *Journal de Médecine* (vol. ii., p. 507, 1779), the patient being a male who had from a very early age been known to swallow horse-hair; he died, after great suffering, at the age of sixteen. Pollock published in the Pathological Transactions (1851-52, p. 327) the case of a girl, who died at the age of eighteen, with a mass of hair in the stomach measuring 6 in. by 3¾ in., and a smaller mass in the duodenum. She had been known to eat hair since she was three years old. The illustration accompanying this is very like the mass I removed. George May, jun., published a similar case, I believe, in 1865; but I have been unable to find it. Ritchie published one in the *Edinburgh Monthly Journal* (vol. ix.); the patient, a female, died at twenty-one, and the mass weighed 21 oz. Russell published one in the *Medical Times* (1869), which is, perhaps, the most remarkable of the series; the woman died at thirty-one after an abortion, and a matted mass of hair was found in her stomach weighing 4 lb. 7 oz., and dragging the pylorus down into the pelvis; it had been growing for seventeen years, yet she did not seem to have suffered much from its presence, and there was only one small ulcer in the stomach. This case led Inman to publish in the same journal a short note of a case which he had heard of in the practice of Dickinson of Liverpool, the patient, also a female, dying at thirty-four, with symptoms of obstruction. In the same year (1869) Best recorded a case in the *British Medical Journal*, the patient, also a

[1] For note of first case see Proceedings of Medical Society of London, vol. v., p. 37, 1881: also, report of the meeting, THE LANCET, Dec. 13th, 1879, vol. ii., p. 875.

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female, being thirty when she died, and the mass weighing 30 oz. It is obvious from these records that the condition tends to a fatal termination if not relieved, and its successful treatment is another triumph for the abdominal surgery of our day.

COMBINED DISEASE OF THE POSTERO-EXTERNAL AND LATERAL SPINAL TRACTS.

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B. G——, a labourer, aged sixty-one, was admitted into the workhouse infirmary on August 18th, 1885, complaining of weakness and pains in the legs. No family history of importance could be elicited. He has been a free drinker and much exposed; in 1879 he contracted syphilis. His present illness commenced about two and a half years ago with pains in the legs, more severe in the right, shooting and paroxysmal in character. He has been unable to work for a year and nine months. In July, 1884, he was in the infirmary, and it is recorded on his case papers that he suffered at that time from constipation and "double sciatica," that there were no tender spots in the course of the nerves, and that the reflexes in the lower extremities were slightly increased. In October, 1884, it was observed that the symptoms were those of locomotor ataxy, although the knee-jerk was increased. The Romberg symptom was present, and the gait was somewhat ataxic. The patient was not seen again until his readmission in August last, he then stated that during the last few months his legs had been getting very weak, so that he could scarcely walk at all. At times also he had suffered from girdle pain and severe paroxysms of shooting pains in both legs, and had noticed that he could not control them—they would "kick out"; but latterly his toes caught the ground in walking. He had never suffered from vomiting, pain in the head, or vertigo. For the last few weeks he had been unable to hold his urine, and it dribbled at times.

At the present time the patient can walk with sticks, but he has a difficulty in lifting the toes, which drag, and is quite unable to point them owing to weakness of the extensor muscles. He lifts the feet rather high from the ground and brings the heels violently down, the gait being a combination of the spastic and ataxic types. There are marked swaying movements when he attempts to stand with his eyes closed. He complains of numbness in the legs, and there is complete analgesia and thermal anæsthesia in both; tactile sensibility is perfect both as regards localisation and differential sensibility. There is no well-defined line of demarcation of the analgesia upwards. The muscular sense is unimpaired; he can tell the difference between half ounce and one ounce weights suspended from the toes, knows the position of his limbs, and executes any required movement with precision, his eyes being closed. The plantar, cremasteric, abdominal, and epigastric reflexes are very well marked. The knee-jerk is exaggerated, and vibration of the patellar is marked when the quadriceps extensor is suddenly put on the stretch by depression of the patella. There is slight ankle-clonus on both sides, but no front tap contraction. The left cremasteric reflex is absent. Spontaneous jerking movements of the legs frequently occur and trouble him a great deal. There is no pain in the back at present, no deformity or tenderness anywhere on percussion, and no rigidity. There is myosis of both pupils, which refuse to respond to light, but do so readily to accommodation. The fundus oculi is normal on both sides. Slight incoördination is observed in the upper extremities; he does not guide the fingers to different parts of the face very accurately. The urine is ammoniacal; it contains no albumen or pus. There is, however, considerable paresis of the bladder, the urine constantly dribbling. There are no tremors and no rigidity of the legs; no bedsore or other trophic lesion.

As to the diagnosis in this case. Myelitis in the upper part of the lumbar enlargement would account for the bladder trouble and for the increase of the reflexes below the cremasteric. But this is excluded by the great predominance of the irritative phenomena, and by the very gradual onset of the paresis (two years and a half). The increase of the reflexes was observed before the paresis appeared. Meningo-myelitis or pacchymeningitis with secondary implication of the cord would explain all the irritative phenomena, and by involving the postero-external and lateral columns would account for the ataxic and paretic symptoms. The pupil symptoms would, however, remain to be accounted for. All the symptoms are explained on the supposition that the case is one of combined primary sclerosis of both postero-external and lateral columns. At first the symptoms were those of locomotor ataxy—double sciatica, ataxic gait, and Romberg symptom; then symptoms indicative of implication of the lateral columns, increase of reflexes, spasmodic jerkings, and paresis. The paralysis of the bladder is a point against the above diagnosis, for a moderate degree only of incontinence is observed in tabes, complete paralysis being rare, while in lateral sclerosis bladder symptoms are much less frequently present than in tabes. Charcot insists that double sciatica is always symptomatic, and that its causes are spinal diseases—e.g., locomotor ataxy and meningo-myelitis, diabetes, cancerous disease of the spine causing pressure on the nerves, and disease of the nerves themselves. Westphal reported five cases of this affection in the *Archiv für Psychiatrie* (vols. viii. and ix.). He believes that the lesion does not spread directly from the posterior to the lateral columns, but that the lesions of the two columns are independent. From his cases he concludes that when the lateral columns are affected the symptoms of ataxia are replaced by those of paresis, and not by contracture. In my case no rigidity is present.

CASE IN WHICH A LOUD SPLASHING SOUND WAS PRODUCED SYNCHRONOUSLY WITH CARDIAC ACTION.[1]

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AND
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Mr. B——, aged twenty-four, a student of medicine, called on Dr. Cormack Smith, of Abbey-hill, on the evening of June 14th, 1885, complaining of pain in the præcordial region and in the region of the left scapula, not extending below its angle, and also of pain in the left arm as far as the elbow. The pain was "numb" in character. In addition, there was a feeling of constriction at the præcordia, and inspiration was so painful that only "half breaths" could be taken. The pain had come on suddenly after dinner, the dinner hour having been 4 P.M. It was so acute that he went and lay down, and he had no sooner done so than the sound to which we shall have specially to refer became audible to himself. The stomach had been out of order for some days previously; there had been an absence of the normal relish for food, and the bowels had been confined. He had never had any illness of importance, and there was no rheumatic history and no history of special injury, although he had had a somewhat severe fall from his bicycle a few years before. There is, however, one interesting point in the history. Three years ago, during the night, a friend who shared his bed was awakened by a noise evidently proceeding from our patient's inside. Becoming alarmed, he roused his friend, and he, with his medical knowledge, referred the sound to his heart, as it was synchronous with its pulsation. It was not accompanied by pain, and in the morning the sound had disappeared. He was quite satisfied that the sound at that time resembled exactly that which we shall presently describe. The only explanation he could offer as a possible cause was that he had walked very rapidly from South Queensferry the previous day.

When Dr. Smith first saw him the pulse was 84, and the temperature was slightly raised, but had fallen to normal the following day. He was kept in bed. On June 21st he was seen by both of us, and we took the following notes of his case. The pulse was 64, regular, small, and thready, readily compressed and obliterated. There was no albumen

[1] Read before the Edinburgh Medico-Chirurgical Society.

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in the urine. The tongue was furred and the stomach somewhat dilated. When lying on his back a venous pulse was visible above the inner end of the right clavicle, also over the inner end of the left, although less pronounced here than on the right side; there was also supra-sternal pulsation, and pulsation in the upper and outer part of both infra-clavicular regions. The thorax was well formed; both sides moved with respiration, the right slightly more so than the left. The faintest cardiac impulse was perceptible over the præcordia. The hepatic dulness began at the fifth rib. The left nipple was on the fourth rib. Cardiac dulness extended on the left side in the second space for 1½ in. from midsternum, in the third for 2½ in., in the fourth for 3½ in. In the third and fourth right spaces it extended for 2½ in. from mid-sternum. From the fifth to the seventh left rib the percussion-note was more resonant than above that, while below that limit the tympanitic note of the stomach was obtained. In the fourth left space, just within the nipple line, a typical cracked pot sound was elicited by sharp percussion, and was invariably accompanied by an acute pain. Pain was also produced by pressing deeply in this interspace. On auscultation there was a distinct friction sound, synchronous with the action of the heart, and audible over the entire sternum, also over the area of cardiac dulness in the second, third, and fourth left spaces. In the fifth left space, a little within the nipple line, a friction sound was heard intermittently, only during inspiration, but occasionally accompanied by a distinct splash. Towards the site of the cardiac apex a friction sound was present during rather deep inspiration, and influenced by the cardiac action. The second sound was accentuated in both the pulmonary and aortic areas. The foregoing was the result of an examination when the patient lay on his back. He was then turned towards the left side. In this altered position there was visible pulsation in the fourth left space from the nipple line, somewhat inwards, and there was at once developed a sound which was so loud as to be audible at the distance of at least six feet from the bedside. The sound was rhythmical, metallic in character, and somewhat splashing or flopping, not unlike the sound produced by water dropping into a cistern. It was synchronous with cardiac systole. During the sound a limited part of the fourth space bulged, and on its subsidence the interspace faintly vibrated. On auscultation over this spot, the sound was evidently produced immediately under the stethoscope, and was found to be present during both cardiac systole and diastole, and accompanying it was a friction sound, which, however, gave the impression of being distinct from it. The sound, although difficult to describe, was evidently produced by the presence of air and fluid at the site indicated. On palpation the sound could be felt, and entirely gave the impression of being produced under the hand and within an area not larger than a florin. When the patient turned somewhat more on his face the sound disappeared. It is further to be noted that the patient had the power of inducing, or arresting, or modifying the sound within certain limits by apparently allowing the lower part of the thorax and the diaphragm more or less play. He could also occasionally produce a distinct splash by a rotatory jerk of the body when lying down. The assumption of the erect posture often, indeed, as a rule, led to the cessation of the sound.

These are the facts as accurately and fully as they appeared to us; and the question presents itself, How are they to be explained? We begin with the hypothesis that the abnormal sound was produced in a cavity containing air and fluid, and that these were set in sufficient motion to produce sound by the shock both of the cardiac systole and the cardiac diastole. But we may go further, and say that this cavity had an opening, as evidenced by the cracked pot sound elicited by percussion. The question next arises, Where was this fluid and air? It might be in the pericardium, but there appear to us insuperable difficulties to the acceptance of this view. The effect of change of posture is of moment. The sound was produced when the heart was allowed by the position occupied to come into closer relations with the chest wall; and it must be remembered the sound could be *felt* over a very localised area. Had the air been free in the pericardial sac, the position of the patient on his side would have displaced it in a direction which would have tended to diminish rather than to increase its intensity, if not entirely to obliterate it. Further, to explain the cracked pot sound, it would be necessary to assume an opening between the respiratory organs or a hollow organ in the abdomen and the pericardial sac, and that the fluid and air were confined to one part of the sac—that, in fact, it should be encysted, and therefore incapable of displacement by the position of the heart. Equal difficulties surround the attempt to locate the cavity in the pleura or in the lung. There was an entire absence of evidence of antecedent lung mischief, and beyond the pain on inspiration and the pleural friction there was none at the time he was under observation; he did not even have a cough. The next question which presents itself is, Was the sound produced by the action of the heart against a dilated stomach? There is no doubt the stomach was dilated, but this will not explain the evident production of the sound at a point readily appreciable by touch, and so evidently localised. It, further, does not explain the cracked pot sound.

All of these views are to us unsatisfactory, if not untenable. Returning to the hypothesis of a cavity with air and fluid and an opening, we can only explain the phenomena by assuming the presence of a diverticulum from or a hernia of the stomach or large intestine through the diaphragm. By granting this, all the facts are readily understood, and the case would present itself thus: an initial gastric catarrh with dilatation leading to a similar condition of the diverticulum; the retention of air and fluid in it, possibly from a degree of swelling of the mucous membrane at its mouth; while the production of the cracked pot sound by sharp percussion, the finger being pressed deeply and firmly into the interspace, would result from the obstruction at its mouth being still capable of being overcome, although not without causing the patient acute pain. The splashing sound developed by the change of position would thus be due to the heart falling forwards against the cavity; its disappearance as the patient turned more on his face would be the result of the obliteration of the cavity by the weight of the heart. The influence of respiration and of certain voluntary muscular efforts would be due to the position of the diaphragm, and therefore of the diverticulum or hernia which it held. The pleural and pericardial friction would be the result of an irritation originating around the cavity, and gradually spreading outwards and upwards from it. Whether the condition which we have assumed be congenital or acquired we are not at present prepared to hazard an opinion on. The sound was present for nearly two weeks, and its cessation was somewhat sudden. We asked Dr. Bramwell and Dr. Gibson to see the patient, as they are interested in cardiac curiosities, but this was delayed too long, for the sound had not been heard for a day or two before their visit, and had not returned.

THE RATIONAL METHOD OF TREATMENT OF HYDROPHOBIA.

BY SURG.-MAJOR G. C. ROY, M.D., F.R.C.S. LOND.,
CIVIL SURGEON, BEERBHOOM.

THE abortive treatment of hydrophobia discovered by M. Pasteur, if confirmed by subsequent experiments and trials, will confer a boon on mankind not inferior to that of Jenner. It will eliminate from our category of death one fell disease that has hitherto defied the skill of surgeons and physicians alike. The master mind has deducted the result from analogical reasoning, and we are wellnigh in the path of success, though the goal seems to be a little distant. The inoculation of the cultured virus is supposed to give the same protection as vaccination to small-pox, and aborts the real attack of rabies. Unlike many other poisons, the incubative period of rabies is long in its manifestation, and gives sufficient time for inoculation to mature itself and overtake the disease before its development in the system. Hence a man bitten by a mad dog, if inoculated with the cultured virus in the preliminary stage of the disease, is said to enjoy immunity from subsequent attack. M. Pasteur has verified his reasoning by experiment on animals, which, though bitten by mad dogs, did not show any symptom of the disease after inoculation. But inasmuch as all bites are not necessarily attended with fatal consequences, the profession has been sceptical in accepting the theory, and has explained the immunity as a lucky and fortuitous event. However, it seems to be a question of time before the truth will come home to the world and be accepted as a recognised remedy. But it will

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not [illegible] the lot of the generality of patients to have a laboratory close at hand, and if by chance the bite is overlooked, and the disease actually gains its ascendancy in the blood, have we got any medicine in our Pharmacopœia on which the slightest reliance can be placed for treatment? The full confession in the weakness of our resources will thereby be manifest, and, while brooding over our failures, it [illegible] me that Nature could not be so improvident and callous as to leave us so thoroughly helpless and unprotected.

Starting from the acknowledged action of hydrophobic poison on the blood, can we not find another poison that has [illegible] an opposite virtue and likely to neutralise its effect? We have in the animal kingdom two deadly poisons, which differ entirely from each other in their physiological action. Thus, whilst the poison of snake-bite acts with the rapidity of an electric current, that of hydrophobia takes a long incubative period to mature itself. The effect of both is on the cerebro-spinal system, chiefly the medulla. Rabies produces death by causing spasm of the respiratory centres; snake-poison, paralysis. One causes hyperæsthesia of the cutaneous nerves; the other, numbness. One gives rise to excitement of the brain and furious delirium; the other, coma. In every detail, therefore, of its action, one is in physiological opposition to the other, and, applying the law of analogies, it stands to reason that the effect of one should neutralise the other in the system. Just in the same way as opium and belladonna, being two deadly poisons, their antagonistic virtue was discovered simply on the observance of their different effect on the pupils.

My suggestion may startle the readers as a bold and dangerous practice, but a deadly disease requires a deadly remedy, and we are apt to forget that in the whole range of therapeutics the most potent remedies are the most deadly poisons. But though poisons in ordinary doses, the attenuation of quantity by dilution may yet bring them within the range of remedial measures. It is known that a snake-bite which is not effective to be fatal simply produces a deleterious effect, the symptoms varying in proportion to the quantity of the poison injected into the system. A smaller dose than would produce the physiological effect, instead of bringing on death and destruction. We have, consequently, to hit on the happy medium, and this can be worked out satisfactorily by observing that a good bite of cobra instils ten to fifteen drops of the poison into the tissues. One drop diluted with glycerine and injected subcutaneously, and repeated every two hours according to the symptoms observed, affords a rational presumption for success in the treatment of hydrophobia: thus—snake-poison, twenty-four minims; glycerine, half an ounce; ten drops to be injected every two hours under the skin.

The improvements in medical science in former days were deduced from empiricism. In fact, few remedies were discovered on rational philosophy. I have, on rational principles, suggested the treatment to which I would confidently solicit the profession to give a trial, for it falls to the lot of few to treat one case of hydrophobia from one year's end to the other, and unless the co-operation of [illegible] practitioners be accorded, our life is too short to enable me to establish one single truth in a generation. Cobra poison is plentiful in the rains in India, and, diluted with glycerine, it will keep its virtue intact for a year. I shall be glad to supply the mixture in August next to those who may feel disposed to put the method to the test.

[illegible]TONIN IN AMENORRHŒA.

BY AMAND ROUTH, M.D., B.S., M.R.C.P.,
[illegible] PHYSICIAN TO CHARING-CROSS HOSPITAL, AND PHYSICIAN TO THE SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.

[illegible] that the re-establishment of the catamenia in amenorrhœa with constitutional disease (especially [illegible]) is helpful in restoring the patient to health, and also that general remedies may be some months before that result, I have tried santonin, as suggested by Dr. Whitehead (THE LANCET, Sept. 5th, 1885)—[illegible] of powdered santonin to be taken on two successive nights. I omitted, however, the morning saline [illegible] to avoid possible sources of error. I have [illegible] twenty cases of amenorrhœa, thirteen of [illegible] with anæmia or chlorosis, and failed completely in seventeen. In all, restlessness, yellow vision, and discoloured urine followed the use of the drug. The following four cases are of interest:—

CASE 1.—Harriet V——, aged eighteen; plethoric and epileptic; has never menstruated. Eight hours after taking the first powder, violent colic with diarrhœa came on, with an unusually severe epileptic fit, during which the menstrual flow appeared, and continued painlessly for four days. She has not menstruated since (three months and a half), but has had one fit.

CASE 2.—Alice K——, aged nineteen; chlorosis; has never menstruated; much ovarian tenderness; slight leucorrhœa. After the two powders a profuse leucorrhœal discharge ensued, lasting six days, with much uterine colic, but no catamenia. Patient is now quite well and regular, after two months and a half of treatment with iron, arsenic, salines, and aloetic purgation.

CASE 3.—Annie B——, aged twenty-one; chlorosis; amenorrhœa three years. The powders produced no effect, but two weeks afterwards three grains of permanganate of potash, with kaolin in sufficient quantity, in form of pill, and taken three times a day after meals, brought on the flow after taking twelve pills. Patient is now nearly cured with the usual remedies.

CASE 4.—Mary E. R——, aged twenty-four; quite healthy; catamenia overdue eight days, though usually regular, and patient is to be married in six days. Catamenia came on during the night after one powder, and for the first time in her life painlessly, lasting the usual four days.

Remarks.—My twenty cases seem to indicate that santonin, as a direct emmenagogue, is useless in amenorrhœa associated with chlorosis, in which cases I have often found permanganate of potash useful. In healthy, or full-blooded women, santonin seems to have some power in starting a uterine flow, and apparently without causing much pain. Its mode of action, however, is quite unknown in this respect, and it seems not likely therefore to be much employed in gynæcological therapeutics.

NOTE ON THE QUESTION OF THE

POISONOUS PROPERTIES OF THE SALTS OF COPPER.

BY CHARLES H. PIESSE, F.I.C., M.R.C.S.,
PUBLIC ANALYST.

THE important question as to whether the compounds of copper are poisonous or not has been recently investigated by M. Dumoulin, Professor of Toxicology in the University of Ghent. A report of the paper he read on the subject before the Belgian Academy of Medicine appeared in the *Semaine Médicale* of the 2nd ult., of which the following is an abstract:—"His first experiments were made on rabbits and dogs, to which he administered doses varying from four to six grammes (sixty-two to ninety-three grains) of copper-sulphate; in no case was the effect serious; the whole of the animals bore perfectly well the ingestion of the copper salts. He next tried the subacetate (verdigris) upon the same class of animals; they vomited at first, but after the administration of further doses the vomiting ceased, and they bore daily doses of the salt during a period varying from six weeks to one year. The carbonate, the oxide, and the oleopalmitate, of which doses varying from seven to fifteen grains were administered, gave equally negative results, the last-named compound being borne with the greatest ease. Toussaint and several German writers had administered to human beings doses rising to seventeen grammes (263 grains) daily of salts of copper without disturbance. It happened that one of the dogs experimented upon by M. Dumoulin was suffering from impetigo. He noticed that the disease disappeared, and attributed the cure to the copper salt. He therefore in the same way treated some children suffering from impetiginous eruption of the face and scalp, and without accident cured the eruption. He then successfully extended the treatment to all forms of scrofulous symptoms, to various superficial skin diseases, ophthalmias, &c. He has now under treatment some scrofulous children aged about five or six years, to whom he administers about one grain of copper sulphate daily, with the result that the

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manifestations of the diathesis are disappearing. Lastly, he has treated croup, and cured it by the administration of a potion containing from seven to ten grains of copper sulphate taken in teaspoonful doses every half hour till vomiting occurred, then every two hours. In this way about forty grains of copper sulphate have been taken without the least inconvenience, though that quantity should be considered serious to a young child. Brouardel declared long ago that preserves in general, vegetables, &c., greened by a salt of copper, are not in the least dangerous."

The *Analyst* for the current month contains a report of the Proceedings of the American Society of Public Analysts, in which the following paragraph appears: "Dr. Bartley spoke of a case of unmistakable copper-poisoning which occurred in Brooklyn last spring from eating pickles coloured with copper. The victim was a child, who was suddenly seized with severe dysentery and inflammation of the colon. A portion of the pickle eaten by the child was found to contain copper."

Some years ago several samples of canned green peas submitted to me for analysis were found to contain copper, probably in the form of an albumen compound, and were reported by me to be adulterated with some material—to wit, some compound of copper—which would, in my opinion, be likely to prove injurious to the health of persons eating the peas. The Board of Works for the Strand District summoned the vendors for infringing the Act now known as the Sale of Food and Drugs Act. The opinion expressed in my certificates was supported at the hearing of the case by several eminent medical men, including Dr. Tidy and the late Dr. Guy, but was opposed by Dr. Pavy. The Court, however, decided in favour of the Board, since which time the sale of preserved foods tinted green with copper salts has practically been completely suppressed throughout the entire kingdom. The amount of copper varied in the different samples, being equivalent to about two to eight grains of sulphate of copper per pound. The accuracy of the hitherto received opinion, that copper compounds are poisonous, has by M. Dumoulin's experiments been severely shaken, and certainly this question demands further investigation. Wormley, in the "Micro-Chemistry of Poisons" (p. 375), says that "numerous instances are recorded of accidental poisoning by preparations of copper," and also that "the compounds of copper when taken in large doses, or in frequently repeated small doses, are all more or less poisonous." Hence, it would seem from reported cases that though copper salts may not be poisonous, in the generally accepted meaning of that word, yet that the predisposition for poisoning by them is far more common than might be anticipated in the compounds of what is now asserted to be a really non-poisonous element.

Strand, W.C.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

MIDDLESEX HOSPITAL.

THREE CASES OF UTERINE FIBRO-MYOMA; TWO REMOVED BY ABDOMINAL SECTION, AND ONE TREATED BY THE ADMINISTRATION OF ERGOTINE.

(Under the care of Mr. HENRY MORRIS.)

THE operation for the removal of uterine fibro-myomata of large size by abdominal section has, during the last few years, been somewhat frequently performed, and the operation is now a well-recognised one, although the mortality is still high. It is an operation which the surgeon will always undertake with a certain amount of anxiety, for until the tumour has been actually inspected it is almost impossible to be confident that the operation can be completed by the removal of the growth. The adhesions may be numerous and dense, or the pelvic portion too large to permit of the application of a clamp below the tumour. The reasons which chiefly influence a surgeon in the performance of the operation are, briefly, rapid growth of the tumour, persistent and severe pain, or severe and uncontrollable hæmorrhage from the uterus. Cases 1 and 2 are examples of the removal of the tumour and greater part of the uterus with the ovaries, and Case 3 of the successful treatment of a tumour by means of ergotine. For the notes of the cases we are indebted to Mr. W. Roger Williams, surgical registrar.

CASE 1. *Removal of the uterus and its appendages, with the tumour, by abdominal section; recovery.*—A tall, spare, healthy-looking, unmarried lady, aged forty-one, was brought to Mr. Morris, on May 20th, by Dr. John Waters of Bloomsbury-square. The abdomen was then greatly distended by a large tumour, which felt elastic, but did not fluctuate. The greatest prominence was on the right side, and there was dulness on percussion over the whole tumour. Vaginal examination afforded only negative information. She complained of a dragging sensation caused by the size and weight of the tumour, and of dyspnœa and faintness on making any exertion. The patient was very desirous to get rid of the tumour on account of the unsightly abdominal protuberance. She said she first noticed slight swelling in the right iliac region about eight years ago, which has since increased to the present size. The catamenia, previously regular, have lately been excessive. On June 30th, with the assistance of Mr. Pearce Gould, Dr. Waters, and Mr. Norton, who administered the anæsthetic, Mr. Morris removed the uterus and appendages, with the tumour, by abdominal section. Tait's clamp was applied to the neck of the uterus immediately above the vagina, and the pedicle thus secured was fixed in the wound. Very little blood was lost during the operation. The tumour removed weighed a little over ten pounds and a half; it was a soft fibro-cystic myoma. The cysts were small, and the softness of the tumour was due rather to the looseness of its texture than to the size and number of the contained cysts. Its bloodvessels, especially the veins, were of great size. The subsequent progress of the patient was uninterruptedly good. The clamp came away on the thirteenth day. The ligatures applied to the uterine vessels were discharged through the external wound about a week later. The patient left London for the seaside, convalescent, at the end of the fifth week after the operation. She is now quite well.

CASE 2. *Removal of the uterus and its appendages, with the tumour, by abdominal section; death from shock; foreign body retained in vagina for three years.*—This patient, a single woman, aged forty-one, was admitted on April 6th, 1885. She was moderately nourished and of dark complexion. The abdomen presented considerable uniform distension; at the level of the umbilicus its circumference was thirty-two inches. On palpation, a smoothly rounded and very elastic swelling was felt, which was slightly movable. There was no fluctuation. On percussion in the middle line of the front of the abdomen, dulness extended from the symphysis pubis to about two inches above the umbilicus. Laterally, the upper limit of the dulness did not reach quite so high. Both loins were resonant. There was œdema of the left leg and foot. The catamenia were profuse and painful. Beyond this and its bulk the tumour caused no inconvenience. On vaginal examination the os uteri was found to be high up and out of reach. At the upper part of the vagina some foreign bodies were felt. The patient said she introduced these three years previously to relieve displacement of the womb, from which a doctor told her she suffered. Subsequently, with a long forceps, a glazed earthenware candle extinguisher and several large pieces of cork were extracted. About seven months ago she first noticed slight abdominal enlargement through her dresses getting too small. She could not localise this primary swelling. During the last two months the circumference of the abdomen had increased by four inches. No injury or other known cause for the disease. Œdema of the left leg was first noticed six weeks ago. The catamenia, which commenced when she was fourteen, continued normal until this illness began, since which they had been profuse and of late painful. She had never had any difficulty in micturition; bowels usually constipated. Previous health indifferent. When three years old the left cornea ulcerated. The seat of the disease was now marked by leucoma, synechia, and capsular opacity. She had been living very badly, substituting ever since the age of sixteen, to some extent, stimulants for food (so her friends stated). She had been subject to palpitation of the heart and faintness. She had never had rheumatic fever. Fifteen years ago she had a severe illness, which her doctor said was dropsy and renal disease; ten years ago she had another similar attack. Four

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vomiting, she says, she had "inflammation of the brain." No history of cancer, tumour, or phthisis in the family. At 9.15 P.M. on June 17th, the patient's condition being much the same as on admission, an incision a few inches long was first made in the median line of the front of the abdomen, midway between the symphysis and umbilicus. This exposed the tumour covered with adherent peritoneum. The tumour was not free in the abdomen, but was held back against the posterior wall of the abdomen and pelvis by the peritoneum, which left only its front and sides free. The incision was prolonged upwards and downwards, and a large trocar was thrust into the tumour at a spot which felt very elastic, but no fluid, except a little blood, escaped. The incision was further lengthened, upwards nearly to the xiphoid cartilage, downwards nearly to the symphysis. The bladder was carefully avoided. The peritoneum was next stripped off the front and sides of the tumour, and the tumour was then raised out of the abdomen. On each side of it large vessels were seen, the size of a little finger. These were secured with stout silk. Kœberlé's serre-nœud was passed round the base of the tumour; when it was screwed up the wire broke. Tait's clamp was then applied, and the tumour was quickly cut away. No sooner was this done than the clamp slipped. There was sudden profuse hæmorrhage from half-a-dozen large vessels. These were quickly seized with fingers, forceps, &c., and finally tied with silk ligatures. Tait's clamp was reapplied to the pedicle, which was secured thus in the wound. The loss of blood was not excessive. The peritoneum was sponged out, and the wound closed with superficial and deep sutures in the usual way. Boracic harpie was used for dressing the wound, with strapping and an abdominal binder; carbolic lotion for the hands, instruments, and sponges. The tumour removed was a large elastic, encapsuled fibro-myoma of the cervix uteri. It was about the size of a child's head, and weighed 7 lb. 4 oz. The ovaries and its appendages were adherent to it. The latter was but little altered; both ovaries were normal. There were a few small cysts in each broad ligament. The patient after the operation she was in a state of collapse—cold and clammy. Soon vomiting supervened: she died thirty hours after the operation. At the necropsy, made by Dr. Fowler eight hours after death, a few ounces of blood-stained fluid were found in the peritoneal cavity, and there was extensive retro-peritoneal ecchymosis, especially about the pelvis; this was due to the detachment of the peritoneum, and was beneath the detached portions of the mesentery, which were lying smoothly in place in the abdominal cavity. The vagina was intact. All that remained of the uterus was the portio vaginalis. The ureters were unaffected; both were slightly dilated. Both kidneys showed a moderate degree of sacculation; the renal substance was hard and pale. Spleen small and pale. Liver normal. Old pleuritic adhesions over both lungs. Bronchi contained frothy mucus; their mucous membrane congested. Lungs cedematous. Heart small; the muscular substance pale and soft; the valves normal. The stomach was unusually thin.

Uterine fibro-myoma causing retention of urine, treated with ergotine; recovery.—In September, 1882, Mr. Morris was asked by a medical man to see a patient in great distress from retention of urine, caused by an abdominal tumour. The patient was unmarried, and about forty years old. When first seen the abdomen was greatly distended, and she was suffering severe pain from unrelieved retention of urine of several hours' duration. There was no difficulty in drawing an elastic catheter into the bladder, when about three pints of urine were drawn off. She was then greatly relieved. On examination a large abdominal tumour was found, which was diagnosed as a fibro-myoma of the uterus. The abdominal tumour was of several years' duration. She had previously experienced several attacks of retention of urine. Beyond this, and inconvenience from the abdominal enlargement, she had suffered little. She came to London from Australia, with the intention of having the tumour removed by operation. But the menopause was approaching, and there was no hæmorrhage. Mr. Morris dissuaded her from this, and gave her ergot. She subsequently consulted Sir Spencer Wells, and the ergot was discontinued. She next consulted Dr. Moore of Cavan, who wrote to Mr. Morris for his opinion on the case. In reply, Mr. Morris recommended the continuance of the ergot treatment, which was accordingly carried out, Dr. Moore's wishes, and accordingly it was continued. For four months she took a pill containing one grain of ergotine three times daily; then she took one drachm of extract of ergotine daily for another four months. At the end of this time the tumour had very much diminished. The ergot medicines were, however, not given up, but had been continued up to September, 1885, when Mr. Morris again saw and examined the patient in London. She was then in excellent health, and the abdominal prominence had completely disappeared. On deep pressure over the hypogastrium a small hard lump was felt. On vaginal examination the uterus was found heavier and larger than normal. In a letter to Mr. Morris, Dr. Moore said he was sure the disease was starved out in the patient. He had had three other similar cases, and now after a lapse of ten years there had been no return of the tumours, and the patients are now in perfect health.

GENERAL HOSPITAL, WOLVERHAMPTON.

ACUTE INTUSSUSCEPTION; INFLATION AND INJECTION OF BOWEL; RECOVERY.

(Under the care of Mr. F. E. MANBY.)

FOR the following notes we are indebted to Mr. J. W. Batterham, B.S., F.R.C.S., house-surgeon.

Benjamin H——, aged five years, was admitted at 3.30 P.M. on Feb. 8th, 1885. His mother said that the child was quite well till an hour before admission, when he was suddenly seized with violent pain in the abdomen. Soon afterwards he wanted to go to stool, and there he passed "a teacupful of blood" from the bowels. Alarmed by this occurrence, the mother immediately brought the child to the hospital.

On admission, the little patient, a well-nourished and apparently healthy child, lay in bed on his right side, with his legs drawn up, pressing his abdomen with both hands just above the umbilicus, where he complained of great pain and tenderness. On abdominal palpation a tumour of elastic feel was discovered. Its shape was, roughly, that of a cylinder, 5 in. long by 2 in. in diameter, bent upon itself at an angle of 120°. Commencing at the level of the right crista ilii, it could be traced upwards along the line dividing the right lumbar from the umbilical region till it bent round the umbilicus, and ended an inch and a half above and to the left of it. The tumour could be moved laterally over an area of about two inches, but allowed of no movement in a vertical direction.

After admission the patient vomited some semi-digested farinaceous food. At 5.30 P.M. the patient was put under chloroform, and the large bowel was inflated with air. This producing no sensible effect on the tumour, olive oil was injected until the colon was seen and felt to be largely distended. By this means the tumour was reduced to three inches in length and confined to the right lumbar region. Further injection being thought unadvisable, the patient was returned to bed, belladonna fomentations being applied to his abdomen. At 8.30 P.M. the tumour was found to be only an inch and a half in length, and to occupy the lower part of the right iliac region. As it was being examined it was felt to slip from beneath the fingers, communicating a sensation similar to that experienced on the reduction of a hernia. No trace of the tumour could then be found.

On the next day the patient appeared cheerful, was no longer pallid, and had no abdominal pain or tenderness. Oil and fæces were passed per anum. There was no blood in the stools. No vomiting had occurred since the previous afternoon.

The patient was kept in bed on low diet for a few days, and discharged quite well on February 8th.

FRACTURE (?) OF THYROID CARTILAGE; LARYNGOTOMY; RECOVERY.

James W——, aged sixty-four, was admitted under the care of Mr. Manby, on the morning of June 18th, 1885. On the evening of the 15th the patient awoke from an alarming dream, and, springing out of bed, fell and struck the front of his neck against the sharp edge of a chairback. He stated that "the lump in the middle of the neck" (pomum Adami) was "driven in" and that he was almost suffocated, but ultimately succeeded in drawing "the lump" back into position with his thumb and forefinger.

On admission, he complained of increasing dyspnœa (which was "worse at times"), dysphagia, and slight cough, with expectoration of blood-stained mucus. On examina-

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tion of the patient's neck, the larynx was found to be median in position. Considerable swelling and ecchymosis were visible over the right side of the thyroid cartilage, the ecchymosis extending across the middle line at the level of the crico-thyroid membrane. No pain was complained of on handling the hyoid bone. Manipulation of the larynx was painful, but elicited no crepitus. Laryngoscopic examination (which was difficult by reason of dyspnœa) revealed no œdema glottidis, nor was any obstruction seen between the vocal cords. The latter were congested, and the right cord was a little nearer the middle line than the left. The patient's voice was hoarse and his respiration laboured; both inspiration and expiration were noisy. The lower intercostal spaces receded with inspiration.

An hour after admission the patient, who had been put to bed in a warm ward, was seized with an attack of urgent dyspnœa, and became intensely cyanosed. Laryngotomy was immediately performed, without an anæsthetic, and a Fuller's bivalve tube introduced. The patient was placed in a steam tent, and the dyspnœa was markedly relieved.

The further progress of the case is shown by the following notes from the bed-card:—June 19th: Passed a good night; respirations 20; muco-purulent expectoration through the tube.—20th: Pulse 76, regular, of good volume and force; respirations 22; liquids are swallowed readily. The swelling on the right side of the larynx is diminishing. The tube was removed at midday, forty-eight hours after its introduction. He can breathe well through the wound, but cannot bear it closed.—21st: The cough is less; can breathe a little when the wound is closed.—23rd: Swallows solid food without much difficulty; breathes easily through the glottis; edges of wound drawn together with strapping; steam kettle discontinued.—24th: The patient gets up and walks about the ward.—July 1st: The wound was quite healed, and the patient discharged.

Remarks by Mr. J. W. BATTERHAM.—It is difficult in some cases to diagnose accurately the lesion produced by a blow on the larynx. The only symptom of fracture of the cartilages not present in mere contusion is crepitus, and this is not appreciable in all cases. The reasons that would lead us in this instance to suspect fracture are the age of the patient and the violent nature of the injury. In addition to the fact that all the eleven cases of fracture of the cricoid cartilage reported in Holmes's System were fatal, the position of the external marks of violence render it probable that the thyroid cartilage was the site of the lesion.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Sarcoma of the Tongue.—Malignant Disease of the Œsophagus.—Joint Disease in Animals.—New Growths in Heart and Viscera.—Tubercular Exfoliating Cystitis.—Aneurysm of Mitral Valve.

THE annual general meeting of this Society was held last Tuesday, Dr. J. S. Bristowe, F.R.S., President, in the chair.

Mr. F. EVE showed two specimens of Sarcoma of the Tongue. The first was a Hunterian specimen, at least 100 years old. It was a rounded tumour, situate in the left side of the base of the tongue, and directly continuous with the subjacent structures; the mucous membrane over it was slightly altered. The tumour contained wavy fibrous tissue at the base, and above this groups of clear round cells. Many dilated lymphatic sinuses were to be seen in the deep layers of the mucosa. The tumour was probably a fibro-sarcoma; it had some resemblances to the case recently exhibited by Mr. Jonathan Hutchinson as a lympho-sarcoma. The second specimen was a distinctly encapsuled tumour, and consisted of fibrous tissue, with spindle and round cells.

Dr. PRICE showed a specimen of Carcinoma of the Œsophagus, taken from a man aged fifty-seven, who had suffered from dysphagia for eight months. He complained of pain in the back. The cervical glands were enlarged, and especially in the left posterior triangle of the neck. Temporary œdema of the left upper limb was also noticed, probably due to obstruction of the left innominate vein. The superior mediastinum contained a large mass of new growth, that surrounded the aorta and spread upwards into the root of the neck, involving various structures. A sloughy-looking ulcer on the level of the bifurcation of the trachea was found in the œsophagus, and there were two openings leading into the submucosa. There was a secondary nodule in the liver. The extensive affection of the glands of the neck and left axilla was remarkable.—Mr. CHARTERS SYMONDS made some remarks on the tube worn by the man, and thought that the second opening in the submucosa might equally well have been caused by ulceration as by the tube.

Mr. J. B. SUTTON read a paper on Injuries and Diseases of Joints in Animals. Dislocations of joints were very rare in animals, and but few cases were on record. An example of old unreduced dislocation of the hip-joint in a cat was exhibited, and also the epiphysis of the head of a femur taken from a two-year-old horse. The latter specimen was singular, for after the accident the horse walked without betraying any evidence of lameness, but when trotted always limped; it lived for many months. At the autopsy the epiphysis was found quite separate, and all movement had taken place between the neck of the femur and the epiphysis, which had in consequence become eburnated and smooth. A specimen of pulpy degeneration of the knee-joint from a capeybara was exhibited, and reference was made to a case of Pott's disease in a monkey. Of all forms of joint disease, none were so frequent, so ancient, or zoologically so widely distributed, as osteo-arthritis. Specimens illustrating the affection were shown in the vertebral column of a snake, llama, and a horse, and in the knee-joint of an antelope. Specimens in the museum of the College of Surgeons proclaimed the disease in an ostrich, white bear, and lion. The affection had been seen in cats and dogs. In the museum of Trinity College, Dublin, is a skeleton of the extinct megaceros said by competent observers to present traces of this affection. A curious symptom associated with this form of joint disease in animals, and probably in human beings, was the early fall of the teeth, due to abnormal absorption of the alveolus. Paraplegia caused by disease, affecting the spinal column was very frequent in animals, some of the cases possessed considerable interest. In rickets paraplegia arose from two causes; in very young animals, from actual softening of the bone, causing the vertebræ to yield under the weight of the body. If rickets affected an animal at puberty, the epiphysial lines of the vertebræ bulge and compress the cord, as by a series of tumours. An interesting case occurred in a tiger that had received an injury to the atlas six years before. The fracture never repaired, except by fibrous tissue, but exuberant callus and the gradual yielding of the transverse ligament allowed the odontoid process slowly to compress the medulla, and produced complete paraplegia. An example of dislocated atlas that produced paraplegia in an ichneumon was also exhibited, and also a case of paraplegia produced by disease of the cord in a civet cat; it was associated with sclerosis of the nerves of the limbs, and with a typical perforating ulcer on the fore-paw. These investigations went to show that there were few diseases of joints peculiar to man, gout being probably wholly human.—Dr. NORMAN MOORE had not seen any compression of the spinal cord in cases of human rickets. He referred to a form of paraplegia to be observed in dogs after distemper; it resembled the weakness of the legs, such as might be seen in diphtheritic paralysis.—Dr. GOODHART inquired whether there was any new growth about the perforating ulcer of the cat's paw.—Dr. DAWSON WILLIAMS said that stringhalt had recently been attributed to peripheral neuritis, and inquired whether Mr. Sutton could state the condition of the nerves in his cases.—Mr. J. B. SUTTON said that in man the epiphysial plates were very slight as compared with those of some animals, and so compression of the cord from overgrowth was not likely to occur in rickety children. On the other hand, mere softening of the vertebræ might, even in human beings, cause paraplegia. He would examine the thick rim of the perforating ulcer for new growth. "Stringhalt" was a term that covered a whole group of anomalous symptoms, and we had the clue to but one in the cases of osteo-arthritis; sometimes it was due to disseminated sclerosis; it had resemblances with chorea, which Mr. Horsley had recently shown in the dog to be due to disseminated sclerosis.

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Dr. NORMAN MOORE showed specimens of Cancer of the Heart. The first case was that of a man aged forty-one, who died after an illness of five months. The heart contained several masses of a firm whitish new growth embedded in its substance, and extending from the pericardium to the endocardium. The largest mass was in the anterior part of upper wall of the left ventricle. The microscope revealed the epithelial structure with abundant dense stroma. The new growth involved the lungs (not the bronchi), the diaphragm, lumbar glands, and kidneys. The primary growth was probably in the right kidney. The second case was that of a man aged fifty-seven, who died after an illness of eight weeks. The heart contained a single mass of firm whitish new growth in the upper part of the anterior wall of the right ventricle. The pleura, peritoneum, liver, kidney, suprarenals, lumbar glands and œsophagus were also the seats of cancer. The carcinoma was probably primary in the gullet, though there was no evidence of stricture during life. The third specimen came from a women aged sixty-four, who died after an illness of four months. The heart contained many masses of new growth, and the pericardium was involved. Cancerous nodules existed in the skin, cervical glands, lungs, pleuræ, peritoneum, thoracic and abdominal glands, spleen, surface of liver, and in the remaining abdominal organs. The skin was probably first affected. No symptoms pointed to cardiac disease during life. All the cases were carcinomata of somewhat rapid growth, less than six months; and it was worthy of note that in all the kidneys as well as the heart contained carcinomata. In eighteen cases of œsophageal cancer the heart was found to be involved twice, and the kidneys were also affected.—Dr. PYE-SMITH said he remembered Dr. Wilks had alluded to the frequency with which the kidneys were affected when the heart was the seat of abscesses in cases of pyæmia.—Mr. A. A. BOWLBY had recently examined two cases of scirrhus cancer of the gullet, in which the kidneys were the only seats of secondary growth.—Dr. J. S. BRISTOWE did not himself think there was any special connexion between the heart and kidneys. In his experience also cardiac cancer had been without symptoms.—Dr. NORMAN MOORE, in reply, remarked that Queen Catherine of Aragon died with melanotic cancer of the heart, with symptoms which led to the belief that she had been poisoned.

Mr. E. H. FENWICK showed a specimen of Tuberculosis of the Kidneys, Ureters, and Bladder. The man had suffered from several attacks of renal colic in the right side, also hæmaturia and very frequent micturition. Nephrotomy relieved the tension of the pus in the pelvis of the right kidney, and then pyuria became a symptom. Nearly the whole of the mucous and submucous tissue of the bladder (with the exception of the mucous membrane of the trigone) had been exfoliated. The irritability of the bladder probably received some explanation from this circumstance.

Dr. SAMUEL WEST exhibited a specimen of Aneurysm of the Mitral Valve, taken from a man aged thirty-four, who had suffered from rheumatism first at the age of fourteen. An oscillating temperature, varying between normal and 105° F., was an important symptom. An external squint, with nystagmus, was also reported. Abscesses of embolic origin were found in many organs, and one in the middle of the right lateral lobe of the cerebellum, which was probably the cause of the nystagmus. There were numerous vegetations on the aortic valves, and one large pear-shaped mass must have come into incessant contact with the aortic flap of the mitral valve, on the aortic aspect of which a minute opening into an aneurysm could be seen. The aneurysm was filled with clot, and was of the size of a Barcelona nut. He showed three other specimens of aneurysm of the large flap of the mitral valve. The rarity of aneurysm of the mitral valve was a part of the interest of the specimens, which also illustrated exceedingly well the mode of formation of those aneurysms originating in the fibroid structure of the heart. Many of the incipient aneurysms possessed the exact shape and size of the vegetations which, by their incessant friction, constituted the chief cause of production of the aneurysms.

The following card specimens were shown:—Dr. Hale [illegible] Hæmorrhage into the Sheath of the Optic Nerves. [illegible] Edwards: Carcinoma of Bladder. Mr. [illegible] Fracture of the Tibia and Fibula into the [illegible]. F. S. Eve: (1) Large Urinary Calculus [illegible] by a girl; (2) Ectopia of the Crop of [illegible]:

MEDICAL SOCIETY OF LONDON.

The Lettsomian Lectures.

AT the meeting held on Monday last, Dr. Wm. Ord, President, in the chair, Mr. Jonathan Hutchinson, F.R.S., delivered the first Lettsomian lecture, on "Some Moot Points in the Natural History of Syphilis."

Mr. J. HUTCHINSON said that if the question in debate could be once clearly stated the duality or unicity of venereal poisons would soon cease to be a moot point. No one thought there were two forms of syphilis, and no one doubted that there were two kinds of sores. Were they related or independent? Bassereau proved that chancroids were very contagious, and always produced sores like themselves. This process of syphilisation was, however, only done on those who had had syphilis. This was a fallacy, for the patient might, in consequence of his prior syphilis, be insusceptible of fresh contagion. Danielsen, in Bergen, inoculated a number of lepers who had never had syphilis, and with similar results. Mr. Hutchinson insisted on the difference between a specific poison and a specialised poison. All inflammatory products were probably under favourable conditions contagious; the contagium might be a product of an inflammation that had originated spontaneously. It is possible that the poison which produces the chancroid is, after all, only a specialised inflammation product, and not a specific virus. Soft sores might be a mere appanage of syphilis. Many of the soft sores wanted the typical characters of a chancroid, and the absence of induration was the most universal characteristic. This want of uniformity, and the fact that the true chancroid on the genitals is seldom seen excepting in those who have had syphilis already, were strong arguments against specificity. If a person who has never suffered before contracts a venereal sore of any kind, it is highly probable that it will tend to syphilis. Dr. Morgan's (Dublin) experience placed this fact in a strong light. Thus it would seem that insusceptibility is a usual cause of non-occurrence of induration. In using this argument he did not wish to deny that the typical chancroid is sometimes seen in those who have never had syphilis. Important evidence as to the origin of the chancroid and of all non-indurated venereal sores from syphilitic secretions was afforded by the experiments of Morgan, who inoculated syphilitics with purulent vaginal fluid of syphilitic women. Mr. H. Lee had shown that artificial irritation of a true chancre gave rise to a purulent secretion which is inoculable in the patient, producing a sore not distinguishable from chancroid. A parallel might be drawn between the chancroid process and phagedæna. All will admit that syphilitic inflammations have a remarkable tendency to become phagedænic. There is reason to believe that the chancroid type of inflammation might be only a kind of minimised phagedæna, and differ only in degree. If the virus of a chancroid be not specific, it is at least well specialised; and chancroids are very contagious, and reproduce themselves with closely similar features.

Mr. Hutchinson next dwelt on the relations of hospital phagedæna to syphilis, and said it was not uncommon to see the disappearance of hospital gangrene claimed as one of the triumphs of antiseptic practice. He held this to be a mistake, whilst believing strongly in antiseptic surgery. Evidence in the form of clinical cases and outbreaks of hospital phagedæna was brought forward, showing that syphilitic sores could always, and even in unlikely instances, be made to account for the occurrence of hospital gangrene. Hospital phagedæna is very contagious, and spreads by contagium only; the previous health of the patient matters nothing, nor the salubrity of the ward. It never leads to constitutional syphilis. Accepting the hypothesis of its syphilitic origin, we have, then, a parallel fact to what is observed in the case of the chancroid. A specialised contagium has been bred up which can produce its like whenever inoculated, but which does not contain the virus of syphilis. It is easy enough to see that, if once the particulate virus of syphilis have died out of a secretion, the latter may then be propagated *ad infinitum* without the slightest possibility of reproducing the defunct elements. Mr. Hutchinson held that true chancres were the most likely to be attacked by phagedæna, and he believed that it occurred at a stage too late to prevent absorption. Phagedæna was a concomitant of a true syphi-

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litic inflammation, and did not usually occur until induration had taken place. It denoted unwonted susceptibility to the influence of the virus, and was often followed by severe secondary symptoms. A knowledge of the fact that phagedæna usually accompanied true syphilis was of great importance in retrospective diagnosis in medical practice. Mr. Hutchinson believed that a scar or the remains of a phagedæna more often meant syphilis than not. Moreover, scars in the groin were most likely syphilitic. In private practice inflamed buboes were rare. It was not very exceptional for a typical chancroid to cause no enlargement of the glands. He could not lose sight of the fact that a great many infecting sores did inflame and suppurate, and when that was the case the glands would follow suit. In a group of six infants suffering from syphilis, the result of circumcision, no less than two had suppurating buboes, and another had large masses of agglutinated glands. He considered it possible that age and personal peculiarities often exercised great influence in the tendency to inflammatory action. The recognition of non-infecting venereal sores on other parts than the genitals, whether on the hands or elsewhere, was a matter of great difficulty. Mr. Hutchinson had never yet seen a suppurated bubo in the arm-pit in association with a venereal sore on the hand. So remarkable a fact might mean that the soft sore was very rare on the fingers, or that it very rarely caused bubo. Probably there was truth in both statements. Speaking of second attacks of true syphilis, Mr. Hutchinson referred to Ricord's statement of 1839, that an individual who had once had syphilis was not liable to it again. But in 1859 Ricord admitted, what several observers have subsequently asserted, that second attacks were possible. The interval was generally long, and might be as long as twenty years. Mr. William Allingham published an interesting case, in which a man contracted syphilis in February; the induration of the primary chancre disappeared under mercurial treatment. In May a rash and sore-throat appeared, and mercury was again taken. Having left off the mercury for a month or more, he returned in July with another chancre, which was believed to be the result of fresh contagion; the second chancre was not in the site of the former one, but presented the most characteristic induration. This sore was followed by rupia and periostitis, and yielded but slowly to mercury. Mr. Hutchinson admitted the difficulties of the case, but felt sure that we not unfrequently encountered most startling exceptions to general rules.

Treating next of periods of incubation, Mr. Hutchinson gave his own experience as leading him to believe that the period was a more or less definite one of four or five weeks, thus differing from Sigmund of Vienna and Ricord. Berkeley Hill said that twenty-four days was the average, but from ten to forty-six days were the limits. In the case of a medical man who had vaccinated himself in the forearm from a syphilitic infant, the punctures, which had quite healed, became irritable on the twenty-first day, and were well indurated on the forty-first. Coming next to recurrent chancres, Mr. Hutchinson said he was the first, he believed, to draw attention to the very curious group of cases which illustrated recurrence, but two years after his brief paper Fournier wrote a masterly account. It was quite possible, and not a very rare occurrence, for indurations to develop in the retro-coronal fold of the prepuce which were not consequent on any fresh contagion. They usually, but not invariably occurred in the site of former chancres. They might occur at very various periods after syphilis, but ordinarily within five years. He thought that too much importance had been attached to the condition of induration as an almost essential characteristic of the initial lesion of syphilis. The absence of induration went for very little in the way of evidence. In many cases induration lasted but a short time. It was often ill marked in women, and its characteristics varied much in relation to the special tissue affected. If we admitted this, we might still hesitate to admit that syphilis could begin without any chancre whatever. Yet, for practical purposes, that was the conclusion to which we must come. No doubt a slight sore might be overlooked. Was it possible that intra-urethral chancres might occur without pain or signs of obstruction, and without external hardening and without discharge? Such was the suggestion of some, but it did not seem very probable. The frequent occurrence of cases in which syphilis followed what was considered to be only gonorrhœa suggested the suitability of recognising what we might call gonorrhœal syphilis. In explanation of facts adduced by Lee and Berkeley Hill, it might be admitted at once that there was nothing in the least improbable in the supposition that the particulate virus of syphilis might exist in gonorrhœal pus. Basset and Tamorowsky, both quoted by Berkeley Hill, made experiments apparently proving that gonorrhœal pus either from the male or the female could not induce a chancre followed by syphilis. Their experiments were made on non-syphilitic subjects.

The last question on which Mr. Hutchinson touched was the possibility of the conveyance of syphilis by translucent vaccine lymph. The belief that it was necessary to draw blood, or at any rate to allow the vesicle to drain after emptying it, and thus permit the escape of fresh leucocytes, could no longer be entertained. The fact that apparently pure lymph from vaccinia of a syphilitic infant could cause true syphilis in a non-syphilitic individual must be held to have been proved as the result of some inoculations made on himself by a member of the medical profession (this was an allusion to a case which has already been made public). The interest of this demonstration did not end with its relations to the practice of vaccination. It proved that the virus of syphilis might exist in a perfectly clear fluid and in company with that of another specific fever.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

Cases of interest from the late War in the Soudan.—Antiseptic Surgery at the West London Hospital.

AT the meeting held on December 4th, 1885, Mr. W. B Hemming, President, in the chair,

A paper was contributed by Surgeon HAROLD HENDLEY, I.M.S., and read by Mr. DUNN, on "Some cases of interest from the late War in the Soudan." The paper consisted of five cases, in four of which operative interference was followed by exceedingly good results.—Case 1: Bayonet wound. A bayonet which had transfixed the left arm through the biceps had also caused an apparently superficial wound of the chest, in the mid-axillary line immediately below the seventh rib. There were no signs during life of penetration of the thorax or injury to the lung. The man, contrary to orders, left the hospital in the course of an hour, and after three hours had elapsed difficulty of breathing supervened and death occurred from asphyxia. At the post-mortem extensive pneumothorax was found, with collapse of both lungs. There were four ounces of venous blood in the left chest, and there was a small wound of the lower lobe of the left lung.—Case 2: Bullet wound (Remington rifle). An Indian mule-driver, aged twenty-eight, was admitted with a bullet wound of the right thigh and left foot. The bullet had passed into the foot immediately in front of the astragalo-scaphoid articulation, where, upon several previous occasions, unsuccessful attempts had been made to find it. Under chloroform, careful digital examination and the use of Nélaton's probe having failed to establish the whereabouts of the missile, the patient was placed in the position in which he was supposed to have been in when the injury was received, and then palpation of the foot revealed an oblong mass in the sole of the foot; this swelling was cut down upon and proved to be the bullet. The patient was subsequently invalided to India and did well.—Case 3: Suture of tendons and the median nerve. A Greek wasadmitted from one of the field hospitals for a deep horizontal sword-cut across the front of the right wrist, in consequence of which some time previously it had been considered necessary to resect the lower end of the radius. On admission there were complete loss of sensation over the parts supplied by the median nerve, and but limited power of movement of the hand. The wound was reopened, and the median nerve, after some dissection, together with the tendons of the flexor carpi radialis and palmaris longus, were found widely separated; the ends were pared and catgut sutures used to bring them into close apposition. The hand was fixed upon a splint in a flexed position. The wound granulated well, and ultimately the man was discharged with complete recovery of sensation, except over two small patches, and with daily increasing power of movement.—Case 4: Ununited compound fracture of the radius and ulna. A native of India, aged twenty, was admitted with this injury, which had been caused by the bite of a camel. The patient had been under treatment for some time without any union taking place in the bones in question. Under chloroform, the ends of the bones were resected, and holes drilled through the fragments; the latter were then approxi-

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nated with silver wire, the ends of the wire being left projecting from the wound. The patient was afterwards invalided to India, with every prospect of good union taking place.—Case 5: Malignant-looking ulcer of the pubes of 180 days' duration. The ulcer measured 3½ in. vertically and 2½ in. transversely. Its edges were irregular, raised, rounded, hard; base firm, indurated; inguinal glands slightly enlarged. Under chloroform, the mass was removed, after which a flap of skin was brought down from the right of the middle line, twisted at its base, and attached by its free end to the loose skin of the penis, so that the wound was almost wholly covered. The patient was subsequently invalided to India, and was soon quite convalescent. The dressings used were carbolised oil lint and iodoform tenax.

Mr. KEETLEY read a paper on Antiseptic Surgery at the West London Hospital. During the years immediately preceding and including 1880 the course of wounds had been so unsatisfactory that towards the end of that year the staff held meetings to consider the matter. These resulted in recommendations for the provision of better means of carrying out antiseptic surgery and certain minor improvements in the drainage and ventilation. The drainage is, however, to this day old-fashioned, and the faults of ventilation are not very materially removed. Anything like systematic registration of cases in detail had been absent from the hospital till recently, so the only reliable statistics the author possessed were those of his operations. In the first five years ending August, 1881, he had only sixty-nine operations to record; eleven of the patients died. He now became acting full surgeon, and in the year immediately following, the improvements as regards provision of antiseptic materials &c. having taken place, he had seventy-five operation cases and no death. In the period of four years and a quarter from August, 1881, up to the present, he had had 438 operations with 16 deaths. The percentage of mortality was therefore in the first period 16, and in the second 3·6. The fatal cases were then considered in detail, and it appeared that the majority in the first period might be referred to septic causes, while an entirely different state of things prevailed in the second period. The class which bore the most striking testimony to the value of antisepticism was that of operations affecting the larger bones and joints; of these the author had performed, since January, 1881, 235, with the loss of only four patients in the hospital, and a fifth who died shortly after leaving it. All the fatal cases were complicated in the most serious manner, one being a double amputation of one leg and the other thigh; one being a patient with advanced phthisis; two having died of tubercular meningitis when they were far advanced in convalescence from the operations which had been done; and a fifth died, seven months after being trephined, of cephal-hydrocele. The 235 bone and joint operations included twenty-two major amputations, all but four through the lower extremity, with one death (in the previous period there were seven major amputations with four deaths); seventy-four osteotomies, with no death (in the preceding period only one osteotomy, which inflamed and suppurated seriously). Of the osteotomies, twenty-three were of the hip and 32 of the femur near the knee-joint; fifteen excisions, including three of the hip, five of the knee, and three of the elbow; seven excisions of tarsal and carpal bones; seventeen partial excisions and erasions of the larger joints, including seven of the hip and five of the knee; many cases of antiseptic drainage of the larger joints; eight sutures of the patella; seven scrapings out of the medulla of long bones (the femur five times); three direct operations for caries of the spine; four for malunited and ununited fractures (femur and tibia), &c. The other classes of cases, such as excisions of tumours, myotomies, and rectal and genito-urinary cases, caused no death, and otherwise showed a clean sheet, except as regarded about one case of erysipelas. An account was then given of the antiseptic methods practised at the West London Hospital. This showed a transition from strict use of the spray and carbolic gauze dressings, through what might be described as an iodoform period down to the present time, when the douche and turf moss pads charged with sublimate were being used. But Listerian principles had never been lost sight of, and the author believed that the choice of any particular antiseptic appliances was far less important than thoroughness in the use of those chosen. Lastly, he stated that the results and principles of his colleagues did not essentially differ from his own. They were now all antisepticists at the West London Hospital. — Dr. SINCLAIR THOMPSON said he was a strong believer in antiseptics. He approved of the douche, but now discarded the spray.—Mr. TUKE described a case of sebaceous tumour of the scalp, which the patient refused to have removed. The cyst suppurated, and the cyst wall was taken away. No antiseptics were used, and the patient died in six days of symptoms of blood-poisoning.—Dr. ALDERSON did not think that in small operations, such as the removal of sebaceous cysts, antiseptics were necessary. The worst case of amputation of the breast which he had seen was one in which strict antiseptic precautions had been taken.—Dr. THUDICHUM said that where perfect cleanliness was observed no cases of hospital gangrene were met with. He described a visit to a continental hospital where the wounds invariably failed to progress favourably, and this was distinctly traced to dirtiness of the bandages, forceps, and splints. In alkaline solutions salicylic was not an antiseptic.—Mr. EDWARDS did not use the spray, except in operation upon serous and synovial sacs. He thought cleanliness a very wide term. It was immaterial what the description of the antiseptic was which was used. The cardinal features of wound treatment were pressure and drainage, and in this connexion he strongly advocated Esmarch's bandage.—Dr. POPE was glad that Mr. Keetley had discarded the spray. He related a case in which a knee-joint had been opened five successive times without it.—After some remarks from Dr. BALL, Mr. KEETLEY replied.

Dr. SINCLAIR THOMPSON read an interesting paper upon a Trip which he had taken to Suez and back, and advocated strongly the advantages of a short sea voyage for the purposes of health.

CAMBRIDGE MEDICAL SOCIETY.

Friedreich's Ataxia.—Embolism of Central Artery of Retina.

AT the meeting held on Nov. 6th, 1885, Dr. Bradbury, M.D., President, in the chair,

Dr. MACALISTER narrated a case of Friedreich's Ataxia. The patient, a labourer, aged twenty-nine, single, was admitted to Addenbrooke's Hospital in July, 1885. The father is living, but the mother died twenty-two years ago, complaint unknown. One brother alive in America, believed to be well; one brother died, having been "afflicted" like the patient; two sisters are also "afflicted." Patient thinks he was "queer in his legs" about the age of nineteen, but could do his work till three years ago. Then he began to feel weak in his legs, and dizzy at times. This gradually increased till eighteen months before admission, when he lost all power in his legs. During this time he suffered from backache, but has never had pains of any kind in the limbs. His speech also has gradually altered. He had to go to the workhouse more than two years ago, and has gradually got worse. On admission his legs were found to be somewhat wasted; organs appeared sound. He could not stand even with his eyes open, nor move his legs and toes when lying or sitting. No abnormality of sensation. Patellar reflex entirely absent; no ankle-clonus; skin reflexes apparently normal. He had complete control over bladder and rectum. His head was in constant slow motion from side to side; he had a slight convergent squint. Complained only of backache, and of (apparently flatulent) distension of abdomen. No trace of syphilitic disease. Urine normal. Pupils reacted both to accommodation and to light; the fundus appeared normal. The back showed a slight lateral curvature of the dorsal and lumbar spine to the left, but the ribs did not bulge and the transverse processes could not be felt. Speech slurred and drawling; no aphasia. He was given small doses of liquor strychniæ. On Aug. 11th the arms began to be ataxic, especially marked in attempts to write. Five-grain doses of iodide of potassium were ordered. On the 30th he complained of seeing double when looking at distant objects, and had pain in the right eye. The right pupil was somewhat dilated and sluggish in reaction; left optic disc not quite clear; slight nystagmus. On Oct. 1st ataxia of the hands and arms was very marked, and the speech was very drawling and indistinct. Legs weaker.

Mr. DEIGHTON remarked on a case of Embolism of the Central Artery of the Retina. On Feb. 2nd, 1885, he was sent for to see a woman, aged sixty, who said that as she was lying awake in bed in the morning she suddenly lost the sight of her right eye. She had never had any previous attacks of loss of sight or even of temporary dimness, and the other eye was

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not affected when this went blind; she did not feel giddy, faint, sick, or have any sensation of pain at the time of the attack. Never had rheumatic fever, chorea, or suffered from fits of any sort. There was no albumen in the urine; the heart sounds were healthy. She had suffered for years with a cough; the apex of one lung presented well-marked evidence of phthisis. The pupil of the affected eye did not act directly to light, but contracted on illuminating the other eye; with moderate pressure there was no sensation of phosphenes. The next day vision had improved, and she could distinguish large objects in a small peripheral portion of temporal half of field. Ophthalmoscopic examination showed the optic disc blanched, the arteries very much reduced in size but not filiform, the veins full and distinct. Round the optic disc and in the neighbourhood of the macula lutea a perceptible haziness of the retina was visible, but there were no hæmorrhages. The fundus of the other eye was quite healthy. On Feb. 5th the retinal haze was very much more marked and of a white cloudy appearance, quite concealing the margin of the disc; at the yellow spot a cherry-coloured spot, slightly oval in shape (transversely) and very clearly defined, stood out in marked contrast to the surrounding œdema. This patient was seen again about six months after. The ophthalmoscopic appearances were those of atrophy; the arteries were very small, but not obliterated. Vision the same as before. Mr. Deighton insisted upon the importance of being able to distinguish between thrombosis and embolism.

Mr. CARVER showed a specimen of Flat Foot taken post mortem from a young man, aged about thirty, who had followed the occupation of billiard-marker for some years. He remarked that after dissection of the parts the deformity appeared to be due, not to stretching or lengthening of the calcaneo-scaphoid ligament, but rather to displacement of the scaphoid and astragalus downwards and inwards, the head of the latter resting upon the anterior portion of the internal lateral ligament of the ankle-joint, and not on the calcaneo-scaphoid.

MIDLAND MEDICAL SOCIETY.

Mollities Ossium.—Foreign Body in the Œsophagus.—Epithelioma.—Hydronephrosis.—Wrist-drop.

AT the meeting on Dec. 9th, 1885, Dr. Holmes Joy in the chair,

Mr. AUGUSTUS CLAY showed the sternum, portions of the femurs, clavicles, and a part of the ilium from a case of Mollities Ossium in a woman aged thirty-nine, who had been under the care of Mr. Pearse, of Brierley Hill. She was by occupation a dressmaker, and her mother, sister, brother, and eldest son died of phthisis; she was the mother of five children, the last confinement being a difficult one. Her illness extended over nine years, and at the time of her death the bones of both thighs and legs were fractured, none of them showing any tendency to unite.

Mr. BENNETT MAY showed a child, aged seven years, from whom he had removed, by œsophagotomy, a halfpenny which had been swallowed three years and a half before the operation; it had ulcerated through the œsophagus and opened the right bronchus, and was lying partly in the œsophagus and partly in the bronchus. Its removal was easily effected: the child was at first fed by nutrient enemata in order to avoid the possible entrance of food into the bronchus or surrounding cellular tissues. At the present time there is a slight constriction at the seat of ulceration, but a bougie can be passed without any difficulty, and food is easily swallowed.

Mr. JORDAN LLOYD showed the whole of an Epitheliomatous Tongue and Submaxillary Lymphatic Glands, which he had removed from a man by Kocher's method, after temporarily ligating the tongue at its root in two separate halves. The operation was practically bloodless. The man died on the tenth day from exhaustion. Mr. Lloyd also showed a Kidney with Dilated Pelvis as large as a fœtal head, which he had successfully removed from a boy five years of age. Intermitting hydronephrosis, accompanied by great pain and constitutional disturbance, were the indications for removal. The operation was lumbar, and seven or eight renal arteries were ligatured separately, the kidney liberated with its pelvis unopened, and cut off through healthy ureter. The condition was probably congenital and depending on a unilateral kink. The boy is now in perfect health.

Dr. SUCKLING showed a man, aged thirty-five, who was suffering from wrist-drop, due to progressive muscular atrophy. There was complete paralysis and atrophy of the extensor muscles of both forearms, the supinator longus on each side escaping. Other muscles of the hand and front of the forearm were also affected. The paresis and atrophy had gradually supervened and advanced together. There was no history of lead-poisoning and no hereditary syphilis, but he had acquired syphilis four years previously. There was no response to faradaism or galvanism of the muscles of the back of each forearm. Elsewhere there were no qualitative changes.

Dr. FOXWELL showed a man with atrophy of the extensor muscles of both forearms and the short muscles of the hands, whose symptoms did not fully agree with any recognised form of such lesion.

Dr. SIMON showed a case of Aphasia, in which the power of writing was retained.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

Treatment of Congenital Talipes Equino-varus.

AT the meeting of this Society on Dec. 4th, Mr. J. White, President,

Dr. LEWIS W. MARSHALL read a paper on the Treatment of Congenital Talipes Equino-varus. The author called attention to the unsatisfactory condition which existed in reference to the treatment of this congenital deformity. Quotations were given from recent papers published in the various journals, illustrating the want of unanimity between the opinions of surgeons. A brief summary of the method advocated by Mr. Barwell without division of tendons, and an account of the imperfect success obtained by Dr. Marshall, if slight cases be excepted, was read. Also the most recent pathological opinions as expressed in the joint paper of Messrs. Parker and Shattock at the Pathological Society in May, 1884, were touched on. Dr. Marshall stated that he concurred in the views contained therein, and believed in the mechanical production of this malformation. The fact of the males to females being in the ratio of 4 to 1 in his list of cases was thought possibly to be an additional argument in favour of Cruveilhier's theory, because of the usually smaller size of the female offspring. Intra-uterine pressure would therefore be less easily effected. The opinion as to most children having at birth a tendency to varus was also concurred in. Stress was laid upon the fact that the majority of congenital cases are due to paralysis of the peronei, together with displacement and altered relationship of the tarsal bones. The annotation published in THE LANCET a year or two ago, summing up the treatment of talipes equino-varus by plaster-of-Paris, was freely criticised, and an adverse opinion expressed. Dr. Marshall confined the use of this splint to the time anterior to the eleventh month, the period at which he preferred to divide the tendo Achillis. This limited use even was thought to be prejudicial. Mr. Davy's cuboid operation on infants was also objected to, and a case of Mr. Davy's was shown in which one foot had been treated by this method, and the other by division of the tendo Achillis by Dr. Marshall, and subsequent treatment by Mr. Barwell's springs. Dr. Marshall said that he adopted the following system: First, division of the tendo Achillis only at the eleventh month—i.e., at or about the time of walking; secondly, ten days after division Mr. Barwell's springs were applied; thirdly, a removable splint on the same lines was adopted; fourthly and finally, shampooing, faradisation, and exercises by Ling's system as advocated by Dr. Roth were used. Cases and photographs were shown, supporting the assertion that perfect and good results could be as easily obtained in this way as by any other. It was pointed out that no other tendon had been divided in any single case, nor was it believed ever to be necessary. The received doctrine that tendons should be cut in the front of the foot first was deemed to be wrong, because inversion of the foot was clearly obtained after excessive contraction of the calf muscles, and division of the tendo Achillis released this in part. The main points of difference between the method recommended by Dr. Marshall and that of orthopædists generally are included under the following heads: 1. Time of operation. 2. Tendons to be cut, and the order of doing this. 3. The apparatus used for after-treatment.

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NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY.

Epithelioma of Tongue.—Trephining for Traumatic Epilepsy.—Supra-pubic operation for removal of large Calculus.

THE second monthly meeting of the session was held in the library of the Newcastle-on-Tyne Infirmary on Nov. 12th, 1885, Dr. Fielden, President, in the chair.

Dr. MORISON showed a patient upon whom he had operated four years ago for epithelioma of the tongue and floor of the mouth. The man was sixty years of age at the time of operation, and the growth had invaded the front half of the tongue, the floor of the mouth, and was adherent behind the symphysis of the lower jaw. Two inches and a half of the lower jaw, the floor of the mouth, and the anterior half of the tongue were removed. The patient made a good recovery and had since done well, having a fairly useful jaw and powers of speech.

Mr. PAGE exhibited a boy nine years of age, whose knee he had excised a year ago. The boy, although so young, had now a useful limb, which appeared to be growing with his growth. Mr. Page also exhibited a patient whose femoral he had tied for popliteal aneurysm. The result was in every way satisfactory, the wound having healed by first intention, and the aneurismal sac could be felt in the popliteal space contracted and pulseless.

Dr. OLIVER showed a boy who had been trephined in the right parietal region for supposed traumatic epilepsy. The fits had developed after a blow on the head, and although on admission to the infirmary no injury to skin or bone could be detected, it was decided to trephine, as the epileptic phenomena were unilateral. The opening was made an inch above and behind the right ear, and a quantity of effused serum and lymph removed. The wound healed up well, but the fits continued, though with less severity and frequency. There had been no subsequent bulging at the seat of the operation.

Dr. MORISON exhibited a portion of Bowel with Perforating Ulcer and a portion of Intussuscepted Bowel, removed by abdominal section; also a series of seventeen Vesical Calculi, and considerable interest attached to this exhibit since it included the largest stone ever removed during life. This calculus, which weighs 1 lb. 6½ oz., was removed from a sailor, fifty-two years of age, who had suffered for thirty-eight years from pain and difficulty on micturition. The lateral operation was first tried, but it was found impossible, for want of room, to remove the stone in that way. A supra-pubic incision was then made, and as no lithotomy forceps which the operator possessed were large enough to grasp the stone, recourse was had to a pair of midwifery forceps, and the stone successfully removed. The man did well till the twelfth day after the operation, when, without warning, he suddenly became very ill, and died on the fourteenth day. No post-mortem was allowed.

Mr. PAGE showed the Sigmoid Flexure and Rectum from a patient who had suffered from fibrous stricture of the rectum. The stricture, which only admitted a probe, was at the juncture of the sigmoid flexure and rectum, and no fæces had been passed for fourteen days before operating. Right colotomy was performed, with complete relief of symptoms; but the patient died three weeks afterwards, and the post-mortem discovered extensive disease of the kidneys and partial occlusion of both ureters by cicatricial bands.

Dr. OLIVER exhibited a specimen of Aortic Aneurysm. The sac, which was of immense size, arose from the ascending aorta and projected forward between the pleuræ to the anterior chest wall, where it opened into a blood space behind the right pectoral muscles.

Dr. HUME read an interesting paper on two cases of Scirrhus of the Mamma, with Eczema of the Nipple. After carefully tracing the connexion between the two, the author came to the conclusion that where there was true eczema of the nipple—that is, eczema confined to the nipple alone—one was justified in recommending excision of the breast as a safeguard against the malignant disease which, in his opinion, was almost certain to follow in the gland.—The discussion was carried on by Drs. Drummond, Arnison, and [illegible], and Mr. Page.

Reviews and Notices of Books.

The Principles and Practice of Medicine. By the late CHARLES HILTON FAGGE, M.D., F.R.C.P. Two Vols. London: J. and A. Churchill. 1886.

[SECOND NOTICE.]

THE diseases of the Nervous System form a large part of the first volume, and their consideration is richly illustrated by facts of the author's personal observation. He discusses peripheral affections first—namely, paralysis and neuralgiæ,—and then passes to diseases of the spinal cord. The symptom of paraplegia serves as an introduction to this latter subject; it includes an interesting account of reflex movements, in which, however, the subject of the so-called "tendon-reflex" does not receive such attention as its significance merits. It must be remembered, however, that the study of these phenomena is very recent, and their explanation yet undetermined. After dealing with the pathology and symptoms of myelitis, various conditions are described which are hardly to be diagnosed from it—some of which, indeed, as spinal anæmia and hyperæmia, may have no real existence, or at any rate be unrevealed by symptoms. Reflex paraplegia, again, is discarded, the opinion being that a myelitis is present in most of the cases so assigned. Acute ascending paralysis is given from Erb's description, and we are told that no case of this remarkable affection could be found by the author in the records of Guy's Hospital. Alcoholic paraplegia receives but scanty notice, the wider extension of the subject at the hands of Lancereaux, Broadbent, and others, being again a matter which is one of our most recent additions to knowledge. As regards syphilitic paraplegia, the suggestion is made that it mostly depends upon defective nutrition of the cord from interference with blood-supply due to arterial disease, comparable to the affection which underlies so many cases of cerebral syphilis. Pursuing our glance through these pages, which teem with facts and are full of interest, we may note that Dr. Fagge believes the symptoms of "spinal irritation" to be explained by neuralgia of the posterior branches of the spinal nerves; that he describes in detail the subject of compression paraplegia, as illustrated in cases of Pott's disease, malignant disease of the spine, erosion by aneurysm (the rarity of compression from this cause being noted), by hydatid tumour and tumours of the membranes, examples of which are given from his own experience; again, in spastic paraplegia—which, although admitting the fact of lateral sclerosis in many cases, he thinks is often comparable to other spasmodic functional neuroses—he gives details of cases cured by the administration of Calabar bean. Under the head of Spinal Paralysis attended with wasting of muscles, he describes in turn acute atrophic paralysis (of infants and adults), chronic diffused atrophic paralysis, progressive muscular atrophy (more limited in its distribution than the preceding), bulbar paralysis, lead palsy, and pseudo-hypertrophic paralysis. This grouping of affections shows that in his view the latter two diseases own a centric origin, although the evidence is for the most part still wanting to determine the fact. Dr. Fagge indeed would assign a larger share to the action of lead poisoning than many admit, believing that some cases eventuate in more or less generalised muscular atrophy, distinguishable from progressive muscular atrophy only by the electrical test. Locomotor ataxy and disseminated sclerosis are respectively dealt with in separate sections.

The chapter on Diseases of the Brain opens with a discussion of hemiplegia and aphasia. It is of interest to learn that in a paper read before the Guy's Hospital Physical Society in 1860 or 1861 Dr. Fagge anticipated the conclusions formulated subsequently by Dr. Broad-

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bent regarding the exemption of harmonious movements from paralysis in hemiplegia; and the following remarks, giving an explanation of the varying distribution of paralysis in cerebral hemiplegia, has been fairly substantiated by the recent researches of Horsley. Dr. Fagge says (p. 488), speaking of the views of Jackson and Ferrier: "But, in spite of these high authorities, I cannot help thinking it is possible that, at least in the internal capsule, the fibres which belong to the upper limb may hereafter be distinguished from those that pass to the lower limb. We shall hereafter see that Hitzig and Ferrier state that the cortical centre for the leg muscles lies nearer the median plane than that for the arm muscles. It seems to me a fair inference that if there be a distinction of fibres within the internal capsule, those for the leg should be situated further inwards (or forwards) than those for the arm." And he goes on to point out that in cerebral hæmorrhage the outer and hinder part of the capsule is often alone lacerated. The subject of cerebral hæmorrhage abounds in details of clinical and pathological experiences. Two cases of an extremely rare condition—chronic diffused cerebritis—are recorded; hydrocephalus is attributed to a chronic inflammation of the ependyma and choroid plexus; atrophy of the brain is illustrated by "general paralysis of the insane"; and the various forms of meningitis, thrombosis of sinuses, and hæmatoma of the dura mater conclude the chapters devoted to organic disease. The interesting subject of the neuroses follows, dealing first with the *spasmodic*—viz., spasmodic tic, torticollis, paralysis agitans, chorea, tetany, tetanus, and hydrophobia; and then the *paroxysmal*—migraine, epilepsy, paroxysmal vertigo, and paroxysmal insanity; the subjects of hysteria and hypochondriasis being dealt with apart, and forming, as it were, a link to the section upon Psychoses, in which the various forms of insanity are dealt with. Lastly, the consideration of the diseases due to poisons and to heat conclude the subject of nervous disease, which have seldom received so ample and exhaustive a study in any similar text-book.

The remainder of the first volume is devoted to the Diseases of the Respiratory Organs. The affections of the larynx are detailed as fully as is consistent with a general treatise, and amongst other indications of the author's acquaintance with recent teachings may be cited his references to Dr. Semon's work upon abductor paralysis. There is a very full discussion upon Croup, a term which is retained by Dr. Fagge in its old significance, whilst he expresses in detail the facts which have led him to adopt what may be called the old-fashioned doctrine as to the nature of the affection. To be sure, he admits the practical impossibility on anatomical grounds of discriminating between simple membranous croup and laryngeal diphtheria, but he thinks the evidence goes to show that it is only exceptional for diphtheria to be limited to the air-passages, and wholly rejects the notion that the presence of exudation on the pharynx is sufficient to determine the diagnosis in favour of diphtheria; for he deems it probable that a non-specific membranous inflammation may extend upwards to the pharynx. In spite of the ingenuity of his reasoning, and the force of many of his arguments, the hypothesis of a specific poison being at the root of all cases of (non-traumatic) membranous laryngitis seems to best accord with facts, but at the same time there is room for further investigation, which Dr. Fagge's utterances may serve to stimulate. The general symptomatology of Chest Diseases, including the methods of physical diagnosis, introduces the articles devoted to their consideration. We note that the author adopts a cautious line in dealing with the etiology of acute pneumonia, and there is not of course any reference to Friedländer's discovery of a specific micrococcus. Still, Jürgensen's doctrines receive full attention, and it is pointed out that all inflammation must be regarded as due to some specific exciting cause. Laennec's division of gangrene of the lung into circumscribed and diffuse is held to be untenable in the light of extended experience in the post-mortem room. The question of surgical treatment of gangrenous cavities is another of those subjects, which has almost arisen since Dr. Fagge wrote; at any rate, no mention is made of it. There is a very elaborate review of the etiological conditions bearing upon pulmonary phthisis, and the influence of soil, climate, and hygienic surroundings is shown to be very great in determining the disease, whereas the theory of contagion receives but little countenance. Neither does Dr. Fagge admit that in inheritance there is more than a transmitted "vulnerability"; and he rejects the doctrine of "phthisis ab hæmoptæ."

The second volume opens with Diseases of the Heart and Bloodvessels, some sections of which—viz., Valvular Disease of the Heart, Aneurysm, Thrombosis, and Embolism—have been supplied by Dr. Wilks, these being subjects which the author had left unwritten. It may be remembered that Dr. Fagge contributed an article on the first-named of these subjects to "Reynolds' System." It is needless to say that Dr. Wilks discusses them with the clearness and precision which characterise his writings. Reverting to Dr. Fagge's own work, we may mention that he discusses admirably the etiology of dilatation and hypertrophy of the heart, and shows clearly how often these may give rise to valvular incompetence. We find the subject of mediastinal tumours interpolated in the chapter upon Diseases of the Bloodvessels, probably from the clinical resemblances between them and thoracic aneurysm. Diseases of the Stomach are introduced by a chapter devoted to the subject of Dyspepsia, the author showing an intimate acquaintance with the views of the leading authorities upon this common but inadequately understood derangement. In dealing with Gastric Ulcer, he discusses Virchow's long-accepted view of its production by local ischæmia, but does not offer an alternative hypothesis. The Diseases of the Intestines include two subjects with which Dr. Fagge's name is always associated—viz., lead colic and intestinal obstruction; and their discussion in this volume shows evidence of his vigorous and independent thought. In speaking of acute peritonitis, he is very sceptical as to its ever (or with extreme rarity) occurring idiopathically, contending that a primary local inflammation in neighbouring organs or regions is almost essential to its supervention. The Functional Derangements of the Liver are dealt with much in the broad sense which Murchison gave them; and the subject of Jaundice serves as a centre around which hepatic disorders are grouped. It is pointed out that "simple jaundice" is by no means always catarrhal; and a contrast is drawn between acute yellow atrophy and febrile jaundice—the latter almost as fatal as the former, but evincing a variety of causes, amongst which "pylephlebitis" is the most prominent local affection. Other causes of jaundice—as gall-stones, cancer, &c., are reviewed; and, after discussing the subject of bile-formation, Dr. Fagge concludes that it is hardly possible to formulate a theory of jaundice other than that bile-pigment is first secreted and then reabsorbed—endeavouring thus to break down the distinctions between "hæmatogenous" and "hepatogenous" jaundice. He seems to make rather a subtle distinction between the "secretion" and the "production" of bile; but we are grateful for the manner in which he brings his knowledge to bear upon the question. In the section upon Cirrhosis of the Liver, as in that upon Jaundice, one is surprised at the absence of any specific mention of so-called hypertrophic or biliary cirrhosis (except in a brief footnote by the editor); but it is interesting in this connexion to note that, according to Dr. Fagge's experience, in most cases of cirrhosis of the liver accompanied by jaundice the liver has been enlarged, often greatly so, and mostly containing

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much fat. Abscess of the liver he inclines to view as being mostly, if not invariably, secondary to dysentery. A chapter is devoted to Painless Enlargements of the Liver, and the section upon Hydatid Tumours is, as may be expected, written from a wide personal knowledge. Leuchæmia and Hodgkin's Disease are next discussed, and then we pass to the subject of Diseases of the Urinary Organs. Among functional derangements are considered diabetes insipidus—a rare affection, according to the author—and renal inadequacy; then the changes in the composition of the urine are discussed, followed by an admirable account of hæmoglobinuria. Of the paroxysmal affection that goes by this name we are told that it is now well ascertained to be due to disintegration of the red corpuscles within the blood, but the difficulties attending its pathology are fully recognised. Another subject, treated at greater length than commonly in text-books, is hydronephrosis. The pathology of diabetes receives considerable attention, and the opinion is expressed that excessive formation of glycogen is the most tenable of all hypotheses advanced to explain this disease, but at the same time little stress is laid on the theory that the hepatic derangement is itself due to a medullary lesion. In fact, Dr. Fagge hardly seems to have done justice to physiological research upon this question; nor is the subject of diabetic coma given as much attention as it merits. Dr. Fagge recognises five forms of Bright's disease—viz., parenchymatous nephritis, lardaceous disease, cirrhosis, consecutive Bright's disease, and cystic disease,—and devotes several pages to their common symptomatology. Of all the topics raised in this instructive chapter we can only refer to his views respecting the cardio-vascular changes in chronic Bright's disease and upon uræmia. The former are, he thinks, to be referred to primary renal derangement, and he harmonises Mahomed's views by the suggestion that such derangement, sufficient to cause a heightening of arterial pressure, may be functional, or at any rate may not require the structural lesions which mostly characterise it. The theories concerning uræmia are subjected to lengthy criticism, but without any clear solution being arrived at, as may be gathered from the following paragraph (p. 459): "In conclusion, there seems to be no doubt that uræmia is produced by the poisonous action upon the nervous centres of materials accumulated in the blood as the result of defective excretion by the kidneys. But it is still uncertain whether this action is excited by one substance in particular, or by all of them together. In many cases the actual outbreak of convulsions is immediately due to some cardiac disturbance of the balance of the bodily functions, which may then be supposed to have been previously unstable." ..... Sometimes, perhaps, what directly causes uræmic symptoms is the sudden failure of the heart to keep up an active circulation through the renal vessels, so that the excretory function of the kidneys, which may for a long time have been more or less impaired, now becomes rapidly altogether ineffectual." The symptoms of Addison's disease are referred to derangement of the sympathetic, from which conclusion Dr. Fagge does not see any escape; although it [illegible] at least so far as concerns the cutaneous pigmentation, the acceptance of more than one hypothesis. Gout, [illegible], arthritis deformans, and gonorrhœal synovitis are the subjects next dealt with, to which the editor has appended a few paragraphs on Charcot's joint disease; then [illegible] and mollities ossium; and lastly, diseases of [illegible] atrophy, anæmia, hæmophilia, and purpura.

[illegible] all that the author had prepared for publication [illegible] death; but, in fulfilment of the original design, [illegible] Dr. Pye-Smith, has supplied the chapters upon [illegible] of the Skin. Comprising upwards of one hundred [illegible] chapters form a valuable part of the work, especially as the subject is dealt with in a manner which is much to be admired. Rejecting all attempts at a "natural" classification as useless, and condemning the binomial nomenclature as "pedantic, cumbrous, and barbarous," Dr. Pye-Smith first defines the various "elementary lesions" characterising cutaneous disease, the distribution of the lesion, and the circumstances attending the case. He then deals with the diseases in the following order: Eczema and common superficial dermatitis, papular forms of common dermatitis, pityriasis rubra, psoriasis, pemphigus, scabies, erythema, disorders of sebaceous glands, hair-sacs, and sweat glands, ringworm and its allies, with other affections of the hair, chronic deep inflammations and hypertrophies, lupus, leprosy, tumours of the skin, pigmentary, hæmorrhagic, and neurotic affections, concluding with some practical remarks on classification and diagnosis. It would be impossible to do justice to the writer by attempting an analysis of these chapters; it must suffice to say that he has done much to place dermatology on a scientific basis by this monograph, and that he has admirably filled the place of the author of the work. It is not for this contribution alone that the reader is indebted to Dr. Pye-Smith. He has had the sole responsibility of arranging and editing the manuscripts of this work for publication, and we can imagine that he has willingly devoted much time to this really formidable task; for although of necessity the rapid progress of medical investigation renders it almost impossible for a work such as this to comprise all the most recent advances in knowledge, much can be done by the assiduous supervision of a careful editor to supply such deficiencies. This Dr. Pye-Smith has done with conscientious regard to the author's work, and the result is a treatise which may be claimed to be among the most scholarly and scientific works upon medicine, and one which is deserving of the most careful study.

Descriptive Catalogue of the Pathological Specimens contained in the Museum of the Royal College of Surgeons of England. Second Edition. By Sir JAMES PAGET, Bart., with the assistance of JAMES FREDERICK GOODHART, M.D., and ALBAN H. S. DORAN. Volume IV. London: Printed for the College, and sold by J. and A. Churchill. 1885.

WE are glad to see that another volume of the new catalogue of the Hunterian Museum has been issued from the press. The fourth volume shows the same signs of careful work as characterise its predecessors. To recatalogue such a large collection of valuable specimens was a great task, but its accomplishment will add enormously to the value of the Museum. In this volume the specimens numbered 3514 to 4880 are described. They illustrate morbid conditions of the Urinary Organs, of the Nervous System and Organs of Special Senses, of the Generative Organs and Breast, and the Anatomy of Stumps. This volume therefore deals with matters of wide interest and importance.

AMBULANCE WORK IN BURMAH.—A class for the Volunteer Artillery at the Rangoon branch of the St. John Ambulance Association, instructed by Dr. T. F. Pedley, medical officer of the corps, has been examined by the Bishop of Rangoon, who holds the degree of Doctor of Medicine, and twelve members have been reported to St. John's Gate as entitled to certificates. The male classes held last year at Rangoon have recently been re-examined, and the Bishop is now instructing a large class of ladies, wives of officials, merchants, and others.

SUDDEN DEATH.—On the 2nd inst. Mr. W. J. J. Scofield, M.R.C.S., died suddenly at his residence in Bath. Mr. Scofield, who at the time of his decease was in his fifty-seventh year, had been in practice for some twenty years in Birmingham, and had retired and settled in Bath only about two years ago.

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THE LANCET.

LONDON: SATURDAY, JANUARY 9, 1886.

IN a recent article on operations undertaken for the relief of patients afflicted with cancer of the œsophagus and of the stomach, we referred to the fact that doubt was sometimes expressed as to the justification of performing such serious operations on the subjects of incurable malignant disease. We were unable then to discuss this question, but it is one of so much moment that it is worth while to see what are the principles which should guide the surgeon when this problem is presented to him. It is essential to recognise from the outset the fact that the conditions of this problem may and do vary within very wide limits, at each extreme of which the right line of practice would be quite evident to any surgeon called upon to operate.

A great risk and a severe operation are only justifiable when the advantage to be gained is also great. Where, for example, an operation promises complete cure or long immunity from an otherwise certainly fatal malady, it is obviously right to undertake it, even if it be severe and dangerous. This is a somewhat self-evident proposition, and yet one of its applications to practice is often lost sight of. Experience has fully shown that, other things being equal, the success of excisions of malignant growths is largely dependent upon the period at which they are performed. As, therefore, an early operation for cancer offers a far greater prospect of long immunity from recurrence than a later one, a wider and more severe operation is justified in the earlier rather than the later stage. The contrary view is sometimes acted upon, even when not actually stated. Excisions of limited extent are often practised when malignant tumours are small, and because they are small and of recent origin; while in tumours of greater age and more extensive growth more formidable operations are readily undertaken, in spite of the small prospect of success they hold out. The converse should be the rule. When the surgeon has to deal with a case in which a free excision holds out a strong hope of long immunity or even of cure, a very thorough operation should be performed, even although it cause some deformity or mutilation, or expose the patient's life to danger. The great advantage to be expected from such an operation justifies the greater severity and the extra risk of such a procedure. Where the object aimed at is the removal of a malignant tumour, with the view of interrupting for a time, or stopping for ever, its growth, this principle should be kept in view, and if it were fully carried out in the early operations we believe the practice would be attended with most favourable results.

But this is not the only object for which operations are performed in patients suffering from malignant disease. Some are undertaken to promote comfort, even where there is no hope of removing the disease entirely. Thus it will afford considerable temporary relief to a patient's distress to excise an offensive fungating tumour of the breast or a painful mass of cancer in the mouth, even when there is no prospect of the operation eradicating the local disease. In such a case the surgeon should limit his procedures within narrow bounds, aiming to attain his end with the minimum of risk, and he should not be led to extend his operation to a wider range in the delusive hope of attaining some further good, simply because he is induced to operate at all to promote the patient's comfort. There is a temptation to argue thus: "Since an operation is justifiable or rendered necessary by the extreme local distress which is occasioned by the presence of the tumour, and which can be at any rate temporarily relieved by operative procedure, why not make it as wide as possible on the chance of delaying the recurrence for a long period?" The very condition for which the operation is undertaken renders illusory any such hope, and the surgeon should not be misled by a sophistry of this kind,, but should carefully regulate the severity of his procedure in any given case by the prospect of good to be attained.

The operation of colotomy for malignant disease of the rectum or sigmoid flexure affords another important illustration of a similar ethical principle. The relief that this operation affords is very marked; and there is every reason to believe that diverting the course of the fæces not only removes a source of pain, but lessens the rapidity with which the tumour grows and its subsequent ulceration. Hence, colotomy does not become more justifiable, but less so, in the later stages of the disease, when all the good it holds out is the relief of obstruction. When obstruction is complete the operation becomes very *urgent;* but the benefit it affords is at the best small, as compared with an earlier one, which may be effectual not only to prevent obstruction, but to relieve pain and retard growth. Too often this operation is postponed until the final stage of the disease, when the patient's powers are exhausted, and any procedure — even the simplest—has special peril; even then it may be justifiable. But it is bad surgery to postpone to a time when it is nearly valueless an operation which, undertaken earlier, is capable of affording great benefit.

In conclusion, we must allude to one or two views that are sometimes expressed in regard to such operations. It is said by some that where the surgeon is unable to afford complete or great relief, and especially where he is unable to remove the disease, he should not undertake any operation at all, for at best it only prolongs a miserable existence. In reference to this, it must be borne in mind that with universal consent surgeons have agreed to regard life as sacred, and its maintenance as the chief aim of their art. When once the quality of the life in point is allowed to be placed in one scale or the other, an element of confusion is introduced, and the surgeon in stepping out of his province assumes a responsibility that is not his. He must never allow himself to argue that life is not worth preserving or prolonging; to do so is always wrong and often dangerous, although the course of action it would indicate may be, for other reasons, in some cases the right one. Similarly, it is false to argue that because a patient is the subject of an incurable disease, or suffering severely, the fatal termination of an operation is any the less regrettable. *Fiat experimentum in corpore vili* is sometimes quoted as the justification for such a view;

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..., however, will not bear this interpretation. ... case, the surgeon must refuse to consider the ... a life when weighing the evidence in favour of ... the performance of a surgical operation. This is ...parent if we remember that there is no sharp line ... so-called operations from other milder forms of ...

Where difficulties such as these present them- ... safe course to pursue is to determine the aim ... any operation would be undertaken, and then ...ose principles we have already laid down. Amid ...ated brilliant achievements of surgeons in this ...practice, it is doubtful whether some of these ...have resulted in adding to the sum-total of human ...olongation of a life here and there does not com- ... the cutting short of that of many others.

...AS is all very well for the public, and especially ...r portion of the community, but it is no holiday- ...edical men; and the present festive season has ...ception to the rule. It is said that in the public ... the holidays affect the attendance of numbers ...s. This is intelligible enough. Even those ...rom the graver diseases of a chronic order will ...prefer home to a hospital at Christmas-time, ... of the less grave cases are beneficially affected ...ractions of the time; while no doubt to some ... same influences tend at this season to the ...f disease in private practice, and to create ...e to consult the medical adviser. But, never- ... is in much demand among both the rich ...oor. The forces of nature and of weather are ...; and though he would gladly enjoy a little of ... that he sees others possess, he has to be content ...t enjoyments, and too often with scant sleep. ...e of any ordinary Christmas; but it is especially ... a season as the present, in spite of the low ...which the Registrar-General reports. The average ...re has not been low, and that is enough to explain ... in deaths from diseases of the respiratory organs. ...gh the meteorological conditions of Christmas- ... been such as, happily, not to bring the usual ...nder the notice of the registrar of deaths, they ... bad enough to be highly inconvenient to many, ...asion a good deal of work for medical men. The ...f medical science will, let us hope, make the ...General less and less an authority as to the ... of sickness, and diminish the number of ... become the subjects of record in his returns. ... any man in ordinary brisk practice at present ... very much as follows. Out of a list of, ... patients, twenty-five or thirty would be cases ... in some form or other—conjunctival, nasal, ... bronchial, gastric, gastro-intestinal, hepatic, ...nal or vesical. In one or two he is pretty sure ...d very high temperatures, varying from 100° ...h or without a defined pneumonia. Most family ...n will have been struck by the apparent infec- ...tious catarrhs, extending often through nearly ... of eight or ten children, affecting them with ...rious of intensity. They seem to be interminable ... whether as regards the persistence of the catarrh in individual cases or the succession of cases. One of the best remedies, by the way, in such cases is quinine, taken two or three times a day. Even young children will take this remedy well, and it will often pull them together and bring back normal temperatures more quickly than any other remedy. Perhaps this is especially so when pallor or perspirations accompany or alternate with the high temperature. The apyretic action of quinine will often be very striking. The drug may either be given in repeated doses during the day, or, when the night temperature is high, in one good dose at night. It is a curious novelty to see practitioners ordering quinine in cases where their predecessors would have prescribed James's powder. But the practice has much to recommend it, especially in certain families, where there seems almost an epidemic influence at work, and saline and expectant treatment fails to make any impression. One of the most troublesome forms of catarrh in the damp and foggy weather of the present Christmas-time has been the tonsillitic,—generally follicular in character, sometimes suppurative, but in some districts, especially of the metropolis, with a suspiciously diphtheritic appearance, affecting numbers in the same house, with marked prostration of strength, and perhaps slight albuminuria. It may well put London practitioners on their guard to learn from the Registrar-General that of twenty-four deaths from diphtheria in twenty-eight of the large towns of England in the week ending Dec. 26th, fourteen occurred in the metropolis. The fact suggests disinfecting measures and applications in all throat cases of a suspicious character.

Though disease has not been so fatal in its character as in severe weather it is apt to be, giving another contradiction to the well-refuted saying that "A green yule makes a fat churchyard," it has been considerable in amount and depressing and debilitating in character. Those happy mortals who can escape from our "fickle" climate, and go where the sun is seen to shine occasionally, and where the air is not laden with soot and fog, are to be congratulated; for those who cannot, medicine must be chiefly protective, strength must be preserved, sleep must be cultivated, fatigue and late hours avoided. The comfortlessness of the world without must be counteracted by genial light and warmth within, and by more clothing, and the disease, which may still appear in spite of our well-directed advice, must be met, as we have suggested, by measures that sustain the strength while rebuking fever.

WHENEVER Mr. HORSLEY undertakes to provide a course of lectures bearing on pathology, it is perfectly certain that his audience will not have to listen to lengthy dissertations on minute and comparatively uninteresting points. In the short course which he delivered in December at the University of London subjects of much importance and wide extent occupied the five lectures which have to be given agreeably to the clauses of the late Mr. BROWN'S will. In the last and present number of THE LANCET will be found full abstracts of the lectures, and we propose here to select the most important matters brought forward, and endeavour to submit them to whatever criticism they may seem to deserve.

Last year Mr. HORSLEY extirpated the thyroid gland of

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monkeys and dogs, and obtained results which led him to the conclusion that this organ exercises very important metabolic functions. He believes that the thyroid in some way transforms mucinoid substances so as to make them available for further purposes in the economy, and he also produces evidence to show that the perfect formation of the blood is furthered by the presence of the same organ. It need hardly be said that Mr. HORSLEY was not the first to extirpate the thyroid gland from animals, nor was he the first to show that the symptoms thereby resulting belonged to the same category as those of myxœdema, cretinism, and cachexia strumipriva. But it was his chief care to prove that the loss of the thyroid was the *causa causans* of the symptoms, and that the likeness of artificial myxœdema to the other diseases just mentioned was something more than a mere similitude, and in fact amounted to more or less identity, only incomplete because of certain conditioning elements of time and space and other avoidable circumstances.

If the gland be slowly destroyed by a chronic sclerosing process leading to gradual disappearance of the working tissue, then we have myxœdema lasting a corresponding length of time, and manifesting a suitable group of symptoms. Rapid removal of an organ cannot be expected to give us the same order of symptoms as its slow destruction, and the more recent experiments of Mr. HORSLEY must prove of great value in the endeavour to bridge over certain gaps which, though of necessary theoretical existence, cannot, nevertheless, be disregarded, and may legitimately be pointed out by those who find themselves unable to admit identity unless on the clearest of evidence. Is the disease that follows removal of the thyroid in animals essentially the same disease as that known as myxœdema in man? If it be, cannot we by some means so manage to lengthen out the inevitably compressed disease, and so give the semblance a still greater likeness? This question appears to have been answered affirmatively by Mr. HORSLEY'S recent experiments. He has found that monkeys which have been deprived of their thyroids can be kept alive for from four to six months by the employment of artificial heat. (*Vide* Lecture I., page 4 of THE LANCET.) This method not only prolongs the duration of life, but alters the mode of onset of the symptoms, and indeed tends to cause the disappearance of some of the symptoms of the early stages. It would be of much interest if it could be shown that a slowly induced artificial destruction of the thyroid in monkeys gave an even more perfect resemblance between artificial and human myxœdema. Is it not possible for an experimental pathologist to set up a chronic sclerosing process in the thyroid gland by means of a slow form of irritation such as that caused by setons, or by some other kind of continuous irritation? In contemplating the resemblances between the natural and the experimental diseases, allowance must be made for differences of constitution and for the time of life at which the removal takes place. Age exercises a very important influence in both the experimental and natural disease, for it is found that young dogs and animals die rapidly with a sort of convulsive group of symptoms; and KOCHER'S results on man show that age also is a powerful element in the production of cachexia strumipriva.

Unexhausted as the subject yet is, this formed but a small part of the material that Mr. HORSLEY laid before his hearers. Questions of great weight in neurology occupied the chief part of his lectures. How endless is the practical study of the nervous system, what vast tracts lie unrevealed, what hidden depths unfathomed, not even the most accomplished neurologist could venture to assert. A superficial observer might think we had travelled a long way in the discovery that there is an excitable zone in the cortex of man, monkeys, and other animals; but the thoughtful alone know the shallowness of the step thus made in advance. It is true here, as elsewhere, that one thing more uncovered but reveals larger numbers of undiscovered facts beneath.

Mr. HORSLEY has greatly interested himself in the subject of the mode of discharge of nervous energy from motor regions, and he, with SCHAEFER, has arrived at the interesting conclusion that motor nerve cells appear to have a regular rate of discharge of about eight per second. We know that the idea of a continuous liberation of energy is not yet rooted out, but the very notion of a *discharge* conveys the element of intermittency. But what an important discovery, supposing it to turn out every way true, that this intermittence has a regular rate, and that nervous explosions do not act capriciously—as indeed no one would expect them to do. Mr. HORSLEY tells us that he has measured the rate of the tremors of artificial myxœdema, of the spasms of canine chorea, of the tremors of paralysis agitans, of the movements of disseminated sclerosis, and finds that the above-mentioned rate holds good. And Dr. GOWERS some years ago showed that the rate of an ankle-clonus was eight per second.

Another and separate field of work treated by Mr. HORSLEY was the graphic record of muscular movements resulting from stimulation of the various parts of the motor path from the motor-cortical region to the nerves. The tracing obtained from stimulation of the "motor" cortex is of a striking character: the muscle passes first into the tetanic state after a decided period of latency; but the fall of tetanus is perhaps the most interesting part of the myogram; the gradual descent of the lever is seen to be interrupted by waves indicating clonic spasms, which have the not unexpected, but still remarkable, rate of eight per second. These clonic spasms may be observed for a variable time after the cessation of cortical stimulation. This kind of tracing is regarded as pathognomonic of cortical discharges, for the lecturer assured himself that such clonic spasms only appeared when the motor cortex was in existence, and could practically not be obtained when stimulation was made of any part of the motor path below the cortex. Having investigated the myograms obtained from stimulation of the various parts of the normal motor path, he compared them with the myograms resulting from stimulation of the motor paths in cases of tremors of artificial myxœdema and canine chorea, and differences were found in the way of increased excitability and more rapid exhaustion, for the details of which the abstracts must be consulted. The relations of the thyroid to the pituitary body has led him to attempt the removal of the latter. This hazardous operation has been done twice with success, and the dogs lived five and six months without manifesting any special symptoms referable to the loss. The subject of

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canine chorea has been investigated with thoroughness, and MR. HORSLEY'S chief contention is that the symptoms are due to the existence of a disseminated sclerosis.

THE health of London in 1885, judged by the mortality statistics issued by the Registrar-General in his returns for the fifty-two weeks that ended on Saturday last, was unprecedentedly satisfactory. The death-rate during the year did not exceed 19·7 per 1000 of the estimated population of Registration London, exceeding four millions. This rate showed a further decline from the low rates in the preceding two years (20·5 and 20·3), which were lower than the rates in any previous year since the Registrar-General's returns were first issued in 1840. The reduction in the London death-rate has been continuous since 1860. In the five years ending 1865 the mean annual rate was 24·4, and in the following five years (including the cholera year 1866) it was 24·3; while in the two five-year periods of the following decade (1861-70) the rate successively fell to 22·9 and 22·0. In the last five years (1881-5) the fall was more remarkable, the mean rate declining to 20·6, and the rate in each of these years was lower than in any previous year on record, excepting only 1850, which followed the fatal cholera year, 1849. Independently of the death-rate from all causes, the mortality statistics for 1885 afford other and conclusive evidence of improving sanitary condition. The death-rate from the principal zymotic diseases did not exceed 2·3 per 1000, against 3·5, 2·8, and 3·4 in the preceding three years, and was lower than in any year on record. The deaths from measles showed a slight excess, but those from each of the other principal zymotic diseases were below the average. The most marked decline was shown in the deaths from scarlet fever and from enteric fever—the two diseases, it may be mentioned, other than small-pox, to the isolation and treatment of which the Metropolitan Asylum Hospitals are mainly devoted. The deaths from small-pox, which had been 430, 136, and 913 in the preceding three years, were 899 in 1885. Infant mortality, measured by the proportion of deaths under one year to registered births, was equal to 148 per 1000, corresponding with the average rate in the preceding three years, but showing a decline of 10 per 1000 from the mean rate in the ten years 1871-80. Neither in London, nor in England and Wales generally, has the rate of infant mortality shown so marked a decline in recent years as has the death-rate of children above one year of age.

AT the last meeting of the North Dublin guardians, Dr. Kenny, M.P., the medical attendant at the workhouse, applied for and obtained seven days' leave of absence in order that he might attend the opening of Parliament. We shall watch with interest the amount of success which attends the attempt to combine the functions of legislator and attendant to the Dublin Workhouse, where his presence is required every day, in one and the same individual. It appears to us that either St. Stephen's or the sick paupers will suffer.

THE Professorship of Anatomy at Dorpat vacated by Dr. Stieda, who has gone to Königsberg, is to be filled by Dr. August Rauber of Leipsig, who was formerly assistant to Rudinger and Bischoff in Munich, and afterwards prosector for His in Basle, whence he went to Leipsig as prosector, and was subsequently appointed Extraordinary Professor.

Annotations.

"Ne quid nimis."

THE CONTINUANCE OF CHOLERA IN SPAIN.

CHOLERA is stated to have broken out at Algeciras in the province of Cadiz, on the western side of the bay into which Gibraltar projects on the east, and also at Marbella in the province of Malaga, and which lies on the coast about midway between Gibraltar and the city of Malaga. The result is that quarantine has been established at Gibraltar against both the seaports in question. Some surprise is often felt at the ready imposition of quarantine by a British possession such as Gibraltar; but quite irrespective of the views which may be there held as to the desirability of imposing this restriction or not, it must be remembered that Gibraltar has practically no option in the matter, for if it did not impose quarantine on communications with the neighbouring places and countries where cholera is alleged to exist, all surrounding countries, including Spain, would put Gibraltar in quarantine; and so its means of existence and its food-supplies would be cut off. It is further rumoured that cholera still tends to recur in the neighbourhood of Brest.

The province of Malaga was severely tried during the epidemic last year; in spite of official denials, there were more than 400 deaths in the town of Malaga itself distinctly due to cholera. The Spanish port authorities, for political and commercial reasons, and in obedience to orders received from Madrid, gave clean bills of health to the ships leaving this port; but the English consul was compelled to contradict these certificates and notify the presence of cholera. Under such circumstances and as there are not English consuls in every part of Spain, it is difficult to know what is really taking place. But it nevertheless seems quite evident that the cholera is still lingering, at least in the south and south-west. It has ominously approached the frontiers of Portugal, notably at the Christine Islands, near Huelva; and the cases, occurring so late in the year, suggest the possibility, if not the probability, of a sharp revival in the spring. Last winter the cholera continued at Toledo late in the year, not sparing its victims even when the snow was lying some feet deep on the ground, and it only ceased to break out again with the commencement of the spring. In the province of Valencia, the cholera also began this year just where it had left off during the previous winter. Thus, Portugal, and those portions of Spain which have not yet been severely tried, may still have to undergo a severe visitation.

HUNTER'S HOUSE.

IT is sad to think that the house and grounds occupied by the great naturalist and surgeon, at Earl's-court, will ere long fall a prey to the unsparing hand of "civilisation." One by one the relics of the past, which serve to keep green the memory and the recollection of many a noble life, are allowed to become extinct, or are ruthlessly destroyed. The contemplation of Earl's-court house brings vividly to mind the scenes transacted there by its former owner. Here it was that the great Irish giant, Byrne, or O'Brian, was by a pious fraud on the part of Hunter saved from oblivion. Hunter, being desirous of obtaining the skeleton of O'Brian, bribed heavily the guardians of the body who had been commissioned to bury it in the sea, and in order to ensure success in his enterprise boldly submitted the disjointed cadaver to the seething cauldron. This episode in Hunter's career shows the dauntless courage, the pertinacity of purpose, and the ever-present desire of seeking after knowledge for its own sake, which were

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pronounced traits in the great anatomist's character. It was at Earl's-court, too, that Hunter watched so carefully the habits and studied the instincts of animals kept in captivity, and made innumerable observations and experiments, of which we have an imperishable monument in Lincoln's-inn-fields. It is not only the medical profession, of which he was so distinguished an ornament, that gained by the researches of Hunter, for his life-work forms one of the brightest spots in our national history. It is to be hoped that, if the "dens" where John Hunter kept imprisoned his ferocious leopards and the copper in which the mortal remains of the Irish giant were subjected to fervent heat cannot be allowed to rest longer in the place they have hitherto occupied, at least some attempt will be made to find a fitting receptacle for their future preservation. Is it too much to ask the learned member for the University of London to give a brief respite from care to his laborious ants and turn his attention to the safeguarding of "an ancient monument"?

POISONING BY PHOSPHORUS AT WOOD GREEN.

ON Dec. 30th an adjourned inquest was held by Mr. G. Collier, deputy coroner for East Middlesex, at the Lordship Tavern, Lordship-lane, Wood Green, touching the death of a single young lady named Edith Hunt, aged twenty-two. The deceased was about six months advanced in pregnancy. According to the evidence of Sarah Jane Thompson, who was in the service of Miss Hunt, the latter did not manifest symptoms of serious illness until Dec. 18th, when she complained of headache and pain in the chest. On the 19th vomiting set in, and on that date deceased is alleged to have stated, "I took some poison on Thursday week, and I have taken phosphorus paste." Mr. Webb, surgeon, who was called in the same day, prescribed for the sickness, and on the morning he found her "again vomiting *blood* and unconscious, and almost pulseless." She never regained sensibility. At the post-mortem examination the stomach was observed to contain a small quantity of "dark fluid" like that vomited. The opening inquiry was adjourned for the testimony of Dr. Tidy, who had been entrusted with the analysis of the stomach and its contents and portions of the viscera. Dr. Tidy's evidence was to the effect that "the stomach and intestinal linings were healthy"—a statement rather surprising when taken in conjunction with the observation of Mr. Webb, that deceased had vomited blood on two days. The viscera showed excessive and extensive fatty degeneration. *Phosphorus* was absent, but this was accounted for by the supposition that it had been taken in small repeated doses and had become oxidised. Dr. Tidy unhesitatingly averred that death was due to phosphorus-poisoning; and the collateral evidence lends great weight to this view, inasmuch as the deceased is reported to have acknowledged taking some "paste," and an almost empty bottle of James's phosphorus paste was found in the dresser drawer, together with an unopened bottle of the same. We do not wholly dissent from the view taken by Dr. Tidy, that the symptoms and their course were determined by the drug having been taken in small repeated doses; at the same time, it appears not improbable that the vomiting of blood might very well be explained as a *late effect*, and that only one dose may have been taken, and that, too, many days prior to the fatal issue. The researches of Tardieu and others prove that there is no poison more capricious in its action than phosphorus, and that, although the effects may be roughly classified as irritant, nervous, and hæmorrhagic respectively, there are many instances in which they coincide and succeed one another. If Miss Hunt's assertion, that she took the paste on a certain date, can be relied upon, assuming the witness spoke the truth, there is an end of the matter, for it seems certain that after the dangerous symptoms began to develop no fresh dose was exhibited, or the chemical analysis would have succeeded in detecting traces of the element. But the jury by their verdict—"That deceased met her death by phosphorus-poisoning, but how administered there was no evidence to show"—distinctly ignored the statement of Thompson concerning the confession of deceased. Some painful social matters were disclosed during the inquiry, which, to say the least, in our opinion, fully justified the rider to the verdict, "that the case required further investigation." A coroner's court is a court of first instance, or preliminary inquiry, and its main function is to arrive at the cause of death. It is desirable, no doubt, that the "how, when, and by what means" should receive a satisfactory answer, but this often requires more time than is at the disposal of the court. The verdict of the jury is no bar to further investigation.

THE BISHOP OF LONDON ON JUVENILE TEMPERANCE.

THE Bishop of London, in addressing the metropolitan members of the United Kingdom Band of Hope, congratulated himself and his fellow-teetotallers on the numbers of children growing up in London on temperance principles. This is a good fact, upon which society is indeed to be congratulated. There are few subjects on which medical authorities are more agreed than in thinking that children are far better without any form of alcoholic stimulant, and juvenile education of this sort is the best counteractive of that deeply inherited vice of English children which is the result of what Dr. Valpy French calls in his interesting book "Nineteen Centuries of Drink in England." Recent Christmas Days have given painful evidence that all London boys, or girls either, are not of the Band of Hope. It is a pitiable sight to see boys and girls of sixteen or eighteen reeling along the streets. All honour to the Bishop and his co-workers, who, we trust, will be supported by hosts and hostesses in the remaining holidays. The beverage at all children's entertainments should be non-alcoholic.

VERRUGA PERUANA.

THE Lima medical journals, *La Cronica Médica* and *El Monitor Médico*, are largely occupied with details concerning the fatal case of self-inoculation in a medical student which we mentioned in a recent issue. The disease is known under the names of Verruga Peruana, Verruca Andícola, and Fiebre de la Oroya, and appears to be peculiar to Peru, being "endemic in certain Cis-Andean localities, especially in Huarochirí and Yauyos y Canta, where the ground is from 3000 to 7500 feet above the sea." The disease is febrile, and is characterised by anæmia and by the appearance of red tubercles of variable size on the cutaneous surface of the body. A special bacillus is said to have been discovered by Dr. Isquierdo, Professor of Histology in the Faculty of Medicine of Santiago, Chili. This disease seems to have attracted attention from the earliest times, having been known in the time of the Incas. Augustin Zárate, in his History of Peru (1543), mentions a tract of country which is "very hot and very unhealthy, the inhabitants suffering particularly from very malignant pimples (verrugas) or furuncles with deep roots, more dangerous than small-pox and almost as much so as the carbuncles of plague." It is also mentioned by Dr. Cosme Bueno in his *Descriptiones Geograficas*, and by Tschudi in his work on Peru, 1843. The first scientific description of the disease is due to Dr. Salazar, whose graduation thesis at Lima in 1858 was entitled "Historia de las Verrugas." He considered it to be an endemic disease due to a poisonous virus. A considerable number of cases were observed about the year 1870 in districts where great excavations were being made in laying

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railway lines, and it is worthy of remark that epidemics of pernicious anæmia also took place in Paris, when the boulevards were being constructed, and in Switzerland, amongst the workmen employed on the St. Gothard tunnel; and that during the excavations for the Panama Canal the workmen have suffered most severely from fatal malaria. In 1875 Dr. Nicanor Pancorvo read a paper before the Lima Academy of Medicine, in which he expressed an opinion that the cause of the disease was to be looked for in emanations of sulphuretted hydrogen from the ground; but his views do not seem to be at all largely accepted by the profession in Peru. The whole subject of the etiology of verruga peruana is, however, now being carefully studied, as it is to be largely discussed in the Peruvian medical societies this year.

SKATING.

IT is never safe in this country to speak of the enjoyment of any sport which depends on the weather in an anticipatory sense. At the moment of writing it seems not unlikely that the lovers of skating may find it possible to indulge their inclination at an early date; but when this sheet is in the hands of our readers, it may, for aught we can tell, be quite warm weather. What we have to say, therefore, is more general than particular, and relates to the exercise rather than to its performance. Beyond question skating is one of the finest of sports, especially for females. It is graceful, healthy, stimulating to the muscles, and it develops in a very high degree the important faculty of balancing the body and preserving perfect control over the whole of the muscular system, while bringing certain muscles into action at will. Moreover, there is this about it which is of especial value: it trains by exercise the power of intentionally inducing and maintaining a continuous contraction of the muscles of the lower extremity. The joints, hip, knee, and ankle are firmly fixed or rather kept steadily under control, while the limbs are so set by their muscular apparatus that they form, as it were, part of the skate that glides over the smooth surface. To skate well and gracefully is a very high accomplishment indeed, and perhaps one of the very best exercises in which young women and girls can engage with a view to healthful development.

POLLUTION OF WATER AND MILK.

LAST Saturday Mr. James Bateman, C.E., read a paper on the Pollution of Rural Water-supplies at the Association of Public Sanitary Inspectors, and pointed out the opportunities for contamination of water by surface drainage from manure heaps, piggeries, and land dressings, and the [illegible] to which persons at a distance were exposed, through [illegible] which received infection from admixture with such [illegible] pail-washing or otherwise. Mr. Bateman was of [illegible] that there should be a determined opposition to [illegible] of milk from any but a farm certified [illegible] sanitary authority as being properly drained and [illegible] pure water-supply, for until this became law [illegible] be periodical outbreaks of disease. He was [illegible] hope for any great sanitary reform just yet, but [illegible] of our food-supply must sooner or later claim [illegible] of Parliament, when doubtless that of the [illegible] would have its share, and this danger be [illegible]. We fully endorse Mr. Bateman's remarks, [illegible] that much good would be done if greater attention [illegible] to the sanitary condition of milk farms. [illegible] of milk infection is still in its infancy, and [illegible] indications that milk consumers are not [illegible] risk of disease if their milk-supply be [illegible] where considerable precautions are [illegible], their condition being satisfactory from what is usually understood as the sanitary point of view. The investigation of all the circumstances which may give rise to milk infection requires prolonged and skilled observation; this is needed in the interest of the milk vendor as well as the milk consumer, and we would gladly see the cordial co-operation of all engaged in the distribution of milk in any step which is taken having for its object the increase of knowledge of the means by which milk contamination may occur. To wait for legislation is, we are afraid, to accept as inevitable for some years to come loss of life and loss of money. Knowledge must precede the passing of Acts of Parliament, and there is no reason why milk vendors should not in their own interest assist materially in its acquisition.

LONGEVITY.

IT has been said, with some degree of reason, that the maximum age attainable by man has risen somewhat during the present century over that recorded in former ages. In judging of such a statement some allowance for error must be made. The exact statistical calculations of our day should not, in fairness, be marshalled against the round numbers of less accurate traditions. The fact remains, nevertheless, that the limit of seventy years is now very frequently passed. Fourscore may even be reached by some without excessive labour and sorrow, and we have among us nonagenarians who carry on with still respectable proficiency the activities of their prime. Such effective longevity is a bright spot in the history of our advancing civilisation. Its comparative frequency, and its association with different physical types, suggest a certain generality in its origin, and encourage the hope that it may be, in some measure at least, dependent on personal conduct. It has been stated that no such condition can influence the length of life after middle-age. After that period inherited vital force is the only potential factor. To some extent this may be granted. If we fix an average of conduct, and suppose that a number of persons conform to it, we should certainly find the purest and most powerful constitutional types outlive the others. For instance, a gouty tendency does not enhance the prospects of old age. A rheumatic one is little better in this respect. The scrofulous are heavily weighted in the race of life by the chances of several infirmities. Nervous persons, again, are wiry, and may live through much trouble in virtue of their elastic tenacity. Then there are nondescript diatheses, which, except in their remote history, present no definite physical bias. Theoretically, these are most likely to furnish, under ordinary usages, the old men of a given time. It will be at once evident, however, that these are general statements, and that an unlikely individual will often exceed his own expectation of life, and by care, or from the suitability of his circumstances, will reach old age. In weighing the value of constitutional tendencies, moreover, another nearly related quality should be considered. This is disposition. The mind of a man must be more or less of the nature of his body, and accordingly we expect to find, and do find, that mental habit reflects in preferences, variations, rate of action, and the like, the type of processes in the lower tissues. So far disposition is merely a part of constitution, and cheerfulness, hope, apathy, or gloom are only expressions of physical change. That all such qualities react upon the body in such a way as to influence its vitality is undoubted. On the other hand, they may certainly be overruled by the action of the will, so as to be no longer mere bodily impulses, but trained servants of a governing intellect. They may thus acquire a compensatory value in correcting faults of constitution, and strengthen in proportion the tenure of life. This brings us to the sphere of intelligent effort. There can be no

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doubt, in our opinion, that there is much room for exercise of private judgment and energy in seeking the prolongation of one's own life. If there is any known diathetic fault, this implies a law of one's being which will repay in a gain of vitality the man who recognises it and guides himself accordingly. The doctrine of the survival of the fittest does not work itself out by blind chance, or without evident design, even among the lowest forms of life. Much less is it to be believed that man is unable so to adjust his circumstances to his needs as to continue to live after a certain mean period. The weaker will sometimes prove himself the more tenacious of life by observing rational methods of living, of which the more robust is careless. Moderation has probably more to do with success in this respect than anything else. To eat sufficiently, and drink stimulants sparingly, to alternate work with adequate rest, and to meet worries heartily, will afford to everyone the best chance of arriving at a ripe old age.

HYDROPHOBIA.

As time wears on the aspect of M. Pasteur's experiments have a more and more favourable appearance. The number of individuals under his care must now be considerable, but still time is necessary to show how far his treatment has been successful. This must be so from the nature of the case, seeing that so few bitten by rabid dogs ever develop hydrophobia. M. Pasteur meanwhile cannot complain of want of confidence in him, for his doors admit not only large numbers, but also members of the medical profession—assuredly not a slight tribute to his personal renown. The Professor has, it appears, consented to receive a Hungarian doctor as a pupil, to be nominated by the State. With the object of giving facilities for the carrying out in London of M. Buisson's plan of treatment by means of baths, provision has been made for the reception of patients at an establishment in Wilton-place, Belgravia. It seems that a "dread of mad dogs" was highly prevalent in 1765, and the "Annual Register" of that date asserted that the whole nation was "actually groaning under the malignity of its influence." "The people sally from their houses with that circumspection which is prudent in such as expect a mad dog at every turning. The physician publishes his prescription, the beadle prepares his halter, and a few persons of unusual bravery arm themselves with boots and buff gloves in order to face the enemy if he should offer to attack them. In short, the whole people stand bravely upon their defence, and seem by their present spirit to show a resolution of not being tamely bitten by mad dogs any longer."

DR. MEZGER AND THE POPE.

THE announcement that Dr. Mezger of Amsterdam has been summoned to the Vatican to attend the Pope has once more directed attention to a mode of treatment extensively practised on the Continent in many diseases of nervous origin. Massage is of considerable antiquity as a remedial agent, but it was not until the publication of Mezger's classical paper in 1868 that it received what may be called official recognition. The different steps of the procedure have to be carried out in a certain definite order, and no little skill is required for the due performance of the various manipulations. It has no connexion in any way, as is often ignorantly supposed, with rubbing or shampooing, but constitutes in itself a definite mode of treatment. The great danger, in this country at all events, is that it should fall into the hands of unqualified persons. No *masseur* or *masseuse* should under any circumstances be allowed to undertake the treatment, unless under the immediate direction of the patient's medical adviser.

SIR JAMES CRICHTON BROWNE.

THE honour of knighthood is well bestowed in the case of Dr. Crichton Browne. At the comparatively early age of forty-six, with a career in medicine dating from 1861, he has well won his spurs as a scientist, and will wear them not only worthily but with the esteem of his profession. In what we like to call the physiological pathology of cerebral disease and in the applied science of psychological medicine Dr. Crichton Browne has rendered important services to his profession and to the public. Notably did he serve the community last year, when, successfully overcoming the opposition offered to his benevolent enterprise by the officials of the Education Department, he aroused public attention to the fact that, under pretence of educating the brain of the juvenile population, the administrators of an ill-advised code and of a short-sighted system of payment by results were really stunting and crippling the brains of the rising generation, with every reasonable prospect of projecting the baneful influence of their mistaken policy on to the succeeding generation, and perhaps the next. The futile endeavour of Mr. Fitch to counteract the effect of Dr. Crichton Browne's report will be fresh in the recollection of our readers, and they will rejoice that not only was the obstructive effort abortive, but that the truth and energy of Dr. Crichton Browne's enterprise have been acknowledged as they deserved to be. Sir James Crichton Browne has our hearty congratulations, and in the recognition of a well-earned honour the whole profession will join.

ALLEGED ILLEGAL ABORTIONS.

ON December 31st, William Turnbull, surgeon, and Mary Nottage, midwife, were committed to take their trial on the charge of having caused the death of Charlotte Louisa Clifford by procuring abortion. The facts relating to the case, as disclosed at the inquest, have been published in our columns. There have been several remands at the police-court for the attendance of a Mrs. Burton, supposed to have been an important witness, as it was alleged, and indeed admitted, that it was she who introduced the girl Clifford to the male prisoner, for what purpose constitutes one issue the jury at the Central Criminal Court will have to decide. Previously to the hearing at the police-court on Dec. 31st Mrs. Burton died, and an inquest was held by Dr. Thomas, coroner for Central Middlesex. At the latter inquiry it was given in evidence by Mr. Pepper that the death was owing to pyæmia following abortion. The uterus was enlarged in every way, and at the fundus a portion of placenta was found attached. There had been some pelvic cellulitis, resulting in abscess; and the neighbouring lymphatic glands were much enlarged, and one had suppurated. The left knee-joint and both wrists were distended with pus, and the calf of the left leg was in great measure destroyed by suppuration and sloughing. There was no recent peritonitis, but several organised adhesions between the pelvic viscera showed there had been inflammation at a distant date. It will be remembered that whilst Clifford was residing in the house of Mr. Turnbull, where she subsequently died, Mrs. Burton sent a messenger to inquire as to the state of her health. The husband of the deceased woman, Burton, deposed that Dr. Raynor was the usual medical attendant of the family, but that his wife at the commencement of her fatal illness refused to have him called in, but insisted on having Mr. Turnbull. This gentleman continued to visit deceased up to the time of his arrest for having, according to the theory of the prosecution, procured an illegal abortion on Clifford. From that time Dr. Raynor attended Mrs. Burton, whom he found extremely ill with acute inflammation of the joints and an offensive discharge from the vagina. Unfortunately for the interests of justice no depositions were taken from Mrs. Burton, so

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that her knowledge of the affair must in great measure remain unknown, except so far as it can be gathered from collateral circumstances. She is reported, however, to have admitted that she might have miscarried, and that she "had taken a lot of stuff in rum." The coroner's jury found that Mr. Turnbull was chargeable with having caused the death of Mrs. Burton by procuring abortion, and the magistrate, Mr. De Rutzen, has commited him to take his trial on the charge at the next sessions of the Central Criminal Court, which commence on Monday next.

FIREPROOF DRESSES.

So much attention has been directed to the recent deaths from burning at Stoke, that it may be well if we indicate in general terms the methods by which ball-dresses and other delicate fabrics can be rendered incombustible. There are many chemicals employed for this purpose, the most popular, perhaps, being tungstate of soda. It is comparatively inexpensive, and by the outlay of a couple of shillings the dresses of the whole household may be protected from fire. To three parts of good dry starch add one part of tungstate of soda, and use the starch in the ordinary way. Should the material not require starching, dissolve 1 lb. of tungstate of soda in two gallons of water, well saturate the fabric, and then let it dry. It will not affect in any way even the most delicate colour, and ironing does not interfere with the efficacy of the process. Muslin so treated may be held in the flame of a candle or gas lamp without catching fire, so that, although the part in contact with the flame may be charred or even destroyed, there is no danger of its spreading. In the Exhibition of 1872 Mr. Donald Nicoll exhibited a starch which possessed the property of rendering the finest cambrics and muslins not only uninflammable but almost incombustible. It has always been a matter of surprise to us that some of the makers of washing powders should not have turned their attention to the subject. Ladies should decline to purchase light dress materials which are not shown to be practically fireproof.

In reference to the means to be adopted to lessen the injury likely to be sustained by an individual whose dress unfortunately has become ignited, Mr. John Marshall has contributed to a lay contemporary some judicious hints. As he states, the best course to pursue for a person in such circumstances is to throw himself or herself flat on the floor, so that the flames, which ascend, should not be capable of attacking the head and upper part of the body, where the most serious injuries are usually sustained.

AMMONIA IN ANTHRAX AND CARBUNCLE.

DR. LEONIDAS AVENDANO, in a paper read before the Union Fernandina, a Lima medical society, testified to the great value of ammonia in anthrax and "carbunculous diseases." Indeed, he expressed his opinion that it "is a specific, and that it should be the only drug used." In cases of malignant pustule, he advises that after an incision has been made, some drops of the official solution of ammonia should be introduced into the wound with the hope of destroying the bacilli there and of the ammonia finding its way into the circulation before the bacillus does and thus converting the blood into a fluid in which the parasite cannot multiply. In addition, some ammoniacal salt, such as the acetate, should be given internally, and on the slightest suspicion of general infection resort should at once be had to intravenous injections of ammonia, in doses of ten drops of the official solution diluted with an equal quantity of distilled water. In cases of malignant œdema and carbunculous fever, too, "the microbe should be attacked directly in the blood, ammonia being injected into the circulation." The author detailed several cases in which immediate improvement and ultimate recovery had taken place in patients apparently moribund by the use of repeated ammoniacal intravenous injections. He concluded by claiming for Peruvian medicine the honour of having suggested and proved the value of intravenous medication in no less than four different diseases: Dr. Leno Alarco having first injected chloral in tetanus, and ammonia in septicæmia or purulent infection; Drs. Armando Vélez and F. P. del Barco having employed capsicum injections into the veins of yellow fever patients; and Dr. Néstor Corpancho and himself having originated the treatment above described in carbuncle.

ESCAPE OR RESCUE FROM A BURNING BUILDING.

IT ought to be generally understood that, whether in escaping from a burning building or in endeavouring to rescue a person who has been unable to escape, the aim should be to keep the head as low as possible, by stooping or crawling, as, although smoke is heavy, the purest and most easily respirable air will nearly always be found in the lower stratum of the atmosphere, near the floor or ground. Another point to note is that with the aid of a damp but not wet cloth, such as a blanket held over the head and face, but far enough from it, a considerable atmosphere may be carried around the head sufficient to last for some two or three minutes, if the precaution be taken of breathing as little as possible, and through the nose instead of the mouth, the object being to avoid irritation of the larynx or air-passages, which would produce cough, and by emptying the lungs necessitate deep breathing, with disastrous results. The blanket or cloth, if damped, must not be made sufficiently wet to generate steam, or the heat will have an exaggerated effect, and the length of time during which respiration is possible will be seriously abridged. Great self-possession is the first essential condition of a successful exercise of courage in connexion with fire. Every act must be carefully though quickly thought out, and the peril clearly understood and intelligently faced, or no good service for self or others can be successfully performed.

CHOLERA NOSTRAS AND CHOLERA ASIATICA.

DR. J. SEMMELINK, formerly principal medical officer to the Dutch army in the East, points out, in his recent studies on the history of cholera, what, in his opinion, is the relation of cholera nostras to cholera Asiatica. Certain birds—for example, hens—lay their eggs during a considerable portion of the year without any contact with the male bird; and the eggs, though in all appreciable respects precisely similar to fertile ones, are nevertheless sterile, the difference between the two sorts being altogether hidden from the physiologist. So also, the symptoms of cholera nostras and Asiatic disease, including the rice-water evacuations, collapse, and other typical signs, are such as to prevent even the most experienced physicians from deciding as to the precise nature of certain cases. And yet it is maintained there are between the two diseases essential differences, the vital one being that cholera asiatica is transmissible. Cholera nostras represents, according to Dr. Semmelink, the sterile egg, the fertile egg corresponding to the Asiatic disease. Referring then to Dr. Koch's recent researches, he is inclined to consider that the comma bacillus in the Asiatic disease may constitute the difference between the transmissible and the non-transmissible affections. Dr. Klein's recent researches do not bear out this view in so far as the pathological organism in question is concerned; but it is quite possible that micro-pathology may some day afford the means of distinguishing between cholera asiatica and cholera nostras.

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There is, however, in many outbreaks, no sharp line between the behaviour of the two diseases in so far as their sporadic or epidemic character is concerned; and it is quite likely that an organism common to the two affections may, under some circumstances of soil, climate, and other surroundings, acquire a power of reproduction and of transmissibility which it would otherwise fail to do, and that the essential difference between the two diseases may be brought about by the influence of these surroundings, rather than by the presence in one of them of a definite organism which is altogether absent in the other.

MOTOR PLATES IN PERIPHERAL PARALYSIS.

THE experimental researches of Gessler on traumatic peripheral neuritis have been made on guinea-pigs and lizards. He has been at pains to determine the modifications that the terminal plates in muscles undergo from the onset of paralysis to the commencement of the cessation of muscular excitability, to the full development of the degeneration, and through the final regeneration. Five or eight days may pass without any signs of degeneration in the terminal plate. Fourteen days after the operation, however, the nuclei of the sarcolemma are seen to be multiplied, and the muscular fibres atrophied; in the muscle plates the nuclei are proliferated, whilst the nervous fibres still preserve their integrity. After twenty-eight days, when the inexcitability has attained its maximum, the muscular fibres are profoundly wasted, the nuclei of the sarcolemma are increased in number as well as the granular nuclei of the terminal plate, whilst the chloride of gold method fails to reveal the presence of any nerve fibres. When eighty days have elapsed the muscle is found to be infiltrated by connective tissue, and the wasting has reached an extreme degree. When it occurs regeneration sets in about the sixtieth day, and the first stage consists in the restoration of the terminal motor plates. All the changes are still slower in the cold-blooded animals. The paper may be consulted in the *Centralblatt für die Med. Wissensch.* 1885, p. 475.

CHRISTMAS IN THE HOSPITALS.

IN most of the metropolitan hospitals the usual Christmas festivities have taken place, and the hearts of the inmates gladdened by suitable presents—to the children toys and fruit, to adults articles of clothing and sums of money. The decorations of the wards in these institutions were in many instanes excellent, and reflect credit on the taste and ingenuity of those who were responsible for them. The world may, as pessimists would have us believe, be growing daily worse, but Christian charity has not been extinguished, as is proved by the efforts made during the past fortnight by the healthy and the wealthy to cheer the lot and brighten the lives of those unfortunate sufferers condemned to spend their Christmas in a hospital.

EYE DISEASES IN WHITE AND COLOURED RACES.

AN interesting paper on the "Comparative Frequency of Eye Diseases in the White and Coloured Races in the United States" appears in a recent number of the *Archives of Ophthalmology*, from the pen of Dr. Burnett, who has paid special attention to the subject. Taking the various diseases from a topographical point of view, he finds in the first instance that the diseases of the conjunctiva occur with about the same frequency in the two races. Scrofulous conjunctivitis, including herpes of the conjunctiva and herpetic ulcers of the sclera and cornea, is most frequent in the coloured races. It is remarkable, however, that trachoma is almost unknown amongst the black race, and is rare even amongst the mulattoes. Dr. Burnett thinks that the trachoma granule or follicle is a deposit of material analogous in character to tubercle, since, like tubercle, in disappearing, the tissue in which it is embedded is destroyed and a cicatrix is the result; and, further, in the circumstance that each fresh attack of trachomatous inflammation is the manifestation of a fresh deposit, and when successive crops of them occur total destruction of the mucous membrane is seen, as may be observed in most old cases of trachoma. In regard to diseases of the cornea, there is in the negro a disproportionately large number of cases of inflammation of all kinds. The proportion of cases of iritis is nearly twice as great in negroes as in white people, though the percentage of syphilitic iritis is about the same. On the whole, Dr. Burnett is of opinion that in cases of operation the prognosis for the negro is as good as for the white man, though the negro is more liable to secondary iritis.

SMOKY CHIMNEYS IN COLD WEATHER.

A SMOKY chimney is an exceedingly great nuisance in a sick room, and even after the well-known method of creating a draught by holding a newspaper against the front of the grate, so as to create an up-draught by preventing a down-draught, has been adopted, the chimney will smoke in cold weather. This is because the upper part of the chimney is cold, and the fire in the grate has not power enough to heat the column of air sufficiently. Good may be done by lighting a fire in some room on a higher floor, the flue of which is in contact with the upper part of the chimney from the sick room; but the best plan probably is to create a blaze—if the chimney has been recently swept, and it is safe to do so—by placing on the top of the fire some sticks and paper, or one of those wheels of fire-wood which are sold prepared with an inflammable material. The purpose is to raise the temperature of the upper part of the chimney as rapidly as possible, and to keep it well heated. It may not appear worth while to make this self-evident suggestion, but as a matter of fact no one can see much of the sick in private houses without being struck with the relative greatness of the discomfort to which they are exposed by failure to adopt what would seem obvious precautions. It is necessary, therefore, to assume that matters so simple as this even are too often forgotten or unknown.

THE OVERHEAD WIRES AGAIN!

The first heavy fall of snow in London this season has already broken down many of the wires that stretch across squares and streets in most localities, and nothing but good luck has prevented the occurrence of fatal accidents. When will London be in the same enviable state as Chicago, with respect to this matter? In the American city, about 3000 miles of electric wires have been put underground, and it is estimated that all the wires in the business portion of the city will be underground by May 1st.

EXPERIMENTAL DENUTRITION.

THE quantity of soluble substances in an organ increases after its removal from the body. According to Quinquaud, these substances are precisely like ordinary waste products of the living organism. The organ is placed under certain conditions of temperature, aeration, and sterilisation; so it is believed that there is no actual decomposition. Hence the name denutrition, which may on Quinquaud's view be regarded as a posthumous descending metabolism or disintegration. By employing the comparative method, observations of the quantity and quality of an aqueous extract obtained from various organs may be made. It was ascertained that the spleen, liver, and lungs were the organs in which disassimilation was most active; it was less marked

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in voluntary muscles, in the heart and brain, and most feeble in osseous tissue. Carbonic acid, and especially oxygen gases, were found to promote denutrition, whilst hydrogen and nitrogen hindered the changes. Chloroform, ether, and alcohol in feeble doses repressed denutrition, whilst hydrocyanic acid favoured it. Further development of the subject can alone show whether this method of investigation will enable physiologists and therapeutists to penetrate further into the mysteries of nutrition and the mode of action of drugs.

PATHOLOGICAL SOCIETY.

AT the annual meeting for the election of officers for the ensuing year, the scrutineers of the ballot (Dr. F. Willcocks and Mr. D'Arcy Power) declared that the gentlemen nominated by the Council had been duly elected; the list was published in the last issue of THE LANCET. The most noteworthy change is the resignation of Dr. Goodhart and the appointment of Dr. Coupland as hon. secretary. Mr. Butlin, hon. secretary, read the report of the Council, indicating the continued prosperity of the Society, which numbers altogether 682 members. Dr. Charles West proposed, and Dr. Thomas Barlow seconded, the resolution that the report of the Council and the balance sheet of the treasurer be received, adopted, and printed in the Transactions of the Society. Mr. J. W. Hulke, F.R.S., proposed, and Dr. W. B. Hadden seconded, the chief vote of thanks of the meeting in a resolution expressing the feelings of the Society at the able and admirable manner in which Dr. Goodhart, the retiring secretary, had conducted the affairs of the Society during his three years' tenure of office. This vote was carried with cordial demonstration. The vote of thanks to the other retiring officers was moved by Dr. Pye-Smith, and seconded by Mr. Swinford Edwards.

VISITORS TO SMALL-POX HOSPITALS.

IN his last annual report on the Western Hospital belonging to the Metropolitan Asylums Board, Mr. Sweeting refers to a certain number of persons who were admitted into the small-pox wards within thirteen days of having visited the hospital to see patients who were dangerously ill. Such persons, themselves receiving the infection, must necessarily constitute a source of danger to the outside public as soon as they sicken from the disease they have contracted; and Mr. Sweeting suggests that, since nothing short of the compulsory revaccination of all visitors to the small-pox wards will get over the difficulty, submission to that operation should be invariably insisted upon. Visits are already restricted to dangerous cases, and, if revaccination were enforced, a serious risk would be avoided and a substantial benefit would at the same time be conferred upon the visitors. During the year small-pox occurred amongst some convalescents, and Mr. Sweeting, failing other sources of infection, is obliged to suggest as possible that the infection was due to aerial transmission.

THE CASE OF HENRY PATRICK.

WE are glad to observe that the course suggested by our[illegible] in reference to this case has been taken, and that on consideration it has not been deemed decent to hang a [illegible] epileptic. There must always be enough of doubt [illegible] conditions such as these whether the perpetrator of [illegible] criminal in itself ought to be punished as if he were [illegible]; and when the alternative issues are instant [illegible] on the scaffold or deferred death in penal servitude, [illegible] expedient that the convict should have the [illegible] doubt. The case of Henry Patrick is not one [illegible], but servitude under surveillance, and this [illegible] to his fate.

AN OLD ANATOMICAL PREPARATION.

PROFESSOR ROTH of Basle has recently been engaged in investigating the history of a remarkable relic which the University of Basle possesses. It is a skeleton prepared by the founder of anatomy, Andreas Vesalius, and as it bears the date 1543 it may be justly regarded as the oldest anatomical preparation in existence. Professor Roth has published a pamphlet upon the relations of Vesalius with the old Swiss town, from which it appears, contrary to previous ideas, that the great anatomist only once took up his residence in Basle—viz., in 1543, when he came from Padua for the specific purpose of seeing his great work, "De Humani Corporis Fabrica," through the press of Jo. Oporinus, and that during that visit he undertook no official teaching. The dissection of the human body was at that time most reluctantly allowed by the authorities, and it was only occasionally that the body of a criminal was sent to the medical schools, such a concession having previously to 1543 happened only once in Basle—viz., in 1531; and one may imagine the intense longing for such an opportunity on the part of the University students and professors to occur whilst Vesalius was with them. Their desire was gratified. On the 12th of May in that year one Jacob Karrer was beheaded for a murderous assault upon his wife, and the body was handed over to the University, to be dissected by Vesalius. On the afternoon of that day, and for many days afterwards, the great master taught to students and teachers a new anatomy; and when the dissection was completed he prepared the skeleton, and with his wonted generosity presented it to the University—a gift in those days of no trifling value,—where to this day it remains, in the words of the inscription, "Artis et industriæ suæ specimen." As the possessor of the only known relic of the greatest of human anatomists, the University may well be proud of its treasure.

MEDICAL CONTRACT BY TENDER AT THE CAPE.

THE Government of the Cape of Good Hope have set a thoroughly vicious example of how *not* to make medical appointments. Wanting medical men to attend convicts employed in restoring the roadway through Meiring's Poort, in the divisions of Oudtshoorn and Prince Albert, the Commissioners of Crown Lands advertise that they will be prepared to receive tenders. Hitherto such duties have been assigned to duly qualified practitioners at fixed allowances. Now they are to be assigned by tender, as if medical men were ready to compete at a kind of Dutch auction. We hope the Commissioners will consider whether this is the way to get good medical servants, even for convicts.

THE EAST-END TAILORS.

THE special report of our Sanitary Commission on the Polish colony of Jewish tailors in the East-end of London, which we published on May 3rd, 1884, still continues to bear good fruit. Reproduced by the Jewish and the local papers, this report gave rise to a violent paper warfare. Many meetings were also held, and a trade union of working tailoresses was formed under the auspices of the Women's Protective League. Some years previously the men engaged in this branch of tailoring—i.e., the "slop work" done by foreigners in the East-end of London—had also attempted to organise a trade union. Special difficulties, however, stood in the way, and the society never became strong enough to influence the trade. Overwork under the most insanitary conditions has continued to be the rule. The description by Mr. Lakeman, Inspector of Factories, of the poisonous atmosphere in which they work fourteen hours consecutively confirms the complaints made in our report. It is fortunate that many of the details

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given have found an echo in the press, for the problems involved will not solve themselves. By trade associations, and the exercise of their political influence, the skilled and better educated artisans of England have obtained a reduction of the hours of labour, and sufficient wages to enable them to live in a fairly healthy manner. But these advantages, secured after many years of arduous struggle by the "aristocracy of labour," cannot be acquired by the half-starved exiles from Russia who work with the residuum of the East-end population. In this case the elements of self-regeneration are not strong enough; and therefore outside help, such as that which Mr. Lakeman has attempted to give, is as justifiable as it is necessary.

ROYAL BOTANIC GARDENS, CALCUTTA.

THE annual report of Dr. King, the superintendent of the Royal Botanic Gardens, gives some interesting information regarding the work done during the year 1884-5. There were 12,056 plants received and 23,433 sent out from the garden, and there were 1201 packets of seeds received and 2972 distributed. The subject of the cultivation of fibre-yielding plants received special attention; an attempt to introduce the plantain from which Manilla hemp is derived (*Musa textilis*) proved a failure, the plants being killed by the low temperature of the cold season. The *Sanseviera Zeylanica*, which furnishes an admirable fibre, not difficult of extraction from the plant, has been found to grow well, and a number of plants of it have been distributed during the year. The Japan paper mulberry, the bark of which furnishes one of the best materials for paper, has thriven remarkably well, and Dr. King is in hopes that it may be extensively cultivated on the odd corners of land near the villages. The *bhabur* or *sabai*, to which he directed attention in his report for 1877-8, "has now become a recognised material for paper, and is largely used in local manufacture." A number of green stems of the *rheea* were given to "persons interested in discovering an efficient, cheap method of extracting the fibre." In connexion with the important discovery of the anæsthetic properties of cocaine, the cultivation of the coca plant received much attention, with a view to propagating it for distribution. The condition of the gardens appears to be very satisfactory, and the conservatories are reported to be in as high a state of efficiency as possible.

ARTIFICIAL TEETH.

ANOTHER warning against the practice of not removing artificial teeth at the time of retirement to bed is reported. Miss Turnerelli, sister of a Roman Catholic priest at Sunderland, was found about a week ago struggling and choking in bed. The interior of her throat was horribly lacerated, and three false teeth found embedded in it were with difficulty extracted. The shock proved fatal, and the unfortunate lady succumbed to her injuries. For the sake of cleanliness as well as comfort, and the removal of a grave peril to life, these products of our civilisation should invariably be removed at night-time, and it is to be hoped that other wearers of these appliances will profit by a contemplation of the sad fate that has befallen Miss Turnerelli.

PIGMENTARY HEPATIC CIRRHOSIS IN DIABETES.

HYPERTROPHIC pigmentary cirrhosis has been carefully described by MM. Hanot and Chauffard as occurring in the course of diabetes mellitus. M. Letulle has met with two other cases of the kind, and these are well reported in No. 20 of the *Bullet. et Memo. de la Société Méd. des Hôpitaux*. In the first case, that of a man aged forty-eight, there was melanoderma and contractions of both palmar fasciæ; the autopsy revealed the hypertrophic cirrhosis, and pigmentation of the heart, lungs, and spleen. The second case, also a man, aged sixty-two, had no ascites and no melanoderma, but there was purpura hæmorrhagica. It is curious that in the first case, where there was excessive pigmentation of the hepatic cells, the glycosuria disappeared some weeks before death. Two excellent plates illustrate the morbid conditions in the liver. The author is chiefly concerned with the subject of the origin of the pigment, and believes it to be formed from hæmoglobin.

THE FUTURE OF THE MEDICAL CONGRESS.

WHETHER it be the spirit of the Christmas-time, or the late, but sure, triumph of good feeling over all disintegrating and discordant sentiments, several journals of the States are beginning seriously to discuss the terms of a compromise to obliterate controversy and establish the success of the Congress. The proposal of the *Medical News* is for a union of the present Executive Committee with the original enlarged General Committee, and for this joint body to begin the work of preliminary organisation *de novo*. We adhere to our view that outsiders do best in leaving all healing processes to those on the spot. Domestic differences are best adjusted at home. We abstain, therefore, from expressing any opinion on any particular suggestion. We only say "Blessed are the peacemakers," and repeat the expression of our hope that, for the sake of the profession in the United States and throughout the world, this great cause may be yet crowned with such success as a united profession in the United States cannot fail to ensure.

DETERMINATION OF THE SEX OF THE FŒTUS.

THE possibility of determining, or rather of making a good guess at, the sex of a fœtus before birth has occupied the attention of a good many observers at various times. One of the latest contributions to the elucidation of this question is supplied by a paper by Señor Juan B. Bidart, who examined 100 cases—ninety-nine in the maternity ward of the San Francisco de Borgia Hospital in Santiago, Chili, and one at home—his own wife, in fact. His observations were mainly directed to rapidity of the beats of the fœtal heart at the termination of pregnancy; and the conclusion he arrived at was that when the number of beats is below 135 a minute the child is usually a boy, and when the number is above 145 it is generally a girl. He found that under these circumstances he could diagnose the sex correctly in 92 per cent. of the cases. When, however, the beats were between 135 and 145 it was quite impossible to do more than guess at the sex. Frequent examinations must be made before the rupture of the membranes so as to obviate the chance of mistaking a temporary irregularity for the ordinary rhythm. Of course the auscultation must be made in the intervals between the pains if labour has already commenced.

SURREPTITIOUS PRACTICE.

WE feel that it is our duty to call attention to a pernicious custom becoming daily more prevalent, which if persisted in, must in time materially affect those cordial relations which have hitherto existed between medical men and our large charitable institutions. We refer to the casual and surreptitious private practice frequently carried on by the resident medical staff outside the walls of the hospital. If a surgeon choose to take his house-surgeon or dresser to a private operation to give the anæsthetic or assist him in any way, no objection can be raised; but when a member of the resident staff, contrary to the rules of his office, takes on himself to act the part of a consultant, or, under cover of a friendly interest, give gra-

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tuitous advice respecting the conduct or progress of a case under the care of another physician or surgeon, we cannot resist the conclusion that a grave error of judgment has been committed. Temptations of this kind are thrown in the way of those holding posts at hospitals, and they are not always easy to resist, especially when a qualification to practise has only recently been obtained; but a little consideration will, we are sure, serve to convince even the most unthinking that any departure from the strict line of rectitude and professional honour cannot but be attended with the gravest consequences.

PORTRAIT OF DR. WILKS.

THE profession will be gratified to know that the portrait of Dr. Wilks, published by Mr. D. H. Menzies, 154, West Regent-street, Glasgow, is a very satisfactory one. The ample dome, the thoughtful expression, and the whitened locks of the great physician and pathologist of Guy's are all well rendered in a picture which presents a skilful and an effective combination of the art of photography and lithography. It is a valuable contribution to medical portraiture.

DISPENSING PRACTITIONERS.

EVERY now and again hard things are said by the lay press, and even by members of our profession, writing "at large," against practitioners who dispense. It should be generally understood that when a qualified medical man dispenses his own prescriptions, it is done not because he likes to do so, but because there is some reason why the course taken appears necessary, or at least expedient. Endeavours to make the public suppose they are not as well served when the practitioner is also the dispenser are unworthy. Everyone who knows anything about the facts must be well aware that this is not true. Meanwhile, we are clearly of opinion that it is better that practitioners should only prescribe, not dispense; and anything like an overture on the part of druggists to render this universally practicable, in towns at least, will, we are assured, be hailed by the profession as a boon. The difficulties of solving problems of possibility are, however, very great, and no hasty measures or sweeping change in this matter will succeed.

RESTORATIVES OR STIMULANTS.

OF late the subject of refreshments for messengers, waiters, and others who are accustomed to serve the public convenience, has received considerable attention. The suggestion that tea, coffee, or cocoa should in such cases take the place of spirituous liquors comes in good time. It has long been a recognised fact that drinks of the former class were much to be preferred to those containing alcohol, in conditions of ordinary health, whether as sustaining strength under fatigue or as opposing the action of cold. The suggestion is therefore worthy of general adoption. The reform which it would introduce into social usage has been found to work well under the most trying conditions of travel and amid the hardships of war, and is at least deserving of a more extended trial at home.

SAFETY ON RAILWAYS.

We are glad to see that the Amalgamated Society of Railway Servants, speaking through its secretary, insists strongly, in the interests of safety, that "overwork on railways is highly dangerous, and ought to be abolished." No wiser words express this opinion too forcibly. It is simply a [illegible] of danger to over-work men upon whose [illegible] and quickness of attention and presence of mind the safety of life and limb depends.

FEMALE LABOUR AT COAL-PITS.

MR. ELLIS LEVER has just published a statement which deals, among other matters, with the condition of women employed in the Lancashire mines. Young girls are included in this class. Their work certainly is not quite so heavy as that of the men, inasmuch as actual tunnelling does not fall to their lot. Short of this they would appear to do anything. They carry, load, bank, and screen the coal, and they dress as men when convenient for working purposes. We have before objected to this misuse of the energies of the female sex. Physically, women are not designed for such occupations. With every allowance made for the possibilities of evolution in a race bred from birth among the pits, it must still be evident that coal-heaving is, at the colliery as well as the depôt, a labour of which only strong men are really capable. To impose it on women is to overstrain them. Socially and morally, it is difficult to see how anything but coarseness of tone and the degradation of domestic life can result from this system. The practice is far from being general in other coal districts, and we sincerely hope that Mr. Lever's disclosures may help to liberate the mining body in Lancashire from their unfortunate pre-eminence in maintaining it hitherto.

THE profession in St. Petersburg has been somewhat excited by some selections which have recently been made to some rather coveted hospital appointments. The question of nationality has been rather unpleasantly obtruded, the "thorough Russians" complaining that they are being elbowed out by Germans, and their opponents retorting that there are many hospital superintendents whose names are German, and who may be of German descent and even speak German at home, but they are all bound to be Russians, and that they certainly have no better chance of appointments than anyone else. Whatever they get is obtained by their own worth and ability.

THE hospital physicians and surgeons of Paris, to the number of 106, have signed a petition addressed to the Minister of the Interior, praying that the *religieuses* in the hospitals to which they are attached may be retained. In the present temper of the French people, it is thought that this petition will not be granted; but in the interests of the sick, who are most closely concerned with the matter, it is to be hoped that it will not be disregarded without careful consideration.

AT the meeting of the Wigan School Board on the 5th inst., a report from the medical officer of health was read on the prevalence of measles in the borough, and the suggestion was made that the usual Christmas holidays should be prolonged. The closure of the public elementary schools has frequently been effectual in checking epidemics of measles, and there is no doubt that the same satisfactory result will in a short time be attained in Wigan.

THE Committee of Management of the Aberdeen Royal Infirmary have at last decided to consult an architect as to the improvement of the present building and the capabilities of the site. It is a pity that this was not done before; still, better late than never. Mr. Saxon Snell has been selected to advise the committee, and will visit Aberdeen for that purpose early next month.

IT is stated that Dr. Herbert Watney, who at the general election unsuccessfully contested Greenwich against Mr. Boord, has been invited to become a candidate in the Liberal interest for the vacant seat for Croydon.

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THE Paris correspondent of the *Daily News*, in a recent letter to that paper, gives an interesting account of a visit he paid last month to the Hertford Hospital, an institution for the treatment of anyone born wherever the Queen's sovereignty is acknowledged, and maintained, at a yearly cost of between £4000 and £5000, at the sole expense of Sir Richard Wallace.

OWING to the great prevalence of scarlet fever at Leicester, and to the probability that it is mainly propagated by children attending the elementary schools while in an infectious condition, these have, on the suggestion of the sanitary authority, been closed for three weeks, instead of the few days usual at the Christmas holidays.

MR. T. HOYLE, son of the late coroner, has been appointed by the City Council to the coronership of Newcastle-on-Tyne. We are sorry that the Council did not embrace the opportunity of electing a medical man.

ON the 5th inst., the death occurred, at Bath, of Mr. E. C. Holland, L.R.C.P., M.R.C.S. The deceased, who was in his seventy-first year, had for some time suffered from cancer in the neck.

DR. HAGENTORN has resigned the Professorship of Surgery at Kieff.

IT is estimated that there are now in the United States 120,000 practitioners of medicine, including non-graduates.

THE ITALIAN HOME OFFICE ON CHOLERA IN 1884-85.

SIGNOR MORANA, Secretary-General to the Minister of the Interior in Rome, has just issued an elaborate report on the cholera epidemic in Italy during 1884 and 1885. His facts, in the main, are already familiar to our readers; the conclusions he draws from them are interesting, as those of an intelligent and fair-minded official.

In 1884, in compliance with public opinion and the advice of the highest medical authorities in Italy, an attempt was made to bar by force the entrance of cholera through the Alpine passes, and, also by force, to limit its ravages to certain foci of infection. This system of defence was not, according to Signor Morana, without results. It retarded the invasion and it limited its spread; "but in substance it did not attain the end for which it was designed."

In 1885, following the counsels of an international conference attended by the greatest lights in hygiene from every country, and with the experience of the past year as a guide, Italy refrained from the policy of material force; removed the frontier barriers and sanitary cordons, and, while maintaining the usual defensive measures at sea, left the land open, but never lost sight of possible importers of the cholera germ, and even accompanied them with wakeful and suspicious eyes to their very domicile. This precaution, according to Signor Morana, succeeded in detecting the disease as imported by various travellers, and so in isolating and suppressing it. But he confesses it did not attain the supreme end of securing exemption from the epidemics, which, indeed, eluded even the quarantine afloat and effected a landing in Sicily.

"The conclusion," he says, "is inevitable, that the only certain means of successfully resisting the shock of the epidemic is that of facing it boldly and so intercepting it, to which end the primary means are—good personal and local hygiene, isolation and stamping out of the first cases, effective drainage, disinfection, and the wholesale destruction of all articles even suspected of impregnation with the disease, so as to destroy its means of life, of reproduction, and of propagation."

But clear and precise as his conclusions are as to the worthlessness of quarantine by land and sanitary cordons, Signor Morana's Italian critics are loth to part with a means of defence which a section of the population seems to make necessary in Italy. An able writer in the *Nuova Autologia*, just published, says *à propos* of this population: "We admit that such defensive measures are not called for in the case of ordinary travellers or in that of well-to-do families who are fleeing from the epidemic. From Naples, in the first two or three days of September of 1884, the trains kept pouring thousands of fugitives into Rome, without importing a single case of disease into the city. But when we have to deal with the flight and the home-return of masses of operatives, things take quite a different aspect. Here lies the distinction between us and the northern countries. We have, picking up their livelihood abroad, thousands upon thousands of poor compatriots who, on the outbreak of an epidemic, either take to flight or are constrained, even against their will, to return to their native home from want of employment. Among these are mendicants, rag-dealers, itinerant musicians, and vagabonds of every shade. In 1884 there was a stampede to Italy of persons who had been stricken with the cholera at Toulon; some of them had been employed in bringing the victims to the epidemic; others, again, had bought at Toulon and Marseilles articles already used by the dead, or coming from sources more than suspected. To disarm ourselves entirely against an immigration of this kind seems to us a capital error. On the other hand, Austria, Germany, France, Belgium, Holland, and Denmark send few or no such *industrianti* abroad, and therefore have to defend themselves only against ordinary travellers, who, as we have shown, are not dangerous. We ought, therefore, to be very wary in adopting provisions or systems from other states which live under different hygienic conditions." The contention is not without a substratum of truth, and explains the otherwise unaccountable partiality which Italy retains for defensive measures long abandoned elsewhere.

One important point made by Signor Morana is his proof that in the winter of 1884-85 cholera was still in Italy long after municipal bulletins as to its presence had ceased to be issued. On February 15th there was a case at Afragola; on March 3rd another at Crevalcore; on the 7th another at Capannori, and so on through all the successive months till its explosion in Sicily, chiefly at Palermo. Long before it appeared at Marseilles it was numbering victims and giving every evidence of its virulence in the Alta Italia, in Central and Southern Italy, and even in communes and provinces which had remained exempt from it in 1884. But no steps were taken to arrest it in this stage. One of the most valuable conclusions to be drawn from Signor Morana's report is the necessity of stamping out cholera when in a state of hibernation, so to speak; when, as in the past winter, it had been reduced to manageable dimensions and its victims were counted by units. The hygiene, personal and local, the isolation of first cases, the drainage, the disinfection, the destruction of suspected articles—admirable prescriptions in themselves—are apt to be postponed till long after the enemy has effected a foothold, and when all they can do is simply to diminish the mortality. This has been eminently the case in Italy, where, as Signor Morana further points out, there is a strange reluctance, not to say incapacity, to admit that the disease is really Asiatic cholera, even when every symptom betrays its character. For instance, in 1884, at Pancalieri, the malady declared itself on July 20th in two cases, but these were set down as simply cases of "gastric disturbance" until the 27th, by which time twenty-four cases and eight deaths brought the local authorities to their senses. Notably at Spezia and Naples, and in 1885 at Palermo, the malady had for weeks been an unobserved or unacknowledged guest, and was not recognised in its true character till after it had assumed epidemic proportions. With such tardy, imperfect diagnosis, Signor Morana has no difficulty in showing that land quarantine or sanitary cordons, even if efficacious in themselves, have not a chance of proving their efficacy.

DEATH UNDER CHLOROFORM.—Last week we recorded a death from chloroform occurring in Newcastle-on-Tyne. In the same city another has since occurred. The deceased was eleven years old, and the drug was administered for the purpose of facilitating the reduction of a dislocation of the hip. The jury at the inquest returned a verdict of "Death from misadventure," and exonerated the medical attendants from all blame.

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VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 6322 births and 4[illegible] deaths were registered during the week ending [illegible]nd, being the fifty-second week of 1885. The [illegible] death-rate in these towns, which had been [illegible]0, and 19·3 per 1000 in the preceding three weeks, [illegible] week to 25·3. This increase was mainly due to [illegible] registration from the previous week, the last two [illegible] which were Christmas Day and Bank Holiday. During [illegible] thirteen weeks of last quarter the death-rate in these [illegible] averaged only 20·0 per 1000, and was 2·6 below the [illegible] rate in the corresponding periods of the nine years [illegible]. The lowest rates in these towns last week were [illegible]all, 17·7 in Brighton, 18·4 in Sheffield, and 19·6 in [illegible]d. The rates in the other towns ranged upwards [illegible] in Preston, 29·5 in Manchester, 31·7 in Halifax, and [illegible]ottingham. The deaths referred to the principal [illegible] diseases in the twenty-eight towns, which had been [illegible]95 in the previous two weeks, further rose last week [illegible]; they included 168 from whooping-cough, 163 from [illegible], 49 from diarrhœa, 41 from diphtheria, 38 from "fever" [illegible]cipally enteric), 34 from scarlet fever, and 4 from [illegible]-pox. No death from any of these zymotic diseases [illegible]ceeded last week either in Norwich, Wolverhampton, [illegible]x; they caused the highest death-rates in Bolton, [illegible], and Nottingham. The greatest mortality from [illegible]-cough occurred in London, Cardiff, and Bolton; [illegible]sles in Bolton, Nottingham, and Plymouth; from [illegible]ver in Leicester and Birkenhead; from "fever" in [illegible]nd Portsmouth. The 41 deaths from diphtheria [illegible]25 in London, 3 in Birmingham, 3 in Salford, 2 in [illegible]m, and 2 in Liverpool. Small-pox caused 6 deaths [illegible]he residents of London and its outer ring, 2 [illegible]ool, and 1 in Bristol. The number of small-pox [illegible] in the metropolitan asylum hospitals situated in [illegible]d London, which had declined in the preceding [illegible]ks from 90 to 48, further fell last week to 41; the [illegible] to these hospitals, which had been 13 and 9 in [illegible]us two weeks, were but 2 last week. The [illegible] Small-pox Hospital contained 7 patients on Satur[illegible]ne case having been admitted during the week. [illegible]s referred to diseases of the respiratory organs in [illegible] which had been 503 and 383 in the preceding two [illegible] rose last week to 610, and exceeded the corrected [illegible] by 94. The causes of 128, or 2·9 per cent., of the [illegible] the twenty-eight towns last week were not certi[illegible]d by a registered medical practitioner or by a coroner. [illegible] causes of death were duly certified in Portsmouth, [illegible], and four other smaller towns. The largest pro[illegible] of uncertified deaths were registered in Hull, [illegible], and Newcastle-upon-Tyne.

HEALTH OF SCOTCH TOWNS.

The rate of mortality in the eight Scotch towns, [illegible] been 24·1 and 22·9 per 1000 in the preceding two [illegible]ther declined to 21·6 in the week ending Jan. 2nd, [illegible]·9 below the mean rate during the same week in [illegible]y-eight English towns. The rates in the Scotch [illegible] week ranged from 17·7 in Dundee and 18·4 in [illegible] to 27·3 in Paisley and 29·9 in Perth. The 528 [illegible] eight towns showed a decline of 32 from the [illegible] the previous week, and included 13 which were [illegible] whooping-cough, 8 to "fever" (typhus, enteric, [illegible]·6 to diarrhœa, 3 to scarlet fever, 2 to diph[illegible], not one either to small-pox or measles; [illegible]y 32 deaths resulted from these principal [illegible]eases, against 56, 51, and 43 in the pre[illegible] weeks. These 32 deaths were equal to an [illegible] of 1·3 per 1000, which was 1·6 below [illegible]tes from the same diseases in the twenty-[illegible] towns. The fatal cases of whooping-[illegible] had been 7 and 12 in the preceding two [illegible]s last week, of which 9 occurred in Glasgow, [illegible]burgh, and 2 in Aberdeen. The 8 deaths from [illegible]lso showed an increase upon the numbers in the [illegible]wo weeks, and included 4 in Glasgow, 3 in Edin[illegible]d 1 in Paisley. The 6 deaths attributed to diar[illegible]wed a considerable further decline from recent [illegible] and were 5 below the number in the [illegible] of last year. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 178, 175, and 151 in the previous three weeks, further declined last week to 143, and were 31 below the number returned in the corresponding week of last year. The causes of 88, or nearly 17 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 34·4 and 22·8 per 1000 in the preceding two weeks, further rose to 37·1 in the week ending January 2nd. During the thirteen weeks of last quarter the death-rate in the city averaged 27·0 per 1000; the mean rate during the same period did not exceed 19·5 in London and 19·0 in Edinburgh. The 251 deaths in Dublin last week showed an increase of 97 upon the number returned in the previous week, and included 32 which were referred to the principal zymotic diseases, against 23, 28, and 16 in the preceding three weeks; 17 resulted from whooping-cough, 6 from "fever" (typhus, enteric, or simple), 6 from diarrhœa, 1 from measles, 1 from scarlet fever, 1 from diphtheria, and not one from small-pox. These 32 deaths were equal to an annual rate of 4·7 per 1000, the rate from the same diseases last week being 3·6 in London and 1·0 in Edinburgh. The fatal cases of whooping-cough, which had been 8, 15, and 10 in the previous three weeks, rose last week to 17, and exceeded the number in any previous week of the year. The deaths referred to "fever" and to diarrhœa also showed a considerable increase upon the numbers in the previous week. Thirteen inquest cases and 6 deaths from violence were registered; and 79, or nearly a third of the deaths, were recorded in public institutions. The deaths both of infants and of elderly persons showed a marked increase upon the numbers in the previous week. The causes of 37, or nearly 15 per cent., of the deaths registered during the week were not certified.

Correspondence.

"Audi alteram partem."

"HYPOPION" AND "HYPOPYON."

To the Editor of THE LANCET.

SIR,—In the ophthalmological section of your interesting summary of the Annus Medicus for the year 1885 you refer (presumably) to the condition of pus in the anterior chamber of the eye under the term *hypopion* (see THE LANCET, Dec. 26th, 1885, p. 1197.) Though this is a common way of spelling the word, it is, I submit, incorrect, and should be *hypopyon*. So far as the word hypopion is applicable to a pathological condition, it denotes, not a collection of pus, but an extravasation of blood into the lower eyelid—in fact, what is called a "black eye." Both the words "hypopion" and "hypopyon" are to be found in the works of Hippocrates and of Galen, or in the writings ascribed to them, as well as in the writings of many other Greek medical authors; but their meanings are never confounded. "Hypopyon" is derived from *ὑπόπυον*, and primarily signifies a collection of pus anywhere; whereas "hypopion" comes from *ὑπώπιον*, and primarily signifies the part of the face under the eye.

In the seventh book of the *Epidemics*, which has been erroneously ascribed to Hippocrates, mention is made of certain swellings about the knees and feet which resemble purulent infiltrations, *ὥσπερ ὑπόπυα*. Later, however, the term "hypopyon" was applied commonly, if not exclusively, to pus in the anterior chamber or in the cornea. In the treatise *Medendi Methodus* Galen not only definitely states that pus in the eye is called "hypopyon," but gives an interesting account of the practice of a contemporary oculist, named Justus, who cured many hypopya by shaking the patient's head. The word is similarly employed in some of the spurious Galenic writings, and from the time of Galen forwards is not infrequently used by the other Greek medical authors.

The word "hypopion" underwent a characteristic change before it dropped out of ordinary use. Originally it was employed to signify, as already stated, the part of the face under the eye (see Hippocrates, *de Intern. Affect;* Ruffus Ephes., *de Appell. part. corp. hum.*, lib. i., cap. vi.; Oribas, *Medicin Collect. de Ruffi Comment.*, cap. i.; *et al.*) Later,

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doubtless from the frequency of the lesion, the term came to signify an ecchymosis of the lower lid (see Galen, *de Compos., sec. loc.*, lib. v., cap. i.; Pseudo-Galen, *lib. de Virt. Centur.*, cap. iv.; *lib. de Med. fac. parab. ad Solon*, cap. xii.; Oribas, *Euporist*, lib. iv., cap. l.-li.; *de Virt. Simplic.*, lib. ii.; *de rebus à A incip.*; Aëtius, *Tetrabib.* ii., ser. iv., cap. ii.; Paulus Aegineta, lib. iv., cap. xxx., *et al.*)

In the case of the two words referred to in this note, it will be seen that it is of absolute importance not to confound the letters *i* and *y*. Some degree of care and discrimination is more important now, perhaps, than ever, inasmuch as from ignorance of the significance of the letter *y* as a representative of the Greek *upsilon*, there seems to be a growing tendency to adopt a false representative in the letter *i*. I am, Sir, yours truly,

Harley-street, Jan. 1st, 1886. JOHN TWHEDY.

THE REAL CAUSE OF HOSPITAL DISTRESS, AND THE ONLY MEANS OF CURE.

To the Editor of THE LANCET.

SIR,—I have noticed, more especially this Christmas-tide the numerous and urgent appeals made to the public on behalf of hospitals both in the lay and medical press; in the latter, many of these appeals have in a general way been made the subject of editorial remarks urging their importance. It has often occurred to me, and it has been more especially brought home to me at the present time, when I notice the persistent frequency and increasing urgency of these appeals, that the subject is one very little understood by the general public and very little cared for by the profession, whom it most concerns, and this very much to the detriment of both. To go to the root of the matter at once, it is most apparent to me that the real cause of this great and widespread hospital distress is the still greater and more rampant evil—viz., hospital *abuse*. Hospitals, as they now exist, and as at present managed, by granting aid to all who seek it within (and in many cases without) their walls, without exercising any discrimination as to the real fitness of the individual patient, are not only needlessly and heedlessly squandering the money of the benevolent, but they are at the same time inflicting a real and crying injustice on the large body of general practitioners who may, unfortunately, be obliged to attempt to practise under the shadow of their wings. But in this connexion there is a still greater evil existing, and this is the system that is gradually creeping into many of these institutions—of exacting a fee from all those who seek their aid, arranged on a sliding scale to suit the pocket of each patient. Our profession has never been accused of possessing too great a spirit of unanimity or co-operation; we have, in fact, always been a living contrast to trade-unionism; but for bare-faced robbery of the general practitioner, in order that patients and fees may be provided for the staff of a public institution, commend me to the system which I have now described. Under what plea of justification, I would ask, can any so-called hospital impose fees on patients of an amount equal to in many cases, and falling far short of in the majority of cases, the very moderate fees of the general practitioner? Is the competition fair and honest? Is it not rather carried on and fostered by subterfuge on the part both of the staff and governing body of these institutions? It is my misfortune to live in the immediate neighbourhood of three hospitals: one of these is a large general hospital, where free aid is granted to all applicants without comment or distinction, unless in a gross and very apparent case of what I may call "fraud." If such a case arise, what happens? Why, what I have many times seen is this, that the patient is requested to call the next morning at the physician's or surgeon's private house, and is mulcted in a fee of a reduced character; this may or may not be the proper treatment, according to opinion. I maintain that the proper place for that patient is the surgery of a general practitioner, and he should not be made a source of profit to any member of a consulting staff. And this brings me to another point—viz., Why is this system of total disregard of supervision in the patients fostered, and by whom? I believe, Sir, that it is fostered by the medical staff, and this for the express purpose of enabling them to build up a reputation by its means; for it stands to reason that a better class of hospital patients can have more outside influence than the very poor. That this is no imaginative view I am well assured, for many times have patients of my own, who have been able to afford to pay me bills of pounds, subsequently received free advice at this institution. Then, as to the two other hospitals to which I have referred. In these, payments are exacted from each patient. Some of this money finds its way into the pockets of the staff, and thus, as I have shown, the local medical man is defrauded under the guise of charity. Now, Sir, are hospitals and hospital staffs to be allowed to exist for the purpose of gathering within the walls of the one and the pockets of the other the people who are not poor and the money which should constitute the fees of the general practitioner? And herein lies the remedy: In the large general hospitals eliminate by a careful system of discrimination all but the really necessitous, and enforce in all cases a small charge for medicine (if the patient is a pauper, the parish doctor or workhouse infirmary is the proper place). In all accident cases, when the patients are in a position to pay for attendance they should be obliged to seek private medical aid as soon as their immediate necessities are attended to; and they should not be allowed to continue as out-patients for a long time. Were these suggestions carried out, I believe that the funds of every hospital would be sufficient for its wants; in any case, they would not be misappropriated as at present. With regard to the other class of hospitals of mushroom growth and predatory principles I would, in the first place, remove them from all participation in the Sunday and Saturday Hospital Funds, since they are not *charitable* institutions properly so called; and I would warn the benevolent of their tendencies. In the second place, let the medical men of the neighbourhoods where these exist organise a combined attack, by offering to do all that they do, and not passively to allow as at present their legitimate patients to be swallowed up by spurious and fraudulent eleemosynary institutions. Personally I intend to take this course, and I shall each morning and evening, in an attempt to stem this tide, devote one hour to patients who would otherwise become patrons of these establishments, and my scale of fees will be arranged on the same principles, to suit the pocket of each patient. Thus I shall hope to contribute my iota towards remedying this great evil of hospital abuse, and so alleviate, in some degree, the consequent distress, at the same time practically entering my protest against the wholesale spoliation of general practitioners by their professional brethren under the guise of charity, which here indeed does "cover a multitude of sins."

I am, Sir, yours truly,

Hampstead-road, N.W., Jan. 6th, 1886. JAMES S. M'DONAGH.

THE RELATION OF THE PAROTID TO THE GENERATIVE ORGANS.

To the Editor of THE LANCET.

SIR,—In the last number of the *Medical Times and Gazette* there is an abstract of a paper, read by Dr. Goodell before the American Gynæcological Society, on Inflammation of the Parotid Glands following Operations on the Female Genital Organs. He gives five cases, and ten were added by other members of the Society. Those who are interested in this subject will find in the same journal (vol. ii., 1881, p. 290) an account of five cases of parotitis after ovariotomy, which were published by Professor Möricke. I have a note of a similar case which occurred at St. Bartholomew's Hospital; and Dr. Cribb, of Highbury, allows me to refer to a case where acute parotitis, with a pulse of 120 and a temperature of 104·5°, followed the introduction of a pessary. I have also notes of parotitis after lithotomy and after circumcision. But there are cases where simple parotitis follows pelvic or abdominal injury or disease, without any affection of the generative organs: after gastrostomy (Transactions of the Medical Congress, 1881); after gastrotomy (Transactions of the Pathological Society, 1884); after evacuation of an abscess round the vermiform appendix (Transactions of the Clinical Society, Dec. 1885). And perhaps the parotitis of typhus and typhoid (*Medical Times and Gazette* vol. ii., 1885, p. 839) is of this kind. These cases of parotitis following injury, not of the generative organs, but of the abdominal viscera and peritoneum, may perhaps show that the relation of mumps to orchitis is not due to any connexion between the salivary glands and sexual glands, but to some wider connexion between the glands at the

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beginning of the alimentary canal and the membrane which is reflected over the rest of it and over the testicles and the female generative organs. This was suggested at the last meeting of the Clinical Society by Dr. Barlow and Mr. Godlee. On the other hand, if the case of parotitis after circumcision, quoted above, was more than a mere coincidence, and if the few published cases of inflammation of the breasts and labia in mumps were more than coincidences, then there may be some special bond between salivary organs and sexual organs. It is said that in camels the salivary glands are enlarged during the breeding season, and Darwin has collected many cases of enlargement of the thyroid and the odoriferous glands in various animals during the same season ("Descent of Man," vol. ii., p. 18). Thus the salivary glands, like these other glands, like the hair on the body, and like the vocal organs, may be related directly to the generative organs. But it would be a good thing if we could get rid of guess-work, and find the connexion, in mumps, not between salivary glands and sexual organs, but between salivary glands and peritoneum.

I am, Sir, yours truly,

Wimpole-street, Jan. 4th, 1886. STEPHEN PAGET.

THE TREATMENT OF PERTUSSIS.

To the Editor of THE LANCET.

SIR,—There seems to be a tendency amongst medical practitioners, even at the present time of rational therapeusia, to consider too much the symptoms of a disease as a basis for their treatment, instead of the *fons et origo mali*. In no complaint have I noticed this so much as in whooping-cough. The medicines for the most part prescribed in this disease have generally an antispasmodic and sedative effect, such drugs as belladonna, bromide of ammonium, and croton chloral hydrate are, as a rule, the favourites. These frequently relieve the spasmodic cough, and, if the patients are cured by their means, it is simply because they are tided over the danger, and the disease is allowed to wear itself out. Now, there is a well-known symptom which is met with in nearly every case of whooping-cough, and that is the occurrence of offensive alvine evacuations; and it was the variation in the character of these, as well as in the number of whoops in certain states of the weather, that led me to make some remarks at one of the conferences held at the International Health Exhibition on July 17th, 1884, in the discussion following Dr. Tripe's paper on "Some Relations of Meteorological Phenomena to Health." If I may be permitted, I will quote from my remarks:[1] "During March and April, 1882, a rather severe epidemic of whooping-cough occurred at Chingford, a small village about ten miles to the north of London. Whilst watching the course of the cases he noticed on several occasions a decided remission in the symptoms, and then at other times a marked aggravation. This induced him to suspect some powerful atmospheric influences at work, and on consulting his charts he found that the increase in the number and violence of the whoops corresponded to an absence or a very low percentage of ozone or other purifiers in the air; whilst, on the other hand, a decrease was accompanied by an extremely deep tinting of the ozone papers. This seemed to suggest a new line of treatment, and forthwith all his little patients suffering from this disease were treated with an antiseptic medicine internally, and the result, he was pleased to say, was very satisfactory; and, moreover, further experience confirmed the plan adopted. He had not yet published in any of the medical journals this new therapeutic of whooping-cough. He would have done it before, but so many specifics had been recommended and found wanting, that he was loth to prematurely risk the possible addition of another to the list of multitudinous drugs of a questionable nature used in this complaint. The present time, however, seemed to be a happy one for making it public. It was just as well to refer to the fact that the [illegible] spectroscope would prove a rough and ready, but reliable, ozonometer to those who did not suffer from colour-blindness, and who possessed the requisite acuteness of vision."

The antiseptic medium referred to above is carbolic acid; [illegible] prescribe with tincture of tolu in as strong a [illegible] is safe to give. Previous to commencing with this mixture, I always order a smart purge of compound jalap powder or compound scammony powder. The result of this treatment I have found to be, almost without exception, highly satisfactory, and in many cases it acts as a very rapid specific. To many readers it may seem almost incredible that this remedy has frequently cured little patients of the kinks and sickness after the administration of from ten to twenty doses of the mixture.

In suggesting the above line of treatment, it is far from my purpose to encourage empiricism, and to advocate these drugs as the only ones that ought to be administered; of course cases are met with where the addition of some other medicine to the above mixture would prove beneficial. I would further add that this remedy, as far as my experience goes, will be found as much a specific for this troublesome complaint as quinine is for intermittent fever.

I am, Sir, yours obediently,

Bournemouth, Dec. 10th, 1885. W. F. CORY.

[1] Clinical Journal of the Royal Meteorological Society, vol. x., p. 284.

SUPRAPUBIC LITHOTOMY.

To the Editor of THE LANCET.

SIR,—From what has lately been very clearly and fully written on the above subject, it would appear to be *the* operation in many cases of vesical calculus. Having performed the operation twice in the last few weeks, I should like to mention what I have not seen suggested, but which very materially simplifies the operation—viz., to introduce a long *well-bent* sound into the bladder, and by depressing the handle to bring the point up close to the pubes; by so doing, the end of the sound is easily felt after the abdominal walls are divided. The opening into the bladder may be made upon the sound, which gives a firm support during the incision. It is not necessary to transfix the bladder with a needle, or bruise it in any way. The sound is retained in the opening until the finger is admitted into the bladder. By this simple procedure it becomes unnecessary to inflate the rectum, with its after-discomfort, or inject the bladder—a proceeding, according to reported cases, not without danger.

I am, Sir, yours &c.,

J. HODGSON WRIGHT,

Dec. 31st, 1885. Senior Surgeon, Halifax Infirmary.

MANCHESTER.

(*From our own Correspondent*)

A NEW PROTECTION SOCIETY.

SOCIETIES for the protection of the interests of the medical profession appear to be on the increase. In addition to those already existing in the metropolis, it was, at the last meeting of the Lancashire and Cheshire branch of the British Medical Association, resolved "That it is desirable that a Medical Defence Society should be formed in connexion with the British Medical Association," and a committee was appointed to inquire into the practicability of the scheme, and to report to the next annual meeting. Amongst the subjects discussed at the same meeting was an interesting one on "Alcoholic Paralysis," by Dr. Dreschfeld, who cited several cases that had come under his notice.

SIR WILLIAM ROBERTS.

The honour of knighthood conferred upon Dr. William Roberts is acknowledged by all to be well deserved by the recipient. Sir Wm. Roberts has done good work in the science of medicine, and has long occupied a leading place in the profession in the north of England. As a compliment to the medical profession generally it is satisfactory, for both law and science, in the persons of Sir Thos. Baker and Sir Henry Roscoe, have had this recognition conferred upon them; but since the death of Sir Jas. Bardsley, now some years ago, no medical man in Manchester has possessed the coveted prefix to his name.

THE NORTHERN COUNTIES HOSPITAL FOR INCURABLES.

At the annual meeting of this institution a letter was read from Mrs. Fraser, enclosing a cheque for £100 in memory of her late husband, the Bishop, and alluding to it as one of his favourite institutions. The number of inmates is at present eighty-four, the limit of accommodation is almost reached, and many applications are constantly received; therefore

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the committee ask for means to extend the hospital so that 150 patients may be provided for. To do this, £10,000 will be required, and they appeal for this sum to meet a pressing want. The mayor of Manchester presided, and he testified to the economical administration of the institution, stating that for economy and efficiency it came very close to the Eye Hospital, which he had always considered to be in advance of most of our local hospitals in this respect.

INSANITARY CONDITION OF PUBLIC PLACES.

Complaints have of late been frequent and loud as to the deficient hygienic arrangements of two of our much-used public places—viz., the Free Trade Hall and the Coroner's Court. In the former, although a building of large dimensions, the condition of the atmosphere when crowded, as at our large concerts, is often well-nigh unbearable, necessitating the opening of doors, &c., which create draughts so keen that coat-collars are, perforce, turned up for protection. The ventilation is, however, now receiving attention, so that we may hope for better things. It is singular how difficult architects find this (in theory) simple matter of ventilation, especially in our public places of entertainment. The other building referred to is the Coroner's Court, and most medical men in Manchester who have had to attend this dreary place will admit the justice of the complaint that, not only in the ventilation of the court, but in all its surroundings and accommodation, or want of accommodation, it is a disgrace to the municipal authorities of the city.

THE TREATMENT OF INFECTIOUS DISEASES.

That constant source of squabbling between local sanitary authorities and boards of guardians, the responsibility for the cost of maintenance in hospital for patients suffering from infectious disease, has again come up—this time at the Gorton Local Board. This board was startled by the receipt of a bill for £76 from the Royal Infirmary for the use of the Monsall Fever Hospital in August and October only. If the local board had to maintain its own hospital, it would find that this sum would go a very little way towards its expenses. Whether the patients were on the borderland of pauperism or not is rather beside the question, or whether paid for by the guardians or by the sanitary authorities, the money in each case comes from the rates. The important feature is that these should be provided for in some manner that ensures their prompt removal as centres of infection, and at the same time in the most economical manner to the ratepayers. The consideration of this question opens up a much larger one as to the right principle of our present arrangement, and whether a charity supported by voluntary contributions like the Royal Infirmary should expend any of its funds for purposes which it is the duty of the health authorities to provide for.

COMPENSATION TO MEDICAL OFFICERS.

The extension of the city boundaries and the taking in of the Rusholme and Bradford districts has brought up the question of compensating the officials of the local boards of those districts. At the last meeting of the City Council it was proposed to pay an annuity of £24 and £8 respectively to the two medical officers of health of these districts, but there was some opposition to this, and since then one of the city auditors has given formal notice to the corporation that he shall hold its members responsible for any such illegal payments as compensation for loss of office.

The new Eye Hospital is now opened for the reception of out-patients, but the formal ceremony of opening is yet to take place. At present patients are treated at both the old and the new buildings.

Manchester, Jan. 4th.

PARIS.

(From our own Correspondent.)

POST-MORTEM EXAMINATION OF A HYDROPHOBIC PATIENT.

DR. BOCHEFONTAINE has very obligingly furnished me with the following report of the post-mortem examination of the body of the hydrophobic patient referred to in my letter of the 26th ult. The patient who died from rabies in Professor Vulpian's ward at the Hôtel Dieu, on the 11th of December last, was about twenty-seven years of age, and of muscular build. The autopsy was performed on the following day, when the undermentioned characters were noted:—A scar on the left arm about the level of the insertion of the deltoid. Brain: The grey substance of the cerebrum and that of the cerebellum, including the medulla oblongata, were highly congested, and the grey substance of the spinal marrow was also in the same condition. Larynx and trachea: The mucous membrane of these organs presented patches of a dark-red colour. The bronchial tubes, and in fact the whole tissue of the lungs, were of the same hue. An omental hernia was observed on the right side, but without any complication. Nothing particular was noticed in the other organs. The blood was loaded with bacteria. The ventricles of the heart were filled with coagulated blood and with discoloured fibrinous clots.

M. PASTEUR AND INOCULATION FOR RABIES.

The four American boys who, you will have heard, were bitten about three weeks ago at Newark by a dog reputed to be mad were brought to Paris for M. Pasteur's treatment. They were accompanied by a physician, and M. Pasteur inoculated them with the rabic virus on December 21st and subsequent days, the last inoculation having been performed on New Year's Day. They are now on their way to their homes. The youngest of the party, who is only six years old, was accompanied by his mother. I learn that the physician was initiated into the secrets of the preparation of the virus, but he did not take any back with him, as M. Pasteur gave him to understand that the virus would keep but a very few days, and that it would soon lose all its virulent properties at sea. Another American, by the name of Kauffmann, who came over in the *Labrador*, was bitten on Nov. 22nd. He was inoculated by M. Pasteur on Dec. 29th, and, although thirty-eight days had elapsed between the bite and the inoculation, M. Pasteur is hopeful of the successful issue of the operation. Another American, named Sattler, and who is said to be a physician, has also presented himself for inoculation, but M. Pasteur, not finding any scar or mark of a bite, declined to operate upon him. It turns out, however, that it was only a ruse on the part of the American, as he wished to learn the secret of M. Pasteur's mode of operation.

The Minister of Public Instruction of Hungary has written to M. Pasteur, asking him if he would consent to instruct a physician in the steps of his method of inoculation for hydrophobia. The answer being in the affirmative, the Hungarian physician is shortly expected here.

DEATH OF DR. DECHAMBRE.

I regret to have to report the death of Dr. Amédée Dechambre, which took place, from apoplexy, on the 4th inst., in the seventy-fifth year of his age. He was the editor of the *Gazette Hebdomadaire*, and was for many years connected with the Parisian medical press, of which he was the senior member. He was also member of the Academy of Medicine, physician to the Council of State, and officer of the Legion of Honour.

Paris, Jan. 5th.

Obituary.

JAMES MARR SNOW, M.R.C.S., L.S.A.Lond.

THE announcement of Mr. James Marr Snow's death, after a few days' illness, has been received with sincere regret, not only by his professional brethren in Lincoln and its neighbourhood, but also by numerous friends and patients. The deceased gentleman, who had practised in Lincoln for upwards of half a century, was highly esteemed, not only for his professional abilities, but also for his honourable character and kind and courteous demeanour towards all classes.

Mr. Snow was educated at the then United School of Guy's and St. Thomas's, and passed the College of Surgeons and Apothecaries' Hall in 1831. He shortly after commenced practice in Lincoln as partner with the late Mr. Rawlings. For many years he held the appointments of surgeon to the Royal North Lincoln Militia and the Lincoln Blue-coat School, besides having an extensive private practice. Mr. Snow appeared to be in his usual good health when he retired to rest on the night of Tuesday, December 22nd,

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having been engaged seeing patients until late in the evening. On his servant going to his room on Wednesday morning, she found him partially out of bed. He remarked very quietly that he thought he must have had a shake, as he could not use his left hand, and he also complained of pain in his head. When seen shortly afterwards by some of his medical friends, it was only too evident that effusion had taken place on the brain. The usual symptoms followed, and a calm, painless death took place at 5 minutes past 6 on Monday morning, December 28th. Mr. Snow was buried in the cemetery of St. Mary Magdalene, on Tuesday, December 31st, his funeral being attended by several of his medical brethren and fellow-citizens, who will long bear his memory in affectionate remembrance.

PROFESSOR JOHN C. DRAPER, M.D., LL.D.

BY the death of Dr. J. C. Draper, which occurred on the 20th ult., from pneumonia, after an illness of only four days, New York has lost one of its most popular medical lecturers and authors. Born in Virginia in 1835, Dr. Draper graduated at the University of the city of New York in 1857, having for a year prior to this held the office of house-physician and surgeon of Bellevue Hospital. In 1858 he was appointed analytical chemist in the New York University, a position he retained for thirteen years. In 1860 he assumed the Professorship of Chemistry in the Cooper Institute, but relinquished it in three years; and in 1862 he served as surgeon in the United States Volunteers, and was on General Wood's staff at Harper's Ferry when that place surrendered. Professor Draper was widely and favourably known as an author, several of his works on Chemistry holding an important place amongst text-books. His last work, an advanced text-book on Medical Physics, was published a short time before his death, and such was the absorbing interest this work possessed for its author that the attention he gave it probably hastened his decease.

Medical News.

SOCIETY OF APOTHECARIES.—The following gentlemen passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Dec. 31st:—

Christopherson, Cecil, Grove House, Blackheath.
Fellowes, William Edmund, Newcastle-on-Tyne.
Lyndon, Arnold, Adelaide-road, S. Hampstead.
Maloney, William Robert Nuttall, Melbourne, Australia.
Young, Charles Wheeler Forrest, The Chase, Clapham-common.

The following passed the examination in the Science and Practice of Medicine, and received certificates to practise:—

Jowers, Reginald Francis, M.R.C.S., Old Steyne, Brighton.
Simcock, George, Mile End, Landport.

THE offertories at York Minster on the 3rd inst. were on behalf of the Royal Medical Benevolent College.

THE death of Joshua B. Lippincott, the well-known Philadelphia publisher and bookseller, is announced.

MEDICAL MAGISTRATE.—Mr. Robert N. Robson, M.R.C.S., L.S.A., has been placed on the Commission of the Peace for the city of Durham.

THE new Russian Society of Children's Doctors has just held its first sitting, Professor Bystroff being chosen president, and Dr. J. J. Radecki vice-president.

THE Glasgow Samaritan Hospital for Women, the first institution of its kind in Scotland, was formally opened on the 4th inst.

FLEET SURGEON SEDGWICK has taken over the duties of Senior Medical Officer of Portsmouth Dockyard, in succession to Mr. O'Malley.

PASTEUR INSTITUTE OF THE CITY OF NEW YORK.—This institution was incorporated on the 2nd inst., its declared objects being the study and treatment of rabies and diseases susceptible of inoculation. The names of the promoters furnish a sufficient guarantee that every effort will be made to attain the results for which the institute has been founded.

THE Austrian Minister of War has ordered compulsory vaccination with calf lymph for the whole of the Austrian Army. The order will be carried out with all expedition.

A DEATH from chloroform has occurred at Tunstall. The anæsthetic had been administered twice to the deceased on previous occasions, and he had come well out of it, but the third time proved fatal.

THE Hospital Sunday Collection in Liverpool will be held on the 10th inst. The amount realised last year was £9216, a sum which, it is to be hoped, will be considerably exceeded on Sunday.

A SENSIBLE RESOLUTION.—At the meeting of the Whitby Board of Guardians on the 2nd inst. several members stated that the amount of stimulants, averaging 9½*d.* per head per annum, used in the workhouse, was, in their opinion, excessive. Common sense, however, at last prevailed, and it was resolved that the matter be left to the discretion of the medical officer.

LONDON HOSPITAL.—On the occasion of the opening for inspection of the new Nursing Home adjoining this hospital, the 150 nurses of that institution determined to signalise the event by presenting their matron, Miss Eva Lückes, with a writing-table. Accordingly, on the 5th inst. they assembled to the number of 140, and the nurse who had been longest on the establishment, in the name of her colleagues, asked Miss Lückes' acceptance of the gift.

PROPOSED PUBLIC PARK FOR WEDNESBURY.—On the 30th ult. a Local Government Board inquiry was held at Wednesbury, touching an application on the part of the local board for sanction to a loan of £5000 for the provision of a public park. The project was opposed by several of the inhabitants on account of the proximity of the proposed site to the cemetery; but since the inhabitants of the town are in the habit of promenading the cemetery itself, this objection can hardly be deemed sufficient ground for the refusal of sanction. The result of the inquiry is not yet known.

OLD MEAT.—On the 5th inst. a butcher was charged before the Brighton magistrates with having on his premises meat unfit for human food. The peculiarity of the case was that there was no specific disease in the meat, nor was it unwholesome through being kept too long, but it was shown that the animal was of great age, and the medical officer of health asserted that the flesh when submitted to him was not fit for food, and that a certain amount of disease was inseparable from old age. The magistrates fined the defendant, who had been twice before them previously, £10 and costs, or a month's hard labour.

HOSPITAL SATURDAY FUND.—The Board of Delegates of this fund met on the 2nd inst., when the Council presented their report for 1885, according to which it appears that £11,192 had been received altogether, and £9500 were awarded to different metropolitan hospitals, dispensaries, and convalescent institutions, being £500 more than in 1884. It is to be regretted that the percentage of expenditure for the year had not been reduced, but this was explained by the fact that there had been a sudden demand upon the funds for a largely increased number of boxes, and the expenditure attending the change of date in the collection.

YORKSHIRE ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—At the annual meeting of this Association, recently held at York, a very satisfactory report by the committee was read and adopted; after which Mr. North, who has been re-elected President, delivered an address, in which he pointed out the advantages of organisation, and recapitulated the various sanitary improvements effected in York during the past year. Papers on Enteric Fever were afterwards read, and an animated discussion followed.—The following is a list of the officers and committee elected unanimously to serve during the ensuing twelve months:—President: Mr. S. W. North (York). Vice-Presidents: Mr. T. W. Hine, M.B. (Bradford), Dr. W. K. Giddings (Calverley), and Dr. Britton (Halifax). Committee: Dr. H. W. Arbuckle (Thorne), Mr. G. Goldie (Leeds), Dr. J. Hardwicke (Rotherham), Mr. A. Roberts (Keighley), Dr. J. W. Mason (Hull), and Mr. W. Burman (Wath). Secretary: Dr. J. Mitchell Wilson (Doncaster). Treasurer: Dr. R. Bruce Low (Helmsley).

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THE LATE MR. EBDEN.—In Haughley, Suffolk, some patients and friends have raised a memorial to the late Mr. W. Ebden, who died in 1884, by recasting the tenor bell of the church at an expense of about £30.

DR. PARSONS, one of the medical officers of the Local Government Board, has, we understand, paid a visit to Kidderminster in consequence of statements regarding the water-supply of the town. Mr. Arnold Taylor, one of the engineers to the Local Government Board, will assist Dr. Parsons in his inquiries.

ILLEGAL TITLES. — At Westminster, Mr. Wm. Yelverton Davonport, of Vincent-square, Westminster, appeared to a summons before Mr. D'Eyncourt, to show cause why a distress warrant, to satisfy a fine of £10 and five guineas costs, should not issue and be levied on his effects. Mr. Pridham, solicitor to the Medical Defence Association, appeared to support the summons; and Mr. E. D. Rymer represented the defendant. In May, 1884, Mr. Davonport, who styled himself a surgeon on his cards and doorplate, and practised as a doctor in the Vauxhall Bridge-road, was mulcted in the sum of £15 5s., fine and costs, for representing and describing himself as a qualified surgeon without possessing the necessary diploma. Mr. Davonport then contended that having passed the surgical part of the College examination, he might call himself surgeon. Notice of appeal was given, but never prosecuted; but this of course was not allowed. Since then he has passed the medical part, but not the midwifery. Mr. Davonport's solicitor begged for an adjournment that counsel might be heard for Mr. Davonport. But the Judge ruled that there had been the fullest opportunity for appeal, and that distress must issue.

SOCIETY FOR THE STUDY AND CURE OF INEBRIETY.—A meeting of this Society was held at 11, Cavendish-street, on Tuesday last, the president, Dr. Norman Kerr, in the chair. The Chevalier de Proskow-Marstorff of Vienna, president of the Austrian Society for the Study and Cure of Inebriety, read a paper on Inebriety in Austria. In Moravia there was one public-house for every 222 inhabitants, and it was sought to reduce this to one for every 500. In Vienna, 6555 drunkards had been arrested in 1884, of whom 5771 were males and 784 females. The taxes on liquors were only one twenty-second of those in Britain. The Austrian Parliament had recently passed a law to check inebriety. Dr. A. Peddie, of Edinburgh, read an elaborate paper on the Habitual Drunkards Act, pointing out its inefficiency and inadequacy to accomplish the objects aimed at. Dr. Peddie insisted on the recognition of inebriety as a disease, and strongly supported the discontinuance of the necessity of habitual drunkards having to sign a declaration before two magistrates prior to being admitted into a retreat. He proposed a simple contract between the applicant and the licensee of the retreat. He was in favour of Government inspection of all patients in houses, and of compulsory committal in certain cases. A discussion followed.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BLUNT, Mr. T. P., has been appointed Analyst for the County of Hereford.

CHILDE, LETTERSTEDT FREDERICK, M.B.Lond., M.R.C.S., has been appointed House-Surgeon to Guy's Hospital.

DINGLEY, B. A., M.D.Lond., M.R.C.S., has been appointed Medical Officer for the Second District of the West Bromwich Union.

EASBY, W., M.D., has been appointed Surgeon to the Great Northern Railway Company for Peterborough and District, vice J. Hair, M.D., resigned.

FARRER, GEORGE A., M.R.C.S., of Brighouse, Yorks, has been appointed Certifying Surgeon under the Factory and Workshop Act, vice Robert Farrer, M.R.C.P., M.R.C.S., resigned.

FENTON, J. S., M.B., B.Ch.Dub., has been appointed Medical Officer for the Second District of the Brackley Union.

FLOYER, WILLIAM WADHAM, M.B.Lond., M.R.C.S., has been appointed House-Physician to Guy's Hospital.

HARRIS, S. C., L.F.P.S.Glas., L.S.A.Lond., has been appointed Medical Officer for the Ely Trinity District of the Ely Union.

HEWITT, FREDERIC W., B.A., M.B.Cantab., Anæsthetist to Charing-cross Hospital, has been appointed Assistant Anæsthetist to the Dental Hospital of London.

JACOB, E. L., M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer to the Chertsey Rural Sanitary Authority.

KELLY, P. A., L.R.C.S.I., L.R.C.P.Ed. (of Aliwal North, Cape Colony), has been appointed by the Cape Government to attend the employés on the Local Terminal Section of the Railway as far as Molteno.

MOORE, H. G. H., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the East District of the Bingham Union.

MONTGOMERY, R. J., A.B., M.B., M.Ch. T.C.D., has been appointed Resident Clinical Clerk in the Rotundo Hospital, Dublin.

NORTON, R. R., L.R.C.P., M.R.C.S., has been appointed Medical Officer to the Tottenham and Edmonton Dispensary, vice J. Bunting, M.R.C.S., L.S.A.Lond., resigned.

OWEN, ARTHUR DEAKER, M.R.C.S., L.S.A.Lond., has been appointed House-Surgeon to the Teignmouth Infirmary.

SALTER, JOHN R., M.B.Lond., M.R.C.S., has been appointed Medical Officer for the Third District of the Tonbridge Union, vice Gargory, whose appointment has expired.

SPONG, CHARLES STUART, M.R.C.S., has been appointed House-Surgeon to Guy's Hospital.

SUTTON, ALFRED MARTIN, M.B.Lond., M.R.C.S., has been appointed House-Physician to Guy's Hospital.

SWETE, E. H. W., M.D.St. And., M.R.C.S., L.S.A.Lond., has been appointed Analyst for the County of Hereford.

SYKES, E. J., M.D., C.M.Edin., has been appointed Medical Officer to the Tottenham and Edmonton Dispensary, vice J. Bunting, M.R.C.S., L.S.A.Lond., resigned.

TAYLOR, ALFRED ERNEST, M.R.C.S., has been appointed House-Surgeon to Guy's Hospital.

WALTERS, F. RUFENACHT, M.D. & B.S.Lond., F.R.C.S.Eng., has been appointed an Honorary Surgeon to the Westminster General Dispensary, vice Dr. J. H. Waters, resigned.

Births, Marriages, and Deaths.

BIRTHS.

BALLANCE.—On the 31st ult., at Harley-street, Cavendish-square, W., the wife of Charles A. Ballance, M.S., F.R.C.S., of a daughter.

BARNES.—On the 8th ult., at Umballa, the wife of Surgeon Raylar Barnes, A.M.S., of a son.

EAST.—On the 1st inst., at Clifton-gardens, W., the wife of Edward East, Surgeon, of a son.

PRATT.—On the 29th ult., at Camden House, Blechingley, Surrey, the wife of Alfred Pratt, M.D., of a daughter.

MARRIAGES.

BATTYE—FISHER.—On the 29th ult., at St. Michael's Parish Church, John Howard Battye, M.D., of Denbigh-street, S.W., younger surviving son of the late R. Fawcett Battye, M.R.C.P., to Jemima, third daughter of John Fisher, Esq., of St. Michael's-on-Wyre, Lancashire.

CROSSFIELD—GREENFIELD.—On the 31st ult., at Broadwater Church, Worthing, Sussex, Arthur Kyffin Crossfield, L.R.C.P., of Dartmouth, eldest son of Robert Crossfield, Esq., of Oak-hill, Isle of Man, to Emma, eldest daughter of Walter Greenfield, Esq., of Holmesdale, Worthing.

PESKETT—PESKETT.—On the 29th ult., at St. Mary's Church, Leyton, Essex, by the Rev. Alfred Peskett, M.A., assisted by the Rev. Charles Edmunds, Vicar Designate of All Saints', Arthur William Chalmers Peskett, M.A., M.B.Cantab., son of the late William Peskett, M.D., Surgeon-Major Indian Army, to Edith Jane, younger daughter of Alfred Peskett, M.D., of Leyton, Essex.

TREND—STEVENS.—On the 5th inst., at Christ Church, Lancaster-gate, Theophilus William Trend, M.D., of Southampton, youngest surviving son of the late Rev. Henry Trend, LL.D., Curate of Wembdon, Bridgewater, to Frances Jane Elizabeth, younger daughter of the late R. G. Stevens, Esq., of Rockstone-place, Southampton.

DEATHS.

CROFT.—On the 1st inst., suddenly, at Abbey-road, N.W., John McGrigor A. T. Croft, M.D., F.R.C.P., F.R.C.S., late of the Ceylon Rifles, aged 65.

DAVIS.—On the 19th ult., at Coquimbo, Chili, suddenly, of heart disease, John William Davis, M.D., L.R.C.S.Ed., Staff-Surgeon R.N., H.M.S. *Heroine*, fourth son of Dr. James Davis, of Ranelagh, co. Dublin, and late of Newport, co. Mayo, aged 37.

DOWNES.—On the 31st ult., at Milford Lodge, Craven Arms, Salop, Thomas Richard Collins Downes, M.R.C.S., L.S.A.Lond., aged 68.

HAZEL.—On the 3rd inst., at Oakley-square, N.W., George Hazel, M.R.C.S., aged 64.

JULIUS.—On the 4th inst., at Portland-terrace, Richmond, Surrey, Frederic Gilder Julius, M.D., in his 75th year.

KING.—On the 2nd inst., suddenly, at 6, Albion-street, Hull, Kelburne King, M.D., F.R.C.S., Surgeon to the Hull Royal Infirmary.

LILLEY.—On the last day of the old year, at his residence, 12, Strathblaine-road, St. John's-hill, New Wandsworth, S.W., Dr. Frederick John Lilley (formerly of 242, South Lambeth-road), eldest son of the late Mr. John Lilley, Surgeon, of Wisbech, Cambs., aged 63.

MICKLEY.—On his passage to Sydney, Arthur George Mickley, M.B.Lond.

PAGE.—On the 5th inst., at St. Ann's, Carlisle, William Bousfield Page, F.R.C.S., J.P. Cumberland, in his 69th year.

SCOFIELD.—On the 2nd inst., suddenly, at Grosvenor, Bath, W. J. J. Scofield, M.R.C.S., F.L.S., formerly of Birmingham, and Hampstead, London, aged 56.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

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Medical Diary for the ensuing Week.

Monday, January 11.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M., and on Tuesdays at the same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M. Also on Thursdays at 2 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
MEDICAL SOCIETY OF LONDON.—Clinical Evening. Living Specimens at 8 P.M. Mr. A. Boyce Barrow: Cases of Varicocele treated by Excision.—Dr. Isambard Owen: Case of Recovery from Albuminoid Disease.—Dr. C. E. Beevor: Cases of Athetosis.—Mr. Walter Pye: Case of Diffuse Lipoma.
ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—8 P.M. Casual communications by Messrs. Field, Hutchinson, A. S. Underwood, and D. Hepburn. President's Valedictory Address.

Tuesday, January 12.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8 P.M. Mr. Bryce Wright: Exhibition of a Bronze Sword, found by the late Capt. Sir William Peel, R.N., at Sandy, Bedfordshire.—Mr. G. F. Lawrence: Exhibition of Flint Instruments from the junction of the Thames and Wandle.—Dr. R. Munro: Ancient British Lake Dwellings and their Relation to Analogous remains in Europe.—Mr. A. L. Lewis: On Stone Circles in Cumberland.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Mr. Gostling: On the Increase in Number of White Corpuscles in the Blood in Inflammation, especially in those cases accompanied by Suppuration.—Dr. Mitchell Bruce and Mr. Bellamy: On a case of Removal of a Tumour from the Roots of the Last Cervical and First Dorsal Nerves.

Wednesday, January 13.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department 9.30 A.M., on Tuesdays and Fridays.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department: 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.
EPIDEMIOLOGICAL SOCIETY OF LONDON.—7.30 P.M. Council Meeting. 8 P.M. Discussion on Dr. Edwardes' paper on the Report of the German Vaccination Commission.
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Mr. G. F. Dowdeswell: On the Microbe of Chicken Cholera.—Mr. A. W. Burnett: Fresh-water Algæ of the Lake District.—Mr. J. W. Stephenson: On Central and Oblique Light in Resolution.
HUNTERIAN SOCIETY.—8 P.M. Dr. Stephen Mackenzie: On Tetany.—Dr. Carrington: Cases illustrating the Treatment of some of the Complications of Acute Rheumatism.
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown by Dr. John Phillips and others.—Dr. Herman: On the Production of the Shape of the Oblique Pelvis of Naegelé.—Dr. Braithwaite: A case of Extra-uterine Gestation treated by Laparotomy in which the Placenta never came away.—Mr. Knowsley Thornton: A case of Removal of both Ovaries during Pregnancy.—Dr. Lewers: A case of Circumscribed Sarcoma of Uterus and Vagina.

Thursday, January 14.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, January 15.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
SOCIETY OF MEDICAL OFFICERS OF HEALTH.—7.30 P.M. Dr. Swete: The Suction of Sewer Gas into the Water-supply a Fertile Cause of Enteric Fever.

Saturday, January 16.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
MIDDLESEX HOSPITAL.—Operations 2 P.M.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, Jan. 7th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Jan. 1	30·09	W.	47	46	...	52	46	...	Overcast
,, 2	29·95	W.	50	48	...	55	47	·03	Overcast
,, 3	30·04	S.W.	42	39	...	52	36	...	Cloudy
,, 4	29·71	W.	51	50	...	52	40	·17	Overcast
,, 5	29·67	W.	38	36	...	43	36	·19	Fine
,, 6	29·54	E.	34	34	...	35	33	·10	Snowing
,, 7	30·09	N.E.	28	...	...	...	26	·27	Overcast

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

BOOKS BOUND IN HUMAN SKIN.

FOLLOWING the example of Mr. Joseph Zachnsdorf, who lately bound two Elzevir editions in human skin, another London binder has recently executed an order to encase a copy of Holbein's "Dance of Death" in the same material—assuredly a most appropriate covering for this work. These are the most recent instances of the use of human skin for such a purpose; but they are far from unique, several criminals in olden days having been, after execution, despoiled of their integument in order that the bookshelves of some *connoisseur* of bindings might be enriched by the ghastly relic.

Mr. W. A. Benshaw.—Our correspondent had better apply to the registrar of the University.

WINTER COMFORTS FOR MEDICAL MEN.

To the Editor of THE LANCET.

SIR,—Mr. Pridgin Teale, in THE LANCET of last week, gave some valuable hints concerning clothing. I would wish to supplement them by the recommendation of a "cardinal" waistcoat—i.e., a knitted one with long sleeves—for very cold weather. The wearing of one, I find renders a heavy top-coat superfluous. On entering a house I unfasten mine, and it slips back out of sight, leaving the ordinary waistcoat visible; the difference in weight and gain of warmth are most desirable. For ordinary winter weather a flannel lining stitched into the back of a summer waistcoat makes it comfortably warm. Considering how little, comparatively, the spinal cord is protected from external variations of temperature by ordinary clothing, I deem this extra warmth important, and have benefited several bronchitic, asthmatic, and other patients by inducing them to have the backs of their waistcoats as warm as or warmer than the fronts. Some correspondence about this appeared in the *Standard* last year. For women also it is desirable to protect the spinal cord from extreme cold.—I am, Sir, yours faithfully,

Malvern, Jan. 6th, 1886. STANLEY HAYNES, M.D.

Mr. F. D. Lys.—Instruction is given at several of the lying-in hospitals—e.g., Queen Charlotte's—or the Maternity Charity, Finsbury-square.

SEPARATE EXAMINATION IN MECHANICS.

To the Editor of THE LANCET.

SIR,—Can any of your readers inform me when a student, who has passed one of the preliminary examinations supposed to be recognised by the General Medical Council, but which does not include mechanics as one of its subjects, can obtain a separate examination in mechanics likely to be recognised by the Council as a compliance with their new demands? At present it seems that the new regulations simply disfranchise a large number of the preliminary examinations, including both the Cambridge Previous and the Oxford Mods.

I may say that I have applied at the offices of the General Medical Council, but could obtain neither attention nor courtesy, much less information. I am, Sir, yours truly,

Jan. 5th, 1886. AN ANXIOUS PARENT AND A F.R.C.S.

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"A SANE LUNATIC."

THE *Globe* complains that difficulty sometimes arises in placing known lunatics in asylums. It will always be thus, so long as the present clumsy system of certifying is maintained. The filling up of the forms required by law is a task of great perplexity in many of the very cases in which it is urgently necessary to place a person of unsound mind in confinement or under control; whereas in cases of doubtful insanity or mere eccentricity there is not, as a rule, any great trouble in getting certificates duly signed. This is not as it should be.

Mr. R. Stevens.—Jervis on the Office and Duties of Coroners, fourth edition, by Melsheimer; published by Messrs. Stevens and Sons, Chancery-lane.

An Old Subscriber.—We have no knowledge of the system.

MIND AND MATTER.

To the Editor of THE LANCET.

SIR,—With reference to the moot questions of ecstasy, miracles, mothers' marks, stigmata, *et hoc genus omne*, that have been recently discussed or alluded to in your pages, there is a passage in Holcroft's Memoirs, vol. ii., p. 197, which calls, in connexion with wounds &c., for reproduction, if it does not compel adverse criticism or comment. It runs to the effect that Carlisle—the late (as I take it) Sir Anthony Carlisle,—who is described by our author as "an acute and thinking mind," thought that the mind ought not to endeavour to regulate disease, its influence being great, but, as he affirmed, prejudicial. He (Carlisle) "instanced that people having wounds, by a close attention to their feelings in the affected part, increased its sensibility to a noxious degree, and that the bones, which, he said (I think erroneously), have themselves no feeling, had, by the attention of patients fixed upon them when diseased, become entirely sensitive. He spoke of these as facts within his own knowledge." "From my own experience," adds Holcroft, "I believe them to be true, and think with him that the attention so fixed upon parts diseased may be prejudicial; but from experiments made upon myself, if the attention be fixed with a tranquil, pacifying, and cheerful temper of mind, I am persuaded they highly benefit the sufferer. This I urged; but his opinion seemed fixed." It is not easy to see how it can come to pass that the attention of sufferers to their feelings in the affected part may aggravate the sensibility of that part in the one instance without producing a correspondingly beneficial effect, under very similar, and without more favourable, conditions in the other. Yet this is what Carlisle affirms or implies; and I ask your readers how far, if at all, their experience accords with his?

This paragraph suggests three agencies or influences, to the consideration of which I bespeak the attention of such of your readers as can speak about them "as facts within their own knowledge":—1. Can the mind regulate (formed) disease in anywise, and, if so, how far or how much? 2. Can people having wounds increase their sensibility one way or the other—i.e., taking the temperature as the analogue of this so-called sensibility? Can the former be either increased or diminished—no matter how much or how little—by any amount of attention or indifference on the part of the patient? 3. Are the bones (as such) devoid of feeling, and, if so, can they be rendered, by such mental effort or fixation as is here contemplated, on the part of their owner, "entirely sensitive"?

Books, "by the score or more," have been written on these points; but they have been written by sciolists or theorists who had some hobby to ride or some theory to uphold, and facts are what we want in the case. To elicit these in an authentic setting, or from those—and those only—who can speak of them as having come within the sphere of their own knowledge, is the object of this brief note, and the inherent interest of the subject will be my excuse for calling your and their attention to he matter in this place. I am, Sir, your obedient servant,

Auriol-road, W., Nov. 22nd, 1885. WM. CURRAN.

SUBSCRIPTIONS TO CHARITIES.

To the Editor of THE LANCET.

SIR,—I was gratified to read your opposing criticism of the (under present circumstances) absurd proposal of "A Middlesex J.P."—viz., that subscribers to charities should insist that 75 per cent. of their subscriptions should be funded, and only 25 per cent. be used for current expenses. As my letter on behalf of the hospitals, which appeared in *The Times*, brought forth this remarkable suggestion, I trust that you will permit me to say that, although I did not for one moment anticipate that it would be acted upon, yet I replied to "A Middlesex J.P." to the effect of your leader, and also of Mr. Burdett's and Mr. Carr-Gomm's letters—viz., that if the benevolent supporters of charities insisted upon the absurd condition that 25 per cent. only of their subscriptions should be used for present purposes, then by far the greater proportion of the absolutely necessary work of relieving the sick poor in their sufferings from disease and accident would be stopped. Hospital beds would have to be vacated, wards closed, and medical relief suspended to an extent probably little dreamt of in "A Middlesex J.P.'s" philosophy. Not only would there be this immediate sad result, but the carrying out of his suggestion, instead of enabling, as he seems to think, the future work of the medical charities to be extended and more efficiently carried on, would, I believe, cause the subscriptions to fall off, and thus the future, as well as the immediate, operations of the hospitals would have to be greatly curtailed, to the irreparable injury of those for whose benefit they were established.—I am, Sir, yours truly,

Jan. 5th, 1886. THE EDITOR, "CHARITY RECORD."

FEES FOR VISITING A "RETIRED PUBLICAN."

THE Woolwich County Court judge, Judge Powell, seems to have but a poor appreciation of the value of medical services. In a case tried before him last week a medical man sought to recover £3 from a "retired publican" for attendance, which was charged at the rate of 3*s.* 6*d.* a visit. The defendant, who had left the neighbourhood and had been very troublesome to trace, complained—for the first time, though he had had the account in 1882—that 3*s.* 6*d.* was excessive, adding the bit of vulgar abuse that "he had had more skilled doctors for 2*s.* 6*d.*" His Honour "thought the charge rather high"! He, however, gave judgment for the amount claimed. If Judge Powell will ask his own doctor, or look at any of the published tariffs of medical fees—such, for instance, as those in the Appendix to Whittaker's Almanack for last year (they are omitted in this year's issue)—he will see that when people live in houses above the value of £25, it is usual to charge them 3*s.* 6*d.* at the very least.

Dr. Lavers.—The report gives no intimation as to the nature of the supposed remedy.

POISONOUS SNAKES IN NAMAQUALAND.

To the Editor of THE LANCET.

SIR,—Two years' sojourn in a land in which excessively poisonous snakes abound has caused me to direct some little attention to the various remedies which have been suggested to save life when fellow-beings are bitten by snakes of a known poisonous nature. The most deadly snakes here are the puff-adders, the yellow cobra capellas, the horn snakes, and the night adders. Whilst frequently hearing of horses and cattle rapidly succumbing to the bites of these snakes, it appeared strange that the natives themselves, who mostly ramble about the Veldt almost naked, seldom or never appeared to suffer any further inconvenience from the bites of poisonous snakes than would be usual from any accident which would cause a little local inflammation; and, on close inquiry, I found that the natives in Bushmanland, Namaqualand, Damaraland, and the Kalakari are in the habit of extracting the poison-gland from the snake immediately it is killed, squeezing it into their mouths and drinking the secretion, and that they thereby appear to acquire absolute immunity from the effects of snake-bites. The natives, moreover, keep by them some poison-glands which they have allowed to dry in the sun; and they also carry about with them the dried body of a poisonous lizard, known amongst the Hottentots as the "t' nobo." When a native or any traveller who has lived long here is bitten in the Veldt by a poisonous snake, it is customary (whether he be a snake-poison drinker or not) to tie a ligature, if practicable, above the bite, then to suck the wound or cause it to be sucked; make a few incisions close to where the poisonous fangs entered, and insert pieces about the size of a pin's head of the "t' nobo," or, failing the "t' nobo," of the congealed contents of a dried poison-sac. For a long time I hesitated to place much reliance on these methods; but having a month ago seen a native named Snellsteve, who is a snake-poison drinker and a snake collector, put his hand into a box containing two yellow cobras, and several horn and night adders, in doing which he was severely bitten, and has never since suffered anything more than a little pain, such as might be caused by any trivial mishap, I feel I can no longer refuse to believe in the efficacy of the snake virus itself as a remedy against snake poison.

I could quote the testimony of Captain Hills, and Messrs. Ridgell, Fisher, and Kays, who, from five to thirty years spent in the above-mentioned districts, have had undoubted opportunities of observing the action of the remedies; and the result of their observation has been that they now firmly believe in the methods I have mentioned, and never travel without the dried sacs and the "t' nobo."

I am, Sir, yours faithfully,

ALFRED BOLTON, L.R.C.P. Lond.

Port Nolloth, Namaqualand, Dec. 7th, 1885.

Mr. Prowse (Clifton).—We regret we have been unable to find room for the communication.

Mr. A. Allen.—We cannot exchange.

PRURITUS AND COFFEE-DRINKING.

To the Editor of THE LANCET.

SIR,—In your issue of Jan. 2nd (page 34) you note the opinion of Brown-Séquard that certain cases of pruritus vulvæ and pruritus ani are associated causally with the use of coffee. The idea struck me as not only a singular one, but as one which in my own experience receives confirmation on the *post hoc* principle at least. For months past I have suffered from pruritus ani, which yielded to no treatment whatever. No constitutional malady was, or is, present; the renal and nervous systems were normal, and digestion good. I was, however, in the habit of taking a large cup of strong coffee after dinner, and relinquished the habit only on account of certain symptoms pointing to interference with gastric digestion. Since giving up my post-prandial coffee I have not had a return of the intolerable itching. Perhaps it may be held that in reality the coffee caused digestive disturbance, and that this latter primarily caused the pruritus. The coffee in such a case would only be the remote, and certainly indirect, cause of my ailment. Be that as it may, the pruritus has vanished with the coffee-drinking. I think of giving the latter a trial again, and of watching the result.

I am, Sir, yours truly,

Jan. 2nd, 1886. A. W.

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HYDROPHOBIA: OLD PRESCRIPTIONS.

To the Editor of THE LANCET.

SIR,—At a time when hydrophobia is being so prominently brought before us, and when one of the most eminent of continental scientists is so patiently and laboriously working to try and effect its cure, it may not, perhaps, be amiss to glance back and see how the old physicians treated this and allied dreadful diseases.

Alphonse Karr, one of the most charming of simple philosophers, tells us that "physicians, for a long time, applied the roots of fennel pounded with honey to the bites of mad dogs. At the end of three or four hundred years, it was discovered that this had never cured anybody." For the older doctors, attributing virtues to plants based upon analogy, concluded that fennel must be an antidote to the bite of snakes, because, as Pliny says, snakes are exceedingly fond of it. The Romans drank the seeds in wine as a cure for scorpions' and snakes' stings. And, still reasoning from analogy, I suppose, the French physicians thought that as it was a "sovereign remedy" in these two cases, it must therefore be a potent cure for the bite of mad dogs, and so used it for three or four hundred years. Similarly, Pliny tells us that ancient physicians, observing that snakes used the juice of this plant as a kind of eye salve to clear their sight, immediately applied it to their suffering brethren for a similar purpose. Whence arose the following elegant dog Latin lines, which I feel sure must have been oft-repeated by the "Savantissimi doctores" and "Medicinæ professores" of Molière?

Fœniculum, roses, verbena, chelidonium, ruta.
Ex his fit aqua quæ lumina reddit acuta.

Gerarde, our first great English herbalist, also gives very many quaint instances of similar uses. Thus, in speaking of certain flies which "feed" upon the napellus, he says, "Yet of them there is confected an antidot or most available medicine against the deadly bite of the spider called Tarantala, or any other venemous beast whatsoever; yea an excellent remedy not only against the aconites, but all other poisons whatsoever." But honest Gerarde did not believe in everything which was transmitted to him from his ancestors. For, summing up the virtues of larkspur, he says, "That it is set downe, that the seeds drunken are good against the stingings of Scorpions; whose virtues are so forceable that the herbe throwne before the Scorpion or any other venemous beast, causeth them to be without force or any strength to hurt, insomuch that they cannot move or stirre untill the herbe be taken away; with many other such trifling toyes not worth the reading."

I remain, Sir, yours truly,

University College, London, January 4th, 1886. R. W. BOYCE.

A REQUEST TO CANADIAN PRACTITIONERS.

To the Editor of THE LANCET.

SIR,—I am engaged in correspondence in the local papers with the anti-vaccinationists, and, of course, my chief opponent is at Leicester; but Banbury stands only second to that town as a centre of the movement against vaccination. Your valuable remarks will, I doubt not, have been taken as a cue, and I trust that medical men in every county town will avail themselves of the local press to refute the fallacies that at present are being spread broadcast throughout the country by emissaries from Leicester. My adversary states in the *Banbury Guardian* of last week, that "Dr. A. M. Ross of Montreal, writing on Nov. 12th, 1885, quotes from the Health Office Reports. In August the demand for increased vaccination began, and as vaccination increased from 100 to 200 per week in August to from 1000 to 1500 per week in October, so has the small-pox death-rate increased from 50 to 60 per week in August to 300 and 350 per week in October; thus showing that vaccination kindles small-pox." May I appeal to my brother practitioners in Canada, through the medium of your valuable journal, for statistics, in order that I may let the neighbourhood know the truth. I feel that you will see the importance of my request, and agree with me that it is not well to treat the movement with silent contempt, which would be construed by the public to mean inability to refute the arguments of the anti-vaccinationists.

Can you kindly give any statistics to refute the statements I have given? Can you also tell me any facts with regard to the North American Indians, who were being decimated by small-pox before they accepted vaccination? I am, Sir, yours obediently,

G. COCKBURN SMITH, M.D.

Middleton Cheney, Banbury, Dec. 26th, 1885.

*** We would recommend our correspondent to read the last issued report of the Medical Officer of the Local Government Board, where he will find a large number of facts of the kind he evidently requires.—ED. L.

"SYPHILIS IN CAPE COLONY."

To the Editor of THE LANCET.

SIR,—I have just read in your issue of Oct. 17th an annotation headed as above, in which, quoting from the *Friend of the Free States*, you assert that syphilis is especially rife in Basutoland. I have held the appointment of medical officer to the Basutoland Government since Oct. 1st, 1884, and during that period have only had one case of syphilis under my notice. Framboesia (yaws) is pretty prevalent, and this is mistaken by the public for syphilis. That the disease exists largely in the Cape Colony is, I believe, true; but, on the contrary, I believe Basutoland to be practically free from it.—Yours faithfully,

W. J. V. ROWE,
Medical Officer to the Basutoland Government.

Maseeve, Basutoland, Dec. 4th, 1885.

STATISTICS OF INSANITY: RECOVERIES.

DR. PLINY EARLE, writing in the *American Journal of Insanity*, observes that so far as the statistics presented are an indication, the recoveries in British asylums, both in recent cases and of all patients admitted, exceed the recoveries in American institutions by between 8 and 9 per cent. The most important general conclusions to be derived from the statistics included in this paper are: first, that the old allegation of curability in a very large majority of recent cases is not sustained, and that a failure to sustain it is more apparent and more striking than at any antecedent time; secondly, that the percentage of reported recoveries of all cases received at the hospitals still continues to diminish. He thinks the diminution is perhaps in part attributable to the admission of a larger proportion of chronic cases and of cases of greater degeneracy from their origin, in part to a more stringent interpretation of the word "recovery," and to greater conscientiousness in the compilation of statistics.

Mr. Simeon Snell's paper will appear in an early number.

ACUTE GLOSSITIS: ABSCESS.

To the Editor of THE LANCET.

SIR,—The following case may prove of interest to some of your readers on account of its not being very common:—

On Oct. 14th, 1885, I was called to see a case of swollen tongue. The subject was a little girl, aged eight, pale and sickly-looking, the daughter of a miner; she had always enjoyed fair health up to this time. The family history was good. I found, on examination, the tongue half an inch thicker than natural, and covered with a white fur; it was not painful to the touch; deglutition was difficult and caused some pain; the pulse was 160; the temperature being 103·1°. There was some soreness complained of on pressing over the region of the right tonsil. The tonsil was not enlarged; saliva dribbled copiously from the mouth, the floor of which was quite natural. There was no swelling of glands in the neck, and no apparent cause of the enlargement of the tongue. Inquiry was made as regards the patient ever having taken mercury, &c., but with negative results. She stated that she had eaten a quantity of cheap coloured sweets the day before, and had afterwards vomited. I ordered the usual remedies for glossitis and ice to suck. I saw her again the next day, Oct. 15th. The swelling of the tongue had increased quite half an inch more; the patient could not close the mouth on account of the great swelling and protrusion of the tongue; she had taken no food during the day; she could not swallow even a little beef-tea; the dyspnœa was urgent; she was in an extremely weak condition, the constitutional disturbance being great. The voice was quite abolished, so I resolved at once to deeply scarify the anterior surface of the tongue. I wrapped a tonsil bistoury with lint to within half an inch of the end, and made two incisions, longitudinally, each side of the raphe of the tongue; the mouth immediately filled with curdy pus and venous blood. I may say there was no sense of fluctuation to be felt before the operation. I ordered an enema of beef-tea, brandy, and egg, and a gargle of tannic acid and glycerine, to be painted over the tongue and the back of the throat, with a mixture of bark and chlorate of potash internally. I saw her the next day (Oct. 16th). The swelling had decreased half an inch; she could take beef-tea and milk through a feeder; she slept well; the tongue was quite normal, and the incisions healed; the bowels acted four days after the operation. The patient appeared quite well, but weak. Ordered cod-liver oil. She has remained weak ever since.—I am, Sir, yours truly,

Lower Gornal Surgery, Jan. 4th, 1886. WM. ED. NEWEY.

"AUSTRALIAN MEDICAL APPOINTMENTS."

To the Editor of THE LANCET.

SIR,—In answer to your correspondent "Old Subscriber," who wrote under the above heading in your issue of Sept. 26th, 1885, I beg to say that the medical appointments in these colonies are chiefly club and country hospital appointments. The clubs pay £1 per member per annum, for which sum the practitioner has to attend the member, his wife, and family, and (as a rule) find medicine; midwifery extra (two or three guineas), and mileage at the rate of five shillings a mile if the residence is more than three miles, the first three miles being free. There was a hospital house-surgeoncy vacancy in Tasmania a few weeks ago, salary £350 and a house, for which there were eighteen candidates, the successful one being a London M.B. A man over forty would have to stand his chance; but so far as this colony is concerned, he had much better stay at home. There are about 250 medical men practising in Sydney alone, and fees are little, if any, higher than in England, while house rent and expenses are about double. The hospital appointments range from about £40 to £400 a year. The great want here is not more medical men, but a proper Medical Act. At present any man can style himself "Doctor," and anyone can give a death certificate. We have in Sydney a Chinaman assuming the title of "Doctor," and having a large practice, who was cook at a hotel in the gold-fields; another man, who practises as a follower of Hahnemann, was formerly a groom; while a third advertises himself as curing the poor on certain days, his qualification being the fact that he is a seventh son! We have a new House of Assembly now, and it is possible they may find time to pass a Medical Act.

Now to another matter. A patient of mine, aged eight, swallowed a halfpenny. It passed per rectum in exactly three weeks, and bore no marks of its somewhat lengthy sojourn. Yours faithfully,

Sydney, N.S.W., Nov. 18th, 1885. NOSTALGIA.

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Mr. Frederic Irving de Lisle.—The situation is a difficult one, especially when the two persons concerned are of the same rank in the profession. B should decline to attend, alleging as a reason the entire concurrence of himself and A. But we are not prepared to say that under all circumstances this extreme position should be maintained; something is due to the feelings of the patients or friends. Of course, we assume absolute honour and high conduct on the part of the preferred practitioner.

PARALYSIS AGITANS.

To the Editor of THE LANCET.

SIR,—I should be glad if any of your readers could throw out suggestions for the treatment of the following case of what seems to be paralysis agitans. The patient is a woman aged fifty-two years, the mother of four children. She has always been of a nervous temperament, and for many years has had great pecuniary troubles and anxieties. About three years ago she first noticed the tremors, which were then slight and limited to the lower extremities. Now they are almost general (except in the face), preventing sleep, and rendering life wretched. The movements are partially mere tremors; but sudden jerkings are also experienced, which the patient vainly tries to check by holding down one limb with another, or otherwise fixing it. There are also considerable flushings of the face, and noises in the head of the most heterogeneous character. She has tried change of scene, and has used at various times phosphorus, arsenic, strychnine, bromide of potassium, and occasional night draughts of chloral combined with bromide; but nothing seems to procure relief. Can any of your readers suggest anything further? I am, Sir, yours truly,

Jan. 4th, 1886. INQUIRER.

Doubtful.—Our correspondent's view is ingenious; but we should not advise him to take the case into a court of law, where, according to all *past* decisions, he has no *locus standi* as a surgeon.

Dr. A. Wilson (Leytonstone).—Yes, as opportunity offers.

CEPHALALGIA WITH CATALEPTIC SYMPTOMS.

To the Editor of THE LANCET.

SIR,—Can any of your readers give any suggestions as to treatment in the following case?

Miss G——, aged seventeen years, is now suffering from most acute pain in her head, which begins as soon as she awakes in the morning, and comes and goes at short intervals throughout the entire day till bedtime, when she goes into a quiet sleep and so remains till the following morning. She has also occasionally some fits of a cataleptiform description, which last about seven or ten minutes, and when she wakes she screams out and coughs violently for about three minutes, and then relapses into the cataleptic state. She also complains of pains in the chest. She appears unable even to stand alone, and has to be carried from her bed to her chair at the fireplace. The breathing is very short when she is awake, but normal during sleep. The fits are getting each day more frequent, and all the symptoms defy every form of treatment that has been tried during the past five months, and much anxiety is felt by the patient's friends.—I am, Sir, yours faithfully,

Everton, Jan. 5th, 1886. ROBERT B. HUNT, L.R.C.S.E., &c.

Dr. Tindal Robertson.—It would scarcely be fair to other institutions of a like kind to insert the letter of our correspondent.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir William Mac Cormac, London; Dr. Suckling, Birmingham; Mr. Wharton Jones, Ventnor; Dr. Sturges, London; Mr. Reginald Harrison, Liverpool; Dr. Stanley Haynes, Malvern; Dr. Gowers, London; Mr. E. L. Fenn, London; Mr. Atthill, Surbiton; Mr. F. C. Banks, London; Sir B. Lechmere; Mr. Rideal, London; Mr. Knowsley Thornton, London; Dr. E. Diver, Kenley; Dr. A. Routh, London; Mr. Hayes, Bangalore; Mr. Nicholson, London; Mr. Yeates, Newhaven; Dr. A. Wilson, Leytonstone; Mr. Rowe, Maserec; Mr. R. W. Moore, Wednesbury; Mr. Bolton, Port Nolloth; Dr. Cheadle, London; Mr. H. Bigg, London; Mr. S. Paget, London; Mr. McKinney, London; Mr. J. F. Morison, Glasgow; Dr. Russell, Edinburgh; Mr. G. W. Moseley, Edinburgh; Mr. Birt, Wakefield; Mr. C. S. Jeaffreson, Newcastle-on-Tyne; Mr. McDonagh, London; Dr. Mitchinson; Dr. Norman Kerr, London; Dr. Hale White, London; Mr. Hunt, Everton; Dr. Savage, London; Mr. H. P. Symonds, Oxford; Mr. Huxley, Torquay; Dr. G. Burder, Clifton; Dr. Felkin, Edinburgh; Mr. J. H. Wright, Halifax; Mr. Davies, Tenby; Dr. L. Leibswitz, Vienna; Mr. C. J. Green, London; Mr. Pratt, Birmingham; Mr. Boyce, London; Mr. F. D. Lys; Dr. Wise, Maloja; Mr. Alexander, Liverpool; Mr. Clearey, New York; Mr. Braddon, London; Mr. Visger; Mrs. Bent, Bournemouth; Dr. Gordon, Worthen; Mr. Sallon; Mr. Williams, Port Isaac; Mr. Harris, Paterson, U.S.A.; Dr. Lett; Mr. Parkinson, Manchester; Mr. O'Kelly, Hednesford; Mr. Hill, Fulham; Mr. Chaplin, London; Dr. Berder; Mr. Parke; Mr. Lowe, London; Mr. T. Cook, London; Dr. Torbock, Fowey; Messrs. Baiss Bros.; Mr. Palmer, Chard; Mr. Allen, Bath; Mr. Grant, Crediton; Mr. Birdwood, Longreach; Mr. Fowler; Mr. Clyma, London; Mr. Russell, Liverpool; Dr. Coleman, Kingston-on-Thames; Mr. Jones; Mr. Hodgson, London; Mr. Crowther, Halifax; Mr. H. H. Bigg; Messrs. Waite and Co., London; Messrs. Burgess and Co., London; Mr. Tunmer, Harrogate; Messrs. Wavell and Co., Halifax; Dr. Thom; Mr. Logan, Glasgow; Mr. Parry, Abergele; Dr. Arnison, Allandale; Mrs. James, St. John's Wood; Dr. Walter; Mr. Burroughs; Dr. Blume, Stafford; Mr. Lowndes, Liverpool; Mr. Carpenter, London; Mr. Godfrey, Northampton; Mr. Elliott, Carlisle; Messrs. Hall and English, Birmingham; Mr. Scraggs; Mr. Gregson, Spennymoor; Mr. Thomas, Clydach; Mr. Whitford, London; Mr. Morgan, Dowlais; Mr. Parks, London; Dr. J. Black, London; Dr. Andrew; Messrs. Trübner and Co., London; Mr. Harrison, Haughley; Dr. Adam, West Malling; Mr. Menzies, Egham; Mr. B. Marks, London; Mr. Morgan, Froome; A Retired Physician; An Anxious Parent; Enquirens; Indignant M.R.C.S.; Doubtful; M.R.C.S.; Surgeon; Inquirer; A. W.; M.B., Bushey; G. H. B., Finsbury; Unqualified.

LETTERS, *each with enclosures*, are also acknowledged from—Dr. Kerr, London; Mr. Jones, Ruabon; Mr. Davis, Dorchester; Mr. Faulkner, Clontarf; Dr. Thompson, Brailis; Dr. Wilks, London; Mr. Jennings, Colethorpe; Mr. Phillips, West Hartlepool; Mr. Lockwood, Sheffield; Mr. Scriven, London; Mr. Waddy, Wexford; Dr. Stansley, Derby; Mr. Guest, Melsonbey; Mr. Fisher, London; Mr. Ablett, Whitehaven; Mr. Kenny, Matlock; Dr. Mickle; Mr. Gibson, Edinburgh; Mr. Boyveau, Paris; Dr. Harris, Mallow; Mrs. Ligerwood, West Malling; Mr. Creasy, Seven Oaks; Dr. Sherrard, Bournemouth; Dr. Monks, Wigan; Mr. Kenzer, Orkney; Mr. Crassweller, Clapton; Mr. Thornton, Cork; Mr. Hewer, Scarborough; Mr. Young, Hawkhurst; L.R.C.P., Uxbridge; Medicus, Abergele; Digamma; B. F.; M.D., Bournemouth; L.K.Q.C.P.I.; Lady Superintendent, Bristol; X. Y. Z., Liverpool; Mater, Preston; Fideliter, Exeter; F. G., Cambridge; Omega, Liverpool; H. B., Rotherhithe; Beta, Clapham; J. B.; E., Manchester; J. W., Manchester; Cocaine; Graduate, Bournemouth; W., London;

Tyneside Echo, Newcastle Evening Chronicle, Sydney Daily Telegraph, Vaccination Inquirer, Edinburgh Evening Dispatch, Weston-super-Mare Chronicle, Birmingham Daily Post, Southport Visitor, York Herald, Lancaster Guardian, Glasgow Herald, Nottingham Evening Post, Hull Daily Mail, Liverpool Echo, Daily Post (Bangalore), *&c.*, have been received.

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Lectures
ON THE
SURGICAL TREATMENT OF EMPYEMA.

Delivered at the Hospital for Consumption and Diseases of the Chest, Brompton.

By RICKMAN J. GODLEE, M.S., F.R.C.S.,
SURGEON TO THE HOSPITAL, AND SURGEON TO UNIVERSITY COLLEGE HOSPITAL.

LECTURE I.

(*Concluded from page 54.*)

BEFORE discussing the methods of active surgical treatment one word must be said on the advisability of leaving some cases alone altogether. Nature, as has been hinted, probably effects a cure sometimes in children, when, either from the absence of medical advice or a faulty diagnosis, the presence of pus is never made out; but there are also other conditions in which it is at least doubtful whether surgical interference is of any use, and indeed if it be not actually hurtful. In chronic phthisis an empyema may be present and apparently do no harm for a considerable period, but its evacuation may be followed, apparently as a result, by increased destructive changes in the lung; it may certainly, if the greatest care be not taken, be followed by increased constitutional disturbance from inflammation of the pleural surfaces. These cases should then, I think, be left alone as long as the presence of the fluid is not a source of inconvenience to the patient. There is yet another class of tubercular cases where the empyema is in direct communication with a bronchus. Here, again, the advisability of operating depends upon the amount of inconvenience suffered by the patient, and this depends upon the amount of pus which the patient expectorates. It is well known that, if even a small amount of pus be coughed up from a cavity, it may produce much irritation to the bronchial tubes, and the secretion from them, added to that coming from the cavity, may then reach an enormous amount in the course of the day. I have seen a case of a pulmonary cavity not holding more than an ounce which caused more than a pint of expectoration daily; and another of probably the same nature in which the pus, which was offensive though small in quantity, caused the most intense discomfort and copious expectoration, both of which distressing symptoms were relieved by making the patient lie upon her face, the cavity which had been incised being at the anterior part of the lung. Another consideration is that the pus from the empyema may find its way into the bronchi of the opposite side, or into the comparatively healthy bronchi of the same side, and set up destructive changes there. The deduction, then, seems to be that in cases of this kind we may safely let matters alone if the expectoration be slight and the constitutional disturbance and local inconvenience inconsiderable, but not otherwise; though both surgeon and patient must honestly face the fact that a permanent closure of the opening is not to be expected, and thus, though an annoyance and source of danger may be done away with, the not inconsiderable discomfort of a permanently discharging fistula in the side is substituted for it; for these are not cases in which one would feel justified in attempting the operation for removing the rigid elements of the chest walls, or in which, if they were attempted, any permanent good from them could be anticipated. Let anyone who is doubtful on this head consult Estlander's paper in the *Revue Mensuelle de Médecine et de Chirurgie* (1879, pp. 157 and 885). Another class of cases that should undoubtedly be left alone for a time is that in which the empyema is being expectorated, but in which there is no tubercular disease. I say for a time, because there is no doubt that a certain number of them recover spontaneously, and the same observation applies to those in which the pus has found its way into some other cavity, such as the stomach or bowel; but in all of them it is not wise to wait very long, unless the disease is obviously continually advancing towards a cure. Those that open externally very seldom recover without some form of operative interference.

Having decided that something must be done for a recent empyema, the first question that arises is with regard to aspiration. Is it or is it not to be recommended as a rational means of cure? and if so, in what sort of cases? In the first place, it is an undoubted fact that a certain number of cases recover completely after one aspiration, and a still larger number after the process has been repeated a few times. Amongst our own cases there are, as I have said, two in whom aspiration pretty frequently repeated was followed by a cure, and amongst the children there are no fewer than four out of the thirty cases in whom such a result was obtained. F. P., aged three years and four months (Table I., Case 12), was aspirated once three weeks after the onset of the disease; J. D., aged three years (Table I., Case 10), once nine weeks after; H. B., aged four years (Table I., Case 14), four weeks, and M. C., aged six years (Table I., Case 25), four months after the commencement of the illness; and in all the symptoms disappeared without further interference. And these, I feel sure, are not the only cases of the kind which have been met with at the North-Eastern Hospital in the course of the last few years. Still, it must be owned that in the greater number the reaccumulation has been rapid, and there has seemed to be no tendency towards a cure. The experience, therefore, seems to be much the same as that which follows the use of this method in the treatment of ordinary abscesses. Our own cases were both young men, aged respectively seventeen and twenty-one; both, however, were large effusions, and both were right-sided. G. D. was aspirated three times, fifty-two, twenty-six, and nine ounces being drawn off, with a month's interval between; while W. J. S. was only aspirated once, at which time eighty-nine ounces of thin pus were drawn off; and both appear to have made complete recoveries. It seems, I think, clear that aspiration is most likely to be successful in young patients, who are, it must be remembered, much the most favourable for the free incision; in fact, I think, from studying the statistics one may say that those who were thus cured would have recovered quite as rapidly, if not more rapidly, had they been subjected to this operation. They, of course, escape the inconvenience of an open wound, and the more or less prolonged application of dressings; but they run the risk of having left a mass of cheesy inspissated pus, which may possibly be the cause of future mischief. As, however, this risk is rather hypothetical, and as the aspirator is almost as convenient an instrument as any other for making the usual exploratory puncture, I would always use it in the first place in a young subject, and if the fluid were slow in reaccumulating, and then of a more serous character, and less in amount than before, I should evacuate it again after a short interval. It seems only reasonable not to let the cavity become again fully distended, as this distension must not only have the effect of compressing the lung again, and rendering its chance of expansion smaller; but also of irritating the pleural surface, and so making it less prone to absorb the contents. If, after the first aspiration, the accumulation is rapid, or if the pus is as thick as ever, it is best to proceed to the free incision at once; and in any case it is probably wiser not to repeat the process more than two or three times. Aspiration, of course, tends to expand the lung, but it must not be forgotten that if the free incision has at last to be resorted to, the longer the illness has lasted the smaller is the chance of perfect expansion, not only because the tissue of the organ itself becomes more diseased, but also because it becomes coated with a thicker and thicker layer of pleura.

If the free incision be chosen, we have to decide upon the best place to make the opening. There are two important points to be considered: first, to secure efficient drainage; and, secondly, if possible and compatible with the first, to open a part of the chest near that which is likely to close the last. What this part is it is very difficult to decide; certainly not the lower part of the chest, for this usually closes first, the diaphragm being soon drawn out into contact with the chest walls. The lowest part of the chest is therefore to be avoided, because the drainage-tube must on this account be long to begin with, and as the case progresses will almost certainly act with less and less efficiency, and be introduced with greater and greater difficulty. Sometimes it is found in cases that are not doing well (F. G., Table II., Case 13, for instance) that the lower part does

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not close, and an accumulation constantly occurs there. Under such circumstances it is necessary to make an incision behind in the tenth space, or even the eleventh; it is then occasionally followed by the best results, but this is no argument in favour of selecting this spot in the first instance. One might naturally suppose, as our consulting surgeon, Mr. Marshall, has pointed out, that the neighbourhood of the fifth interspace, near the junction of the ribs and cartilages, would be the last region for adhesion to take place between the lung and the chest wall, but it may be doubted if we have evidence enough to show that this is actually what does occur; while we shall see that, in old empyemata, it is the apex itself that offers the greatest difficulties. I believe, then, that any spot about half way between the upper and lower parts of the chest will be found satisfactory so far as the object under discussion is concerned, and, in my experience, that which affords the most satisfactory drainage, both when the body is recumbent and erect, is a little outside and below the angle of the scapula, about opposite the eighth or ninth rib. I do not wish to deny that cases do extremely well if the opening is made further forwards; and if a spontaneous rupture has already occurred in the axilla, or even more anteriorly, I do not hesitate to utilise this opening in the first instance. The spot mentioned is not inconveniently near the angle of the scapula, so that the tube is not interfered with by the movements of the arm, and the wound in this situation is not found to be a source of annoyance to the patient (as has been urged in objection to it by some) when he is lying in bed. The thickness of the tissues which must be traversed in order to reach the chest wall in this situation adds no material difficulty to the operation, even in people of considerable muscular development.

Having fixed upon the spot, we must next consider the method of making the incision. More often than not I am in the habit of excising a portion of a rib, because I find that in most cases this offers the best, if not the only, chance of satisfactorily investigating the cavity with the finger and of securing thoroughly efficient drainage; and while all are agreed that the latter is of the utmost importance, I believe that the former is scarcely less so. Often large masses of curdy material are met with, which are easily detected and extracted by the finger; and sometimes the finger will, by breaking down adhesions, open up loculated cavities which might otherwise have remained unopened, at all events for a time. Nevertheless, I am not so wedded to this procedure as to advocate it in all cases, and if the ribs are sufficiently wide apart—as, for example, in front, in a fairly well-formed chest—I am content with simply incising an intercostal space. It seems wiser also to avoid doing it, if possible, when the pus is fetid, on the theory that absorption of putrid material is more likely to take place when the bone is cut across; but even this objection is, perhaps, more theoretical than real, for in such cases, after a day or two, we almost always find that the bone is bare where the drainage-tube has been in contact with it. I have never seen any evil consequences from the removal of a piece of rib, and I am confident that great advantage is often gained from it, while it is certain that the bone is in a short time reproduced, so that the rib is as strong as before. In the case of J. E., aged one year (Table I., Case 1), who died eleven weeks after the operation, the rib was quite firm; and the same result has been found in other cases where a second operation has been necessary. Here is the rib of F. S., aged twenty-three (Table II., Case 12), removed, if the expression be allowable, five months after it was first excised. You will see that it is completely consolidated, except for the aperture through which the sinus passed, though the thickness of the rib is not much greater than normal. It has been objected that an inconvenient amount of callus is thrown out after this procedure; but I think the specimen now exhibited will convince you that it is scarcely more than occurs when no bone has been removed at all. If no bone be removed, and the case becomes chronic, it almost invariably happens that two spurs of bone are formed on each side of the sinus uniting the rib above with that below; if a piece has been removed, the rib becomes united both with that above and that below. In the latter case, these three ribs are in close contact; in the former, the two ribs are separated by a distance depending on the size of the drainage-tube which has been employed.

I need say nothing about the simple incision of an intercostal space, but will describe a little in detail what seems the simplest way of removal of a piece of rib. In all cases of operations upon the chest, but especially if one side be much disabled, and still more so if there be much expectoration—as, for example, where one is dealing with an empyema which communicates with a bronchus, or with a case of bronchiectasis,—it is important not to turn the patient more than is necessary on to the sound side. For, in the first place, there may arise risks from the anæsthetic, the increased impairment of the respiratory functions adding the toxic effects of carbonic acid to those of chloroform or ether, and so constituting a real danger to the patient; and, in the second place, such a position increases the probability of the expectorated matter finding its way into the bronchi of the sound lung, and so producing alarming symptoms or actual asphyxia. A case in point, which also illustrates the reason why chloroform is better than ether for such operations, was that of a girl who had one lung much damaged by an empyema which she was expectorating. Ether was administered, and the combination of the "ether bronchitis" with the entrance of pus into the bronchi of the sound lung, added to the already impaired action of the latter, brought her into such a serious state that we were obliged to draw blood from the arm and resort to other active measures in order to keep her alive. We are having made here a high table with flaps on each side to draw aside in the position which will be occupied by the side of the chest, by the employment of which we shall be enabled, whilst sitting down and operating from below, to explore or open an intercostal space far back without turning the patient over at all, and thus avoid the dangers to which I have referred. Of course such a table cannot be always at hand; but if it be not, the same result may be obtained almost as well by bringing the patient to the very edge of the table or couch, and even allowing him to project a little beyond it. Mr. R. W. Parker has employed cocaine with excellent results, and the suggestion seems a most valuable one. The use of a general anæsthetic may be avoided by freezing the part; but it is doubtful if these methods will answer for anything more severe than the simple incision of an intercostal space.

It is also advisable not to raise the arm more than to a right angle with the body; or at least, if this be done, to note the extent to which the skin is drawn up by doing so, and then to pull it down before making the incision through the soft parts. If this precaution be not taken the opening will be found to be valvular, and much inconvenience may arise at a later date in the introduction of the drainage-tube. Should this difficulty, however, arise, it may be obviated by making a second incision upwards at right angles to the first. Such an incision gives more room, and it is not a bad plan to adopt it to start with, especially if the patient be very fat or muscular, rounding off the corners of the small flaps afterwards. The skin being then steadied by the finger and thumb pressed upon the rib, the first incision is carried down to the bone for a distance of two or three inches. After any superficial vessels are secured, the periosteum is divided and raised from the bone, as may most conveniently be done by means of an elevator with a cross handle (an instrument introduced from Germany). The periosteum on the deep surface of the rib may readily be separated by a blunt and slightly curved elevator, which is then thrust beneath the rib to raise it beyond the level of those above and below it. This allows room for the introduction of the blade of a pair of ordinary string-cutting pliers, or that of a pair of forceps which I have had made, one blade of which is blunt and the other sharp, both being slightly curved. The cutting pliers will divide most ribs, but occasionally it is more convenient or even necessary to use a small saw. The rib is divided in front of and behind the elevator, and from an inch and a half to two inches are removed, leaving the periosteum and pleura uninjured and exposed. The knife is then carried through these structures, and, the parts being clearly seen, there is no difficulty in avoiding the intercostal artery, but should this be cut it is now quite easy to secure it and to apply a ligature at once. The opening in the pleura may be made quite small if desired, and increased by introducing the finger or a pair of closed dressing forceps, the blades of which are subsequently expanded. The finger is then introduced into the cavity and a thorough exploration made, and the pus, if aseptic, is allowed to escape under cover of a piece of rag soaked in carbolic lotion, which is placed over the wound. If it be desired to prevent the entrance of air into the chest, a tube with a thin

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caoutchouc valve, such as that I now show, may be employed; or a still simpler method (of which I have no experience) may be employed—viz., the tying over the end of the tube a sort of petticoat arrangement of linen. The valved tube will work even though the opening be of some size; but for the petticoated tube to be efficient it is necessary that the opening should be only just large enough to fit it accurately. Neither arrangement will, it need not be said, answer well in cases where there are thick flakes mixed with the pus, but when such do not exist the valved tube answers admirably. This was shown in W. B. (Table II., Case 5), where the pus at the first opening was remarkably thick. On the third day, on making the patient expire forcibly, a drop or two of perfectly clear serum alone escaped—a beautiful illustration of the fact that the so-called "pyogenic membrane," if subjected to no irritation either from tension or putrefaction or any other cause, ceases at once to form pus, but secretes only serum.

I feel convinced that the introduction of the antiseptic principle into surgery, coupled with the freedom of drainage which we now always secure, has done much to render the treatment of empyema less formidable than it used formerly to be. I would strongly advocate the employment of the antiseptic treatment, even to its most minute details, for such cases; though freely acknowledging that some putrid cases do quite as well as those in which the pus is sweet. It is a matter of common experience that the opening of an empyema which has not previously putrefied without antiseptic precautions often leads to very serious symptoms, in the same way as severe septic poisoning follows incision of a psoas abscess under similar circumstances, because a large surface and a surface favourable for absorption becomes bathed with a highly putrid material. In the case of an already putrid empyema, nothing but good can come from allowing the septic material a free exit; while in the case of a sweet one tension is certainly removed, but a potent source of irritation—namely, putrefaction—is admitted. Thus the effect of simple incision produces much more serious results in the former than in the latter case. On the other hand, it cannot be denied that septic empyemata often, if not generally, produce much more serious symptoms than aseptic ones. We have had two examples here where putrefaction followed the introduction of the aspirator needle—H. B. (Table II., Case 16) and J. F. (Table II., Case 18), in both of whom high fever and other signs of septic poisoning were present. A. C. (Table II., Case 1), in whom the putrefaction originated from within, was also much more ill than children with chests full of such pus are usually found to be. I have notes of at least three other cases of putrid empyema which proved rapidly fatal.

One of these cases was a boy, aged eight, at University College Hospital, who had only been ill for a month before he was admitted with a chest full of the most offensive pus, and a fluctuating swelling over the second interspace, due to perforation. This was incised; but the boy, who was almost *in extremis* from septicæmia on his admission, died two days afterwards, and it was found post mortem that there was a gangrenous area on the inside of the chest walls corresponding to the upper six ribs, so that the muscles were in many parts dissected, whilst in others they were covered by a sloughy membrane. There was a second point of ulceration besides the actual point of perforation in the second space, and there were four in the third (one of which was complete), four in the fourth (one of which was complete), and one in the fifth space. Such a condition is never met with in aseptic cases.

Another was that of a man aged forty-two years at University College Hospital, whose illness began four days before admission. His chest, which had been previously tapped, was freely incised on the ninth day after the attack, but his temperature and pulse never fell, and he died of septicæmia on the sixteenth day. A small abscess of the lung was found post mortem, the rupture of which had no doubt caused the empyema.

Another case, which I saw with Dr. Thane, was that of a young strumous man between twenty and thirty years of age. His illness began as pneumonia, and when seen the left pleura was distended with the most putrid pus imaginable. Though he improved after the incision, he never thoroughly rallied, and died three weeks afterwards with symptoms of septicæmia and pleurisy on the opposite side.

I mention these cases because they are typical ones of their kind, and are not very uncommon. They should be borne in mind when the assertion is made that putrid cases do as well as aseptic ones. Such results do not, as far as my experience goes, occur in aseptic cases, nor do they ever follow the antiseptic incision if the treatment be carefully carried out.

The causes of putrid empyemata are always, or almost always, gangrenous abscess of the lung, or the introduction of an improperly purified needle, or the rupture of an empyema into a bronchus. In the last instance there will be expectoration of pus from the pleura; but it is an interesting fact that it does not follow that an empyema which is being expectorated will contain putrid pus, the pus sometimes remaining sweet if the communication with the air passages be small and tortuous. Such cases often do extremely well, the expectoration ceasing immediately after incision, and the case following a favourable course. Even if there be a certain amount of smell, I think it is wise to employ the antiseptic treatment for a few days at least, as it sometimes happens, as in the case of abscesses that smell, but are not actually putrid elsewhere, the discharge soon becomes sweet, and the case pursues a typical course. If, however, the discharge continue offensive, a moist dressing, frequently changed (boracic fomentation or an oakum poultice), is much the best dressing from every point of view.

We have thus dealt with the methods to be employed in the primary treatment of an ordinary case of empyema, but a few points remain to be spoken of.

1. If antiseptic dressings are used, they should be continued to the very end of the case. Many a promising case has ultimately become chronic through neglecting this rule.

2. The tube in adults must be retained until the discharge has almost stopped. In ordinary cases, in children, it may usually be removed at the end of a fortnight or thereabouts. But both of these rules are liable to exceptions, especially the latter if the discharge be at all copious. If after the removal of the tube there be signs of accumulation, which will be, not increased discharge showing externally, but a rise of temperature with general malaise and thoracic or abdominal pain, no time should be lost in dilating the sinus and reintroducing the tube. If this be delayed the recent adhesions quickly give way, and much time is lost.

3. As soon as the general health will allow, patients with empyema seem to do better if permitted to get up, the change of position and the movements of the chest apparently aiding the expulsion of the contents of the pleural cavity.

4. Is it wise to employ injections?

5. What is to be done if the case becomes chronic?

The last two questions will be dealt with in the next lecture.

Clinical Lecture

ON A CASE OF

BELL'S PARALYSIS OF CENTRAL ORIGIN.

By W. R. THOMAS, M.D., M.R.C.P.,

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GENTLEMEN,—I shall to-day direct your attention to a very interesting case of Bell's paralysis of, I believe, central origin; and for the purpose of comparison I shall picture for you another case of ordinary Bell's palsy from exposure to cold.

The patient suffering from ordinary Bell's palsy, you will observe, when he smiles, smiles but on one side; the paralysed side looks sober and serious. The zygomatics on one side will not contract; whistling to him is an impossibility; fluids will often run out of his mouth; and owing to this utter want of power on the part of the orbicularis oris, he can neither open nor close his mouth properly. Owing to implication of the buccinator, food often accumulates between the cheek and the teeth, and when he blows the cheek becomes much distended from the same cause. An expression of surprise or a frown can only be seen on one side, as the occipito-frontalis and corrugator supercilii are both paralysed. All the muscles of expression, all the muscles supplied by the portio dura of the seventh, are paralysed. The orbicularis palpebrarum cannot contract

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so the eye is kept open and exposed, and when the patient is told to close the eye he turns it up so that the pupil becomes invisible and nothing but the white is seen, and he thinks that the eye is closed. Even the tensor tarsi cannot contract, and epiphora ensues. Thus the whole right side of the face is an expressionless mask, and yet the left side is full of vivacity, and conveys to you very plainly the workings of the brain.

The next case I have to bring before your notice is a very different one—is one from central origin, and but very seldom met with. The celebrated Dublin physician, Dr. Graves, in his work on Clinical Medicine, says, "I have seen two cases of seizure, evidently apoplectic, in which the paralysis that followed the seizure was seated in the muscles supplied by the portio dura." And, again, Trousseau says, that "when examined with great care, using Burq's dynamometer, these patients invariably display slight want of power in the arm or leg, of which they are not conscious"; and adds in another part, "It is conceivable, therefore, that if a small hæmorrhage occurred in a very limited spot of the pons it would give rise to the symptoms of Bell's paralysis exclusively. But such cases are so very rare that, in the course of a very long practice, I have not yet met with a single instance of the kind."

This patient is a married man, aged twenty-four, a tanner by trade. His family history is good. When seventeen years of age he fell down the cellar steps and injured the left side of his head. Until five weeks ago, for two years and a half he has suffered from epileptic fits, two or three every month. Five weeks ago he fell down in the street in a state of insensibility. He was carried home, soon recovered, but suffered from headache for three weeks. About two weeks ago, one morning his friends noticed that his face seemed peculiar, and laughed at and chaffed him. No treatment whatever was adopted for one week, when he presented himself at the hospital as an out-patient. You see that all the muscles supplied by the portio dura are paralysed, but not completely. The right orbicularis palpebrarum is not much affected, but closes a little later and less firmly than the left. There is also slight epiphora, showing implication of the tensor tarsi. The point of the uvula is turned towards the paralysed side and drawn by its base to the left. The soft palate and arches hang into the mouth, or, in other words, the left side is more arched and roomy. If you apply a weak acid solution to the right side of the tongue, it gives rise to a burning sensation, but no taste, unlike the other side. Hearing on both sides is normal. The occipito-frontalis and corrugator are partially paralysed, and his speech is not natural owing to implication of the buccinator and orbicularis oris.

I should like to draw your attention to the following interesting facts relating to this case:—1. The temporal masseter and pterygoids supplied by the motor branch of the fifth, and the muscles of the tongue supplied by the hypoglossal, are not affected in this case as they are often in hemiplegia, where so frequently the tongue, when protruded, points to one side. This shows that the portio dura only is affected, as in Bell's, wherever the lesion may be. 2. As in facial paralysis with hemiplegia, the orbicularis palpebrarum has not been much paralysed; in Bell's it is. 3. The paralysis of the muscles of the face is not quite complete, and contractility not quite gone, as in hemiplegia. In Bell's the paralysis is generally complete, and electric contractility gone. 4. The paralysis of the uvula and soft palate on the right, and impairment of the sense of taste, show that the great petrosal and chorda tympani nerves are involved, and that the mischief is probably above the part where they are given off. In this case we have not had any ear symptoms whatever, neither intensity of hearing nor obtuseness, so the disease is probably higher than the bony canal. 5. This patient has suffered for two years and a half from about three epileptic fits a month, probably from some central cause. He has not had an attack now for five weeks, but at the end of three weeks from the last attack this paralysis came on. This, to my mind, decidedly points to some central cause, especially when taken in conjunction with the other symptoms. 6. Ever since the attack came on his memory and his mental powers generally have been very much impaired, whereas they were not so before. You will observe that I have come to the conclusion that it is of central origin, not for one reason, but for many—viz., because the electric contractility of the muscles has never been lost, the paralysis has never been complete, the orbicularis palpebrarum has been but slightly paralysed, and the implication of the chorda tympani and petrosal nerves, without any evidence whatever of ear mischief, rather points to central cause; and the epilepsy before and mental symptoms after the attack of paralysis also aid us.

ON INVERSION WITH INFLATION IN THE CURE OF INTUSSUSCEPTION;

WITH A SUCCESSFUL CASE.

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ACUTE intussusception in childhood must ever be regarded as an exceedingly dangerous condition, but an early recognition of the symptoms will much lessen its dangers, by bringing the case within the range of surgical treatment before adhesions may have taken place, or irreparable damage have occurred to the intussuscepted bowel. It is one of those conditions I would claim as surgical from the onset, inasmuch as the only efficient treatment must be surgical, and it is strictly comparable in this respect to the obstruction occasioned by strangulation in hernia. To my mind, the cases appeal for relief in precisely the same terms as do those suffering from strangulated hernia; and it is grievous to have to reflect upon the valuable time often wasted in palliative treatment, and the lack of promptitude in applying surgical aid, not to speak of the failure to penetrate the shadow of dangerous symptoms which overhangs and enshrouds these unfortunate infants. I have even heard it calmly discussed whether it might not be justifiable to wait patiently till nature might detach the intussuscepted bowel, as if this were a common event or as favourable a result as could be anticipated. I have myself already been in the profession long enough to have witnessed a complete change in the relation of operative treatment to hernia. It is no longer considered a disgrace to fail to reduce a hernia by taxis; and the pounding and crushing which I witnessed as a student have, I trust, now disappeared from surgery. No wonder that, after all the time wasted with hot baths, opium, poultices, and ice, with periodical kneading of the tumour, the dreaded operation, when at last performed, was often unsuccessful. What has brought about this change is the acknowledgment that the danger lies, not in the operation, but in the duration of the strangulation, and in the rough treatment to which the bowel may have been subjected. I look forward to the time when the treatment of intussusception will be in every respect as successful as that for hernia, but this improvement must come about by an earlier recognition of the gravity of the symptoms and a greater promptitude in the application of the means available for obtaining reduction. During the past ten years I have often advised students to disencumber their minds from the general unessential symptoms of strangulated hernia with which word-painters depict in eloquent terms the condition of the patient, and to fix indelibly in their memories three salient signs of strangulation—viz., (1) an irreducible hernial tumour devoid of impulse, (2) persistent vomiting, and (3) constipation. With these signs present, there is no room for doubt, or excuse for delay. There should be no speculation upon what other conditions might give rise to the vomiting and constipation. The surgeon's duty is to concentrate his attention upon the hernial tumour and to relieve any constriction that may be there present before having regard to other possible contingencies. The signs of acute intussusception in children—another form of mechanical obstruction—are, as a rule, equally clear, and may be formulated with equal precision—viz., (1) vomiting, (2) constipation, (3) passage of blood per rectum, and (4) the presence of a tumour to be felt through the abdominal wall and occasionally per rectum. With these symptoms present, there is nothing to gain, but everything to be lost by hesitation or delay. There is a mechanical obstruction present, which must be overcome by mechanical means, and medical treatment in such grave crises is apt to raise in a surgical mind a feeling allied to contempt. The administration of purgatives can only do harm, and anodynes will but obscure the danger by clouding the acuteness of the symptoms. The invaginated bowel is

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impacted, swollen, and congested. Every hour lessens the freedom of the circulation through it, and the peritoneal surfaces which lie in contact will soon become inflamed and pour out lymph that will glue the introceding bowel to that which surrounds and constricts it. Before this has happened, or at least before the lymph can have so far organised as to withstand gentle traction, surgical interference should have completed its task.

What right have we to stand by with folded hands and watch the efforts of Nature to give relief when we possess such efficient means for cure as are altogether beyond her reach? The prejudice of friends, it is true, is opposed to the means we advocate as essential, nor will they ever give the credit to their surgeon of an unequivocal saving of life, which they would be only too ready to accord to the so-called faith-healers, or such unprincipled men as fill their own pockets whilst affecting to make cures through the aid of the miraculous. From time to time I see cases reported of recoveries from intussusception after the casting off of so many inches, or it may be feet, of intestine; but I read these with pain, for I feel they ought not thus to have been left to recover; and I know their convalescence is seldom permanent, and that there is a prospective early death from stricture at the seat of separation. At best it is only one out of a vast number which can make an imperfect recovery without surgical aid. To hesitate, dally, postpone, is to trifle with Nature. A great, a terrible, and altogether unequal struggle may be carried on to open up a free way from within, when a prompt and simple surgical means from without may easily bring about complete relief.

The means we have at our disposal are—first, inflation with inversion; secondly, should this method of reduction fail, abdominal section, with the object of withdrawing the invaginated bowel; or, finally, when this is impossible, enterectomy may be entertained. I am strongly of opinion that, if the cases are seen sufficiently early, the first of these methods, when properly applied, will seldom fail. The principal object of this paper is to advocate the inversion of the patient during the time inflation is being performed—an addition and aid to the reduction by inflation which occurred to me after failing to reduce an invagination by inflation alone. My experience of the value of inversion during taxis for hernia in children led me to adopt this position as an adjunct to inflation in the case presently to be recorded. Intussusception and hernia, which I have been trying to show have so much in common, are here again brought into parallel lines in the course of treatment. In both the object of the inversion is to cause the intestines to gravitate towards the upper part of the abdomen, and the effect in the case of intussusception will be to straighten the lower part of the bowel, so that the air forced into the rectum will act more directly upon the plug of intestine closing the lumen of the gut. It has been advocated by some to distend the bowel with water in lieu of air, but against this practice I hold a very decided opinion. There are two strong objections to the use of water. In the first place, owing to its weight it exerts much too strong lateral pressure for the intestine safely to bear, and I have found it is easy to rupture the bowel after death by forcing in water. Secondly, should reduction have been accomplished, the contact of a large quantity of water with the lower bowel is apt to increase the tendency to subsequent diarrhœa. Air, on the other hand, is a natural occupant of the intestinal canal, and, whilst its pressure is of the gentlest, its presence excites no unnatural peristaltic action.

The manner in which inflation should be performed is as follows:—An ordinary bellows is connected with a gum-elastic enema tube by means of a piece of rubber tubing, which is firmly wired at either end. Around the base of the enema tube lint should be wrapped, so as to make a conical and air-tight base. The tube is inserted about three inches into the rectum, and the anus closed by the conical plug of lint. Further to guard against the escape of air back through the anus when inflation is commenced, an assistant should press the edges of the buttocks firmly together. It is very important that an anæsthetic should be administered up to the stage of muscular relaxation before the operation is commenced, otherwise the forcible contraction of the abdominal muscles will leave the operator little chance of effecting his object. As soon as anæsthesia is complete, the child should be seized at the ankle and knee on either side, and be raised vertically with his back to the operator, the head being allowed to rest on a pillow. The enema-tube is next inserted, and the anus closed in the way directed. An assistant now places his hand over the tumour in the abdomen to watch the effect of the operation, and the inflation is commenced. The air is at first forced slowly in, and the effect watched through the abdominal wall. The upper part of the rectum or sigmoid flexure will probably be seen to swell up, and the tumour may be noticed to change its position somewhat. If the tumour show little tendency to yield, more rapid action of the bellows may be employed. How, then, are we to know that the intestine has been reduced, and there is no longer occasion to continue the operation? There are three indications of the reduction of the bowel: (1) The assistant whose hand is over the tumour will feel this gradually sink away and be lost; (2) a gurgle of air will at the same time be felt by the assistant, and often heard by the bystanders; (3) the whole abdomen becomes suddenly and uniformly distended and tympanitic. When these signs of reduction have occurred, the enema-tube may be withdrawn and any compressed air be allowed to escape, and the surgeon may leave the case with a feeling of contentment that he has almost certainly saved a life. The after-treatment consists in limiting the diet to milk and ice, and in administering stimulants if there be a tendency to collapse. Small doses of opium may also be given to relieve pain and check any tendency to diarrhœa.

The following is a careful report by Mr. H. W. Drew of a case in which the means advocated were successfully employed on the third day of the intussusception.

Charles T——, aged six years, was admitted into Guy's Hospital, under the care of Dr. Pavy, for abdominal pain and vomiting, on June 22nd, 1885. In the absence of Dr. Pavy he was seen by Dr. Carrington, who, after determining the nature of the case, sent for Mr. Clement Lucas. From the history obtained from the friends it appeared that the child had been well up to and including Friday, June 19th. On Saturday morning, June 20th, he began to complain of pain in the abdomen and sickness. These symptoms continued and increased up to the time of his admission on Monday evening, June 22nd. The condition of the bowels during this period was not positively known. He appears to have gone to the watercloset two or three times between Saturday and Monday, but whether anything was passed was not known. He vomited just prior to his admission and the vomit was yellow. On examination he complained of great pain over the abdomen, but there was only slight tenderness. In the left iliac region, corresponding to the region of the sigmoid flexure, a fusiform tumour, four or five inches in length and about two in breadth, was very readily felt. It was dull on percussion, but not hard. The region of the cæcum was markedly empty and dull on percussion, and the fingers sank down, without resistance, into the right iliac fossa. The rectum was quite empty, but high up there was a transmitted feeling of resistance. The tongue was somewhat furred, but there was not much general disturbance. Pulse full, about 100 per minute, rather irregular; heart-sounds normal; apex-beat in the fourth space half an inch below and to the inner side of the nipple; dulness normal; respiratory system normal. Soon after admission, the child passed per rectum about two ounces of red fluid blood. When Mr. Clement Lucas arrived the patient was placed under an anæsthetic. The house-surgeon commenced to administer chloroform, but as the pulse seemed to fail somewhat, ether was substituted. The patient being fully under the influence of the anæsthetic, an enema-tube connected with a bellows was inserted into the rectum and inflation commenced. A coil of intestine was at once noticed to rise and become distended to the right of the median line, as if the sigmoid flexure or rectum were pushed over by distension. Inflation was continued for about five minutes without further effect, the patient lying meanwhile in the recumbent position. A change was now made in the position of the patient, who was held up vertically with his head downwards. Inflation was again commenced, and in about three minutes Dr. Carrington, whose hand was on the tumour, felt it resolve itself with a gurgle. The operation was then suspended, and a suppository, containing a quarter of a grain of morphia was placed in the rectum. Milk diet with ice was ordered, and the following prescription every six hours: Tincture of opium, two minims; chloroform water, one drachm.—June 23rd: He passed a good night, and this morning is free from pain. No tumour can be felt in the abdomen, which seems rather full, but there is no tenderness. A little more blood was passed, but no fæces. He has taken

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a pint of milk and seems to enjoy it. Temperature 98·8°; pulse 116. He has not passed any urine since he came in. In the evening, as there was still retention and the bladder could be distinctly felt above the pubes, some chloroform being administered to prevent struggling, a catheter was passed. Twelve ounces of urine, acid, and of specific gravity 1015, were drawn off.—24th: He has again slept well, and this morning complains of no pain. There is no swelling of the abdomen. He has had no motion, and there is still complete retention of urine, which has to be drawn off by the catheter. No vomiting. Temperature normal. Ordered: tincture of belladonna, ten minims; camphor water, half an ounce; every six hours.—25th: Early this morning he passed a small quantity of fæcal fluid. He slept well, and is comfortable. Complete retention of urine still continues. The urine was drawn off by catheter this morning without chloroform, and fourteen ounces were evacuated. It was acid, clear, and of specific gravity 1012. He takes his milk readily.—26th: He had another good night, and continues cheerful and free from pain. There is still complete retention of urine, but this morning he passed a very dark liquid stool containing only small pieces of solid matter, the largest about the size of a pea. Temperature normal; pulse 92. Twelve ounces of urine were drawn off about midday. He is taking custard to-day. —27th: He has again passed a good night. He complains of no pain, but the catheter was required again to relieve his bladder. The bowels have not acted to-day.—28th: He continues free from pain and takes his food well. In the afternoon he passed urine naturally for the first time since the operation. In the evening the bowels acted again, and much more naturally; he passed about six solid pieces, the largest the size of the little finger, greenish-yellow and firm. Ordered farinaceous diet with milk.—29th: After passing a good night he emptied his bladder naturally. The bowels acted well in the afternoon. In the evening he sat up for the first time since the operation.—30th: His bowels acted well again this morning, and he was allowed to get up early in the day—July 1st: He is running about the ward apparently quite well.—2nd: He continues well, and went out to-day.

It will be observed that the vomiting and abdominal pain which commenced on Saturday morning continued without relief until the operation on Monday evening. The condition of his bowels was not known with any certainty until after his admission into the hospital. All that the friends were able to state was that he had been two or three times to the watercloset, but whether anything was passed was not ascertained. Among the children of the poor little attention is paid to the condition of the excreta, and the sanitary arrangements are often such as to prevent any examination of the motions passed. Soon after his admission into the hospital, however, he passed blood per rectum without any natural motion, and, a tumour being felt in the abdomen, the diagnosis of intussusception was not doubtful. The obstruction was overcome by combining inversion with inflation, after inflation alone had failed. The tumour was felt to disappear under the hand, and the intestine, becoming unravelled by the *vis a tergo* allowed air to pass up beyond the seat of obstruction. From this time the vomiting ceased, and the only trouble that followed was due to retention of urine, which is a not uncommon complication of abdominal operations. His diet was restricted for several days to a pint of milk in twenty-four hours; the bowels acted on the morning of the third day; and, when the bladder began to empty itself naturally on the sixth day, there was no longer any cause for anxiety.

Nothing could have been more satisfactory than the result of our treatment in this case; but had we failed to reduce the obstruction in the manner described, we had other resources at our command. It was our intention, under such circumstances, to have opened the abdomen on the lines *alba*; to have sought for the tumour, and, having found the intestine at the point of invagination, to have exerted gentle traction, thus employing what might be described as *vis a fronte* for the restoration of the bowel to its proper position. Had we been again baffled in our attempts to restore the intestine to its natural condition, we should probably have proceeded, if the condition of the patient had permitted, to perform resection of the intestine. This would be performed only as giving a last chance; and I am strongly of opinion that, with a better recognition of the symptoms characteristic of intussusception, it will seldom be necessary to resort to this extreme measure, or even to that of opening the abdomen. It is sometimes pleasant to look back on the experience of former years, and these cases possess an especial interest for me, inasmuch as the first case I ever published and the first printed article to which my name was ever attached was, "A Case of Intussusception cured by Inflation," which appeared in THE LANCET for 1870, vol. ii. page 183.

"POLITICAL MANIA" IN CONJUNCTION WITH PARALYSIS AGITANS.

BY ALFRED MANTLE, M.D.

THE following particulars of a case of "political mania" in a respectable working man, the subject of paralysis agitans, may be interesting, since attention has recently been drawn to this form of madness in the columns of THE LANCET.

W. S——, aged sixty-nine, has been under my observation five years. He never had any serious illness until ten years ago, when symptoms of tremor appeared. He has always been of strictly temperate habits, and was formerly a carrier by occupation, but latterly worked at a colliery. He is the eldest of eight children. His father, who always took a lively interest in politics, died of senile decay. His mother died of consumption. Three sisters are living, and healthy. His four brothers are all healthy, with the exception of the youngest, who is now suffering with the same disease—paralysis agitans. There is no history of any other member of the family having any nervous disease, but all take an interest in politics. My patient is a well-educated man for his position in life, and has always watched the political world with a considerable degree of enthusiasm. When a Conservative working-man was supposed to be a being scarcely in existence, and only rarely heard of, let alone seen, my patient, although living in a remote corner of the country, was a staunch supporter of Conservative principles; and, unlike the majority of politicians, he has never deviated from the path of Toryism, but has always remained true to the cause he first espoused. For seventeen years he has taken a daily paper and closely watched the political party in power, but it was not until the election of 1874 that he became an extraordinary political enthusiast. At this time he was most anxious for the Conservatives to be in power, and, the result of the elections being such as to enable Lord Beaconsfield to form a government, his political craze became more and more intensified. It was noticeable then that he was more easily agitated when anyone advanced an opinion contrary to his own. A few months afterwards he had tremor in the right hand, the arm becoming likewise affected after a short time. He gave up work for nine months, with no improvement. His political ardour was as strong as ever. He attempted work again, but after working for some four or five months he was obliged to give up, the left leg becoming affected with tremor. The disease continued to progress slowly, and at the end of two years all the limbs were similarly affected.

The patient's interest in politics, in spite of so sad a disease, instead of diminishing, has steadily increased, and at the present time, when sometimes he is quite prostrated by the sufferings and discomfort such patients have to endure, he will make a determined effort every morning to learn the political news revealed in the daily papers. On account of the tremor being so general, and having the constant desire to change his position, suffering as well from excessive heat, this is only accomplished under the most trying circumstances. Anything else save politics receives little or no attention from him; and his one topic from morning to night, if he can get anyone to talk with him, is that of politics. Should anyone disagree with him, he is very soon in a great state of mental agitation, which results in an exacerbation of the tremor, terminating in great prostration. His wife, knowing that his first question to a stranger is to discover his political creed, makes it her business to ask anyone who may hold different opinions from himself to be Conservative *pro tem.*, in order to prevent an exacerbation of the tremulous symptoms and consequent prostration. I have always made the same request to a locum tenens seeing him in my absence. One marked feature is the opinion he entertains of his opponents, denying them any principle whatsoever. He has a particular

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aversion to the late Prime Minister, and does not hesitate to say he would rejoice to hear of his decease. He thinks it is utterly impossible for Mr. Gladstone to get to heaven; and, although holding strong religious views, he is sure he could not enjoy that new country were he conscious of the ex-Premier being there also. Upon my jocosely, though thoughtlessly, remarking one day, on hearing this statement repeated, that I thought both Mr. Gladstone and himself would reach heaven, and that it might possibly happen he would carry the former's harp, he became terribly excited and offended with me for suggesting such a possibility.

A few months ago, when my patient thought the late Government was making some terrible blunders and was impatient for a change, his disease became much exacerbated, and there was great prostration, with retention of urine, lasting for a fortnight. I quite thought he would not recover. Day by day he asked to be informed of the latest news. Being told that Mr. Gladstone had resigned, his face lighted up with joy, and it would be incredible to anyone who had not witnessed it to believe the change in his condition from that time. He soon regained strength of mind and body, and has taken an anxious interest in the late General Election. The excitement in the early part of it, when the Conservatives met with such marked success, was too much for him, causing great prostration and compelling him to keep his bed for several days. When the results were known later on, his disappointment was very marked, for he had expected a great Conservative success. I have spoken of his hatred of the Liberal leaders, but should not omit to remark upon his great attachment for the Tory chiefs. The late Lord Beaconsfield he adored, and most acutely felt his death, telling me it was a greater blow to him than the loss of any relative.

The patient's brother, aged fifty, whom I have mentioned as suffering with the same disease, lives some fifteen miles distant, and was a clerk by occupation, but is now a publican. He has not come under my immediate observation. The symptoms in his case first appeared six years ago, about the time of the General Election of 1880, when he was taking a more than ordinary interest in politics. They are not so fully developed as in my patient, though all the limbs are affected with tremor. From all accounts, his mind has suffered more than in the case of his brother, and he endeavours to live a secluded life, although taking a great interest in politics. It is a remarkable fact that he holds entirely antagonistic views to those of his brother, and is a great admirer of Mr. Gladstone. In consequence of their opinions being so opposed to each other they do not visit, this probably being the wiser course to adopt.

Stanley, Durham.

ON THE

PALLIATIVE AND RADICAL TREATMENT OF THE OBSTRUCTING PROSTATE.

By REGINALD HARRISON, F.R.C.S.,

SURGEON TO THE LIVERPOOL ROYAL INFIRMARY, AND LECTURER ON CLINICAL SURGERY IN THE VICTORIA UNIVERSITY.

It is now upwards of four years since I brought under notice my views and practice as to the prevention and palliative treatment of prostatic obstruction,[1] and eighteen months since I published a communication[2] illustrating the employment of prostatotomy in more advanced and otherwise irremediable forms of this affection. It is to these subjects I propose again referring. Though the proportion of persons suffering from an obstructing prostate is not inconsiderable, it is a matter of satisfaction to me to know from my own observations, and to hear from others who have been good enough to communicate with me, that there are grounds for believing that it has been sensibly diminished by the more general employment of the simple means advocated in my first paper, and that hence the necessity for adopting the more radical measures which form material for description in the second communication referred to has been, and is still further likely to be, sensibly reduced. Still, so long as cases of the latter kind present themselves, so long will it be necessary to carefully consider the various proposals urged for their relief.

It is hardly requisite to point out how frequently we find large prostates in persons who have been, as far as it is known, but little inconvenienced by them, the explanation of this immunity from symptoms being found in the fact that the growth in no way interfered with the outlet from the bladder. In this conservative process there is much that may be imitated by art; and as the regular expulsion of urine from within outwards is capable of preventing obstruction by the formation of grooves or channels in the hypertrophied mass, so in like manner may the same condition be brought about by the introduction of a suitable instrument along the passage which is threatened with extinction. It is important to notice how slight is the prostatic barrier in some of these instances, but yet how complete is the obstruction which is thus occasioned both relatively to the act of spontaneous micturition and to the introduction of an instrument to relieve it. When we consider how extremely limited physically is the nature of the obstruction in many of these cases, it is not difficult to understand how readily this state may be remedied by the timely adoption of mechanical means. How easily the mere outlet of the bladder may be improved in some instances of obstruction by a large prostate is shown by the undoubted success which frequently followed the practice of Mercier in making a linear incision through the prostatic bar, and more recently by the means advocated by Gouley, where no more than a small portion of the obstruction is punched out by an ingenious instrument contrived for this purpose. Of both of these operations I have had sufficient experience to enable me to conclude that, as a rule, the amount of tissue it is necessary to divide or destroy for the purpose of permanently improving the outlet from the bladder is comparatively small. It is, however, not to be implied that, because the orifice of the bladder is mechanically improved so far as relates to the mere act of letting urine out or an instrument in, the power of spontaneously discharging urine naturally follows upon this; on the contrary, it frequently happens that under the strain of months or years of unaided micturition the muscular power of the bladder becomes sensibly and permanently weakened, or the power of expulsion completely disappears, never to be regained. Hence it becomes, in all cases of impeded micturition, of the first consequence that every means should be taken to avert a catastrophe which by no means ceases with the mere inability to expel urine from the bladder. From the observation of a number of cases of this kind, it seems clear that when the prostate in its growth commences to obstruct micturition the hypertrophic process increases proportionately with the efforts of expulsion. This is only to be expected in a part which largely consists of involuntary muscular fibre, and is necessarily more or less involved in the sphincter action of the apparatus. In illustration of what preventive treatment can do, I will select a typical case of the kind which has been under observation for some years.

In 1881 a gentleman of sixty years of age consulted me for an irritable bladder. Not only was there unnatural frequency in passing urine, but the act had lost its normal characteristics, for, instead of the urine being expelled in a stream, it seemed rather to ooze from the penis. Though an examination of the prostate from the rectum revealed but little amiss with the gland, further investigation determined—first, that there was a considerable obstruction within the prostatic urethra; and, secondly, that the bladder was commencing to lose its power. Under these circumstances I advised the patient to introduce a soft instrument into his bladder daily until further instructed. In the course of three months he was practically well, and, beyond passing his instrument occasionally for his own satisfaction, he has remained so. Can it be doubted that this marked change was due to the use of the instrument? What would the patient's condition have been within six months had nothing of this kind been done?

In an experience of this kind, which has not been inconsiderable, I think I may say that where there exists any mechanical obstruction to the escape of urine along the urethra from the bladder, I have never known any harm come when an instrument adapted to the particular case has been selected and is properly used. Where these conditions are not complied with, it is not remarkable that the results have been disappointing. On the other hand, the evidence of patients themselves as to the immediate and

[1] The Prevention of Prostatic Obstruction. (Churchill, London, 1881.)
[2] On the Treatment of certain Cases of Prostatic Obstruction by a Section of the Gland. (Transactions of the International Medical Congress, Copenhagen, 1884.)

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permanent advantages attending the employment of mechanical means in the earliest stages of prostatic obstruction is sufficiently ample to render further allusion to this aspect of the question unnecessary.

I will now proceed to notice the treatment employed in those cases of prostatic obstruction where the condition of the patient appeared hopeless of relief by such palliative measures as the use of the catheter. I have now operated under these circumstances in four different ways, which I will briefly illustrate.

First, by a removal of more or less of the obstructing prostate by an incision from the perineum. In two instances where this was done both patients are now alive and well, after intervals of seven and four years, having previously suffered from the most serious forms of prostatic obstruction.

Secondly, by perineal incision and section of the bar, and by the subsequent use of a proper drainage-tube. Let me take two illustrations from amongst several where this was done. In June, 1883, I reported[3] one of my earliest cases where I had thus operated. The patient has since remained under observation, has discarded his catheter for over a year, and is perfectly well. In August of the present year I met a man (J. B——, aged seventy-three) in the street carrying a heavy load on his back, who I recognised as an old patient of mine upon whom I had performed median prostatotomy. I questioned him, and found that he was quite well and had never used the catheter since he left my care. The circumstances of this case, which has not been published, are briefly these: The patient was sent to me by Dr. A. Barron. He had a large prostate, required constant catheterism for retention; the instrument was difficult to introduce, and serious hæmorrhage frequently took place. For three weeks he was treated in various ways, but with no benefit. His desire to urinate and his strainings were incessant, and nothing appeared to give any relief. In February, 1884, he underwent median prostatotomy, and wore one of my tubes for seven weeks; the perineal wound closed, and he shortly left the infirmary with the result I have already mentioned. I should add that I have recently had an opportunity of passing a full-sized bougie, when not the slightest hitch was experienced. This man's present condition is a remarkable contrast to what it was previously.

Thirdly, by the permanent retention of a perineal tube with a suitable tap. This has twice been resorted to. In both of these instances it was only intended to use this apparatus for temporary purposes after median prostatotomy, as in the second class of cases, but at the patient's desire the tube was allowed to remain in. In one of these instances the patient wore the tube for three months in the infirmary, and then left to reside at a distance from Liverpool. I have not been able to hear further of him. The second case was where the patient wore the apparatus nearly three months, when he removed it on finding the power and function of the bladder returning. The opening has closed, and when he was last seen by me, nine months after the operation, he was quite well, but he still used the catheter daily. I believe he could do without the latter instrument, but he had suffered so much from retention and difficulty in getting an instrument into his bladder prior to the operation that I was not surprised at his taking this precaution.

I should just say one word on the apparatus used. It consists of my ordinary bladder drainage-tube, as made for me by Mr. Wood, 81, Church-street, Liverpool, to which is attached a piece of rubber tubing, about 2 ft. long, terminating in a small stopcock; the perineal tube is retained by a modified T-bandage, whilst the end of the tubing is looped into an ordinary belt which the patient wears. All he has to do is to let down the end of the tubing and turn the stopcock when he requires to pass urine. Within three weeks both of the patients I have just mentioned were up and going about the wards as usual. I have frequently had patients up and about within ten days from the operation.

I have sometimes been asked whether I do not find that the urine leaks through the wound by the side of the tube. If the wound is properly made this is not the case. It sometimes happens that after the perineal tube has been worn for three or four weeks the urine is suddenly propelled along the side of the tube, and I have known some even escape along the anterior portion of the urethra. This is a sure indication that the tube may be entirely dispensed with, and that the urethra is prepared to resume its normal function.

Fourthly, by prostatic puncture, without incision, and the retention of the cannula made for me by Messrs. Krohne and Sesemann. Atrophy of the large prostate has followed this proceeding.

A study of the cases I have arranged under these four headings will, I think, justify me using the term "radical cure" in connexion with the treatment of advanced forms of prostatic obstruction. I will now, in conclusion, turn to the other side of the picture, and refer to those cases where I have failed to obtain the results I could have desired. I have now operated over twenty times—a number sufficiently large for the purpose of drawing some general conclusions which seem to me of value in connexion with this subject. Not a single instance has yet happened to me where I either regretted having done the operation, or directly or indirectly connected the death of the patient with the proceeding. In two instances only, so far as I know, did the patients die; one three weeks after the operation, and another four. Both of these patients lived longer and far more comfortably than they would otherwise have done, and had nothing to regret in what was undertaken for them. Both patients showed after death a condition of the urinary organs beyond repair; both showed the damage that long-continued back-pressure of obstructed micturition is capable of effecting, and to this extent was a cause for regret that more perfect mechanical measures for relieving this back-pressure had not been earlier applied. Both of these cases, however, served to teach how the mechanism of median prostatotomy, as already described by me,[4] might be improved, for both shewed that in some instances the form of the prostatic bar was such as to render it wellnigh impossible to divide it adequately, as in lateral lithotomy, from before backwards: it is necessary sometimes to use a long curved probe-pointed bistoury, passed within the bladder from the perineal wound, and to divide from within outwards. Of the importance of this I have since been able to satisfy myself in practice. Only in these two instances, and a third, where I removed almost the whole of a carcinomatous prostate, the patient living in comfort for ten months, and being able to return to his work, did death follow, so far as I can ascertain, either shortly afterwards or more remotely, any of the proceedings I have just referred to under the headings of prostatectomy, prostatotomy, and perineal drainage. The improvements which have recently been made in the drainage of bladder wounds, the arrest of hæmorrhage, and in the use of antiseptics, bid fair not only to extend our means of relief in directions which previously seemed hopeless, but to lessen the high mortality which appears to have attended some operations for stone and allied affections of the urinary apparatus.

Liverpool.

[3] British Med. Journal, June 9th, 1883.

[4] Trans. International Medical Congress, Copenhagen, 1884.

A CASE OF

CYSTICERCUS OF THE ANTERIOR CHAMBER.

BY RICHARD WILLIAMS,

SURGEON TO THE LIVERPOOL EYE AND EAR INFIRMARY, AND OPHTHALMIC SURGEON TO THE ROYAL ALBERT EDWARD INFIRMARY, WIGAN.

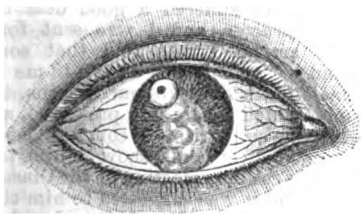
F. B——, a collier, aged twenty-two, was admitted into the Wigan Infirmary on Sept. 12th, 1885, and was first seen by the senior house-surgeon, Dr. J. Buchanan, to whom I am indebted for the notes relating to the earlier period of the case, and who found him suffering from iritis of the right eye. Three days later this diagnosis was confirmed by myself, and the case was treated with atropine in the ordinary way. The patient said that three or four weeks before admission his first symptom had been pain in the eyebrow, followed two days later by "inflammation" and failure of sight. Some days the pain was so severe that he had to take to bed. Previous to the attack his vision had always been good. There was no specific history.

On admission the iris was discoloured and the pupil apparently fixed, the officinal solution of atropine producing no dilatation. On Sept. 21st a whitish mass was noticed in the lower part of the anterior chamber, and immediately above, rather behind and to the inner side of this mass, a small round

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vesicle about the size of a small bead was observed. It was transparent and contained a whitish nucleus. Two days later the vesicle had somewhat changed its position, and was seen to have a tremulous motion. On Sept. 28th it had moved upwards and the exudation covered the pupil, so that the patient's vision amounted to faint perception of light. The following day the patient was again seen by me after my return from a fortnight's holiday, and the eye presented the appearance shown in Fig. 1. There was considerable perikeratic injection and lacrymation. The pupil was hidden behind a mass of whitish substance, which might easily have been mistaken for lens matter after a needling operation. Above this heap at the outer and upper corner of the anterior chamber, resting on the iris, was seen a small, round, transparent body, with a regular outline and a yellowish speck in the centre. On carefully watching this

FIG. 1.



body, its walls were seen to have an active wavy movement every now and again, and the diagnosis of cysticercus was now made. It was also noticed that during the more active movements a whitish cloud passed apparently through the vesicle, so as temporarily to hide the nucleus in the centre. On Sept. 30th some of my colleagues at the Eye and Ear Infirmary had an opportunity of examining the patient, and all agreed in the diagnosis. The cyst had now dropped to the lower and outer angle of the anterior chamber, so that altogether it had made an excursion of nearly the whole of its circumference. Two days later (Oct. 2nd) the movements of the entozoon were much less marked, but still quite visible with the aid of a magnifying lens, and the exudation had considerably diminished. The general symptoms were, however, on the increase, and the pupil was undilated.

The patient was now placed on the operating table, and

FIG. 2.



some cocaine having been instilled, a linear incision was made with a Graefe's knife in the lower part of the cornea, just below the cysticercus. The incision was made rather quickly, in the hope that the vesicle would escape with the aqueous. My expectations were more than realised, for it shot out with considerable force, and was found on the pillow near the patient's head. The iris prolapsed into the wound and could not be returned. I therefore cut off a small portion, and the eye was dressed in the usual way. The eye made an excellent recovery, and now (Nov. 20th) V = $\frac{6}{6}$, there being only a slight difference in clearness between this and the other eye. The small gap in the iris and one or two small pigmentary deposits on the lens are the only remaining ill effects. The cyst, on being picked up, collapsed, but the cyst wall was put under the microscope by Mr. Barnard, the junior house-surgeon, and presented two groups of hooklets, of twelve each, one of which is shown in Fig. 2. The anterior chamber, as shown in Fig. 1, was the seat of a considerable quantity of a peculiar-looking exudation, which, I believe, was not at all inflammatory, but was probably a coagulable liquid thrown out of the vesicle itself. Two things lend probability to this supposition. First, the shape and position of the exudation—immediately underneath the vesicle; and, secondly, it diminished in quantity with the diminished activity of the animalcule, although the general symptoms of inflammation were rather on the increase.

The extreme rarity in this country and in France of cases of entozoa of the organ of vision imparts to them quite an exceptional interest, and every practitioner is under an obligation to record whatever experience he may possess of so interesting and destructive a disease. De Wecker says (Traité Complet) that no case of cysticercus of the anterior chamber has ever been recorded in France, and in 100,000 patients he only met with two cases of the animalcule in the vitreous. On the other hand, the disease is comparatively common in Germany, for Alf. Graefe detected the entozoon eighty times in 80,000 patients. The reason given for this great difference in frequency is the custom of eating raw meat in the latter country. In the British islands, Mackenzie, Windsor, and Teale have each reported a case. In the district in which my patient lives the disease cannot be common, for this is the only case that has come under my observation, nor do I know of anything in the patient's habits or circumstances to account for the appearance of the disease in him.

CASE OF POST-MORTEM HYPERPYREXIA.

BY T. EDGAR UNDERHILL, M.B., F.R.C.S. EDIN.,
SURGEON TO THE GUEST HOSPITAL, DUDLEY.

THE subject of post-mortem thermometry is one that has at various times attracted the attention of many observers, and different theories have been put forward to account for the remarkable elevations of temperature which are occasionally found to exist after death. Wunderlich says: "In many cases of disease, even such as are not febrile in themselves, during the last hours of life the temperature rises enormously, generally by a sudden spring to over 41° C. (105·8° F.), or even above 44° C. (111·2° F.) They are generally diseases in which the central nervous system is seen to be implicated, and generally severely so before the rise of temperature. Tetanus in particular pursues such a course, and so do epilepsy and hysteria when terminating fatally; and so also inflammatory affections of the brain and medulla spinalis, as well as injuries of the upper part of the medulla." He adds: "The remarkable phenomenon of post-mortem rise of temperature which sometimes occurs in cholera, but especially in cases of disease which have terminated with hyperpyretic temperatures, is based on two causes. When death occurs, the cooling that goes on by the introduction of air (in respiration) and by perspiration comes to an end, whilst the warmth-producing processes of the economy are not so immediately terminated; and new sources of warmth are opened after death by changes in the substance of the muscles and post-mortem decomposition—two sources which are foreign to the living body, and which are sufficient to maintain the corpse for a short time at an equilibrium of temperature against the losses of heat it suffers, and sometimes even to raise the temperature a little." According to Huppert, and also according to Fick and Dybkowsky, the reason for the elevation of temperature after the cessation of the circulation is to be found in the setting free of heat during the stiffening of the muscles on the coagulation of the myosin. At the same time, with the cessation of the circulation, the circumstances governing the giving off of heat change, the exchange from one layer of the body to another is accomplished by conduction without the intervention of the circulation. In the following case there was no evidence of any implication of the central nervous system or any visceral lesion as a cause of the hyperpyrexia, the slight delirium which was present in the pro-agonistic stage being apparently a result of that condition. Death occurred at an hour when in the diurnal fluctuation of temperature the mercury is generally at its lowest, and in spite of antipyretic medicines, which only resulted in profuse diaphoresis.

S. P——, aged thirty-five, a strong, healthy woman, was

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delivered on Nov. 5th, 1885, of a living male child. Labour was natural, and she progressed most favourably afterwards, speedily becoming convalescent. On Dec. 3rd she came to consult me about a small tender swelling in the left breast, close to the nipple. Milk was abundant, and she was nursing from both breasts. I applied some liquid extract of belladonna to the left breast, and recommended her to stay in the house for a few days.—Dec. 6th: There was every appearance of a small mammary abscess, though fluctuation was indistinct. She complained of shivering. Was ordered to bed, with quinine every two hours.—7th: Much better. Temperature normal. No pain in breast. Fluctuation more distinct.—8th: Slight rigor; skin moist; no pain; abscess about the size of a small nut, and pointing close to the nipple. I suggested making an incision, but she preferred to let it take its course.—9th: Patient same as yesterday. Skin warm and moist; abscess had not burst. I omitted to use a thermometer, as there appeared to be no higher temperature than I should have expected from the state of the breast. No evidence of disease in any other organ. In the evening her husband came to me and said she complained of feeling very hot, but was in no pain. I ordered fifteen grains of salicylate of soda and fifteen grains of citrate of potash every two hours.—10th: Sent for at 4 A.M., but on my arrival found the patient dead. Her mother told me that she had remained in the same condition as when I last saw her, merely complaining of feeling very hot, till about 3 A.M., when she became slightly delirious, and died a few minutes before I arrived. On placing my hand on the body, I found it still very hot, though the skin was moist, and her night-dress was saturated with perspiration. I introduced a thermometer into the right axilla, and the mercury rapidly rose to 110·2° F. Thinking there might be a mistake, I shook the index down and took the readings again, but with the same result. After fifteen minutes I requested patient's mother to ascertain the temperature, and she found it exactly the same. I waited for more than an hour, and removed the bedclothes so as to expose the chest and allow cooling to proceed more rapidly, and the mercury then rose to 103·8° F.

I regret that I omitted ascertaining the temperature on the two days preceding death, though I am of opinion, from a manual examination, that there was no condition of hyperpyrexia existing when I last saw her alive. The case is a most unfortunate one, as there was no evidence of disease in any organ which would lead one to suspect a fatal termination, and consequently I expressed a favourable prognosis only a few hours before death took place.

A CASE OF TUBAL PREGNANCY.

By ALEX. HAY, M.D.

FROM the rarity of cases such as the following, I have deemed that a perusal of the details may be of interest.

On December 23rd, 1883, I was called to visit Mrs. R——, a young married woman, aged twenty-four. I found her in bed, lying on her back with her knees drawn up, slightly feverish, and complaining of considerable pain all over her abdomen, but especially over the left side. There was slight tympanites and tenderness on pressure. She told me that she had no family, but that she had not menstruated for four months, and had felt quite well until the day previous to calling me in. She attributed her present illness to fatigue which she had just undergone while nursing her sister-in-law, who had been very ill. On examining her abdomen, I discovered a tumour about the size of the fist in the left iliac region, manipulation of which caused some pain. I called her attention to its presence, but she said she had never felt it before. It was freely movable, and presented to the touch the feeling of a round solid mass, but on more minute examination I convinced myself that there was an off-shoot from its inner border. I then examined per vaginam, at the same time pressing the tumour down from above; but, as no impetus was felt at the os uteri, the idea immediately occurred to me that I had to deal with a case of tubal pregnancy. I ordered her an opiate and to apply hot fomentations.

I saw the patient the next day, and, discovering nothing to make me alter my opinion, I resolved to have a consultation, and accordingly, on Dec. 26th, called in Dr. Stirton, Professor of Midwifery in the Glasgow Royal Infirmary School of Medicine, telling him what I believed to be the nature of the case. He examined the patient carefully, and at first was inclined to agree with me in my diagnosis; but after passing the uterine sound he came to the conclusion that she was not pregnant, but was suffering from ovarian disease, and in this opinion he was strengthened by the fact that there were present none of the usual signs of pregnancy—no sickness, no mammary secretion, and no deepening in colour of the areolæ; and, moreover, during his examination per vaginam, there was discovered a discharge of blood which had the appearance of being catamenial. At the same time he stated that I might be right after all, that probably the wish on his part might be father to the thought, and advised me to watch the case, as time would clear the matter up.

I continued to visit the patient daily, each time making a careful external examination. During the night of the 29th she had suffered a good deal of pain of a bearing-down character, and I was sent for early next morning. On arrival I was told that something had come away, and when this was shown to me I found it to consist of a male fœtus of quite four months, with placenta and membranes, which I carefully preserved, and have the specimen before me as I write. I communicated the result to Dr. Stirton, and afterwards showed him the specimen. He mentioned this case at a meeting of the Glasgow Southern Medical Society, and it was suggested to him there by one of the members that there may have been a double uterus; but in this view neither he nor I coincided, because, in the first place, the tumour was quite distinct from the uterus, as evinced by no impetus being conveyed to the finger placed against the os when pressure was applied externally; and, in the second place, with the expulsion of the fœtus the tumour quite disappeared, and on passing the sound it was found to be like a virgin uterus. My own opinion is that it was purely a case of tubal pregnancy, that the offshoot which I felt at first must have been the lower extremities, and that the irritation set up by the previous exertions of the patient, the passing of the uterine sound, and the frequent manipulation, had caused contraction of the pouch formed in the Fallopian tube and the subsequent expulsion of its contents.

The patient made a good recovery, no untoward symptoms arising. She left this district some time ago, but being anxious to know somewhat of her subsequent history I instituted inquiries about her, and learned that she had given birth to a full-grown male child on Aug. 21st last, and that the same kind of tumour had again presented itself in the same region, and had remained there until between the third and fourth month of pregnancy, when it suddenly disappeared, receding (presumably) into the uterus, and remaining there this time until the full term of utero-gestation, as the sequel showed, thus resembling a case reported before the Obstetrical Society of London on Oct. 7th by Mr. E. F. Grün.

The Grange, Maryhill.

NOTES ON SPRING HEALTH-RESORTS.

By W. E. BUCK, M.A., M.D. CANTAB.

THE question of where to send patients after wintering on the Riviera is often a difficult one. They are only too apt to hurry back to England at the most trying time of the year, and so undo all the good done; after which they will maintain that, "though the Riviera does temporary good, the benefit of wintering there is but transitory."

There are two spots in the Maritime Alps which seem to me particularly well suited to be half-way houses on the road to England—namely, San Dalmazzo di Tenda, and the Certosa di Pesio. Of the two, San Dalmazzo appears to offer the most advantages. A large building, formerly a convent, has been turned into an hotel or *pension*, where, if desired, hydropathy can be indulged in. The management of the establishment is excellent, and the prices are reasonable. It is situated on the southern side of the Col di Tenda, in the valley of the Roya, and at about 2000 ft. above the level of the sea. The surroundings are most picturesque. The air in May and June is light and fresh, but not cold, and less exciting than the air of the Riviera. San Dalmazzo is on the high road to Nice, but is nearer to the station at Ventimille, which may be reached in six hours by a good

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carriage-road. The establishment opens on April 15th. The Certosa di Pesio is another charming resort. It is cooler than San Dalmazzo, being rather higher and situated in a valley on the north side of the Maritime Alps, and does not open till the middle of May. It can be easily reached from the Riviera, *viâ* Genoa, Savona, and Mondovi; the Certosa is about three or four hours' drive from the last-named station [illegible].

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, Lib. Ir. Proœmium.

ST. THOMAS'S HOSPITAL.

SURGICAL CASES.

(Under the care of Mr. SYDNEY JONES.)

FRACTURE of the base of the skull is a severe injury, and when complicated with numerous other fractures, notably of the bones of the face, proving the great severity of the violence applied to the head, is usually fatal. Fractures of the bones of the face, including the superior maxilla, the nasal bones, and also the inferior maxilla, are uncommon, and the injury usually terminates fatally. In this case there was in addition a Colles' fracture of both arms, one of them compound. In a large number of cases of fracture of the base of the skull optic neuritis develops during the course of the injury, but, if unattended by symptoms of general meningitis, does not appear to indicate a bad prognosis. The case of dislocation of the knee is an example of one of the commoner dislocations of that joint (a lateral one), and is interesting from the fact that such injuries are rare.

CASE 1. *Fracture of the base of the skull; separation and fracture of the bones of the face; Colles' fracture of both forearms; strabismus and optic neuritis; recovery.* (From notes by Mr. SHERRINGTON.)—The patient, a coal-porter, aged thirty, was admitted on March 27th, 1884, having fallen twenty feet into a coal-bin half an hour previously. He had been unconscious for a short time after the fall. There was a wound of the upper lip, extending half way to the nose from the mucous margin; there was also a contused wound over the bridge of the nose, at the bottom of which bare bone could be felt, and running vertically across the base of it a line simulating fissure of the bone. There was much ecchymosis of the cellular tissue of the eyelids of both eyes, and on the right side it was present under the ocular conjunctiva. There was slight hæmorrhage from the mouth, nose, and left ear. The lower jaw was fractured in two places, the two lines of fracture being one on either side of the symphysis, and between them included a fragment containing the two central incisor teeth and their bony sockets. This fragment was lying loose and nearly completely free under the tongue. It included more of the inner than of the outer plate of the alveolus. The two halves of the jaw moved freely against each other with crepitus. The upper jaw was also fractured, the two halves being separated one from the other and easily moving against each other, the range of movement being, however, limited to about the eighth of an inch. There was an impacted Colles' fracture of the left arm with some comminution of the lower fragment; also a Colles' fracture on the right side, with two small wounds above the wrist in front, one of which communicated with the fracture. In both fractures the typical displacement was well marked. The man was suffering from shock, cold and shivering, but conscious. Pulse 112. Hot bottles were applied to the feet. The wound of the forearm was dressed antiseptically, and after extension of each forearm to restore the parts anterior and posterior plaster-of-Paris splints were applied.

28th.—Gutta-percha splints for the upper and lower jaw applied. The right forearm was dressed and found that the wound was almost healed. A gutta-percha splint was applied to the under surface of the lower jaw. The right pupil was smaller than the left and acted to light; the left pupil did not respond well.

14th.—The eyes were more fully examined, and the following note made:—Nearly complete paralysis of the right external rectus; other movements normal; secondary squint very marked. Left eye movements normal. The pupil has no direct action to light; indirect action good; it is considerably larger than the right pupil. Left optic disc somewhat pale. Veins normal. Arteries somewhat diminished in size. There is slight haze of the optic disc and central portion of the retina, the fovea centralis being very easily seen. The right fundus appeared normal; there was some doubtful haze about the margins of the disc. It was supposed that in all probability there had been direct injury to the left optic nerve, possibly by fracture through the optic foramen.

16th.—The appearance of the left fundus resembled that of embolism of the central artery, the arteries being diminished and there being a good deal of haze. The blindness was first noted about four days after admission.

22nd.—Yesterday the splints on the left arm were shortened, so as to leave the fingers free. A week ago those on the right arm were similarly reapplied. The wounds are completely healed. The fracture of the upper jaw is quite firm and in good position; the splints are discontinued. A fissure, however, exists in the posterior part of the hard palate, about half an inch long, through which fluid passes into the nose. There is some underlapping of the lower jaw due to the loss of the central portion, and the union is not firm. The pieces are fixed by silk fastenings round the bicuspids, and the inside splint is retained.

May 4th.—The fissure in the hard palate has closed, and there is firm union of the superior maxillary bones. The lower jaw is still ununited, and the treatment is carried out as in the last note.

7th.—The left optic disc is extremely pale, the arteries considerably diminished. There are some white lines along the vessels. The right eye is apparently normal.

The temperature for the first week was higher than normal, reaching 100·8° to 102° in the evening, and being 99° or 100° in the morning; after this it was normal. The hæmorrhage from the left ear was slight, and the discharge which followed of small quantity. There was no vomiting. The strabismus was very marked at the time of discharge, forty-five days after admission.

CASE 2. *Dislocation of the left knee.* (From notes by Mr. TOTSUKA.)—T. K——, aged forty, a bargeman, was admitted June 21st, 1885, and remained under treatment fifty days. A few minutes before admission, whilst standing on a barge, a heavy rigging fell on his back; he was knocked down by the weight and twisted his leg in falling.

On examination there was found to be considerable deformity about the left knee-joint, the thigh was rotated outwards and abducted, and the leg rotated inwards and adducted, thus forming a distinct angle with the thigh. The tibia was found to be dislocated and strongly rotated inwards, the condyles of the femur being felt on the outer side. Owing to considerable rotation of the femur, the inner condyle was found situated directly in front of the outer, and the trochlear surface of the patella pointed directly outwards. The patella could be distinctly felt resting upon the internal condyle of the femur. The internal tuberosity of the tibia with its anterior surface could be felt projecting on the inner side of the joint. He was a strong muscular man. In addition to the pain in the knee he complained of pain in the left side, especially on drawing a deep breath or coughing, and on examination a contusion was found and crepitus elicited, there being two fractured ribs (? seventh and eighth).

The dislocation was reduced without difficulty by Mr. Sydney Jones, the patient being under the influence of chloroform. Plaster-of-Paris splints were put on the knee and a long outside splint applied to the limb. A flannel roller was applied to the chest. The temperature rose to 100·4° or 99·2° in the evening for a few days. There were no unfavourable symptoms.

ANCOATS HOSPITAL, MANCHESTER.

URETHRAL STRICTURE; PERINEAL ABSCESS; CONTINUOUS DILATATION; CURE; REMARKS.

(Under the care of Mr. E. STANMORE BISHOP).

A. S——, Arab, aged twenty-eight, was first seen on Oct. 18th, 1885. Had always had good health, with the exception of ague and several attacks of gonorrhœa, of which he

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thought so slightly that he could not be certain of their number. Was sent to Syria this year whilst suffering from a gleety discharge, and whilst there had to spend several hours in the saddle; once or twice as many as twenty hours at a time. Has always lived freely, and smokes incessantly. Had noticed for some years that the stream of urine was narrower than it should be and somewhat forked. Has now intense pain on passing urine, which comes in a small stream, but with much force. The most intense pain, however, occurs about five seconds after urination, there being a quiet interval first, and lasts for some time, gradually becoming less. This pain he describes as burning and scalding in character. This acute condition has lasted five days, becoming steadily worse.

On examination at 10 P.M., a red, hot, swollen condition of the lower third of the scrotum, as well as the anterior portion of the perineum, was seen, the inflamed condition gradually blending with the normal tissue about half way between the anus and the scrotal line, or about the plane of the posterior edge of the triangular ligament, and in front the rest of the scrotum was in a normal state. There was slight epididymitis on the right side, from which a hardened cord passed towards the inflamed focus. The penis was tender, and there was a slight discharge of pus. Examination per rectum was not unbearable, but still painful, and showed a still full bladder, with a tender, somewhat enlarged prostate. Temperature 102·6°.

The diagnosis was perfectly plain—viz., a stricture of the urethra, probably at the spongio-membranous junction, behind which ulceration had taken place, with discharge of urine by it into the peri-urethral connective tissue, at first guttatim, but now most probably in moderate quantity, the main amount passing in when the *vis a tergo* was not sufficient to carry it in a quick stream through the stricture, but was flagging as the bladder became more empty.

With the assistance of Dr. Douglas, who first saw the case, chloroform was given, and an incision made in the median line through the tensest portion of the swelling, which allowed the issue of some unhealthy pus and a jet of urine. The cavity, which passed upwards by the side of the urethra, leaving its right side exposed in the wound, was washed out by perchloride solution, and a drainage-tube introduced. It was then dressed with perchloride lint and cotton-wool, and a T-bandage applied. The patient recovered from the chloroform well, and expressed himself free from pain.

Oct. 19th.—9 A.M.: The patient has had a good night. Temperature 99·8°. Urine passes both by the wound and by the urethra. The wound looks healthy; the swelling has already begun to subside; dressed with iodoform and sublimate lint. 9 P.M.: Temperature 100·3°.

20th.—8·30 A.M.: Temperature 101°. The patient has had a rigor; but there is evidence of his having had ague once or twice, and he is extremely nervous, almost hysterical. The wound looks healthy, and most of the urine passes by it in a fairly good stream. Dressed as before. Temperature, 9.30. P.M., 100°.

21st.—12.30 A.M.: Four grains of quinine were given in one dose. Temperature, 1.15 A.M., 103°; 2.15 A.M., 102·4°; quinine repeated.—3.30 A.M., temperature 102·2°; 4.30 A.M., 99·8°; 5.20 A.M., 99°; 6.20 A.M., 98·2°; 7.20 A.M., 98°; 10 A.M., 98·0°; 10.30 A.M.; wound dressed; some slough separating and plugging the opening; tube cleared and reintroduced. 12.30 P.M., quinine repeated.—2.20 P.M., temperature 100·2°; 2.30 P.M., quinine; 3.30 P.M., temperature 99 8°; 6.15 P.M., 99.4°; 6.30 P.M., quinine repeated; 10 P.M., temperature 98°; 11.30 P.M. 99·6°; quinine repeated.

22nd.—3 A.M., temperature 99°; 6 A.M., 99·4°; 9 A.M., 99·4°; 11 A.M., 99°; wound dressed.—3.30 P.M., temperature 98·4°; 6.20 P.M., 98·2°; 9.30 P.M., 97·6°; 12 P.M., 99·3°.

23rd.—6.30 A.M., temperature 99 2°; 9.30 A.M., 99·1°; wound dressed. 12.20 P.M., temperature 98 0°; 3 P.M., 98·0°; 6 P.M., 98·6°; 9.20 P.M., 99°; 12 P.M., 99·2°.

24th.—6.30 A.M., temperature 98·4°; 12 A.M., 98·4°; wound dressed.—6 P.M., temperature 98 6°; 10 P.M., 100°; quinine.

25th.—3 A.M., temperature 99·0°; 6 A.M., 98·6°; 12 A.M., 98·4°. Wound dressed; healing up well. Most of the urine now comes by the urethra. There is no swelling or tenderness about the scrotum, although a little thickening remains. There is a great amount of purulent discharge from the urethra, and there is some little straining required to start the stream of urine.—6 P.M., temperature 98·5°; 10 P.M., 98·5°.

26th.—9 A.M.: Temperature 98·4°; wound dressed.—9 P.M.: Temperature 98·4°.

27th.—10 A.M.: Temperature 98°. The temperature having now been normal for some three days, it was intended to attempt to pass a catheter or bougie on the next day, and as the patient was very fearful of pain, chloroform was given.—9.30 P.M.: Temperature 98·4°.

28th.—9 A.M.: Temperature 98·6°. Chloroform having been given, a large catheter was passed first, which was checked slightly half an inch inside and stopped at a point. An attempt was then made to pass an elastic catheter five inches from the orifice, but it was impossible. Gum-elastic was tried with no better success, and at last a No. 1 silver catheter (English scale) was carefully wormed through a very long and gristly stricture, which appeared to extend along the membranous urethra and some inches of the spongy portion. Before this could be done, however, the wound was broken open again by the finger of the left hand, inserted as a guide to the right direction. The catheter was left in.—3 P.M., temperature 99·3°; 6 P.M., 99·4°; 2 P.M., 99°.

29th.—8.30 A.M.: Temperature 99·4°. The urine has passed partly through the catheter, partly by the side of it, little or none by the wound; as he is pretty comfortable the catheter is allowed to remain. The wound is dressed as before with iodoform and perchloride lint.—6 P.M.: Temperature 99°.

30th.—10 A.M.: Temperature 99·4°. The catheter was removed and a No. 3 elastic was immediately substituted; this passed with ease and was tied in.—9 P.M.: Temperature 100°.

31st.—9 A.M.: Temperature 100°. Another dose of quinine. Catheter left in.—3 P.M., temperature 99·2°; 9 P.M., 99°.

Nov. 1st.—8.30 A.M.: Temperature 99°. No. 3 catheter removed and No. 5 placed in; this also passed fairly easily. The perineal wound has again nearly closed, and the drainage-tube was removed.—9 P.M.: Temperature 99·1°.

2nd.—8 A.M., temperature 99·4°; 8 P.M., 99·6°.

3rd.—9 A.M.: Temperature 99·6°. No. 5 catheter has slipped, and on attempting to replace it by No. 6 considerable difficulty was experienced; it was, however, left in position, but the patient complained of it as very painful.—3 P.M.: Temperature 101·2°. Quinine.—6 P.M., temperature 100°; 12 P.M., 100°. Quinine.

4th.—6 A.M.: Temperature 99·2°. Patient has pulled out the catheter, which appears to have become blocked, and as the urine passes pretty freely per urethram it is allowed to remain out for to-day. The perineal wound is closing, and there is no inflammation about the part.—6 P.M.: Temperature 99·4°.

5th.—9 A.M.: Temperature 99·2°. No. 6 catheter (elastic) again passed, and with comparative ease; left in as before.

6th.—9 A.M.: Temperature 102·0°. Quinine. Catheter left in.—3 P.M.: Temperature 98·3°.

7th.—9 A.M.: Temperature 99·5°. Catheter No. 6 removed, and No. 9 (elastic) passed, and left.—9 P.M., temperature 100·2°.; 12 P.M., 100 0°.

8th.—6 A.M.: Temperature 100°. Quinine.—8 A.M.: Temperature 99·5°. Catheter left in.—8 P.M.: Temperature 99·6°.

9th.—9 A.M.: Temperature 98·4°. Catheter removed and bougie No. 12 passed; left for five minutes and removed. Can now pass full stream of urine, with no straining and no pain. There was still a gleety discharge, but not constantly. Urethra to be distended with eucalyptus oil and olive oil (one part to four) twice daily; and the full-sized bougie to be passed every fourth day for a fortnight, after which time at gradually increasing intervals. The perineal wound is almost entirely closed, and no urine passes by it. The patient, who was very restless, appeared to have considered this condition satisfactory, as he has not attended again for the purpose of having the bougie passed.

Remarks.—This case is given in detail because, although not so complete as one could wish, it yet shows plainly that continuous dilatation is practicable immediately after the subsidence of inflammatory lesions consequent upon the stricture. The patient was an unfavourable one, of an extremely nervous temperament, and had suffered from malaria; but although the temperature went up from time to time during the treatment, it never reached a dangerous height, and appeared to be more due to the aguish tendency than to any direct traumatic cause, passage of catheters, &c.; inasmuch as whilst the catheter remained *in situ* quinine always brought down the temperature to a moderate level. The course of the perineal wound also was most satisfactory, although opened up a second time, in the very difficult introduction of the first instrument.

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Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY

Leucocytosis.—Removal of Tumour from Brachial Plexus.

An ordinary meeting of this Society was held on Tuesday last, Dr. George Johnson, F.R.S., President, in the chair. The discussion on both papers was well sustained.

A paper was communicated by Dr. Ringer on the Increase in Number of White Corpuscles in the Blood in Inflammation, especially in those cases accompanied by suppuration. The author of the paper was Mr. T. P. Gostling, of University College Hospital. The observations of Virchow, Nasse, and Malassez on the increase in number of white corpuscles in the blood in different inflammatory conditions were alluded to. The estimations recorded in this paper by the author have been made with a Gowers' hæmacytometer, and the results were given in percentage numbers of red and in relative numbers of white corpuscles, the normal number being taken as 1 white to 333 red corpuscles, as stated by Dr. Gowers. Estimations have been made in the following cases:—(1) Iliac abscess; (2) pelvic cellulitis and probably abscess; (3) suppurating white leg; (4) suppurating tonsillitis; (5, 6) white swelling treated by the actual cautery; (7, 8, 9, 10) empyemas; (11, 12, 13) phthisis; (14, 15) serous pleurisy; (16) lobar pneumonia; (17, 18) typhoid fever; (19) acute rheumatism. In the iliac abscess (Case 1) ten observations were made on separate days before the abscess was opened. The first half of these estimations showed the relative average number of white to red corpuscles to be 1 to 160; the second half, 1 to 101. The abscess was then opened, and the proportion immediately fell to 1 to 383, after which there was a slight increase, and then a steady decrease to the normal proportion, as is shown by the following averages: 1 to 203, 1 to 223, 1 to 252, and 1 to 358. In Case 2, which was one of pelvic cellulitis and probably abscess, there was found, for a long period, a large increase in the number of the white blood-corpuscles. As is shown by the averages given below, these covered a period of eighty-four days, and each average was made from five estimations: 1 to 148, 1 to 172, 1 to 150, 1 to 158, 1 to 167. During the above period grave symptoms existed, but on May 15th these commenced to improve, and at once the relative number of white corpuscles decreased to 1 to 250, and on May 19th reached the proportion of 1 to 366. It was thought that an abscess in this case had discharged by the bowel, and, if so, the sudden fall would correspond with that seen in Case 1. Analogous conditions were found in the other cases. The new series of observations were from cases of phthisis (Nos. 11 and 12), in both of which cavities existed in the lung-secreting pus. Cases of serous pleurisy, acute rheumatism, typhoid fever, pneumonia, and cauterisation were also considered with reference to the proportion of white corpuscles. The following conclusions were drawn: 1. That white corpuscles are increased in number in suppurative inflammations, especially when accompanied by tension. 2. That they are slightly increased in parenchymatous inflammations. 3. That they are not increased in inflammations accompanied by serous or sero-fibrinous exudation.—The PRESIDENT thought the observations were of much value.—Dr. SYDNEY RINGER said it was still a question whether the increase was due to multiplication in the blood or outside the vessels with subsequent absorption. It was a question also whether leucocytes did not multiply after emigration, or whether other cells than leucocytes could give rise to white corpuscles.—Dr. BERNARD O'CONNOR asked whether there was an actual diminution in the number of the red blood-corpuscles.—Dr. THIN believed that exuded corpuscles did multiply; the inflamed cornea of the rabbit was a site at which the various stages of fission of leucocytes could be seen. The stable cells did not multiply so far as his investigation went.—Mr. VICTOR HORSLEY said that our knowledge had been brought to this definite point by Mr. Gostling, that the increase of white corpuscles in the blood was connected with the local tension of an abscess; and the suggestion naturally arose whether there was reabsorption of white corpuscles. This point could be determined by estimating the number of corpuscles in a vein going from the inflamed area and comparing them with those in an artery going to the part.—Dr. ANGEL MONEY said that the research was one that had evidently occupied a large amount of time, and involved considerable labour, as would be allowed by those who had worked at the subject themselves. He had noted an increase in the number of white corpuscles chiefly in cases of phthisis and empyema. He thought that white corpuscles might be absorbed by the lymphatics, and so Mr. Horsley's suggestion would not be a conclusive proof.—Dr. SIDNEY COUPLAND said the observations were of much value, but still left us in doubt as to where all the white corpuscles came from, even in an ordinary inflamed area.—Dr. DOUGLAS POWELL inquired how long before the actual suppuration began the increase of the white corpuscles in the blood had been observed. He did not think that abscesses or empyemas were often absorbed.—Mr. VICTOR HORSLEY was of opinion that lymphatics did not act as absorbents from abscesses, but Dr. MONEY said he could not accept that position.—Mr. HOWARD MARSH said that large collections of pus unquestionably disappeared, and probably by absorption.—Mr. THOMAS BRYANT had seen very large abscesses become absorbed, and that very rapidly.—Dr. SIDNEY RINGER asked whether pus was absorbed as such, or only after having undergone fatty and other degeneration.—Mr. T. P. GOSTLING, in reply, said that a normal percentage of red blood-discs was not often observed in hæmacytometric calculations; generally there was a slight decrease. Cases 5 and 6 would show that there was a definite increase before actual suppuration occurred.

Dr. MITCHELL BRUCE and Mr. E. BELLAMY read a paper on a case of Removal of a Tumour from the Roots of the Last Cervical and First Dorsal Nerves. Their object in bringing this case before the Society was that it might possibly be of value in demonstrating the spinal origin of the ulnar nerve as far as regarded its relation with the brachial plexus. The patient, a lady aged fifty-four, and very stout, consulted Dr. Bruce about two years ago, with acute pain in the right arm, rapidly increasing; and with paralysis of the muscles supplied by the ulnar nerve and hyperæsthesia of the integument supplied by its cutaneous branches. The symptoms became so serious that entire loss of power of the arm ensued, with serious affection of her health. About eight months before the operation a tumour was noticed near the middle of the lower portion of the posterior triangle projecting just above the collar-bone, steadily increasing in size, firm, incompressible, almost immovable, and giving great pain on manipulation. In November, 1884, it was determined to cut down on the tumour in order to ascertain its nature. An incision was made such as would be adopted for ligature of the subclavian in its third part, but owing to the great depth and accumulation of fat, a vertical incision along the posterior border of the sterno-mastoid was added, and the growth readily reached. The great bloodvessels were carefully held out of the way, and the brachial plexus exposed, the cords of which were "frayed" out over the tumour. After some careful dissection, a growth, springing apparently from the under surface of the last cervical and first dorsal nerves, was uncovered just at their emergence from the intervertebral foramina, passing beneath the subclavian artery and jutting into the superior aperture of the thorax. No nerve trunk seemed to pass through it, and it was readily enucleated. A full account of the tumour was given in the paper. Almost immediately after its removal the patient lost the peculiar lancinating pain, but there was complete paralysis of the arm, owing to the free handling of the cords of the plexus during the operation. After the parts had thoroughly healed, the constant current was applied, increasing to fifty Leclanché cells, and by degrees perfect restoration of function ensued. In February, 1885, however, the patient was attacked with right hemiplegia, and died in the following October.—Mr. T. BRYANT related the case of a lady, aged fifty, in whom pains in the left arm and wasting of the extensor muscles and weakening of the flexors were the chief symptoms. There was a swelling above the clavicle, pressure on which increased the pain. A supernumerary rib or an exostosis was suggested. The tumour increased in size, and the forearm had become further wasted. An exploratory operation was made, and a tumour reached on the upper trunk of the posterior aspect of the brachial plexus, and was readily enucleated after the sheath of the nerve had been opened. The wound healed up in a few days. The pain did not at once entirely disappear, though it was less shooting and had altered in character. The pain ceased at the end of two months. Microscopical investigation led to the opinion that the tumour was a soft sarcoma into which hæmorrhage had occurred.—Dr. BERNON

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said such cases were of much interest in neuro-muscular pathology and physiology, as throwing light on the distribution of the nerve-roots from which the muscles were supplied. The same subject had been treated by him in a paper published in the current volume of the Royal Medical and Chirurgical Society's Transactions. He also gave the results obtained on monkeys by Ferrier and Yeo. He was now investigating the subject by experimental researches on monkeys.—Dr. B. O'CONNOR related the case of a young lady in whom Mr. R. J. Godlee found on the anterior portion of the first rib an exostosis which had pressed upon the brachial plexus and produced painful and paralytic symptoms.—Mr. W. H. JESSOP asked whether there was any affection of the pupil. Stimulation of the second dorsal nerve in the monkey gave rise to mydriasis, and the first dorsal of the dog also possessed this function. The contraction of the pupil had been observed in a case of Mr. Pick's in which the brachial plexus had been injured.—Mr. VICTOR HORSLEY inquired as to the exact progress of the paralysis of the ulnar nerve; the case would be of no value for purposes of localisation after the tumour had been removed on account of the free disturbance of the whole plexus.—Dr. ANGEL MONEY said that Dr. Hughlings Jackson had narrated a case of progressive muscular atrophy of the small muscles of the hand in which the pupil on the same side was small and did not dilate when shaded.—Mr. STANLEY BOYD said that Mr. Jonathan Hutchinson had observed the contracted pupil in cases of rupture of the brachial plexus. The danger of wounding nerves in operations about the brachial plexus was alluded to, and the employment of flat retractors recommended.—Owing to the absence of Dr. Mitchell Bruce, the reply on medical questions was not forthcoming.

CLINICAL SOCIETY OF LONDON.

Desquamative Prostatitis with Hyaline Casts.—Cervical Spina Bifida.—Myositis Ossificans.

THE annual general meeting of this Society was held on the 8th inst., Mr. Thomas Bryant, F.R.C.S., President, in the chair.

Sir ANDREW CLARK related the case of Acute Prostatitis, with discharge of hyaline cylinders resembling renal cylinders, seen by Sir James Paget and himself. The chief interest lay in the circumstance that during the whole course of the case there were found in the urine hyaline cylinders and small flask-shaped hyaline masses, which in some instances were connected with the cylinders. The patient recovered by resolution. It is nearly seven years since the date of the attack, and the patient, a medical man, has remained quite well. Sir Andrew Clark alluded to two other cases, also of medical men, which had come under his personal observation. They might be mere curiosities of medical experience, but as no reference to the discharge of hyaline casts in prostatitis could be found in standard works or special monographs, he thought the case of sufficient importance to be brought to the notice of the Society.—Mr. T. BRYANT considered that the observation was one which merited careful attention. He asked in what way the casts could be distinguished from those of renal origin.—Professor GREENFIELD had met with four cases in which the urine contained concretions having somewhat the characters of corpora amylacea; the cases occurred in two girls and one young woman, and in one boy seven years of age. The concretions appeared intermittently. In one case he found the concretions in large numbers in the kidney after death; they stained deeply with carmine and magenta, and some with iodine. He mentioned these cases, not as of the same nature as Sir Andrew Clark's, but as worthy, like his, of further investigation.—Dr. J. G. GLOVER asked whether the patient had previously had a well-defined attack of gout.—Sir ANDREW CLARK replied in the negative to the last speaker. The characters of the casts were such as existed in the urine of cases of acute nephritis or acute congestion. A most important diagnostic point was the presence of flask-like bodies attached to the hyaline cylinders. The presence of prostatic trouble, and the fact that it was a healthy urine with the addition of a little albumen, were the other conditions that favoured the diagnosis of the prostatic origin of the hyaline casts. In two other medical men he had had illustrations of the same thing, but in neither of these was the disease so acute. The flask-like bodies were probably moulds of the follicles of the prostate. In the urine of women he always found a large quantity of mucus and veritable starch-granules, which were probably derived from the violet powder of the toilet.

Mr. CLUTTON read the notes of a case of Large Cervical Spina Bifida undergoing Spontaneous Cure. The subject was the younger brother of a patient in whom he had successfully treated a lumbar spina bifida by the glycero-iodine injection, and the particulars of which were reported to the Society in 1862. Both cases were shown as living specimens last November. The mother had had ten children, of which the ninth and tenth were affected as above mentioned. The latter was born in 1885 with a spina bifida in the cervical region of the spine, of which the size and position were demonstrated by means of a photograph. It was six and a half inches in diameter, and rather coneiform in shape, with the apex directed upwards. The coverings were thin, but completely enveloped with skin. It could be reduced in size by pressure, but increased again when the child cried. A considerable aperture could be felt in the vertebral arches. It was thought to be a simple running spina bifida, from the fact that there was a perfect cutaneous covering without any ulceration, median furrow, or central depression, that it was translucent in every part of its surface, and that there were no paralytic symptoms. When five weeks old the cyst was found to be much smaller, and its coverings quite soft and flaccid. No treatment of any kind had been adopted, and yet the communication with the interior of the vertebral canal had become occluded. From that time till December it diminished in size, when the child died from causes unconnected with the spina bifida. Mr. Shattock showed the specimen, which was obtained from the post-mortem examination. The posterior part of the cord was involved in the protrusion. The chief part of the latter was constituted by a closed sac of fibrous tissue, situated behind the protruded portion of the spinal cord.—Mr. R. W. PARKER thought that Mr. Shattock's anatomical description went to show that the case was not one of ordinary spina bifida; it could not therefore be used for the purposes of contrasting spontaneous cures with those effected by treatment. As far as the tables of the Spina Bifida Committee went, it would seem that more cures were brought about by treatment than by leaving the cases alone.—Mr. GOLDING BIRD asked what the child died of.—Mr. R. J. GODLEE referred to a case of spina bifida of the upper dorsal region in which there was a scarcely perceptible impulse. Treatment by the iodo-glycerine method led to paralysis of the lower limbs and retention of urine, which was treated by catheterism, on which cystitis developed and the child died some weeks later. Here was a case which seemed most favourable for treatment and yet led to disastrous results.—Mr. J. W. HULKE said that the diagnosis was sometimes exceedingly difficult. He remembered a case in which a slender tubular prolongation connected the sac with the spinal canal; removal was followed by suppuration and death in forty-eight hours.—Mr. J. H. MORGAN said it would be very interesting to know in what the shrinking changes consisted. He well remembered a case of spina bifida of the upper dorsal region under Mr. T. Holmes's care in which there seemed to be almost no connexion between the tumour and spinal canal, yet removal led to immediate syncope and rapid death.—Mr. CLUTTON, in reply, said the child died of some diphtheritic affection. The question was whether it was a pure meningocele or meningo-myelocele, but it was a spina bifida all the same. Spontaneous shrinking was far more favourable than shrinking by treatment. The shrinking was very marked, and the opening between the tumour and the spinal canal or cord must have almost closed, for the impulse on coughing and other signs of like significance altogether disappeared as the shrinkage went on.

Mr. SYMPSON (Lincoln) read notes of a case of Myositis Ossificans, which occurred in a boy aged seven years. He first saw the case on March 27th, 1885, when there was much complaint of pain and tenderness about the right shoulder; a tumour was noticed along the posterior boundary of the right axilla, and another on the left axilla; these growths were larger, more elastic, and nodulated than they were now. There was no history of syphilis. Fresh tumours appeared a month later on the right ilium, and later still over the left eleventh rib.—Mr. J. HUTCHINSON gave a brief report of the conclusions that the Special Committee had arrived at. The case was regarded as a most

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remarkable case of myositis ossificans, affecting chiefly the latissimus dorsi and trapezius on both sides, also the triceps on the right side. There was no certain proof of any exostosis independent of the muscles. A remarkable feature was the existence of a "saddle" of bone extending completely round the loins, and preventing movement of the trunk. There was no ossification of muscles on the anterior surface of the trunk. The shoulder-joints were fixed by the result of the ossification in muscles. Another feature that was drawn attention to was the occurrence of ossification in the form of bony lumps or nodules, not in plates and spinous processes, as was the rule in myositis ossificans.

The following living specimens were shown:—Dr. Pringle: Symmetrical Guttate Scleroderma. Mr. Sympson (Lincoln): A case of Myositis Ossificans. A special committee, formed of Mr. J. Hutchinson, Mr. H. H. Clutton, and Dr. W. H. Allchin, was appointed to investigate the latter case. (*Lancet.*)

MEDICAL SOCIETY OF LONDON.

Treatment of Varicocele.—Lardaceous Hepatic Disease.—Athetosis.

A SPECIAL meeting of this Society was held on Monday last, Dr. W. M. Ord, President, in the chair.

Mr. BARROW read a paper on a new method of treating Varicocele by Excision. It was most important to protect the spermatic cord from injury. This was accomplished by separating the diseased veins from the cord, and then silkworm needles were passed behind the veins and served as a platform to them, and facilitated the operation. An incision was made from the external abdominal ring to the scrotum so as to allow of retraction of the skin and fully expose the veins. The pins were then removed, and the wound closed and dressed. In ten days or a fortnight the patient left the hospital, the wound healed by first intention, and there was no constitutional disturbance. He considered that this operation would compare favourably with others; it was certainly most radical.—Mr. A. P. GOULD had employed division of spermatic veins by means of the ecraseur thirty times, and excision of the veins about fifty times, and he preferred the former operation. He had given up excision, for he had witnessed evil consequences from the practice of other surgeons. He considered the incision was unnecessarily long. It was, in his experience, difficult to get the scrotal skin to heal by first intention.—Mr. BERNARD PITTS said in one case of excision of the veins he had experienced considerable trouble from suppuration spreading widely necessitating incision, and greatly prolonging the convalescence. He had also seen much wasting of the testicle, probably as the result of free excision of parts. He thought the operation was necessarily severe for most cases of varicocele.—Mr. LORD EDWARDS had seen symptoms probably due to pulmonary embolism, after a case of excision of the varicose veins. He preferred Ricord's operation.—Mr. J. HUTCHINSON thought it was somewhat surprising that atrophy of the testis was not more frequent, as the spermatic veins not uncommonly ran in the so-called anterior bundle of the cord veins.—Mr. BARROW, in reply, thought the size of the wound was of no consequence if the antiseptics were used. He used salicylic wool as a dressing.

Mr. BERNARD OWEN showed a case of great improvement in Albuminoid Disease of the Liver. The patient was a boy aged twenty-five, who had suffered from gastric symptoms for some months; slight jaundice had been noted for six months, and a tumour in the epigastrium for three months. Frequent micturition was another symptom. The patient was first seen in Nov. 1884. The liver was found to be greatly enlarged, and the tumour was a projection from it. The spleen could be touched below the ribs. The urine was of low gravity of 1018, and contained bile and about one-fifth albumen. Lardaceous disease was the diagnosis. There was no history of suppuration or syphilis. An ordinary iodide of potassium treatment was prescribed; mercury was also given. The liver gradually diminished in size, and the organ was probably now not more than one-third its original size. The gastric and other symptoms had disappeared.—Dr. PRINGLE had under his care [illegible] there was evidence of syphilis many years before. The projection was probably a gumma. He had ordered 20-grain doses of iodide of potassium three times a day, with excellent results.—Dr. ORD said that the presence of an isolated tumour and of tenderness was an unusual circumstance in the case, supposing it to be one of pure amyloid disease. He considered that the disease was probably syphilitic as well as albuminoid. He inquired whether the blood had been examined.—Dr. PURCELL had seen a similar condition of the liver in a nurse who was evidently syphilitic.—Dr. KINGSTON FOWLER considered that external evidence of syphilis was frequently wanting in cases where the syphilitic disease was internal. Regarding the case as one of syphilitic cirrhosis, he said it was rare for the liver to be affected with lardaceous disease before the spleen.—Mr. WALTER PYE suggested a mechanical origin for the albuminuria.—The PRESIDENT elicited that the amount of urine secreted was increased and so negatived this suggestion.—In reply, Dr. ISAMBARD OWEN said that the projection was hardly of the nature of an isolated tumour, but merely the bulging of a generally enlarged liver.

Dr. BEEVOR showed a case of Left Athetosis in a girl aged twenty, which had come on after fits following an attack of whooping-cough when the patient was two years old. The hand was chiefly affected. There was no anæsthesia. She had left-sided fits, beginning with an epigastric aura and twitching of the left hand, and followed subsequently by temporary left-sided paralysis. The lesion was considered to be softening of the cortical centres of the left arm and leg following thrombosis after whooping-cough. Attention was drawn to the presence of athetosis and epileptic fits on the same side, and to the prevalence of the epigastric aura with left-sided fits, which was considered to be a symptom, and not a cause, of the attacks.—Dr. STRETCH DOWSE was glad that Dr. Beevor took exception to the view that the internal capsule was the seat of the lesion in all cases. In his opinion, the cortex might be the seat of lesion. In many cases there was great loss of intellect.—In reply, Dr. BEEVOR said that the number of fits might account for whatever of mental deficiency might exist.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

The Housing of the Working Classes as it affects the Status of Medical Officers of Health.

A MEETING of this Society was held on Dec. 18th, 1885, at 1, Adam-street, Adelphi, the President, Dr. W. H. Corfield, in the chair.

A paper was read by Dr. E. C. SEATON entitled "The Recommendations of the Royal Commission on the Housing of the Working Classes as affecting the Status of the Medical Officer of Health." The recommendations to which the author of this paper alluded are: (1) that medical officers of health should in future appointments be required by sanitary authorities to give their whole time to their official duties; (2) that they should be required to live within a mile of the district which they serve. The object of the paper was to show that in the present state of public opinion, and with areas of local government as at present constituted, such restrictions as those recommended are calculated to retard rather than to advance the progress of that cause which all health officers have at heart—the extension and application of medical and scientific knowledge for the benefit of the public health. The question of the status of the medical officer of health—that is to say, the character of his duties, his relation to his fellow-officers, and his emoluments and tenure of office—is the most important one that has to be considered in relation to the public health. The author has always had doubts of the wisdom of that policy which has led some earnest sanitarians so strenuously to advocate as a general principle that which, for the sake of brevity, might be described as "whole service," except in occasional instances, such as the very large combined areas and perhaps towns of the first magnitude. After quoting the opinion of Dr. Gairdner, Mr. Simon, and Dr. Buchanan in favour of the view that advantage was derived by the medical officer having opportunities for hospital practice, an account was given of a supposed dialogue between two medical officers—the one who argued in favour of the "whole," the other of the "partial service" system. In this dialogue it was argued that

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medical officers of health should not assume too much responsibiliy in connexion with legal matters, and that they should avoid appearing in courts of law as advocates or prosecutors, but rather adhere to their proper position as scientific witnesses. It was further pointed out that on such questions as those connected with unhealthy houses, sewage-disposal, water-supply, &c., there was much risk of their coming into collision with engineers, surveyors, architects, and professional chemists (who upon some aspects of these questions were, generally speaking, more entitled to be considered experts), unless they adhered strictly to their own special province as medical officers. Particular attention was also directed to the important duty of a medical officer of health as an adviser of the sanitary authority on all municipal questions affecting the public health, such as hospital accommodation, sanitary administration and police, excrement removal and disposal, water-supply, &c.; and to another equally important duty which devolved on him, of scientifically studying the causes of the origin and spread of outbreaks and epidemics of disease. Dr. Seaton was of opinion that, assuming that the professional arguments on both sides were equally balanced, as a general policy, apart from other considerations, the whole-service system is opposed to the highest public interests, because the public would in the future be deprived of the services of medical experts, such as those who in various ways have so largely contributed to scientific knowledge in the prevention of disease, but who could not be expected to sacrifice everything for a profession in which the usual incomes are very small and precarious, and which, as a profession, may be said to be without prizes; also, because among the towns and districts which have required the whole services of medical experts there are many which are evidently not sufficiently large to need them, as is clearly shown by the fact that the officers appointed for this purpose have undertaken, or had imposed upon them, duties which do not require any professional knowledge, and which might be performed quite as well, and at less cost to the public, by non-professional persons; finally, because the insecurity of tenure makes it very difficult for a medical officer of health, who is cut off from all other means of earning a livelihood, to discharge his duties with sufficient independence, and this want of proper independence would be especially felt in cases where the authority was largely composed of small property owners, who were opposed to sanitary work. In conclusion, he alluded briefly to the proposed restriction with regard to place of residence, and pointed out that such a restriction would interfere with the combination of sanitary districts for the purpose of appointing a medical officer of health, an arrangement which generally worked so well; and further, that in London the facilities for locomotion were such that from central positions medical officers could reach any part of their parishes or districts in the shortest time.—In the discussion which followed, the President, Mr. Armstrong, Dr. C. E. Saunders, Dr. Swete, Mr. W. Blyth, Mr. Lovett, Mr. Jacob, and Dr. Bate took part.

ACADEMY OF MEDICINE IN IRELAND.

Madura Foot.—Milky Fluid in the Peritoneal Cavity.—Rupture of Intercranial Vessel.—Osteomalacia.

AT a meeting of the Pathological Section held on Dec. 4th, 1885,

Dr. E. H. BENNETT exhibited a specimen of Madura Foot which had been presented to the museum of the University by Surgeon Burke, of the Indian Medical Service, a former pupil in the School of Physic and a graduate of the University. The specimen was obtained by amputation for the relief of the disease, which occurred in a coloured woman, an inhabitant of Central India.

Dr. DUFFEY exhibited a specimen of a Milky Fluid removed by Paracentesis during life from the peritoneal cavity of a single woman, aged fifty-two; and also portions of the viscera from her body. He briefly referred to the different forms in which a fluid resembling milk is met with pathologically, and said that he believed many of the so-called cases of "chylous" ascites were so only in name. In Dr. Duffey's patient the fluid was certainly not chylous. The case was one of chronic diarrhœa of five months' duration, during the last six weeks of which there was, in addition, ascites. The abdomen was tapped three times. On each occasion a milky fluid was withdrawn. Erysipelas supervened after the last tapping, and the woman, who had become very weak and emaciated, died. On post-mortem examination the parietal peritoneum was found to be thickened and opaque, and, as well as the costal pleura, sprinkled over with small white fibrous nodules, which were likewise plentifully bestrewed over the greatly thickened omentum and the serous envelope of the intestine. In Douglas's pouch there was a considerable deposit of nodules, which in some places had coalesced and looked like caseous masses commencing to soften. There were enlarged glands in the lesser omentum and in the vicinity of the cæcum. Numerous small ulcers were found in the cæcum itself and adjoining portion of the large intestine; and both segments of the valve were much thickened and ulcerated. The thoracic duct and its branches appeared quite normal. Dr. Duffey believed the case to be one of tuberculosis, but he could not say what was the cause of the colour of fluid, or what connexion, if any, there was between it and the chronic peritonitis. So far as these two circumstances went, the case seemed to support the conclusion recently advanced by M. Letulle (*Rev. de Méd.*, Sept., 1884), to the effect that a chronic inflammatory element is the most constant character in the genesis of such chyliform effusions.—Dr. FOOT said he had a case of this kind in which he tapped the patient four times for effusion into the peritoneal cavity. Mr. Scott analysed the fluid, and found in it 25 per cent. of sugar and a notable quantity of urea, which he expected, as the man was suffering from parenchymatous nephritis and general dropsy. But his limbs and scrotum had to be punctured, which was done without any bad results; and the fluid which issued from these punctures, of which he made about 150, was as limpid as dew. On the other hand, the fluid that came from the peritoneal cavity was like milk-and-water; and similar fluid came up from the man's stomach. By the four tappings twenty-four quarts of this milky fluid were taken from him. Its specific gravity was from 1004 to 1006.—Mr. STORY asked if Dr. Duffey had found any microscopic evidence of the presence of bacilli.—The PRESIDENT remarked that after two or three tappings, the man whose case was the subject of Dr. Duffey's communication had an attack of erysipelas, which assumed a gangrenous character, and perhaps was the cause of his death. The supervention of erysipelas was very rare after tapping for ascites. Where did it start from in the case in question?—Dr. DUFFEY, in reply, said he believed most analyses that had been made of the kind of milky fluid in question had shown the presence of sugar. In his case the fluid had not been examined for sugar. Dr. Foot's case bore out the view that a great many cases of the kind were due to chronic peritonitis. A microscopic examination of a portion of the fluid drawn off at the second tapping showed some endothelial cells and exudation corpuscles. There was no microscopic evidence of bacilli; Dr. Purser and other gentlemen had detected none. But there was a case of convalescent erysipelas in the ward, and in consequence every precaution as to cleanliness of instruments and disinfection was taken. The erysipelas started from the site of the third puncture made in the patient, gradually extended, and in a short time assumed a bluish appearance. There was no vesication, and the erysipelas did not extend into the peritoneal cavity.

Dr. J. K. BARTON made a communication on a Tumour of the Internal Saphena Vein. It was about the size of a pullet's egg, and was evidently formed by an expansion of the coats of the vessel. It was filled with a clot so firm and adherent to the lining membrane that it could with difficulty be separated.

Dr. FOOT exhibited the Heart and Kidneys from a case of Bright's Disease. The kidneys were typical examples of the contracted granular kidney as described by Richard Bright. The heart was hypertrophied, weighing thirty-two ounces, the hypertrophy chiefly affecting the left ventricle. Neither valvular disease nor atheroma of the aorta was present, but the surface of the heart was covered with a regular sheet of pericardial exudation. The chief clinical feature in the case was the presence of persistent hæmatemesis.

Dr. MACSWINEY exhibited the Brain of a Man who had died from Rupture of an Intercranial Vessel. The man, aged sixty, was brought to the hospital that day week in an insensible condition. He was quite unconscious, immovable, and without sign of sensibility. He was a labourer, and was actually at work that day. A few hours

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before the fatal attack he complained of pain in his head. That did not deter him from continuing his work, and he was in the act of levelling a wall with a crowbar when he fell. When persons came to his assistance he was conscious and could speak, but was unable to walk; but consciousness and power of speech rapidly left him, and in two hours after the attack, when he was brought to the hospital, he was in the state which he (Dr. MacSwiney) had described. His face was pale and his eyes contracted and immovable, but he had no stertorous breathing. His pulse was feeble and rapid. The sphincter of his bladder was paralysed, and he passed a quantity of urine, which trickled to the floor. His left upper and lower extremities were extremely rigid and almost tetanically contracted. He lived about fourteen hours after his first seizure. After death the brain was removed. The convolutions on the left side were very much flattened, and there was considerable subarachnoid effusion of blood on the surface of the convolutions. The base of the brain was occupied by a very large effusion of blood. It appeared that the blood burst through the arachnoid, and was effused into the arachnoid space. When the blood had been removed, it was found that on the left side there was an aneurysmal dilatation of one of the branches of the internal cerebral artery which had given way. There was a very large hæmorrhagic focus, which had torn through the white substance of the frontal convolutions and excavated a large cavity, which was filled with clotted blood, and the sides of which were formed of projections of lacerated brain substance. The ventricles had not been opened, but he had no doubt that there was blood in them. Arterial hæmorrhage in the brain generally resulted from the rupture of a diseased vessel, and in the present instance the diseased vessel showed the form of degeneration known as atheroma, which was not the most usual form that existed in the arterial dilatations described by Charcot. He had no doubt that the efforts the man was making were the cause of rupture.

DR. E. H. BENNETT exhibited specimens taken from a patient suffering from Osteomalacia, who had been under his observation for several years before her death, and during the entire period of her disease. The case was exceptional in this, that while the woman was comparatively young, being at her death about thirty-nine years of age, pregnancy had not occurred as the starting-point of the disease, nor were the conditions of life such as could be assigned as the cause. She had lived in the capacity of upper nurse in most comfortable situations and in various climates, in England, Ireland, and in France. The chain of events in the progress of the disease was spontaneous fracture of the left clavicle, after union of this its refracture, a fracture of the shaft of the humerus at its upper extremity, followed at intervals of several months by successive fractures of the same bone in its upper half, each fracture uniting well and in the usual time for healthy bones. During the treatment of the last of these accidents, just as the repair was completed, the shaft of the femur on the same side broke in its upper half as the patient turned in bed. At this time she suffered severe pains in the lower limbs and back, and particularly in the right thigh—such that one began to expect the occurrence of fracture of that bone also. She could not bear the restraint of a Liston splint, and milder means were adopted; but the patient suddenly died from failure of the heart. Her fingers had become remarkably clubbed at the ends, while the nails were corrugated—points which raised a suspicion of pulmonary phthisis, but of this there were no signs during life and no evidence post mortem. The bones, which had been the seat of pain as well as those that were broken, presented a dull mottled appearance, and were so softened that a scalpel could easily be thrust through their tissue, even through the shaft of the unbroken femur. The medulla was brownish, fatty and free from red colourisation. The kidneys were studded everywhere with fine grains of dull white particles of gritty sand, against which the edge of the knife grated in cutting the cortical and medullary tissues, but there was no free sand or calculus in the hilum, ureters, or bladder. Chemically examined, these grains were found to be composed of mixed phosphate and carbonate of lime—to be, in fact, bone-earth. Structurally they were amorphous. The liver and spleen were free from disease. The heart was very small, thin, and soft, and evidently fatty. Dr. Bennett discussed the relation of this affection to rickets and to senile osteoporosis, pointing out the characters which appeared to him to distinguish them.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.

Difficulties of Diagnosis in certain Cases of Cerebral Tumour.

AT the meeting of this Society held on Jan. 1st,

Dr. HALE WHITE read a paper on the Difficulties of Diagnosis in certain Cases of Cerebral Tumour. The author first related particulars of a case in which no cerebral symptoms whatever were known to be present during life, but at the necropsy the presence of a tubercular mass in the cerebellum was quite accidentally discovered. Then full particulars were given of an interesting case of tumour in the frontal lobe. In this patient for a long time, the only symptom was headache, and it was not till a short period before death that the presence of optic neuritis was discovered. The patient died suddenly without the advent of any other than these two symptoms. The next case related was one of a woman, in whom a tumour in the region of the occipital and temporo-sphenoidal lobes existed; it was about the size of a Tangerine orange, and produced no symptoms whatever that could with certainty be referred to its presence. It was concluded from these three cases that tumours might exist in the cerebellum, frontal lobes, and occipital region, and be very difficult of diagnosis. The presence of paralysis of some of the cranial nerves did not necessarily forbid the diagnosis of the presence of a tumour in this region, for if it were of a very great size its pressure might compress the nerves at the base of the skull against the bone. Tumours in the regions just indicated have no special symptoms, such as paralysis; therefore, for their diagnosis we are entirely dependent upon the general symptoms—viz., headache and optic neuritis; vomiting occupying an intermediate position, being partly a general and partly a special symptom of tumours near or in the cerebellum. Even the combination of headache and optic neuritis did not conclusively prove the existence of a cerebral tumour, for a case was brought forward in which both of these symptoms were present, both being due to anæmia, the patient rapidly recovering on treatment with iron; still, the combination of these two symptoms would make one extremely suspicious. The form of headache most likely to be associated with cerebral tumour was next discussed, and it was pointed out how frequently, if not careful, a mistake might be made with myopic patients, who often complained of dimness of sight and headache. The next question raised was as to the means of diagnosing the kind of tumour, but it was pointed out that this was not of so much importance as to diagnose its presence, because one's duty to a patient is always to give large doses of iodide of potassium.—Dr. PURVES moved a vote of thanks to the author, and gave an interesting account of a case in which the diagnosis lay between embolism and hysteria.—Dr. CABLE, in seconding the vote of thanks, related several cases of cerebral tumours.—Dr. ERNEST CLARKE made some suggestive observations with regard to optic neuritis in cerebral tumours.

Reviews and Notices of Books.

English Worthies. Edited by ANDREW LANG, CHARLES DARWIN, and GRANT ALLEN. pp. 206. London: Longmans. 1885.

This is the first of a series which is to include Marlborough, by George Saintsbury; Steele, by Austin Dobson; Sir T. More, by Cotter Morison; and many others. The present volume is an appreciative account of the life and works of the great naturalist, who has been styled the "Newton of Biology" and the "Joshua who led the world of thinkers and workers into full fruition of that promised land, which earlier investigators had but dimly descried from the Pisgah-top of conjectural speculation." Mr. Grant Allen shows, in a good introductory chapter, how the germs of Darwin's great doctrines of the mutability of species and their origin from a common form were sown by Buffon, nurtured by Geoffrey St. Hilaire and Goethe, and largely developed by Erasmus Darwin, by Lamarck, and later by Lyell, till it was fully matured by Charles Darwin,

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and appeared in the form of modern evolutionism, which rapidly overthrew the previously dominant views of violent revolutions, cataclysmal changes, and new creations. That Darwin was descended from the Wedgwoods through his mother is well known. The grandson of Erasmus Darwin and of Josiah Wedgwood, it is not surprising that Charles Darwin was an accurate observer and an acute and original thinker. The importance of Darwin's early travels in the voyage of the *Beagle* cannot be over-estimated in their influence on his mind, and in many passages he expresses himself in a manner that show the dawning of his later views. Referring to the calm consideration which Darwin devoted to the materials he brought home from all parts of the world in the *Beagle*, Mr. Grant Allen observes that they give us "in a nutshell the true secret of Darwin's success in compelling the attention and assent of his contemporaries to his completed theory." In the "Origin of Species" he brought together an imposing array of closely serried facts, secured every post in the rear before taking a single step onward, and brought to bear upon every antagonist the exact form of argument with which he was already thoroughly familiar, and most of the facts were drawn from his observations whilst acting as naturalist to the *Beagle*.

Great as was the impetus given by Darwin's researches to the study of animal life, that to botanical work was almost equally strong, and Mr. Allen reminds us that, in regard to the single question of the "Fertilisation of Flowers," Mr. D'Arcy Thompson has collected a list of no less than 814 separate works or important papers bearing on that special department of botany—almost all of them subsequent in date to the first publication of the "Origin of Species"; and the number of workers now engaged in the solution of the problems opened up by that work in this country and abroad is incalculable. Taking Mr. Allen's book as a whole, it may be regarded as a history of Darwinism, rather than as an account or biography of Darwin—a description of the origin and progress of his doctrine, than a history of the individual. It, however, commences a series of volumes that, if followed by others of equal value, promise much entertainment, and are thoroughly deserving, not of perusal only, but of study.

Diseases of the Tongue. By HENRY T. BUTLIN, F.R.C.S., Assistant-Surgeon and Demonstrator of Practical Surgery, St. Bartholomew's Hospital. Pp. 451. Cassell & Co.

As Mr. Butlin remarks in his introductory chapter, there are certain difficulties in carrying out the encyclopædic plan—which he has adopted,—inasmuch as "some of the diseases are of such a kind that each one of them comprises in itself several, or many, different physical conditions of the surface of the organ." In other words, this particular method necessitates a good deal of repetition, and involves much cross-division. Had the procedure usually practised been selected, of describing in narrative form the diseases of which a book treats, rather than making abnormal signs often common to many pathological conditions the cardinal point of dissertation, a good deal of space would have been saved, and the book before us would probably not have exceeded two-thirds its present size. The treatise, however, is written for "practitioners and students of medicine," and the former will be glad of an arrangement which affords them a convenient and ready reference to the phenomena of disease. We do not wish to be captious or hypercritical, but it occurs to us, on careful perusal of Mr. Butlin's work, that a few diseases of rare occurrence are given too much prominence—e.g., "Tongue-swallowing," which some may scarcely have heard of, and most have never seen, takes up five pages. The treatment recommended of the several morbid states of the tongue is thoroughly sound; but here, again, we meet with a good deal of repetition which might to some extent have been avoided. Apart from the objections above raised, we have nothing but praise for Mr. Butlin's Manual. Many chapters are models of concise writing and logical reasoning, and this is especially the case with those devoted to "Carcinoma" and "Syphilis." As regards the latter two we could wish nothing better. The section devoted to "Macroglossia" is another instance of lucid exposition, and shows marked clinical acumen. The book, which is copiously and beautifully illustrated with chromo-lithographs and engravings, will add greatly to the reputation of its author, and be highly prized not less by the busy practitioner than the student.

OUR LIBRARY TABLE.

Lectures on Diseases and Injuries of the Ear. Delivered at St. George's Hospital. By W. B. DALBY, F.R.C.S., M.B. Cantab, Aural Surgeon to the Hospital. Third Edition. London: J. and A. Churchill. 1885.—That another edition of this now well-known book has been called for is of itself evidence that it is popular with the profession. The opportunity of revision has given Mr. Dalby the opportunity of dealing in this edition with the adenoid growths in the pharynx to which Dr. Meyer first called special attention, and which have been shown to be of great importance in connexion with inflammatory changes in the middle ear. The chapter dealing with this matter adds nothing to the common knowledge of the malady, but it supplies an important omission in the previous edition. The subjects of affections of the brain following diseases of the ear and the mode of estimating degrees and varieties of auditory acuteness are more fully dealt with than before. The conversational style originally adopted has been preserved, and indeed it would be impossible to alter this without rewriting the entire book. This style has considerable advantages, chiefly in making the book very readable. It has also, of course, its disadvantages in its lack of precise order and fulness of detail, so that as a book of reference it is less useful than a systematic treatise, especially as the index is very scanty. But of systematic treatises we have enough, and we are glad when we get a readable account of the experience of one who has had large opportunities of observing the diseases and injuries upon which he writes. If Sir W. B. Dalby will add a complete analytical index to the next edition of his work, he will greatly enhance its value to the practitioner.

A Schoolmaster's Retrospect of Eighteen and a Half Years in an Irish School. By MAURICE C. HIME, M.A., LL.D., Head Master of Foyle College, Londonderry.—We have read with interest "A Schoolmaster's Retrospect." All that pertains to education is of the first importance to medical men. The best minds in the profession are engaged in imparting knowledge to others. Any hints given by a practical schoolmaster of large experience cannot fail to interest. Dr. Hime's book is evidently the outcome of a great deal of thought, and of very considerable experience during eighteen and a half years. He discusses a great many topics, some of which we will briefly notice. He is opposed to the idea that the art and science of education are of easy attainment, and offers some very sensible observations on this matter. Corporal punishment and all forms of punishment are condemned. "Corporal punishment appeals only to boys' fear as a motive; and what a wretched motive is fear! How improving and elevating, on the other hand, to appeal to and evoke and strengthen his reasoning powers and his love. Fear can have no terror for a boy except when present with him, and this it clearly cannot always be. Love of right and love of parents, though, can be always present with him. Develop this love in him, and alike before your face and behind your back he will try to do his duty." Cramming finds no advocate in this little

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book, but thorough knowledge and a great deal of self-education are insisted on. Dr. Hime finds fault in some particulars with existing methods of education. He upholds the great value of the ancient classics as a foundation in education, and thinks the teaching of science ought to be deferred. In this view he is at variance with a great many modern writers. The education of the senses commences spontaneously at a very early period of life, and this important part of education receives very little development in the present state of school training. The practical teaching of science, it may be said, would require laboratories, which are not to be found in our schools. To this it may be answered that much information in science could be imparted from the study of many common objects which thrust themselves on our attention in every-day life. Dr. Hime holds that every schoolmaster ought to be a medical man. He says: "A schoolmaster ought to understand thoroughly all questions relating to the bodily and mental health of his pupils." Most men who take the trouble of getting the M.B. degree, suggested by Dr. Hime, will probably prefer continuing the all-absorbing study of medicine to undertaking the office of schoolmaster, of the practical duties of which they know little or nothing. It would require years of successful practical work before a man could attain to the enthusiasm for a schoolmaster's work which is possessed by Dr. Hime, as evidenced in the pages of this work. It cannot be insisted upon too strongly that a knowledge of physiology is of the utmost importance, not only to the schoolmaster, but also to every individual. Herbert Spencer, in his work on Education, says: "We infer that as vigorous health and its accompanying high spirits are larger elements of happiness than any other things whatever, the teaching how to maintain them is a teaching that yields in moment to no other whatever. And therefore we assert that such a course of physiology as is needful for the comprehension of its general truths, and their bearings on daily conduct, is an all-essential part of a rational education."

An Index of Surgery; being a concise Classification of the main Facts and Theories of Surgery, for the use of Senior Students and others. By C. B. KEETLEY, F.R.C.S., Senior Surgeon to the West London Hospital, Surgeon to the Surgical Aid Society. Third Edition. London: Smith, Elder, and Co. 1885.—The alterations and additions made in this edition of Mr. Keetley's now well-known book are few and insignificant. In the article on the Surgery of the Ovaries and Uterus Mr. Alban Doran has added notes on Porro's operation and on diseases of the Fallopian tubes. Mr. Juler has also made his article on Ophthalmic Surgery more complete. If used properly—that is, as an accessory to systematic treatises, and not as a substitute for them—the book may be of great benefit to students. The value of the book depends entirely upon the way in which it is used.

Quarterly Journal of Microscopical Science. Edited by Professors LANKESTER, DYER, KLEIN, MOSELEY, and SEDGWICK. No. CI., Nov. 1885.—This part contains five memoirs:—1. J. T. Cunningham: On the Relations of the Yelk to the Gastrula in the Teleosteans; with four plates. In this paper the author gives descriptions, measurements, and illustrations which set forth the peculiarities characterising the eggs of the several species, and also furnishes some explanation of the steps by which the process of development has been produced by the contending influences of heredity and adaptation. 2. Howard Ayers: On the Structure and Function of the Sphæridia of the Echinoidea; with one plate. The author supplies evidence showing that they possess the double function of taste and smell. 3. A. B. MacCallum: The Nerve Terminations in the Cutaneous Epithelium of the Tadpole. Some of the fibrils, he shows, enter the epithelium and terminate in comparatively large bead-like bodies between the cells; others terminate in excessively fine fibrils, of which one, two, three, or even more, terminate in the interior of each epithelial cell near its nucleus. 4. Ray Lankester: On Green Oysters; with one plate. The colour appears to be deposited in certain cells of the gills of the oyster, and to proceed from the Navicula ostrearia, which is ingested by the oyster as food. 5. John Beard: The System of Branchial Sense-organs, and their associated Ganglia in Ichthyopsida; with three plates. This is a contribution to the ancestral history of Vertebrates.

The Journal of Physiology. Edited by MICHAEL FOSTER, F.R.S. Vol. VI. No. 6.—This part contains the following articles:—I. D. W. Samways: A Double Differential Rheotome; with one plate. 2. W. D. Halliburton: On the Blood of Decapod Crustacea; with one plate. 3. S. Martin: The Nature of Papain and its Action on Vegetable Proteids. 4. S. Ringer: Regarding the Influence of the Organic Constituents of the Blood on the Contractility of the Ventricle; with one plate. 5. J. G. Adami: On the Nature of Glomerular Activity in the Kidney—a valuable contribution to the comprehension of the process of secretion. 6. F. M. Ellis: Plethysmographic and Vaso-motor Experiments with Frogs; with two plates. 7. W. H. Waters: Some Vaso-motor Functions of the Spinal Nerves in the Frog.

The Journal of Mental Science.—The current number contains the following articles: On the Alleged Fragility of the Bones of General Paralytics, by Dr. T. Christian; Some Points in Irish Lunacy Law, by Mr. Conolly Norman; Design for a Public Asylum for 310 Patients, by Dr. S. Cobbold; On a Recent Visit to Gheel, by Dr. Hack Tuke; An Unusually Heavy Brain in a General Paralytic, by Dr. McDowall; Two Cases of Melancholia, by Alex. Patton, M.B.; Cases in which Hæmaturia and Appearances as of Several Bruises occurred Spontaneously in the Course of an Attack of Maniacal Excitement, and in which after death there was found to be extensive internal hæmorrhagic pachymeningitis, by Drs. Savage and Percy Smith; Clinical Notes on Hæmorrhages, by Dr. Savage; Counter-irritation in General Paralysis, by Dr. Pritchard Davies.

Danielsson and Co.'s Clinical Publications.—We have received from Messrs. Danielsson and Co., of Southampton-buildings, Chancery-lane, some specimens of Charts, &c., which they have published. No. 1 consists of a series of outlines of bones upon which the surgeon can mark the seat and direction of fractures, excisions, &c. Included among them are accurate outlines of the skull, with the cerebral convolutions marked, after Féré. These are very useful, and save much time both in making and in referring to notes of cases. No. 2. A series of clinical figures and outlines, consisting of the surface of the body, back, front, and laterally; of individual parts, as the scalp, face, head, hands, feet, larynx; of the brain, entire and on section; of the retina; of the thorax, thoracic, abdominal, and pelvic organs. They are all carefully done, and are of real service in the record of cases. No. 3. A Pocket Case-book. Each page contains a small temperature chart, with appropriate space for history and description of the case. The book can readily be carried in the pocket, and yet the pages are not too small to be of use for short records of cases. Careful practitioners will find it of real assistance to them.

The Medical Chronicle. Vol. II., No. 12.—This valuable Chronicle still keeps on its way, and maintains its original character. The current number contains three original contributions. The article on Enteroraphy, by Stanmore Bishop, is illustrated with a plate showing clearly the various methods of suturing wounds of the bowel. Dr. Leech's article advocates Paracentesis in Pericardial Effusions. Dr.

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T. Harris has an article on a well-worn but still unexhausted subject—the Relative Value of Tests for Albumen in the Urine. The rest of the volume is devoted to abstracts of various papers on Medicine, Therapeutics, Surgery, Midwifery &c., Diseases of Skin, Hygiene, &c. This is, of course, the most valuable portion of the Chronicle, and its chief *raison d'être*.

Gaceta del Hospital Militar.—We have received from Guadalajara, Mexico, the first number of this new medical periodical. Its object is to promote the study of Mexican medical topography by collating and publishing the information acquired by the medical officers of the army respecting the various regions in which they are called to serve, and the diseases peculiar to and most prevalent in them. It is also intended to turn to account the opportunities for clinical observation afforded by the military hospitals. In the present number of the Gazette a return of the military hospital of Guadalajara for the month of October is given, showing the admissions, deaths, discharges, and patients remaining in hospital, but as there is no statement of the strength of the troops to whom the return refers it is of comparatively little value. We trust that in future returns this important information will be given. The present return shows a very great prevalence of venereal diseases, forty-three out of a total of 106 admissions into hospital having been caused by them. A history is also given of an epizootic of acute enteritis and colic among the horses and mules of the artillery immediately after the removal of the company from Guadalajara to Juares. Among 103 animals there occurred, between Aug. 5th and Nov. 2nd, six cases of acute enteritis and twenty-seven of colic, and of the latter five proved fatal. The disease is attributed to the change of climate and of food, but there appears to be some reason to think that it may have been in some degree due to the quality of the maize, which constituted the most important part of the forage. We wish our new contemporary a long and successful career.

HEALTH OF BOMBAY.

THE nineteenth annual report by Surgeon Davidson, the acting health officer, on the health of Bombay during the year 1884 shows the mortality to have amounted to 27·29 per 1000, that of the males being only 25·29, while of the females it was as high as 34·96. Although this is lower than the death-rate of 1883, it is above the average of the preceding five years. Fevers caused 6830 deaths out of a total of 22,542; pneumonia and bronchitis, 3364; phthisis, 3083; infantile convulsions, 1980; diarrhœa and dysentery, 1716. Cholera did not prevail to any extent during the year, only 576 deaths by it having been reported, mostly between the ages of fifteen and fifty. There were only 18 deaths returned under the head of enteric fever. A series of tables is given showing the number of deaths from different causes among persons employed in different occupations, but as there is no statement of the numbers living of each class, the information is of little value. Much has been done of late years to improve the sanitary condition of Bombay, but it appears from Mr. Davidson's report that there is still great need of legislation in this direction. He states that the Municipal Act affords little or no protection against the erection of most insanitary dwellings, some of which are "dark, unwholesome dens, into which the light of day never penetrates, and which must of necessity breed disease and pestilence. ..... A privy is occasionally built inside a house and overhanging a well; on another occasion a similar structure is built within three feet of a well of drinking-water, and a drain is constructed to carry sewage within a foot and a half of the same well; a privy is built or rebuilt underneath inhabited rooms, and yet, notwithstanding the self-evident danger to the public health arising from this, and that such arrangements are opposed to the most rudimentary principles of sanitation, so accustomed have people in Bombay become to them that I have been gravely informed by otherwise fairly intelligent men that such contrivances are unobjectionable. In such cases it is hopeless to argue and useless to make any comments." The condition of many of the cemeteries is very unsatisfactory; they are overcrowded, and some of them are reported to be in a disgraceful state and a source of danger to the public health. The smoke nuisance is beginning to receive attention in Bombay, and it is hoped that effectual measures may be taken for its abatement. The water-supply, especially of the outlying districts, is very inadequate, and, as a consequence, is eked out from wells, the purity of which is often more than doubtful; but steps are now being taken for an increased supply. Attention is called in the report to the need of some system of medical relief for the poor at their own homes—something similar to the Poor-law Union medical system in England. At present no such provision seems to exist; and the very poor, unless they are able to attend at one of the hospitals or dispensaries, are left, when ill, without medical advice, except during the prevalence of epidemic cholera, when special arrangements are made to provide medical attendance for the people at their own houses. This seems to be a subject deserving of the attention of the municipal authorities. The registration of deaths in Bombay is stated to be still in an unsatisfactory state, and an appeal has been made to the members of the medical profession by the health officer for assistance in improving it by furnishing certificates of the cause of death in cases which they have attended—an appeal which, we trust, will meet with a cordial response.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION AND PAYMENT OF MEDICAL WITNESSES.

AT the meeting of the Council of the Poor-law Medical Officers' Association, held at their rooms, 3, Bolt-court, Fleet-street, on the 5th inst., that portion of the report of the proceedings at the winter assizes at Cork on December 11th, 1885, was read, from which it appeared that Mr. Justice O'Brien had said he had received a letter from Dr. Pierce of Newcastle, County Limerick, who complained of having received only £6 odd for his attendance at the assizes. He stated that he claimed £3 3*s.* a day and 15*s.* each day for expenses, and that he had been allowed but £2 2*s.* without any expenses; so that he had received but half of what he claimed. It was his Lordship's intention to reply to him, stating his opinion that £2 2*s.* a day to a professional man who came from a distant place was a wholly inadequate remuneration. The Treasury were, no doubt, very great people, and of course it was the duty of persons holding official positions not to sanction undue extravagance and expense, but the Treasury must understand that he would not require the services of any medical man from the country at £2 2*s.* a day. He would not sanction it, and he would treat as contempt of court any attempt to dispute the carrying out of his orders by the Crown solicitors.

The reading of the Judge's observations was received with much satisfaction by the members of the Council present, some of whom stated that they had been subpœnaed as witnesses in criminal cases, and had only been paid £1 1*s.* a day, and if kept from home all night, 3*s.* 6*d.* additional, out of which they had to pay hotel expenses, and for the services of a deputy whilst absent; and a feeling was expressed that the time had arrived when determined resistance should be made to such injustice. It was also proposed that the best thanks of the Council should be given to Mr. Justice O'Brien for his remarks on the case of Dr. Pierce and for his determination to give effect to his views, which, on being put to the vote, was carried unanimously. It was likewise decided that steps should be taken to memorialise the Treasury thereon, and the co-operation of medical members of Parliament was requested in such memorial. It was further proposed and carried that a report of the proceedings of Council and a copy of their resolution should be sent to THE LANCET, *British Medical Journal*, and the *Medical Press and Circular*, and that the editors be urgently requested to support the claim of Poor-law Medical Officers and others to a higher scale of payment when subpœnaed by the Crown in criminal cases.

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THE LANCET.

LONDON: SATURDAY, JANUARY 16, 1886.

AMONGST the many interesting articles which are contained in the first number of the *International Journal of the Medical Sciences*, a notable place must be assigned to the paper on Bronchial Asthma, wherein Sir ANDREW CLARK reproduces in his customary logical manner the arguments which seem to him to annul the commonly accepted doctrine of bronchial spasm, and to favour that of temporary vascular turgescence of the mucous membrane as being the essential cause of the asthmatic paroxysm. He introduces the subject by a consideration of the phenomena of hay fever, between which affection and bronchial asthma he draws a close parallel. In the first place, he points out that Dr. BLACKLEY'S theory of the production of hay fever through the action of pollen upon the nasal mucous membrane is inadequate to explain the occurrence of the affection under the varied conditions of season and environment in which it often arises; whilst there appear to be many other exciting causes of an attack than the one alleged by Dr. BLACKLEY. These considerations point, he thinks, to the operation of two factors—a local or constitutional predisposition and an exciting actual cause,—the prominent feature in almost all cases being a neurotic temperament or constitution. The symptomatology of hay fever points clearly to a hyperæmic condition of the nasal mucous membrane, and the fact that hay fever may alternate with paroxysms of bronchial asthma appears to justify the conclusion that the two affections are closely allied in their pathology; for he can see no ground for concluding that spasmodic asthma, apart from nasal symptoms, should have an origin differing from the attack that occurs in such association. The features of the asthmatic paroxysm, and their explanation by the theory of spasmodic contraction of the bronchial tubes, are stated freely, and each point in the argument subjected to criticism. In the first place, it is held that although the bronchial muscles are capable of slow and limited contraction, yet there is no proof that they can contract with the suddenness and completeness required to produce the severe dyspnœa which marks the paroxysm. Then it is very doubtful whether the bronchial tubes could contract in opposition to the violent inspiratory efforts which dilate the thorax; and it is shown that the "alleged spasms are most common where the circular muscles are least abundant," for if the terminal bronchioles were contracted, the lungs should be collapsed rather than distended. The absence of proof that the physical signs are produced by such spasm, and the variability in pitch and situation of the stridor, with hindrance to the entrance of air, seem also "to be incompatible with any just notion of the contractility of the bronchial muscles, which is slow, persistent, and progressive."

These, and other difficulties in the acceptance of the commonly received doctrine afford certainly an opportunity for the introduction of a theory more in harmony with the facts. Such a theory is, in Sir A. CLARK'S opinion, to be found in the comparison he has instituted between hay fever and asthma; and he concludes his paper with a series of propositions which embody this doctrine—views similar, he tells us, to those propounded by WEBER in 1872, but which he has himself taught for twenty years past, and which he placed before the profession in an address at the Cambridge meeting of the British Medical Association. These propositions are so tersely stated that they will lose, we fear, by any condensation; nevertheless, it may be stated that they declare asthma to be a neuro-vascular trophic disease, depending upon a "special vulnerability of the respiratory mucous membrane, of the respiratory nerve centres, and of certain portions of the sympathetic." The nerve discharge may be excited by stimuli arising in the blood or any of the mucous tracts, especially the respiratory, in cutaneous inflammations, and in the central nervous system. The theory explains the phenomena of the paroxysm by the occurrence at first of more or less diffused hyperæmic swelling of the bronchial mucous membrane, succeeded by the development of circumscribed congestive swellings, which are more or less fugitive, and resemble the urticarial wheal; the secretion upon these swellings, at first viscid, and then freer and more copious, explains the varying auscultatory signs; and it is admitted that the acridity of the secretion may excite some contraction of the bronchial muscles. The hindrance afforded to the entrance of air excites exaggerated inspiratory efforts to overcome this difficulty, but expiration is less effectual; so that as the paroxysm proceeds the lungs become more and more distended, the subsidence of the attack being brought about by secretion from the mucous membrane and exhaustion of the respiratory and vaso-motor centres.

Although this doctrine of asthma is not propounded for the first time, it has seldom been so clearly and forcibly put; and the unbiased physician will find that there are many clinical facts in support of its conclusions. At any rate, it affords material ground for a reconsideration of the phenomena of this remarkable affection. The main difficulty in the way of the neuro-vascular theory, as opposed to the spasmodic, is the suddenness of the onset of the paroxysm; but that, indeed, is held by Sir A. CLARK to be opposed even more strongly to the view of bronchial spasm, which he contends must occur slowly and gradually. The extremely variable circumstances which surround the occurrence of the asthmatic attack, and the equally remarkable facts as to prophylactic and remedial treatment, may perhaps be as well explained upon the one view as the other; for by either doctrine we are compelled to refer the root agency to the nervous system, and especially to reflex excitation through a hyper-sensitive respiratory tract. Asthma is, in point of fact, a neurosis; but whether the efferent stimulus travels by way of the pulmonary plexuses to the bronchial muscles, or operates through the vaso-motor centre upon the bronchial bloodvessels, is the debatable question. Nor can we think that much gain towards the solution of the problem is derived from the effects of treatment. There is hardly a disease in nosology which has been submitted to so much empirical treatment or which is so capricious in its response to remedies. We may, for instance, fail to see why congestive swellings of the bronchial mucous membrane

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should subside under the influence of the inhalation of the fumes of nitre, or tobacco, or stramonium, and may conceive that the great relief afforded by a hypodermic injection of morphia is more consistent with the relaxation of spasm than the free outpouring of secretion from the congested mucosa. In some cases, too, relief is given by the inhalation of nitrite of amyl, which theoretically should be conceived as tending to aggravate a hyperæmic state. But the truth is that our knowledge of the physiological mechanism is at present too imperfect to explain many apparent inconsistencies in the action of remedies, and it is unsafe to argue too finely upon such a basis. The parallel sketched by Sir A. CLARK between "hay asthma" and "bronchial asthma" is, however, perfectly legitimate, and it certainly gives scope for thought and observation.

DR. WILLIAM FARR, in a contribution to the Registrar-General's Fifth Annual Report, issued more than forty years ago, deemed it necessary to point out the fallacy necessarily involved in any attempt to base conclusions as to the sanitary condition of populations upon the observed "mean age at death" occurring therein, because he "found that the error had survived and assumed new forms very much calculated to mislead." In spite of Dr. FARR's long-continued efforts to develop a sound system of vital statistics, it is disappointing to find that the fallacies he so constantly exposed still survive and are often endorsed by authorities generally accepted as experts. The President of the Metropolitan Association of Medical Officers of Health, in a report he has recently issued upon the health and sanitary condition of St. George's Hanover-square, has given statistics of the mean ages of persons dying in his district and its registration sub-districts during 1884, and incorrectly refers to these figures as "the mean duration of life." The correct use of terms is essential to the progress and utility of all branches of science; and whether or not the claim of statistics to rank as a science be admitted, it is essentially necessary to avoid confusion of terms in writing on this subject, in order to guard against the causation of fallacious deductions. "Mean duration of life" is an abstract term, signifying the mean duration of life in a theoretical or life-table population, and is equivalent to the expectation of life at birth in such a population. Mean duration of life, calculated in this manner on a life-table basis, is the only scientific and thoroughly sound test of the true sanitary condition of a population. When, however, the term "mean duration of life" is incorrectly used to denote the mean age of the persons dying in any ordinary population in which the births exceed the deaths, an entirely false impression is conveyed, as the mean age at death in such populations is worse than useless as a test of its comparative health or sanitary condition. It would be difficult to find a better example of this form of fallacy than that presented in the use of the mean age at death of those dying during 1884 in the three registration sub-districts of St. George's, Hanover-square—statistics which have been widely reproduced, with or without comment, by our lay contemporaries. The report states that whereas the mean age at death (falsely called the "mean duration of life") in the whole of London in 1884 was 38·08 years, it was equal to 49·78 in Belgravia, 62·92 in Hanover-square, and 72·70 in Mayfair—sub-districts of the district of St. George's, Hanover-square. Assuming these mean ages at death to be correctly calculated (although we cannot avoid a suspicion that the mean age at death in Mayfair takes account of all the deaths of the aged poor in the workhouse), we do not hesitate to characterise the figures as entirely misleading if accepted as even indicative of health condition. It is only necessary to refer to the varying birth-rate as evidence of the widely different age constitution of the populations. In Greater London the birth-rate in 1884 was 34·9, while in the district of St. George's, Hanover-square, it was only 21·18; it was 23·87 in Belgravia, 16·46 in Hanover-square, and 15·20 in Mayfair sub-districts. The Census Report gives more direct evidence of the wide variations in the ages of the populations of these sub-districts in 1881, and it is needless to say that the mean age of those dying is mainly dependent upon the mean age of the living. In London 13 per cent. of the population were aged under five years, while in St. George's the proportion was only 8·3. It was 4·7 in Mayfair, 7·0 in Hanover-square, and 9·5 in Belgravia sub-districts. Similar variations occur in the proportions of the population aged upwards of sixty years, which was only 6·3 per cent. in the whole of London, whereas it was 14·1 per cent. in Mayfair sub-district. With such facts before us, it is not possible to doubt that Dr. FARR was right in pronouncing (in the article above referred to) that to take the mean age at death to represent the mean duration of life is "absurd and misleading." It is, however, still necessary to urge upon all medical officers of health to avoid the use of this false, though temptingly easy, method for measuring either the longevity or the health condition of a population.

WHAT is "depressing weather"? It seems enough to say that when the conditions of temperature, light, and atmosphere are such as to make the average mortal feel miserable the weather is depressing. As a matter of fact, however, this paraphrase is no more a definition than the affirmation that life is evidenced by some "form of motion"—in a technical sense—defines life, or even affords the least intelligible notion of what it is, and in what it consists. So is it with the colloquially coupled words "depressing weather." Only cause and effect are named; nothing whatever is said or even implied as to the *modus operandi* or process by which the result is obtained. Without attempting to discuss the question involved exhaustively, it may be worth while to point out two or three of the more prominent considerations which it is important to note. There are manifestly three particulars of the general effect of depressing weather that may be usefully studied apart. Thus: the effect produced by external conditions on the temperature of the body, at the surface at least; the effect on the blood-pressure generally and the air-pressure in the lungs; and the effect on the nerve-state, with the secondary influences exerted on or apparent in the tone of the muscular system. It is, of course, impossible to go into these matters at all in detail. Suffice it to make the following observations by way of suggestion. If the surroundings be such as to abstract heat without at the same time stimulating the organism to a greater or quicker "evolution of caloric"—to use an obsolete but convenient

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expression—there must needs be a gradual lowering of the vital heat on which, as we know, the energy depends. Although it would not be accurate to assert that the convertibility—for convenience of expression—of the terms *heat* and *force* in relation to the organism implies that these two forms of motion are actually correlative, it is nevertheless a fact, that where there is any defect of bodily heat by reason of deficient production, there is sure to be "depression" as a consequence. As a matter of experience, we know the difference from feeling cold as a healthy man may feel it in bright weather, without the least loss of energy, but rather a quickening and enlivening of the animal spirits; and "feeling cold" as it is felt when the life seems to be chilled and the heart sinks with oppression and misery, the very "mind" and "senses" being, as it were, numbed. This subjective difference between the two states is due to the deficiency of bodily heat resulting from different causes: on the one hand, rapid abstraction by the surroundings with stimulation, as on a bright cold day; and, on the other hand, loss of heat without stimulation when the surroundings are cold without being invigorating. Another point of moment as regards heat relates to the manner in which it is distributed. The temperature of the blood may, as is well known, vary, under different conditions of the body-state, in the several vessels, from 98·6° F. near the surface, to a much higher point in the deeper parts. The surface temperature is generally below the figure stated, and immediately underneath the skin it probably often falls to a point still lower, just as it may rise in certain maladies—e.g., erysipelas or scarlet fever—to a temperature at the surface far above that in the deeper vessels. Obviously, if there be a tendency to depression of the nervous tone, any disturbance of equilibrium between the surface and the deep parts of the organism must be embarrassing, and therefore exhausting, when there is no proportionate stimulation or excitation of the heat-producing faculties and processes. Blood-pressure and air-pressure, both, together and apart, are important factors in the general state, and are physically and chemically influenced by the weight, temperature, and oxidation of the atmosphere. The nervous system is acted upon through the mind and senses, and—which is too often forgotten—by the electrical state of the earth and our surroundings generally. There seems reason to suppose that a "heavy," "depressing" state of the environment means, in part at least, a condition in which electricity is absorbed from the earth and held in the clouds at the periphery of the *practical* atmosphere, with the result that the earth, or a portion of it, and the organisms upon it, are deprived of their normal residuum of static electricity, as before a thunderstorm, the electricity being regained only after "the storm that clears the air"—to use a popular expression,—when, in fact, the electric fluid has been returned to the earth in the form of lightning or been carried back to it by the rain. "Depressing weather" is a state, or a number of states, in which an effect, in great part physical and in lesser part mental, is produced on the animal organism through the media of temperature, blood-pressure and air-pressure, nerve tone, and electrisation. Some organisms are more susceptible of external impressions than others, and these are the most susceptible of the injurious influence which depressing weather exerts. The indication with a view to self-defence or remedy is obviously to render the mind and body as little responsive as may be to external conditionings, by giving it a force and momentum of its own. This force and momentum are only to be created by voluntary energy and healthful exercise.

IT is difficult to keep from despair as we once more ask the question, When will the greatest nuisance of England cease—when will the Thames be relieved from the disgusting pollution which now renders it a cesspool throughout its tidal region? Of the existence of a tremendous nuisance, and of the urgent danger to which it exposes the metropolis, there is no longer any room for doubt. Hard as the Metropolitan Board of Works fought, they were utterly crushed by the evidence brought before the late Royal Commission and by the stinging words of the Commissioners in their reports. They have, indeed, practically admitted the whole case against them by adopting a costly system of disinfection, which could only be justified by urgent necessity. The disinfection, it is true, is a sham, utterly useless, and a gigantic waste of the money of the ratepayers; but it is none the less a confession of the existence of a nuisance created by the Board, and for many years defended by them as a public blessing.

Time passes quickly, and the world is apathetic. We are in the winter, and the river does not smell, although we know that it is fouler than ever. Why should anyone trouble about it? People are tired of the subject. We ourselves confess to the weariness which the constant reiteration of admitted statements is sure to engender, and our readers, trained though they are to the duty of persistent denunciation of sanitary abuses, no doubt share the feeling. But it is just at such a time that renewed energy is wanted. Surely the Parliament of England cannot be quite blind to the urgency of the peril to which London is exposed? There is always danger in such contempt of sanitation, but just now, with cholera almost at our doors, it is of the gravest kind. We have had the cholera before, and it has slain its thousands, and we have no possible right to assume that we shall not have it in London next summer. In that case our river will be a natural centre of infection, and as in the recent epidemic in Spain, so here, the disease will be likely to follow the course of the foul river.

What ought to be done and who ought to do it? These are the questions to which immediate attention must be given if we wish London to be safe next summer. It is not for us to propound engineering schemes, or to dictate which among the many possible remedies should be applied. But this much we may safely say: Instant preparation ought to be made for the purification by precipitation of the sewage at the outfalls, and for taking the sludge, properly protected, to the lower reaches of the river, where, applied to the land, it would have a certain though not great value, and would do good rather than harm. Meantime, a complete scheme should be prepared in accordance with the recommendations of the Royal Commissioners for carrying the sewage of all London, including what is known as the Lower Thames Valley, down to Sea Reach, where it could be purified, the solids applied to the land, and a clear effluent

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thrown into the river. This would cost money, but not more than London could well afford.

Such vigorous action as this, which is substantially the same as that urged by Lord BRAMWELL'S Commission, cannot be expected from, and will certainly not be attempted by, the present Board of Works, whose whole desire in this matter appears to be to find how best "not to do it." Possibly they are trammelled by their distinguished engineer, who, although a great benefactor to London in the past, now seems to pose as a mere obstructive. He has so often repeated his belief that the present system is sufficient and satisfactory, and requires merely some expansion, that he can hardly be zealous in any work of real reform.

Annotations.

"Ne quid nimis."

THE UNIVERSITY OF LONDON.

CONVOCATION of the University of London meets on the 19th inst., and the number of resolutions upon the agenda paper is unprecedentedly large—viz., sixteen. The most important of these refer to the Matriculation Examination and the adoption of a revised syllabus which has been prepared by the annual committee. Mr. Hawkins Jones, LL.B., proposes to move a resolution to the effect that an original printed thesis, with examination thereupon, should, as in the D.Lit. and D.Sc., be required of candidates for the LL.D. and M.D. instead of the existing examinations. Mr. Tyler and Mr. Spratling each give notice of long motions affecting the constitution of the University; and Dr. Grece proposes to rescind the vote of the last meeting suspending one of the Standing Orders as being irregular and a breach of Standing Order No. 11.

THE PROPHYLAXIS OF HYDROPHOBIA.

AT the Epiphany Sessions for the County of Surrey last week, the Earl of Onslow—who is the President of the Temporary Home for Lost and Starving Dogs at Battersea—made some forcible and timely remarks. Referring to the circular issued from Whitehall, he said it was unfortunate that the orders could not be put in force by that Court, instead of each separate authority. As an illustration, he mentioned that the Chief Commissioner of Police within the metropolitan area had issued most strict regulations, and although some advantage must be derived therefrom, it could not be conclusive, for a dog had only to come up from the county of Surrey, and was at liberty to bite as many people as it liked until caught. It was well known that rabies and hydrophobia had been very prevalent in Surrey since 1883, and he hoped, therefore, this letter or circular would be brought before the petty sessional divisions in strong terms, and that they would see their way clear to carry out regulations similar to those in the metropolis, and to get them extended to the whole south of England, otherwise no good would result from the stringent measures in the metropolis. Mr. Gordon Clark pointed out the uselessness of the county divisions carrying out the regulations unless the local authorities in the boroughs and towns did the same, and the Chairman, Mr. E. H. Leycester Penryhn, having said that the powers could not be put in force unless there had been a mad dog in the district, it was, after a short discussion, resolved that the clerk should send a copy of the circular to all the authorities in the county. We could wish that all the county, borough, and town authorities had it in their power and were willing to enforce regulations similar to those now carried out in the metropolitan district. There can be no question that it is possible to stamp out hydrophobia in this country. It is emphatically not a necessary evil. Unfortunately, however, it is the fashion to have now and then what is called a hydrophobia "scare," which soon begins to flicker and dies out, while no real efforts are made to render this most terrible disease a thing of the past. Unfortunately, too, directly the police authorities endeavour to take some action the papers are flooded with letters which, though well meant, are, we cannot help thinking, a great deal too highly tinged with sentiment run riot. We yield to none in our love for animals, and especially for dogs, but surely the saving of, say, six or seven human lives each year from death by hydrophobia is of infinitely more consequence than the temporary inconvenience of the whole canine race. The use of muzzles nowadays is not necessarily cruel. Indeed, we think that, if the dogs could be appealed to in the matter, the more intelligent, and may we say representative, of them would agree that as the wise and thoughtful of the human race accept the inconveniences of vaccination to save them from the perils of small-pox, so they should cheerfully endure the temporary troubles imposed by the muzzle, and escape all risk of the sufferings of rabies. We trust that the remarks of Lord Onslow, who is a well-known lover of dogs and a master of hounds, will not pass unheeded. M. Pasteur may be on the right tack, the Russian vapour bath treatment may prove of some use, but it cannot be denied that prevention is infinitely better than cure. We regret to see it stated that the present police regulations in the metropolis with regard to dogs will be withdrawn on the 17th of this month, when the term of sixty days will have expired. Half-hearted measures are never likely to prove successful.

ICE ACCIDENTS.

ICE was, but is not when we write; it may or may not be again. Of all the changeful circumstances and conditions of this changeful world and scene, and especially this most fickle climate of ours, the weather is the least to be reckoned with or counted upon. Ice "accidents" are, in a way, the leading features of the experience we have of ice in this country. Only a passing feeling of regret, mixed with a little grim amusement is awakened, when we hear of a hundred or so of persons being immersed. When a serious immersion occurs, it is necessary to treat the case as one of proximate drowning *plus* refrigeration, not so much from being plunged into the water below the ice, which, although cold, is not greatly colder than uncovered water under ordinary conditions and in average cold weather, but because the immersion occurred at a moment when the body may perhaps have been either already chilled from standing about or exhausted by exertion. Looked at from a physiological point of view, possibly, the precise moment when a man or woman is skating with energy is not a bad time to plunge into cold water, but the immersion should be rapidly performed and ended, and there should be no fright. Taking things as we find them, it is not wise to "go under" at such a time. For the half-drowning of an ice-accident, rapid removal of the wet clothes, brisk rubbing of the surface to restore capillary circulation in the skin, and prompt wrapping in hot blankets, are the best measures. It is also well to give, as soon as possible, a moderate drink of hot tea or milk-and-water—not spirits, as a rule. Coffee is better after reaction has fairly set in than at the moment of rescue, or there may be headache. If the immersion has endangered life by drowning, of course matters must be treated on general principles, and among the most important things to remember is the fact first pointed out by Dr. Benjamin Howard of New York, that the proper anatomico-physiological way of opening the air-passages is not to drag the tongue out but to raise the jaw, closing the mouth.

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The act of clenching the teeth forcibly is really the last act of life in ordinary death, and is a natural instinctive effort to facilitate inspiration. The aids to respiration by manipulation of the thorax and arms are well understood and explained by the Royal Humane Society. Speaking generally, the chief points to note about immersions from ice accident are the special need of very promptly restoring warmth, and the urgency of the demand for friction of the surface to restore cutaneous circulation, thus promptly relieving any congestion of the internal organs which may have occurred in the moment of "chill" or during the subsequent collapse.

THE VACANT PRINCIPALSHIP IN ST. ANDREWS UNIVERSITY.

MUCH wonder exists why the Government is so slow in appointing a successor to the late Principal Shairp in the University of St. Andrews. As St. Andrews is now becoming an important science centre, and as science degrees from it are open to students of the University College at Dundee, a Principal within the University, who should represent the superintendence and interest of natural science, is specially needed. The cause of delay would be less difficult to explain if there were no eligible candidate for the post, but with the fact that Dr. Bell Pettigrew, F.R.S., the Chandos Professor of Medicine, is a candidate, and that he is heartily supported on all sides as one who would fill the office with the greatest distinction and with all the zeal he has ever shown for the University, the difficulty of finding the right man for the right place cannot be the real one. It is more probable that the weight of other and pressing labours has prevented the Duke of Richmond and Gordon from settling this appointment, which, though perhaps minor as an affair of State, is still very important to an immense number of the highly intellectual members of the community. For ourselves, we should rejoice to see the eminent representative of our own profession to whom we have referred selected for the office, and we are sure our whole fraternity would join with us in congratulating him on obtaining a distinction so well earned, and so entirely harmonious with his abilities and trained preparation for its duties.

THE FOCI OF CHOLERA IN SPAIN.

As cholera still prevails in Spain, there is every reason to fear another and serious outbreak next summer. For the protection of Europe, which would then be exposed to contamination, as well as for the sake of the Spaniards themselves, every organ of public opinion should enter a protest against the incapacity or inactivity of the authorities. One of our correspondents recently visited all the principal centres where the cholera had wrought the greatest havoc. He carefully examined the various local foci of disease. Both the Spanish press and Government officials laid particular stress on what they called the focus of disease—i.e., some particular slum or slums which constituted centres from which the epidemic spread to various parts of the town. This being the case, it was natural to expect that special measures would be taken to improve the condition of such pernicious localities. Nothing of the sort, however, has been done. Houses were whitewashed, cleaned, and fumigated; disinfectants were thrown down the drains; and that is the most that can be said. But the temporary removal of a little superficial dirt will not improve the sanitary condition of a dwelling; indeed, the houses of the poor in the large towns of Spain are cleaner than those of England. The bedding, the floors, and the furniture are more carefully washed, dusted, and kept than will be found among the poor of London and the great English towns. It is only when we approach the sanitary contrivances that we find a distinct difference. The untrapped closet, just outside, when it is not in the very middle of the kitchen, is a most common occurrence in Spain. From the kitchen sink a large pipe goes to the closet-pipe, and all the sewer-gas has free access to the cooking utensils and the food. In cholera localities these and many other equally obvious defects exist, and it was found that a large proportion of the cases occurred in rooms where there was no window at all. In other rooms the principal ventilation was received from a foul closet just outside the door. It is therefore indispensable to secure at once the proper ventilation of sleeping apartments and the necessary alteration in the construction of the closets, together with the trapping of all drain-pipes. The larger questions of town drainage and water-supply cannot be solved so promptly. But, in the name of humanity, we have a right to demand that the smaller though no less urgent reforms indicated above should be immediately carried out. So large a portion of Eastern and Southern Spain has now been invaded by cholera, that it is easy, acting on the large experience already acquired, to select in the, as yet, exempt districts to the west of the peninsula, towns and localities that present similar topographical and general conditions. In such places, at least, a large number of inspectors must be appointed, and they should commence at once a house-to-house visitation, for the purpose of detecting and altering those structural defects which, in the towns of Granada, Valencia, Barcelona, Zaragoza, &c., were found to favour the development of cholera. This is the least which under the circumstances, can be done; and if this is not attempted Spain will merit the censure of European civilisation. In Portugal, also, the adoption of similar precautions will be found more efficient as a protection against the approaching epidemic than the sanitary cordons and quarantines on which the Portuguese Government at present solely relies.

"AN UNNECESSARY POST-MORTEM."

A CLERGYMAN has published a letter commenting on what he describes as an "unnecessary post-mortem," with the object of informing the public of "their rights" in similar circumstances. The facts were as follows. The child of a labourer, aged two years, died very suddenly. An inquest was required by law in order to ascertain the cause of death, and the coroner, in the ordinary course of his duty, requested that a post-mortem examination should be made. The parents objected, and the clergyman supported them in their objection. According to his statement no suspicious circumstance attended the death. The refusal of the child's parents to have the body examined, he says, perhaps with good reason, did not in this case afford real ground for suspicion. The examination was made as usual, and the verdict proved that death was not due to unfair means. Some of the statements made in this letter cannot be passed over without remark. The writer has written it with the intention of challenging the administration of the Act which regulates the holding of inquests, and his opinion is that the law has in this instance been injuriously applied. The section of the body was in his opinion a harsh proceeding, because it contravened the wish of the parents. He claims that this was a case in which mercy and consideration should have been shown by deference to that wish. His own feeling with respect to this question appears on general grounds quite justifiable. We can understand and appreciate it as an impulse natural and creditable to humanity. At the same time, every citizen must be prepared to allow some sacrifice of personal feeling on a question of public security. Such a question is that now before us. On our own part, we are convinced that the public opinion of past times has not been misguided in entrusting the decision of such matters to the judgment of a coroner's jury

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and medical witnesses. Coroners are by no means too fond of ordering post-mortem examinations. If consulted, instead of being opposed by the relatives of the deceased, they are probably as reasonably sparing of family feelings as conscience will allow them to be. The final statement of this remarkable letter states that the rich have an advantage over the poorer classes practically, if not theoretically, in the application of the law of inquests. This advantage consists in the possession of the power—i.e., the means—of maintaining an objection in a court of law. In reply to this, we have only to say that, whenever the point of right is raised in such a case, the rich plaintiff will find himself, like his poor brother, a loser in the end, and superior in nothing but in having the power to raise a needless scandal.

HYALINE PROSTATIC CASTS.

THE paper read by Sir Andrew Clark at the last meeting of the Clinical Society may prove an interesting contribution to our knowledge of the clinical examination of the urine. Hitherto, we believe, the existence of hyaline cylindrical casts in the urine has been held to be conclusive evidence of the presence of some form of renal disease. And we suspect that a proposition embodying that information would still be regarded as of the greatest value from a practical point of view. It is, however, possible that hyaline tube casts may come from the mucous glands of the prostate, and the presence of flask-shaped bodies, probably moulds of the inner ends of the mucous glands, would no doubt give a kind of evidence in support of the prostatic origin of such casts. The case that was specially narrated by Sir Andrew was one in which, according to the author's own statement, the urine was healthy, with the addition of a small quantity of albumen. The evidence that was adduced in favour of the prostatic origin of the hyaline casts was no doubt of a strong character, though not to our minds absolutely convincing. Some further interesting information, culled from a clinical examination of the urine, was also forthcoming from Dr. Greenfield. He has found in a few urines bodies having much the appearance of corpora amylacea, and in one post-mortem examination it was proved conclusively that these bodies were present in the kidneys.

THE PRESERVATION OF LIFE ON THE CONGO.

THE heavy mortality of the Baptist missionaries who have done so much for both science and the missionary cause in the vast regions of the Congo basin is a matter of much concern to all who wish to see religion and commerce established in these parts. It is hoped that a few medical men will be induced to offer themselves for medical service at the mission station. Meantime a very kind and useful service has been rendered to this cause by Dr. Prosser James. He has addressed a series of familiar letters to the Rev. T. J. Comber, entitled Health on the Congo, and intended for circulation under the direction of the committee of the Baptist Missionary Society. We have read these letters, and think them calculated to be of the greatest use to the missionaries. They are written in an easy style, but they embody good descriptions of the principal diseases of tropical countries, and an excellent and discriminating account of the best treatment, which cannot fail to be valuable to missionaries and others in the absence of medical aid. Dr. James has not restricted himself to a mere account of the diseases likely to be met with and their most appropriate treatment, but has devoted several preliminary letters to such questions as the position of stations, acclimatisation, malaria, soils, houses, personal hygiene, clothing, work, exercise, rest, sleep, food, digestion, &c. It is evident that much of the promotion of health of Europeans in such regions will depend on an intelligent knowledge of the questions discussed in these preliminary letters, which give with much clearness just the kind and amount of information likely to be useful. Mr. Stanley, it is well known, has spoken as if the missionaries and not the climate were at fault. This is scarcely the case, though Mr. Comber himself admits that the high mortality has been chiefly due to overwork, imprudence, and want of proper medical treatment. With the admirable physiological and medical lessons conveyed in these letters and in the notes of Mr. Comber, there will be less chance of, and certainly less excuse for, the operation of these factors in future, and we cordially commend them to the thoughtful study of all persons labouring in the great field now opening up on the Congo, and as particularly appropriate in the case of the countrymen of Bruce, Winterbottom, and Livingstone.

TONSILLITIS.

THE *Journal of the American Medical Association* contains an account of a discussion on Tonsillitis and its relations to Diphtheria and other diseases, on a report of two hundred cases by Dr. J. M. G. Carter, of Waukegan, in the Chicago Medical Society. The author attributed the majority of cases, which he said occurred in March, April, and May, to north-east winds containing an excess of ozone, and to unusually disturbed electrical conditions of the atmosphere. His notions of the relations of the disease may be gathered from his division of the cases into three groups—simple, diphtheritic, and scarlatinous. He considered, however, that cases of simple tonsillitis were often accompanied by attacks of diphtheria or scarlet fever among other members of the family. This is really the point to be determined. Few things are more common, especially in certain families, than follicular tonsillitis, with big tonsils and a red condition of the fauces and pharynx. Occasionally one sees this condition affect several members of the same family, with more or less grave symptoms in one or more of them. But, except in certain districts, the cases are of a slight character, and are often attributable to cold and damp, sometimes associated obviously with a rheumatic diathesis, as was pointed out by several members in the Chicago discussion. It would be interesting to know from those practitioners who have seen much of recent diphtheria in London how frequently they have noticed simple follicular tonsillitis associated in the same house with cases of grave and fatal diphtheria, with characteristic exudations and albuminuria. One speaker in the Chicago discussion suggested that we should consider all cases of simple tonsillitis as malignant, which would be about as reasonable as to consider all cases of summer diarrhœa as cases of Asiatic cholera, or all cases of bronchial catarrh as cases of bacillary phthisis. There is much need for careful classification of tonsillitic cases, especially now, when we seem threatened with a revival of bad forms of throat disease.

DISCUSSION ON CHOLERA IN BARCELONA.

IN a paper read before the Barcelona Academy of Medicine by Dr. Sordé, giving his views on the lessons to be learned from the experiences of the recent cholera epidemic, the question of abortive treatment was entered into. When, during the existence of cholera, cases of diarrhœa occur, with frequent fluid stools and little or no pain, energetic treatment should be at once adopted. Laudanum should be given, and strict confinement to the bedroom enjoined. If there is frequent vomiting and severe gastric pain, drugs by the mouth are useless; so probably is medication per rectum; and even the absorbent power of the skin is often so slight that external applications are of little efficacy. The only plan then is to resort to hypodermic injections. The most useful drugs are the salts of quinine, amongst which the

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author prefers the hydrobromide. Ether also is useful for setting up reaction. Subsequently tonic medicines may be given. The best nourishment for cholera patients is at first vegetable soup (in the case of children, Nestlé's milk food); afterwards meat soup without fat, and milk, and ultimately solid food, may be allowed. Cold water the author considers indispensable in all stages. He does not allow alcohol until convalescence. With regard to diagnosis, the author considers it impossible to diagnose cholera with absolute certainty unless the algide stage is reached. As to prognosis, he considers cholera less fatal than typhoid. In the discussion which followed, Dr. Suñé remarked that until the outbreak of this epidemic he had always considered that at such times diarrhœa should be looked upon as a premonitory symptom of cholera, but that now he knew that numbers of cases had occurred in Barcelona, which had got well by themselves, so that if all had been treated with opium the drug would have been credited with far too great a degree of efficacy. He referred to the case of a student who, being attacked by diarrhœa and having great faith in the ideas of Tunisi, took enough laudanum to render him narcotic; notwithstanding which cholera developed itself. Dr. Carré also believed that the efficacy of laudanum had been overrated, and referred to the case of a boy whose uncle had dosed him well with it, but who, nevertheless, developed all the symptoms of cholera. Dr. Fargas mentioned some observations he had made on the body of a man who had died from cholera which lasted only a few hours. Nothing remarkable occurred during the first hour after death, but at the end of that time movements were noticed in the legs, shoulders, and head, also fibrillar contractions in the arms. The temperature had risen to 40° C., and sweat was observed on different parts of the surface.

IRREGULAR DEATH CERTIFICATION.

IT is curious, notwithstanding the serious censure by the Medical Council of practitioners who sign death certificates in cases which they have not seen, but which have been seen by an unqualified person in their house, or in a house with their name on the door-plate, to see that both practitioners and unqualified persons are found to repeat the offence. Such a case has just been investigated by Mr. M. Browne, the borough coroner for Nottingham. It was that of an illegitimate child with measles, taken to Mr. Irvine's house by its mother, who there, according to the report before us, saw a gentleman whom she thought to be Mr. Irvine, but who proved to be a medical student, Mr. E. H. Maclure. He saw the child a second time and recommended that it be taken to a dispensary. He said he could wash his hands of the child. She sent for another doctor, but before he arrived the child was dead. She went for a certificate to Mr. Irvine's house, and got one written by Mr. Maclure, but signed by Mr. Irvine, who admitted he had never seen the case. He said he did not know the law was so strict. The coroner commented severely on the admitted facts of the case, and we cannot but regret that practitioners should be found to allow themselves to get into so indefensible a position.

ETIOLOGY OF TETANUS.

M. Lannelongue raised a discussion in the Society of Surgery of Paris, the 28th October ult., on the etiology of tetanus, still inclined to the opinion that it is sometimes endogenous. This view found little favour with succeeding speakers; but it was generally admitted that much uncertainty still prevails on the causation of tetanus. This is a disease worthy of being studied with the aid of comparative pathology. All our domestic animals, but more especially horses and sheep, are liable to tetanus after injuries. Army surgeons long since admitted the influence of climatic conditions in producing the disease, and interesting confirmatory evidence is supplied by Professor Robertson in his Text-book on the Practice of Equine Medicine (p. 407):—"That cold and exposure suddenly encountered have a determining influence in the production of tetanus we occasionally see exhibited on an extensive scale in the case of newly-shorn sheep, where, should a lowering of the temperature and boisterously wet weather immediately succeed the shearing operation, it is no uncommon circumstance to find a considerable number of animals, on the subsidence of the storm, suffering from tetanus. Horses clipped in cold weather, and incautiously exposed immediately afterwards, are also sometimes similarly affected; while one of the most commonly observed results of young animals being partly submerged in wet ditches, and remaining struggling in such a situation until completely exhausted, is an attack of tetanus."

SNAKE-BITES AND RABIES.

THE curious local traditions that are handed down from one generation to another are sometimes of much interest, and especially those bearing on the treatment of snake bites and other accidental occurrences likely to prove fatal. In some of the heath countries a general notion prevails that the bite of a yellow or black adder is best combated by the rubbing in of some of the fat of an adder, and also by giving some of the grease internally. A lay correspondent, referring to an article in last week's LANCET by Surgeon-Major Roy, suggesting that the poison of the cobra may prove to be an antidote for rabies, says that it is a curious fact that in Wales there is a belief among the common people that a dog that has been bitten by an adder will never be subject to hydrophobia. When Sir Thomas Watson was asked his opinion on this subject, he said, "I agree with you in inability to see how this could be proved; or how, if proved, it could be practically utilised for the benefit of the human animal; such traditions are, however, always worth preserving." In the course of a case tried before the Tribunal of Correctional Police in Paris, it appeared that the carcase of a dog that had been slaughtered on account of rabies was thrown by scavengers on to a dust-heap, where it was devoured by cats and rats. A great number of the cats in the neighbourhood of the places where the dust is shot from the municipal carts have been attacked with rabies.

THE PERILS OF FOOTBALL.

FOOTBALL, which seems to be degenerating more and more into a species of "free fight," has been the cause of another sad fatality. An adjourned inquest was held on Monday evening last at Bridgwater on the body of William Poole, aged twenty, who came by his death from injuries received whilst playing in a football match on Dec. 28th. As reported in the papers, it appeared from evidence that the deceased, who was playing a very fast game, slipped and fell, and at the same time received a severe kick in the chest (? abdomen) while several other players fell above him. Dr. Winterbotham deposed that death resulted from hæmorrhage arising from injuries accidentally received to the internal organs. It is satisfactory to add that the jury had the courage of their opinions, and, in returning a verdict in accordance with the medical testimony, strongly condemned football as a dangerous game, and deprecated the recklessness with which it is played. Can nothing be done to check this "recklessness" (as the jury somewhat mildly put it)? Mr. E. T. Sachs, a well-known athlete, recently wrote to us recommending lacrosse as an alternative game. Football, however, is in many ways a good game, and enjoys remarkable popularity. Surely, by some modifications it might be made also comparatively safe. At present there

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can be no doubt that it is highly dangerous. If proof of this be wanted, it is furnished by the fact that this is at least the third fatal accident *directly due to football* already recorded thus early in the season. Some measures will have to be taken, for it must always be remembered that the actual sufferer is very often the breadwinner of the family, a fact which largely adds to the roll of football victims. Cannot our sporting contemporaries make any suggestions?

SOCIETY FOR THE EXTENSION OF UNIVERSITY TEACHING.

IN the Poplar branch of the above Society, Hygiene is to be the subject of the course during the next session, with Dr. A. H. Robinson as lecturer. The course will be opened on the 25th inst., when Dr. Richardson, F.R.S., at the request of the committee, will preside, and will deliver a short introductory address. Last year the subject of the course was History, the Marquis of Ripon giving the opening presidential address. The attendances throughout the year averaged as many as two hundred students. It is most gratifying to observe how much real good is being wrought by this useful Society for advancing university instruction. It is practically bringing the universities to the doors of the people. To Dr. Robinson we wish every success in his professorial and useful task for 1886.

THE STATE OF THE STREETS.

IT is not creditable to our intelligent self-government as a civilised people that year by year the first fall of snow finds us unprepared to clear the streets of the encumbrance. There would not appear to be any great difficulty, remembering the immense number of persons out of work at this season of the year, to send out into the streets at half an hour's notice an army of sweepers, who would make very short work of the heaviest downfall in, say, a couple of hours at most. Only the shovels and brooms need be close at hand; the carts could be collected at once if officers were empowered to issue the necessary instructions; and, instead of a great scandal arising, positive good might be done by giving the poor an honest and not unhealthy spell of work. The masters of workhouses should have orders to send all the tramps into the streets with brooms and shovels for work in gangs, under proper official supervision, instead of sending them into the stone-yards or oakum-sheds, and the able-bodied inmates of workhouses might be similarly employed. It only needs a general order and a standing organisation of the official staff, which could be set in action instantly. There is not the smallest difficulty in this, beyond the *vis inertiæ* of a clumsy and discordant system of administration. We do not need to talk of snow ploughs and rakes, and special collecting apparatus; brooms and shovels will answer every purpose, if only time be taken by the forelock and the obvious duty perceived and performed at once.

MEDICAL MEN IN THE WORKHOUSE.

THE public were scandalised a few days ago by a paragraph in the papers intimating that three medical men and a dispenser were in the Islington Workhouse. Most statements of this kind have an air of exaggeration about them, and from our inquiries we conclude that it is so with this particular assertion. But it is true that two registered medical men and one dispenser have lately been among the inmates of the Islington Workhouse. Medical men are not a rich body, though it must be allowed that they generally contrive to make ends meet and to maintain an honest independence. It is possible, however, for a medical man to experience misfortune and to come even to the workhouse. But we have ascertained that in the particular cases under notice there is little to excite the sympathy of the profession. There is plenty of real honest poverty even in the medical profession, and its members feel the hard times more than many think they do. But a bare statement of three doctors in one workhouse is apt to convey a wrong impression.

SIR WILLIAM BARTLETT DALBY.

THE latest addition to the lengthy and still lengthening roll of members of the medical profession who have recently received the honour of knighthood is the name of Mr. Dalby, the well-known aural surgeon. Mr. Dalby was born about the year 1840 (and is consequently still in the prime of life), took his B.A. degree at Cambridge University in 1863, and graduated M.B. in 1866. In 1870 he became a Fellow of the Royal College of Surgeons, having previously in 1867, become a Member of that corporation. He is the author of several works on diseases of the ear, and of many contributions to the pages of the various medical and scientific journals. To non-professional readers Mr. Dalby will perhaps be best known as the able and ardent advocate of the pure oral method of educating the deaf and dumb—i.e., by means of lip-reading and articulation. Several communications from him have appeared in the pages of this journal in support of the revolution which has taken place in the education of the deaf, and the plan propounded by him is now almost universally adopted throughout the United Kingdom. Mr. Dalby, who has had a severe attack of bronchitis has recently been on a voyage to Madeira and back, only returning to England on the 5th inst. We congratulate him on having been selected for the honour which Her Majesty has been pleased to confer upon him.

NECESSITY FOR QUINQUENNIAL CENSUS ENUMERATIONS.

THE Registrar-General's Weekly Return will in 1886, as was the case in the preceding four years, deal with the vital statistics of London and its outer ring, and of twenty-seven of the largest provincial towns. On the hypothesis that this urban population has increased since 1881 at the same rate that prevailed between the last two censuses in 1871 and 1881, the aggregate population dealt with is estimated at ten and a quarter millions in the middle of this year. This signifies that the increase of this population from the middle of last year to the middle of this year, partly by excess of births over deaths and partly by immigration, is estimated, on the above-mentioned hypothesis, at nearly 230,000. It is now, however, nearly five years since the last census enumeration, and the long-continued period of depression which has recently so severely affected many of our commercial and manufacturing districts causes more than a suspicion that the population of our large towns has not during recent years increased at the same rate that prevailed during the last intercensal period. There seemed so strong a ground for this suspicion in the case of some of the towns that returns of inhabited houses on the rate-books have been called for, and a note has been appended to the Weekly Return just issued, being the first for 1886, calling attention to the fact that if the populations of Leicester, Salford, and Bradford have increased since 1881 at a rate not exceeding that of the inhabited houses on the rate-books (instead of the rate of increase of population between 1871 and 1881), the death-rates are understated by about one-fifteenth, one-thirteenth, and one-tenth respectively. On the other hand, the rate in Cardiff is, through a probable under-estimate of population, overstated by about one-eighth. It may reasonably be presumed

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that doubt prevails, though to a less extent, with regard to the approximate accuracy of the estimates for many of the other towns. Such doubts seriously affect the value of the vital statistics of our large towns, the trustworthiness of which has so direct and important a bearing upon sanitary effort and health progress. These doubts, moreover, cannot be removed until another census enumeration gives a new and trustworthy basis for calculation. Is it useless to urge both upon the Government and upon local authorities the urgent necessity for a quinquennial census, at any rate in all large towns?

OBSTINATE VOMITING CURED BY THE STOMACH-TUBE.

DR. MAERE has communicated to the Ghent Medical Society a case in which a young woman who had had some mental shock suffered from such extreme irritability of the stomach that nothing whatever could be retained. The bowels also absolutely refused to act. This obstinate constipation was overcome by faradaism applied by means of an insulating sound with a metallic button introduced into the rectum. Nourishment was given by the bowel. At last, as the patient's condition appeared to be somewhat critical, Dr. Maere, after painting the pharynx with a 1 per cent. solution of cocaine, introduced a Debove's stomach-tube, and poured in a litre of milk and water in equal proportions. This was retained, and afterwards the patient was able to take and retain gradually increasing quantities of liquid nourishment. In a week she was convalescent. The author suggests that the girl's hysterical condition had caused the stomach to contract in the same way as the limbs sometimes do in these cases, and that when this was once forcibly overcome by feeding through the stomach-tube it did not recur. He remarks that painting the pharynx with cocaine is, as has been pointed out by Dr. De la Roche, much more effectual in facilitating the passage of the œsophageal tube than the application of bromide of potassium.

MESSAGES IN PARISH CASES.

THE servants of medical men, as a rule, are not negligent in delivering messages concerning patients, either private or parochial. But at Southport, at an adjourned inquest on the body of an old woman named Mrs. Jane Wright, it was alleged by some of the witnesses that messages delivered to the servant both on Tuesday and Wednesday were not given to Mr. Moore. Those delivered on Thursday were more successful, and the patient was seen by that gentleman on Friday. The delay led the coroner and jury to reflect both on Mr. Moore and the servant. If there is any difference, as the coroner said, in the importance of messages from paupers and private patients, it is in favour of the poor, for they cannot help themselves by sending for other medical help as private patients can.

"CASES OF URGENCY."

MEDICAL OFFICERS, under the Poor-law system, are far too commonly "censured" or "cautioned" by coroners and their juries for neglect for which they are not responsible. A little more courage is needed, on the part of district officers particularly, to place the question of responsibility in a clear light. If a relieving officer give an "order" for medical relief, it should be his duty and business to mark it in such way that the medical officer may clearly understand whether the case is really an urgent one; and the relieving officer should, moreover, be required to make it clear to the person to whom he gives the order that it is to be delivered immediately. It must not be assumed that medical officers are always waiting on their doorsteps to run at the bidding of the first person who calls them. It is notorious that parish clergymen, Roman Catholic priests, and district medical officers are exposed to the most annoying and injurious hoaxes with regard to the urgency of the cases to which they are called. The not unnatural anxiety of friends very commonly leads to exaggeration of need in their cases; but there is something beyond this—a margin of carelessness and wanton indifference to the time and toil of the official, which ought to be exposed and condemned. It is the universal experience of medical officers in charge of districts throughout the country that, of several apparently equally pressing "calls," there is no sure way of telling which ought to be obeyed first. And when a medical man is censured or cautioned by a coroner, as at Little Missenden a few days ago, insult is added to injury in a way that cannot be too sternly or indignantly reprobated.

THE SPREAD OF INFECTION THROUGH ELEMENTARY SCHOOLS.

WE have received from Mr. S. W. North, medical officer of health to the city of York, a series of papers which show that the Town Council have determined vigorously to aim at the prevention of the spread of infection through the agency of elementary schools. The sanitary authority have delegated their powers under the Education Code to Mr. North, in so far as the exclusion of scholars from specified houses and districts is necessary for the preservation of health, and the co-operation of the managers and school teachers is sought in order to give effect to such prohibition. A number of printed forms have been prepared in order to acquire and impart the information needed with the utmost despatch and with the least difficulty, and it is evident that a considerable attempt will be made to control the spread of infection through school attendance by the less rigid action of exclusion from school, rather than by the complete closure of the schools. For success in the exclusion system, the Town Council and their officers will have the advantage of an immediate notification of infectious disease, but they will still be largely dependent on the goodwill of the managers and teachers. The actual closure of a school is only to be carried out as the result of a special resolution of the urban sanitary authority. It is right that this proceeding should be carefully considered, the more so as it is one against which the school managers have the power of appeal to the Education Department. But when such closure is necessary as the result of the failure of the exclusion system, it has generally to be carried out immediately, and it is to be hoped that the authority will not fail to meet specially on such an emergency, so that there may be no delay in giving effect to the advice of their medical officer of health in this respect.

ANOTHER DISASTER WITH BENZOLINE.

SOME months ago we published an abstract of rules to be observed in the management of lamps containing inflammable oils, and issued with the authority of Sir G. Abel. The precautions then enjoined were amply sufficient to meet almost any emergency. Advice of this kind is most valuable, but it cannot do everything. It may guard against every possibility, yet it cannot prevent accidents. For instance, a few days ago a most serious explosion, attended with loss of life in one case and severe bodily injury in others, occurred, it is supposed, from bringing a can of benzoline used in filling an exhausted lamp in contact with a lighted taper. This is a sad though simple story, especially for the poor old lady who was the unintentional cause of the misfortune, and who herself suffered in a painful degree. Her act, however, is by no means unique. It is a fact that some persons will even charge a lamp with oil while the wick is alight. The marvel therefore

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is that accidents are not more common. One may cry caution, and describe at length the qualities of explosive oils to little purpose, when the lesson of accidents themselves is not more generally felt. A given example is too apt to be set aside as an isolated one. The danger which it illustrates has been escaped before; it may be encountered again. Such is the argument, if argument it is; and while people will think and act in this way, the list of such accidents is not likely to be kept down.

THE THREE TOWNS FRIENDLY SOCIETIES' MEDICAL INSTITUTION.

OUR readers are aware that we have never approved of those huge co-operative arrangements between Friendly Societies for the purpose of extinguishing medical clubs on a smaller scale. We have always thought them too obviously suggestive of an attempt to beat down remuneration for medical service to such terms as only an inexperienced or impecunious man would be likely to accept, and then only for such a time as his health would hold out or his sense of self-esteem come to assert itself. Such experiments have shown a heartless disposition to exact an enormous amount of work for a mere pittance, and one very objectionable feature of them has been the absence of any efficient test of fitness of cases. In the Three Towns things have been going pretty favourably for the Societies till now, when they have broken with their medical man on the subject of cabs. As the Israelites were expected to make bricks without straw, so the medical officers of the institution were given to understand that they were expected to see innumerable patients with a very inadequate allowance for cab fare. Thereupon Mr. Keiley resolved not to use a cab, but then the members complained that they were not promptly attended to. The Executive Committee, designing further changes unfavourable to the medical men, two of them have resigned. It is exceedingly desirable that these appointments should be declined by medical men who respect themselves and wish for the respect of their professional brethren.

ARRESTED AND CURED PHTHISIS.

DR. DETTWEILER of Falkenstein (Taunus), who has had much experience in the treatment of phthisis at that health-resort, has published a report upon seventy-two cases which have been completely cured within the space of from three to nine years. The returns of the German Collective Investigation Committee appear to have stimulated him to investigate the cases known to him; for in these returns there are fifty-seven cases of cured phthisis contributed by seventeen practitioners. During ten years at Falkenstein there have been 1325 patients in residence; excluding non-phthisical cases and those phthisical who only remained a month under treatment, there remained 1022 cases, which the symptoms, physical signs, and microscopic examination of the sputa proved to be undoubtedly cases of phthisis, the detection of bacilli in the latter cases observed being further confirmatory of the diagnosis. Of this number 132 were described as completely cured, and Dr. Dettweiler was able to learn the subsequent history of ninety-eight of these cases. The replies received to his letters showed that since their residence, eleven had died, mostly from intercurrent disease; twelve had relapsed, but recovered; three remained ill; but in seventy-two there had been no further extension of the disease. He has tabulated these cases, showing the signs presented by them when under his care, their subsequent condition, and the length of time that they have remained ill. The cases included thirty-seven male and thirty-five female patients; in nineteen the disease involved the right lung, in ten the left, and in the remainder both lungs were affected. It is pointed out that in no single instance was the disease transmitted to the non-phthisical residents. The results of his inquiry seem to Dr. Dettweiler to justify the statement that under favourable conditions bacillary phthisis is very amenable to treatment. It would be interesting to get similar inquiries made at other health-resorts; and we may mention that Dr. Vincent Bowditch of Boston records (*Boston Med. and Surg. Journal*, Dec. 10th) a case of well-marked phthisis in a young lady twenty-three years of age, in which numerous bacilli were found in the sputum, but where the disease became entirely arrested by careful hygienic and climatic treatment. Dr. Bowditch thought the case proved that the rapidity of a fatal issue is not always directly proportionate to the number of bacilli, and that the presence of numerous bacilli in the expectoration is not inconsistent with complete arrest of the disease.

UNIVERSITY AND HOSPITALS OF BRUSSELS.

THE University of Brussels is in a ferment—not, we hasten to explain, on account of the Englishmen who attend the examinations for the purpose of obtaining a degree which is denied them at home: the said university has other functions, though we in this country are accustomed to overlook them somewhat. Well, the students have "struck," as a Belgian medical journal informs us, because the Administration des Hospices proposes to dismiss and replace the medical officers of the hospitals, even including the university clinical professors. All sorts of methods are being employed to bring pressure to bear on the sapient Administration to persuade it to rescind its resolution. The students have signed a petition, the councils of the hospitals and of the university have met and protested, and the communal authority has passed resolutions, so that it is to be hoped that something will result from all this storm, if only a great change in the nepotism and favouritism which are said to be rife in the Administrative Commission, which has the function of making the appointments to the medical staffs of the Brussels hospitals.

THE VICTORIA HOSPITAL FOR CASTE AND GOSHA WOMEN.

THE arrangements made for the carrying on of the Victoria Hospital for Caste and Gosha Women, the opening of which in Madras we reported in a recent issue, have provoked much hostile criticism from the native press. The two defects in the plans of the committee upon which the greatest stress is laid, are, first, the extraordinary expenditure for supervision over working expenses; and, secondly, the fact of the rejection of indigenous talent, education, and experience, and the seeking out of India for these qualifications at an expense to which the funds are inadequate. Considering that the hospital has just been opened—opened, too, without a single in- or out-patient calling for its aid,—there is, as yet, the orities contend, hardly any work for the lady superintendent to do in the hospital, and an assistant is at present not needed. Nevertheless, one has been engaged to go out from England. The monthly expenditure is calculated at 1125 rupees, and out of this sum 925 rupees have been reserved as salaries and allowances to the lady-superintendent and the assistant (resident) lady superintendent; in other words, over 82 per cent. of the monthly income—and that income is only assured for a few months—is to be expended on superintendence, and little over 17 per cent. is to be expended on the internal arrangements, matron, nurses, and servants. This seems an extravagant disproportion, and we do not wonder that it has prov'".ed murmurs, both loud and deep, at the financial temerity of the committee in agreeing to such a division of the expenditure. With regard to the second objection, that of the rejection of native talent, we

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can express no opinion, those on the spot being best qualified to judge of the fitness of the local candidates for the post of assistant lady superintendent. At the present rate of expenditure in the administrative department, it is evident that, unless there is a very great increase in the donations and subscriptions to the hospital, we may expect that more than three-fourths of its expenses will have to be paid by Government, and it will then be, to all intents and purposes, a Government institution. Is that what was meant when the scheme was proposed?

UNVACCINATED COMMUNITIES IN NEW SOUTH WALES.

AN editorial writer in the *Sydney Daily Telegraph* endeavours to use the melancholy epidemic of small-pox in Montreal so as to rouse his fellow-colonists to the risks existing amongst them. Referring to the 100,000 French Canadian Catholics who are unprotected, like our small-pox-loving fellow-subjects at Leicester, and who have supplied the chief victims in the recent epidemic, when sometimes 2500 lay sick in one day, he points out that, perhaps from mere apathy and a false sense of climatic security, there are probably 50,000 unprotected persons in Sydney alone who are providing material for the variolous flames when they are fairly lighted. We cordially endorse the advice of our contemporary to those who are unvaccinated to get well vaccinated, and to those who are well vaccinated to get well revaccinated. To the credit of the Pope, be it said, the French Canadians remain unvaccinated now against the specific advice of his Holiness. Our Australian fellow-subjects do not need the advice of the Pope in this matter, but it is gratifying to see how universally authority for once is on the side of science. Our colonies cannot too soon institute a system of public vaccination; and if their intelligence is not more backward than we take it to be, it will be a compulsory system.

NOISELESS COAL FIRES.

THE sick, and those who watch by their bedsides, know how terribly disturbing is the noise of "putting coals" on the fire, whether they be violently thrown on in the manner generally adopted by servants and nurses (skilled or otherwise), or placed more carefully with the tongs, as kind relatives or friends will *sometimes* "make up the fire" in their sympathy with a sufferer. Even under the most careful manipulation loose pieces of coal are almost sure to fall, and a disturbing rattle is the result. This may appear to be a very small matter to look back upon, but at the time it is by no means unimportant, and in some cases very great distress and even injury may be produced by it. A very simple precaution will suffice to prevent the annoyance altogether. If a few paper bags be supplied to the servant who replenishes the coal-box, and these are filled with pieces of coal, nothing can be easier than to lift one or more of these packages on to the fire noiselessly, and so settle them that when the paper burns the coals may not fall out of the grate. By this obvious method a noiseless coal fire may be secured.

METRITIS IN YOUNG GIRLS.

ACCORDING to Dr. Gallard, of the Hôtel Dieu, young girls who suffer from violent metrorrhagia alternating with profuse purulent discharge, due to metritis, should be treated with cold injections and sitz-baths, combined with ergotin, hamamelis, digitaline, and iron internally; and if these means are not successful, recourse should be had to an intra-uterine injection of perchloride of iron, care being taken to use a graduated syringe and an intra-uterine tube whose calibre is decidedly smaller than that of the cervical canal.

TEMPERANCE DRINKS.

AT the Birmingham Police-court, on the 8th inst., summonses were taken out by the Inland Revenue against a shopkeeper for selling, and against a firm of manufacturers for supplying, certain drinks, under the name of temperance wines, which were alleged to be intoxicating. An analyst to Somerset House gave evidence that the port wine was a fermented liquid containing 17·4 per cent. of proof spirit; the sherry was a liquid of the same description, and contained 19·6 per cent. of proof spirit: thus showing that a large proportion of alcohol was hidden under the seductive title with which the bottles were labelled. Another compound of a similar kind was sold under the name of "hot Tom," the purpose of which was to give a spiced flavour when added to beer. It was suggested for the defence that fermentation must have occurred after the wines had been bottled; but the absence of carbonic acid in any quantity proved that this could not have been so. The salesman was fined 1*s.* and costs, the manufacturers £10—a penalty which will probably stop the sale of this particular form of refreshment, but which will be of more service in calling the attention of teetotallers to the nature of the trade in powerful stimulants sold under tempting and unsuspecting names.

ATROPHODERMA PIGMENTOSUM.

THE pathology of this affection, which has received so many names, appears to be fairly understood as the result of the labours of Kaposi, Neisser, Vidal, Radcliffe Crocker, and others. About thirty-six cases appear to have been placed on record. Dr. White of Harvard University describes two cases in the *Journal of Cutaneous and Venereal Diseases*. The cases occurred in a family of Russian Polish Jews. There were seven children in the family, and the two affected were the second and sixth. The first case was a boy aged seventeen, in whom the melanotic and atrophic conditions were well marked, and telangiectasis was evident only about the face. The second case was also a boy, three years old, in whom the only marked morbid condition appeared to be on the face, and to consist of abnormal pigmentation. The author avers that there can be no doubt of the correctness of the diagnosis in the cases, the first of which exhibits everything characteristic of the disease, except the final transformation of parts into malignant growths. White regards the melanosis as the initial lesion, and would so name the disease, adding the terms telangiectodes and atrophica as secondary conditions. Radcliffe Crocker says the disease is admittedly an atrophy of the skin, and suggests the term "atrophoderma pigmentosum."

VENESECTION FOR HÆMORRHAGE.

A CORRESPONDENT of a Madrid medical journal, writing from Zaragosa, says that in cases of hæmorrhages, notably in hæmoptysis and in epistaxis, if astringent remedies fail to arrest the attack, the simplest and best proceeding is to open the saphena or basilic vein. So far from alarming the patient and his friends, he finds that it rather tends to reassure them, for there is an idea very prevalent in Spanish towns that "a doctor who does not bleed is not a good one." Many patients, too, with epistaxis will exclaim that they would rather die than allow an instrument to be passed into the nostril, but they will readily consent to allow a vein to be opened, especially when they are assured that this proceeding will almost infallibly cause the flow of blood from the nose to cease. The writer says that this assurance may be given with the utmost confidence, as he has constantly employed venesection for this purpose with very great success.

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PUBLIC HEALTH IN MINNESOTA.

AN official publication entitled *Public Health in Minnesota* has been established by the State Board of Health as a means of communication between that board and health officers. It is published monthly, and besides containing the suggestions, regulations, and orders of the State Board, news as to sanitary work and discoveries abroad, laboratory and meteorological notes, and book notices are included in the information it contains. Some of the numbers refer to the results of sanitary inspections, others to the recent prevalence of small-pox and the means necessary to its prevention. Again, the state of our knowledge with respect to the influence of bacteria in the production of diseases such as cholera, and contributions relating to many current sanitary discussions, are grouped with items of local news, which it is important to convey to health officers. It is evident that such a pamphlet must be of considerable value in effecting the object which its originators have held in view.

SEVERE CASE OF MORPHIA-POISONING.

DR. YAVORSKI gives in the *Vrach* an account of a case of poisoning by morphia, in which a woman had taken about thirty grains of the acetate in powder, and, as it did not act quickly enough to please her, had followed it up with half an ounce of tincture of opium. She slept a few hours, and then awoke, complaining of being very ill; she did not vomit. Dr. Yavorski saw her about an hour later. He injected apomorphia, and in a quarter of an hour this produced vomiting, after which strong coffee was given and vomiting again induced by apomorphia. Atropine was then injected in doses of one-sixth and one-twelfth of a grain every fifteen to thirty minutes, till in ten hours more than two grains of atropine had been given. Tincture of musk was also injected—120 minims altogether. The patient recovered.

CHOLERA IN PALERMO.

Il Morgagni for December publishes a report of researches conducted on the recent cholera epidemic in Palermo by Professor Lepidi-Chioti, assisted by Dr. de Simone. The results were entirely confirmatory of Koch's, on the comma bacillus as the cause of cholera.

A CONTRIBUTOR to the *Newcastle Weekly Chronicle*, in the most recent of a series of articles on "Our Young Ladies, by One of Them," calls the attention of her readers in plain and forcible terms to the dangers attending the use of hair dyes, the consumption of arsenic, tight lacing, cumbersome clothing, and low dresses. It is gratifying to find one of the female sex condemning the use of all such meretricious aids to what is supposed to be beauty; but we fear the day is far distant when all her sisters will be of the same mind. We hope, however, that the writer of the article alluded to does not forget the proverb which tells us that "an ounce of practice is worth a pound of theory."

A FIRM of druggists in Jersey have been fined for importing Vin Mariani, a medicinal wine containing a good percentage of alcohol, without having made a declaration on the subject to the Excise authorities. By the insular law all spirituous liquors, for whatever purpose used, must be declared, but it is hard to believe that such a provision was intended to apply to a case like the one under notice.

THE Gresham Medical Lectures, the subject of which this year will be the Treatment of Disease, will be delivered on January 19th, 20th, 21st, and 22nd, 1886, by Dr. E. Symes Thompson, at Gresham College, Basinghall-street, E.C.

ON the 8th inst. a party of high officials visited the Toorah Convict Prison, Cairo, at the invitation of Dr. Crookshank, the Director-General. Some few of the visitors remembered the state of these prisons prior to Dr. Crookshank's administration, and congratulated him heartily on the general improvement and perfect order prevailing in the establishment. The good work done in this department has hitherto been little recognised, and it is pleasing to be able to point to at least one reform which has been thoroughly well carried out under English superintendence.

AT the annual meeting of the Allotments and Small Holdings Association held at the Westminster Palace Hotel on Monday last, Mr. J. B. Clark, L.R.C.P., M.P. for Caithnessshire, stated that, from his experience of rural practice, want of milk caused the illness of two-thirds of the children brought under the notice of the doctor, and that "three acres and a cow" would do more than anything else to promote the health and happiness of the people generally.

THE authorities at Montreal are making great efforts to check the small-pox epidemic in that city. According to latest advices a law has been enacted by the Provincial Board of Health, and confirmed by the Governor in Council, making it a crime punishable by a fine of twenty dollars or imprisonment in the common gaol "to advise others to refuse vaccination." This enactment will doubtless go far to check the efforts of the anti-vaccinationists.

DR. DYKE, medical officer of health for Merthyr Tydvil, has reported to his board on underground dwellings—places in which diseases are invariably most prevalent and most fatal. It is to be hoped that the result of his report will be the closure, as human habitations, of all such dens in the town under his care.

THE Russian Government has issued an order that the practice of massage is only to be allowed to be conducted by those who have obtained a licence after examination in the same way as those who practise medical gymnastics are licensed, and massage must always be carried on under the orders and supervision of a medical man.

A COLLECTION of the songs and verses by members of the well-known medical clubs in Edinburgh, many of which are familiar to the outside public as well as the medical profession, is about to be published by Messrs. Maclachlan and Stewart.

THE meetings of the Sanitary Congress will most probably be held in Bolton this year. If this be so, it will be an honour to the town, which was the first to adopt the compulsory clauses in reference to sanitary subjects.

AN epidemic of measles is reported to have been for some time prevailing at Luton, Beds, and neighbouring villages, and to have assumed so severe a form as to necessitate the closing of schools at Sundon and Barton.

DR. HIRSCHMANN has been appointed Professor of Ophthalmology in the University of Kharkoff, and Dr. W. Dobronravoff has been elected to the chair of Midwifery and Gynæcology in the University of Kieff.

DR. MORITZ, the senior medical officer of the Obukhoff Hospital in St. Petersburg, being about to resign his post, his colleagues have arranged to hold a farewell dinner in his honour at the Grand Hotel.

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DR. ANDREW WILSON, F.R.S.E., &c., Examiner, Faculty of Medicine, University of Glasgow, has been appointed an Examiner in Botany in connexion with the Intermediate Board of Education for Ireland.

THE pauper lunacy charges for England for 1885-6 amount to £478,500, being an increase on the previous year of £17,500; for Scotland £84,500, an increase of £500; and for Ireland £98,200, an increase of £2810.

AN examination of candidates for commissions to fill sixteen vacancies in the Medical Department of the Royal Navy will be held at the University of London on Feb. 8th and following days.

THE death is announced in St. Petersburg of Dr. Hirschfeld, editor of the medical journal *Prakticheskaya Meditsina*, and translator of many foreign medical works into Russian.

M. PAUL BERT has been appointed by the French Government Resident in Annam, Tonquin, and Gambodia, and is to embark for Hué on the 3rd prox.

SURGEON HEATH, British Army Medical Department, has been killed in action in Burmah. The fatal wound was received whilst he was endeavouring to remove to a place of safety an injured comrade.

SIR J. FAYRER, F.R.S., has been appointed a Corresponding Member of the Academy of Medicine of Paris.

Pharmacology and Therapeutics.

POROUS BELLADONNA PLASTER (A. DE ST. DALMAS, LEICESTER).

THIS is a porous belladonna plaster spread on scarlet felt. Our experience of its use extends over several months, and we have no hesitation in saying that we believe it to be one of the best belladonna plasters ever made. It is very active, is not irritating, and gives plenty of support.

MESSRS. HOWARD AND SONS' CINCHONA PREPARATIONS.

Messrs. Howard and Sons are so well known as makers of cinchona preparations, that very little more is necessary than to call attention to their fluid extract of cinchona from calisaya bark, their fluid extract from red bark, and to the extractum cinchonæ liquidum of the New British Pharmacopœia. Their preparations leave nothing to be desired, and are a credit to British pharmacy.

TASTELESS, ODOURLESS COD-LIVER OIL.

We have received from Mr. W. G. Radley, of Newton Abbot, Devon, specimens of "tasteless, odourless" cod-liver oil and castor oil. We are not quite prepared to say that they are destitute of all taste and odour, and they certainly require a great deal of shaking; but they are fairly palatable, and there can be no doubt that they will be taken by children without difficulty. We hope at some future time to give the cod-liver oil preparation a more extended trial.

PARALDEHYDE.

Dr. Dujardin-Beaumetz, in a recent article on the "New Hypnotics," speaks highly of paraldehyde as a therapeutic agent. He usually prescribes three drachms in six ounces of water, and orders a teaspoonful to be taken in rum, whisky, or kirsh at bedtime. The drug has a peculiar and characteristic odour, resembling the smell of a tippler's breath, and it is only by mixing it with spirit in some form that this can be effectually disguised. Yvon accomplishes the same object by administering it in conjunction with camphor-water, tincture of vanilla, and syrup of virgian prune. As an enema it is greatly superior to chloral, frequently affording a good night's rest after the failure of many other remedies. It does not readily lose its remedial power, and its administration may be continued for a very long time without producing any inconvenience. Dr. Dujardin-Beaumetz thinks that it is especially indicated in strychnia-poisoning, and speaks well of it in the treatment of eclampsia.

PURE TEREBENE.

Pure terebene, prepared by the action of sulphuric acid on turpentine, is a clear, colourless fluid, having the odour of freshly sawn pine-wood. It has recently been introduced as a remedy for chronic bronchitis and winter cough, and is said to be most efficacious in the treatment of the flatulence of dyspeptics. It is usually given in ten-drop doses on sugar every three hours, but as it has no poisonous action the dose need not be very accurately measured. It is agreeable to take, and is preferable in every way to the turpine-hydrate recommended by M. Germain Sée and other observers as a remedy for certain forms of consumption. It is not to be confounded with the terebene employed in surgical practice and in the preparation of soaps. There is reason to believe that it will prove valuable not only in chest diseases but in many affections of the throat and vocal organs.

PICHI, A CHILIAN DRUG.

An account is given in the *Independencia Medica* of a Chilian coniferous plant, the Fabiana Imbricata of Ruiz and Pavón, but called by the natives Pichi. It has, according to them, great powers of controlling almost all diseases of the urinary organs, and is even considered to be capable of causing calculi to dissolve. A study has recently been made both of its chemical and therapeutic properties. It has been found to contain an aromatic essential oil, a resin, and a crystalline substance of a highly fluorescent appearance, which is soluble in ether and in alcohol at 80° C., and very slightly in cold water, but sufficiently so to produce a solution which appears of a magnificent blue colour when seen by transmitted light, but is yellow when seen by reflected light. The therapeutic action of pichi is most marked in cases of vesical catarrh caused by uric acid diathesis, gravel or calculi. Here it diminishes the secretion and allays the irritability of the mucous membrane, thus allowing the gravel a better opportunity of passing with the urine. It has also a diuretic action, which has been found valuable in many cases of icterus, dropsy, and dyspepsia due to the deficient action of the liver. In these cases the preparation employed was the essential oil, which, being absorbed and taken into the circulation, acted as a stimulant of the secretory organs in general. The specific action of the drug, however, is evidently exercised on the urinary apparatus. The writer of the paper from which we quote prefers to use a fluid extract of the plant, of which he gives from two to three ounces daily, dissolved in water, either hot or cold.

ANTIPYRIN AS A HÆMOSTATIC.

Antipyrin, which has been largely used in the treatment of fever for reducing temperature, has proved valuable in the hands of an Italian surgeon, Dr. Casati, as a local hæmostatic. In a case of epistaxis it was employed as a 5 per cent. solution; also, after an operation, hæmorrhage was arrested in three minutes by the application of a 4 per cent. solution of antipyrin. Dr. Casati considers antipyrin preferable to perchloride of iron or the actual cautery for arresting hæmorrhage, because it leaves the wound quite clean, and without any eschar. It has, too, the advantage over ergotine of being non-poisonous, even in large doses, and its antipyretic and antiseptic properties are themselves in many cases of considerable advantage.

PELLETERIN.

Tauret in 1878 isolated an alkaloid out of the pomegranate bark. Schröder has studied the physiological action of pelleterin on frogs and rabbits. It increases the reflex irritability of the spinal cord and disturbs locomotion, probably as the result of its action on the cerebellum. It raises blood-pressure by acting on the vaso-motor centre and paralyses the vagus. In man, giddiness, disturbance of sight, feeling of weakness in the legs, and occasionally nausea, vomiting, cramps, and convulsions were the phenomena observed. Pelleterin kills the tapeworm of cats, and it has proved successful in that of man, but its high price precludes its general use.

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VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 6239 births and 3927 deaths were registered during the week ending January 9th, being the first week of 1886. The annual death-rate in these towns, which had been 23·0, 19·3, and 25·3 per 1000 in the preceding three weeks, declined again last week to 22·5. During the thirteen weeks of last quarter the death-rate in these towns averaged 20·0 per 1000, and was 2·6 below the mean rate in the corresponding periods of the nine years 1876-84. The lowest rates in these towns last week were 18·5 in Sheffield, 18·8 in Newcastle-upon-Tyne, and 18·9 in Wolverhampton. The rates in the other towns ranged upwards to 27·8 in Nottingham, 28·3 in Huddersfield, 28·5 in Manchester, and 30·8 in Bolton. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 395 and 497 in the previous two weeks, declined again last week to 448; they included 174 from whooping-cough, 113 from measles, 42 from "fever" (principally enteric), 41 from diarrhœa, 38 from scarlet fever, 37 from diphtheria, and 3 from small-pox. No death from any of these zymotic diseases was recorded last week in Halifax, whereas they caused the highest death-rates in Salford, Bolton, and Plymouth. The greatest mortality from whooping-cough occurred in Sheffield, Cardiff, and Bolton; from measles in Oldham, Nottingham, and Plymouth; from scarlet fever in Leicester, Huddersfield, and Bradford; and from "fever" in Oldham and Norwich. The 37 deaths from diphtheria included 21 in London, 4 in Liverpool, and 2 in Bristol. Small-pox caused no deaths among the residents of London and its outer ring, and but 3 in the twenty-seven provincial towns, of which 2 occurred in Liverpool and 1 in Nottingham. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had declined in the preceding eight weeks from 90 to 41, had further fallen to 35 on Saturday last, only one case having been admitted to these hospitals during the week. The Highgate Small-pox Hospital contained 6 patients on Saturday last, no case having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 383 and 610 in the preceding two weeks, declined again last week to 518, but were 25 above the corrected average. The causes of 86, or 2·2 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Sunderland, Portsmouth, Brighton, and in four other smaller towns. The largest proportions of uncertified deaths were registered in Hull, Halifax, Salford, and Leicester.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 24·1, 22·9, and 21·6 in the preceding three weeks, rose again to 22·9 in the week ending Jan. 9th, and exceeded by 0·4 the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 15·5 in Leith and 16·1 in Edinburgh, to 27·8 in Perth and 28·7 in Glasgow. The 565 deaths in the eight towns showed an increase of 37 upon the number in the previous week, and included 15 which were referred to whooping-cough, 10 to diarrhœa, 8 to scarlet fever, 6 to diphtheria, 5 to "fever" (typhus, enteric, or simple), 1 to measles, and not one to small-pox; in all, 45 deaths resulted from these principal zymotic diseases, against numbers declining steadily from 56 to 32 in the preceding four weeks. These 45 deaths were equal to an annual rate of 1·8 per 1000, which was 0·8 below the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 7, 12, and 13 in the preceding three weeks, further rose last week to 15, of which 12 occurred in Glasgow. The 10 deaths attributed to diarrhœa also exceeded the numbers in recent weeks, and included 6 in Glasgow. The deaths from scarlet fever exceeded the number in the previous week by 5, and included 4 in Aberdeen and 2 in Glasgow. Four of the 6 deaths referred to diphtheria and 4 of the 5 to "fever" were returned in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had declined from 178 to 143 in the preceding four weeks, further fell last week to 132, and were 66 below the number returned in the corresponding week of last year. The causes of 80, or more than 14 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 34·4, 22·8, and 37·1 per 1000 in the preceding three weeks, declined again to 28·8 in the week ending January 9th. During the thirteen weeks of last quarter the death-rate in the city averaged 27·0 per 1000; the mean rate during the same period did not exceed 19·5 in London and 19·0 in Edinburgh. The 195 deaths in Dublin last week showed a decline of 56 from the high number in the previous week, and included 15 which were referred to the principal zymotic diseases, against 28, 16, and 32 in the preceding three weeks; 8 resulted from whooping-cough, 3 from scarlet fever, 3 from "fever" (typhus, enteric, or simple), 1 from diarrhœa, and not one either from small-pox, measles, or diphtheria. These 15 deaths were equal to an annual rate of 2·2 per 1000, the rate from the same diseases last week being 2·9 in London and 0·6 in Edinburgh. The fatal cases of whooping-cough, which had been 15, 10, and 17 in the previous three weeks, declined again last week to 8. The 3 deaths from scarlet fever exceeded the numbers in either of the previous two weeks; while the 3 deaths referred to "fever" showed a decline from recent weekly numbers. Three inquest cases and 6 deaths from violence were registered; and 63, or nearly a third, of the deaths were recorded in public institutions. The deaths of infants showed a marked decline from the numbers in recent weeks. The causes of 21, or nearly 11 per cent., of the deaths registered during the week were not certified.

VITAL STATISTICS FOR KENSINGTON.

Dr. Dudfield's last monthly report on the sanitary condition of Kensington gives a summary of the vital statistics for 1885. On an estimated population of 172,000, the birth-rate, which is low compared with that for London generally, was only 23·4 per 1000, or 5 below the decennial average, and the death-rate was 16·1 per 1000, or 1·5 below the decennial average, and 3·5 below that of the metropolis as a whole. The deaths amongst children under one year of age were somewhat numerous, amounting as they did to a rate of 16·1 per cent. of the registered births. The deaths classed as zymotic were 361 in number, and amounted to a rate of 2·1 per 1000, this being slightly below the decennial average and considerably below that for the whole of London, where the rate reached 2·8. These deaths included 25 from small-pox, 22 of them occurring in the hospitals of the Asylums Board; there were also 111 deaths from measles which led to an increase in the infant mortality.

THE SERVICES.

GREENWICH HOSPITAL PENSION.

THE Lords Commissioners of the Admiralty have awarded the Greenwich Hospital pension of £50 a year for fleet surgeons and staff surgeons, rendered vacant by the death of Staff Surgeon James K. Ballard, to Deputy Inspector-General James G. T. Forbes.

Surgeon-Major Galbraith, serving with the Egyptian army, having completed duty with the Recruiting Commission, has been attached to the head-quarters staff of that force for special service.

WAR OFFICE.—Army Medical Staff: Surgeon-Major Arthur Charles Gaye to be Brigade Surgeon, vice Frederick William Moore, granted retired pay. Surgeon-Major John Alexander Scott to be Brigade Surgeon, vice Austin Jonas Ferguson, granted retired pay.

ADMIRALTY.—The following appointments have been made:—Surgeon Ernest D. Minter, to the *Lion*, additional, for disposal; and Surgeon Thomas E. H. Williams, to the *Terror*.

THE HONOURABLE ARTILLERY COMPANY OF LONDON:—Surgeon Thomas Stevens Barringer retires into the Veteran Company, with the honorary rank of Surgeon-Major, and has permission to wear his uniform on retirement; Walter Culver James, Gent., M.D., to be Surgeon, vice Barringer, retired.

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ENGINEER VOLUNTEERS: —1st Newcastle-on-Tyne and Durham: Charles Nairne Lee, Gent., M.B., to be Acting Surgeon.

RIFLE VOLUNTEERS. — 3rd (the Buchan) Volunteer Battalion, the Gordon Highlanders: Acting Surgeon George S. D. Knowles resigns his appointment.—4th Volunteer Battalion, the South Wales Borderers: Surgeon Robert Smyth is granted the honorary rank of Surgeon-Major.—4th Volunteer Battalion, the Norfolk Regiment: Acting Surgeon Thomas Harry Bate Rodwell resigns his appointment.

Correspondence.

"Audi alteram partem."

THE SUPRAPUBIC OPERATION.

To the Editor of THE LANCET.

SIR,—Mr. Hodgson Wright appears to me to have misapprehended the essential feature of the new form of suprapubic operation by which it is proposed to replace the old one. The "well-bent sound" or staff is that which hitherto we have all used. He will find it in my own or in any other work which describes the operation. The new proceeding has for its object to remove the peritoneum from its natural vicinity to the pubis, and leave a large interval for the incisions; while the bladder becomes an abdominal organ instead of a pelvic one. In this way the danger of injury to the peritoneum, the chief danger of the high operation, as heretofore performed on a staff, is removed. This object is attained by injecting the rectum and the bladder, and the staff then becomes unnecessary, while its presence is incompatible with the moderately distended condition of the bladder. The effect of distension on the rectum, which is the chief factor in placing the peritoneum out of harm's way, can be best appreciated by drawings from the subject demonstrating the condition. These are fully shown, with a far more complete statement of the whole question, in a little work on the Suprapubic Operation, which will appear next week, by

Yours obediently,

Wimpole-street, Jan. 12th, 1886. HENRY THOMPSON.

THE QUESTION OF A NEW UNIVERSITY FOR LONDON.

To the Editor of THE LANCET.

SIR,—At the meeting of Convocation of the University of London, fixed for Tuesday next, Jan. 19th, it is very probable that important subjects for discussion will be brought forward, and I ask you to permit me not only to remind my fellow medical graduates of the importance of duly considering the dangers of the situation, but also to put fairly before all those who are interested in the higher medical and general education my view of the existing wrongs and the proposed remedies.

I cannot help thinking that with graduates in the various faculties of the University the field of debate is far from clear; that one section does not thoroughly comprehend the views of another section; that what to one group seems to be an adequate remedy for existing evils, to another is no remedy at all. Since the collapse of Lord Justice Fry's scheme for a complete reorganisation of the University a much more moderate plan has been formulated. There seems to me little cause for objection and not a little of valuable suggestion for reform in the proposals of Mr. Magnus (*vide* THE LANCET of December 5th, 1885, p. 1090). They are chiefly directed to the providing a means whereby the views of teachers in the various faculties may be adequately presented to the Senate, and to a partial reconstruction of the Senate, so that teachers may have a more direct representation therein. It may be urged by some that the teachers, even with the very best motives, must have some tendency to make matters easier for those whom they teach, and that there may result a lowering of the standard in examinations for degrees; but most will probably agree that this is a remote danger in the [illegible] plan of Mr. Magnus, and that certainly the voice of the teachers ought to be heard. This is not the danger. The point is, that in all these schemes for reorganising the University, which are considered in Convocation of the University the fringe of the question which is agitating aspirants for degrees outside, is not even touched. Even in the discussion on Lord Justice Fry's propositions it was urged and reiterated that the standard for degrees should not be lowered. How, then, will those be helped who clamour (and that most justly) for the degree of Doctor of Medicine for the student in London who shall manifest the same aptitude and diligence that would obtain for him such a degree in any other of the universities of the United Kingdom? The list of those successful at the late examination for M.D. Lond. contained twenty-seven names, and it was, I believe, an exceptionally long one. Twenty-seven M.D.'s in one year from all those who have struggled at the matriculation examination! There is no escape from the dilemma: either the standard for examinations must be very much reduced, and therefore the degrees in the London University must be proportionately depreciated in value—a course which the authorities have deliberately pronounced against,—or the University must lie open to the imputation of shelving the most important question that public opinion submits to it.

Granted that London wants facilities for conferring ordinary degrees, is it necessary to level down the University of London in order to supply this want? I have already argued this question in the negative sense. As at present constituted the London is an Honours University—not as regards medicine only, but in all faculties. Its originators deliberately framed its regulations so that it should differ from all existing universities, and should be an indirect means of elevating the standard of education throughout Great Britain and her colonies. In the opinion of many, and certainly in that of myself, the plan was a wise one, and has borne the fruits of success. It cannot be denied, however, that those who from force of circumstances cannot comply with its stringent regulations and cannot get over the difficulties of its examinations, and yet would be the gainers of a degree if they happened to be members of other universities, have a distinct grievance. I would urge as the best and simplest plan of overcoming the present difficulties that the University of London should remain, just as at present, an Honours University, its mechanism with all reasonable improvements preserved, but the severity of its tests in nowise reduced, and that another university, which might be called the University of Westminster, should be founded to confer ordinary degrees. By ordinary degrees I mean degrees which are conferred after examinations which present no greater difficulties than those of the other universities of the United Kingdom. It is, I suppose, conceded that a student who goes to Oxford or Cambridge and manifests reasonable aptitude and diligence is fairly sure of obtaining his degree at the close of his curriculum. Not so with a student who hopes for a degree in the London University. It is well known that many run, but few win. In this case it is as if at Cambridge the examiners for the B.A. degree in the Mathematical Tripos stopped after the list of Wranglers and senior optimes, decreeing that all those now classed as junior optimes and pollmen (those worthy of an ordinary degree) had failed.

The question that the University of London should be asked is, Is it willing to work in lines parallel with those of another university, such as that I have mentioned? Would it be so very difficult to arrange that the one should be the honours branch of the other? Then none of the existing mechanism would be destroyed, the present degrees, the value of which is recognised, would not be depreciated, and their now intelligible connotation would be preserved. The Association for Promoting a Teaching University would surely be more likely to succeed if its initial work were one of construction and not destruction, and many good educational institutions would crystallise round the new University if it had the power of granting degrees after a fair but not an excessively difficult examination.

With such a scheme the project of the Royal Colleges of Physicians and Surgeons to give to those who have passed the examinations for their licences facilities for proceeding to the degree of M.D. would best harmonise. The Royal Colleges would constitute, without any necessary change, the Medical Faculty of the new University. It would be surely an advantage to them that they should not be isolated, but associated with other faculties of arts and sciences. Such an association would probably promote the success of their

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scheme, for though the application for power to confer degrees merely in medicine might provoke the active, and perhaps successful, hostility of medical corporations with vested interests, it would be difficult to withstand a great movement tending to promote the higher education of large numbers of the population.

I am, Sir, yours faithfully,

Harley-street, Jan. 11th, 1886. A. ERNEST SANSOM.

THE RELATION OF THE PAROTID TO THE GENERATIVE ORGANS.

To the Editor of THE LANCET.

SIR,—The interesting letter of Mr. Paget, published in your last issue, has raised a question which I think has not yet received the attention it deserves—viz., Is the parotid in any way related to the generative organs? As writers, and among them Professor Möricke, often commence by taking for granted "the well-known relation which exists between the parotid and the testicle," I think, before we go any further into the matter, we ought to inquire into the facts upon which this doctrine is founded. I suppose the belief was first formed by observing the phenomena of mumps. Now, what do we know of mumps? That although for the most part a disease of childhood, it not unfrequently attacks adults, both male and female. In children the sexual organs are imperfectly developed, and do not suffer. Adult females, as all the books tell us, are liable when attacked to suffer from a "metastasis" affecting the breasts and ovaries, but as after some experience I have never seen a case myself, nor apparently has Professor Möricke, I gather that this complication is comparatively rare. With adult males, however, the case is different; among them a considerable proportion, in my own cases a considerable majority, of the patients suffer from orchitis. This orchitis, it seems to me, may be explained on the one hand by supposing that some relation exists between the parotid and the testicle, or, on the other, by considering it simply as one of the phenomena peculiar to the disease. Now, if the cause is to be found in some relation existing between these two organs, should we not be led to expect, at any rate, some slight manifestation of its influence when the parotid becomes affected by causes other than mumps? As far as I know, however, this is not the case. Again, supposing this mutual influence to be capable of exerting itself in the opposite direction, should we not expect to find the parotid affected far and away more frequently in cases in which the testicle is involved than in any other? Is this the case? Taking the other alternative, may we not consider mumps as an acute specific disease, which has its own selective peculiarities, just as other specific diseases—such as scarlatina and diphtheria—have theirs? This view is, I think, strengthened by considering the period when the "metastasis" occurs. Sometimes the testicle becomes involved whilst the parotid is still affected, more generally when it is recovering, while occasionally there is an interval without local affection, during which the constitutional symptoms are sometimes unusually severe. Surely we should hardly expect the disease to stay thus hovering, as it were, about the system, if it were sent to the testicle through the dominating influence which the parotid holds over it.

We have now to look at the question from the opposite point of view—viz., when the parotid becomes affected secondarily. Attention has been drawn to this side of the question by the fact that a certain, but I venture to think very small, percentage of operations upon the female genital organs have been followed by inflammation of the parotids. I am indebted to Mr. Paget's letter for the means of referring to most of the cases to which I shall allude. Professor Möricke had five cases, four of which suppurated, all after ovariotomy; the mortality is not given. Dr. Goddell's paper elicited in all fifteen cases, all but one of which related to the female genital organs, nearly half of which died. Other cases are given which cannot be catalogued from want of sufficient particulars; but, put together, they show frequent suppuration and a high mortality.

So far as I am aware, three explanations have been offered for these cases. 1. That some were cases of mumps occurring accidentally. 2. That they were due to the operation, which, I suppose, means that they were due to a relationship existing between the parotid and the parts operated upon. 3 That they were septic. Of these the first may be true; the third is certainly true of some of the cases; but it is with the second which we have specially to deal. Now, if it is due to the relationship existing between the parotid and the parts operated upon, what are those parts? Professor Möricke had five cases following 200 ovariotomies, and none after any other operation. He argues that from "the well-known relation existing between the testicle and the parotid we may infer that the same exists between the ovary and the parotid, but he does not explain why four out of five of his cases suppurated. That the the theory of an exclusive relation between the ovary and the parotid was untenable was soon shown by the fact that these cases occurred after other operations involving the peritoneum, such as hysterectomy (Baker), gastrostomy and penetrating wound of the abdomen (Mann). The first line of defence failing, the idea has been proposed that some relation exists between the parotid and the peritoneum. How far this position can be maintained is shown by the fact that cases have occurred where the membrane has not been involved; for instance, after excision of the cervix uteri (Goodall), laceration of the cervix (Emmett), vesico-vaginal fistula (Emmett), and, lastly, lithotomy and circumcision (Stephen Paget). This list does not include the cases occurring on the medical side, notably in typhus, where no special organ can be said to be primarily involved.

Lastly, it seems to me that we are driven by the process of exclusion to the third or septic theory. If we look at the frequent suppuration and the very high mortality of these cases, coupled with the fact that the septic character of many of them was undoubted, I think it is to this cause that we have to look for the true explanation. Are we justified always in saying that the inflammation is not septic because suppuration does not occur? Given a small dose of poison, coupled with a high power of resistance, may not resolution and recovery occur? I do not wish to enlarge upon this part of the question; my position is rather that the evidence of the connexion between the parotid and the genital organs is entirely based upon the phenomena of mumps, which I hold does not justify such a conclusion, and the relation between the female genital organs and the parotid rests upon no good evidence whatever.

I am, Sir, yours truly.

St. John's, S.E., January, 1886. F. T. TAYLER, M.B., B.A.

"THE REAL CAUSE OF HOSPITAL DISTRESS."

To the Editor of THE LANCET.

SIR,—I have read Mr. M'Donagh's letter in your issue of the 9th on "The Real Cause of Hospital Distress and the Only Means of Cure," and I think that it should not be allowed to pass without a brief statement of the case from the hospital point of view. In the first place, I cannot agree with Mr. M'Donagh in thinking that he has put his finger on the real cause of the acknowledged hospital distress, much less on the only cure. I have also to find fault with the letter because of its vagueness. Mr. M'Donagh makes sweeping statements, but he does not back them up with specific instances of the alleged abuse. Moreover, it is a dangerous thing to impute motives in the wholesale way Mr. M'Donagh does, and he seems to me to class all hospitals together, and to condemn all equally—the large general hospital and the small special hospital alike. And while I might be willing to admit that there may be some cause for complaint on the part of general practitioners against special hospitals, I am not prepared to admit that there is the same, or indeed any, valid ground for grumbling at the general hospitals. Patients are inclined to flock to a special hospital, believing that there they get the advice of a medical man who has made their particular ailment his special study, and that he is therefore in a position to know more about it. This does not so strongly apply to general hospitals, and, moreover, there is now, in at least some of our largest hospitals, a most careful system of supervision of out-patients, to the exclusion of unsuitable cases. This is so at the London Hospital, and I believe at several others. At my own hospital, where I saw out-patients for a number of years, I came to the conclusion, after careful study of the matter, that very few of the patients presenting themselves for advice were in a position to pay the fees of any medical man, however moderate these might be. Those who had been ill for any length of time had previously been under

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the care of some local practitioner, and had paid his fees until loss of work or some other accident rendered them unable longer to do so. Then, and not till then, they came to the hospital. In other cases, I am sorry to say, they came because they could not go on paying, and were none the better for the advice they had got—probably, I should think, because the doctor they had consulted had adopted some such wholesale plan of seeing cheap patients as the one advocated by Mr. M'Donagh, and for that reason had been unable to do justice to his patients. I have already said that I think Mr. M'Donagh is too sweeping in his statements, and especially do I deprecate the way in which he attributes motives of purely selfish interest to those of his brethren who happen to be attached to hospitals. For myself, I believe that most physicians and surgeons see their patients at hospitals faithfully, and do their best for them, without a thought of any direct advantage therefrom, and without thinking of numbers so long as they are not so few as to interfere with clinical instruction, or so many as to overtax their energies. As a matter of fact, is out-patient work directly or indirectly very much of a stepping-stone to practice? I think decidedly not, as Mr. M'Donagh puts it.

I believe the distress of hospitals arises in the main from two causes: (1) The depression of trade, which acts doubly on them by increasing the numbers who seek medical charity and by diminishing the means of those who support hospitals; (2) from the greatly increased number of special hospitals.—I am, Sir, your obedient servant,

Jan. 12th, 1886. PHYSICIAN TO A GENERAL HOSPITAL.

"ARTHRECTOMY."

To the Editor of THE LANCET.

SIR,—In answer to Mr. Wright's letter in THE LANCET of January 2nd concerning a remark of mine at the December meeting of the Leeds and West Riding Medico-Chirurgical Society, I would say that the case of arthrectomy or erasion reported by my friend Mr. McGill healed by first intention, and was so well at the end of four months that the boy walked several miles and had a fair amount of movement in the joint. In the discussion which followed I remarked "that such a perfect result could not often be looked for after erasion, since, out of sixteen cases reported by Mr. Wright, only one similar success had been obtained." In the epitomised report of the meeting it is stated that erasion had only succeeded once in Mr. Wright's sixteen cases; it should have been that such a perfect result had only occurred once. I have Mr. Wright's original paper before me, and extract from it the following results of his sixteen arthrectomies:—"Case 1. Quite well, with movable joint. 2. At end of two years wearing an apparatus because of tendency to displacement. 3. Excision. 4. Amputation. 5. Death from phthisis. 6. Limb flexed and required artificial support. 7. Excision and amputation. 8. Amputation. 9. Death from scarlet fever three months after operation, with wound unhealed. 10. Amputation. 11. A year afterwards limb flexed and required support of a Thomas's splint. 12. Stiff limb, sound and well. 13. Unhealed five months after operation. 14. Unhealed four months after operation. 15. One month after operation healed; much pulpy disease. 16. Excision." These results speak for themselves.

Arthrectomy is still on its trial, and is not by any means a well-established operation; nevertheless, I believe that in certain well-selected cases, where the disease is limited to the synovial membrane, erasion is preferable to excision; and I am acting up to that belief in my practice, expecting, on the one hand, that whilst in certain cases I shall have better results than if I had excised, on the other I shall have a smaller number of failures than I should have in an equal number of excisions.

Illustrative of the difficulty of being certain that the disease is limited to synovial membrane, I will mention a case that came under the care of one of my colleagues at the Leeds Infirmary. My friend, Mr. Ward, was excising a knee-joint on account of disease which appeared to be limited to the synovial membrane, the articular cartilage and bones being apparently healthy; but on examining the excised part of the femur, a nodule of tuberculous granulations, about the size of a pea, was found beneath the articular cartilage. Had this joint been erased instead of excised, the probability is that the disease would have returned, necessitating excision or amputation. I am sorry if my remarks, too much epitomised, should have misled anyone, but I trust that this fuller explanation of my views will render my meaning clear.

I am, Sir, yours, faithfully,

Hillary-place, Leeds, Jan. 7th, 1886. A. W. MAYO ROBSON.

THE "TUBERCLE BACILLUS."

To the Editor of THE LANCET.

SIR,—In your issues of THE LANCET of Nov. 28th and Dec. 5th I find two articles having the title of "Tubercle and the Tubercle Bacillus, a Review," on which, with your permission, I wish to make one or two remarks. Without introduction, I observe at once that I receive the writer's history of the bacillus, but I am quite at issue with the general tenour of his deductions, believing, as I do, that there are many causes of tubercular disease, and that the tubercle bacillus, so-called, has yet to be shown to be one of them; for if the tubercle bacillus be the chief cause of tubercular disease—nay, truly, the only cause—i.e., the cause without which it cannot exist,—I ask how it can be that at the Brompton Hospital phthisis does not occur among the attendants (physicians, nurses, and others) more frequently than in our general hospitals, or among people outside? The writer of the articles states that the tubercle bacillus is present in the wards of a consumption hospital and in the breath of phthisical patients, yet neither contagion nor infection is more prevalent here than in any other place; nay, indeed, much less prevalent than in many places one could name. And it may be further observed that the observation respecting the freedom of the attendants at the Brompton Hospital from consumption was made long before the bacillus was dreamt of, and therefore before any unusual precautions were taken in the way of prevention.

I observe that the writer of the articles brings forward certain reasons for their escape; but in my judgment they do not meet the case, if, indeed, they (the attendants) are daily living and working in an atmosphere laden, as is stated, with infectious matter. I am really concerned at the thought of the amount of time and ingenuity which in this day is spent—wasted I had almost said—over "cultivations," so-called, of various and most wonderful microscopic entities; and I will venture to predict that before many years roll away we shall look back on the whole thing with regret and wonder at our folly. I remain, Sir, yours obediently,

King's Lynn, Norfolk. WM. DALE, M.D. Lond.

ON A PARTICULAR USE OF THE THUMB-NAIL IN LATERAL LITHOTOMY.

To the Editor of THE LANCET.

SIR,—Will you allow me to offer a description of a particular method of using the thumb-nail in lateral lithotomy, which I have practised for some time with advantage.

The vertical plane in which the thumb-nail lies when the hand is raised semi-prone in front of the face contrasts advantageously with the horizontal plane of the index-nail in the same position of the hand. With the thumb-nail in the groove in the staff the elbow may remain in its natural position, while with the index-nail there the elbow must be raised at least to the horizontal—a somewhat awkward manœuvre. The second source of advantage consists of the guidance the thumb-nail gives to the knife on being deeply pressed into the integuments covering the staff groove so as to define it (or at least one edge of it, if it be laterally grooved); along the nail thus planted the point of the knife can be slid with much precision in thin subjects and the majority of children, with the comfortable assurance of immediate arrival at the groove (i.e., in the operation about to be allnded to). In very fat subjects, though I cannot speak from experience, I have no doubt it would be found helpful, as I should think even then a wide-grooved staff could be fairly defined from without by a moderately long thumb-nail.

The operation I have now in view is the transfixion one, consisting of entry of point of knife in raphé at middle of perineum and transfixing till staff is reached. The authorship of this improved operation I cannot speak of with

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certainty, but can only say I adopted it, and have practised no other since reading the description of it by Dr. H. W. Boyd in his valuable report on lithotomy cases in the Bombay Medical and Physical Society's Transactions, 1882.

Another addition to the transfixion operation, which I have found useful is the subcutaneous incision of the urethra by a back and forward sawing movement for a convenient length, for the thumb-nail, on its subsequent introduction into the wound, to easily find the exposed staff. On accomplishing this and re-introducing the knife on it, I withdraw my thumb, take the staff in my own hand (as advised by Harris in his work on Lithotomy), and proceed with the deep incision.

I am, Sir, yours faithfully,

FREDK. C. BARKER, M.D., F.R.C.S.I.,
Surg.-Major, Bombay Medical Service; Civil Surgeon, Kathiawar.

Rajkote, Kathiawar, Dec. 23rd, 1885.

"VISITORS TO SMALL-POX HOSPITALS."

To the Editor of THE LANCET.

SIR,—I gather from the paragraph in THE LANCET of the 9th inst. under the above heading that it is the habit to admit persons to see relatives in the Metropolitan Asylums Board Small-pox Hospitals without revaccination, that consequently it is observed that "a certain number" of such persons turn up in thirteen days as small-pox patients, and that as a deduction from his observation of these facts in connexion with the Western Hospital, "Mr. Sweeting suggests that since nothing short of the compulsory revaccination of all visitors to the small-pox wards will get over the difficulty, submission to that operation should be invariably insisted upon."

I am impelled to ask why the superintendent of a small-pox hospital should have to "suggest" such a rational proceeding. When I found myself in that position twenty years ago, I made it a rule absolute, without saying anything to anybody, and it has been rigidly followed to this day in Glasgow. Visits are minimised to the case of serious illness or of convalescence in the open air, and no relationship or other pathetic sentiment is ever allowed to obviate the condition of revaccination. Of course we have therefore never had those experiments on the incubation period of small-pox. I am, Sir, your obedient servant,

JAS. B. RUSSELL,
Medical Officer of Health of Glasgow.

Sanitary Department, Glasgow, Jan. 11th, 1886.

LARGE CALCULUS.

To the Editor of THE LANCET.

SIR,—I notice in last week's LANCET that at a meeting of the Northumberland and Durham Medical Society it was mentioned that Dr. Morrison removed a calculus from a man's bladder weighing 1 lb. 6¾ oz. The interest attaching to this was that it was the largest stone ever removed during life, though the patient died on the fourteenth day. In connexion with this statement, I may mention that a few years ago Surgeon Joseph Hunter, I.M.S., removed by suprapubic operation from the bladder of a native in the Madras Presidency a calculus weighing over 25 oz. This stone is now in the museum at Madras. Surgeon Hunter said he did not publish the case, as he considered there was no merit in it, the patient having lived only three days after the operation. He at one time thought of bringing the stone home to the British Museum.

Yours very truly,

W. B. HUNTER, M.D.

Londonderry, Jan. 12th, 1886.

GASTROSTOMY FOR MASSES OF HAIR IN THE STOMACH.

To the Editor of THE LANCET.

SIR,—With reference to the list of published cases which I gave in my paper last week, Sir William Gull has been kind enough to call my attention to one which I had overlooked, and which was published by him in the fourth volume of the Transactions of the Clinical Society. It occurred in the practice of Mr. Carver. The patient was a married woman, aged thirty-two, who had had three children and two abortions, and died two days after giving birth to a dead seven months' child, the cause of death being incessant vomiting, which had commenced some time before her confinement. A mass of hair and string, weighing 5¾ oz. when dry, was found in her stomach. I am also able from Sir William Gull's paper to give the correct reference to Mr. George May's case. I thought that it was recorded in 1865; it should be *Medical Association Journal* of Dec. 28th, 1855. The mass of hair in this case weighed 26 oz. Possibly I have overlooked other cases; but there are, at any rate, eight deaths, without correct diagnosis or attempt at surgical relief. My own case and that of Schönborn, the only two operated upon, are alive and well, and it is to be hoped that no one in the future will be allowed to die, when operative relief is so easy and safe.

I am, Sir, faithfully yours,

J. KNOWSLEY THORNTON.

Portman-street, Jan. 11th, 1886.

"SANTONIN IN AMENORRHŒA."

To the Editor of THE LANCET.

SIR,—In a recent number of THE LANCET Mr. Whitehead of Manchester drew attention to the value of santonin in the treatment of amenorrhœa; and he hoped that others would test the potent or valueless influence of the drug. In your issue of the 9th inst., Dr. Routh states that he has tried it in twenty cases, in seventeen of which it failed completely. As a further help towards a definite knowledge of its value I may relate my own experience of it. Since the publication of Dr. Whitehead's article I have treated all the cases of amenorrhœa that have come under my notice according to the method suggested by him—viz., ten grains of santonin taken on consecutive nights, omitting, however, the morning saline purge. I have thus given it in twelve cases, the majority of them being chloro-anæmic. In eleven it signally failed, and in a few the powder produced some unpleasant symptoms. In one only was it successful—that is, the catamenia came on in the morning after taking the second powder, and lasted the usual time. As Mr. Whitehead has been so very successful in its use, and Dr. Routh and myself as equally unsuccessful, we must be guided as to its value by further experience. That it has some influence in starting a uterine flow (difficult though it be to understand how it acts) seems evident. How much that influence is will soon, I trust, be ascertained.

I am, Sir, yours truly,

E. R. WILLIAMS.
Senior House-surgeon, Macclesfield Infirmary.

Jan. 11th, 1886.

OPERATION FOR CATARACT: A NEW ANTISEPTIC.

To the Editor of THE LANCET.

SIR,—In a paper read before the Paris Academy of Medicine, M. Panas referred to the great success which had attended the operation for cataract, in his hands, even among gouty, rheumatic, or diabetic patients, by the use of a new antiseptic. This consists of a solution of Biniodide of Mercury, containing—

Distilled water	1 litre
Mercuric iodide	0·05 gramme
Alcohol at 90°	20 grammes.

That is to say, 20,000 parts of the solution contain one part of the salt, and 20 parts of 90 per cent. alcohol. The mercuric iodide is dissolved in the alcohol, and this poured into the water and the whole filtered. Mercuric chloride is said to possess much less antiseptic power, and to be more irritating than the iodide. The globe is thoroughly rinsed with the solution, which is thrown in by means of an apparatus resembling the drum-tube of a dropping-bottle, local anæsthesia being induced by cocaine. Panopthalmitis is almost entirely unknown in the author's practice consequent upon the employment of the antiseptic treatment; moreover, he has been able to do away with von Graefe's method (linear incision with iridectomy) and revert to the older flap operation, reserving the iridectomy for exceptional cases. The capsule of the crystalline lens is freely torn, or even completely removed by means of a special forceps. When the operation is finished, the interior of the eye washed, and

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eserine distilled, the eye is dressed with an ointment containing 1 per cent. of benzoate of mercury spread on linen, over which pads of wadding are placed, the whole being kept in place by a bandage in the usual way. The first change of dressing is made in twenty-four hours, cure being effected in about seven days.

I remain, Sir, yours truly,

January, 1886. CHARLES H. PIESSE, M.R.C.S.

THE TREATMENT OF PERTUSSIS.

To the Editor of THE LANCET.

SIR,—Mr. F. W. Cory has done good service in adding his testimony to the use of carbolic acid in whooping-cough; but, from the tone of his communication which appeared in your issue of last week, he seems to have overlooked all previous evidence, as well as the fact of carbolic acid having been in general use in that complaint for several years. In the year 1875, Dr. R. J. Lee, speaking at a meeting of the British Medical Association held in Edinburgh, advocated the use of carbolic acid vapour in whooping-cough. In the same year, Dr. Burchardt, lecturer at the University of Berlin, and Dr. Rugg, of Clapham-road, wrote to the *British Medical Journal* advocating the use of carbolic acid vapour. In THE LANCET of July 13th, 1878, I recorded several cases which resisted every remedy but carbolic acid given internally and deposited about the house, under which the malady rapidly subsided. Whether this was the first public announcement of the internal use of carbolic acid in whooping-cough I am not in a position to state. The above methods of treatment are quoted in Dr. W. H. Day's work on "Diseases of Children," published in 1881; also in Squire's "Companion to the British Pharmacopœia."

I am, Sir, yours faithfully,

Aberystwith, Jan. 11th, 1886. T. D. HARRIES, F.R.C.S.

LADY PROBATIONERS.

To the Editor of THE LANCET.

SIR,—As lady probationers are now to be found in most of our general and children's hospitals, I very much wish to learn, through your columns, how their hours of day and night duty are arranged, as I know of an instance in a provincial hospital where they are at the earliest period of their training placed upon night duty continuously for seven and eight weeks at a time, possibly as a trial of their strength and powers of endurance, and undoubtedly prejudicial to their health, as it is more than any trained sick nurse is allowed to do when employed in private houses. If the intention be to disgust these young ladies at an early period, no better means could be suggested; and should they fall sick or fail in their duties during such a term of trial, neither matron nor staff can be surprised at it. Having once been a hospital surgeon myself, I was always most careful that my nurses' strength should not be overtaxed in order that my patients, equally with themselves, should not suffer.

I am, Sir, yours faithfully,

January, 1886. AN OLD HOSPITAL SURGEON.

*** Our correspondent's inquiry is very important, and will, we trust, receive satisfactory replies. It is to be hoped that the practice he cites as obtaining in a provincial hospital is exceptional. It certainly is most culpable.—ED. L.

THE BLACKWATER VALLEY.

To the Editor of THE LANCET.

SIR,—In reference to your annotation in THE LANCET of Jan. 2nd, concerning the Blackwater Valley, I can inform you that the Hartley Wintney Sanitary Authority, in whose district much of the southern side of the river lies, have long been making efforts to have the river cleansed. More than a year ago we tried to have the work done at the expense of the riparian owners on either side of the river. In the Hartley Wintney Union, as well as in the Farnham Union, which contains Aldershot, the consent of all the riparian owners could be obtained, but the scheme fell through by the refusal of owners in the Finchampstead Union. Efforts are now being made to force the three authorities to combine in this most necessary work. At the same time, I think this is a subject of far more than local interest, and ought to be taken up as an Imperial work, affecting as it does the Camp at Aldershot, the Military Colleges, and the Broadmoor Asylum.

I remain, Sir, yours faithfully,

AN EX-OFFICIO GUARDIAN OF THE HARTLEY WINTNEY UNION.

Blackwater, Jan. 13th, 1886.

LIVERPOOL.

(From our own Correspondent.)

HOSPITAL SUNDAY.

LAST Sunday, being the second Sunday in the new year, was, as usual, observed as Hospital Sunday, being its sixteenth anniversary in Liverpool. A more unfavourable day, so far as the weather was concerned, could hardly have been imagined, and yet it is a most gratifying circumstance that the collections show in many cases an increase over those of last year. It is probable that the total sum raised will be greater than that of last year, the Hospital Saturday Fund showing an increasing tendency, while there is a general impression that the long depression in trade is giving way to a more hopeful state of things, of which the hospitals will, it is believed, reap the benefit.

WAKES AND THE SPREAD OF SMALL-POX.

Liverpool contains, as is well known, a very large proportion of Irish poor, and, in spite of all the efforts of the Roman Catholic clergy, the disgusting and drunken revels, falsely called "wakes," still continue to be a scandal to the city and a fruitful source, in many instances, of contagion being spread. Last week a man and his wife were summoned before the stipendiary magistrate, under Section 126 of the Public Health Act, for exposing a child suffering from infectious disease. It appeared that Dr. Hope, the assistant medical officer of health, visited the defendant's house, and there saw the body of a child who had died from small-pox. In the house at the same time was another child, four years of age, who was also suffering from the same disease. Dr. Hope informed the mother and other relatives of the nature of the disease, and recommended the removal of the child to the hospital; instead of which, the child was taken away to some other house, and could not be found for some time, when it was sent to the small-pox hospital. Dr. Hope stated that ten cases of small-pox had occurred among the relatives of the family, which had been traced to the house of the defendants, and round the body of the dead child a crowd of persons were indulging in a "wake." Neither of the children had been vaccinated, and it was in order to avoid a prosecution that the child had been removed. The deceased child had no medical attendance, and was in a frightful state, and the parents tried to persuade the coroner that it had died of measles. The magistrate expressed his wonder that people who ought to know better, and even members of Parliament, could be found to support the system of non-vaccination. The mother was fined 40*s.* and costs, and, being unable to pay, was sent to gaol for fourteen days; the summons against her husband was dismissed. It is hoped that this case will act as a warning, as wakes on the victims of small-pox are now illegal.

Liverpool, Jan. 13th.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

THE LATE ELECTION FOR CORONER.

THE late election for coroner by the Newcastle Council did not turn on the question of eligibility of a medical candidate for the office; but Mr. Newton found out before he retired that the feeling of the Council was very strong as to the office being given to Mr. Hoyle, son of the late coroner, who had acted as his father's deputy for many years. The question of medical or legal candidate was discussed very fully in our local newspapers, and of course with varied views. The *Newcastle Chronicle*, however, one of our

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principal papers, was very decided in its opinion as to a preference for a medical coroner. It said: "In the election of a coroner, it is a moot question whether the office should be filled by a lawyer or a medical man. Speaking for ourselves, we would prefer the latter, inasmuch as the cases to be inquired into are for the most part of such a character as one having a knowledge of the human body can best deal with." Had the Newcastle Council been of the same opinion, their choice could not have fallen on a better man than Alderman Newton. In addition to medical knowledge and experience on the bench, he possesses, what is scarcely of less value for the due fulfilment of the office, a thorough knowledge of the life of the district to be served, its people, their ways and manners.

THE PROPOSED HOSPITAL FOR CHILDREN AT GATESHEAD.

The proposal to erect a hospital for children at Gateshead is meeting with great encouragement. Lady Northburne has given a site near the Boy's High School, Durham-road, consisting of two acres. For some time past the need of such a hospital has been felt, in order that children might have more exclusive attention. A beginning, it is to be hoped, will soon be made now with the building.

DEATH UNDER CHLOROFORM AT NEWCASTLE INFIRMARY.

I regret to say that the death took place at the Newcastle Infirmary on the 7th inst. of a patient who had been placed under chloroform by direction of the house-surgeon for the purpose of having an abscess of the face opened. It transpired at the inquest that the patient, who was a delicate woman aged thirty-five, became unconscious in about half a minute; after one drachm had been inhaled the breathing suddenly stopped, and all efforts to restore consciousness proved futile. This being the third fatal case in the Newcastle district in about three weeks, it has of course produced a very painful impression on the public mind. The verdict of the jury was that the patient had died while under chloroform from failure of the heart's action, and that there was no blame attached to anyone as to the administration of the chloroform.

NEWCASTLE THROAT AND EAR HOSPITAL.

The annual meeting was held on the 8th inst., the Mayor presiding. It was shown that nearly 2000 patients had been treated during the past year. The patients had contributed more than £200 to the funds of the hospital. The hospital was free from debt, and had an invested capital of £150 as a nucleus for its extension, which was necessary.

Newcastle-on-Tyne, January 12th.

EDINBURGH.

(From our own Correspondent.)

CLINICAL INSTRUCTION IN FEVER.

IN connexion with the proposed arrangement for conducting clinical teaching at the Fever Hospital, it was decided at a recent meeting of the Public Health Committee that a deputation representing the University and the Extra-academical Medical Schools should be asked to wait upon the Town Council and discuss the matter. At a meeting of the Town Council held last Tuesday the question came up for discussion. A letter was read from Dr. Claud Muirhead as representing the wishes of the extra-mural lecturers on the subject. Their views had already been fully expressed in a prior communication to the Public Health Committee, and they were unwilling to trespass further on the time of the Council at large by sending a deputation, but were perfectly prepared to leave the matter entirely in its hands. A deputation from the University, consisting of Professors Grainger Stewart, T. R. Fraser, and Rutherford was then introduced. The proposals of the University authorities are, for the most part, identical with those of the extra-academical teachers. The University proposition is that two ordinary physicians shall be appointed, one connected with the University and one connected with the extra-mural School. The control of the hospital wards would be equally divided between these two officers, whose duty it would be to conduct clinical instruction for students visiting the wards, and to superintend the treatment of the patients. In case of there being at any time very few inmates of the hospital, the two acting physicians might alternately take charge of the whole for periods o three months at a time. The only points in which difference of opinion cropped up between the ideas of th University authorities as expressed by their deputation an those of the extra-mural lecturers was in regard to th number of physicians to be appointed and the system o remunerating them for their services. The University hold that this should be provided for by fees payable by the student attending the Hospital. As Professor Stewart put it in hi speech—"What was worth having was worth paying for and the students were none the worse for paying a small fee." The extra-mural lecturers, on the other hand, urge that only one physician should be appointed, that an honorarium should be provided for him apart from students' fees, an that all students of the school, whether matriculated at th University or not, should have access to hospital instructio entirely free of charge. In reply to a question from th Lord Provost, Professor Grainger Stewart expressed a opinion in favour of making the proposed course of instruc tion a necessary part of the University medical curriculum A deputation from the Students' Representative Counci was afterwards received by the Town Council, and th arguments adduced were in the same sense generally a those propounded by the professors. The matter, having thus been thoroughly ventilated, was remitted to the Public Health Committee for final adjustment. Several very important principles are involved in their decision. Perhaps the most serious aspect of the matter is the proposal to add another to the already long and lately greatly expanded list of subjects which have been made compulsory, and to which has been superadded a very appreciable increase in the fees payable; and all this without any recommendation or even suggestion by those in authority of a prolongation of the period of study. A single additional fee and a single additional subject are not in themselves very serious matters to the student; but when these single additions are made in rapid succession, as has lately been the case, there is a great danger of the burden becoming too oppressive even for the much-enduring student of the modern *régime*. An addition to the number of optional classes, so as to provide a fair representation for the claims of important specialities, is a great desideratum, as ensuring the development of a broader academic spirit; but such new growths as these should be sustained by nutritive arrangements of their own, and should not exist merely parasitically by drawing sustenance from the already well-drained vital currents of student life. If the Public Health Committee make arrangements which will tend towards the former result, they will confer a boon on the school which it is their desire to benefit; if towards the latter, it is to be feared that these long-wished-for facilities of instruction will not bring with them the unmixed benefit which it ought not to be utopian to hope for.

ROYAL MATERNITY HOSPITAL

Professor Simpson, who has been physician on duty at this hospital during the last three months, will be succeeded on Feb. 1st by Dr. Angus Macdonald for the ensuing quarter. Messrs. T. W. Dewar, M.B., and D. M. Moir, M.A., M.B have been appointed house-surgeons for that period.

SICK-ROOM COOKERY.

A most useful course of demonstrations under the auspices of the Edinburgh School of Cookery is about to take place in the large theatre of the Royal Infirmary. A series of the most valuable sick-room delicacies are prepared and cooked in the presence of the students by lady demonstrators, who are adepts alike in the arts of cooking and of teaching. The course comprises a great variety of useful details, which must prove of great service to the practitioner in arranging for this very important factor in the successful treatment of his patients.

Edinburgh, Jan. 13th.

ABERDEEN.

(From our own Correspondent.)

VOLUNTEER MEDICAL STAFF CORPS.

A PUBLIC meeting was held on Saturday, the 9th inst., to consider the proposal to form a Volunteer Medical Staff Corps. Lord Provost Matthews presided, and a number of prominent citizens who were present formed themselves

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into an Ambulance Association to forward the scheme, by first obtaining the guarantee fund of £100, and afterwards to further the development of the ambulance system, so that a number of representative men from the various public works in and around Aberdeen should receive instruction in ambulance work, and thus there would be "a regularly trained body of men spread over the town who would be of great service in case of serious accidents." At first only medical students are to be enrolled as members of the corps, and already more than the requisite number have given in their names. Professor Ogston and Drs. McKenzie Booth and MacGregor are to be proposed as officers.

THE ROYAL INFIRMARY.

Another expert has been called in to help the managers to make up their minds as to what they should do in the case of the Infirmary. Mr. Saxon Snell inspected the present buildings and site on Saturday, and met the House Committee on Monday, when he laid before them a scheme whereby accommodation could be found for 250 beds, and a further extension if necessary could be made so as to give 300 beds altogether on the present site, infectious diseases to be excluded. He proposes building three pavilions behind the present building, which is to be given up to administrative purposes. He recommends 1300 cubic feet, but if required can provide 1500 cubic feet per patient.

INSPECTOR OF DISEASED MEAT.

The Public Health Committee have resolved to recommend the Town Council to appoint an "inspector of unwholesome food of all kinds," who shall devote his whole time to the work, with a salary of £125 per annum. At present Dr. Simpson performs the duties, and receives £30 per annum.

[redacted], Jan. 13th.

IRELAND.

(*From our own Correspondent.*)

[redacted] ROYAL UNIVERSITY OF IRELAND.

[redacted] Senate, at a meeting last week, adopted a resolution expressing their deep regret for the loss the University has sustained by the death of its first Chancellor, the Duke of Abercorn, K.G., and they directed that the expression of their sympathy should be conveyed to the Duchess and the other members of the family. The Senate have fixed Tuesday, April 6th, as the date for holding a meeting of convocation for the election of a person to fill the vacancy in the Senate which will then arise by the expiration of the period of three years for which Mr. Farrelly had been elected. Mr. Farrelly is a candidate for re-election, and probably will be opposed in consequence of his action during the recent election for a member of the Senate. At the same meeting the Senate reappointed the various examiners in medicine who conducted the medical examinations last autumn. At a public meeting of the University, held on the 7th inst., the degree in Obstretrics was conferred upon Drs. Maurice H. Curtin and James Whitton, and diplomas for proficiency in the treatment of mental diseases were granted to Patrick Arthur Daly, M.B., and Wm. Henry Thompson, M.D.

[redacted] QUEEN'S COLLEGES, IRELAND.

[redacted] Educational Endowments Commission last week counsel appeared on behalf of the Crown, and submitted that the Queen's Colleges of Belfast and Galway should be exempted from the provisions of the Act. The question having been argued at considerable length, Lord Justice Fitzgibbon, in giving judgment, said they had very little difficulty in dealing with the matter. The moneys annually voted by Parliament upon the estimates did not become appropriated in any way for the purposes for which they were applied until they were dealt with by the Appropriation Act; and such money, therefore, not constituting in fact property at all until it was absolutely appropriated by the supreme authorities of the country, could not, as it appeared to the commissioners, come under the description of property dedicated to charitable uses, or which was applicable to educational purposes. Therefore, as regards these annual votes, there could be no doubt whatever that they did not constitute property with which they could deal [redacted] under this Act. The next portion of the grant was the £33,000 a year appropriated under the original [redacted] to each College. The fund was one which depended for its existence upon the power vested in the Lords of the Treasury to make the charge upon the consolidated ground. This, again, was not property dedicated to charitable uses or applicable to educational purposes, until their power to appropriate it was first exercised by the commissioners of Her Majesty's Treasury. The third-class of property was in a different position—namely, the buildings, which were originally provided by Parliament by money obtained through the action of Parliament, and as the sites of these buildings and as property was acquired it became vested in the Board of Works upon trust for the Queen, and if it had remained so he did not think there could be any doubt that the Act did not apply, but they had been handed over by the charter of 1863 to the governing body of the Colleges, composed of the president and professors. It would, therefore, occur to them that they plainly came within the words of this Act of Parliament in so far as the buildings were concerned. The commission would be administered with a view to what was practicable as well as to what was legal. There was no compulsion upon the commissioners to settle schemes, and he need not say that the settlement of a scheme for the bare buildings of the Queen's Colleges would be perfectly useless. They had no intention of initiating proceedings regarding the endowments of these Colleges until further orders.

DUBLIN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

The ninth annual general meeting of this branch will be held at the College of Physicians on Thursday, the 28th inst., when the officers and council for the ensuing year will be elected, and any other necessary business transacted. The president-elect, Mr. Bennett, will deliver the annual address, and the members and their friends will dine together the some evening in the hall of the College.

AMPUTATION THROUGH THE HIP-JOINT.

Mr. J. Kellock Barton performed this operation on last Tuesday at the Adelaide Hospital, the method adopted being that suggested by Mr. Furneaux Jordan of Birmingham. The patient some years since had the os calcis removed at another hospital for disease of the foot; but, the disease spreading, amputation was performed through the lower part of the thigh by Mr. Barton. Ether was administered, being the anæsthetic usually given in this hospital. I reported in THE LANCET about a year since a similar operation by Mr. Barton, which turned out very satisfactorily; the patient, however, succumbed from an attack of measles.

Dublin, Jan. 12th.

PARIS.

(*From our own Correspondent.*)

THE ANTISEPTIC TREATMENT OF CATARACT.

PROFESSOR PANAS read a very interesting note at the recent meeting of the Academy of Medicine on the Advantages of the Employment of the Antiseptic Method in the Treatment of Cataract. "Thanks to it," said the Professor, "we are enabled to give up the linear incision of Von Graefe with iridectomy, and to return to the old method with flaps, reserving iridectomy for exceptional cases." Of all the antiseptics that have been employed in man, Professor Panus gives the preference to a solution of the biniodide of mercury as follows: Biniodide of mercury, 0·05 centigramme; alcohol at 90°, 20 grammes; distilled water, 1 litre. The biniodide is thus rendered soluble, and the solution may be preserved indefinitely. It produces no irritation of the conjunctiva; it is well tolerated, except in some rare cases, when it is injected into the interior of the eye. At the moment of operation the globe of the eye should be anæsthetised by the application of cocaine; then the capsule of the lens should be freely opened—it should even be removed by the aid of special forceps. The operation over, the eye should be washed interiorly and the dressing applied, after having previously instilled a solution of eserine into the eye. For this dressing, M. Panas covers the eye with a piece of linen greased with an ointment composed of one gramme of the benzoate of mercury to 100 grammes of white ointment. With this method, M. Panas has been able to operate without any inconvenience on diabetic, gouty, and rheumatic subjects—in short, on all such as would be in an unfavourable condition for the success of the operation.

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THE DEVELOPMENT AND HEALTH OF RECRUITS.

At the same meeting Dr. Lagneau read a paper on the conditions necessary for recruiting soldiers in the French army in regard to the development of the human body. After consulting various statistical documents, Dr. Lagneau has been led to the conclusion that a great number of men reach their maximum height at the ages of twenty-three, twenty-five, and thirty, according to race. In France the inhabitants of certain departments, formerly peopled by Celts, reached their maximum height very late. "Physiological misery," resulting frequently from insufficient food and other depressing causes, also retards physical development in height and breadth. The development of the chest is also never completed before the age of twenty-five or twenty-eight, that in those of young men brought up to a sedentary life being notably less than that in those who follow active occupations. Although the physical development is not complete at the age of twenty, yet Dr. Lagneau thinks that it is sufficiently so to permit the men to receive military instruction. Although the mortality in the French army is considerably less than it used to be, yet the soldiers present about double the number more of patients, and about half as many more of deaths, as among civilians of the same age. This, I presume, is the proportion in time of war, as Dr. Lagneau states further on that the military mortality in time of peace is from 8 to 10 per 1000 of the effective, which differs little from that among civilians. Two maladies commit great ravages in the army—typhoid fever and tuberculosis,—resulting principally from aggregation and defective ventilation, and are more rife in barracks located in towns than in those in rural districts. Dr. Lagneau refers to many other points, which for want of space cannot be entered into here; I may, however, mention that he is in favour of short service in the army, so as to give the population a better chance of being increased.

SMALL-POX AT TOULON.

Reports have reached Paris to the effect that a violent epidemic of small-pox has broken out at Toulon, and that many deaths have occurred from the disease. The panic is very great among the inhabitants, and several of the medical men have offered their services gratuitously to vaccinate those who are desirous of undergoing the operation.

THE PRIX MONTYON.

At the last distribution of prizes at the Academy of Sciences M. Girard, the Director of the Municipal Laboratory, was awarded 2500 francs of the Prix Montyon for his report on Adulterations of Food.

Paris, Jan. 12th.

ROYAL COLLEGE OF SURGEONS.

AT a quarterly meeting of the Council held on Thursday last, the Council authorised the expenditure of £40 on some models of fossil specimens of the Pterosaurs, which have been obtained from Munich.

The resolution passed at the general meeting of Fellows and Members, which was held at the College on Dec. 17th, was reported by the President, and the resolution read. Upon that, by permission of the Council, without giving notice of the motion, Mr. Macnamara moved, and Mr. T. Smith seconded, "That a committee be appointed to ascertain and report to the Council the opinion of the Fellows as regards the advisability of Members being allowed to vote for the election of Fellows as members of the Council." To this the following amendment was moved by Sir James Paget, and seconded by Mr. Cooper Forster: "That the consideration of Mr. Macnamara's motion be deferred until after the report of the Committee on the Conditions of Admission to the Fellowship has been presented to the Council." This was carried *nem. con.* It was afterwards carried as a substantive motion.

Mr. Savory was appointed Hunterian Orator for the year 1867.

PRESENTATION. — Dr. Moore, Medical Superintendent of the Chelsea Infirmary, was on New Year's Eve presented by the officers of that institution with a handsome silver-plated biscuit-case and a set of silver-plated salt-cellars as a mark of their appreciation of the efforts which he had always made for their welfare.

Obituary.

KELBURNE KING, M.D., F.R.C.S. EDIN. & ENG.

DR. KING died suddenly at his residence in Hull on the 2nd inst., the cause of death being rupture of a thoracic aneurism. The son of the late Captain King, R.N., Spring Bank House, Kilmalcolm, Renfrewshire, he was born in January 1823, and was thus only sixty-three years of age at the time of his lamented death. He was educated at the Edinburgh University, where he graduated as M.D. in 1844. In his student days he not only distinguished himself as a pupil of the late Sir William Hamilton, but was also associated with the late Dr. Robert Knox as Demonstrator of Anatomy. Dr. King was, moreover, a favourite pupil of the late Professor Syme, with whom he maintained a firm friendship until the death of the latter. He was elected to the Fellowship of the Royal College of Surgeons of England (*ad eundem*) in 1870 as "a tribute to his reputation and professional attainments." As surgeon to the Hull Royal Infirmary since 1858, he laboured assiduously for its reputation, and a vast number of grateful patients have experienced the benefit of his masterly professional services. It was, however, not only to his qualities as an eminent and gifted surgeon that Dr. King's reputation was due in his adopted town; he had there filled many public offices with that energy and success which he carried into all his works. He was President of the Hull Literary and Philosophical Society, 1864-69 and 1872-75, and during those periods many eminent men who lectured before the Society found at his house a kindly welcome, the genial hospitality of their host being always extended on such occasions to many private friends. Dr. King was an alderman, and had been thrice Mayor of the borough, and only last year filled the office of Sheriff. He entered the Town Council with a view mainly to the advancement of sanitary improvements, and was instrumental in effecting many, his scientific acumen and fluent speech always exercising great influence upon those who were brought in contact with him. His funeral took place in Hull on the 6th inst., and was attended by the Mayor and Corporation, the Brethren of the Trinity House, the members of the Board of the Hull Infirmary, besides an immense concourse of people of all classes and shades of opinion, who were moved by deep sympathy and the respect in which he was held to join in the funeral ceremony. Of him indeed it may be truly said, "He filled his course of life with deeds, and not with lingering years"; and though the grave has closed over him, he will long survive, not only in the local memory of his townsmen, but also in the loving remembrance of a far-reaching circle of friends.

MR. JOHN BLACKETT JEAFFRESON, M.R.C.S., L.S.A. (OF HIGHBURY.)

THE profession and the public of Highbury were much shocked on Wednesday by the announcement of the death of Mr. Jeaffreson, of 145, Highbury New Park, and of the well-known and much-respected firm of Jackson, Jeaffreson, and Peignand. Mr. Jeaffreson's health for some years had been impaired by diabetes, but he was out so lately as Saturday last. He felt the cold severely, and had been heard to say that he feared it would be fatal to him. On Sunday he did not feel well. Symptoms of indigestion, with irregularity of the heart and an extreme sense of exhaustion, gave his friends much concern. He seemed better on Monday morning, but, in spite of the exertions of his partners and of Dr. Pavy, the sense of exhaustion returned and increased, and he died early on Wednesday morning, to the great grief of a large circle of friends and patients, by whom he was much esteemed. Mr. Jeaffreson's name is an honourable one in the north of London. His father, Mr. John Furrance Jeaffreson, preceded him in partnership with Mr. Jackson, and he was the nephew of the late Dr. Henry Jeaffreson, of Finsbury, who was in very large consulting practice. He leaves a widow, one daughter, and three sons to mourn their loss. One son at least, we believe, is likely to perpetuate the credit of the name in medical practice.

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FREDERIC GILDER JULIUS, M.D., F.R.C.S.

WE regret to have to record the death of Dr. F. G. Julius, which took place on the 4th inst., at Richmond, Surrey, in the seventy-fifth year of his age, from pneumonia. Deceased was born in Bristol in February, 1811, and shortly afterwards his father removed to Richmond to join Sir David Dundas, then Serjeant-Surgeon to George III., in practice; here he was subsequently joined by his two sons, Dr. George C. Julius (who predeceased his brother by only one month), and the subject of this notice. Dr. Frederic Julius was educated at St. George's, and in 1833 he became a member of the Royal College of Surgeons and licentiate of the Society of Apothecaries; in 1851 he received the degree of M.D. Lambeth, from the Archbishop of Canterbury; and in 1853 he was elected an Hon. Fellow of the Royal College of Surgeons. Dr. Julius's name was at one time prominently before the public as the principal medical witness against the prisoner at the Smethurst trial. He ultimately retired from practice in 1871, and afterwards spent much of his time abroad, visiting upon different occasions most of the countries bordering upon the Mediterranean.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their Primary Examination in Anatomy and Physiology at a meeting of the Board of Examiners on the 11th inst., and when eligible will be admitted to the Pass Examination:—

ANATOMY AND PHYSIOLOGY.—Arthur A. F. Fletcher and Henry W. Bryant, Melbourne University; H. Grier and Thomas O. Williams, Dublin; William S. Crawford and Ernest A. Steele, Liverpool; W. Kenneth Mackenzie, King's College Hospital; John R. Wood and Frederick W. Mais, Leeds; John Farrington and Guy H. Woods, Manchester; Frederick Dymoke, Bristol School of Medicine; Thomas S. Coombe and Frederick N. Burwell, Cambridge University.

ANATOMY ONLY.—Samuel E. C. McDowell, Toronto; Walter F. W. Wilding, Liverpool; Charles A. Morgan, St. Thomas's Hospital; John T. Bradley, Manchester.

PHYSIOLOGY ONLY.—James S. Tait and Henry L. Green, Pennsylvania; Frederick A. Foy, Bombay and Aberdeen; James S. Fox, Liverpool; John H. Murray-Aynsley, St. George's Hospital; Henry Walter, Dublin.

Passed on the 12th inst.:—

ANATOMY AND PHYSIOLOGY.—David R. P. Evans, Charing-cross Hospital; H. G. Collett, King's College Hospital; David A. Birrell, St. Mary's Hospital; Patrick O. Thompson, Joseph Nall and Charles H. Cosens, St. Bartholomew's Hospital; William Griffiths, Melbourne and University College Hospital.

ANATOMY ONLY.—William G. Beyts and Arthur B. Hudson, Guy's Hospital; Arthur H. Howell, London Hospital; Herbert Lloyd, University College Hospital.

PHYSIOLOGY ONLY.—Walter L. A. La Croix, Bristol Medical School; Richard F. Hiley, Cambridge and St. Thomas's Hospital; Arthur C. J. Macann, James W. Hudson, and Louis P. Gibson, Middlesex Hospital; John W. Jessop, Edward P. Furber, and Sidney L. Hinde, St. Bartholomew's Hospital; Thomas G. J. Moore, Charing-cross Hospital.

The Library of the College will be closed to-day (Friday), for the purposes of the Pass Examination for the Membership, for which 280 candidates have entered.

SOCIETY OF APOTHECARIES.—The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on the 7th inst.:—

Kaka, Sorabji Manekji, M.R.C.S., L.R.C.P., Bombay.
Weaver, John James, Hoghton-street, Southport.

On the same day the following gentlemen passed their Primary Professional Examination:—

Fletcher, George Rory John, Charing-cross Hospital.
O'Connor, Wm. Patrick, University College.

THE death of a boy has recently been caused by the bite of a cat.

THE Red Crescent Society in Turkey is being reorganised by the Sultan's private physician, Dr. Mavroghéni Pacha, so as to be in a condition to assist the army in the field.

SANITARY CONDITION OF MARYLEBONE.—At a meeting of the Vestry of St. Marylebone on the 7th inst., the sub-ject of the sanitary condition of certain districts was considered, and some startling disclosures made respecting them. It was resolved to appoint a special committee to investigate, and suggest measures for the improvement of, the sanitary condition of the parish.

MEDICAL MAGISTRATE.—T. D. Harries, F.R.C.S., L.R.C.P. Lond., has been placed on the Commission of the Peace for the Aberystwith district.

THE PARKES MUSEUM.—On Thursday, Jan. 21st, at 8 P.M., a lecture will be delivered by Mr. R. F. Grantham, on "The Working of the Separate Sewage Systems," Prof. W. H. Corfield, M.A., M.D., in the chair.

AT the quarterly meeting of the Directors of the Naval Medical Supplemental Fund held on the 12th inst., Sir W. R. E. Smart, K.C.B., M.D., Inspector-General, in the chair, the sum of £71 was distributed among the several applicants.

A WARD at the Leeds General Infirmary has just been furnished and opened for the reception of patients suffering from the diseases peculiar to women. A maternity charity, too, has been organised.

SANITARY ASSURANCE ASSOCIATION.—At the Parkes Museum of Hygiene, on Jan. 20th, at 8 o'clock, Professor T. Roger Smith, F.R.I.B.A., will read a paper on "A Damp House," Sir Joseph Fayrer, F.R.S., in the chair.

IT is proposed to erect, at a cost of £20,000, a new Bath Hospital and Convalescent Home at Harrogate. Accommodation will be provided for seventy-five patients in the hospital and for fifty in the convalescent home.

THE final list of the Newcastle-on-Tyne Hospital Sunday collections taken last October, shows that in the two departments the amount received is slightly over £3400, a small increase compared with the total received in the previous year.

ROYAL MEDICAL BENEVOLENT COLLEGE.—The amount collected at the sermon preached by Archdeacon Blunt, D.D., in the church of St. Mary Bishophill Senior, York, on the 7th inst., on behalf of the Epsom College, amounted to £26 1*s* 10*d*.

A SMALL-POX epidemic has recently declared itself in the slums of Marseilles, and the municipality have ordered the immediate creation of eight vaccine dispensaries. M. Pasteur and the veterinary establishment at Alfort have been applied to for a supply of vaccine matter.

QUARANTINE IN TURKEY.—The forty-eight hours' observation on arrivals at Conttantinople from Trieste has been abolished, and vessels from that port will in future be subjected to medical inspection. The quarantine on arrivals from Venice has been reduced to forty-eight hours. Vessels from Spanish ports will undergo ten days' quarantine.

ST. JOHN AMBULANCE ASSOCIATION.—A further series of lectures have been arranged for the police force belonging to the East and West India Dock Company, the lecturers appointed being members of the medical staff of the Poplar Hospital. Since these classes were started in 1879, 2438 accidents have occurred within the Dock premises, in many of which valuable assistance was rendered by students at the ambulance classes.

VOLUNTEER MEDICAL STAFF CORPS.—A crowded and enthusiastic meeting was held at Woolwich on the 11th inst., to promote the extension of this corps of voluntary workers, for the purpose of aiding the study and development of ambulance and hospital corps organisation. Addresses were delivered by Sir Thomas Crawford, Colonel Stewart, and others, and a resolution pledging the meeting to support the formation of a corps was carried unanimously.

TEMPERANCE IN AMERICA.—At a meeting held on the 12th inst., at Prince's Hall, Piccadilly, the Venerable Archdeacon Farrer, D.D., gave an interesting account of his experience of the temperance legislation which exists in some parts of America. There are no less than five States of the thirty-six which have adopted a stringent measure of absolute prohibition, which has been productive of most beneficial effects. In the State of Maine the prohibitory law has been in force twenty-two years, and there is only one convict to every 1000 of the population; whereas in Massachusetts, where there is no liquor law, there is one convict to every 500 of the population. In Trimble county, Kentucky, which has adopted the liquor law, during the last year there has not been a single criminal case, not a single prisoner in the gaol, and not a single pauper in the county. Kansas adopted the prohibitory liquor law in 1881, and during nine months of 1880, when it was under free whisky

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rule, there were 264 convicts, while in nine months of 1881, when the prohibitory liquor law was in force, the number of convicts was only 148; and in a town in Illinois, with a population of 2500, there had not been a single arrest in twenty months.

A NARROW ESCAPE.—On the 8th inst., as Mr. Le Page of Salford was passing over a level railway crossing, a train of trucks, with an engine at the back, ran across the street. The buffers of the front waggon struck Mr. Le Page's brougham, one on the door and one on the box. The carriage was overturned and driven by the train for twenty or thirty yards, the horse being dragged by the side of the truck. Mr. Page was extricated from the débris after an imprisonment of about ten minutes.

THE DANGERS OF CHLORODYNE.—An inquest was held on the 12th inst. on the body of a woman who, together with her two sisters, had been in the habit for some years of taking chlorodyne in large quantities. The result was their bodies had become emaciated, their mental condition affected, and the use of their limbs impaired. In the present case the body of the deceased, who was sixty-two years of age, did not weigh more than 50lb. The jury returned a verdict in accordance with the evidence.

A HEALTH DEPARTMENT FOR JAPAN.—A Health Department has been established in Japan under Dr. Mansanori Agata, Professor of Hygiene in Tokio, who studied for several years in Munich, Leipsic, and Berlin, and in particular worked for a lengthened period in the laboratories of Pettenkofer and Koch. Since his return to Japan he has carried out the German methods of bacteriological research, and has by this means investigated the disease beri-beri, which is indigenous to Japan.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—The following members were elected as officers for the year 1886 at the annual meeting on the 11th inst.:—President: Mr. T. Charters White. Vice-Presidents (resident)—Messrs. G. Gregson, H. Sewell, S. J. Hutchinson; (non-resident)—Messrs. Richard White (Norwich), Andrew Wilson (Edinburgh), Richard Rogers (Cheltenham). Treasurer: Mr. James Parkinson. Librarian: Mr. Felix Weiss. Honorary Secretaries: Messrs. David Hepburn (Council), Robert H. Woodhouse (Society), Willoughby Weiss (for foreign correspondence).

CLINICAL SOCIETY.—The annual general meeting elected the gentlemen nominated by the Council to serve on the various offices during the ensuing year (*vide* THE LANCET, p. 45). The scrutineers of the ballot were Dr. C. E. Beevor and Dr. H. M. Murray. The report of the Council was read by Mr. R. J. Godlee. The resolution that the Treasurer's report be received, adopted, and printed in the Transactions was moved by Mr. Harrison Cripps, and seconded by Dr. Angel Money. The vote of thanks to the retiring officers was moved by Dr. James Anderson, and seconded by Dr. B. O'Connor. Mr. J. H. Morgan responded.

OVERHEAD WIRES.—At the meeting of the Metropolitan Board of Works on the 11th inst., attention was drawn to the action taken by the Wandsworth Board of Works with reference to overhead wires, and it was resolved that the Works Committee be requested to inquire and consider as to the facts relating to the recent accidents to overhead telegraph and telephone wires and the danger to the public therefrom, and to report thereon, and as to the necessity of any proceedings or future legislation on the subject; and that the surveyors to the vestries and district boards be requested to supply the Board with any information which they have on the subject.

THE GORDON BOYS' HOME.—A general meeting of the Council of this institution was held on the 12th inst., at Marlborough House, under the Presidency of the Prince of Wales. Through the generosity of the War Office the committee had been enabled to open a temporary home at Fort Wellington, and at this place fifty boys are already in residence. The original idea was to establish a camp for 480 boys, and to spend on the building £12,000, and on furnishing £8000. It is now, however, not considered desirable to extend the operations to that amount, but it is the intention of the committee to arrange a camp for 120 boys, spending for this purpose about £6000. Further contributions are needed, and an effort is to be made during the present year to obtain them.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

DAKIN, WILLIAM RADFORD, M.D., B.S.Lond., M.R.C.P., has been appointed Physician to the Royal Hospital for Women and Children.

EVANS, A. E., M.B.Lond., M.R.C.S., L.S.A.Lond., has been appointed House-Physician to the Wolverhampton and Staffordshire General Hospital.

HOLLINGS, C. E., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Holme District of the Howden Union.

LEFTWICH, C. H., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer to the West Deptford Division of the Greenwich Union.

MOLINE, PAUL F., M.B.Lond., has been appointed Registrar to the Victoria Hospital for Children, Chelsea.

STUDDERT, R. C., M.D., has been appointed Medical Officer of Health by the Erith Local Board.

TURNER, PHILIP D., M.B.Lond., has been appointed House-Surgeon to the Victoria Hospital for Children, Chelsea.

WALKER, FRANCIS J., M.B., Cert. San. Science Durh., M.R.C.S., L.R.C.P.Lond., L.S.A.Lond., has been appointed Medical Officer of Health to the Spilsby Rural Sanitary Authority, vice J. West Walker, M.B.Lond., resigned.

Births, Marriages, and Deaths.

BIRTHS.

HUMPHREYS.—On the 9th inst., at Queen's-crescent, Haverstock-hill, N.W., the wife of F. Rowland Humphreys, M.R.C.S., L.R.C.P.Lond., of a son.

MOORE.—On the 12th inst., at Penlea, Shirehampton, Gloucestershire, the wife of George Moore, M.D., Deputy Inspector-General, Royal Navy, of a daughter.

ROBATHAN.—On the 5th inst., at The Grove, Risca, Monmouthshire, the wife of George Beckett Robathan, M.R.C.S., of a daughter.

TIRARD.—On the 9th inst, at Weymouth-street, Portland-place, W., the wife of Professor Tirard, M.D.Lond., of a daughter.

WADE.—On the 8th inst., at Beauclerc House, Harold-road, Upper Norwood, the wife of Charles H. Wade, B.A.Oxon., M.R.C.S., L.R.C.P., of a daughter.

WAGSTAFFE.—On the 6th inst., at Purleigh, St. John's-hill, Sevenoaks, the wife of W. W. Wagstaffe, B.A., F.R.C.S., of a son.

WORLEY.—On the 6th inst., at Green-lanes, N., the wife of W. Charles Worley, L.R.C.P.Lond., of a daughter.

MARRIAGES.

BROGDEN—RHODES.—On the 5th inst., at St. Paul's, Beckenham, Richard William Brogden, M.B.Lond., formerly of Tockwith, Yorkshire, to Constance Mary, younger daughter of John George Rhodes, of Beckenham.

GOSSE—SMITH.—On the 6th inst., at St. Thomas's Church, Salisbury, by the Rev. Canon Morrice, assisted by the Rev. Robert Wilkes Gosse (brother of the bridegroom), Hope Wilkes Gosse, M.R.C.S. & L.R.C.P., of Eccleshall, Stafford, to Mary, third daughter of George Smith, Solicitor, Salisbury.

SMART—JONES-GIBB.—On the 12th inst., at Holy Trinity Church, Paddington, Francis Gray Smart, M.A., M.B., of Tunbridge-Wells, to Marion Pender, widow of T. Jones-Gibb, of Bredbury, Tunbridge-Wells.

SWAIN—HEXT.—On the 6th inst., at All Saints', Plymouth, W. P. Swain, F.R.C.S., to Lucy, youngest daughter of the late Rev. John H. Hext.

DEATHS.

BURROWS.—On the 1st inst., at The Limes, Crediton, Devon, Edmond Boulter Burrows, Surgeon-Major, Bombay Army, retired, youngest son of the late Rev. W. F. Burrows, Vicar of Christchurch, Hants, aged 53.

JEAFFRESON.—On the 12th inst., at Pomfret House, Highbury New-park, John B. Jeaffreson, M.R.C.S., L.S.A.Lond., aged 48.

MACDONOGH.—On the 9th inst., at 15, Clapham-park-road, S.W., John MacDonogh, M.R.C.S.E. & L.S.A.Lond., aged 86.

MILROY.—On the 11th inst., at Church-road, Richmond, Surrey, Gavin Milroy, M.D., in his 81st year.

ROWE.—On the 9th inst., at Wimborne, Dorset, Charles Reynolds Rowe, F.R.C.S., aged 72.

SHEA.—On the 7th inst., at Crescent Lodge, Kingston-hill, Surrey, John Shea, M.D., in his 85th year.

STARKEY.—On the 5th inst., Charles Starkey, of Upper Wick, Worcester (formerly of West Bromwich, Staffordshire), M.R.C.S., in his 83rd year.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

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Medical Diary for the ensuing Week.

Monday, January 18.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M., and on Tuesdays at the same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M. Also on Thursdays at 2 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
SOCIETY OF ARTS.—8 P.M. Prof. H. S. Hele Shaw: Friction (Cantor Lecture).
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Jonathan Hutchinson, F.R.S.: Some Moot Points in the Natural History of Syphilis (Lettsomian Lecture).

Tuesday, January 19.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Robert Stawell Ball: The Astronomical Theory of the Great Ice Age.
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Eve: (1) Examples of Colloid Degeneration of Breast and Omentum; (2) Dislocation of Hip of a Cow (card); (3) (for Mr. A. Lingard) Specimens of Actinomycosis in Oxen (card).—Dr. S. West: Ulcers of Gall-bladder, with Pus in Portal Veins.—Mr. Sydney Jones: Spontaneous Fracture of Urinary Calculi.—Mr. Clutton: Spontaneous Fracture of Urinary Calculi (card).—Dr. Ashby: Diffuse Sclerosis of Brain in a Child of eighteen months.—Dr. A. Davidson: Malignant Growth (secondary to cancer of pylorus) obstructing Thoracic Duct and invading Minute Lymphatics of Lung.—Mr. Barwell: Two cases of Aneurysm.—Mr. Churchill: (1) Post-nasal Fibroma in a Child; (2) Syphilitic (congenital) Necrosis of Vomer.—Mr. Cripps: Stricture of Rectum.—Mr. Bruce Clarke: Rectum after Colotomy.—Dr. Goodhart (for Dr. Marshall): Calculus in Bladder of Female Child of two years (card).—Dr. Carrington: Cancer of Body of Stomach.—Mr. J. B. Sutton: Congenital Inguinal Hernia in a Monkey (card).—Mr. H. Fenwick: Tumour of Bladder (card).—Dr. Hadden: (1) Intestine in Lymphadenoma (card); (2) Lipæmic Blood in Diabetes (card); (3) Mucous Cyst of Tongue (card); (4) Gumma pressing on Ureter (card).

Wednesday, January 20.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department 9.30 A.M., on Tuesdays and Fridays.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department: 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.
SOCIETY OF ARTS.—8 P.M. Capt. Douglas Galton: Results of Experiments on Mechanical Motors for Tramways made by the Commission at the Antwerp Exhibition.

Thursday, January 21.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Robert Stawell Ball: The Astronomical Theory of the Great Ice Age.
HARVEIAN SOCIETY OF LONDON.—8 P.M. Annual General Meeting. President's Address; Election of Officers; Conversazione.

Friday, January 22.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
QUEKETT MICROSCOPICAL CLUB.—8 P.M. Papers by Mr. E. M. Nelson and Mr. Priest.
SOCIETY OF ARTS.—8 P.M. Mr. J. George Scott (Shway Yoe): Burma, the Eastern Country and the Race of the Brahmas.
CLINICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Barker: Ununited Fracture of the Clavicle producing Writer's Cramp, Resection of the False Joint and Wiring of the Fragments, Complete Union and Relief of the Nerve Symptoms.—Dr. Angel Money: On a New Symptom of Megrim and Epilepsy.—Dr. Samuel West: Chronic Simple Ulcers of Stomach and Duodenum without Symptoms until the occurrence of Perforation.—Mr. Brudenell Carter: A case of Complete Recovery of Vision in Amaurosis consecutive to Malarial Fever.
ROYAL INSTITUTION OF GREAT BRITAIN.—9 P.M. Prof. Tyndall: Thomas Young and the Wave Theory.

Saturday, January 23.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
MIDDLESEX HOSPITAL.—Operations 2 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Robert Stawell Ball: The Astronomical Theory of the Great Ice Age.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, Jan. 14th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain al.	Remarks at 8.30 A.M.
Jan. 8	29·57	N.W.	35	35	...	37	22	...	Snowing
,, 9	29·80	N.	30	...	...	37	26	...	Overcast
,, 10	30·07	N.W.	34	...	...	39	30	...	Overcast
,, 11	29·73	S.W.	39	39	...	41	33	·73	Overcast
,, 12	30·13	N.W.	31	...	...	44	31	·12	Fine
,, 13	29·35	W.	44	44	...	47	32	·23	Overcast
,, 14	29·80	N.	40	37	...	...	37	·12	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

TRANSFER OF PRACTICES.

Medicus complains that a short time back he observed an advertisement in THE LANCET headed "Practice Wanted." He replied, and sent full particulars of his practice, also name and address, thinking it was inserted by a private practitioner. He found, however, to his astonishment, that it had been inserted by a medical agent, who was now in possession of the details of the practice and of the movements of our correspondent, who thinks it a most unfair mode of procedure on the part of any agent. A similar complaint has reached us from another correspondent.

Mr. F. C. Banks.—We cannot devote more space to the subject at present.

T. H. is referred to an annotation in our last issue, page 79.

ARTIFICIAL TEETH.

To the Editor of THE LANCET.

SIR,—The warning repeated in your issue of Jan. 9th, as to the danger, to say nothing of the want of cleanliness, of retiring to rest at night without removing artificial teeth, will, I trust, have some beneficial effect. For some time I have been impressed with the carelessness of people on this subject, and many are inclined to treat with scant respect any opinion expressed as to the desirability of nightly removal. Only a day or two since, when searching for dental irritation as a possible cause of an obstinate eye trouble, in answer to my question whether she removed her artificial teeth, the patient answered readily, "Yes"; but I found she only did so once or twice a month. Are dentists as careful in giving directions as to the withdrawal every night of artificial teeth as they should be? My experience would lead me to answer in the negative. Some practitioners have, on the other hand, I believe, desired their not frequent removal. Certainly, directions should be as precise—or *more so*, on account of the danger—as the surgeon gives respecting the use of an artificial eye. I am, Sir, yours faithfully,

Sheffield, Jan. 11th, 1886. SIMEON SNELL.

SEPARATE EXAMINATIONS.

To the Editor of THE LANCET.

SIR,—In reply to "An Anxious Parent and a F.R.C.S.," in your issue of this day's date, I beg to state that his son may pass any one or more of the subjects which he still requires to complete his preliminary at the Universities of Edinburgh or Glasgow and the Royal College of Physicians, Edinburgh, or the Faculty of Physicians and Surgeons, Glasgow. The charge at these boards is £1 for all or one subject, except at the University of Glasgow, where it is 10s. The secretaries of these institutions will forward him full particulars as to dates, &c., on application. I am, Sir, your obedient servant,

Jan. 9th, 1886. WM. M. D. G.

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HELEN PRIDEAUX MEMORIAL FUND.

IT is proposed to raise a sum in memory of Miss F. Helen Prideaux, M.B. & B.S. Lond., sufficient to endow a prize or scholarship bearing her name. The following contributions to the fund have been received from members of the medical profession:—

Dr. Garrett Anderson. ...	£25	0	0	Dr. Tempest Anderson ...	£1	1	0
Sir Wm. Gull, Bt., F.R.S.	10	10	0	Mrs. Atkins, M.D. ...	1	1	0
Dr. Clifford Allbutt, F.R.S.	10	10	0	Miss Barker, M.D. ...	1	1	0
Stanley Boyd, Esq. ...	5	5	0	Dr. Thomas Barlow ...	1	1	0
Dr. W. Allen Sturge ...	5	5	0	Dr. Elizabeth Blackwell ...	1	1	0
Prof. Schäfer, F.R.S. ...	5	0	0	Miss Boddy, L.K.Q.C.P.I.	1	1	0
Dr. and Mrs. Waller ...	5	0	0	Thomas Bond, Esq. ...	1	1	0
Dr. Ford Anderson ...	2	2	0	Harrison Cripps, Esq. ...	1	1	0
Dr. G. W. Balfour ...	2	2	0	Dr. Curnow...	1	1	0
Prof. Bentley	2	2	0	Miss Walker Dunbar, M.D.	1	1	0
Dr. Cheadle	2	2	0	Dr. A. T. Myers	1	1	0
Dr. Matthews Duncan ...	2	2	0	Mrs. Burdon Sanderson ...	1	1	0
C. W. Heaton, Esq. ...	2	2	0	Miss Edith Shove, M.B.Lon.	1	1	0
Sir Jas. Paget, Bt., F.R.S.	2	2	0				
Dr. Octavius Sturges ...	2	2	0		£252	9	0

Subscriptions may be sent to Mrs. Garrett Anderson, M.D., 4, Upper Berkeley-street, or to the London and Westminster Bank, Stratford-place, W.

Unqualified.—The question is legal rather than medical; but our correspondent is entitled at least to be paid up to the time of his leaving.

PEMPHIGUS (CONTAGIOSA?).

To the Editor of THE LANCET.

SIR,—While attending a patient after her confinement in October last, I was asked on the sixth day to look at the baby, who had an eruption on the skin. The child, a healthy male infant, was the last of a family of six, all living, the eldest being seven years and a half old. I found it had a few small patches of hyperæmia about the nose and face, and on the fingers of each hand. On the fingers also were one or two bullæ filled with clear fluid. During the next three or four days the hyperæmic spots became bullous, those already bullous became more tense, their contents thicker, and finally burst, leaving behind a raw surface similar to that of a burn after the blister has been removed. This condition spread—the bullæ seeming to run together in places—till the face was raw over about half its surface, while a similar condition existed on all the fingers and thumbs, and parts of the feet and thighs. The only treatment adopted was zinc oxide in the form of lotion, ointment and powder, outwardly applied. The child never seemed at all affected in its health, taking its food well, its motions being of good character, and its rest but little disturbed. In from a fortnight to three weeks it had fairly recovered.

So far, I have traced the one case only, because it was the first to appear, because it was the most severe, and because its description cannot leave any doubt behind. All must agree that it was a case of pemphigus; but the curious part of the history is that similar bullæ appeared on four of the five other children, the father, and the monthly nurse. All with one exception were very slightly affected; in all, the fingers were chiefly attacked, and all began and ended under the same treatment, in a manner similar to that already described.

I failed to find the least cause for the outbreak. The infant was from the first brought up by hand, but its excellent health and perfectly normal excretions seem to show plainly that there was no fault in the food. I am sure there was no congenital cause, the family history being free from the faintest suspicion of taint. And why did it run through the house? Does not this look like contagion? The children were frequently in their mother's room, and no doubt often kissed the baby, as children will. The father was of course often playing with his children when at home, and the nurse too found her chief work in looking after, and attending to the infant. It is very easy to understand therefore, on the theory of contagion, that all who did should have caught the complaint. It is very difficult to find any other reason that will satisfactorily account for it. Still it is far from my wish to say that because difficult to find, therefore no other cause could have existed. I only regard the communication as a curious and rare piece of evidence in favour of the existence of a contagious form of pemphigus; and its curiosity and interest must be my excuse for wishing to obtrude myself on your valuable space.—I am, Sir, yours faithfully,

Beckenham, Kent, Jan. 9th, 1886. FRANK STURGES, L.R.C.P.Lond.

M.B. had better apply to the Director-General of the Navy Medical Department for an authoritative statement on the matter.

"DISPENSING PRACTITIONERS."

To the Editor of THE LANCET.

SIR,—Having read an exposition on the above subject in your issue of the 9th inst. (page 83), I should like to say that as a householder keeping up an ordinary country house establishment, four miles from a town, I find it a great convenience that after his visit to a case of no particular urgency the "doctor" should say at what hour the medicine will be ready at his house, instead of being obliged—solely, so far as it appears to me, to please the dispensing practitioners' detractors—to send a messenger with a prescription to a druggist, involving more or less time to wait, whereby is held out the temptation to dawdle or drink. This would be obviated to a great extent by the former convenient arrangement.

I am, Sir, yours obediently,

Chevet, Jan. 11th, 1886. LIONEL M. SWINNERTON PILKINGTON.

BATH CHAIRS AT HASTINGS AND ST. LEONARDS.

A CORRESPONDENT in whose veracity we can place reliance writes to warn medical men against sending any of their patients suffering from nervous or spinal complaints to St. Leonards and Hastings without first obtaining, what is very grudgingly accorded, a written permission from the superintendent of police to have their chairs drawn along the pavements, instead of the uneven roadway. It is very reasonable that the municipality should instruct the police not to allow Bath chairs to indiscriminately use the pavement; but it will scarcely be believed, though it is nevertheless strictly true, that the municipality, disregarding the petition signed by nearly all the medical men in Hastings and St. Leonards, decline to allow patients, though armed with a certificate from one of them, to be drawn along the pavement, even to get to and from their houses and the promenade by the sea.

Mr. M. G. Biggs.—The institution at West Hill, Putney, or that in the Clapham-road, would probably be suitable for the case.

CASE OF PLACENTA PRÆVIA.

To the Editor of THE LANCET.

SIR,—Having read in your issue of Dec. 19th a letter from Mr. O'Bryen recording a case of partial placenta prævia, in which he states it would be interesting to know the method of treatment adopted by various practitioners, I thought the following case might be of interest.

Last September (Sunday, 6th) I was summoned to Mrs. C—— (living three miles from the house in which I was resident), who, the messenger stated, was "flooding fearfully." On arrival I learnt that the woman was a multipara, and was now about seven months and a half pregnant. On entering her room I found her lying on the bed in the usual obstetric position, and saw that her face and arms were extremely blanched, great drops of sweat stood on her brow, and she had that peculiar dead-blue appearance showing an advanced stage of hæmorrhage. The pulse was small, quick, and compressible. On examination, the vagina was found to be blocked with clots, and it was easy to see that the clothes upon which she was lying were saturated with blood. Having cleared out the clots, I found the os soft, dilatable, and about the size of a five-shilling piece; the dilated space was occupied by a soft roughish tenacious mass, easily recognised as placenta; so, insinuating my fingers, I stripped up the placenta as far as I could reach all round, with the double object of stopping the bleeding and ascertaining where there was least thickness, but as on all sides nothing but placenta could be felt, I thought the case was probably one of entire placental presentation. Not being able to get my hand through the os, and the hæmorrhage having ceased, the cessation being due no doubt not only to the clearing of the lower placental zone, but also to the patient's collapsed condition, I turned my attention to her general condition, and administered hypodermics of ether, and several teaspoonfuls of brandy and ergot by mouth. The examination having caused some considerable pain, and there being now some uterine action, I asked permission to give chloroform and deliver at all hazards, as it was imperative to complete delivery before the hæmorrhage recommenced, for had it done so, it must have proved fatal. When the patient was sufficiently under the anæsthetic, I passed my hand into the vagina, and with my fingers rapidly dilated the os, and again searched for a thin spot, but could find none. I therefore scraped my way through the placenta, found a head presenting, ruptured the membranes, turned and delivered; the placenta and membranes followed within five minutes of the birth of the child, the uterus contracted well, and the woman, although for some hours in a most critical condition, under repeated injections of ether, the application of warmth, with friction, recovered from her extreme collapse, and made a good recovery.

On examining the placenta and membranes, I found the latter intact except where the hand had passed first through the placenta, and then through them, and that my hand had as nearly as possible gone through the exact centre of the placenta. As these cases of entire placenta presentation are extremely rare, much more so than partial, it seemed to me worthy of note, as well as my mode of treatment. First, the stripping of the lower placental zone according to the teaching of Dr. Barnes is the most essential point, for not only is the hæmorrhage thus stopped, but time is also gained. Secondly, many would advocate bimanual turning as incurring less risk of further hæmorrhage, and also because it avoids the introduction of the hand into the uterus. Others again would say that having found a head presentation, and ruptured the membranes, forceps ought to have been applied.

My reasons for not following the above plans of treatment were, that personally I find bimanual turning much easier in theory than in practice. To apply forceps to a head above the brim through a jagged placenta is a difficult and tedious mode of delivery. The course I adopted recommends itself by the fact that one has at once entire control of the labour, and can hasten delivery as much as is thought requisite, not to mention the body acting as a plug.

I do not think that with a dilatable os and membranes intact the introduction of the hand is a hazardous proceeding; moreover, it is much more rapid than any other method, and with the advantage of anæsthesia, one need have no dread of the "shock," that bug-bear of many practitioners.—I remain, Sir, yours obediently,

ERNEST E. KING,
Late Resident Obstetric Physician, Middlesex Hospital, and
Dec., 1885. Assistant Medical Officer, Cleveland-street Asylum.

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CONSTIPATION.

Mr. Geo. Smith, M.R.C.S., of Stratford, Ontario, writes to us to confirm statements made in our columns as to the benefit to be derived in some cases, especially those in which constipation is a prominent symptom, from drinking largely of fluids. Mr. Smith mentions an instance in which a female patient whose bowels had not been moved for three weeks, in spite of the exhibition of castor oil, salts, and other cathartics, was permanently relieved of the constipation by copious draughts of weak tea.

Dr. Weljaminow (St. Petersburg).—We cannot exchange.

Dr. Bell Taylor.—As early as possible.

THE APPEAL TO CANADIAN PRACTITIONERS.

To the Editor of THE LANCET.

SIR,—Allow me to thank you for your suggestion. I had already quoted from Dr. Buchanan's report, and had been jeered at for bringing forward what the anti-vaccinationists call "interested evidence." May I ask you to insert these latest statements, with the hope that some kind brother will be able to explain the truth concerning them.

Prof. Coderre, physician to the Hôtel Dieu Hospital, Montreal, is stated by a correspondent to the *Banbury Guardian* to give the following as facts collected by himself during the present small-pox epidemic:—"M. Z. Lapierre, 33, Desalabeurry-street, had a child die of small-pox soon after it was vaccinated. By his physician's advice his four remaining children were vaccinated: all took the small-pox and died. Pierre Mainville, 172, Drolet-street, had his child, one year old, vaccinated; it died fifteen days after, in consequence of vaccination. The Hon. Judge Dr. Montigny had his children vaccinated in September; one, a little girl, took small-pox, and is dangerously ill. The child of Louis Beloc, 267, Papineau-road, was vaccinated, and died a few days after in consequence of it. The child of Joseph Grenier, 101, Dufresne-street, was vaccinated, and took small-pox eight days after vaccination. M. Marios, 154, Plessis-street, had two children vaccinated; both took small-pox, and one died. From St. Camille Hospital the report is for one week (Nov. 1st to 7th). 'There are now in this hospital 198 small-pox patients; of these, ninety-four are vaccinated. Amongst the dead are twelve who were vaccinated, and three who had small-pox the second time.'"

Of course we can explain the above by supposing that the vaccinations were badly performed; and then, again, the fourteen days' incubation renders it possible for the vaccine to have been inserted while the small-pox virus was in the system. You will probably have seen these statements already in the anti-vaccination organs and pamphlets, for doubtless you are inundated with these missives, and agree with me that if we can have evidence to refute their mis-statements the uninitiated will not be so easily misled.

I am, Sir, yours obediently,

G. COCKBURN SMITH, M.D.

Middleton Cheney, Banbury, Jan. 11th, 1886.

HOSPITAL ABUSE.

F. L.—We do not see why such a patient should not be under the care of a general practitioner. If the case prove impracticable or incurable, a reference to a hospital physician or surgeon from him would always secure consideration.

Mr. R. C. Bennett (Trinidad).—The paper has not come to hand.

Prof. Schiller (Berlin).—The book has been received.

"WINTER COMFORTS FOR MEDICAL MEN."

To the Editor of THE LANCET.

SIR,—I know well the "Jemimas" Mr. Pridgin Teale speaks of (THE LANCET, Jan. 2nd, p. 38), and twenty or thirty years ago, whatever may be the case now, they were commonly worn in the midland and northern counties in snowy weather. When we have had snow in former winters, I have tried in vain to get them in London, and since reading Mr. Teale's letter have tried again at Cording's and other indiarubber shops, but still without success. I find a sort of extended, flannel-lined golosh generally kept; but this is a totally different thing from the snow boot in question, which is made entirely of felt. If Mr. Teale would let his *confrères* know in your columns where the real thing can be obtained, he will doubtless be doing them service, as well as conferring a favour upon, Sir, Your obedient servant,

Jan. 9th, 1886. ONE OF YOUR NON-PROFESSIONAL READERS.

H. A. B.—1. The Home Secretary.—2. Our advertising columns contain the information.

HYPERIDROSIS.

To the Editor of THE LANCET.

SIR,—Will any of your readers suggest a remedy for the above annoying symptom? The patient who suffers from it is over fifty years of age, and is of a highly nervous temperament. The least undue amount of exercise invariably causes him to perspire most freely, especially on the head and face. He has tried almost everything, both as regards local applications and general treatment, but has found nothing even partially relieve, except small doses of atropine combined with oxide of zinc. He has worried so much on account of this that he frequently suffers from profound melancholia.—I am, Sir, yours faithfully,

Jan. 11th, 1886. ENQUIRENS.

THE INSURANCE RAILWAY GUIDE.

THE example of a weekly contemporary—*Tit-Bits*—in holding out as a bait to purchasers the boon of insurance against fatal railway accidents, provided that that paper for the week in which the injury is received is found upon the person of the victim, has been followed by the publishers of the Insurance Railway Guide. The purchase of a sixpenny Guide provides for the payment of £200 in case of the purchaser's death during the month for which the guide is issued; and the purchase of a shilling guide provides for the payment of £500 in case of death, and £2 per week for total disablement. The venture ought to be well supported by commercial travellers and others who travel much by rail.

An Anxious Parent will find his question answered in another column.

J. B. T.—Barraud, 96, Gloucester-place, Regent's-park.

THE END OF A WALKING-STICK EMBEDDED IN THE FACE FOR TWO MONTHS.

To the Editor of THE LANCET.

SIR,—The following case may be sufficiently interesting to be reported in your columns.

On Sept. 29th a patient presented himself, complaining that "a piece of bone was growing from his face," and seeking advice about it. He stated that one evening, eight weeks previously, he was very drunk, and that whilst going home he recollects quarrelling with somebody in the street, and "thinks" he received a blow on his face during the altercation. Upon the following day he felt pain in the left side of his face, and noticed a small wound under his left eye. A painful spot, or "boil" as he termed it, arose in the position of this small wound, and after a few days burst, liberating a large amount of pus; since then fetid matter has continued to discharge from the wound; and three weeks since he first noticed a small, hard, pointed body in the wound, which body he called "the bone." Situated immediately under the anterior part of the left malar bone, one inch from the orifice of the left nostril, was to be seen a hole half an inch in diameter, and projecting from it was a pointed substance, which, on close examination, appeared to be wood. This projection was seized with a pair of forceps, and the end of a walking-stick, with ferrule attached, measuring two inches in length, was withdrawn. The resulting cavity healed rapidly by granulation, and by Oct. 12th was quite filled.

I am, Sir, yours obediently,

SYDNEY H. A. STEPHENSON, M.B.,

Oct. 24th, 1885. Resident Medical Officer, Rochdale Infirmary.

MAHOMED MEMORIAL FUND.

THE following additional subscription has been received:—Percy Moore Wood, Esq., Australia, £3.

Dr. A. H. Watson.—Henry Rutherfurd, Esq., Barrister-at-Law, 2, Harcourt-buildings, Middle Temple, E.C.

TREATMENT OF A SPLIT FINGER-NAIL.

To the Editor of THE LANCET.

SIR,—I should be glad if some of your correspondents would suggest some treatment in the following case.

The nail of my right index-finger has split down the middle; it has been in that state for five years. I cannot get it to grow; it constantly seems as if it would do so, but never gets further than one-eighth of an inch from the root. It is the finger I use most in examining the os uteri in midwifery cases. Possibly some syphilitic virus may have been the origin; but I never had syphilis or any constitutional symptoms of it. I have scraped the nail very thin and applied nitrate of silver, but all to no effect. It renders the finger unsightly. I should be averse to evulsion of the nail. I am, Sir, yours truly,

January 11th, 1886. RUS.

Dr. Markley (Juniata).—We have no knowledge of such an institution.

D. H. B.—Professor Liveing, Cambridge.

THE TELEPHONE AND MEDICAL TOUTING.

To the Editor of THE LANCET.

SIR,—I was surprised to see in a chemist's shop in a first-class watering-place on the south coast a large placard, stating: "Dr. A—— can be communicated with from here by telephone." There was another doctor in practice nearly opposite the shop. The telephone man, I found out, resided a little more than a quarter of a mile away; therefore the object was plain. Is not this, with all the interested recommendations of the chemist as to Dr. A—— being the best doctor, &c., very unprofessional?

I am, Sir, yours obediently,

Jan. 6th, 1886. SURGEON.

*** We quite agree with our correspondent.—ED. L.

INFANTILE HERNIA.

To the Editor of THE LANCET.

SIR,—I should feel obliged if any of your readers could tell me the most satisfactory treatment to adopt in cases of congenital hernia, which are constantly brought under one's notice, when the children are a month or two old. I am, Sir, yours faithfully,

Jan. 12th, 1886. ENQUIRENS.

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VACCINATION IN JAPAN.

THE Japanese do not appear to have lost any of their faith in the efficacy of vaccination for small-pox. It is announced that they have just enacted a very stringent law on the subject, which, besides ordinary vaccination in the first year of infancy, provides for at least two subsequent revaccinations at intervals of from five to seven years, so that by the time a child has reached its fifteenth year, it will have been vaccinated three times. In addition to this, during epidemics of small-pox, local authorities have power, when they deem it necessary, to order the vaccination of all the inhabitants of their districts, irrespective of the vaccination required by the law.

Dr. George Mundie.—The method of fire-lighting suggested by our correspondent has been often described and advocated.

PARALYSIS AGITANS.

To the Editor of THE LANCET.

SIR,—In reply to your correspondent, "Inquirer," who asks in your last issue for some hints on the treatment of paralysis agitans, I beg to suggest that electricity (constant current) should be used; likewise sulphur baths, which are certainly of very great value and importance in the disease. Good may be done by keeping the brain quiet by hyoscyamus, to which, I think, conium and gelseminum should be added, to quiet the nervous irritation at both central and peripheral extremities. The latter drugs should, however, be carefully watched, and, if any unpleasant symptom ensue, should be discontinued at once. The hyoscyamus may be used for an indefinite period with great advantage; also iodide of potassium, to cause as much absorption of matter as may be, preferably combining the latter drug with iron. In the use of electricity good results have been obtained by placing the positive pole over the spine, and drawing the negative along the course of the nerves as they leave the vertebral column to the periphery. I should, however, strongly urge and advise the use of sulphur baths. I shall be glad to hear the result of this treatment in "Inquirer's" case.

I am, Sir, yours faithfully,

Jan. 12th, 1886. T. J. LAVERS, M.D.

DYSMENORRHŒA.

To the Editor of THE LANCET.

SIR,—I have found the aromatic spirits of ammonia in drachm doses a thoroughly trustworthy remedy for dysmenorrhœa. It should be given every hour or two, according to the requirements of the case, but one dose every four hours is generally enough. In place of the alcoholic stimulants generally prescribed, I think this remedy deserves recommendation.

I am, Sir, yours truly,

Jan. 8th, 1886. C. R. ILLINGWORTH, M.D.

THE ALBO-CARBON LIGHT.

To the Editor of THE LANCET.

SIR,—Can any of your readers inform me whether the albo-carbon light has been found to exercise an irritating influence on the throat or the organs of respiration?—I am, Sir, yours faithfully,

Reading, Jan. 12th, 1886. J. HOPKINS WALTERS.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir Joseph Lister, Valeseure; Sir Henry Thompson; Dr. A. H. Hassall, San Remo; Dr. A. R. Sansom, London; Dr. Braxton Hicks; Dr. Brown-Séquard, Paris; Dr. J. B. Russell, Glasgow; Sir L. M. S. Pilkington, Wakefield; Dr. Sedgwick Saunders, London; Mr. C. F. Wright; Dr. W. H. Barlow, Manchester; Mr. Chittenden, Faversham; Mr. C. Bischoff; Mr. Parsons Smith, Croydon; Dr. Illingworth, Clayton-le-Moors; Dr. Purcell, London; Dr. Lewers, London; Mr. J. W. North, York; Mr. Hodge, London; Mr. Moro, London; Mr. Mayo Robson, Leeds; Messrs. Barr and Son, London; Dr. Elliott, Hull; Mr. Druitt, Bournemouth; Mr. Hills, Pwllheli; Mrs. L. Harris; Mr. G. C. Roy, Bengal; Mr. R. M. Craven, Southport; Surgeon-Major Barker, Bombay; Dr. Jos. Rogers, London; Mr. F. Sturges, Beckenham; Mr. Noble Smith, London; Dr. Lavers, London; Mr. Barnardo, London; Mr. L. Humphry, Cambridge; Dr. Warlomont, Brussels; Mr. F. W. Cory, Bournemouth; Mr. E. R. Williams, Macclesfield; Dr. Dale, King's Lynn; Mr. G. S. Davis, Detroit; Mr. Knight, London; Mr. Radley, Newton Abbott; Mr. J. M'k. Davidson, Aberdeen; Mr. Geo. Smith, Stratford, Ontario; Mr. R. Williams, Liverpool; Dr. Cockburn Smith, Banbury; Dr. A. Hay; Dr. Thursfield, Leamington; Mr. Walters, London; Dr. W. B. Hunter, Londonderry; Mr. T. D. Harries, Aberystwith; Mr. C. H. Piesse; Mr. Rintoul, Liverpool; Messrs. Fraser and Co., London; Mr. Whittingdale, Birmingham; Mr. W. T. Brooks, Oxford; Mr. H. A. Fotherby, London; Mr. Rice, Derby; Miss Price, Brighton; Mr. Harding, Scarboro'; Mr. Rugg, Dover; Mr. Codd, Dublin; Miss Fitt, Limerick; Dr. Jones; Messrs. Harrison and Sons, London; Dr. Hall, London; Mr. Lockwood, Sheffield; Mr. Bright, Brixton; Messrs. Dawson Bros., Montreal; Mr. J. de Styrap, Shrewsbury; Dr. J. Black, London; Mr. Sergeant, London; Messrs. Shanks and Co., London; Dr. Deas, Exeter; Mr. Round; Messrs. Bennett Bros., Salisbury; Dr. Turner, Polruan; Mr. Wilcox; Messrs. Griffin and Co., London; Messrs. Williams and Norgate, London; Dr. Lytle, Maghera; Mr. Macpherson, Middlesbrough; Mr. Simeon Snell, Sheffield; Dr. Bampton; Dr. Mundie; Dr. Woakes, London; Mr. F. F. Tayler, St. John's; Mr. Franklin Wright; Mr. Southam, Manchester; Mr. Walters, Reading; Mr. Bettany, London; Mr. Brooks, Hull; Mr. G. Brown, Greenwich; Mr. F. R. Cane, Leeds; Dr. Ridge, Enfield; Mr. Stuart, Wigan; Mr. Kershaw, London; Mr. Leighton, Cheltenham; Messrs. Cousins and Co., Oxford; Lieut.-Col. Wilson, Stockport; Messrs. Reynolds and Co., Leeds; Messrs. Macmillan and Co., London; Messrs. A. and C. Black, Edinburgh; Mr. Ellis Lever, Bowdon; Mr. H. J. Cave, Bath; Mr. Spear, London; Dr. Donald Hood, London; Medicus; F. L.; An Old Hospital Surgeon; A Parish Nurse; One of your Non-professional Readers; G. C. P.; Enquirens; Hooked; Practical; Medicus, Tiverton; M. N.; Y. P. Q.; An Ex-officio Guardian of the Hartley Wintney Union; Enquirer.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Mair, Switzerland; Mr. Seymour, Coventry; Mr. Page; Mr. Botham, Manchester; Mr. Sers, Oldham; Mr. Sydney, Hounslow; Mr. Russell, Birmingham; Mr. Smith, Winchcombe; Messrs. Dixon and Co., Birmingham; Dr. Beatty, Vindore; Dr. Skinner, Paris; Dr. Carter, Demerara; Mr. Bennett, Trinidad; Mr. Griffiths; Dr. Meadows, London; Mr. Helme, Lancaster; Mr. Smith, Belfast; Mr. Vinrace, Birmingham; Mr. Dixon, Manchester; Mr. Woolman, Stockton-on-Tees; Mr. Price, Treorky; Mr. Turner, Portobello; Dr. Strahan, Berry Wood; Dr. Veitch, Beaconsfield; Messrs. Wyley and Co., Coventry; Mr. Barron, Manchester; Messrs. Portway Bros., Egham; Dr. Mauche, Valetta; Dr. Redwood, Rhymney; Mr. Johnstone, Dundee; Dr. Kammerle, Berne; Mr. Cox, Battersea; Mr. Denman, Beaconsfield; Mr. Abbott, Carlisle; Dr. Somerville, Ayr; Mr. Hill, Roxborough; Mr. Ormond, Bath; Mr. Goodden, Bristol; Mr. Greaves; H. G., Spennymoor; H. F., Liverpool; Beta, Kennelworth; Medicus, Tewkesbury; Medicus, Minchinhampton; Omega, Liverpool; H. F., Liverpool; Medicus, Stockport; Surgeon; Matron, Newark; Medicus, Holloway; Medicus, Edinburgh; M. O. D, Liverpool; Medicus, Brixton; L. C.; G. P.; P. P.; Framer; Medicus, London; D. E. S., Sunderland.

Newcastle Daily Journal, Walsall Free Press, Newcastle Weekly Chronicle, Liverpool Courier, Liverpool Daily Post, Manchester Courier, Pall Mall Gazette, Liverpool Echo, Chemiker-Zeitung, Admiralty and Horse Guards Gazette, &c., have been received.

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Tables of Contents, with the Index of Advertisements, for each Number can be had on application to the Publisher.

Agent for the Advertising Department in France—J. ASTIER, 66, Rue Caumartin, Paris.

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Lectures

ON THE

SURGICAL TREATMENT OF EMPYEMA.

Delivered at the Hospital for Consumption and Diseases of the Chest, Brompton.

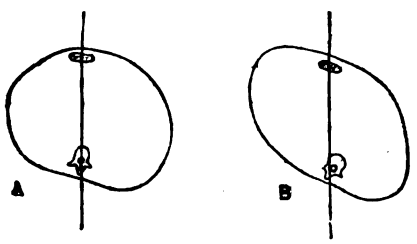
BY RICKMAN J. GODLEE, M.S., F.R.C.S.,

SURGEON TO THE HOSPITAL, AND SURGEON TO UNIVERSITY COLLEGE HOSPITAL.

LECTURE II.

GENTLEMEN,—In the last lecture we were engaged in discussing some points in the treatment of recent cases of empyema. We have now to consider what can be done for the cure of a case which has become chronic, and in which the efforts of nature to close the cavity have been brought to a standstill. Such cases are more common amongst adults than children for obvious reasons, and may be classified under three headings: (1) Those in which a mere sinus remains, surrounded by dense fibrous walls; (2) those in which a large cavity exists, the lung being more or less completely collapsed, the diaphragm having been drawn up to the utmost possible extent, and the structures in the mediastinum and the opposite side of the chest having come over to the diseased side as much as possible, but the chest wall having fallen in only to a very slight extent; and

FIG. 1.

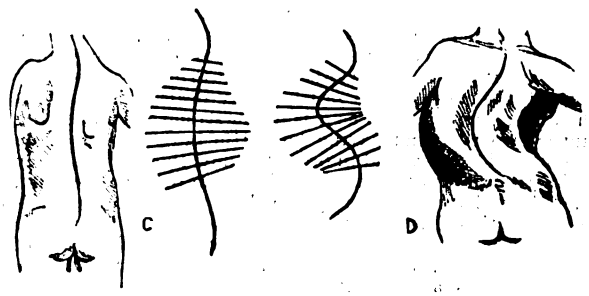


Cyrtometric tracings at about the level of the nipple.
A, A case of empyema. B, A case of lateral curvature.

(3) those in which the chest wall has fallen in to a considerable extent, producing often great deformity, but leaving a cavity which cannot close. In all of these cases the pleura becomes remarkably thickened, forming a dense layer of hard fibrous tissue, reaching at times an inch or more in thickness. The deformity of the chest which is produced follows from the fact that the ribs are drawn close together like the segments of a closed fan; the result of this is a lateral curvature of the dorsal spine, the concavity being directed towards the affected side. A consequence of this, again, is the separation of the ribs on the sound side, like the segments of a fan that has been opened, and thus a deformity is produced somewhat like that which occurs in ordinary cases of scoliosis. The angles of the ribs on the affected side become flattened out, while those on the sound side become more acute, and there is a corresponding flattening in front on the sound side; but there is not, as in ordinary lateral curvature, as a rule, any increased angularity on the affected side near the junctions of the ribs and cartilages. On the contrary, the diseased side is flattened both in front and behind, as may be seen from the accompanying cyrtometric tracings of the two conditions (Fig. 1, A B). The diagrams (Fig 2, C D) illustrate the difference in the nature of the curve which obtains; for while after an empyema the dorsal curve is very long, and occupies the whole dorsal region, in scoliosis we generally find a compensatory curve beginning at the lower part of the back, and thus, while in the former case all the ribs are separated, in the latter some are separated and others approximated. The prominence of the angles, together with the separation of the ribs on the sound side, causes an elevation of the shoulder and a prominence of the scapula, giving a humped appearance to the back, which becomes more and more mesial in position as the disproportion between the two sides becomes more and more marked, so that in an exaggerated case, when the clothes are on, it comes to have an outward resemblance to that produced by an angular curvature in the dorsal region. The compensatory curves in the lumbar and cervical regions are shorter than those of ordinary lateral curvature, and there is much less rotation of the bodies of the vertebræ, so that the curve indicated by the line of the spines corresponds more nearly with the actual curve of the bodies than is the case in the latter condition. The net result is that the affected side has a much smaller capacity than before, while the sound side is larger, and can thus accommodate the working lung, the size of which is increased by compensatory hypertrophy. In the most exaggerated cases there is occasionally a very acute prominence parallel with the sternum, near the junction of the ribs and their cartilages. The size of the cavity, provided there be a free outlet, determines the amount of discharge, and this again determines the amount of the constitutional disturbance from which the patient will suffer. What these disturbances are, and what the prospect for the patient is if left alone, must next be considered.

A patient with a small cavity and a pretty free opening may go on for a long time—i.e., for a considerable number of years—without any very serious symptoms manifesting themselves. The oldest case of empyema of which I have any notes is that of a man upon whom I operated at Charing-cross Hospital when I was assistant-surgeon there in the year 1876. He was then not much over twenty years of age; he had a good family history, and showed no signs of tubercular disease. If it is possible under any circumstances to trace the cause of this disease to an injury, this seemed to be a case in point. At all events, his illness

FIG. 2.



The above illustrates the difference between the curve of the spine and the deformity in the ribs in—C, a case of empyema; D, a case of lateral curvature. The schemes of the arrangement of the ribs are purely diagrammatic; the drawings of the backs are from actual cases.

appeared to depend upon the fall of a load of gravel on to his back some time previously, but it is not clear that he sustained a fracture of his ribs. When he came under notice he had his right chest full of fluid, which had made its way through the chest walls, so that he had a large collection of matter in the soft parts at the lower and posterior part of his axilla. After opening this the finger was passed into the cavity, and, being used as a guide, an incision was made in about the eighth or ninth space, and drainage-tubes were inserted. The case pursued a pretty favourable course. The antiseptic dressings employed at first were ultimately given up, and the cavity became much reduced in size, so that it would contain at last not more than an ounce. He had a small necrosis of one of the ribs, which separated, and after the employment of a variety of tubes and the use of injections, &c., he at last settled down to wear a piece of a No. 12 English gum-elastic catheter, which he has continued to do ever since. I have kept this man constantly under observation, for he now attends at University College Hospital, and though at times he suffers from a slight accumulation when the tube becomes blocked, he has continued to lead an active life as a costermonger, not feeling, however, strong enough to resume his original occupation as a navvy. He stoutly refuses to submit to any other operation. Well; for years this man showed no signs of suffering from the prolonged discharge; his muscular development was good, and his health also quite satisfactory; but of late years he has slowly and steadily began to show signs of albuminoid

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degeneration. His skin is now more sallow than it was, his liver can be felt and is enlarged, and his fingers are clubbed, but it is impossible to say that he may not have several more years of active life before him. Cases of this kind must be borne in mind in advising a patient to undergo the somewhat formidable, though I believe not really dangerous, operation I shall presently describe.

This may be taken as typical of a considerable class of cases, and I could easily mention others in point from amongst our own patients. But in most of them the discharge comparatively soon produces marked changes: the great clubbing of the fingers, and, in some cases, similar swellings about the wrists, ankles, and the nose, the characteristic pale and earthy colour of the skin, the emaciation, and, lastly, the albuminoid changes, with albuminuria, indigestion, and diarrhœa, which we are in this hospital very apt to associate with the word empyema. A very grave prognosis must therefore always be given in cases of empyema which will not heal, and the question arises as to what, if anything, can be done for their relief. In the first place, a thoroughly free drainage must be obtained either by dilating the original opening or by supplementing it with another in a more favourable position. A second opening alone has often proved sufficient to enable the cavity to close, simply by affording a free exit for discharge; but it does not yet appear that a simple enlargement of the original sinus might not have been sufficient for this purpose. This second opening will often be best made at a higher level than the primary one, for this reason:—it is, as might have been supposed *à priori*, almost invariably the case, that the lower part of the chest cavity is the first to close. This arises partly from the fact that there is only a small space between the diaphragm and the thoracic wall, partly because the structures in the mediastinum can more readily be drawn over in the lower and middle parts of the chest, and partly because the ribs, being larger, can yield more easily, and so assume the modified shape and position that the altered circumstances require. This, as was before stated, is one of the reasons why a very low opening is in most cases to be deprecated, and it will be afterwards seen that in old cases the lower part of the chest can be satisfactorily dealt with, but that the upper part, enclosed as it is by the strong and unyielding upper two ribs, and having but little lung substance on the other side to expand in order to allow the comparatively rigid structures in the upper mediastinum to come over, and, moreover, having probably no lung of its own available, as this has usually sunk down and back near the spine, soon reaches the extreme possible limit of contraction, and, when granulation has done all that it can, often remains as a cavity which defies all that surgery can devise for its closure. The second opening may be made then at any available part, not too far down, and best at a considerable distance from the original one. It is the simplest thing that can be done for an obstinate case, and I have several times seen it successful. But there are many cases in which it is obviously impossible that this should lead to a cure—viz., those in which, although there is a free opening and no accumulation of discharge, there remains a cavity of considerable size. If we suppose a case in which the various walls of this cavity have been drawn in to the utmost possible extent, there is nothing further to trust to, if things be left alone, than the filling in of the cavity by granulations. Now, when this has gone on to a certain extent a degree of tension is established, which effectually prevents a continuation of the process. A state is then reached in which the pleura becomes lined with a perfectly smooth surface—secreting pus indeed, but showing no signs of developing fresh granulations. This is quite analogous to what we see in an ordinary callous ulcer. Here the intense hardness of the surrounding parts establishes a high degree of tension, and therefore the contraction which is essential to the healing process can no longer take place. The result is an ulcer with a hollow base, covered by minute granulations—if they are worthy of the name—of low vitality, and disposed to slough at any slight irritation, rather than to the development of fresh material. In these cases the one essential of treatment is to diminish the tension, which may be accomplished either, as has been often done, by making a circular incision round the ulcer, or by putting the patient to bed and so reducing the chronic œdema, or by applying a blister to the surface of the sore, or by placing an elastic bandage on the limb. To get over the difficulty in the case of the chest, it has been suggested to apply sponge-grafting; that is, to diminish the size of the cavity by filling it with a new material—viz., an organic basis,—which becomes vivified by the migration into it of young cells from the surrounding parts; and it has apparently proved successful in certain circumstances. I have not met with a suitable case to put this in practice. It is essential that the cavity should be in an aseptic condition, which is rare in old cases of empyema. If it be septic, the pieces of sponge introduced soon become putrid, and then not only is it impossible for new cells to find their way into the mass, but this becomes a source of increased irritation to the pleura and of danger to the patient. This was the case in the only patient in whom I tried it, J. H. (Case 4, Table II.). Many pieces of sponge were introduced at different times, but at a subsequent operation they were found unaltered in size, but smelling horribly. To be successful, then, the cavity if septic must first be purified, and then small pieces of sponge, previously decalcified by soaking in a weak solution of nitric acid, must be pushed up to the end of the cavity, and when they are found to adhere to the wall others may be introduced on a subsequent occasion. But it is clear that this method of treatment cannot be of very wide application. To imitate, then, the treatment we apply to a callous ulcer, the only available plan is to diminish the resistance of the chest walls. It was this idea which first led the late Professor J. A. Estlander of Helsingfors to suggest the removal of a considerable length of a variable number of ribs, a suggestion which he first appears to have put in practice in 1877.[1] His patient was twenty-one years old, and the empyema had been opened, apparently not very satisfactorily, eight months previously. He removed 4 centim. of the seventh, 3 centim. of the sixth, and 3 centim. of the fifth ribs through an oblique incision passing upwards and outwards from the fistula. By June 25th of the same year the sinus had completely closed. This was the starting-point of an operation which has been very much practised of late years; which has been much vaunted by some and equally decried by others; which has, I am sure, great merits; but which, because too much has been claimed for it, has often led to disappointment. I will quote, before commencing a description of the operation, a few words from the second of his two articles referred to below to explain his exact position as regards it:—

"It might perhaps be concluded from my article [the first referred to] that, in order to obtain a cure, it is always sufficient to resect once for all from 3 to 6 centim. of several ribs. But this is not what I intended to imply, and is not consistent with the fact. When it is necessary to operate upon a case of chronic empyema, the first essential condition is for the operator to make himself acquainted with the extent of the cavity in all directions. I have been in the habit of using a male urethral bougie, but possibly other instruments may answer the purpose better. After ascertaining the size of the cavity, and in which direction it is most extensive, the operation must be planned upon these data—that is, the largest portion of ribs must be removed at that part where the lung is furthest removed from the thoracic wall. Thus it is not an operation which, when once it has been described, can be repeated exactly; but, on the other hand, the exact steps must depend upon the peculiarities of each individual case; and, as the shape of the chest must be in different cases differently modified, the name of 'thoracoplasty' might well be given to the operation. Nor, again, is it enough, as might be gathered from the cases which were quoted, to do the operation once only. A larger experience has shown me that there are cases where the cavity, after diminishing rapidly as the result of the operation at first, and afterwards more slowly, reaches at last such a stationary condition that no progress is noticed even in the course of months. Under these circumstances the cavity must be again explored and the operation repeated; there may, indeed, be some cases in which even a third operation is necessary. Generally in these secondary operations, which have to be done through the old scars, it is enough to remove a smaller number of ribs, but the portions removed should be at least as long as before."

I can fully endorse these remarks of Professor Estlander, but am not sure that in adults I have yet removed sufficiently long portions of bone to meet the instructions he has laid down. I have never employed it in an adult where a really large cavity remained, because all the patients

[1] Revue Mensuelle de Médecine et de Chirurgie, 1879, pp. 157, 885.

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in whom this condition was found presented other symptoms which seemed to render the operation inadvisable. I have, however, removed considerable portions of ribs in adults who had only a small cavity, and also in children with much contracted chests, but a pretty large remnant of the originally completely distended pleura. In all, great benefit has been derived, the cavity and the discharge being much diminished; but I am not sure that I can bring a single instance where a complete closure of the cavity has occurred.

(To be concluded.)

NOTES ON DISEASES OF THE NERVOUS SYSTEM.

BY W. R. GOWERS, M.D., F.R.C.P.

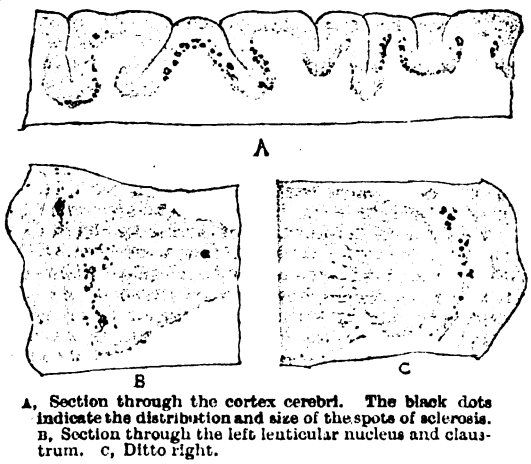
I.

ON A CASE OF MILIARY SCLEROSIS OF THE BRAIN.

THE term "miliary sclerosis" was first applied by Drs. B. Tuke and Rutherford to a lesion found by them in the white substance of an atrophied cerebellar hemisphere in an insane patient. The lesion was chiefly microscopic, was only discovered after hardening, and consisted of minute spots of degeneration, in which there was little evidence of a process deserving to be called "sclerosis." The term was subsequently used by others to designate another microscopic lesion, since abundantly proved to be of artificial origin—an "artefact," as the Americans say. It is questionable whether the term "miliary" ought to be applied to a purely microscopic lesion. It is derived from that classical standard of size, a millet-seed (milium), and may with advantage be restricted to lesions not differing much in dimensions from the grey granulations of tubercle, to which the word is universally applied. Since the demonstration of the spurious nature of the lesion generally designated by this term the expression has fallen into disuse. I venture, however, to revive it as a designation for the lesion in the following case, not only because it accurately describes the morbid state, but also because it is the only term that does so, and the character of the morbid state is the only one which the term accurately connates. The case was observed several years ago, but temporary loss of the notes has prevented its earlier publication. They are unfortunately deficient in many particulars, but the case has at least the interest of extreme rarity.

The patient was a well-built man, aged fifty-nine, seen in consultation with Mr. E. C. Shoppee of Kentish Town, who kindly furnished me with some particulars of the early history of the case. The patient had had syphilis many years before. Recently, slight dyspeptic troubles occurred, and shortness of breath distressed him, which was found to be due to emphysema of the lungs and cardiac weakness. Six months before death his liver and spleen enlarged, and some ascites and anasarca appeared, the urine being free from albumen. Then his limbs gradually became weak, so that, at the end of about six weeks he needed help to walk across the room. He had difficulty in raising his arms. The elbows were flexed and rigid. The weakness increased to complete loss of power about two months after the onset. I then saw him with Mr. Shoppee and found the following condition. He presented no indication of mental change. The cranial nerves and special senses were normal, and the fundus oculi healthy. There was no difficulty in swallowing. The arms were completely paralysed, but very rigid, the elbows being flexed at a right angle. The fingers were flexed at the middle joints, as in hemiplegic rigidity. The legs were also completely paralysed. In neither arms nor legs was there any loss of sensation. The sphincters were competent. During the next week consciousness remained unaffected. Both spine became extended and remained so. Some power was preserved in the left arm and leg. A week later he had some twitching in the right leg, and a day or two afterwards he had several slight convulsive attacks, beginning in the left shoulder, affecting the left side and head only, and the arm more than the leg. Soon after these attacks he lost the power of speaking, mumbled in an unintelligible manner, became comatose, and died a fortnight after I saw him, about ten weeks after the onset of the nervous symptoms.

Permission could be obtained to examine only the brain. The arachnoid over the convexity was more opaque than normal. At the posterior part of each hemisphere of the cerebellum there was a small submeningeal extravasation. There was no excess of fluid in the ventricles or any large lesion in the brain. Throughout both hemispheres, and in all parts of them, the cortex contained minute reddish-grey spots, at the junction of the grey and white substance. In tint they were a little darker than the darkest grey substance (as that of the corpus striatum). They were more translucent in appearance than the grey matter of the cortex, and they were not depressed below the surface of the section. Their aspect was very like that of the areas of disseminated sclerosis. In size they varied from that of a mustard-seed, or a little larger, to the smallest point visible. Their size and distribution are shown in the accompanying diagram. (Fig. A.) In many places the section showed rows of these spots along the junction of the grey and white substance, festooning the convolutions. Here and there were larger and more irregular areas about an eighth of an inch in diameter, distinctly formed by the coalescence of the smaller spots. Their number is fairly represented in the figure, and they were equally abundant in all parts of the hemispheres. At two spots there was a more considerable change in the white substance of a convolution. One of these was about a square inch in extent on the inner and posterior part of the right occipital lobe. The white substance was mottled with reddish lines, mingled with some diffuse redness, and many grey spots, similar to those elsewhere, were scattered through this area, and



A, Section through the cortex cerebri. The black dots indicate the distribution and size of the spots of sclerosis. B, Section through the left lenticular nucleus and claustrum. C, Ditto right.

between them were spots and lines of yellowish tint, apparently degenerating cerebral substance. The consistence of this area was not diminished. This change did not invade the grey cortex. Another area of precisely similar aspect, but smaller, existed in the highest part of the left ascending frontal convolution, but also limited to the white substance. In the neighbourhood of this area the grey spots were especially numerous. The rest of the white substance of the hemispheres presented no abnormal appearance, but spots of grey degeneration, identical in aspect with those of the cortex, were numerous in the central ganglia. On the left side the anterior part of the lenticular nucleus was free from them, although they were abundant in the adjacent convolutions of the insula. The claustrum, however, was riddled with similar spots, the size of millet-seeds. In the rest of the lenticular nucleus the two inner segments contained very few, but in the posterior half of the outer segment (Fig. B) they were numerous, grouped chiefly along its outer border, adjacent to the external capsule; none could be seen in the caudate nucleus. In the centre of the optic thalamus was a rather larger spot of similar character; around this were many small spots like those elsewhere, some coalescing. In the right lenticular nucleus were similar spots, but fewer in number. The anterior extremity was free. In the outer segment was a larger irregular spot, one-sixth of an inch in diameter, apparently formed by coalescence. The claustrum (Fig. C) on this side also contained many; the caudate nucleus was free; many were scattered through the optic thalamus, all small. Beneath the corpora quadrige-

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mina were two small spots. In the rest of the pons, medulla, crura cerebri, and cerebellum none could be found.

On microscopical examination (of sections, stained and unstained, kindly prepared for me by my colleague, Dr. Beevor) the affected patches were as distinct as to the naked eye. In addition many smaller areas were seen, too minute to be visible to the naked eye, but as well defined as the larger ones. All presented the same characteristics. At the periphery of the larger areas, and throughout the smaller ones, the change consisted of small round or oval cavities separated by septa, which had an indistinctly fibrous appearance, and were dotted with minute granule-like nuclei. The cavities in unstained sections were seen to contain clear or faintly granular material; in stained sections they appeared empty. The cavities varied much in size, some being very small, others larger, and they seemed to communicate. This vacuolated structure bore considerable resemblance to that of a sponge. Passing from the periphery towards the centre of the area, the substance between the cavities increased in thickness and in its fibrous aspect. In the normal tissue near the patches were seen spider cells with conspicuous processes. Similar cells became more numerous within the margin of the diseased area; these were, however, larger, with conspicuous nuclei, but with less distinct processes, some of which could be traced a short distance in the fibrous septa. Towards the centre these cells were still more numerous, larger, with larger nuclei. Smaller, rounded, nucleated cells were seen here and there within the cavities. The increased number of cells and thicker septa gave the centre of the patches a dense appearance, contrasting with the sponge-like periphery. The smallest spots consisted only of the spongy structure. None of the cells seemed to be altered ganglion cells, for the appearance was the same in the patches that were entirely within the white substance as in those that were partly in the grey cortex. Where a patch had developed in the centre of a convolution, among the longitudinal fibres, the cavities were elongated, and many of the cells were fusiform. The patches, large and small, had for the most part no connexion with vessels. Small vessels seen in some had a normal appearance, or presented only a slight increase of nuclei in the wall or slight thickening of the wall. A few were seen with a series of the altered spider cells along each side of the vessel. Away from these patches, however, the tissue beside some some vessels presented the spongy change above described; it did not extend far from the vessel, and showed no tendency to develop into areas of disease such as have been described. In other cases larger cavities were seen beside the vessels, fewer in number, and very irregular in distribution, with thin septa between them and little increase of the cells so conspicuous in the other diseased areas. Similar cavities were seen elsewhere in the white substance near the cortex; some of these had no apparent connexion with vessels, but others were arranged in lines as if indicating the course of vessels that did not come into the section. The grey cortex, apart from the areas of disease, had a normal appearance, and its ganglion cells showed no indication of degeneration.

The lesion in this case seems fairly to merit the term "sclerosis." Its naked-eye characters resembled perfectly those of insular sclerosis, and the microscopical characters are not inconsistent with the term. There was a wasting of the cerebral tissue, and an increase of fibrous tissue and glia-cells. It differed from insular sclerosis in size, seat, and multiplicity of the foci of disease. I have met with no recorded case of quite similar characters. It is, however, clearly allied to the changes that have been met with in rare cases of general paralysis of the insane. In a case of the latter disease, recorded by Dr. F. Greiff,[1] a lesion is described similar in size and seat, except that the central ganglia were unaffected. It differs in that the lesion was invisible in the fresh brain, and consisted in a "vitreous degeneration" of the cerebral tissue and cortical cells, starting everywhere from the vessels, and similar in character to a slighter lesion described by Simon in Bd. ii. of the same *Archiv*. I could discover no trace of a vitreous change in the case now described, unless the process of vacuolation be so described; but a partial relation to the vessels was distinct, and it is possible that the two cases present varieties of the same lesion. The peculiar localisation of the disease suggests a relation to vascular supply, although not necessarily a vascular origin. From all recorded instances of analogous lesions this case is distinguished by the sanity of the patient. Until the final coma there was no mental alteration. It is, then, of much interest as an example of a form of disseminated disease of the deeper cortical layer of the brain, and of the central ganglia, occurring apart from any form of insanity. The absence of an examination of the cord makes it impossible to refer the symptoms in the limbs, with certainty, to the cerebral lesion. It is, noteworthy, however, that in the case described by Greiff a similar rigidity was present.

Queen Anne-street, W.

[1] Archiv f. Psychiatrie, Bd. xiv., p. 287.

THE FAMILY HISTORY OF CANCER PATIENTS.

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IN treating of this subject, some knowledge of the principles of biology and the laws of inheritance, as applied to the whole organic world, is absolutely necessary. I take it that lack of this knowledge is the chief cause of the recent epidemic of disbelief in the heredity of cancer, which is totally at variance with all that we know of these principles and laws. Therefore I propose to preface this account of my investigations into the family history of cancer patients with a brief general statement as to the nature and laws of heredity, as bearing on this subject.

In ultimate analysis it appears that reproduction is nothing but growth of the organism beyond its individual limit of size. We see this in the amœba, which reproduces itself by simple division. In every act of propagation a certain quantity of cell substance is transmitted from the parents to the child, and along with it the molecular motion peculiar to the parental individuals. The phenomena of inheritance are essentially dependent upon this material continuity and partial identity of the producing and produced organisms. The child is really flesh and blood of its parents. That the main structural characters of all organic beings are inherited is indeed universally admitted, and most naturalists are now agreed that even the smaller morphological details are similarly transmitted. Moreover, not only are those structures which have been inherited from ancestors transmitted to descendants, but also those peculiar variations which have been acquired during the lifetime of the individual. Examples of this are seen in plants and animals—e.g., copper beeches, weeping willows, supernumerary digits, &c. Indeed, it has been established as a general rule that any structure which has once varied in a particular way is henceforth more liable to take on that action again. Now, cancers and tumours must be regarded as morphological variations, and as such they are subject to these laws. On this subject Darwin remarks: "When amongst individuals, apparently exposed to the same conditions, any very rare deviation, due to some extraordinary combination of circumstances, appears in the parent—say once amongst several million individuals,—and it reappears in the child, the mere doctrine of chances almost compels us to attribute its reappearance to inheritance. Everyone must have heard of cases of albinism, prickly skin, hairy bodies, &c., appearing in several members of the same family. If strange and rare deviations of structure are really inherited, less strange and common deviations may be freely admitted to be inheritable. Perhaps the correct way of viewing the whole subject would be to look at the inheritance of every character whatever as the rule, and non-inheritance as the anomaly."

I trust that in these few brief remarks I have succeeded in making my views as to the heredity of cancer intelligible. I will now proceed to state the facts elicited by the analysis of the family history of 254 cases of uterine and breast cancer under treatment at the Middlesex Hospital during the years 1882, 1883, and 1884.

I. UTERINE CANCER (119 Cases).

The fathers.—Of 100 cases in which inquiries were made, in 86 the fathers were dead, and in 14 still alive. Their average age at death in 81 cases was fifty-nine years, the youngest twenty-six, the oldest ninety-five; 7 attained or exceeded the age of eighty; 12 died at or under forty. Of

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those still alive, in 10 cases the average age was seventy-three years, the youngest sixty, the oldest eighty-two. They had died of, or were subject to, the following diseases:

Lung disease in 31 cases (31 per cent.): phthisis, 20; bronchitis, 7; others, 4.
Neuroses in 9 cases (9 per cent.): apoplexy, 5; insanity, 2; others, 2.
Heart disease in 3 cases.
Zymotics in 3 cases: typhoid fever, 2; "fever," 1.
Dropsy in 2 cases.
Rheumatic fever in 1 case.
Gout in 1 case.

Four of the fathers who had died of causes other than phthisis were, however, of phthisical families. Thus, of these 100 fathers, 24 were of decidedly phthisical families. There was not a single instance of cancer among the fathers, but 4 of them were of decidedly cancerous families. In 30 cases the causes of death were unknown.

The mothers.—Of 98 cases in which inquiries were made, in 80 the mothers were dead, and in 18 still alive. Their average age at death in 76 cases was sixty years, the youngest twenty-five, the oldest ninety-three; 10 died at or under forty; 9 attained or exceeded eighty. Of those still alive, in 15 cases the average age was seventy years, the youngest fifty-five, the oldest ninety. They had died of, or were subject to, the following diseases:—

Lung disease in 21 cases (21·4 per cent.): phthisis, 12; bronchitis, 8; pleurisy, 1.
Neuroses in 10 cases (10 per cent.): apoplexy, 9; epilepsy, 1.
Cancer in 8 cases.
Dropsy in 4 „
Zymotics in 4 „
Heart disease in 3 „

Five of the mothers who had died of causes other than phthisis were, however, of phthisical families. Thus, of these 98 mothers, 17 were of decidedly phthisical families. Eight of the mothers died of cancer, and in 5 cases, though the mothers had not died of this disease, they were of cancerous families. Thus, of these 98 mothers, 13 were of decidedly cancerous families. In 25 cases the causes of death were unknown.

Consanguinity in parents.—As to this, inquiries were made in 20 cases. In 1 only were the patients blood relatives; in this case they were first cousins; there was no history of cancer or phthisis in either parent.

The patients' brothers and sisters.—In 56 families, one or more of the adult members had died of, or were subject to, the following diseases:—

Lung disease in 35 families: phthisis, 33; others, 2.
Cancer in 6 „
Zymotics in 6 „ typhoid fever, 2; scarlet fever, 2; others, 2.
Dropsy in 5 families.
Neuroses in 4 families: insanity, 2; apoplexy, 1; brain disease, 1.
Heart disease in 4 families.
Scrofulous affections in 3 families.

Of the families in which phthisis prevailed, more than a single member had died of it in 15. The number of children in each family was noted in 92 cases, with the result that the smallest family consisted of 1 (3 instances), the largest of 18 (in 2 instances), the average being 7·5.

The occurrence of cancer.—Of 108 families in which this [illegible] was specially investigated, there was a history of malignant disease in 23 families (21·3 per cent.); in 2 cases there was a history of non-malignant tumours. The relatives affected with cancer and the seats of the disease may be grouped as follows:—

[illegible]'s sisters (in 2 families): stomach, 1; face, 1.
[illegible]'s brothers (in 2 families): uterus, 1; arm, 1.
[illegible]'s cousins (in 1 family): breast, 1; neck, 1; [illegible].
[illegible] mother (in 1 family): uterus, 1.
[illegible] (in 6 families): uterus, 2; breast, 2; [illegible], 1; face, 1.
[illegible] sisters (in 6 families): uterus, 2; breast, 2; [illegible], 1; intestine, 1; abdomen, 1.
[illegible] brother (in 1 family): stomach, 1.
[illegible] (in 9 families): uterus, 5; breast, 1.
[illegible]'s daughter (in 1 family): uterus, 1.

In one case the patient's maternal grandmother, mother, mother's sister, and patient's two sisters, all died of cancer of the uterus. These 30 seats of the disease may be grouped thus:—Uterus, 12; breast, 6; stomach, 3; face, 2; all others, 7.

The occurrence of phthisis.—Of 101 families, one or more relatives had died or were the subjects of phthisis in 49, or 48·5 per cent. In 45 families more than a single relative had suffered from this disease. The relatives thus affected may be classed as follows:—

Father's father	in 1 family.
Fathers	in 17 families.
Father's brothers and sisters	in 14 „
Mothers	in 10 „
Mother's brothers and sisters	in 7 „
Patient's brothers and sisters	in 34 „

The combination of cancer and phthisis.—Of 101 families there was a history of both phthisis and cancer in 10. Thus:

Phthisis	Father's side in 5 cases.
	Mother's side in 1 case.
	Patient's brothers and sisters in 4 cases.
Cancer	Father's side in 1 case.
	Mother's side in 4 cases.
	Patient's brothers and sisters in 1 case.
Cancer & phthisis	Father's side in 1 case.
	Mother's side in 3 cases.

II. BREAST CANCER (135 Cases).

The fathers.—Of 108 cases, in 99 the fathers were dead, and in 9 still alive. Their average age at death, in 94 cases, was 62·5 years; the youngest thirty, the oldest ninety-three; 13 attained or exceeded the age of eighty. Of those still alive, in 7 cases the average age was 71·2 years; the youngest sixty, the oldest eighty-six. They had died of, or were subject to, the following diseases:—

Lung disease in 27 cases (25 per cent.): phthisis, 20; bronchitis, 7.
Neuroses in 10 cases (9·2 per cent.): apoplexy, 7; insanity, 2; cerebral softening, 1.
Heart disease in 10 cases (9·2 per cent.).
Zymotics in 6 cases (5·5 per cent.): cholera, 2; others, 4.

Cancer	in 4 cases (3·7 per cent.).
Dropsy	in 4 „ (3·7 per cent.).
Old age	in 3 „
Diabetes	in 1 case.
Ulcer of leg	in 1 „
White swelling of knee	in 1 „
Chronic rheumatism	in 1 „

Twelve of the fathers who had died of diseases other than phthisis were, however, of phthisical families. Thus, of these 108 fathers, 32 (29·6 per cent.) were of decidedly phthisical families. There were 4 deaths from cancer among the fathers, and in 7 other cases, though they had not died of cancer, they were of cancerous families. Thus, of these 108 fathers, 11 (10·1 per cent.) were of decidedly cancerous families. In 31 cases the causes of death were unknown.

The mothers.—Of 105 cases, in 89 the mothers were dead, and in 16 still alive. Their average age at death in 88 cases was 62·5 years; the youngest twenty-five, the oldest ninety-nine years and nine months. Of those still alive, in 12 cases the average age was 71·7 years; the youngest sixty, the oldest eighty-four. They had died of, or were subject to, the following diseases:—

Lung disease in 25 cases (23·8 per cent.): phthisis, 16; bronchitis, 5; pneumonia, 3.
Neuroses in 7 cases (6·6 per cent.): apoplexy, 6.
Dropsy in 7 „ (6·6 per cent.).
Cancer in 5 „ (4·7 per cent.).
Zymotics in 3 „ (2·8 per cent.): cholera, 2; typhoid, 1.

Liver disease	in 3 cases (2·8 per cent.).
Diabetes	in 1 case.
Spinal disease	in 1 „
Heart disease	in 1 „
Inflammation of bowels	in 1 „

Five of the mothers who had died of causes other than phthisis were, however, of phthisical families. Thus, of these 105 mothers, 21 (20 per cent.) were of decidedly phthisical families. Five of the mothers died of cancer,

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and in 11 cases, though the mothers had not died of cancer, they were of cancerous families. Thus, of these 105 mothers, 16 (15·2 per cent.) were of decidedly cancerous families. In 31 cases the causes of death were unknown.

Consanguinity in the parents.—Of 18 cases in which inquiries were made, there was a history of consanguinity in the parents in 3. In 1 case the parents were first cousins. The father died of phthisis, and the paternal grandmother of cancer of breast. In the other 2 cases the parents were second or third cousins. In one of these cases the father died of phthisis, and his mother of cancer of the breast; in the other there was no history of cancer or phthisis, but the father's father died insane.

The patient's brothers and sisters.—In 75 families, one or more of the adult members had died of, or were subject to, the following diseases:—

Lung disease in 37 families: phthisis, 33; bronchitis, 2; others, 2.
Zymotics in 10 families: typhoid fever, 3; small-pox, 2; others, 5.
Heart disease in 7 cases.
Dropsy in 5 „
Cancer in 4 „
Neuroses in 4 „ apoplexy, 3; cerebral softening, 1.
Scrofulous diseases in 3 „
Rheumatic fever in 1 case.
Diabetes in 1 „
Inflammation of bowels in 1 „

Of the families in which phthisis prevailed, more than a single member had died of it in 13. Of 90 families the average number of members was 8·5, the smallest 1 (single instance), the largest 17 (2 instances).

The occurrence of cancer.—Of 114 families, there was a history of cancer in 28, or in 24·5 per cent. The relatives thus affected and the seats of the disease may be shown as follows:—

Father's grandfather (in 1 family): nose.
Father's grandmother (in 1 family): breast.
Fathers (in 4 families): breast, lip, hand, internal.
Father's sisters (in 10 families): breast (5), mouth, internal, liver, face, scalp.
Mother's grandmother (in 2 families): breast, uterus.
Mothers (in 6 families): breast, uterus, tongue, internal; not stated, 2.
Mother's sisters (in 5 families): breast (4), internal.
Mother's brother (in 1 family): groin.
Sister of mother's father (in 1 family): breast.
Female cousin on mother's side (in 2 families): breast; not stated.
Patient's sisters (in 4 families): breast, 3; not stated, 1.
Patient's brothers (in 2 families): throat, back.
Patient's daughter (in 1 family): internal.

In 3 cases there was a history of cancer in the families of both parents. In 6 cases more than a single relative was affected. These 40 seats of disease may be grouped thus:—Breast, 18; "internal," 16; uterus, 2; all others, 13.

The occurrence of phthisis.—Of 112 families, one or more relatives had died or were the subjects of phthisis in 65, or 58 per cent. In 30 families more than a single relative had died of this disease. The relatives thus affected may be classed as follows:—

Both paternal grandparents in 1 family.
Paternal grandmother in 1 „
Both parents in 5 families.
Fathers in 14 „
Father's brothers and sisters in 17 „
Mothers in 11 „
Mother's brothers and sisters in 7 „
Patient's brothers and sisters in 32 „

The combination of phthisis and cancer.—Of 112 families, in 15 there was history of both phthisis and cancer. Thus:

Phthisis	Father's side	in	9 families.
	Mother's side	in	1 family.
	Patient's brothers and sisters	in	2 families.
Cancer	Father's side	in	1 family.
	Mother's side	in	10 families.
	Patient's brothers and sisters	in	2 „
Cancer & phthisis	Father's side	in	2 „
	Mother's side	in	3 „

THEORY OF CANCEROUS INHERITANCE.[1]

By H. PERCY DUNN, F.R.C.S.,
ASSISTANT OPHTHALMIC SURGEON AND PATHOLOGIST AT THE WEST LONDON HOSPITAL.

"As the births of living creatures," wrote Bacon in 1625, "at first are ill-shapen, so are all innovations which are the births of time." This, I venture to believe, is true in its application to the subject which it is my intention now to discuss. I believe that the pregnancy, so to speak, of the non-identity of cancer with heredity has begun, that the metaphorical embryo is satisfactorily developing, that time will enable us to chronicle a new birth in the history of a foul disease, and that in the future we shall be able to show unequivocally that there is no such thing as the hereditary transmission of cancer; and the facts, in my opinion, are accumulating to this end. What, if we cannot show directly that cancer is not hereditary, can the surgeon hope for from operative treatment? What more than despair can the suffering patient exhibit whose disease has been pronounced to be hereditary by the attending surgeon? These are matters to us confessedly of the greatest importance. When therefore we calmly weigh the direful results to which cancer as a disease gives rise, upon the grounds even of humanity, it is right that each particle of evidence bearing upon its supposed hereditary transmission should be sifted and exposed to the ptyalinistic effect of scientific research for the purpose of proving its value.

And now cancer is said to be hereditary—upon what grounds? The laws governing inheritance, as Darwin observes in the "Origin of Species," are for the most part unknown. It is impossible to say why the inheritance of family characteristics should be limited by age, sex, and conditions of life; and it is still more difficult to understand why in some instances a child, instead of inheriting the peculiarities of its parents, should resemble its uncle or aunt, grandfather or grandmother, or some ancestor even still more remote. It has been well said by La Place that the "surest method we can adopt for our guidance in the search after truth consists in raising phenomena by induction to laws and laws to facts," and it is conceivable that the adoption of this principle is admirably adapted for an inquiry which relatively is so obscure as the hereditary transmission of natural or morbid peculiarities. Heredity, nevertheless, is, as is well known, operative as a fixed principle in accordance with three definite and unvarying laws. There is, in the first place, direct heredity, where some peculiarity is transmitted immediately from the parent to the offspring; then we have indirect heredity, where the peculiarity is derived from an uncle or aunt; lastly, there is atavic heredity, where a child inherits some striking feature peculiar to its grandfather or grandmother, or which has been known to belong to some remote ancestor. Now, cancer is held to be hereditary because the disease has occurred consecutively amongst the members of certain families, and because its occurrence has been considered to be consonant with the principle of the hereditary transmission of structural peculiarities. Sir James Paget has observed—and I must apologise here for introducing his well-known statistics—that amongst the cancerous patients whom he saw at the hospital, one in six could give a family history of cancer. In the course of time he made similar inquiries amongst his private patients, and he then deduced the fact that one person out of every three who came to him with cancerous disease had knowledge of the previous manifestation of cancer in the family. With this record, unsupported as it may be by collateral facts, we stand thus: that cancer is apparently hereditary, and not only hereditary, but hereditary to a high degree. The evidence disclosed by these facts concisely expresses the grounds upon which cancer is considered to be hereditary, and, dealing with the question in a general sense, I will now proceed to state the reasons which impel me to dispute the conclusions to which statistics of this nature are calculated to lead.

In the first place, it is essential again to refer to the fact that the theory of cancerous inheritance is based simply and solely upon the consecutive appearance of the disease

[1] A paper read at the meeting of the West London Medico-Chirurgical Society on Nov. 6th.

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in certain families. Apart from and beyond this peculiarity it fulfils in no sense whatever the characters of an hereditary disease. "Heredity," says Quatrefages, "which is essentially a preserving agent, becomes an agent of variation when it transmits and accumulates the modifying actions of the conditions of life."[2] Does cancer, I may ask, become an agent of variation? Do the conditions of life which we believe to be favourable to the production of the disease in any way impress themselves upon the human offspring sufficiently to enable us to recognise any influence of heredity in their appearance? Is there such a thing as a cancerous diathesis, equivalent to what we understand by the gouty diathesis, the tubercular, or the syphilitic? Occasionally a child is born whose parent before lactation is completed becomes the subject of cancer of the breast. Now here, in the midst of a disease which is active, is it not natural to expect some impress of it, if nothing more, to be visible in the offspring? But are we able to say, Here is a child who will become cancerous, or because the child's parent was cancerous therefore it will suffer in this way or that? No; a child inherits no pains or penalties from a cancerous parent. It possesses no special, pathological, or structural features which might have come to be regarded as pathognomonic of cancerous disease. It does not necessarily exhibit any ill-health or differ in any respect from a healthy child born of healthy parents. And what is true of the child is true also of the adult. Therefore the conclusion seems obvious and indisputable that, whilst syphilis, gout, and tuberculosis, which are correctly described as constitutional diseases, permanently modify the structure and functions of the body, cancer cannot be included in this category, for, commencing as a local disease, its effects, it is true to say, are never transmitted. A man may be gouty without having had an attack of gout, the origin of his gout having been hereditary. A man may suffer from the effects of inherited tuberculosis without being actually tubercular. A child may be syphilitic in its face, in its teeth, in its eyes, without being actively syphilitic, the disease having been derived by inheritance and remedied at the time by treatment. These are examples of diseases which are unquestionably hereditary; and in the case of cancer, assuming it to be hereditary, analogy would lead us to expect a similar condition of things to prevail. But no. There is no such thing—even in the most recent text-books on medicine—as, say, a cancerous stomach, a cancerous neuralgia, a cancerous ache or pain, without cancer. A person is either cancerous or he is not, and he is not so until he becomes so by exhibiting unequivocally in some organ or part the disease in its primary form. It is clear, then, that if he has inherited cancer he has not inherited much. For, obviously, cancer must be an exceptionally benign disease—before it becomes cancer—in those cases, indeed, in which it is believed to be inherited. For a man with an inherited cancerous taint must patiently wait until the near approach of the last scene of all which ends his strange eventful history, before his morbid patrimony can become an accomplished fact. Now there is something here which calls for special comment. Either the man is exceedingly accommodating for being good enough to wait, or the disease is to be specially commended for exercising such patience. It is pleasant to be able to record this fact. The disease exhibits a feature here which enables us to assign to it even a personality which is worthy of example. Sometimes, however, man frets it into activity before its time by smoking clay pipes and rummaging about in soot. But then, in these cases, of course he has only himself to blame. Those of us who are convinced that cancer is hereditary must unquestionably admit that, to use a commonplace phrase, the disease is generally called upon "to play a waiting game." But is this belief scientific—is it philosophical? I hold that it is not so.

Now it will appear plain from all these remarks that I emphatically oppose the belief in the hereditary transmission of cancer. Well, this is precisely the case. I deny unconditionally, upon grounds which seem to me to be incontrovertible, that the theory is tenable. In other words, to formulate my opinion, I hold that cancer as a disease is never transmitted. But, if cancer as a disease is not hereditary, in what manner can the occurrence of consecutive cases of the disease in certain families be explained? It is possible to reply to this in two or three ways, and the first which I will consider here is that of predisposition.

[2] "The Human Species," International Scientific Series, vol. xxvi., p. 258.

Now I am not sure that it is not impossible to inherit a a predisposition to cancerous disease. It may be that parents are able to transmit to their offspring a predisposition to cancer. But what is the inheritance of a predisposition in comparison with the inheritance of a disease? They are two vastly different things. The one can be made to perish by rendering the surroundings inimical to its existence; the other is a reality, an unalterable fate. It is by no means true universally that heredity implies simply a tendency to this or that disease.[3] Does the new-born infant of syphilitic parents inherit simply a tendency to syphilis when its wizen appearance, its scaly eruption, the gross display of colour on its nates betoken the active transmission of its parent's disease? Such an infant, if it survived, would in after-years—nay, indeed, throughout life—display to the observant surgeon, not the tendency which had come to it by inheritance, but the fate to which it had been born. Now what is predisposition, resolved into its simplest terms and reduced to a definition founded upon scientific fact? It is almost impossible to define it. Presumably it implies some transmitted functional insufficiency of organs as a whole or of tissues as a part. There need not probably be any particular structural departure from normal growth, but conceivably simply a diminution of vitality, an inherent want of power in some organ or part which has followed as the result of particular or general disease in the parent. Analogically, perhaps, predisposition may be described as the shadow of a disease, as a disease without its substance—the reflection, as it were, in the offspring, distinct from the repetition, of the morbid types common to one or both parents. It is, however, impossible to generalise, except to a very small extent, in matters relating to the hereditary transmission of morbid peculiarities; and consequently conjecture carried further in this direction would be more prone than otherwise to lead us into error. Common experience has taught us the power we possess of causing the inherited tendency to a disease to subside by adopting certain measures of precaution which are known to be inimical to its existence. This fact is too well known to require more than simply mentioning; but it is not possible to over-estimate its importance, and I will here briefly refer to its application in regard to cancer. It is indisputable that if we admit categorically that cancer as a disease is not transmitted, there is some reasonable hope for believing that some check could be placed upon it by turning attention to the causes and conditions with which it invariably seems to be associated. The strongest element undoubtedly in the production of cancer is age. With this of course we could not deal. But even the most favourable age, together with, if you will, the strongest family history of cancer, would, I firmly believe, not be sufficient to provoke the disease without some extraneous condition, which perhaps should be described as an exciting cause. And in relation to the various causes and conditions with which cancer is allied we have now an accumulation of facts, some of which up to the present are certain, and the rest reasonably possible. Statistics to which I have elsewhere drawn attention have unmistakably shown that the geographical area within which these islands is included is highly favourable to the disease.[4] Upon these grounds, therefore, it is evident that the prevalence of cancer amongst us depends primarily more or less upon this fact. Cancer, therefore, in England should be regarded as a racial disease, as distinct from a disease of the individual. By virtue of the climatic surroundings of England it is probable that English people as a race are inherently much more liable to cancer than the inhabitants of, say, the Faroe Islands and Iceland, in which the disease is said to be unknown. This susceptibility undeniably forms a part of the national family likeness. It has its counterpart, to name only a single example, in the immunity from yellow fever enjoyed by negroes and their half-breeds. Thus, regarded in this light, the predisposition to cancer in England being racial in its origin, and not individual, the primary origin of the disease in the large majority of persons who suffer from cancer amongst whom no family history of cancer can be traced, may be in some respects explained. And perhaps it would be expedient for those families in whom cancer has appeared more than once to emigrate to some Elysian district in the world where the

[3] British Medical Journal, Sept. 26th, p. 607.

[4] An Inquiry into the Causes of the Increase of Cancer (British Medical Journal, April, 1883).

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disease is unknown. If this should be ineffectual something different could be tried. Cancer leaves savages alone—that is, uncivilised men and women. To return to a primeval condition would certainly in these days be a novelty, and I commend the suggestion to those who are in search of such things. It would have some advantages, and might prove popular for a time; but it is doubtful whether the wild man would appreciate the experiment or reciprocate the feeling of gratification of which all things novel become the source.

I will now briefly discuss the relation of cancer in regard to the social position of the patients. What do we learn? Taking Gross's statistics as an example, we find that out of 712 women with cancer of the breast, 88·22 per cent. were or had been married. Of these, 83·91 per cent, had borne children and 16·09 were sterile, while 11·77 were single. What a remarkable statement is this! We are here again brought face to face with the astounding influence exercised by fecundity upon cancer. It is almost certain that if every virgin in England at this moment maintained her *status quo ante* in this respect until the end of her natural life the female mortality from cancer in the future would be infinitesimal in comparison with present records. The question of marriage is thus an eminently important one in relation to cancer as far as the female is concerned, and yet it is one obviously far beyond the influence of politicians, moralists, or surgeons.

Let me now, however, draw attention to the somewhat remarkable fact that in those families whose cancerous history has been quoted as evidence of the hereditary theory, the disease has almost invariably been transmitted in the female line. I say almost invariably, because of course there are exceptions to every rule. Thus in Warren's case, in Paget's, in Velpeau's, in Broca's, the female members of the families concerned predominently—almost entirely—suffered from the disease. Before, however, determining the question of hereditary transmission in these cases, it is perhaps as well to take into consideration certain factors which it is scarcely possible to overlook. For instance, we know that cancer as a disease is not limited in its appearance to one sex. It is true that it is more common in women than in men, but the truth of this only extends as far as the fact that women possess a uterus and functionally active breasts, for both of which organs the disease exhibits a marked predilection. In short, then, assuming the disease to be hereditary, it should be transmitted equally to both sexes, and not expend its virulence upon the female line alone. Again, all women who have borne children are liable to cancer, as statistics have abundantly shown. Furthermore, the briefest experience of cancer in women is sufficient to reveal the wholesome dread and misgiving with which the disease is regarded, and it is quite comprehensible that the sympathy and mental disturbance excited by a suffering relative succumbing by slow degrees from cancer of some organ might readily become the *fons et origo* of the disease in another member of the family. Thus the inexorable logic of facts compels the conclusion that if cancer can be met with frequently without any hereditary history, heredity can scarcely be regarded as exercising any potential influence in its production, more especially in those cases where other and more important factors are present, with certain of which the disease is always inseparably associated.

In bringing forward these facts and opinions—and I am bound to admit that the latter predominate—I have not endeavoured to exhaust the subject to which they relate; but rather my object has been to extract the most salient features of the case, and appear as a counsel with his brief urging the claims of a client in whom he has more than an ephemeral interest. The advocacy of a cause of this nature involves the discussion of many complex topics; it necessarily deals with problems of science, of which the solution cannot be too frequently essayed; it leads the inquirer into many a cul-de-sac of pathology, from which it is often a difficult matter to effect a graceful retreat. But whether or not we shall ever determine the influence of heredity upon cancer depends confessedly upon whether or not we are prepared to sink the belief which has been bred of unsupported facts, and to struggle onwards patiently seeking and hopefully expecting some gleam of light to disperse the obscurity of the pathology of the disease.

The Sanitary Committee of the Bristol Town Council have adopted Sir J. Bazalgette's recommendation respecting the disposal of the sewage of that city.

ON THE

IMPLICATION OF THE MASTOID BONE IN EAR DISEASE.[1]

BY SIMEON SNELL,

OPHTHALMIC SURGEON TO THE SHEFFIELD GENERAL INFIRMARY AND TO THE INSTITUTION FOR THE BLIND.

AMONG the more important diseases affecting the hearing apparatus must be counted those attacking the mastoid process, occasioning as they do in many cases danger, and giving rise to very proper alarm. In this communication I purpose recording cases from my own practice, which will indicate varieties as to the manner and degree in which the process is affected, and will illustrate also the methods of treatment pursued. It is only rarely that the mastoid process becomes the seat of disease independently of an affection of the middle ear; Mr. Pierce, of Manchester, has, however, recorded[2] an instance in which suppuration in the process occurred without implication of the tympanic cavity; other cases are also reported, but they are far from common. Generally speaking, there is associated disease of the middle ear, either of an acute or frequently of a chronic character.

Discharges from the ear are, it is well known, by no means infrequent; and patients so suffering constitute a good proportion of those seeking treatment in aural cases, and their number would be largely increased if the importance of attention to and the danger of neglecting such cases were recognised. It is high time the old fable that such discharges had better not be stopped be driven out of the heads of the public, opposed as it is to sound surgical teaching. "It is even," says an American aurist,[3] "gravely asserted that such a discharge is salutary, as if our Creator would not have made the human race with such a one if it were necessary." The offensive character of the discharge, which renders him a nuisance to others, is occasionally the reason that induces a patient to seek advice; but, whatever the cause, it is clearly our duty to counsel steady treatment until the ear is in a healthier condition. In conscientiously fulfilling our duties, however, we not uncommonly labour under disadvantages. Patients have been accustomed in many cases to treat the matter with such levity that the frequent consultations or continued attendances are, it would seem, viewed by them as a means to an end, the object being to put fees into the medical man's pocket. It is thus difficult in some cases to keep patients under observation sufficiently long to render all the services of which our art is capable. It is no part of my subject to enter into the various causes of discharges from the ear, nor of the dangers associated with such conditions; but I have dilated thus widely on this matter because of the close connexion between such states and the subject under consideration. A free exit to all tympanic discharges is a matter of the first importance. The late Mr. Hinton observed:[4] "When threatening symptoms declare themselves, such as rigors, with or without ceasing of the discharge, pain in the ear or side of the head, giddiness, fever, or loss of power of any of the muscles, the aim of the treatment is simple—namely, to subdue any newly arisen inflammation, and, above all, to secure a perfectly free exit for pus, wherever it may be. In the vast majority of cases, impeded discharge is, or has been, the primary cause of the evil." The truth of these words will be exemplified in the cases about to be related.

In the first place let me refer to the case of a man, aged about twenty-five, recently under my care. He had been the subject of ear disease for about four years, coming on after picking the left ear with a pin, and injuring, as he was told at the time, the drum. The left meatus was filled with a polypus; and he complained, moreover, of giddiness, pain in the ear, over the mastoid, which was also a little tender, and over the head, and he suffered from sleeplessness. The meatus was cleared of the polypus. The Eustachian tube was pervious, but at first, with Politzer's bag, no air passed externally because the orifice in the tympanum was closed

[1] A paper read before the Sheffield Medico-Chirurgical Society.
[2] THE LANCET, 1875, vol. i., p. 11.
[3] Roosa: Treatise on Diseases of the Ear, p. 363.
[4] Questions in Aural Surgery.

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by the polypoid condition of the cavity. A little later a large piece of bone from the tympanic wall was removed. Boracic acid lotion was used; and with the re-establishment of a ready exit for pus by the Eustachian tube and external meatus, the symptoms, pain, giddiness, &c., rapidly disappeared, and the discharge ceased.

The next case, also, is an example of involvement of the mastoid, which threatened to be serious, with stoppage of the discharge and subsidence of the symptoms, when exit for the discharge was re-established.

A young girl, aged fifteen, was sent to me by her medical attendant on April 13th, 1883. Her history was briefly this. About two years before she suffered from pain in the left ear, and it is said to have "gathered and burst." In a short time the discharge ceased. About six weeks before coming to me she had sore-throat, and when this had subsided, intense pain again commenced in the ear, which began to discharge, and afterwards ceased. When discharging the ear was free from pain, but directly it stopped the suffering was distracting. It came on in this way, discharging and ceasing five or six times. For some little time there had been swelling behind the ear, and recently it had become worse, and the pain was very severe. She had had very little sleep for three weeks. Examination showed over the mastoid and upper part of the neck a good deal of swelling, not much redness, but it was tender to the touch. There was pus in the ear, but the meatus was so occluded by swelling that a good view far down was impossible. The Eustachian tube was pervious, and the membrana tympani was perforated.

Here let me draw attention to a symptom which is very characteristic of mastoid inflammatory mischief. Allusion is made to the peculiar way in which the external ear loses its manner of lying more or less flat, and stands straighter out, and forms something of a right angle with the head. It should at once attract attention and suggest an examination of the mastoid. Little or no mention is accorded to this condition in books.

To return to our case. It appeared very probable that operative measures might be required, but, in the first place, the following line of treatment was decided upon, and was eminently satisfactory. She was confined to her room; poppy fomentations were frequently applied to the mastoid, and it is believed leeches as well, but the notes do not mention it; boracic acid lotion, warmed, was used for cleansing the ear, the importance of which was duly urged, and inflation with Politzer's bag was employed. A gargle was ordered also for the throat. Under these measures the mastoid swelling and pain rapidly disappeared, and she was soon out of my hands.

Another case under treatment at the same time was very similar to the one just related. There was not, however, in this case the marked obstruction observed in the other, but the mastoid affection subsided under the same treatment.

In April, 1883, a young man came to me. He had suffered in the right (?) ear for two weeks previously—the result, as he thought, of "cold." It commenced as a tickling in the ear, and later on a discharge from the meatus began. Then he suffered from pain behind the ear, which was very severe, and could not sleep. The pain in the ear had never been of a severe character. When seen by me the mastoid was somewhat swollen and puffy, and tender to the touch. Here the same line of treatment was pursued as in the last case. Leeches were applied to the mastoid, a lotion of Condy's fluid was employed for cleansing the ear, and the air douche was used for securing the perviousness of the Eustachian tube. The symptoms speedily subsided.

The instances just related have been those in which the implication of the mastoid has been only slight compared with what in many is the case. The prognosis is favourable, Politzer says, when there is a sufficiently free escape of pus from the tympanic cavity and from the external meatus. For this reason cleansing of the ear is an important part of the treatment. Boracic acid is my favourite lotion, but Condy's fluid, carbolic acid, and other lotions are admissible. The tympanum may be cleansed by the catheter in the Eustachian tube, a plan Politzer recommends, but it is out of the question with children. Internal medications are most valuable; iodine and belladonna seem also to act well in some cases.

As has been said, there are cases in which the symptoms are much more intense than those already referred to. The swelling over the mastoid region may be very great, extending into the head above and into the neck below; and the skin may be reddened, brawny, and œdematous. Moreover, the pain suffered may be of the most intense character, and there may be associated pyrexia, delirium, and other alarming symptoms. The extent and danger of the implication of the mastoid is not, however, in all cases to be measured by the amount of swelling on its surface.

On May 1st, 1882, a middle-aged clergyman from a little distance consulted me, under the following circumstances. Eight weeks previously he awoke one night with "earache," which continued very severe for four or five hours; he noticed a "crack" in the ear, and then a discharge came from it of a very offensive character. Latterly he had suffered from throbbing over the mastoid and side of the head. At the time of his visit there was no discharge from the ear, and the membrana tympani had healed. A watch (hearing distance forty inches) was heard only in contact; the Eustachian tube was pervious, but hearing was not improved after the passage of a catheter. There was no appreciable swelling over the mastoid, but firm pressure elicited a little tenderness. I communicated with his medical attendant, expressing the opinion that there had been suppuration in the tympanum, that there had been extension of the disease to the mastoid, and that, if suppuration in the cells had not already taken place, the condition was such that operative interference might at any time be demanded. It was not until May 16th that news of his progress reached me; his medical man, writing at that date, stated that his condition had not improved, but that the mischief in the mastoid cells had extended. On the 17th I visited him, together with his medical attendant and a medical relative. His condition was found to be rather alarming: pain of the most intense character was felt in the mastoid region and head, sleep had been absent, and there were delirium and pyrexia. The mastoid region was much swollen, tense, and brawny, but with only an indistinct feeling of fluctuation; the swelling extended above into the head and below into the neck. It was decided to cut down on to the mastoid, and if necessary to perforate the bone. Accordingly, under ether, a free incision was made behind the ear through the thickened tissues; about a dessertspoonful of pus immediately escaped, and the bone was found eroded and readily gave way. Free poulticing of the wound was advised. No opportunity has occurred of my again seeing the patient; but on the 19th his medical attendant wrote to me, saying that he was doing well, and he ultimately made an excellent recovery.

A somewhat similar case[7] to this I related before the Society a few years ago, and will only make brief reference to it now. The symptoms were just as severe and urgent in a man aged forty as in the one I have just mentioned. On cutting down to the mastoid a little pus escaped, and with a director an opening was found in the bone. The director was pushed further into the mastoid, and the opening was enlarged by levering it about in different directions; pus then freely escaped. He made a rapid recovery.

Recently I have seen with a medical friend the mastoid involved in two little sisters—delicate strumous children. In both the primary tympanic mischief was recent. In the elder, aged five, the swollen and tender mastoid subsided under warm poppy fomentations, cleansing the ear with boracic lotion, and inflation with Politzer's bag, together with a chlorate of potash gargle for the throat. In the younger, aged three, the course was different. She had suffered a little from earache and discharge for a few days, but it was only on January 23rd that she complained of actual pain. The next day this had increased, and my medical friend discovered that the mastoid was implicated. Warm poppy fomentations and boracic acid lotion for the ear was prescribed as in the last case. At our consultation the following day (January 27th) the ear was noticed to be straightened out from the head, and there was considerable swelling and tenderness over the mastoid; there had been rigors and pyrexia, and the child was much upset. Politzer's bag was used and the treatment continued. By the 29th the condition was worse. Under chloroform an incision was made down to the bone; a little pus escaped, and the bone was eroded. Poultices were applied to the wound, which was also syringed with boracic acid lotion; the treat-

[illegible] Diseases of the Ear (English translation), p. 560.

[illegible] some time since, and no mention has been [illegible]

[7] THE LANCET, 1881, vol. i., p. 410.

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ment for the ear was continued. The symptoms quickly subsided. I have since heard that a piece of necrosed bone has come away.

Another variety of cases may be unattended with swelling over the mastoid, and these are often among the most serious. The localised pain may be as intense as, or more so than, in any of the foregoing instances, and there may or may not be tenderness on deep pressure. The constitutional disturbance may be great, and whilst suppuration is taking place in the mastoid cells the unhappy state is aggravated by the inability for the imprisoned pus to find a mode of exit. These are among the extremely grave instances of implication of the mastoid, and it would appear not unlikely that the real nature might be overlooked or confounded with meningitis or some cerebral disorder. At all events, they are a class of cases that demand very decided treatment, the importance of which has been urged by Hinton, Dalby, Troeltsch, Politzer, and a host of others. The case next related caused my friend Dr. Martin (with whom I saw the patient) and myself to fear at one time that it would be of the serious nature just indicated, and was one of considerable anxiety.

The patient, a young gentleman of about twenty-three years, was first seen by me in 1877. Twelve years before he had had scarlet fever, and had since suffered from discharges from the ears. Both drums were destroyed; the lining membrane of the right tympanum was villous-looking. The left ear heard the watch on contact, the right at two inches ($\frac{2}{6}$). There was obstruction of both Eustachian tubes. This part of the case may be left with stating that with Politzer's bag and catheter the Eustachian tubes were rendered pervious, and at the end of a month the discharge had ceased, a result which held good when seen again some time later. On Feb. 2nd, 1883, Dr. Martin asked me to see him. He had just recovered from an attack of broncho-pneumonia, and a few days before my visit he had been seized with pain in the right mastoid; this had been of a very severe character, and had occasioned much loss of sleep. Leeches had already been applied with some temporary relief, and so had warm fomentations, and the application also of belladonna extract, with similar benefit. In spite of these remedies, however, and chloral as well, the suffering became aggravated. When I saw him the pain was confined to the mastoid, from which it ran into the jaw, especially the inferior maxillary articulation. It was at times less severe than at other times. There was no swelling to speak of over the mastoid, and only deep pressure elicited tenderness. The discharge from the ear had not been great. The ears were inflated with Politzer's bag, and boracic acid lotion was ordered; otherwise, the local applications were continued, and leeches, from which the patient appeared to have derived some relief, were re-applied. The next day he appeared, if anything, a little relieved; but this proved to be merely a temporary subsidence, for when we met again on the 6th his symptoms were aggravated, and it was decided to do what we had discussed at the outset—viz., cut down over the mastoid on to the bone. This was accordingly done, the patient preferring to have it performed without an anæsthetic. The incision, about an inch and a half in length, was carried through the periosteum; bleeding was encouraged, poultices were applied, and measures were taken to prevent the early closing of the wound. Great relief was immediately experienced, his symptoms soon disappeared, and we had the pleasure of seeing him before long restored to convalescence.

Enough has been said respecting the foregoing cases to indicate the different ways in which the mastoid process may suffer. They have been grouped thus rather than separated into periostitis or suppuration of the mastoid, because in practice the cases run much into each other, and it appeared better to consider the treatment necessary as a whole.

This is not the occasion to refer to the treatment of chronic ear discharges, which is a subject of itself more than long enough to occupy as much space as the present communication. The importance of maintaining a free exit for the discharges both from the Eustachian tube and the auditory meatus has been already urged. If the perforation in the drum-head is very small, it may be well in certain cases to enlarge it. My experience, moreover, with incision of the membrana tympani is such that I am convinced that many membranes which, left alone, would have become perforated or destroyed, have by a timely puncture been restored. It is not often easy to see a case at the best time for the incision, but I think it likely that in scarlet fever especially, if the ear complication is looked for and the membrane incised at the right moment, an exit will be given to the pent-up pus and in many cases the tympanic membrane saved, and this, it may be, at a time when the Eustachian tube is closed by the pharyngeal lesion and Politzerisation is rendered difficult or impossible. In a case of this kind which I saw with a medical man a year or two ago one membrane had perforated and the other seemed on the point of doing so. The latter was incised, and Politzer's bag used, and it was learned afterwards that speedy recovery ensued.

A few words as to the incision over the mastoid—Wilde's incision, as it is called, after the eminent Dublin surgeon. It is an operation generally recognised as of great value. In the last case related it was performed with the previous clear understanding that it was quite probable the mischief was in the interior of the bone, and that it was done to see the benefit the incision alone would render, and to obviate if possible the more serious procedure of opening the mastoid cells. No pus came away, and the beneficial result would appear to have been caused by relieving tension, by opening the periosteum and giving relief to the inflamed bone beneath. In cases in which the mastoid is tender the incision affords benefit. In the instances also mentioned here in which it was used it gave relief either by freeing pus or by giving a means of exit to suppuration in the bone. After making the incision it is a good plan to examine the condition of the bone; it may have already perforated, and the opening may be enlarged with a probe or other means, or it may be thinned and be readily penetrated by the knife. It is an interesting fact, attested by many surgeons, that chronic ear-discharges often cease after the mastoid process has been opened. The aperture, if large enough, is a convenient way for cleansing the tympanum by syringing through the latter. The condition of the mastoid bone itself must materially influence the inflammatory process set up in it. It is well known, for example, that the mastoid is absent in the new-born child, though Politzer in the first years of life has found it as a "considerable blunt protuberance." Then, as to its internal structure, it does not always consist of air-cells, but the interior may be often entirely or in part occupied by an adipose or compact osseous substance. Zuckerkandl[8] has pointed out that, among 250 temporal bones he examined 36·8 per cent. had the mastoid process entirely pneumatic; 43·2 per cent. partly pneumatic and partly like diploë; and in 20 per cent. it was composed of sclerosed osseous tissue. Politzer states that it is impossible to ascertain in a living person the anatomical condition of the mastoid, and it is only at the time of an operation in the process itself that its nature is revealed. Another point of moment is the varying forward position of the sigmoid fossa in which lies the lateral sinus, for this is of great importance in connexion with an operation for perforating the mastoid. Thus "Hartman[9] found in 100 cases, through the variable position of the sigmoid fossa, which appeared to be shifted forward to a considerable extent in many cases, as also through the middle cranial cavity lying lower than usual, the transverse sinus was wounded twice and the middle cranial cavity three times at the opening of the antrum mastoideum from without." In any operation, therefore, it is desirable to keep as far forwards as possible, making the incision at or just behind the attachment of the auricle. Politzer employs a second incision, prolonged backwards from the upper end of the first, forming in this way a flap. The direction subsequently for penetrating the bone and reaching the antrum mastoideum would be inwards, upwards, and forwards. For opening the bone a trephine has been used, and also a chisel, straight and hollow, with mallet, have been employed. I have generally gone to a case provided with these instruments, but I am disposed to adopt a perforator with a stop to regulate the necessary depth, such as Mr. Dalby has recently advocated. Left to themselves, cases of mastoid suppuration may perforate inwardly and set up meningitis, or, through the lateral sinus, thrombosis. At the same time there is a greater tendency to come outwards, and if timely aid is unsought, pus may burrow under the muscles of the head or neck and perforate at some distance. More or less caries often results, but it is not uncommon to see scars on the mastoid, the evidence of former disease, which has been recovered from.

[8] Politzer: Treatise on Diseases of the Ear, p. 549. [9] Ibid., p. 550.

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In this practical review of the way the mastoid process becomes implicated many points have been necessarily omitted. Internal medication has thus received no proper notice, and I will only say that I believe sulphide of calcium, which in my hands has been such a satisfactory remedy in strumous ophthalmia,[10] will be found useful in chronic ear affections in scrofulous subjects.

ON A

METHOD OF CONTROLLING BLEEDING DURING COMPLETE OR PARTIAL EXCISION OF TONGUE.

BY JORDAN LLOYD, M.B., F.R.C.S.,
SURGEON TO QUEEN'S HOSPITAL, BIRMINGHAM.

I AM not about to inflict on the profession another mode of tongue removal. Too many operations for this purpose have already been devised and executed; several of them doubtless being excellent, and possessing certain advantages in particular cases. From amongst the whole number I should single out Kocher's probably as the best where the entire organ is to be eradicated; and in those very rare cases where unilateral excision only is called for, removal by the mouth with scissors as suggested by Whitehead (after splitting the organ as advised by Morrant Baker) is the plan to which I should give preference. I have no love for cauteries or écraseurs in tongue excision; they so frequently betray us by failing to realise the only advantage which can possibly be claimed for them—viz., the prevention of hæmorrhage. In all operations on the tongue bleeding has been the factor most difficult to combat. I believe that the procedure described below will reduce our trouble from this source to a mere trifle, for when it is properly carried out the tongue may be cut through at its root with knife or scissors without any blood loss whatever. Before attempting this procedure I would invite the surgeon to familiarise himself with the glosso-epiglottidean pouch, by palpation with an index finger introduced into its deepest part and another placed outside between the hyoid bone and the under surfaces of the angles and rami of the lower jaw. It is surprising how little tissue intervenes between the fingers, and how distinctly the various structures in relation to this space can be identified.

Chloroform having been administered, gag the mouth widely open, introduce the left index finger well to the bottom of the glosso-epiglottidean pouch, defining clearly the hyoid bone with its cornua, the front of the epiglottis, and the back of the root of the tongue. Take a stout, long, well-curved needle in handle, threaded with medium-sized whipcord, and enter it from the front of the neck in the middle line immediately above the hyoid bone; feel for the point of the needle with the left finger as the instrument is pushed through the root of the tongue. In this way the epiglottis is protected from injury, and nothing more than the lingual tissues are transfixed. Hook up the loop of thread with the left finger, and pull it well through and out of the mouth. Withdraw the needle, liberate the thread from it, and cut through the loop. Now enter the empty needle at the same point of puncture, through the skin only, and pass it subcutaneously—say to the right—until its point is opposite the upper border of the root of the great cornu. (This step is facilitated by pinching up the skin and pulling it outwards away from the needle.) Care must be taken that the needle runs immediately beneath the skin, so as to be outside and well away from the lingual artery. Now turn the point inwards above the great cornu, so as to enter the bottom of the side of the pouch, the finger having again been introduced to receive the point of the instrument. Thread one of the ends of the cord which is in the mouth through the needle and withdraw. A loop will in this way have been made around the root of the right half of the tongue; its two ends emerging from the median puncture are to be tied tightly enough to control circulation (best ascertained by feeling for the pulsation of the lingual vessel on the under surface of the tongue). A similar proceeding is to be carried out on the left side, and then the whole tongue will be secured in two separate halves. There is no real difficulty in the operation. The guiding finger in the pouch enables us to recognise all the structures concerned with the greatest confidence and accuracy. The only possible danger is that of passing the needle too far backwards in the second puncture, thus wounding one or other of the carotid arteries. I can only conceive this occurring in careless hands in very thick necks. Instead of entering the needle the second time at the first puncture, the surgeon may, if he chooses, make a fresh puncture altogether, at a point external to and immediately above the root of the great cornu, and may push the needle straight through into the pouch, thus avoiding the subcutaneous manipulation. The encircling ligature will then include the external skin between the points of puncture, which may slough if the ligature is pulled too tight or allowed to remain on too long. I have practised both methods, and have seen no bad effects follow. I have cut through tongues after the application of these ligatures with knife and with scissors, and in all my incisions have been absolutely bloodless. After the tongue is removed and the lingual arteries securely tied, the ligature of one side is to be liberated, and any bleeding points which then appear are to be tied; afterwards the other ligature is to be removed. When the median puncture only is made, as in the first method described, the loops must be cut through from the mouth by passing a blunt-pointed bistoury beneath them where they lie in the pouch. In the second method the loops must be cut through externally over the included skin. It is important to see that the threads are not twisted before beginning the second punctures, otherwise the loops engage the one in the other. This makes no difference to the efficient control of the circulation in both sides of the tongue collectively, but when the time comes to remove the threads the division of one will slacken the other, and thus liberate the smaller vessels in both sides at the same moment.

I first tried the above method on October 20th, 1883, and succeeded in completely removing a cancerous tongue without any loss of blood from the tongue tissue itself. In this case, after my ligatures, I performed Whitehead's operation with scissors. My last case was done a few weeks ago, on a patient sent to me by my friend Mr. T. Law Webb, of Ironbridge. I then removed the whole tongue within half an inch of the hyoid bone, without the loss of a single minim of blood from the lingual tissue until after the removal of the ligatures. So effectively was the circulation controlled that, when the tongue had been liberated from its lateral attachments, I cut it away with a single sweep of a bistoury, the stump remaining as dry as in an amputated limb surrounded with an Esmarch's ligature.

[10] The Practitioner, 1882.

ALBUMINOMETRY AND ESBACH'S TUBES.

BY J. E. BLOMFIELD, B.A. OXON.,
RADCLIFFE TRAVELLING FELLOW.

THE usual method for the quantitative determination of albumen in the urine in the course of clinical work must be regarded by everyone as unsatisfactory. It consists generally, according to my experience, in boiling a test-tube about half filled with the urine, allowing the coagulated albumen to subside, and then getting by sight a rough estimate of the proportion of the albumen to the amount of urine employed, which must necessarily vary with the idea of the proportion according to the observer, where one person would call it an eighth, another would say a tenth, and so on. There is a method used as clinical routine in many of the French hospitals, which is in every way as convenient as this, but which yields results possessed of numeric accuracy, and which serves to give a good idea of the actual amount of albumen a patient is losing by his urine. The method was devised by Dr. Esbach, and consists in the precipitation of the albumen by means of picric acid. After standing twenty-four hours, the precipitated albumen reaches a certain height in the tube, and it is according to height to which it reaches that the amount of albumen is determined. The tube is empirically graduated in such a way that the number to which the precipitate reaches gives directly the grammes of albumen per litre of urine. The reagent for precipitation is made by dissolving ten grammes of picric acid and twenty grammes of citric acid in 800 or 900 c.c. of boiling water, and then adding sufficient water to make one litre. Urine is

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poured into the tube up to a certain mark, the reagent added up to another mark, and then the tube is inverted about a dozen times to mingle well the contents, and placed in the vertical position for twenty-four hours, when the height to which the subsided precipitate has reached gives the grammes of albumen per litre. The tubes can be procured for three or four shillings from Brewes Frères, 43, Rue St. André des Arts, Paris.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

KING'S COLLEGE HOSPITAL.

COMPOUND FRACTURE OF THE HUMERUS IMPLICATING THE ELBOW-JOINT; RECOVERY WITH USEFUL JOINT; REMARKS.

(Under the care of Sir JOSEPH LISTER, Bart.)

BEFORE the introduction of the system of antiseptic treatment, introduced and perfected by the surgeon having charge of this case, such an injury would most likely have resulted in the loss of the limb. Had the operator, taking into consideration the youth of the patient, attempted to save the arm, as was here done, the amount of dirt ground into the wound would have inevitably caused suppuration in and around the joint. This would have ended either in the performance of secondary amputation or in ankylosis of the elbow, supposing the patient to have escaped the danger of septic absorption to which he would have been exposed. In this case there was no suppuration, no pain during the after-treatment, and the usual movements were restored. The following notes are supplied by Mr. R. C. Priestley, house-surgeon.

James W——, aged sixteen, was admitted into the Victoria ward on August 9th, 1885, suffering from an injury received through his arm being caught between two revolving wheels of a machine. On admission there was found a lacerated wound three or four inches long on the outer side of the elbow-joint. The muscles arising from the outer condyle were exposed and lacerated, and the external condyle was separated from the shaft of the humerus, and lay loose in the wound; the ligaments about the elbow-joint were so much torn that the finger could be introduced between the articular surfaces of the humerus and ulna with ease. The forearm and exposed muscles were begrimed with machine oil, the whole wound being in a terrible state of dirt.

The patient was put under the influence of an anæsthetic about three hours after the accident. Some ordinary soap and carbolic lotion (1 in 20) were then mixed so as to form soapsuds, and the whole wound was thoroughly scrubbed with this by means of a clean nail-brush, until every trace of grease and dirt had disappeared. The fractured external condyle was removed, and loose tags of muscle were snipped off with scissors. The joint was syringed out with carbolic lotion (1 in 20), and a counter-opening was made over the internal condyle, through which a drainage-tube was introduced. No attempt was made to bring the edges of the wound together by sutures or otherwise. The arm was enveloped in an antiseptic dressing, and an angular splint applied. The wound healed without suppuration, and there was absolutely no pain. The temperature was normal, except on one occasion (the eleventh day), when it rose to 100·1°. Passive motion was begun early, and at the end of three weeks the joint permitted all the usual movements. The patient was discharged at the end of five weeks, cured.

Remarks.—The special points of interest attaching to this case are: the apparent hopelessness of trying to render the wound aseptic, owing to the infiltration of so much dirt and greasy material; and the success of the treatment adopted, as shown by the complete restoration of the joint to its usual functions.

BRADFORD INFIRMARY.

FUNCTIONAL DISEASE OF THE HEART; REMARKS.

(Under the care of Dr. H. C. MAJOR.)

FOR the following notes we are indebted to Mr. Eustace G. Carter, house-physician.

Richard B—— was admitted on October 28th (has been an in-patient five times during the last five years, under the late Dr. Tibbits), suffering from the same symptoms as when previously under observation. By occupation a blacksmith. Family history entirely satisfactory. Unmarried; suspicion of sexual excess. Has occasionally been drunk, the last time twelve months ago. Is not an excessive smoker. No history of acute rheumatism or illness of any importance up to five years ago, when he had for the first time an attack similar to the one about to be described, following a "bad cold." Five months ago he had "inflammation of the lungs" and was in bed three weeks, but had no symptoms referable to his heart during that time. He says that in one of the attacks mentioned above he "had swelling of the legs." One month ago a severe bilious attack left him suffering from dyspeptic symptoms—viz., flatulent eructations, acid taste in mouth, &c. Whilst suffering in this way palpitation suddenly set in, but was not worse on exertion; this gradually became more severe, obliging him to discontinue his work.

On admission, he was a fairly well developed young man, with well-marked general cyanosis; eyeballs rather prominent, but no enlargement of the thyroid gland. Dorsal decubitus was present (maintained throughout the attack). His whole body seemed to be shaken by the rapidity of the heart's action. Pulse 144, very weak; respiration 24; temperature normal. Complained of an "aching pain" across the lower part of the thorax. Thorax well formed; skin over præcordial and hepatic regions of a dark-brown colour, from frequent counter-irritation. There was a rapid, regular pulsation over the whole of the præcordial, hepatic, and epigastric regions, without thrill on palpation. Apex-beat of heart diffused, probably in fifth interspace, three inches and a half from the left edge of the sternum. Superficial cardiac dulness measured horizontally, opposite the fourth rib, three inches and a quarter, beginning at the left edge of the sternum; no increase of vertical dulness. On auscultation no bruit could be detected. Lungs clear. Abdomen distended; no bulging in flanks; hyper-resonant note in every area; violent pulsation in epigastrium and at hypochondriac regions. Hepatic dulness increased for about three-quarters of an inch; tongue furred; bowels confined; urine high-coloured, intensely acid, sp. gr. 1035, no albumen. Ordered ten minims of tincture of digitalis, with half a drachm of compound spirit of ammonia three times a day; milk diet.

Oct. 16th.—Passed a restless night. Complains of abdominal distension and choking sensation in his throat. Pulse now uncountable; heart sounds cannot be differentiated.

20th.—Continues in the same condition, though his symptoms are exaggerated. Cyanosis more marked. Has developed a harsh ringing cough. Is in an extremely excitable state, throwing himself about in bed and imploring relief. Vomits everything taken; says milk chokes him. Medicine stopped; ice-bag to præcordial region; ice to suck, and teaspoonful doses of Brand's essence of beef to be taken every hour.

21st.—8 P.M.: Pulse still uncountable; vomiting less frequent; is very much excited. A quarter of a grain of morphia injected.

22nd.—10 A.M.: Expresses himself as feeling much relieved. Pulse 82, full, yet dicrotic and intermittent. Heart: no bruit to be detected, but the pulmonary second sound is markedly accentuated. Has passed 86 oz. of urine in the last twenty-four hours.

24th.—Continues better. Passed 177 oz. of pale limpid urine in the last twenty-four hours. Heart-sounds clear and well struck; cyanosis less marked.

30th.—The superficial cardiac dulness is now normal; apex-beat also in normal position, and not now diffused. All pulsation in epigastric and hepatic regions gone. On auscultation, the accentuation of the pulmonary second sound has disappeared. Pulse 60, still dicrotic (dicrotism well shown in sphygmogram). Continues to pass from between sixty and seventy ounces of urine in the twenty-four hours.

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Nov. 16th.—Up daily for the last fortnight; helps to make the beds, and has no symptoms whatever. Has had no medicine since Oct. 22nd, save purgatives occasionally. To be an out-patient.

Remarks by Dr. MAJOR.—When first seen on admission the diagnosis of organic disease of the heart was made, but on surveying the case as a whole, the weight of evidence is in favour of functional disease of that organ. I will therefore give shortly the evidence on either side. (*a*) Points in favour of organic disease: (1) Occupation (a blacksmith); (2) history of anasarca during a previous attack; (3) the obviously dilated condition of the heart when admitted; (4) the marked cyanosis. (*b*) Points in favour of functional disease: (1) No history of acute rheumatism; (2) suspicion of venereal excess; (3) attack not brought on by exertion; (4) absence of orthopnœa; (5) sudden onset of attack whilst digestion was disturbed; (6) no bruit to be detected, either during the height of the attack or when the heart had slowed down; (7) no symptoms of mechanical derangement of the circulation, save the dilatation of the heart and the cyanosis, the probable explanation of this latter symptom being over-action of the heart, due to some functional derangement of the cardio-inhibitory centre in the medulla; the heart, as it were, having "got the bit between its teeth," was galloping away from its driver, the pneumogastric nerve.

DUNDEE ROYAL INFIRMARY.

HYPERPYREXIA OCCURRING TWICE IN THE COURSE OF ACUTE RHEUMATISM; TEMPERATURE OF 110·4°; COLD BATHS; REDUCTION OF HEAT AFTER EACH; DEATH; NECROPSY; REMARKS.

(Under the care of Dr. SINCLAIR.)

FOR the clinical record of the following case we are indebted to Mr. Malcolm A. Ker; and for the notes of the necropsy to Mr. A. M. Stalker.

John M——, aged fifty-five, shoemaker, was admitted into No. 12 ward of the Dundee Royal Infirmary on July 8th, 1885, suffering from an attack of acute rheumatism. For the last thirty years the patient has been very intemperate in his habits. Twenty years ago he was seized with an attack of acute rheumatism, ascribed by him to alternations of heat and cold which he was exposed to while at work. Since that time he has had numerous attacks, from which he always made good recoveries, being completely free from pain during the intervals. The present attack began about a week previous to admission, the joints of the upper extremities being affected first; later, the ankles, knees, and hips were involved.

State on admission.—The patient is a well-developed muscular man. Face flushed; skin hot and dry. Complains of pains in his ankles, knees, hip-joints, and right wrist, the knees being considerably swollen and imparting a feeling of fluctuation on palpation. Tongue thickly furred; appetite poor; bowels constipated. Pulse 112, of fair volume, but very compressible. Heart-sounds feeble, but pure. Physical signs of lungs normal. Temperature at 4 P.M., 102·8°. Ordered half a grain of extract of podophyllin and twenty grains of salicylate of soda every hour for three hours.

July 9th.—Temperature 100°. Urine acid in reaction; sp. gr. 1035; large deposit of urates; contains albumen. Salicylate of soda increased to twenty grains every hour for six hours. Evening temperature 100·2°. Pains much relieved to-night.

10th.—Temperature 99·6°. Swelling of knees gone. Still some pain in affected joints. Evening temperature 100°.

11th.—Temperature 101·4°. Patient states that he is quite free from pain. Salicylate of soda reduced to twenty grains every hour for four hours.—11.40 A.M.: Temperature 101·4°.—3 P.M.: Temperature 103·6°.; pulse 142, bounding; very compressible. Patient has a vacant, stupid look, and talks in a silly manner.—3.45 P.M.: Had twenty grains of antipyrin.—4.45 P.M.: Temperature 103·6°. Antipyrin repeated.—6.30 P.M.: Temperature 105°.—7.15 P.M.: Had twenty grains of sulphate of quinine.—9.20 P.M.: Temperature 104·2°. Patient is violently delirious. Put into strait jacket. Had one-third of a grain of hydrochlorate of morphia subcutaneously.—10.30 P.M.: Delirium has passed into a state of complete coma. Breathing stertorous.

12th.—12.15 A.M.: Temperature 107°. Pulse 150, full, compressible. Respiration 30 per minute.—1 A.M.: Temperature 108·2°.—1.30 A.M.: Temperature 108·8°. Radial pulse imperceptible. Heart-sounds almost inaudible. At this juncture patient was put into a bath at a temperature of 80° F., which was rapidly cooled down, by the addition of ice, to 50° F. The following tabular statement is an accurate record of the observations made at the time:—

Time.	Temp. of bath.	Temperature of patient per rectum.	Remarks.
A.M. 1.30	80°	108·8°	Patient placed in bath; radial pulse imperceptible; heart-sounds almost inaudible; complete coma.
1.35	80	110·4	Had enema of 2 oz. of brandy.
1.45	50	109·0	Enema repeated.
1.50	55	107·8	Pulse 140, perceptible at radial artery.
1.55	53	108·0	
2.5	53	102·8	Pulse 120, gaining strength.
2.10	55	102·0	
2.16	57	101·4	Pulse 124, taken out of bath.

2.16 A.M.: On being lifted out of the bath, the patient was rolled in a warm blanket, carried to bed, and rapidly dried. He was then transferred to another bed, surrounded by hot bottles, and covered by warm blankets. At 2.30 A.M., half an hour after removal from the bath, the temperature was normal; pulse 116, good; respiration 28 per minute; slight conjunctival reflex. During the next hour the temperature gradually sank to 95·2°, after which reaction set in and it began to rise. The following table shows the changes in the patient's state from the time of his removal from the first bath until he was immersed the second time:—

Time.	Temp.	Remarks.
A.M. 2.30	98·6°	Pulse 108, improving in strength; patient beginning to resist; slight rigor; had 1 oz. of hot coffee per rectum.
2.38	97·9	
3.0	96·0	Severe rigors; conjunctival reflex absent; pulse 100, very weak; enema of coffee repeated, but not retained; had hypodermic injection of 25 minims of ether.
3.30	95·2	
4.0	97·4	Pulse 112, improving; rigors gone.
4.30	98·2	Pulse 112.
5.0	99·8	Pulse 110.
5.30	100·6	Pulse 100.
6.0	101·6	Pulse 105.
6.30	101·8	Pulse 105.
7.0	103·0	Pulse 126, respiration 20; epiglottis falling back during inspiration; conjunctival reflex well marked; had hypodermic injection of 30 minims of ether.
7.30	103·2	Pulse 110; had enema of sulphate of quinine (30 grains); ice-bags to spine and head.
8.0	103·0	Pulse 110; respiration 30.
8.30	104·0	Pulse 120, very weak; had hypodermic injection of
9.0	104·6	30 minims of ether.
9.30	105·0	Pulse 116; patient has had an attack of severe bilious vomiting; over whole surface of chest numerous moist râles are heard; gurgling in trachea and large bronchi; frothy mucus flowing freely from nostrils and mouth; respiration 30, stertorous; cyanosis of face; patient was placed on his side, sinapism applied to front of chest, and turpentine stupes over the bases of the lungs.
10.0	106·0	Pulse 116; respiration 32, less laboured, gurgling less; had hypodermic injection of 30 minims of ether.
10.30	106·2	Pulse 109; after consultation it was agreed to repeat the former treatment, and the patient was accordingly transferred to a bath at a temperature of 90° F., which was rapidly cooled down to 56° F.

The following are the results of the treatment:—

Time.	Temp. of bath.	Temp. per rectum.	Pulse.	Remarks.
A.M. 11.0	90°	103·0°	108	Put into bath; complete coma; stertorous breathing.
11.5	66	103·0	108	
11.10	60	107·5	112	Had hypodermic injection of thirty minims of ether.
11.15	57	106·3	108	Slight movement of hands.
11.20	56	105·2	104	
11.25	58	103·9	108	Heart sounds very faint; had enema of 2 oz. of brandy.
11.30	59	—	96	Thermometer would not rise.
11.35	—	—	—	Taken out of bath.

At 11.35 A.M. the patient was removed from the bath, and underwent the same treatment as on the former occasion.

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Five minutes later the temperature was 98·3°, pulse 84, and gaining strength.—11.40 A.M.: Had two ounces of brandy and one pint of beef-tea by the stomach-tube.—12 noon: Temperature 95°; pulse 100; respiration 100, laboured.—1 P.M.: Temperature 95°; pulse 105.—1.30 P.M.: Temperature 99°. Had hypodermic injection of thirty minims of ether.—2 P.M.: Temperature 101°; pulse 115.—2.30 P.M.: Temperature 101°; pulse 118. Ether repeated.—3 P.M.: Temperature 101·6°; pulse 120; respiration 30, more laboured.—3.10 P.M.: Numerous sibilant and moist râles heard over the whole chest; tracheal gurgling; no dulness over bases of lungs; frothy mucus flowing from the nose and mouth; great dyspnœa; cyanosis of the face remarked; pulse very weak.—3.20 P.M.: Had one-tenth of a grain of apomorphia subcutaneously; vomited immediately.—3.30 P.M.: Tracheal gurgling much less; dyspnœa diminished; pulse imperceptible.—3.50 P.M.: Died.

Necropsy, twenty hours after death.—On opening the thorax the lungs did not collapse. The pericardium did not contain any fluid. The substance of the heart presented a waxy appearance on section. The cavities were filled with decolourised blood-clot. All the valves were normal. Lungs: These were fairly crepitant throughout. On section a large quantity of serum could be expressed. The bronchi were injected. Abdomen: The liver, spleen, and kidneys were hyperæmic. Head: The brain was anæmic.

Remarks by Dr. SINCLAIR.—Hyperpyrexia is a complication of sufficient interest and rarity to justify the publication of every case. In the three years that have elapsed since the publication of my first case[1]—a successful one, occurring in the course of acute rheumatism—I have seen pronounced hyperpyrexia only three times: once it occurred in scarlet fever, once in puerperal pneumonia, and the third time in the case so well recorded above by Dr. Ker. The scarlet fever case occurred in the practice of Dr. Stewart, of Newport-on-Tay. The puerperal pneumonia case occurred in my own practice. In the latter I had the advantage of the advice and assistance of my neighbour, Dr. Macewen. Both, unfortunately, terminated fatally; but the power of the cold bath in reducing the temperature and improving the general condition was amply demonstrated in both cases. I was summoned to see the patient whose case is recorded above about 1 o'clock on the morning of July 12th last, and found that his temperature had been rising since 3 o'clock on the previous afternoon. When I arrived at the infirmary I was told that the patient had been going so steadily downhill since I was summoned half an hour previously that his case seemed hopeless; and indeed matters looked bad enough. The patient had a sunken aspect, was comatose, was breathing rapidly and stertorously, had no radial pulse, almost inaudible heart-sounds, and a temperature of 108·8°. But I had sufficient confidence in the value of the cold bath, derived from a perusal of the cases of Dr. Wilson Fox and others, and from my own personal experience, to think myself justified, even in such desperate circumstances, in giving the system a trial. Accordingly, everything necessary was instantly prepared, and the patient was a few minutes later, immersed in a bath at a temperature of 80°. An ample supply of ice was used, and the water was—with difficulty at first, I confess—cooled down to 50° F. Dr. Ker's admirable statements show most clearly the effect of the treatment in restoring the patient from a state of coma, an almost paralysed circulation, and a temperature of 110·4°, to a condition of restored circulation and a temperature of 101·4°. At a consultation in the forenoon it was decided, as the temperature had risen rapidly to 106·2°, to repeat the bath. Again in desperate circumstances the patient was immersed, and again the temperature was reduced. But, although the effects were very satisfactory for the first twenty-five minutes, in the next five minutes the body-heat fell from 103·9° to a subnormal point, and this in water which had actually gained three degrees in the preceding ten minutes. The patient was, of course, at once removed to bed, and again he rallied. But when I saw him again, about 3 o'clock in the afternoon, his respiration was so seriously embarrassed by the accumulation of bronchial exudation that I gave him one-tenth of a grain of apomorphia hypodermically. This certainly had the effect of emptying his stomach and the bronchial tubes, and consequently his dyspnœa was much relieved; but soon after his circulation failed and he died. Fatal though the result unfortunately was in this case, I think there can be no doubt of the soundness of the treatment. Before the immersion of the patient on both occasions he was evidently dying, and dying rapidly, from excessive heat. On both occasions the bath rescued him from imminent peril against which no other known therapeutic agent is of the slightest use. Had his tissues suffered less, or had he had more resisting power, the result might have been very different. But the lesson of the case is clear and certain: that in the external application of cold we have a remedy on which we can rely for the reduction of excessive temperature in the human body. I cannot conclude this note without expressing the gratitude which I feel for the invaluable aid I received during a very anxious time from my medical friends, and especially from Drs. Stalker, Mackie Whyte, and Ker. The nurses of the ward joined with these gentlemen in performing their trying duties with an energy and a loyalty which are beyond all praise.

[1] Edin. Med. Journal, August, 1885.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Colloid Degeneration of Breast and Omentum.—Spontaneous Fracture of Urinary Calculi.—Diffuse Sclerosis of Brain in an Infant.—Large Aneurysms.—Post-nasal Fibroma in a Child.—Syphilitic Necrosis of Vomer.—Stricture of Rectum.

AN ordinary meeting of this Society was held on Tuesday last, Dr. J. S. Bristowe, F.R.S., President, in the chair.

Mr. EVE showed several Tumours with Colloid Degeneration. The first specimen was a tumour of the omentum removed from a man aged twenty-seven, whose illness lasted six months; there was some ascites. An operation for the removal of the tumour was performed by Mr. Lawson Tait. The tumour had a very flocculent appearance, and many sago-grain-like bodies were found therein. An alveolar structure, of which the spaces were filled with colloid material, was to be seen in sections; the glue-like material resulted from mucoid degeneration of the sarcomatous tissues, for spindle-shaped and other cells could be detected. The tumour was a myxosarcoma, and not colloid carcinoma. He also showed another myxosarcoma of the omentum, as well as a true colloid cancer of the omentum, secondary to cancer of the ovary. Another was a specimen of considerable enlargement of the omentum from tubercular disease, removed from a woman who was operated on for acute peritonitis. Three months later the patient died from tubercular peritonitis. Specimens of colloid cancer of the breast had been presented to the Royal College of Surgeons by Messrs. Hulke and Savory. The disease in one case had lasted three years; the patient was a female aged eighty. Operation had been completely successful. Under the microscope an anastomosis of columns of epithelial cells was seen, together with mucoid degeneration of the stroma, not of the cells. Some spheroidal bodies with concentric lamination were always found in the stroma; these were due to change in the connective tissue cells of the stroma, and were very abundant. They had been described as "colloid" bodies; reagents had no effect on them. They were examples of concentric lamination, occurring without the presence of inorganic or crystallisable salts. Carcinoma myxomatodes had been described by German authors, and Billroth had recorded a case of cholesteatoma of the breast, that Mr. Eve thought was of the same nature. In reply to Dr. Bristowe, he said that the first case of omental disease succumbed about the time of operation.

Mr. S. JONES showed many Urinary Calculi illustrating Spontaneous Fracture. The calculi were taken from the bladder of a gentleman, aged eighty-one, whose gall-bladder was also full of calculi. He had suffered for twenty years from rheumatic gout, and for the last seven years from passage of calculi per urethram. Extravasation of urine necessitated perineal section, and through the incision in the membraneous portion of the urethra a number of pieces of calculi were extracted. Ten days later the patient died, and in the bladder seven more or less complete calculi and eleven detached pieces were discovered. Mr. Jones considered that these calculi contained in their interior soft deposits of mucus, urate of ammonia, and phosphates, which by decomposition and development of gas led to fracture.

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Dr. Bernays had found urate of ammonia and carbonate and phosphate of lime in some brownish material which occupied the radiate fissures in the stones.—Mr. H. H. CLUTTON said that his specimen differed in that the calculus broke up from causes acting on the outside.—Dr. W. M. ORD said the specimens shown illustrated two methods that appeared to him to be operative in the spontaneous disruption of calculi. In some cases no doubt Mr. Jones's suggestion held good. The influence of colloids on calculi was a very interesting subject, and Rainey had shown that spheres of carbonate and phosphate of lime deposited in a colloid when removed to a second colloid fluid became eroded by a sort of molecular disintegration, and this happened though the two colloids differed but slightly in nature. This kind of process probably explained the disintegration in Mr. Clutton's specimen. Dr. Ord had shown seven specimens illustrating erosions of calculi due to alterations in the media in which the calculi existed; it was necessary to suppose that the fluid in the bladder underwent some kind of change equivalent to the above-mentioned experimental alterations of Rainey.

Dr. HENRY ASHBY showed a Brain affected with Diffuse Sclerosis taken from a male infant aged twenty-two months. The chief phenomena observed were convulsions, want of power of hearing or vision, nystagmus, retraction of the head, rigidity of the right arm and less of the left, occasional stiffness of the legs, mouth always open, noisy respiration as from paresis of soft palate, constant groaning, "smacking" of lips, and difficult deglutition. He was watched from eight months of age till death. At the necropsy there was some external hydrocephalus; the arachnoid was thickened; the pia mater consisted of many enlarged and tortuous capillary arteries, and could be stripped off without lacerating the brain substance; the cerebrum was everywhere very firm and tough; the cerebellum was apparently normal. The want of development of convolutions and sulci was a marked feature. The Sylvian fissure was deeply cut, but there was no trace of the fissure of Rolando; the grooves branching from the Sylvian fissure were occupied by branches of the middle cerebral artery; the frontal lobes had a somewhat granular aspect; there was but little differentiation of grey from white matter as seen on section; the lateral ventricles were much dilated, as well as the descending cornua. The microscope showed that there were very few caudate cells left in the grey matter; and the latter had undergone an indurating process, though no actual fibrous tissue could be detected. The perivascular spaces were enlarged, and the vessels that enter the cerebral cortex were distended with blood. The pyramidal tracts were markedly atrophied, especially the left tract, above the medulla. There were also descending degenerations in the spinal cord. On section the internal capsule was seen to be of the usual white colour; the white substance occupied less space than usual, was indurated, and of a grey colour like the cortex.—Dr. THOMAS BARLOW said that the specimen would serve to elucidate some obscure points in the pathology of brain disease in children. He had investigated one very nearly like Dr. Ashby's specimen. It was the brain of a microcephalic child, in which the disease was of intra-uterine origin. The brain was very small, and differed in this from the specimen shown. The distribution of the meningitis was much the same as in Dr. Ashby's case. There were indications in places of convolutions having been partly formed. Calcareous particles were also detected scattered over the meninges. He regarded meningitis as one of the causes of sclerosis of the brain.—Dr. HALE WHITE asked what the condition of the pupils was, for the anatomical characters were much like those of general paralysis of the insane.—Dr. ASHBY replied that the pupils were unequal; the brain gave no marked signs of remains of a meningitis, and he was not certain of the mode of origin of the disease, though it might be syphilitic.

Mr. BARWELL exhibited specimens of a large Abdominal and Popliteal Aneurysm taken from a man. There were enlarged liver and granular kidneys. Treatment by compression was adopted for a time for the popliteal aneurysm. Later on, Mr. Barwell ligatured the femoral artery with an [illegible] ligature. The abdominal aneurysm weighed seven pounds; it had eroded the vertebræ from the eleventh dorsal to the second lumbar; the aneurysm also pressed upon the kidneys and pleura. It was filled with laminated clot, but was traversed by a channel through which the blood flowed.

[illegible] showed a specimen of Post-nasal Fibroma removed from a boy aged eight years and a half. It was attached by a pedicle apparently to the upper surface of the velum palati, and had two digital processes, one of which was prolonged into each nostril. It hung in a pendulous manner over the upper opening of the larynx, and apparently had prevented the full development of the child. A fine reticulum of delicate fibrous bands, with some mucous tissue, was seen in sections; the myxomatous character was most marked in the processes above mentioned. He also showed specimens of (congenital) Syphilitic Necrosis of the Vomer, taken from a boy aged ten years; the fragments of bone were passed at intervals of some months. The syphilitic evidence was undeniable. Interstitial keratitis, fissures at the angles of the mouth, and pegged teeth could be seen now in the boy, who was also shown.—Mr. H. T. BUTLIN said the first specimen appeared to him to be undoubtedly myxomatous; it probably had grown from one of the turbinate bones; it was a very large mucous polyp, containing a mixture of mucous and fibrous tissues.

Mr. HARRISON CRIPPS exhibited a specimen of Tubular Stricture of the Rectum. The patient was a female, aged thirty-two, who suffered after parturition from pelvic cellulitis, and some pus had been passed from the bowel. After getting about, some difficulty in passing motions came on. On admission to the hospital emaciation and albuminuria were noted, and the patient was extremely ill. The operation of colotomy was followed in a week by death. There was a tubular stricture about five inches in length, commencing three inches from the anus. He observed great hypertrophy of the circular muscular coat, which was due to dense fibrous tissue. The origin of the disease was evidenced by the presence in the bottom of Douglas's pouch of a cicatrix, which had caused a bend in the rectum, and was the starting-point of the stricture. He did not think that a majority of these cases of rectal stricture in women were due to syphilis; but many of them owned a cellulitic origin. It was extremely rare in men, being ten times more frequent in women; whereas syphilis was far more common in men. He considered that this fact militated against the view that such cases were of syphilitic origin. They began as annular strictures; the consequent ulceration led to infiltration of the muscular coat, and so to a tubular constriction.

Mr. BRUCE CLARKE brought forward a specimen of Rectal Stricture of undoubted syphilitic origin. The patient had suffered from stricture for four years. Colotomy was performed, and four days later death ensued. Emaciation and albuminuria were marked symptoms. Palpation of the rectum showed the disease to be of cartilaginous consistence. There was hardening of both longitudinal and circular muscular coats, and this was especially marked four inches from the anus, where the stricture commenced. There was a total absence of epithelium, but in the submucous and muscular coats enormous numbers of small round cells had replaced largely the normal tissue. Some small round cells were also seen in the internal coat of the artery.—Mr. EVE said there was in the museum of the Royal College of Surgeons a Hunterian specimen of stricture of the rectum composed almost exclusively of hypertrophy of the muscular coats, and believed to be due to spasm.

The following card specimens were shown:—Mr. Eve: (1) Dislocation of Hip of Cow; (2) for Mr. A. Lingard, Specimens of Actinomycosis in Ox-en. Mr. Clutton: Spontaneous Fracture of Urinary Calculi. Mr. Churchill: Syphilitic Necrosis of Vomer (living specimen). Dr. Goodhart, for Dr. Marshall: Calculus in Bladder of Female Child aged two years. Mr. J. B. Sutton: Congenital Inguinal Hernia in a Monkey. Mr. H. Fenwick: Fibromyxosarcoma of Bladder. Dr. Hadden: (1) Lipæmic Blood in Diabetes; (2) Mucous Cyst of Tongue; (3) Gumma pressing on Ureter. Mr. J. H. Morgan: Double Dislocation (? Congenital) of Hip-joints.

MEDICAL SOCIETY OF LONDON.

Moot Points in Syphilis.

AT the meeting of this Society held on Monday last, Dr. W. M. Ord, President, in the chair, Mr. JONATHAN HUTCHINSON, F.R.S., read his second Lettsomian Lecture on some Moot Points in Syphilis.

The lecturer first considered the relationship between secondary and tertiary phenomena. It has been supposed that the viscera and nervous system suffer only in the

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tertiary period, and that in the latter stage there is a general tendency to ulceration and to deep extension, which is not observed in the secondary one. "Gumma" has been supposed to be characteristic of the tertiary stage. But opinions on these matters have changed. It has been argued that syphilis may be very severe and run through some of its late stages before it has finished its first. By degrees, however, we are arriving at another interpretation of these facts, and are beginning to perceive that the old classifications of the phenomena cannot hold their ground, and that we must seek for other characters by which to distinguish the secondary and tertiary stages—not, indeed, that the old observations were wholly wrong.

Cases were given in illustration of the circumstance that gummata may occur in the internal viscera, certainly within the "secondary" stage of the disease. In the adult it is an every-day occurrence to observe symptoms implying periostitis, transitory disease of the nervous system, or even visceral affections during the secondary period. It is not so much in the special location, or even the character of the morbid changes, as in their boundaries, that we observe a difference between them and the lesions of the tertiary stage. The gummata of the early period are small and numerous; those of the later one are large, and often few in number, or even single. Those of the early period easily disappear either spontaneously or under mild specific treatment, whilst those of the tertiary stage persist and grow indefinitely unless adequately met. Hence it may easily happen that the indications of internal disease in the secondary stage may often pass unnoticed, whilst those of the later one rarely escape discovery. This point was argued more in detail in reference to two special lesions which, as they occur in parts open to inspection, are not liable to the fallacies that attach to speculations on lesions of the internal viscera—rupia and periostitis. Rupia is claimed as a definite tertiary symptom, but Mr. Hutchinson contended that this was a mistake. It almost invariably begins within a year of the chancre, and often much earlier. Everything that ulcerates is not necessarily tertiary. Rupia was defined as of bullous origin and tending to the production of conical crusts. It is never one of the earliest lesions, but occurs after erythematous and papular eruptions have disappeared. Often there has been an interval of good health, and all treatment has been laid aside. Sometimes the rupia happens apparently as a consequence of neglect of treatment. Very often a peculiarity in the diathesis of the patient has been implied by the fact that his chancre inflamed and ulcerated. Sometimes a papular eruption is converted into an ulcerating or rupial one by too vigorous treatment. A "scar-leaving" eruption often follows a "scar-leaving" chancre. The belief that the occurrence of rupia or other ulcerating eruption makes it desirable to avoid mercury and use only iodide of potassium is, Mr. Hutchinson thought, fast losing its hold. But it is really a question of *dose*. A condition allied to rupia, which is also something like lupus, is likewise met with; the round form of the sore is lost, for the inflammation spreads at its edges by local infection and allows of healing in the centre; thus a horseshoe form is assumed. This lesion may last indefinitely, unless carefully treated. It seldom originates *de novo* as a genuine tertiary; but it is more commonly a sort of continuation of an imperfectly treated eruption of early date. It ceases to be a generalised eruption, is no longer arranged with any tendency to symmetry, and is often more amenable to local than internal treatment. Mr. Hutchinson thought we might with justice speak of syphilitic lupus just as we had syphilitic psoriasis and syphilitic lichen. They are the syphilitic imitations of the type-malady. The most acute and rapidly destructive of syphilitic lupus is what has been termed erosive lupus, an almost phagedænic affection, which usually attacks the nose, and which is more frequently seen in inherited than in acquired syphilis. As a rule all lupoid affections rank as tertiary, and it would scarcely be too bold a generalisation to say that all the tertiary affections of the skin are of a lupoid character; by which is meant that they are all serpiginous, asymmetrically arranged, and all leave scars. The time for roseola, psorasis lichen, and even rupia, is past; and if the skin at this stage suffers at all, it will form a tubercular affection, which creeps at its edges, persists indefinitely unless cured by treatment, and leaves scars. It is, in fact, a serpiginous gumma of the skin. This generalisation is a most important one, as giving a clue to the character of the hidden affections of the deeper parts which occur in this stage. They, like lupus, may be serpiginous, the cell growth tending to infect the edge of the patch and thus cause persistent spreading. Such a pathological hypothesis would explain the phenomena of ophthalmoplegia externa, in which there are indications of slowly spreading central disorganisation. Locomotor ataxy may be regarded in the same light.

Periostitis may be secondary as well as tertiary. The nervous system may be attacked within the first year—e.g., neuro-retinitis, sensory disturbances, paraplegia, cerebral paralysis, also inflammation of the internal ear. The first attack of choroiditis disseminata often occurs within the first eighteen months; the pia mater might be inferred to be affected with similar changes. Mercury, if it does not cure, usually delays and retards symptoms, and so what would be secondary becomes tertiary in time owing to treatment. Mr. Hutchinson thought that it was quite impossible to classify secondary and tertiary symptoms into two groups with reference to the tissues that are attacked. We must thoroughly understand that there is no lesion which may not happen and no tissue which may not be attacked during the secondary stage. Everything that is tertiary is local in a sense which is not true of any of the secondary phenomena. The difference between secondary and tertiary eruptions of the same tissues was illustrated by what happens in the case of the palm of the hand and of the tongue. The relation of syphilis to locomotor ataxy was discussed, and Mr. Hutchinson was of opinion that syphilis predisposed to the nervous disease. Another moot point is the relation of syphilis to the specifics used in its treatment. The claim of mercury to rank as an antidote is strengthened by the recent experience of the antiseptic power of weak solutions of corrosive sublimate as well as by other considerations.

Mr. Hutchinson stated his own rules of practice. He employs grey powder in one-grain doses three to six times a day, prolonged over a period of six months. Respecting the results of treatment in general, he asserted that he had never in any single case of late years seen a severe eruption on the skin develop itself after a mercurial course of the kind indicated. It is a fact that mercury manifests antidotal power in that it can not only remove but anticipate and prevent by far the most conspicuous manifestations of the disease. He could not make so strong an assertion respecting some other of the symptoms of the later part of the secondary stage. It is a question of some interest whether syphilis has any tendency to develop itself by, so to speak, a series of successive waves. The observed phenomena may, however, be connected with the intermittent employment of antidotal treatment. Some cases of rupia, the worst that could be seen, were met with under such conditions; the patient having been cured of a first and much milder outbreak of eruption, and then after an interval of some months becoming the subject of a more severe one.

In conclusion, Mr. Hutchinson said that if his argument held good, we must regard the terms secondary and tertiary as applicable to different periods of time, and not to different phenomena. At the same time, it had been fully admitted that syphilitic processes do display different tendencies in relation with the stage in which they occur. The position assigned to tertiary symptoms has been that of late relapses of morbid processes in tissues previously damaged. In this way it has been suggested that syphilis may occupy an important part in predisposing to such maladies as locomotor ataxy, without actually causing them.

ACADEMY OF MEDICINE IN IRELAND.

The Surgery of the Soakim Expedition.—Organisation of the Medical Department of an Army Corps.

AT a meeting of the Surgical section on Dec. 11th, 1885, Mr. TOBIN, late of the Army Medical Department, read a paper on the Surgery of the Suakim Expedition. He explained the nature of the appointment styled "field surgeon" (which was that held at Suakim by himself), and pointed out the necessity for its being made a recognised appointment and its duties defined by the regulations. The statistics of the expedition were given, from which it appeared that of 129 wounded 124 recovered, or 97 per cent. Having exhibited a femur fractured by a rifle bullet at a point remote from that struck, the author pointed out the great difference noticed during the campaign between

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wounds from the Martini-Henry and Remington rifles, and cited cases in point. By referring to the experiments of Professor Longmore, he showed that those on the dead body afford a reliable means of ascertaining the effects of gunshot wounds on living tissues, and that therefore the extension of such experiments was a desideratum.—Mr. WHEELER said there was a great advantage in having a surgeon who is in the habit of operating accredited to the army on active service. Billroth was attached to the German army during the Franco-Prussian war. He had the local rank of Surgeon-General, and was probably as well paid as most Germans. But if the British taxpayer desired the advantage of such aid for the British army in the field, he would not only have to pay largely the civil surgeon attached to the army, but make provision for his family should anything untoward happen to him. The statistics of the mortality of the wounded were most creditable, of 129 wounded only five deaths being recorded; and from the nature of the wounds of the five fatal cases it would have been almost impossible to save life. This very small mortality was due partly to the excellent care which was always afforded to the British soldier by the Army Medical Department, and partly to the very easy transport, the hospital where the operations took place being only about three miles from the seat of action, where the wounded were conveyed by dhoolies. The climatic influences, of which he had personal knowledge (having served some years ago in the country), were combated by shipping the patients as fast as possible and getting them away to sea. There was also drainage well established in every case, the necessity for which in wounds and after operations had been first definitely laid down by the late Mr. Callender. Moreover, there was easy transport in the Egyptian campaign, the wounded having been conveyed by water from Kassassin. The specimen of the femur exhibited by Surgeon-Major Tobin was unique. He was not aware of any recorded case of a fracture several inches away from where the ball struck. It was evident the ball had grooved the bone between the trochanters, causing splintering, but a fracture of the bone had taken place several inches below the neck of the bone. Dupuytren had written on the splintering of bone, classifying the splinters, and emphasising the impropriety of removing splinters indiscriminately. Professor Longmore's experiments, which Mr. Tobin had alluded to, were exceedingly valuable. The differences in the wounds produced by the bullets from the Martini-Henry and the Remington rifles would be accounted for by the great difference in the charge of powder.—Dr. BENNETT valued the communication as showing that much more conservative surgery might be adopted in the treatment of gunshot wounds than had been hitherto the rule. So, where a rifle bullet passed through the shaft of a bone tolerably near a joint, or even remote from it, they were not to conclude that there would be longitudinal splintering into the joint necessitating the amputation of the limb. The immunity which had been pointed out followed from the success of the antiseptic treatment.—Dr. BAXTER mentioned that in his experience of the Franco-Prussian war the percentage of recoveries was very good, though not so large as Mr. Tobin had recorded. Antiseptic dressings were never used. Ether was the anæsthetic.—Mr. TOBIN replied. In reference to Dr. Bennett's remark on the fissuring of the bones, the experiments of Professor Longmore showed that when bullets were fired into long bones the fissuring was often carried down to the capsule of the joint, the synovial cavity being opened into. By rough handling the fissuring would extend into it, but with care the wound was rendered non-penetrating. He thought that cleanliness could not be better arrived at than by carrying out the idea which had got the name of "Listerism." In his operations, a long anterior flap, if easily cut, was the one he found most suitable, as falling over the wound like the cover of a box, letting it go on healing, whether dressed or not, and therefore obviating the necessity of frequent dressings.

Surgeon-Major EVATT delivered an address on the Organisation of the Medical Department in an English Army Corps, with suggestions as to Volunteer aid. He said that civil doctors generally knew nothing of our army system of work, and both sections of the profession suffered in consequence. The army surgeon had developed ambulance aid to a point far beyond average civil arrangements, and the systematic training of the students in this work would be useful to all civil doctors. The medical service of the army had worked out a very logical system of hospital administration, based on the principle that the trained medical officer was the best fitted individual to be governor and director, as well as scientific head. Civil doctors, as a rule, had little power in their hospitals, and the students received no training in administration; yet it was a highly important matter, as hospitals went to grief constantly, not from defective science in surgery, but from bad nursing, bad construction, bad drainage, want of discipline and supervision—yet in none of these heads were the students trained. He then explained the war system of the army corps, showing on a diagram the battalion aid, the bearer companies, the field hospitals, the hospitals on the communications, the base hospitals, and the hospital ships, and traced the course of the wounded soldier from the battle-field back again to Dublin. He then said that, with the new duties undertaken by the medical service of the army, no change had been made in the student's training. No training for enforcing discipline had been given to the student, and no teaching in ambulance aid or in hospital administration had as yet been made part of the student's course. He suggested that the students should, as a matter of routine, be exercised in ambulance drill; secondly, that definite teaching in hospital administration should be given them—viz., in cooking, nursing, *personnel*, construction, ventilation, and drainage; and, thirdly, that residences for students were highly desirable in connexion with the medical schools, to improve the discipline of the student and his social comfort.—Mr. CANTLIE, of Charing-cross Hospital, London, advocated the importance of bringing civil surgeons into "touch" with the Army Medical Department by the means which Surgeon-Surgeon Evatt had suggested, and stated that he had himself organised a volunteer corps of medical students.—Dr. BARTON considered the advantage of the training to medical students would be very great, but, while willing to join in the project, felt unable to decide at once as to its practicability.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

Extra-uterine Fœtation.—Pseudo-hypertrophic Paralysis.—Progressive Muscular Atrophy.—Inflammation of Tibia.

AT the meeting on Dec. 3rd, 1885,

Mr. C. ATKIN showed a specimen of Extra-uterine Fœtation, the rupture of which had caused death in sixteen hours. The woman was thirty-two years of age, and it was her fifth pregnancy. The menstrual flow was noticed a week before and on the morning of her death. Her symptoms led the druggist who was called in to treat her for poisoning. Mr. Atkin laid stress on the importance of diagnosing internal hæmorrhage, and the urgent necessity of operative interference in such cases, cold and hæmostatics being perfectly useless.

Mr. D. DYSON related two cases of Pseudo-hypertrophic Paralysis. The first patient exhibited was a boy aged eleven, who had had symptoms since the age of five. Measles and scarlet fever were the supposed causes. The gait, attitude, mode of getting up from the floor, and enlargement of calves and buttocks were characteristic. The progress of the case had been slowly downwards, notwithstanding the treatment consisted of electricity, nerve tonics, and exercise. The other case, a boy aged twelve, was a more advanced one. Heredity was a factor in the causation. He was now unable to stand, and there was much atrophy about the upper extremities. The same treatment as in the first case was of no avail. In both instances the mental condition was very good.

Dr. PORTER exhibited a case of Progressive Muscular Atrophy, of which the chief features were atrophy beginning in the muscles of both shoulders and both scapulæ, wing-like projection of the scapulæ, lordosis, coldness, and blueness of the hands, the temperature of the surface over the affected deltoids being 4° F. lower than that of the axilla or mouth. Latterly the hands had begun to assume the "main en griffe" form. Speaking of the lordosis, Dr. Porter said that Duchenne had described two varieties of curve in the spine, differing according as to whether the extensors or flexors of the trunk were principally involved. The case before the Society seemed to bear out this view as to the causation of the lordosis. The curve resembled the variety attributed by Duchenne to atrophy of the flexor muscles, and, whereas the patient could recover the erect posture after stooping, he was unable to rise from a recumbent to a sitting posture,

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owing to failure in the flexor muscles. Dr. Porter alluded to the absence of the characteristic fibrillary contractions in his case, and stated that such was the case in at least one-fifth of those suffering from the disease.

Dr. GWYNNE showed a Tibia which had become the subject of osteitis some twenty years ago, and from which a sequestrum of bone six inches long had been removed. Two other pieces of dead bone, about three inches long, had been subsequently removed. The sinuses, after discharging more or less for five years, gradually closed up, leaving a fairly useful limb for about fifteen years. The patient (a woman), afterwards getting into low health through nursing weakly children, became subject to severe attacks of periostitis, with intense pain, which necessitated amputation, which was performed through the condyles of the femur. The specimen showed most of the shaft to be formed of dense callus, with obliteration of the central canal. The bone was abnormally thick, and there was a small sequestrum of dead bone, about two-thirds of an inch long, occupying its centre.

Mr. SNELL introduced a patient with double third nerve palsy, associated with contracted pupils.

Reviews and Notices of Books.

The Cyclopædia of India and of Eastern and Southern Asia, Commercial, Industrial, and Scientific. Third Edition. By Surgeon-General EDWARD BALFOUR. Three Volumes. London: Bernard Quaritch. 1885.

AT a time like the present, when the air is full of the signs of changes consequent upon a widening of the representative basis of our Government, and when that Government will be urged by forces resulting from the opinions and the energies of masses of people, it is of the greatest national consequence that a competent knowledge of our magnificent Eastern Empire should be spread amongst the population of this country. For if anything can steady the forces which govern, and prudently influence them too, a contemplation of the magnitude of the responsibilities which the Crown and the people of this kingdom have resting upon them with respect to India is that very thing. A fairly comprehensive knowledge of that great country, with its more than 200 millions of people, is now probably possessed only by a comparatively few cultivated men—men who have gained it by long residence in the East, or who have enjoyed much leisure, and have had at the same time access to the works of a variety of well-selected authors, which they have diligently studied. But this is now altered; for these three clearly printed volumes, which open so neatly, and which are so handy in size, contain more than all that is necessary for a clear and comprehensive knowledge of India and of Indian affairs.

In any cyclopædia, the articles of most interest will vary much with the occupation of its readers; and in this Cyclopædia of the East, the consulter of its pages, whether he be statesman, *savant*, civilian, soldier, or merchant, will find a succinct and wonderful store of information to answer his purpose and to fit him to draw well-based conclusions.

The book contains a good general index; but, besides this, there are three articles in the work each provided with an index of its own. These articles are: "Insects," "Mammalia," and the one with which we commence our short criticisms—viz., "India." The article "India" is properly the fullest in the work, and occupies nearly 200 pages. Here the author, after tracing the ancient history of the country, goes into its relations with her neighbours. Then he takes its provinces and deals successively with them, giving in well-arranged order, as he passes on, such general and particular information about its population and its resources as will satisfy the expectations of those who know the office of a book of reference like this. The article upon "British India" conveys a vast amount of information. The leading features of its history and progress are well brought out. With reference to these two articles, it appears to us that if printed and published apart from the rest of the work, with any additions or alterations which may commend themselves to the author, there are many of the more thoughtful of the reading public who, unable to purchase the entire work, will be glad to possess themselves of this *brochure*. But, if our suggestion be taken, we should like to see the book contain a map, if only in broad outline, to facilitate the study of the reader.

A comprehensive account of the mode of life of the Chinese people, of their government, of important things relating to trade, religion, &c., is given under "China." A person wholly ignorant of the country would get a very full general acquaintance with that little-understood empire from a perusal of this article. We note, however, that when referring to the comparative value of money, no account is taken of the fall in the price of silver. And we also note that in giving the derivation of the word "tea," it is stated to come from "te"; but we would suggest whether it does not rather come from the Chinese word "chaa," or "tsaa." But the article as a whole is a remarkably good one. There is a good article, too, upon "Salt," a commodity of the first importance to the people of India, and to the Government also, for it produces a revenue of no less than 7,000,000 sterling. It strikes us, also, that what is said under "Forests" is not only interesting, but that it has a value which will be better appreciated the more it is considered. For men have had too long a destructive bias towards the finest specimens of the vegetable world. In our own country, the general mischief as well as the pecuniary loss occasioned upon large estates (and upon many smaller ones too) by a want of attention to the science of forestry is patent to all who understand this important subject. In America, the quick accumulation of money has already been the cause of depriving enormous tracts of the northern continent of its most valuable timber; and the ill consequences of this pitiless destruction are beginning to be keenly felt. The art of forestry is akin with the daily duties of the medical man; for how much poor growth in both the animal and the vegetable world is due to unsuitable soil and surroundings! Much timber is stunted through overcrowding, with its attendant deficiencies of light and air, and by insufficient or unsuitable nourishment. The account given by Surgeon-General Balfour of the area of the forests and the character of the timber in the different parts of India is full of interesting facts. The subject of opium is well dealt with; its mode of preparation in different parts of the East is gone into, and the practice of opium-smoking is philosophically considered upon facts ascertained with painstaking care. The article as a whole is very interesting, and it deserves and will repay a careful and deliberate consideration. In fact, whether the author is dealing with general statistics and details of history and geography, or with philosophy, religion, science, or the industrial arts, the information is good; and care has been taken to keep pace with the latest authorities. The articles "Architecture," "Temples," "Cave Temples," "Hindú Sacrifice," "Stone Worship" and "Serpent Worship," "Education," "Rajputs," "Caste," and "Famines" are all excellent, and will well repay careful perusal. We think the biographical notices very good also, but in some important instances they are too contracted. Notices of such men as the two Lawrences should, we think, have been longer; so also should that of Outram, the two Muirs, Bentinck, Strachey, and the two Elphinstones. There are some, on the other hand, which are far too long in comparison. The revenue system of India scarcely receives adequate notice. We observe also that there are some short articles of great value subsidiary to others of a more general character, and yet no reference to them

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is made. Had this been done, the student would more certainly secure to himself the information which the book contains upon a given subject. Take "Architecture" for example. A reference at the end of the article to Fatehpur Sikri, Agra, Delhi, Sarnath, and many others, would lead the reader to points of interest which might be missed from ignorance of particular localities, and the author would have been more just to himself, for his book is fuller of excellent matter than would readily appear.

We observe repetition also here and there. For example, under "Buddhist Architectural Remains," a description at some length is given of several caves—which, by the bye, are avowedly not Buddhist remains at all,—while the same information appears again a little further on under "Cave Temples," its legitimate place. Then in the science of botany, under the common name "Banyan Tree," particulars are given which appear again under "Ficus Indica." And what appears under the common name "Deodar," might have been given, with the particulars under "Cedrus Deodara," with a reference from one to the other. The same remark applies to "Flax" and "Linum Usitatissimum," and to other cases which might be mentioned. We notice, too, an account of the Siwalik Hills in three places—under (1) "Mountains," (2) "Himalayas," and (3) "Siwalik Hills." And we do not see that the articles entitled "Violin," "Socrates," "Cairo," "Kamtschatka," "Cachalot," "Luxor," and some others, have any claim to appear in this work. But, after all, what are these things when set against the real merits of this welcome and admirable addition to British reference literature?

We have not space to write as fully as we should like about these three volumes; but they make an addition to our standard works which can hardly be too highly valued, both because of their intrinsic merit and because they stand alone, so far as we are aware, making a storehouse full of important information possessed by but few people. The purpose of the work, and its character, alike indicate its place to be on the shelves of every public collection of books. So also should it be in the library, whether large or small, of everyone who wishes to possess a sound general and particular account of India and the East. The investment is indubitably a good one, for a share in the rich fruits of the author's indefatigable labours is more than a return for the expenditure required. And we heartily commend the volumes as an addition to the library of every medical man.

OUR LIBRARY TABLE.

American Gynæcological Transactions. 1884. New York: Appleton and Co.—This volume contains thirteen papers, the great majority of which are of considerable interest and value. With the exception of four, all of them discuss questions of treatment, seven dealing with abdominal section, directly or indirectly. It is a curious and not a very promising fact that so much attention should be paid to the end to be attained in medical science, while so little is done towards attaining that end by studying the processes of disease. There are some papers which deserve special mention, as Reeve on some Moot Points in regard to Inversion of the Uterus. The author ingeniously argues that inversion may begin at the cervix and extend gradually to the fundus, and brings some, but not conclusive, evidence in support of his view. Dr. Wilkie, in a paper on Foreign Bodies left in the Abdomen after Laparotomy, gives an account of some cases in which portions of sponge have been left in the peritoneal cavity, and of the methods employed by different operators with a view to avoid this accident. Lusk contributes a valuable note on the Ring of Bandl; and Thomas a further report on Extra-uterine Pregnancy. The President, in his address, discusses the present aspect of Puerperal Diseases. In it he has referred to American gynæcological literature in a way which will command the approbation of every right-thinking man. The distinct and emphatic condemnation of the mode in which certain subjects have been treated, pronounced by such an authority from the chair of the Gynæcological Association, cannot fail to have a beneficial effect, and will tend to raise the standard of both literature and practice.

Ringworm: its Diagnosis and Treatment. By ALDER SMITH, M.B. Lond., F.R.C.S., Resident Medical Officer, Christ's Hospital, London. Third Edition, Revised and in part re-written, with illustrations. London: Lewis. 1885.—This book, originating in our own columns, is too well established in the favour of the profession for us to do more than express our satisfaction at the appearance of a third edition, with important additions on the history of the disease and of the fungus which underlies it. It is admirably practical in its character, both as regards questions of diagnosis and treatment, and every medical man should have it in his library. We have only one critical remark to make, and that is on the portentous growth of parasiticides. They seem to multiply faster than parasites, and yet Dr. Smith's book is a proof of the superiority of these little troublesome organisms to nearly all the poisons that can be heaped on them, so that in even skilled hands it still takes months or even years to effect a cure. We must hope for a speedy announcement of the great simplification of this class of remedies, which at present are decidedly more numerous than effective.

Report of a Committee of the Clinical Society of London, nominated Nov. 10th, 1882, to investigate Spina Bifida and its Treatment by the Injection of Dr. Morton's Iodo-glycerine Solution. Reprinted from Vol. 18 of the Clinical Society's Transactions.—We have received from the Council of the Clinical Society a reprint of the Report of the "Spina Bifida" Committee. We understand that the special reason why this Report has been issued in a separate form is that the Council of the Society may present a copy to each of the gentlemen who contributed to it by sending details of cases or specimens of spina bifida. In this the Council has made an excellent precedent, and it would no doubt encourage others to aid in joint-works of this kind if it were the custom to present each contributor with a copy of the report when issued. Of the merits of this particular Report we have already spoken. We regard it as the most valuable yet issued by the Clinical Society. The pathological section has been very carefully done, and the long and full tables of cases in the clinical section, as well as the comments upon them, are of lasting practical value. The reprint of the Report is not for sale.

Die Chirurgischen Anatomie in ihrer Beziehung zur Chirurgischen Diagnostik, Pathologie, und Therapie. Ein Handbuch für Studirende und Aerzte. Von Prof. Dr. MAX SCHULLER, in Berlin. Heft I.: Die Obere Extremität. Mit zahlreichen Holzschnitten. Berlin: G. Reimer. 1885.—This is the first instalment of the most complete work on surgical anatomy that has yet been prepared. Not only each region but every section of each region is described with the utmost care and precision, and all the practical surgical bearings of the various anatomical details are pointed out. Muscles, vessels, nerves, and fasciæ are treated with the same detail and thoroughness, and their connexion with operations, inflammations, and deformities are fully discussed. The work is of great value, and we shall anxiously await the publication of the remaining parts.

LONDON WATER-SUPPLY.—By the East London Water Company's Bill power is granted to raise £300,000 to meet the increased demand for water within their district.

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REGINA v. TURNBULL AND NOTTAGE.

AT the Central Criminal Court on Friday, Jan. 15th, William Turnbull, aged sixty, surgeon, and Mary Nottage, aged forty, midwife, were convicted of the manslaughter of Charlotte Louisa Clifford, aged eighteen, by unskilful treatment and criminal negligence; and on the following day were sentenced respectively by the Hon. Mr. Justice Denman to ten years' penal servitude and eighteen months' imprisonment, with hard labour. The facts of the case, as deposed to at the coroner's inquisition and before the police magistrate, have been reported in these columns.* They were to the effect that deceased, who was a barmaid at the Boston Arms, Holloway, went to reside in the house of the male prisoner on Nov. 9th, 1885, and that she died there on Nov. 20th. A few weeks previously she had consulted a medical man on the question of her pregnancy. The friends of Clifford were not communicated with during her fatal illness, nor in fact until she had been dead two days. Turnbull signed a certificate as to the cause of death, alleging that deceased succumbed to "typhoid fever seven days, congestion of the lungs three days." At the post-mortem examination it was evident that pregnancy had advanced to about three months, that an abortion had recently taken place, and that septic metritis and peritonitis had followed as a consequence of the abortion. There were three superficial lacerations in the vagina—one just within the orifice, one at the middle, and a third on the cervical portion of the uterus. Beneath each was some extravasated blood. At the interior fundus of the uterus there was a circular pink patch about an inch in diameter. The organ was in every way enlarged. In the right ovary was an orange-coloured corpus luteum five-eighths of an inch in its smallest diameter. It contained an altered clot in its interior, which broke up into small particles on manipulation and section, for the organ had become softened from post-mortem decomposition. The corpus luteum was quite half the size of the ovary. The medical men who made the inspection found no recent organic disease save that referable to the abortion, and no old organic disease beyond the atrophy or non-development of one kidney, and moderately marked "shaved beard" pigmentation of the intestine—if the latter can be considered as pathological. There was no evidence of typhoid fever; and the congestion of the throat and lungs was such as is usually met with in cases of acute septic poisoning or infection. It will be remembered that, except for an ordinary cold, deceased appeared quite well when she visited her parents, only a few hours previously to her entering Turnbull's house.

The case presents several points of great interest from a medico-legal point of view. That deceased had been pregnant and had recently aborted was not questioned at the trial by the counsel for the defence, who pleaded for an acquittal on the grounds that Turnbull was not cognisant of the facts just mentioned. It is curious to note that, although the indictment charged the prisoners with the crime of wilful murder, and on a minor count with felonious assault, neither the counsel for the prosecution nor for the defence appeared to entertain a middle course between murder and nothing. The question of manslaughter was suggested by the judge, on the ground that the prisoners might be guilty of culpable and criminal negligence, either in not having taken reasonable care to ascertain the exact nature of the illness, or in failing to render such assistance as the case required. It was fortunate for the prisoners that the jury adopted the suggestion and returned a verdict of manslaughter only, for, as Mr. Justice Denman remarked when passing sentence, it was idle to suppose that Turnbull and Nottage were not aware of all that happened from the time deceased went to reside with them until the day of her death. Touching the question of doubtful diagnosis, the medical witness for the prosecution admitted that if extreme care were not taken it might be possible to mistake the peritonitis and the other symptoms from which deceased suffered for typhoid fever, and that the post-mortem evidence was more trustworthy than the symptomatic. This proposition is illustrated by a case of undoubted instrumental abortion investigated at an inquest before Dr. Danford Thomas about two years ago. The abortion had been completed when a medical practitioner of unquestionable repute was called in. For several days he treated the patient for typhoid fever, and on the supposition that she was suffering from that disease sent her into a general hospital, where she died soon after admission. At the necropsy it was discovered that the nates and vulva had been punctured in several places, and the vagina and uterus extensively torn. A professional nurse who attended deceased never suspected that she had aborted. The author of the crime was not discovered. The case was reported fully in our columns. Concerning Clifford's abortion, a juryman asked, "Was it possible for the girl to have procured it herself after she entered Turnbull's house?" The reply was, "Yes, it was just possible, but very improbable." Then as to the lacerations in the vagina, it was admitted by the prosecution that the first might easily have been self-inflicted with the unaided finger, the second possibly so, the third not. According to Taylor, "Any mechanical injury done to the womb always implies interference of some other person in the perpetration of the crime." By this, we presume, is meant injury to the *interior* of the womb, for clearly it is possible for a woman to inflict, with the aid of an instrument, very severe wounds on the vagina and the vaginal portion of the uterus. In his evidence Mr. Pepper admitted that it was impossible to say whether the recent lacerations found in the vagina in the case under consideration were made during an attempt to procure abortion, or to extract the products of conception after an abortion had commenced, or by clumsy instrumentation for cleansing purposes. The inference was essentially a question for the jury, guided as they must be, where the medical evidence is at all equivocal, by collateral testimony; and here it may be parenthetically remarked that a chemise and sheet were discovered in the house on each of which were large blood-stains. As regards the blood and discharge found on the bed and pillows, it was impossible to say that they were not dependent on the advanced state of decomposition of the body—five days after death. It was pure imagination to suppose that they were all due to hæmorrhage from an alleged ulcerated throat, for the stain on the bed was in the middle, and was as large as the outspread hand. It goes without saying that the jury were not satisfied beyond reasonable doubt that an illegal abortion had been procured by someone other than deceased; but looking at the evidence as reported from its medical aspect, it is difficult to convince oneself that such was not the case, especially when read by the light of associated facts. Although it is incumbent on a jury to find according to the evidence, it would be unreasonable to expect them to ignore altogether the consequences of their verdict. Had they decided that a murder had been committed, sentence of death would have been passed on both convicts, for there was nothing to show that Nottage was ignorant of what Turnbull knew of the chief circumstances that transpired whilst Clifford was confined at 146, Hampstead-road; and, as the equitable sentences passed by the judge indicated, there was a wide difference between the guilt of the two persons. On first consideration, the law of criminal abortion seems somewhat Draconic in severity, inasmuch as the illegal act is performed with the full knowledge of its victim, and there is not only no intent to kill, but a strong desire to keep alive. But it must not be forgotten that the woman, especially if she is single, has a powerful motive for assenting to an illicit operation, and that she is generally ignorant of the extreme danger she is running in being a party to its performance. Her judgment is narrowed by ignorance, and perverted by a sense of shame. Very rarely is the accused convicted of the capital offence, and still more rarely is the corresponding sentence carried out. Since the law leaves such wide limits to the jury and such great discretionary powers to the judge, we must expect to meet with convictions and sentences of unequal severity. At the Warwick Summer Assizes in 1885, the prisoner, a medical man named Millerchip, was sent to penal servitude for ten years for *attempting* to procure abortion by means of a Lawson Tait's uterine dilator, exactly the same punishment awarded to Turnbull. In each case the sentence was proportionate to the verdict. Legally and technically we subscribe to them, though morally we might hesitate to do so.

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...HE LANCET.

...N: SATURDAY, JANUARY 23, 1886.

...politan Asylums Board has sought the advice ...to the course it should pursue with reference ...harities in connexion with the Eastern Hospitals, ...recommended to take no further proceedings. ...nuty therefore be considered to be terminated, ...tepayers have not even the consolation of ...at due punishment will be awarded to those ...been guilty of practices which have led to the ...penditure of large sums of public money. The ...es which have recently been brought to light ...t to shake to the foundation any remaining con... present form of London government, and to ...their posts the remnant of good and able men ...nder the great disadvantage of a faulty system, ... the public good.

...politan Asylums Board has been an anomaly ...st creation. Elected from the Boards of ...dt had placed upon it duties which necessi... enormous expenditure, over which the rate-... but little, if any, control. Even the Managers ... are not free agents, but in practice are ...o do the bidding of another board which is ...independent. The duty the Managers were ...pointed to perform was limited to providing ...ion for certain paupers suffering from infectious ...ho were imbeciles. The duty which has been ...them is nothing less than to undertake the charge ...ersons suffering from infectious diseases, and who ... treatment, throughout the whole metropolis. ...ve been found wanting in desire to meet the ...he largest city in the world, but they have not ...d with adequate powers or organisation ...r the requirements of a town of moderate ... Hence many and fatal mistakes have been ...es which have not only taxed the pockets of ..., but have cost the metropolis more lives than ...rificed during one of our military campaigns. ...roken out in the neighbourhood of the hospitals ...gain, yet it has been argued that this is ...f the hospital-providing authorities. It is ..., to carry out an Act of Parliament; ... this action are the business of no one. ...t for individual ratepayers to show in ...that the aggregation of cases of small-pox ...th death to many, and that public health ...of the most serious importance are involved ...of hospital provision for infectious diseases. ...isfortunes could have befallen London than ...subject should have been dealt with as a ...law administration. It has prevented the ...these institutions from being recognised. It ...forgetfulness of the fact that the care ...and important than the prevention of ...seemed as if the existence of hospitals was the first consideration, and the existence of the community in which they are placed, and by whom they are maintained, but of secondary importance.

There have been ample indications that the Managers are not satisfied with their position. As long ago as nine years the late Dr. CORTIS, a member of the Asylums Board, pleaded at length in our columns for the reconstruction of the Board of Managers on such a basis that they should be brought into direct relation with the various sanitary authorities. The whole question has been considered in detail by the Managers, and circular letters embodying their views have been addressed to the central and to the various local authorities. Again, as recently as last year, the Managers, in making their arrangements for providing hospital accommodation for cases of cholera, strained a point to seek advice as to the health requirements of the metropolis. Nevertheless, there is no material change in their position, and, as a result, London continues to suffer.

The only complete remedy is to be found in legislation. The provision of hospital accommodation for infectious disease must be a branch of the sanitary administration of the metropolis, if the calamitous occurrences of the last fifteen years are not to be repeated. Parliament has begun its work during the present week, and upon the opportunity for its members to consider the better government of London, in whole or in part, will depend the welfare of numbers of persons. If we were pleading for the lives of animals lower in the scale than man, or if we were protesting against loss of life from some more violent cause than disease, we are convinced that our utterances would not be in vain. There can no longer be excuse for further delay. The investigations of Mr. W. H. POWER have amply confirmed the decision at which a court of law arrived some six years ago, and every year has added, and is still adding, to the list of those who lose their lives from the continued existence of a bad system. This needs to be clearly appreciated, for it is only when the evil it inflicts upon many is fully understood that we can hope it will receive the attention of the legislative body.

OUR columns are open to every fair and honest representation on the subject of Hospitals. Our predominant note about these institutions is one of praise and gratitude. We cannot imagine medical science flourishing without them. Medical education would be infinitely impaired by any change that reduced them to mere workhouse infirmaries. One huge consolation of the poor would disappear—the hope of relief from the highest members of the profession in cases confessedly out of the common beat of practice, and which, occurring in the rich, would command the attendance of consultants and specialists of every kind. By the beneficent provisions of our great hospitals the lot of the poor in their straits of accident or disease is somewhat assimilated to that of the rich. The distinction of the two classes in the matter of physical suffering is so far obliterated by the kindly action of the rich, which not only secures great advantages to the poor, but improves the art to which one day or other the richest man must be indebted. We adhere without abatement to our high opinion of a British hospital supported by voluntary contributions, and to which the working classes are admitted without too much inquisition in their

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days of need when grave disease presses. But, as we have said, every fair and honest representation about these institutions shall have a place in our columns. Accordingly we are frequently receiving complaints that these institutions are abused, and one correspondent lately has written us a letter in which he speaks confidently of having discovered the real secret of hospital distress, and the only means of cure. He goes at once to the root of the matter, and declares that hospital *abuse* is the chief explanation of hospital impecuniosity. Mr. MCDONAGH avers that there is no adequate discrimination of fitness of applicants; but he goes much further and maintains that the total disregard of supervision is fostered by the medical staffs of hospitals, whose interest it is to attract a better class of patients, who are found out as unfit, and then invited to call the next morning at the physician's or surgeon's private house, and mulcted of a fee of a reduced character. He is particular in his statement, and says that "many patients of his own who have been able to pay him bills of pounds subsequently received free advice at a general hospital." Were such a system as general as Mr. MCDONAGH represents, it would doubtless squander the money of the benevolent, it would operate disadvantageously and unjustly towards medical practitioners, and it would demoralise the unfit recipients. It was not to be supposed that such statements would pass unchallenged, and they have been met with much point and dignity by a "Physician to a General Hospital," in THE LANCET of last week, who vindicates the motives and the work of his class in hospitals; who avers that there is, at least in some hospitals, a most careful supervision of out-patients; and whose conclusions as to the abuse of the out-patient department—in which, by the way, very little of the hospital money is spent—differ very much from Mr. MCDONAGH'S. He finds that very few of the patients presenting themselves for advice were in a position to pay the fees of any medical man, however moderate. This has certainly been found in other hospitals also. It does not necessarily follow, either, that Mr. MCDONAGH'S chance of getting a bill of pounds from a patient is diminished by the fact of the patient in an emergency or in an exceptional case seeking assistance in a general hospital. The details of such cases would have to be stated with much more minuteness to establish Mr. MCDONAGH'S point. He may have got his account paid because the hospital relieved his patient of a certain liability. We publish to-day another letter from Mr. MCDONAGH re-asserting his position, and with some more detail of statement.

What system is not abused? Is the provident system not abused? Can anything be more disrespectful to the profession or more unjust to its members than some of the experiments that are now being made in the name of providence? The Liverpool papers have lately contained an able letter by Dr. RENTOUL of very much the same tone as Mr. MCDONAGH'S, and lauding some provident arrangements which seem to us very far from satisfactory, which cover the most irregular and inadequate remuneration of medical service, and which often make the medical man not only a sort of drudge, but a source of profit—a sort of money-maker—for a Friendly Society. A list of forty-two Provident Medical Societies is given, with a membership of 224,267 and an income from benefit members of £40,152. In other words, no bill of pounds is forthcoming, as in the case of Mr. MCDONAGH'S patient, who gets occasional relief at a hospital, and presumably on other occasions contracts with Mr. MCDONAGH a debt of pounds; but all medical indebtedness of these thriving artisans and their families is discharged in the handsome sum of 3*s.* 6*d.* a year per member! The most varying remuneration is given in different places. Thus, in the Metropolitan Provident Society 25,000 people are attended for £3290, whereas in Northampton only 16,000 people are attended for the larger sum of £3309. The Manchester Medical Association is held up to admiration by Dr. RENTOUL; and its 16,000 members, a similar number to that of Northampton, raise £4006, which looks pretty well. But how much of this sum finds its way into the pockets of the medical men? Only £1865. Is it not an unreasonable thing that the medical men, whose work makes or draws £4000, receive less than the half of it? We really cannot join in Dr. RENTOUL'S admiration at such a result, or think it, without explanation, one to be copied. We think it possible, and we devoutly hope, that many medical men of Manchester, having no connexion with the Association, but having honourable relations with the honest poor, get more recompense from them than this, even if they occasionally, and under stress of disease or diathesis, try what the hospital physicians can do for them. We do not wish it to be considered that our hospital system is perfect; but some developments of the Provident Societies are little more creditable, and they give a false sense of pride and independence to the members. Let us work steadily for the improvement of both systems, without denying that each has its place in an old and complicated civilisation like our own.

ANOTHER outbreak of disease in which milk is alleged to have been the vehicle of infection is reported by Mr. WYNTER BLYTH as having occurred in the metropolis. It appears that a group of scarlet fever cases were reported from the neighbourhood of Dorset-square, Marylebone, and preliminary investigation pointed to the fact that the only connecting link in common to these attacked was the use of milk from the same dairy. It next appeared that a lad at the dairy in question had also had scarlet fever, but from the dates of the several attacks it became evident that he was not the cause of the outbreak, but that he too had been infected by the milk. The milk supplied by this dairy came partly from Hendon and partly from Swindon. With the aid of the medical officers of health of those places, it transpired that, whilst no suspicion attached to the Swindon Farm, the one in Hendon was seriously implicated. The Hendon milk was transmitted from three separate barns or sheds to three separate dairymen in London, and a further stage was reached when it was ascertained that only the milk sent out from one of these sheds was involved in suspicion; but in the mean time other cases of scarlet fever were ascertained to have occurred in families who derived their milk direct from the Hendon farm. At this stage the evidence was so strong against the Hendon milk that the farmer was requested to stop the supply. He complied with the request, and threw away part of that which would otherwise have gone to Marylebone; but, apparently not believing in its harmful influence, he gave the remainder

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away to certain poor people, and within a few days eight of the families so receiving it were also suffering from scarlet fever, some patients sickening within about forty-eight hours. So far, it cannot be ascertained that any person employed about the farm had suffered from any affection resembling or having affinity with scarlet fever, but it is stated that one of the cows is "suspect." It will be remembered that on several previous occasions scarlet fever has been distributed through the agency of milk, and that cows suffering from some apparently trivial ailments have appeared in some mysterious way to have been directly concerned in the spread of the infection. Mr. POWER, of the Local Government Board, is the inspector who has specially pointed to the possibility of there being some connexion between certain bovine affections and the distribution of scarlet fever to the human subject through the agency of milk, and we are glad to learn that from the first he has been engaged in investigating the circumstances of this outbreak, and that the "suspect" cow has been purchased and sent to the Brown Institution with a view to an exhaustive investigation by Dr. KLEIN.

Until the official report on this interesting outbreak is issued, it would be premature to express any further opinion as to its actual origin and method of diffusion. But one point merits attention. It has for some time past been hoped that proper sanitary control over dairy farms would suffice to prevent milk from such farms becoming a means for the diffusion of disease. But here we have to deal with what is admittedly a "model" farm, having excellent water-supply and means of drainage; and the fact of scarlet fever being diffused by means of the milk sent out from it should go to show that, however valuable and necessary strict sanitary control over dairy farms may be, it can never suffice altogether to prevent the spread by means of milk of obscure diseases, such as diphtheria and scarlet fever. We therefore repeat the advice which we have more than once given, that all milk should be boiled or otherwise cooked before it is used for human consumption. In this respect continental countries are in advance of Great Britain, where alone large quantities of uncooked milk are regularly used as food.

We have to deplore cases that have recently come before the Law Courts, in which our profession has been disgraced by some of its members. There are, and always will be, "black sheep" in every flock. The clerical, the legal, as well as the medical profession have their *mauvais sujets*, and the profession of arms is not wholly spotless, we believe; nevertheless, there is no comfort to be derived from the fact that vice has its representatives everywhere. The medical body ought to be, and we believe is, especially sensitive on the subject of honour and morality. Its members occupy a unique position; they stand in an altogether exceptional relation to the community. They are in a distinctly personal sense the trustees of [illegible] character. They know more of their clients' secrets than any other class of men can possibly know. A man tells the minister of religion whose advice he seeks and the lawyer he instructs just as much or as little as he pleases about his inner life and most private affairs; but before [illegible] he stands unmasked, and no effort of his can conceal the state of his health, the chances of his living or dying, or the manner of his life, from the expert practitioner of medicine. It is so with men and women alike, of all ranks and conditions. The medical adviser is the one "other person" to whom all secrets are discoverable, and from whom practically nothing can be hid. This being so, it seems strange that society does not require heavier bail and stronger guarantees for the good conduct of the men it permits to practise medicine in its midst than are now deemed desirable; above all things, it certainly appears inexplicable that the community, as represented by the State, does not insist that the governing bodies of the profession, the *Colleges*, should actually exercise such control as they claim to have over the practice of their members and licentiates. There are Colleges of Physicians and Colleges of Surgeons, and if only these distinctly *professional* bodies were anything more than mere licensing faculties, they would be powerful agencies of supervision and control. In the old days the College of Physicians of London had the power of reprimanding its Fellows, Members, and Licentiates, and could, if need be, commit to Newgate any person either daring to practise within its jurisdiction without its leave, or so practising as to transgress its bye-laws. With the growth of a liberal spirit and *régime*, which may readily degenerate into licentiousness, the prerogative of control has been restricted until it has become little more than a name. Meanwhile the College of Surgeons, which never distinguished itself by any care for the honour of the profession, has come to be wholly absorbed with squabbles about collegiate policy taking place within its own walls, and is far too busy to think of what is going on without, even though membership at Lincoln's-inn is now, and has for many years past been, the commonest qualification of general practitioners.

We are convinced that the time has arrived when it is urgently necessary that the Colleges should be compelled, if not by the State and community, by the profession itself, to assume the position and discharge the responsible duties of Boards of Control. It is intolerable that the social credit and common repute of the medical body should be progressively reduced by the nefarious proceedings of qualified quacks and unscrupulous professional practitioners. We hear a good deal about the necessity of exposing and repressing the unqualified pretenders whose lawless trade in physic is supposed to clash with the interests of qualified practitioners. It is high time that something was said, and to the purpose, about internal organisation and control. We venture to think greater injury is done to "our interests"—yes, even our more selfish interests—by the degradation of the profession in the esteem of the public, which results from the perpetually recurring scandals arising in connexion with the misdoing of qualified practitioners, than by the most nefarious deeds of outsiders.

ALTHOUGH nothing of a very definite character was decided upon at the Council meeting last week, it is satisfactory to learn from their proceedings that at least some members of the Council feel that matters cannot be allowed to remain as they are. Mr. MACNAMARA'S motion (seconded by Mr. THOMAS SMITH), "that a committee be appointed to ascertain and report to the Council the views

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of the Fellows as regards the advisability of Members being allowed to vote for the election of Fellows as members of Council," was temporarily postponed until after the report of the Committee on the proposed changes in the conditions on which the Fellowship is at present granted had been received and disposed of. Neither of these motions, however, whether passed in their present or in any altered form, will meet the requirements formulated at the late meetings of the Fellows and Members.

Mr. MACNAMARA'S motion, if passed, can do no sort of harm, but it is insufficient. The Association of Fellows, as the mouthpiece of a considerable and influential section of the Fellows at large, has decided not only that Members shall *vote* for the election of *Fellows* as members of Council, but also that the Council shall *include* a certain proportion of *Members* among its number. Hence it is to be regretted that Mr. MACNAMARA has not included in his motion the latter question also.

As regards Mr. HUTCHINSON'S motion to widen the basis upon which the Fellowship is obtained it is premature to speak, seeing that the subject is still under consideration. But if there is any truth in the whisper we have heard, that it proposes that some fifty Members be elected to the Fellowship without examination every year, we may say at once that the proposal does not meet with our approval. In the first place, we doubt very much whether Members would care to accept the Fellowship on such terms. In the next place, we doubt whether fifty Members really eligible for a diploma so strictly surgical could be found year by year. The chief effect of such an arrangement would be to thin out the ranks of the Members and take away the best and most representative men. It would give these men a higher title without ensuring any wider knowledge of surgery, and would thus defeat the object for which the Fellowship was instituted—"in order more effectually to promote and encourage the study and practice of the said art and science of surgery." The selection of the fifty recipients would be a most invidious task, and would probably lead to much jealousy and disappointment. We are far from thinking that the mode of granting the Fellowship is satisfactory. The great hindrance to its acquisition at present is not the *surgical* but the *anatomical* part of the examination; and although some beneficial changes have been effected within the last year or two, there is much room for improvement even now.

Moreover, both Mr. HUTCHINSON'S and Mr. MACNAMARA'S motions leave the *principle* for which we have so long contended quite untouched—the right of all Members of a large Corporation like the College of Surgeons to a voice in its management. That twenty-four Fellows, members of Council, should absolutely control the affairs of a corporation numbering over 18,000 educated men, is an anomaly which has already existed too long, and which in the interests alike of the profession, of the College, and of society at large must be put an end to. We must once again impress on the College authorities that our arguments for an extended franchise do not rest on the fitness of a few to be made Fellows, but on the principle that a corporation should be governed by those through whom and for whom it exists.

Annotations.

"Ne quid nimis."

THE UNIVERSITY OF LONDON.

A MEETING of Convocation was held on Tuesday last, to consider no less than sixteen different questions, as set forth on the agenda-paper summoning the meeting. The chief part of the sitting was occupied with a discussion on a revised syllabus for the matriculation examination recommended by the Annual Committee to take the place of the one now in force. A comparison between the two occupies six pages of a special report, and as the views of no two graduates agree as to what subjects, much less details, should form part of the examination, and many teachers look upon it as a finishing examination for a schoolboy, instead of a necessary preliminary to a degree, the utter confusion of the discussion can be imagined. after a tedious debate, in which probably some twenty speakers took part, the revised syllabus was recommended for adoption without having undergone any alteration. The Senate should obviously have taken the initiative in such a question as the alteration of its entrance examination, and should have been able to ask the assistance of an authoritative Board of Studies, instead of being dependent on the energy and knowledge of one or two individual graduates, and giving an opportunity to every member of Convocation to air his pet educational crotchet. A motto for the University, a thesis for the Doctorate in Law and in Medicine, and a large alteration in the regulations for the LL.B. degree, were in turn brought forward, and the House was counted out at a little before 9 P.M., having spent four hours in proving its unfitness as a working element in the University, and the folly of giving to it in its present form any increased powers. It may be difficult to find a fitting motto for the University, but one for Convocation immediately suggests itself: "Vox et preterea nihil."

HOME AND HOSPITAL TREATMENT OF INFECTIOUS DISEASES.

NOTWITHSTANDING the noteworthy statistics of small-pox mortality around small-pox hospitals issued by the Medical Department of the Local Government Board, no good reasons have yet been urged for doubting the generally beneficial effect on public health of hospital treatment of infectious diseases. When, however, the effect of such hospital treatment upon the proportions of death and recovery among the patients treated comes under consideration, difference of opinion is often expressed, and the need for satisfactory statistics on this point becomes patent. Dr. Hime, the medical officer of health for Bradford, Yorks, in his report on the health of that borough in 1884, urges, on the basis of certain statistics which he gives, "the folly and cruelty of keeping such cases (scarlet fever) at home, to the danger of the public and with such a great chance of killing the patients." We wish, in the interest of public health, confident as we are of the value of hospital isolation of cases of infectious diseases in large towns, that we could accept Dr. Hime's figures as a satisfactory basis for calculation and deduction. The mean percentage of deaths from scarlet fever among the cases treated in the Bradford Fever Hospital in the three years 1882-3-4 did not exceed 8·6; whereas Dr. Hime gives figures showing that the mean mortality among cases treated at home during the same three years was 14·4 per cent. We regret to find that no satisfactory explanation of these figures accompanies the table. There is no reason to doubt the accuracy of the percentages of mortality in the hospital, although from a statistical point of view the value of the figures would have been increased if the facts upon

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...percentages are based had also been given. It has ...een admitted that the recorded mortality of in... ...ases is greater in hospital than in cases treated at ...his has generally been referred to the probability ...st cases are sent into hospital. It becomes highly ...therefore to know how Dr. Hime has obtained ... mortality among cases treated at home. The ...aracter of these statistics suggests that he has ...roportion between the number of cases notified ...ompulsory clauses of the local act, and the ...deaths registered out of the Fever Hospital. If ... case, it is obviously more than probable that a ... proportion of the milder cases of these diseases ...fied, the effect of such omission being to unduly ...parent mortality of cases treated at home. The ...of trustworthy statistics on this point, and the ...culties in the way of obtaining them, increase ...hat Dr. Hime has not more fully explained the ... of his remarkable statistics.

THE PRINCESS OF WALES.

...ecrecy which is observed whenever a slight ...poses any member of the Royal Family is to ... the scare which was created by the announce... ...he Princess was suffering from diphtheria. A ...may or may not have a diphtheritic tendency, ... the nature of the surroundings of the patient. ...tically the difference is fully recognised, it is ...mes possible to mark the exact line between ...nd specific affection. This difficulty is often ... proportion to the slightness of the attack, ... slight and simple sore-throat a diphtheritic ... engrafted. It is from this fact that anxiety is ...never any member of the Royal Family is ...be suffering from sore-throat. The interest ...rything concerning the Princess of Wales is ... than that taken in Her Majesty, so thoroughly ...l Highness ingratiated herself in the affections ... Nor can this be matter of surprise when the ...nt qualities, both of wife and mother, which ...in the Princess, are borne in mind. This interest ...eing of members of the Royal Family is not a ... curiosity, but is an expression of the devotion ..., in encouraging which there can be nothing ...he secrecy observed in reference to their slight ...l the ambiguity of bulletins in cases of severe ...d in the future be abandoned.

HYPERTROPHY WITH ATROPHY OF ADRENALS.

...r SAUNDBY, physician to the Birmingham ...tal, has just recorded, in the Transactions of ...al Society, a very remarkable case of hyper... ...e spleen with atrophy of the supra-renal ...young lady, who was only eighteen years of ... died, had suffered for three years from dark ...ive anæmia, and gradual splenic enlargement. ...-coloured urine, but this had been habitual ... birth. This dark colour was due to indican. ...ever any leucocythæmia or marked oligo... ...the red corpuscles were deficient in hæmo... ...death, which resulted from an attack of ...which the patient had had several at intervals, ...found to weigh sixty-six ounces. The ...weighed eighteen grains and ten grains ...under the microscope showed simple ...So far the case may be regarded ...disease, due to simple atrophy of the ...of which Hadden, Coupland, and Barlow have published examples. But the remarkable feature of this case is that the father died at the age of thirty-seven with the same symptoms, and was found to have a spleen which weighed seven and a half pounds; while a brother, still alive, presents the same series of phenomena. This coincidence suggests that the atrophy of the capsules has been in each case congenital—a view which is supported by the microscopical appearances of the capsules, in which no trace of inflammatory action was observed. The enormous splenic enlargement present in all three cases distinguishes them from ordinary cases of Addison's disease, in which hypertrophy of the spleen, though frequently observed, reaches very moderate dimensions. The fact that there should be this tendency, even in ordinary cases, to enlargement, indicates, in Dr. Saundby's opinion, that these enormous spleens depend upon the long continuance and extreme degree of the capsular affection. It is noteworthy that Dr. Saundby could discover no change in the structure of the semilunar ganglia, and that, with the exception of pigmentary deposits, the organs generally were free from obvious alterations.

EVENING CLASSES FOR THE YOUNG.

WHILE supporting the admirable movement in favour of evening classes of a recreative and instructive character to supplement the earlier educationary efforts of the School Board, the Bishop of London, a few days ago, alluded to the value of these classes as opportunities for the employment of spare time in the case of boys thrown on their own resources for amusement after the hours of daily labour. This is a most important matter. There is an intermediate stage in the life of every individual which is by no means a "dead-point," but, on the contrary, is signalised by the dawn of special energies which need to be subordinated by proper influences. The mind never so greatly needs to be developed and cultivated as when it is in danger of being dominated by that part of the nature—the emotional—which stands in closest relation with the lower animal instincts and sensibilities. To throw a boy-man or girl-woman entirely on individual resources for amusement at such a crisis is to do more than can be easily accomplished at any other juncture or period of life in the downward line of retrograde demoralisation and dissolution. We quite agree that music and drawing should form the cardinal subjects of instruction at these evening classes, because they are especially instructive; but lessons in the rudiments of natural science—chemistry, zoology, botany, and the like—might be added, and the mind trained to self-respect and self-improvement by the legitimate stimulation of that desire for knowledge which is itself regenerative when not over-developed or mischievously perverted. But the movement must be allowed to proceed on simple and natural principles without any "goody-goody" or, still worse, sectarian bias, if it is to succeed.

VERTEBRAL ARTHROPATHY.

THE author of a paper in the *Journal de Médecine de Bordeaux*, No. 24, records the following case as the first one of authentic vertebral arthropathy of tabetic origin. He observes also that it is curious to notice the presence of osseous and articular lesions in the absence of other severe tabetic symptoms. A man aged fifty-six came under observation on May 6th, 1885, for an affection of the right big toe that interfered with progression. He had met with many accidents, some of a severe nature, but it was on account of his great toe alone that he sought assistance at the hospital. One day, fifteen years previously, when about leaving home to go to his work, he was suddenly seized with weakness, which, commencing in the trunk, invaded the lower limbs; this weakness led to a change in his occu-

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pation—from a cooper he became a tailor. About the same time he began to suffer from pains that shot through his limbs. Within the past five years incoördination of gait had set in, his sight became bad, and the pains increased in frequency and severity. In 1883 it was observed that his stature had decreased to the extent of at least twenty-three centimetres, and he was unable to walk without assistance. On admission to the hospital, under the care of M. Denucé, there was dry gangrene of the big toe, for which resection was performed; this was followed by gangrene of the foot, necessitating amputation of the leg, to which the patient succumbed. The interest of the case turns chiefly upon the condition of the vertebræ and hip-joints. The capsule of the hip-joint was much thickened and irregular; three small bony fragments were adherent to the capsule. The head of the femur had totally disappeared, as well as a large part of the neck; in its place there was a smooth vertical surface, shaped like a punch, on the anterior surface of the femur, and the great trochanter was much flattened. The spinal column was much curved laterally. The osseous skeleton showed in many places rarefaction and in others genuine osteophytes. Depressions and rugosities were very marked on the vertebræ; many of the vertebræ were much flattened, and their upper and lower borders markedly projected.

"MEDICAL EDUCATION IN ENGLAND."

MEDICAL Education in England is the subject of three long and interesting letters by Professor Theordor Puschmann which have recently been published in the *Allgemeine Zeitung*. The writer naturally devotes the greater part of his space to a description of the nature and working of the English system, but he also indulges here and there in comparisons between the English and German systems, which are worthy of attention. He is struck, for instance, by the fact that our hospitals owe their foundation to the beneficence, and are still supported by the contributions, of private individuals; whereas in Germany all such institutions have been founded and are supported by the municipality or the State. Englishmen are so familiar with these creations of individual effort that they do not see anything peculiar in them; the foreigner, however, invariably regards them as the most surprising, and perhaps the most enviable, thing which distinguishes England from the rest of the world. The medical students in this country, too, are noticed as being a stronger and healthier set than they are in Germany. This is attributed to the national addiction to out-door exercises; and Professor Puschmann advises his fellow-countrymen who are studying for the profession to cultivate similar pursuits. The essential differences which he finds between the two systems of medical education are reducible to two. In the first place, the general education of the English student is secured only by the obligation to pass the not very difficult preliminary examination. On the other hand, the German student has to spend nine years at the gymnasium, and to pass that bugbear of German boyhood, the "Abiturienten-Examen." Perhaps the English method does not sufficiently guarantee the possession of a due amount of general culture, but the German system is terribly rigid and inelastic. Prof. Puschmann inclines to a compromise between the two. The other great difference is the stress which the English system lays throughout on practice. It may be said that German students get their training in the universities; English students get theirs in the hospitals. The practical end to which all his labours are directed is kept always before the mind of the English student; the lectures he hears are animated by the constant reference to practice, and are therefore always followed with interest. The German professor, on the contrary, does not condescend to this lower level, and keeps well in the region of theory. That the German system does not adequately recognise that medicine is an art is evidently the opinion of Professor Puschmann; and he regrets that the old Bavarian system under which the young surgeon or physician had to complete his training as assistant to a medical man in large practice or in a hospital before he was allowed to practise on his own account, has given way to the Prussian system, which came in with the establishment of the German Empire. "The English," he concludes, "have accomplished wonderful things in other spheres of labour; perhaps in this sphere also we may find something worth our imitating."

INTRA-PULMONARY ANTISEPSIS.

AMERICAN physicians have employed iodoform dissolved in olive oil and ether as an antiseptic injection in the treatment of pulmonary cavities. M. Lépine has advocated the use of weak solutions of corrosive sublimate. M. Gouguenheim has taken up the subject again by experimenting on the cadaver. He believes that the first and second intercostal spaces in front are suitable sites for penetrating to cavities at the upper part of the lung by means of a Pravaz needle; the axillary line and the angle of the scapula are also available sites. The sternal end of the intercostal spaces ought to be avoided. Clinically, the injections ought to be made slowly, in order to prevent cough and hæmoptysis; the liquid should be at the temperature of the body. The treatment may be carried out for a long period. M. Gouguenheim made almost daily injections for a month, and the necropsy revealed in fatal cases no lesions that could be attributed to the injections. The strength of the solution was either 1 part of the sublimate to 2000, or 1000, or 500. One-half to three milligrammes of sublimate in a syringeful of liquid was the quantity injected at each sitting. After the injection pain was but slight, but cough at times violent; hæmoptysis was exceptional and transitory. Generally speaking, an improvement in the physical signs of auscultation was observed at the site of injection, and expectoration was often diminished. We do not think it has yet been shown that any decided benefit has resulted from such intra-pulmonary injections, and in view of the circumstance that phthisical cases even in their final stages not infrequently manifest marked temporary improvement, not only in symptoms but also in physical signs, we must question whether M. Gouguenheim has shown that this treatment yields "most encouraging" results.

BUILDING ON DISUSED BURIAL-GROUNDS.

A CASE of much interest from its bearing on the disposal of disused burial-grounds has just been decided in the Court of Chancery. A piece of land belonging to the trustees of St. Saviour's Rectory, Southwark, was sold by them last year to a firm of builders. It was then found that by the Disused Burial-grounds Act of 1884 buildings could not be erected on the ground in question, while a complication was introduced by a clause in the said Act, which exempts from its control "any burial-ground which has been sold or disposed of by Act of Parliament." The land in dispute had been received by the trustees from the churchwardens of St. Saviour's, though not by purchase, in 1883, an Act confirming their possession, and providing that the land might be sold for building purposes. Then came the prohibitory Act of 1884. The trustees, relying on their private Bill, sued the purchasing firm to complete their purchase, which, on examination of the later Act, they had refused to do. The Vice-Chancellor, however, ruled that the Transfer Act of 1883 did not refer to a sale or disposition within the meaning of the excepting clause in the Act of 1884, and dismissed the suit with costs. The

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decision in this case has turned upon a delicate point of law, but its justice is apparent. The legal process by which the exchange was effected for their mutual convenience between two similar bodies associated for a common charitable purpose in the present instance could not in any sense be regarded as equivalent to a sale. Practically, the ground could hardly be said to have changed hands. The building firm on their part, though apprised of the various Acts relating to their purchase, could scarcely be expected to decide the point of law involved when that divided experienced legal opinion and was not clear to the vendors themselves. We have in former articles discussed the question of building on land which has been used for burial. Experience has proved that such a proceeding is dangerous to health, as is also the mere breaking up of such ground without due sanitary precautions. In our opinion, the trustees of St. Saviour's Rectory cannot do better with their present unprofitable possession than hand it over to the Public Gardens Association to form one other place of recreation for the inhabitants of Kingston.

STEALING, KLEPTOMANIA, AND MORBID FORGETFULNESS.

As there is a wide practical difference between stealing with criminal motive and the pilfering resulting from a morbid impulse, so there is a distinction to be drawn between kleptomania, properly so called, and morbid forgetfulness of those which may lead its subject to perform acts apparently felonious. Thus, for example, it is quite conceivable that a morbidly forgetful person may take up articles in a shop and carry them away unpaid for without the least intention of purloining or cheating. Obviously, every individual case of this class must necessarily be judged on its merits, or great wrong may be done by conniving at the perpetration of the grave offence under a particularly thin disguise. Nevertheless, the fact should be recognised that this morbid forgetfulness is a true explanation of many otherwise mysterious phenomena of human action; and it is an affection not confined to the rich and well-to-do classes, but common to the population as a whole; so that the poor kleptomaniac depredator should have the benefit of the doubt, as well as the weak-minded possessor of a comfortable home.

ISOLATION ARRANGEMENTS AT LIVERPOOL.

The Town Council of Liverpool have taken another important step towards the solution of the difficulty as to the isolation of the infectious sick, which has so long been a prominent want in the sanitary administration of the city. Happily in the face of an epidemic of small-pox, provided themselves with an excellent small-pox hospital, they are now proceeding to provide means for the isolation of other infectious diseases; and on the 16th inst. a public inquiry was held at the Town Hall by General Carey and Dr. Thorne Thorne, Inspectors of the Local Government Board, as to a loan of £100,000 which the Corporation require for carrying the project into effect. The scheme, as described by the Town Clerk, by Dr. Hamilton, chairman of the Sanitary Committee, and by the city architect, is to acquire a site in the northern part of Liverpool on which to erect a hospital for 140 beds, and to work this in connexion with the Fever Hospital, which contains eighty beds, and is situated in the northern area. The latter hospital, being vested in trustees, has to be acquired by a special Act of Parliament. In addition to the 140 beds thus provided in each case, it is proposed to purchase one or other of two sites lying at the respective distances of ten and fifteen miles from Liverpool, on which to erect a convalescent hospital, to which the patients could be rapidly drafted either by railway or in ambulances. The proposal met with the usual objections which are raised to all such hospitals; but, in addition to these, it is clear, from the evidence given by Dr. Stopford Taylor, that he does not favour the scheme. He maintains that it is most inadequate, and that, quite apart from small-pox accommodation, Liverpool should possess within its limits at least 500 beds for infectious diseases; and he brought forward statistics showing that the average number of infectious cases which occur annually in the city was some 14,000, a total which could not be dealt with by the proposal of the Corporation. He also advocated an alternative site within the boundaries of the city, where such accommodation as he thought necessary could be secured, and in this he was supported by Dr. Flinn. On the other hand, Dr. Gee and Dr. Carter, representing the Liverpool Medical Society, supported the views and action of the Corporation. The conflict of medical opinion is unfortunate, but we see reason why both views should be entertained. The medical officer of health knows better than anyone else what are the real wants of Liverpool, and we can understand his opposition to a scheme which will only partially meet those wants; whereas, on the other hand, any substantial step towards removing a grave blot on the sanitary administration of the city may well receive the approval of the medical profession. The scheme will now be submitted to the Local Government Board, and their decision on it must be awaited.

THE FEARS OF CHOLERA AT GIBRALTAR.

An alarming telegram has been circulated by a news agency concerning the state of affairs in the immediate neighbourhood of Gibraltar. According to this brief message, the persons who died of cholera at the Spanish lines—that is, within some few hundred yards of the English sentinels—have not been properly buried. An offensive odour is consequently stated to prevail in this district, and great fears are entertained that it may occasion a fresh outbreak of the disease. The district in question, commonly designated as the Lenia so as to distinguish it from the English lines, is practically a suburb of Gibraltar, for nearly all its 13,000 inhabitants are dependent on Gibraltar for their subsistence. During the summer the cholera broke out here. At first its existence was denied by the Spanish authorities, so that the official figures ultimately given do not represent fully the extent of the epidemic. According to these statistics, there were in all 416 cases and 191 deaths. Considering that half the population had fled, and that there were many more cases than those officially recorded, it may be said that the Lenia suffered somewhat severely. The fact that the epidemic did not spread to Gibraltar speaks volumes in praise of the general sanitation of the fortress. Nevertheless, many of the inhabitants of the Rock were greatly alarmed. A formidable outcry was raised in favour of establishing a cordon to cut off all communication with Spain. Petitions were even sent to England complaining of the conduct of the authorities in this respect, and demanding that orders should be given by the Colonial Office to isolate Gibraltar. There appears reason to believe that efforts have been made to exaggerate the dangers that menace Gibraltar from without; and certainly it seems somewhat strange that the nuisance caused by the cemetery should not have been noticed before the coldest month of the year. Nevertheless, a cemetery in the sandy, porous soil of this country, situated near to wells supplying drinking-water, constitutes a serious danger which, however, no amount of cordons can modify. In this case the infection would travel below, and not above, ground. Cremation, and not cordons, would be the most logical remedy. At the neighbouring village of Campo-

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mento it was noticed that every fresh outbreak of cholera followed upon a downfall of rain. The germs in the soil seem to have been carried by the rains to the wells. If, as is now stated, the interments have not been performed with due precautions, we have, in such neglect, another reason to fear a recrudescence of cholera early next year. To all who know how such matters are managed in Spain these apprehensions will seem but too well founded.

DAMP BEDS.

THE sad death of Mr. Maas, the well-known tenor, calls attention very painfully to the peril of sleeping in a damp bed. As a matter of fact, this peril is of the greatest, and it s almost ever present. The experienced traveller rarely hazards the risk of sleeping between sheets, which are nearly sure to be damp, until they have been aired under his personal supervision at a fire in his bedroom. If this be impracticable, he wraps his rug around him or pulls out the sheets, and sleeps between the blankets—a disagreeable, but often prudent, expedient. The direst mischief may result from the contact of an imperfectly heated body with sheets which retain moisture. The body-heat is not sufficient to raise the temperature of the linen or calico to a safe point, and the result must be disastrous in the extreme, if, as is sure to happen, the skin be cooled by contact with a surface colder than itself and steadily abstracting heat all the night through. There is no excuse for the neglect of proper precaution to ensure dry beds. Servants are never to be trusted in this matter, and the managers of hotels, even of the best description, are singularly careless in respect to it.

GENITAL TUBERCULOSIS.

THE interesting subject of genito-urinary tuberculosis was dealt with by Dr. Simmonds at a meeting of the Medical Society of Hamburg (*Dutsche Med. Woch.*, 1886, No. 1). Of 60 cases of tuberculosis of the male generative organs which he had observed, 35 had been examined after death, and amongst these latter the epididymis was affected in 31 cases, the vesiculæ in 29, the prostate in 26, and the testicle in 16—the vesiculæ and prostate being sometimes the starting-point of the disease. In cases of bilateral tuberculosis of the testicle, it is generally believed that the one organ has been infected by the other through the vas deferens and the prostate, but in 2 out of 5 such cases the intra-pelvic organs were entirely free from the disease, which could have been eradicated by a complete castration. As to genito-urinary tuberculosis, it was stated that the origin of the disease was more frequently in the genital than the urinary tract. Of 14 such cases, the kidneys were involved in only 9, the bladder in 13, the vesiculæ in 13, the prostate in 12, and the epididymis in twelve; and clinical evidence was adduced in support of the view that tuberculosis of the urinary bladder is mostly a sequel—even after some years' interval—of tubercular epididymitis. Returning to the cases of genital tuberculosis, it was stated that in 31 out of 35 the lungs were more or less involved, but whether primarily or secondarily could not be determined. There were three cases of acute miliary tuberculosis apparently due to caseous deposits in the genital organs. The majority of the patients were between the ages of twenty-five and fifty; but the list of 60 included two children aged two and seven years respectively, and 12 cases between the ages of fifty and eighty. The duration of the disease was most variable, in some cases lasting for years, in others only a few months. The clinical features were described, and the differential diagnosis detailed. Instances were given of retention of sexual power even in bilateral disease, and in two cases of unilateral disease healthy children were procreated. No evidence of transmission of the disease to the wife was found, and Dr. Simmonds confirmed the opinion that such transmission did not occur. As to etiology, the histories of 26 cases showed inherited tendency in 13; 11 had suffered from gonorrhœa, 4 of which were associated with epididymitis; and in 4 there was a history of traumatism; and it was concluded that traumatism, gonorrhœal or other inflammation, may evoke genital tuberculosis in one who is already the subject of tuberculosis or is hereditarily disposed to it. The prognosis is unfavourable, but castration may be performed where there is no evidence of involvement of the pelvic organs, and only slight changes in the lungs.

NEW LUNATIC ASYLUM NEAR BARCELONA.

ON the 20th of December, with a most imposing ceremony, was commenced a large lunatic asylum in the neighbourhood of Barcelona. This work is being carried on by the administration of the Hospital of Santa Cruz in that city, and its commencement is largely due to the untiring and enthusiastic labours of the celebrated Catalan alienist, Dr. Pi y Molist. From the description of the proposed building, which was read by the secretary to the administration, we learn that it is to be 545 metres in length, the mean breadth being 240 metres, and it is calculated to accommodate from 600 to 700 inmates. There is to be a central portion containing the church and the administrative offices, also two general divisions, one for each sex, besides four special divisions, two for each sex. The grounds are to be enclosed by a fence, which, while quite secure, will afford the patients the opportunity of seeing the surrounding country, thus obviating the depressing effects of enclosure within high walls. The total cost of the building is calculated at £90,000. The site is said to be all that can be desired, and the Barcelonians gratify themselves by the thought that when their asylum is finished it will bear comparison with the best in the world.

RATIO OF INCREASE OF HEIGHT TO INCREASE OF BULK IN THE CHILD.

SOME remarkable observations have been recently made by the Rev. Malling Hansen, principal of the Danish Institution for the Deaf and Dumb, on the progressive increase in height and weight of children, 130 of whom were under his charge. Of these, seventy-two were boys and fifty-eight girls, and they were weighed in batches of twenty, four times daily: in the morning, before dinner, after dinner, and at bed-time. Each child was measured once a day. The weighings and measurements extended over a period of three years, and the results showed that the increase in the bulk and height of the body does not proceed at a uniform rate throughout the year. Three distinct periods, with some minor variations, were observed. In regard to bulk, the maximum period extends from August until December; the period of equipoise lasts from December until about the middle of April, and then follows the minimum period until August. In regard to height, the maximum period corresponds to the minimum period of increase in bulk. In September and October a child grows only a fifth of what it did in June and July. So it appears that during the autumn and the beginning of winter the child accumulates bulk, but the height is stationary. In the early summer, on the other hand, the bulk remains nearly unchanged, but the vital force and nourishment are expended to the benefit of height. When the body works for bulk there is rest for growth, and *vice versâ*. M. Hansen has observed a similar ratio of increase of bulk to increase of height in trees. In regard to the minor variations observed, it is probable that they are dependent—in part, at least—upon the external temperature, so that when this

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runs up there is marked increase in weight, whilst a diminution of weight occurs with a fall of temperature. M. Hansen's observations were communicated to the International Medical Conference, held in Copenhagen in 1884, and are undoubtedly of considerable importance. Similar observations have been made both by Dr. Percy Boulton (whose results were given in our columns in 1880) and by Dr. W. H. Miller, surgeon to the West Riding Convict Prison. Dr. Miller experimented on about 4000 prisoners for thirteen years, and obtained results that differ sensibly from those of M. Hansen; for he found that the season of maximum increase in weight in adults is from April to August, and the period of minimum increase in adults from September to March. Dr. Miller found the body became heavier in summer and lighter in winter, and he attributes the loss of weight to the more active excretion of carbonic acid gas in the colder months.

SUPRAPUBIC LITHOTOMY; SUTURE OF THE WOUND.

DR. PILCHER recently showed to the New York Surgical Society a man, twenty-one years of age, from whom he had removed fourteen days previously a vesical calculus weighing 2½ grains by the suprapubic method. He departed from the usual mode of treating the case, inasmuch as after removing the stone he closed the wound in the bladder by seven fine silk sutures passed through the muscular and submucous coats only, and then united the wound in the abdominal wall by a continuous suture in the muscles, and three hare-lip pins with interrupted sutures for the superficial tissues. A catheter was retained in the bladder up to the ninth day. The pins were removed on the tenth day, and the patient returned to his home quite well on the eleventh day. In the discussion that followed the record of this interesting case, the opinion was generally expressed that the case was one eminently suitable for treatment by Bigelow's operation, although Dr. Pilcher's treatment had been very successful. The rapid recovery was no doubt due to the closure of the operation wound and its union by "first intention," instead of by the slower process of granulation. This may probably be safely attempted where the calculus removed is small, as in this case; but where a very large stone is removed and the edges of the wound in the bladder and abdominal wall are more or less bruised, such a step would be fraught with danger from a failure of the "primary adhesion" and extravasation of urine.

THE SANITARY STATE OF MILE-END OLD TOWN.

Owing to the allegations of the Mansion House Council on the dwellings of the People as to the sanitary state and administration of Mile-end Old Town, an inquiry has been held by Mr. Cubitt Nicholls, who was appointed for the purpose by the Home Secretary. On behalf of the promoters of the inquiry, it was contended that dustbins were defective, streets badly paved or unpaved, yard gulleys untrapped or defective, house sinks also untrapped and yet in direct communication with the sewers, and that dilapidations and other conditions were injurious to health. Special descriptions were given of property in Canal-road, St. Dunstan's-street, and Maplin-street; and a large tenemented block known as Norfolk House, and which was described as consisting of "model dwellings," was shown to be greatly overcrowded, to have only watercloset accommodation at the ratio of one for every forty-five persons, and to be so bad in other respects that it could only be improved by extensive alterations. The inspector of nuisances was called, and, in answer to inquiries, he admitted that he was the only officer of his class, and this with a population of nearly 120,000 souls. On behalf of the vestry no witnesses were called, the defence being a general one that the authority had taken such action as they legally could do, and that they had not been neglectful of interfering in the interests of cleanliness and health. The contention of the vestry does not, at first sight, seem to be borne out by the facts elicited, but we reserve further comment until the issue of the report, which Mr. Nicholls stated he should make to the Home Office.

THE PROPHYLAXIS OF HYDROPHOBIA.

IT is satisfactory to note that the authorities are, after all, a great deal more in earnest in this matter than appeared likely when we wrote last week. The Commissioner of Police of the Metropolis, as the local authority for the Metropolitan Police District, under the Dogs Act, 1871, 34 and 35 Vict., cap. 56, has issued the following order, dated Jan. 19th:—

"Whereas, mad dogs and dogs suspected of being mad have been recently found in various parts of the metropolitan police district; now I, the undersigned Edmund Yeamans Walcott Henderson, the Commissioner of Police of the Metropolis, pursuant to the Dogs Act, 1871, and in exercise of the powers vested in me as the local authority under the said Act for the metropolitan police district, do hereby order that no dogs not being under the control of any person shall be henceforth for the period of sixty days suffered to be in or upon any thoroughfare or public place, or any place open to the public, within the metropolitan police District. Notice is hereby given that any dog found at large and not under proper control, by being led or otherwise, will be seized by the police in virtue of the above order, and disposed of in accordance with the law. The 3rd section of the Dogs Act, 1871, provides that 'any person who acts in contravention of any order made in pursuance of this section shall be liable to a penalty not exceeding twenty shillings.'"

Colonel Henderson has also issued the following fresh police orders, dated January 18th:—

"Referring to the police order of November 20th last, which expired yesterday, a fresh order in continuation of the same, for a further period of sixty days, has been approved, to commence from to-day. The police order of December 4th, as to muzzling dogs within the metropolis, is to continue to be stringently enforced until further orders."

Sir Richard Cross has also issued a circular from the Home Office stating that it is highly desirable that all local authorities under the Dogs Act of 1871 should rigorously endeavour to stamp out rabies in dogs by following the directions which Professor Brown, the professional officer of the Agricultural Department, has submitted to the Privy Council. The gist of the proposal of Professor Brown is that all dogs should be put under restraint, as they are in the metropolitan police district. The circular has been forwarded to all the courts of general sessions. We sincerely trust that the various local authorities will now do their duty and not be swayed by unnecessarily sentimental feelings. This time the hydrophobia "scare" seems likely to result in an honest and solid endeavour to stamp out the terrible disease, but this most devoutedly-to-be-wished consummation cannot be reached without united and sustained action.

TESTS FOR ATROPINE.

MORE than a year ago Mr. Gerrard showed that the mydriatic alkaloids were possessed of an exceptional power over mercuric chloride. Schweissinger and Flückiger have confirmed these results. The current number of the *Pharmaceutical Journal* contains an article by the last-named chemist, which proves that atropine and hyoscyamine has an alkaline power like the hydrates of sodium and potassium, and thus differs from probably all other alkaloids. Dr. Schweissinger stated that homatropine

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was devoid of the power of acting on mercuric chloride. Flückiger, however, has ascertained that it perfectly agrees with atropine, whereas hyoscyamine did not yield a precipitate in the solution of mercuric chloride. As a remarkable result corroborative of Mr. Gerrard's test, Flückiger has discovered that atropine is able to impart a red colouration to phenolphtalein paper. Gerrard showed that atropine was more powerfully alkaline than mercury, and so was able to replace mercury in the chloride. Atropine acts on some colouring matters, such as cyanine, methylorange, and tropœolin in the same way as inorganic alkalies, but it does not blacken calomel (mercurous chloride). Cocaine turns litmus paper blue if moistened with either water or alcohol, but it does not partake of the property of reddening phenolphtalein paper. It precipitates mercuric chloride; but it would be impossible to investigate the composition of the white precipitate, inasmuch as it very soon turns red, as in the case of the mydriatic alkaloids. Mercuric chloride and phenolphtalein are therefore to be considered as very valuable tests for alkaloids.

THE UNIVERSITY OF EDINBURGH.

DURING the past year the total number of matriculated students at the University of Edinburgh has amounted to 3525, being 124 in excess of those enrolled during 1884. Of this total, 1829 were enrolled in the faculty of Medicine, 1104 in the faculty of Arts, 114 in the faculty of Divinity, and 478 in the faculty of Law. Of the students of medicine, 736 (or about 40 per cent.) were from Scotland, 664 (or 36 per cent.) from England, 34 from Ireland, 97 from India, 266 from various British colonies, and 32 from foreign countries. The increasing prosperity of the medical faculty is doubtless to be attributed in part to the recent completion of the admirable new buildings, which are specially fitted up for the use of this faculty, and partly to the rivalry which exists between the professors and the lecturers of the extra-academical schools, whose lectures may be attended during two of the four *anni medici* so as to qualify for graduation. From the Graduation List of 1885 it appears that in the faculty of Medicine fifty-nine candidates obtained the degree of Doctor of Medicine, and 187 the combined degrees of Bachelor of Medicine and Master of Surgery. To a munificent donation of £5000 by Mr. William M'Ewan the University has recently been indebted for the practical completion of the extensive new buildings devoted to medicine. One important want, however, still to be supplied, is that of a hall for graduation ceremonials and other university purposes, for which several subscriptions have been announced.

THE REDWOOD TESTIMONIAL FUND.

AN influential committee has, we are pleased to learn been formed for the purpose of making a public recognition and a permanent record of Dr. Theophilus Redwood's services to pharmacy, and the sciences connected therewith, on the occasion of his retirement from the Professorship of Chemistry and Pharmacy to the Pharmaceutical Society, his appointment as Emeritus Professor, and his attainment (in March next) of the age of eighty years. It is proposed to found a Redwood Scholarship, to be held in connexion with the school of the Pharmaceutical Society, which has been for half a century the scene of Dr. Redwood's labours; and with the surplus, if sufficient, it is the intention of the committee to procure a portrait in oils of the venerable scientist, which will be placed in the house of the Society. One, but by no means the only one, of the claims that Professor Redwood has upon the gratitude and kindly memory of the members of the medical profession is his services in connexion with the British Pharmacopœia. His association with this work began in 1851, when he acted as secretary to the committee which was appointed by the Pharmaceutical Society at the suggestion of the Royal College of Physicians. This committee held its sittings up to 1862, working from the year 1858 in conjunction with the Medical Council. In 1865 Professor Redwood was appointed to edit a new edition, which appeared in 1867, the same office being occupied by him in connexion with the editions which appeared in 1874 and 1885. To recapitulate the full list of the benefits which the Professor has conferred upon the science of medicine, both by actual research and by his pen, is impossible in the space at our command. The columns of this journal, amongst others, have frequently been graced by contributions from his facile pen, and for some years he was one of the most valued contributors to its pages. Personally fully appreciating his labours, we note with special satisfaction that they have not been disregarded nor under-estimated by the most prominent members of the profession he has done so much to advance, for amongst the names of members of the committee who have been appointed to superintend the testimonial fund we notice those of the President of the College of Physicians, the President of the General Medical Council, Sir William Gull, Sir Spencer Wells, Dr. Garrod, and others. We commend the scheme to the attention of our readers, feeling confident that the termination of such a lengthy period of scientific work as that performed by Professor Redwood will not be permitted to occur without a generous acknowledgment.

RUPTURE OF THE LIGAMENTUM PATELLÆ.

DR. SANDS of New York has recorded a case (*New York Med. Jour.*, Dec. 26th) of rupture of the ligamentum patellæ, which came under his care some months after the accident. There was then displacement upwards of the patella for about two inches, and entire loss of extension of the leg. Dr. Sands operated, making a long vertical incision over the patella and its ligament. The ends of the ligament were freshened, and an attempt made to approximate them. This failed until several deep cuts were made in the quadriceps extensor. Two silver-wire sutures were then introduced and cut off short. Drains were placed in the joint, the synovial membrane sutured with catgut, and the superficial wound closed. The wound healed by first intention. The limb was kept stiff for five months, when the splint was discontinued. Two months later the man could go up and down stairs without help, flex the knee to a right angle, and extend it fully and strongly. Dr. Sands finds from statistics of the New York Hospital that this accident is met with only once in twenty-five cases of transverse fracture of the patella. It is caused by indirect violence, and is more common in men than in women. The operation is not recommended for recent cases of this injury.

COLLIERY WOMEN AND GIRLS.

MR. ELLIS LEVER writes to inform us that our remarks on the employment of women and girls in the collieries of Lancashire and other districts have led to some misunderstanding of the subject. The intention in our recent article was to describe the character of the work done rather than the precise point of operations. We must not be taken to mean that women are still employed underground. They do not enter the mine or cut coal, but, with this exception, their work at the pit-mouth in carrying, banking, screening, and loading coal is little, if at all, less irksome than that of the miners proper. It appears to us but right to draw public attention to the manifest injustice of imposing on women and girls a daily toil which, wherever it may be undertaken, can only be described as manly, and for which they are physically and otherwise disqualified.

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ENT MEDICAL ASSOCIATION FOR LIVERPOOL.

public meeting in Liverpool it was resolved
ble that a Provident Medical Association be
the benefit of the working classes in Liver-
he Manchester system of checking the abuse
harities be introduced. The latter clause
n understanding between the Association and
s, in virtue of which the latter are to ascertain
f applicants, and refer those who are able and
to the provident dispensaries. Mr. Reginald
oke in favour of the motion, and a document
hands of the chairman signed by 100 medical
ining of the abuse of hospitals, and approving
hment of a well-organised and properly con-
ical Association. We have referred elsewhere to
e charitable and the provident principle and to
acy of payments to medical men in provident
, but the need for them is great everywhere.

PRIMARY UNION OF WOUNDS.

istorical parallel between English and French
hich Professor Roux published just after his visit
in 1814, he noted (p. 116) that one of the most
features in the practice of English surgeons was
lection for the primary union of wounds. So
1881, Professor Verneuil, addressing the surgical
the London International Medical Congress, on
y Union of Wounds (Trans., vol. ii., p. 353), was
less in favour of it than were his English
But this international difference is not likely
if we are to judge from a passage in Professor
uérin's recent work "Du Pansement Ouaté." He
wn without reservation (p. 379) "that every
deavour should be made to secure union by the
ion." It is remarkable that a principle so well
on scientific and practical grounds should only
its way slowly amongst a people from whom
g some of the greatest surgical reformers.

THE HABITUAL DRUNKARDS ACT.

PEDDIE of Edinburgh lately read an important
his subject to the Society for the Study and Cure
y, which will shortly appear in the Transactions
ciety. Dr. Peddie speaks on this subject with
ority as a student of dipsomania and one of the
vocates of wise and efficient legislation. He
nd demonstrates the utter feebleness of the
t, which in Scotland, he says, has actually had
f reducing both the number of homes for the
nd their efficiency. He refutes the absurd plea
l liberty as applied to men who are no longer
themselves, and whose only chance of recovering
om a vice that degrades them and ruins their
in a more effective Act. Such a measure as the
Drunkards Act brings legislation itself into con-

CT OF MERCURY ON THE BLOOD.

RY to the general idea that mercurial treatment
the number of red corpuscles in the blood,
finds that they are more frequently increased
ished, usually undergoing progressive augmenta-
the fourteenth day of treatment, after which a
rease is observed. The hæmoglobin always
ven when the corpuscles diminish; M. Galliard
that the weight of the body increases when
a course of mercurial treatment.

AMERICAN DERMATOLOGICAL ASSOCIATION.

SYSTEMATIC progress in medicine in certain directions can only be accomplished by concerted action, and to fulfil this requirement and enable those similarly interested to cultivate friendships whilst enjoying a few days' holiday, the American Dermatological Association holds an annual meeting at some pleasant spot. Besides the number of excellent papers that have been read from time to time, the standing committees on classification and nomenclature and on statistics have done much real service. At the ninth annual meeting lately held, amongst other papers read, we notice those on Angioma Pigmentosum et Atrophicum, by Dr. White; on Multiple Myomata of the Skin, by Dr. W. A. Hardaway; on a case of Mycosis Fungoïde, by Dr. Tilden; Drs. Hardaway and Heitzman follow up the subject of the Electrolytic Destruction of the Hair Papillæ and of Port-wine Marks; Dr. Hyde discusses the Relations of Lupus to Tuberculosis, and Dr. White the Treatment of Lupus by Parasiticides; Dr. R. W. Taylor relates his valuable experience of Syphilitic Reinfection; and Dr. Duhring, in continuation of his valuable series of communications, seeks to prove the identity of Herpes Gestationis with the Vesicular Variety of Dermatitis Herpetiformis.

THE COLLEGE LECTURES.

AT the Royal College of Physicians this year, the Gulstonian Lectures will be delivered by S. J. Sharkey, M.B., on March 18th, 23rd, and 25th, the subject being "Spasm in Chronic Nerve Disease." The Croonian will follow on March 30th, April 1st and 6th, the lecturer being P. W. Latham, M.D., who will discourse on "Some Points in the Pathology of Rheumatism, Gout, and Diabetes." The concluding series, the Lumleian, will be given on April 8th, 13th, and 15th, by W. H. Stone, M.B., on "Man as an Electric Conductor, Condenser, and Electrolyte." The lectures commence at 5 o'clock on each of the above days.

PATHOLOGICAL SOCIETY.

WE may remind our readers that the meeting of February 2nd has been set apart by the Pathological Society for the exhibition and discussion of specimens of intercranial tumours. The Medical Secretary, Dr. Coupland, will be glad to receive as early as possible the names of intending exhibitors and speakers.

SPHYGMOGRAPHY IN A BALLOON.

ASCENSIONS in balloons are now so frequent that we are in possession of many of the physiological phenomena that attend the sudden alteration of pressure. M. Pozzi has taken some tracings with the sphygmograph at a height of 2150 metres. A rapid rise with brief maintenance and rapid descent, disturbed by well-marked dicrotism, were the chief features of the sphygmogram. The peculiarities are, in relation with the lowering of arterial pressure, due to the sudden rarefaction in passing to the higher strata of the atmosphere. They form the counterpart of the experiments of Viveriot with compressed air.

PURIFICATION OF THE RIVER LEA.

A BILL will be introduced into Parliament this session which provides a remedy for the pollution of the River Lea. It is proposed to construct a sewer from the outfall works of the Tottenham Board to the existing marsh sewer of the Hackney Board, who, with the Metropolitan Board, will be required to receive the effluent of the proposed sewer. It is intended that the work should be done at the cost of the Hackney Board, who should be repaid by the Tottenham

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Board; and after the completion of the sewer it is proposed to inflict a penalty on this board if any sewage be allowed to escape into the Lea. It may be anticipated that this scheme will meet with some opposition from the Hackney Board, but it is to be hoped that the latter will not be forgetful that London must grow, as has been the case with the City Corporation in the past.

ISOLATION HOSPITAL AT BOURNEMOUTH.

A NEW infectious hospital erected under the advice of Dr. Nunn and the Town Surveyor has just been opened at Bournemouth. It is excellently designed to meet the several wants of the town for which it has been provided, including as it does accommodation of a private nature for visitors and general wards for the poorer classes. The site is a good and a convenient one, and the hospital is to be placed in telephonic communication with the office of the Commissioners. That body may take credit for having secured to their town the great additional attraction that those who seek renewed health there will not be likely to find themselves exposed to infection by reason of the absence of the means of isolation which every town, and above all every health-resort, should possess.

MORTALITY IN THE MEDICAL PROFESSION.

A PAPER on this subject will be read on Tuesday evening next before the Medical and Chirurgical Society by Dr. William Ogle, Superintendent of the Statistical Department of the Registrar-General's Office. The subject is one of peculiar, and we may say vital, interest to the profession at large, and the previous statistical work of the author is a sufficient guarantee that the subject will be handled in a manner to command implicit confidence.

THE HAMPSTEAD HOSPITAL.

THE vestry of Hampstead have decided to memorialise the Local Government Board not to allow the hospital of the Metropolitan Asylums Board, which is situated in their district, to be again used for the reception of cases of small-pox. The arguments used in support of the memorial are based upon the reports of Mr. W. H. Power as to the influence of the Fulham Hospital, and on that of Dr. Gwynn, medical officer of health, as to the influence of the Hampstead Hospital.

THE Mayor of Marseilles, in consequence of the small-pox epidemic in that city which we announced last week, has ordered a new hospital for patients suffering from that disease to be opened at the Pharo, whither 120 convalescents, now at the Hospital of La Conception, will be removed. It is stated that the epidemic originated at Toulon, the sanitary condition of which still remains in a most unsatisfactory state.

THE Corporation of Manchester are about to enter upon the execution of the great water-supply scheme which has occupied so much public attention during the past three or four years, a scheme which is perhaps the largest undertaking of the kind in which any municipal body in this country has hitherto embarked. The length of the conduit will, when completed, be almost 100 miles, the source of the supply being the Lake of Thirlmere in Cumberland. Contracts for above 50,000 tons of pipes, involving an outlay of about £230,000, have already been entered into.

DR. J. HUGHLINGS JACKSON has been recently elected Corresponding Member of the Royal Academy of Medicine of Belgium.

WE regret to have to report yet another victim to diphtheria caught in the execution of his professional duty, in the person of Mr. George Searancke, surgeon, of Ashley-road, Bristol. He was attended by his personal friend, Dr. Simpson, and was seen in consultation by Dr. Barrett-Roué, of Clifton, Mr. W. H. Harsant, and Mr. Greig Smith; but, in spite of every effort made on his behalf, grave symptoms of cardiac failure set in, and he died of asthenia on the sixth day of his illness.

WE have received the first number of the "University College (Liverpool) Magazine," which is to appear quarterly. It makes a good start with several articles of considerable interest and literary merit, including one by a medical contributor—viz., Mr. A. Barron, M.B., upon Micro-organisms Mr. Barron treats his subject in a commendably lucid manner, and his paper is illustrated by a well-executed coloured plate. We wish the new venture all success.

AN International Congress of Hydrology and Climatology is being arranged. It is to commence on October 1st, 1886, and is to be held at Biarritz, under the presidency of Dr. Durand Fardel. The Municipalities of Arcachon, Devax, Bayonne, Cambo, and many other places, have sent representatives to assist in the preliminary arrangements. It is expected that numerous medical and scientific men will take part in the Congress.

ON the 18th inst., Surgeon-General McNab died very suddenly at his residence at Preston, from an affection of the heart. The deceased, who was widely known and respected, was a justice of the peace for the county of Lancaster.

THE four children who were bitten by a rabid dog in Newark, New Jersey, and were sent to Paris to be submitted to inoculation by Prof. Pasteur, are reported to have arrived in New York in good health.

A NEW medical, journal entitled *La Medicina Castellana*, has just been commenced. It is published at Valladolid, and is edited by Dr. Don A. de Redondo, professor in the medical faculty of that city.

A PERSON at Natal is bringing an action for £1000 against a medical man for alleged malicious arrest and incarceration on the ground of insanity. This case is the first of its kind which has occuurrd in the colony.

THE Hygienic Congress, which was intended to be held this year at Vienna, has, we learn, been postponed till 1887.

THE MONT DORE, BOURNEMOUTH.

THERE seems to be no doubt that the three weeks' "cure" at Mont Dore, Auvergne, is beneficial in many cases of chronic catarrh of the respiratory passages, in some of asthma, rheumatic gout, and chronic skin diseases. The mode of action of the Auvergne Mont Dore is not a subject on which entire agreement of opinion exists. Most French physicians, and at all events those who practise at the French station, maintain that in suitable cases the waters are the principal agents in the attainment of the frequent excellent results. Sceptical English physicians are disposed to think that even a three weeks' residence in the mountain air of Auvergne may not be altogether harmful in itself, and may be a very powerful cause in the production of the good results. Which of these two positions is the correct one it

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is difficult to say. One of the oldest, and certainly one of the most distinguished practitioners at the Auvergne station, Dr. Emile Emond, Chevalier de la Légion d'Honneur, having devoted a large portion of the last twenty years of his life to the Mont Dore, is a strong believer in the efficiency of its mineral waters, and is of opinion that a mere stay of two or three days is inadequate to account for the marvellous improvement which it is certain that he and many others have witnessed.

The Mont Dore, Bournemouth, is an establishment designed as a sanatorium with the object of carrying out as far as possible the treatment pursued at the French station. It is perhaps needless to say that there is a difference between the Bournemouth imitation and its prototype. It could not be otherwise. But the presence of Dr. Emond during the winter months will guarantee that the method of treatment is the same as at Auvergne. The Bournemouth sanatorium is situate almost in the centre of the town on the east side of the long narrow strip of pleasure-grounds, and consequently is in uninterrupted communication with the sea air, enjoys perfect shelter from cold winds, and possesses every climatic advantage that the situation affords. At this inclement season of the year, the contrast between London and Bournemouth is as striking as it is grateful. The Mont Dore has been erected with great care, and every attention appears to have been paid to the sanitary arrangements, lighting, warming, and ventilation—at all events so far as the residential portion of the building is concerned. The baths and hydro-therapeutical apparatus, too, are now almost completed, and in their final construction have had the benefit of the advice and supervision of Dr. Emile Emond. The principal communication between the hotel and the hotel is by means of a landing and flight of stairs covered in by glass sides and roof; arrangements are being made, we understand, for the more efficient warming of this corridor. At the foot of the staircase, on the basement of the building—one faces three doors: the one on the right hand leads to a most luxurious and exceedingly well ventilated Turkish bath, the central one is the ladies' entrance to the Mont Dore system, and the third door is the gentlemen's entrance. The south side of this compartment contains a buffet, at which the Mont Dore waters may be drunk. The male and female sections are exactly alike. There is first a dressing-room similar to what is customary in Turkish baths; the atmosphere of this chamber, and indeed of the whole of the baths, is kept at a uniform temperature of about 75° F. The long corridor leading from the dressing-room is lined on one side by a series of small cubicals, in each of which there is a bath provided with hot and cold water, salt water, and a douche fitted with a rose or a nozzle. Arrangements also exist for galvanic baths. On the opposite side of the corridor is a series of four rooms. In the first there is a vaporarium constructed of wood and shaped like some dustbins, with an aperture in the roof through which the head of the bather, who sits inside, projects; the vaporarium is filled with hot steam—prepared from the Mont Dore waters. In this room there are also powerful douches both of water and steam. The second chamber contains in its centre a kind of cauldron, which when in action emits steam from several spray pipes; this is filled with the imported waters of Mont Dore. At each corner of this apartment a rose projects, and when the system is in action the whole room is speedily filled with vapour. Here the patient inhales the steam and is at the same time enveloped in vapour. In the third apartment is a series of sprays worked by steam, and fed or charged with Mont Dore water by means of an aspirating tube that acts in the same fashion as Lister's spray. The fourth room is fitted with all the necessary apparatus for treating the nose, throat, eyes, and external ears. In addition there is another bath-room in which water is kept at a uniform temperature of 45° C., and also a compartment where gargles may be carried out. The architecture is Moorish complete. The patients drink and use in inhalations the waters imported from Mont Dore. But whenever large quantities of fluid have to be employed, as in baths, ordinary waters prepared by Messrs. Allen and Hanburys so as to be artificially identical with the genuine natural water are used. Dr. Emile Emond believes that the beneficial effects are largely due to the mode of administration of the waters, inhalations, aspirations, and irrigations.

At present there are under treatment cases of chronic bronchitis, phthisis, asthma, eczema, chronic pharyngitis, and clergyman's sore-throat. The treatment has only been imperfectly in operation for three months, and it is difficult to speak at present positively, but Dr. Emond thinks the results that have hitherto been obtained at Bournemouth are most encouraging. It speaks well for the future good management of the place that the directors have thought it advisable to appoint a resident physician to look after the comforts and necessaries of the patients who reside at the Mont Dore; and Dr. E. P. Philpots, who is well known as the proprietor of a successful sanatorium—Bourne Hall, at Bournemouth itself—has recently been appointed manager of the new institution. Under present arrangements Dr. Emile Emond will reside at the Mont Dore every winter. The system of baths and inhalations and the like is under his sole supervision.

SPONTANEOUS BLENNORRHAGIC CONJUNCTIVITIS.

PROFESSOR FOURNIER, the well-known dermatologist of Saint Louis, recently called attention in a clinical lecture to an interesting form of conjunctivitis arising in connexion with gonorrhœa, but which is quite different in its origin from the ordinary purulent conjunctivitis produced by the contact of gonorrhœal pus with the conjunctiva. By the observation of a patient suffering in this way he was able to astonish the beholders by telling him that he was suffering from a urethral discharge, without taking the clothes off the bed or even examining the genital organs; but when this was done, it was found that such was the case, and that the patient had a veritable urethritis, of which, through ignorance or neglect, he was himself unconscious.

The eye becomes affected during gonorrhœa in two ways. There is first the ordinary purulent conjunctivitis, which is invariably produced by the inoculation or transference of purulent matter from the genital organs by direct contact; and there are other affections of the eye which arise during an attack of gonorrhœa, but which are not produced in this way, but rather by some internal cause in the same way as an arthritis or sciatica. This is the true disease of the eye associated with blennorrhagia. The other is an accident, and moreover it is far more common; for every purulent ophthalmia there are fifty of this nature. It is not always of the same type; sometimes it is an aquo-capsulitis, sometimes an iritis, and sometimes a conjunctivitis. In the latter case the eye looks red and vascular, but there is seen on close examination a sort of œdematous infiltration, which when well marked forms a kind of pad round the corneal margin. Unlike most inflammations of the conjunctiva, it produces hardly any subjective symptoms. There is hardly any pain, no photophobia, and only a slight sensation of itching, and, as a rule, patients continue at their work without any inconvenience, and if they do consult a doctor for their urethritis they say nothing about their eyes. This remarkable absence of pain or inconvenience in the eyes permits the patients to make full use of them, and a man looks about him without any shutting of the lids or much watering of the eyes, and it was this fact which brought the Professor to make the diagnosis of blennorrhagia; it is a striking fact, in which the objective phenomena bear no relation to the subjective, and therefore quickly excite the attention of observers.

As regards the course and duration of the disease, it commences insidiously and increases in intensity for several days, till it reaches a certain stage, when it remains inactive, and no further changes take place till resolution commences, which sometimes is effected very quickly. The average duration varies between ten and twenty days. It often presents a curious shifting character, which reminds one of the phenomena of rheumatism: for example, it may begin in one eye, which after a time is cured; then it appears in the other, and perhaps goes back again to the eye first affected. Another interesting fact about it is its obvious connexion with rheumatism of a gonorrheal origin. Not all cases of gonorrheal rheumatism present the disease of the eye, but in many cases of that affection the eye phenomena have a tendency to recur two, three, or more times, as was the case in the patient the subject of the lecture who during the

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four months of his rheumatism had had numerous attacks in the eyes. As regards the seat of the lesion, it may be very localised, either to the mucous membrane of one lid or to a portion of the ocular conjunctiva.

It may be urged that this is only a very mild form of the well-known purulent conjunctivitis, but a consideration of their evolution and anatomical characters shows that there is in reality no relation between them. The purulent conjunctivitis affects only one eye as a rule, while the form under consideration more often affects the two eyes; the former retains its hold on one eye, while the latter is migratory, and shifts from one to the other. Second attacks of purulent conjunctivitis are rare, because the patient has learnt the dangers of the gonorrhœal pus, but the rheumatic variety will often return with each successive urethritis. Finally, the terminations of the two diseases are totally different,—the one requires most energetic treatment to save the eye, while the other does best when left alone or with mild applications.

As to treatment, the Professor advises the protection of the eye with smoked glasses, which is all that is necessary in mild cases; but when the disease is more pronounced, it may be necessary to keep the patient indoors, to interdict all reading and stimulating drinks, and to give eye douches of tepid water; or, if there is any indication that the iris may become infected, he uses atropine drops.

THE UNIVERSITY OF LONDON.

THE meeting of Convocation on the 19th inst. was a prolonged one; but the House was counted out before all the notices of motion on the agenda paper had been exhausted. Considerable time was spent in considering a report from the Annual Committee recommending changes in the matriculation examination. The amended syllabus drawn up in the report contains alterations in the details of the subject of languages, the omission of modern geography (!), the substitution of mechanics for natural philosophy, and in place of chemistry one of the following branches of experimental science at the option of the candidate—viz., 1, chemistry; 2, heat and light; 3, magnetism and electricity. Some difference of opinion existed as to whether the severity of the examination would be increased or diminished by these changes; and amendments were moved to introduce other optional subjects, such as physiography, drawing, and the science of music, and to diminish the number of obligatory languages. Eventually the motion to adopt the revised syllabus as presented in the report was carried. Another motion to extend the list of questions on the paper, so as to allow the candidate for matriculation a choice, was proposed by Dr. Weymouth, seconded by Mr. Spratling, and carried. A resolution to adopt a motto in connexion with the University arms was proposed by Mr. Bentwitch, seconded by Mr. Cross, and carried, the subject being referred to the Annual Committee. The next question discussed was one affecting the legal and medical faculties. It was a proposal to extend the principle of examination through an "original printed thesis," recently applied to the D.Lit. and D.Sc. Examinations, to the Doctorate of Laws and Medicine. There was considerable opposition to the motion, Mr. Howse and Dr. F. Taylor condemning it, but the debate was chiefly confined to the graduates in laws. The motion was lost. The consideration of changes in the LL.B. Examination was referred to the Annual Committee, and the sitting was suspended.

BRITISH MEDICAL BENEVOLENT FUND.

THE annual general meeting of subscribers to the British Medical Benevolent Fund was held on Thursday, Jan. 14th, at 31, Lower Seymour-street, the house of the Honorary Financial Secretary, Mr. Field, at 4 P.M., when Mr. J. F. France, J.P., Vice-President of the Fund, took the chair in the unavoidable absence of the President, Sir Geo. Burrows. The financial statement was submitted, and the annual report of the committee for the past year was read by the Treasurer, from which it appeared that the donations during 1885 had amounted to £808, and the subscriptions to £1229; a total of £2037: an increase in the amount of donations, while the subscriptions had not fallen off much, inasmuch as the total received showed a slight increase upon that of last year. The disbursements during the year had been, in grants, £1894; in annuities, £1086; in all £2980; and the entire expense of collecting and distributing this large sum (over £5000) had been £141, or about 3 per cent.; including stationery, collector's commission, the printing and postage of the report (a copy being sent to each subscriber), the postage and other expenses of the honorary secretaries for finance and cases, and the postage and expenses connected with the distribution of nearly £3000 in weekly or monthly instalments (a peculiar characteristic of this fund), carried out in an admirable manner by the Cheque Banks. The number of cases relieved was 161; but many of those which came before the committee were exceptionally hard, and the committee felt that, had the means at their disposal been larger, they would have been better able to cope with the painful amount of misery, want, and even actual starvation revealed when the touchstone of personal inquiry came to be applied. This year, 1886, is the jubilee year of the fund, and it is intended to make a special effort to render the year memorable in the annals of the fund by holding at an early date a dinner, at which Sir James Paget has kindly consented to preside, by means of a special appeal to every registered medical man, and by an effort at the meeting of the British Medical Association at Brighton in August, to collect the honorary local secretaries together in a meeting, and try to induce prominent medical men in districts and towns not now represented upon our list to take an interest in the work, accept the post of local secretary, and so aid the committee in the work of helping those who are known to be trying to help themselves, and rescuing those who, but for the help of the fund, would have sunk in the struggle. In the annuity department there were three deaths, and seven fresh annuitants were elected, making a total of fifty-seven. There are, however, still forty-four eligible candidates waiting for a chance of election, all over sixty years of age, not one enjoying an income of £10, and most of them past work and practically penniless, and the committee would most strongly urge their claims upon the profession. Mr. S. H. Byam joined the committee in the place of Mr. Thomas Smith (resigned); and Dr. Habershon was elected a vice-president in the room of Mr. W. B. Page, whose death the fund has good reason to deplore.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 6133 births and 4149 deaths were registered during the week ending January 16th. The annual death-rate in these towns, which had been equal to 25·5 and 22·5 per 1000 in the preceding two weeks, rose again last week to 23·8. During the thirteen weeks of last quarter the death-rate in these towns averaged only 20·0 per 1000, and was 2·6 below the mean rate in the corresponding periods of the nine years 1876-84. The lowest rates in these towns last week were 17·2 in Hull and Sunderland, 18·6 in Sheffield, and 19·1 in Birkenhead. The rates in the other towns ranged upwards to 30·6 in Manchester, 31·3 in Plymouth, 31·8 in Portsmouth, and 32·7 in Halifax. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 495 and 448 in the previous two weeks, declined last week to 435; they included 156 from whooping-cough, 111 from measles, 46 from scarlet fever, 41 from "fever" (principally enteric), 39 from diphtheria, 37 from diarrhœa, and 5 from small-pox. No death from any of these zymotic diseases was recorded last week in Derby, whereas they caused the highest death-rates in Oldham, Nottingham, and Plymouth. The greatest mortality from whooping-cough occurred in London, Portsmouth, and Brighton; from measles in Nottingham and Plymouth; from scarlet fever in Norwich, Leicester, and Birkenhead; and from "fever" in Norwich. The 39 deaths from diphtheria included 22 in London, 5 in Liverpool, 3 in Bristol, 2 in Portsmouth, and 2 in Leeds. Small-pox caused 6 deaths among the residents of London and its outer ring, 2 in Liverpool, 1 in Manchester, and 1 in Cardiff. The number of small-pox patients in the metropolitan asylum hos-

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pitals situated in and around London, which had declined in the preceding nine weeks from 90 to 35, were again 35 on Saturday last; 11 patients were admitted to these hospitals last week, against but 2 and 1 in the preceding two weeks. The Highgate Small-pox Hospital contained 5 patients on Saturday last, no case having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 384, 610, and 518 in the preceding three weeks, were 534 last week, and exceeded the corrected weekly average by 45. The causes of 90, or 2·2 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Leicester, Portsmouth, and in three other smaller towns. The largest proportions of uncertified deaths were registered in Salford, Oldham, Halifax, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 21·6 and 22·9 per 1000 in the preceding two weeks, further rose to 23·9 in the week ending Jan. 16th, and was 0·1 above the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 18·1 and 19·7 in Greenock and Perth, to 26·0 in Paisley and 26·5 in Glasgow. The 589 deaths in the eight towns showed a further increase of 24 upon the numbers in the previous two weeks, and included 13 which were referred to diarrhœa, 9 to whooping-cough, 8 to diphtheria, 6 to "fever" (typhus, enteric, or simple), 5 to scarlet fever, 2 to measles, and 2 to small-pox; in all, 40 deaths resulted from these principal zymotic diseases, against 32 and 45 in the preceding two weeks. These 40 deaths were equal to an annual rate of 1·8 per 1000, which was 0·7 below the mean rate from the same diseases in the twenty-eight English towns. The 12 deaths attributed to diarrhœa exceeded the numbers in recent weeks, but were slightly below the number in the corresponding week of last year. The fatal cases of whooping-cough, which had increased from 7 to 15 in the preceding four weeks, declined again to 9 last week, and included 7 in Glasgow. The 8 deaths from diphtheria showed an increase upon recent weekly numbers, and also included 7 in Glasgow. The deaths referred to "fever," which had been 2, 8, and 5, in the previous three weeks, were 6 last week, of which 3 occurred in Glasgow. Four of the 5 fatal cases of scarlet fever were also returned in Glasgow. Both the deaths classed as small-pox were attributed to chicken-pox. One occurred in Glasgow and 1 in Aberdeen. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had declined in the preceding five weeks, from 178 to 132, rose again last week to 145, but were 54 below the number returned in the corresponding week of last year. The causes of 82, or nearly 14 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 27·7 and 28·8 per 1000 in the preceding two weeks, rose again to 33·3 in the week ending January 16th. During the thirteen weeks of last quarter the death-rate in the city averaged 27·0 per 1000; the mean rate during the same period did not exceed 19·5 in London and 19·0 in Edinburgh. The 350 deaths in Dublin last week showed an increase of 39 upon the number returned in the previous week, and included 30 which were referred to the principal zymotic diseases, against 32 and 15 in the preceding two weeks; 19 resulted from whooping-cough, 4 from scarlet fever, 4 from "fever" (typhus, enteric, or simple), 3 from diarrhœa, and not one either from small-pox, measles, or diphtheria. These 30 deaths were equal to an annual rate of 4·4 per 1000, the rate from the same diseases last week being 2·7 in London and 0·6 in Edinburgh. The fatal cases of whooping-cough, which had been 10, 17, and 8 in the previous three weeks, rose last week to 19, and exceeded the number in any week of last year. The deaths referred to scarlet fever and diphtheria also showed an increase upon the numbers in the previous week. Eight inquest cases and 11 deaths from violence were registered; and 74, or nearly a third, of the deaths were recorded in public institutions. The deaths of infants showed an increase, whereas those of elderly persons corresponded with the number in the previous week. The causes of 22, or nearly 10 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

ADMIRALTY. — The following appointments have been made: Staff Surgeon H. J. Madders, M.D., to the *Hyacinth*; Staff Surgeon Michael Fitzgerald, to the *Caroline*; Surgeon Nicholas C. Ross, to the *Penguin*; Surgeon Thomas Nunan, M.D., to the *Cambridge*.

ROYAL NAVAL ARTILLERY VOLUNTEERS. — London Brigade: John Arkle Waring to be Surgeon.

ARTILLERY VOLUNTEERS. — 1st Inverness-shire: James Milne Chapman, Gent., M.B., to be Acting Surgeon.

RIFLE VOLUNTEERS. — 16th Middlesex (London Irish): Surgeon Arthur Cæsar resigns his commission.

Correspondence.

"Audi alteram partem."

MR. HORSLEY'S CRITICISM ON PROF. SCHIFF.

To the Editor of THE LANCET.

SIR,—A student was once asked, "What would be the result of tying the carotid artery"? He replied, "The pneumogastric nerve is in such close relation with the carotid artery that in tying the artery the operator would inevitably tie the nerve with it, and the result would be death." The Brown Professor's criticism on Professor Schiff's experiments on the posterior columns of the cord is of like nature: "Schiff has taught that the posterior columns of the spinal cord are conductors of tactile sensation direct to the excitable area of the cortex; but Mr. Horsley shows that the results obtained by Schiff are to be explained by the injury that is unavoidably done to the motor tracts in the spinal cord." (THE LANCET, Jan. 2nd.)

In the case of the ligature of the carotid artery above mentioned, if the student whose answer is recorded were himself the operator, his prediction would in all probability be verified to the letter in spite of the lack of natural sequence between ligature of the carotid artery, ligature of the pneumogastric, and death. The section of the posterior columns without injuring the neighbouring portions of the cord unquestionably requires higher skill than is necessary to avoid including the pneumogastric in ligature of the carotid; and it is not improbable that many an operator may have found that he has cut structures he did not mean to touch. From the lack of success of one operator, however, the lack of success of other operators cannot safely be inferred. Those who have witnessed Professor Schiff operate, and have afterwards seen at the post-mortem and microscopical examinations the wonderful accuracy with which the parts cut or removed corresponded with the intention of the operator, will be slow to charge him with the source of fallacy put upon him by the Brown Professor.

I am, Sir, your obedient servant,

WILLIAM R. HUGGARD.

École de Médecine, Genéve, Jan. 12th, 1886.

GASTROTOMY NOT GASTROSTOMY.

To the Editor of THE LANCET.

SIR,—Mr. Knowsley Thornton, in recording a case in which he removed a mass of hair from the stomach through an incision into the viscus, has applied the term "gastrostomy" to the operation. This use of the term is liable to produce considerable confusion, and to lead to errors in the subsequent tabulation of cases. The word gastrostomy is derived from two Greek words, γαστηρ and στομα; and it signifies an operation by which a "mouth" is made into the stomach, or a permanent gastric fistula is established. It is the operation that has been largely practised for œsophageal obstruction. Gastrotomy, on the other hand, is

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derived from γαστηρ and τομη, and denotes an incision made into the stomach. The conditions demanding, and the mode of performing, these operations are quite distinct. It is therefore very important that they should be kept quite distinct, and no confusion between them allowed to creep into medical literature by a wrong use of the terms applied to them.

In Mr. Thornton's paper, and also in his letter, he referred to Schönborn's case of gastrotomy for a ball of hair in the stomach, which, like his own, was successful. He might, however, have considerably enlarged his list of gastrotomies for the removal of foreign bodies from the stomach. For it matters not whether the offending substance be a knife, a fork, a spoon, a bar of lead, or a ball of hair—the essential reason for the operation, its mode of performance, and its dangers, are the same; and Mr. Thornton's argument is materially strengthened by the great success that has attended this operation, whatever the cause for which it has been undertaken. In the "Medical and Surgical History of the War of the Rebellion," Dr. Otis gives full references to many of the cases, but the most complete list of cases is furnished by Dr. Ashhurst in a note to Mr. Henry Morris's article on Injuries and Diseases of the Abdomen in the fifth volume of the "International Encyclopœdia of Surgery." In this table are placed thirteen undoubted cases of gastrotomy for the removal of foreign bodies from the stomach, and ten of the patients recovered, while an eleventh case ended fatally, owing to an indiscretion in diet on the part of the patient. There are five other cases which are more or less doubtful in their character, but in regard to two of them the evidence in their favour is certainly very strong; all these cases are said to have terminated in recovery. This operation is by no means a modern triumph. The earliest recorded case occurred about 1602, and the second in 1635, both of them being successful. The foreign bodies removed have most often been knives, forks, and spoons, but the nature of the body to be removed in no way influences the steps of the operation.

I am, Sir, yours faithfully,

January, 1886. CHIRURGUS.

"VISITORS TO SMALL-POX HOSPITALS."

To the Editor of THE LANCET.

SIR,—The attainment of the ideally commendable is evidently easier and more rapid in the bracing atmosphere of the north than under the more relaxing conditions of southern latitudes. We lesser lights, *en bas*, are not clothed with the autocratic power expressed in Dr. Russell's phrase "without saying anything to anybody." We are governed by committees who require a great deal of persuasion to effect administrative reforms. As regards vaccination of visitors to the Western Hospital, the sending of a circular to intending visitors of patients, advising them to get revaccinated before entering the hospital, was for many years considered sufficient and to cover all responsibility, and this in spite of my oft-repeated recommendation of the surer method; and it was only the occurrence of attacks amongst unprotected visitors in 1884 that afforded me a powerful text for the suggestion that their revaccination should be seen to at the Hospital. It will interest Dr. Russell and your readers to know that after the presentation of my report the Committee of the Western Hospital authorised my colleague (Mr. Gale), during my absence, to offer to revaccinate all visitors to dangerously ill patients. This has been freely carried out, and no attacks amongst visitors have since come under notice.

I am, Sir, yours truly,

London, Jan. 18th, 1886. R. D. R. SWEETING.

THE TREATMENT OF PERTUSSIS.

To the Editor of THE LANCET.

SIR,—Perhaps it would interest Messrs. Cory and Harries, whose communications appeared in your last issues, as well as some of your readers, to know that I have seen during the greater part of last year, under the care of the distinguished Professor Monti, at the Vienna Poliklinik, many cases of whooping-cough treated by the use of antiseptics. The results show that antiseptics, if they have not a decided specific action, have at least a powerful influence in limiting the duration of the attack and soothing the sufferings of the little patients.

Professor Monti's system of treatment was as follows:—Inhalations—through a modified Seigler's vaporising apparatus—of carbolic acid (1 per cent. solution) or benzoate of sodium (5 per cent.) four times during the day. Internally, he administered one or other of the following powders in milk every two hours, the dosage being proportioned to the age of the child—viz., muriate or tannate of quinia, benzoate of soda, and white sugar. He found the tannate the most agreeable salt of quinia to administer to children. The duration of the cases treated as above averaged twenty-one days; no doubt some extended longer, but they could always be accounted for by the development of complications. I may also add that in no case treated with carbolic acid were symptoms of poisoning found.

I am, Sir, yours truly,

Dublin, Jan. 19th, 1886. ALFRED J. SMITH, M.B., M.Ch.

ELECTRIC ILLUMINATION IN OPERATIONS UPON THE PALATE.

To the Editor of THE LANCET.

SIR,—On Thursday last, having promised to perform an operation for the closure of a cleft palate, I found myself embarrassed by a failing light. Unwilling to postpone the operation, I gladly availed myself of the suggestion of Mr. Weiss, who was present, to use the electric lamp which he had been demonstrating to the students. Accordingly, having removed the mirror from one of Semon and Vesey's apparatus for illuminating the larynx, and which is supplied by four Leclanché cells, Mr. Weiss held the lamp just inside the mouth, and, by the beautiful, steady, and distinct light thus afforded, I was able to see clearly, better than even by the brightest daylight, and the operation was quickly and satisfactorily concluded. To those who, like myself, have had to postpone such operations, to the distress of the patient and at personal inconvenience, I feel sure that this new adjuvant will prove the greatest boon. The smallness of the apparatus makes it free from any inconvenience, and the almost entire absence of heat renders it void of danger, while the clear brightness of a steady light renders every step in this delicate operation more facile even to practised hands.

I am, yours faithfully,

Grosvenor-street, Jan. 1886. JOHN H. MORGAN.

I'S AND Y'S.

To the Editor of THE LANCET.

SIR,—Mr. Tweedy has very properly and learnedly called attention to the etymology and right spelling of the word "hypopyon," which in a recent issue of THE LANCET is spelt with an *i*, "hypopion." May I point out how frequently and how erroneously the word "phimosis" is spelt with a *y*? In an important surgical work which has been published within the last few weeks, the word "phymosis" occurs over and over again. Now "phimosis," the proper spelling, is derived from the very appropriate word φιμός, a muzzle—is, in fact, the very word φίμωσις; "phymosis" could only come from some such word as φῦμα, a growth, or from θύμος, fumus, smoke, when it should be spelt "thymosis," and would be without meaning. It is incumbent on a learned profession to be careful of its *i*'s and *y*'s, as well as of its *p*'s and *q*'s.

I am, Sir, yours faithfully,

Jan. 13th, 1886. Y. P. Q.

EDINBURGH.

(From our own Correspondent.)

EDINBURGH ROYAL INFIRMARY.

THE Annual Meeting of the contributors to the Royal Infirmary was held on Monday last. The report of a committee appointed to represent the contributors in reviewing the management of the institution during the last twelve months was read and adopted by the meeting. The report spoke highly of the general management during the last

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twelve months, and detailed some interesting particulars of the work accomplished during that period. 25,000 out-patients and nearly 8000 in-patients had received the benefits of the institution during the year, the former number corresponding to the number of out-patients in the previous year, the latter showing an increase of over 200 in-patient cases as compared with the same period. The total expenditure for the year was £33,474. With regard to subscriptions, it was announced that there had been a slight falling off in the amount of the Hospital Sunday Fund; but some handsome donations had been received, one of the most recent being a sum of £5000 from Mr. R. Mackay Smith. A scheme was suggested by which domestic servants might contribute small sums towards the maintenance of the Institution. During the past year the hospital accommodation has been extended to its full extent. This represents 600 beds, and exhausts all the space which the present buildings place at the managers' command. Two wards must of necessity be kept empty to allow of the transference, whether of medical or surgical patients, to a temporary resting-place when any of the wards have to undergo temporary repair or cleansing, and most of the wards are thus temporarily vacated annually or at least biennially—a system which contributes greatly to the brightness and freshness, as well as to the wholesomeness, of the hospital buildings.

LECTURES ON CLIMATOLOGY.

Dr. W. Felkin, F.R.S.E., commenced this week a series of lectures at the Minto House School of Medicine on the Diseases of the Tropics and Climatology. The course is specially intended for the benefit of students whose duties as medical men are likely to lead them to tropical climes. Dr. Felkin has had unusual opportunities of studying disease in these regions, as he has travelled widely in Africa and the far East, and has combined the practice of medicine and surgery with the extensive geographical and ethnological investigations which have won him recognition in the scientific world. In his introductory lecture delivered last Monday he treated specially the subjects of acclimatization and malaria. The latter he described as the typical disease, a thorough grasp of which was the key to understanding a great number of the special diseases by which tropical life is rendered so dangerous to Europeans and to natives alike. In a school where so many colonial students congregate, and whence so many practitioners are supplied to the colonies, a course of lectures such as this is an inestimable boon; and in Dr. Felkin the Edinburgh School has secured the services of a thorough expert, who, in addition to his large personal experience of his subject, evinces considerable aptitude as a lecturer and demonstrator.

THE ROYAL SOCIETY OF EDINBURGH.

At the meeting of this Society held last Monday, an obituary notice of the late Professor Archer, Director of the Edinburgh Museum of Science and Art, was read by Dr. J. Marwick. The deceased gentleman was widely known in artistic circles as a most successful collector of objects illustrating science and the arts; and his energy may be said to have created the present prosperous and popular museum with which this city is provided. He acted as commissioner of the British Government at several international exhibitions, and at some he occupied the post of one of the judges. Dr. Marwick paid the highest tribute to his personal and social qualities, which were such as to command for him everywhere the highest esteem. Several papers followed, chiefly upon technical subjects. There was a large attendance of Fellows, and amongst the visitors present was the Right Hon. Mr. Childers, who is at present conducting an election campaign in Edinburgh, and who was introduced to the Society's hall by Dr. Russell, F.R.S.E., the chairman of his committee.

MR. BROWNING AND THE EDINBURGH STUDENTS.

Mr. Robert Browning has accepted the Presidency of the Associated Societies of the University of Edinburgh. In answering the requisition sent him, Mr. Browning said that he could only give one response to those who had so enthusiastically greeted his appearance at the recent Tercentenary festival. That reception had created a relationship between himself and them, which he would be highly gratified to terminate by accepting the proffered post of honour.

GLASGOW.

(From our own Correspondent)

THE FACULTY LIBRARY.

For a good many years those using the splendid library of the Faculty of Physicians and Surgeons have felt the want of a full and recent catalogue of the works contained in the library, though the encyclopædic knowledge of medical literature possessed by Mr. Duncan, the librarian, caused this want to be less pressingly felt than it otherwise would have been. Two or three years ago the work of preparing such a catalogue, including lists under the headings of authors' names and subjects, was begun; this work has been steadily carried on, chiefly by Mr. Duncan, and is now completed, the catalogue being ready for issue in the form of a large quarto volume.

GLASGOW HOSPITALS.

Glasgow has had one more added to its hospitals in the shape of a modest undertaking started under the name of "The Glasgow Samaritan Hospital for Women." This hospital, containing three beds and provision for dispensary work, was opened on January 4th. In his opening speech Mr. J. Stuart Nairne, who is surgeon to the hospital, and to whose efforts its establishment is due, claimed that this institution is the only one of its kind in Scotland. He defended vigorously the specialisation of abdominal surgery (the treatment of ovarian and uterine disease) to which this hospital is to be devoted; and mentioned, among other matters, that the rule which prevails in the London Samaritan Hospital would be adopted here—namely, "the exclusion of every person who was ever in attendance on an infectious case"; an excellent rule, which it is to be hoped will be strictly enforced in every instance. The hospital is opened free of debt, but now appeals to the public for support.

LOCK HOSPITAL.

From the annul report of this hospital we learn that the number of patients under treatment during the past year was 357; the average stay of each patient was 32 nights, and the average cost per patient £1 19*s.* 11½*d.* There had been a large proportion of young girls admitted. For the first time in hospital there were 224; for the second time, 80; third, 25; fourth, 19; fifth, 5; sixth, 3; and only 1 for the seventh time. In the autumn of last year a lady who was under a course of medical study in Glasgow, prior to her going as a medical missionary to Japan, took advantage of the opportunities freely afforded at the Lock Hospital of studying disease, and of witnessing the mode of treatment in young women, and in children as well, at the usual visiting hour, along with the surgeon who was on duty. It is expected that the valuable knowledge and experience then obtained will be of great advantage to the medical missionary in her work.

VITAL STATISTICS.

From Dr. Russell's report for 1885 we learn that during last year there occurred in Glasgow 13,486 deaths as compared with 13,929 in 1884. According to the Registrar-General's estimate of the population, this represents an annual death-rate of 26 in place of 27 per 1000 living. Dr. Russell also reports that the fortnight ending Jan. 2nd, 1886, was exceptionally healthy, the death-rate being 24 per 1000, as against 27·2 per 1000 in the preceding fortnight. This was due to the mildness of the weather and the absence of any prevailing epidemic disease among children. Only one case of small-pox was registered, as compared with four in the preceding fortnight.

IRELAND.

(From our own Correspondent.)

DUBLIN HOSPITAL SUNDAY FUND.

By returns recently published I learn that the contributions towards the Dublin hospitals collected on Hospital Sunday in November last amounted to £3976 10*s.* 11*d.*, and, with special donations not included in the above (£491 14*s.* 9*d.*), make a total of £4468 5*s.* 8*d.* This sum included £58 8*s.* 7*d.*, the proceeds of a football match played by the Leinster Branch of the Irish Rugby Football Union,

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on Nov. 7th, 1885. As compared with the year preceding, these returns show an increase of £69 4*s.* 9*d.*, which, considering the greatly depressed condition of the country, must be regarded as highly satisfactory.

THE SANITARY CONDITION OF DUBLIN.

Mr. E. Dwyer Gray, M.P., formerly chairman of the Public Health Committee of the Corporation of Dublin, in a recent communication with Sir Charles Cameron, medical officer of health, states that, notwithstanding all the recent improvements made by the Corporation, the sanitary state of Dublin is still most unsatisfactory. He refers to the probability of cholera reaching our shores this summer, and regards the ashpit system, more especially in relation to tenement houses, as a source of extreme danger both to the inhabitants themselves and to the neighbourhood. Mr. Gray believes that there is only one effective way of dealing with such cases—viz., by the daily removal by the public authority of all the house refuse from such dwellings. He asks Sir Charles Cameron whether this is not the only really effective way of keeping the yards of the houses in the poorer parts of the city in a proper sanitary condition, and so guarding as far as it may be possible, against those insanitary conditions which promote the spread of epidemics such as cholera. Mr. Gray would go further, and make the rule universal that ashpits should be abolished and house refuse daily removed in every part of the city. Sir Charles Cameron, in his reply, agrees with Mr. Gray's statements, and says that he knows of no measure of greater efficacy against the spread of contagious diseases than the prompt and complete removal of filth from dwellings. The storage of effete and unclean matter close to human dwellings he regards as a relic of barbarous ages, and he believes that it was the most potent cause of the terrible mortality of mediæval cities. Should the Corporation see their way to carry out Mr. Gray's proposal for the total abolition of filth receptacles, he thinks that, with such an improvement and with the pure water-supply the city possesses, it would be well prepared to cope with Asiatic cholera should it invade us.

BELFAST MAIN-DRAINAGE BILL.

The Bill for the purification of the River Lagan, and for the construction of works in connexion therewith, to be undertaken by the Corporation of Belfast, came as an unopposed measure last Monday before one of the examiners of the House of Commons. The regulations contained in the Standing Orders were found to have been complied with.

SUICIDE BY A LUNATIC.

On the 15th inst. a lady named Dawson, aged sixty, an inmate of the Richmond Lunatic Asylum, set fire to her clothes and died from the burns she received. Early on Friday morning the deceased set fire to her night-dress by means of a gas jet over the fireplace during the absence of the night nurse, and died the following day. At the inquest held, evidence was given that the gas bracket was seven feet and a half from the ground, and the jury exonerated the officials of the asylum from all blame in respect to the occurrence, Dr. Lalor, the medical superintendent, promising to lay before the governors, at the suggestion of some of the jurors, the necessity of having the gas jets guarded in some fashion.

Dublin, Jan. 19th, 1886.

PARIS.

(From our own Correspondent.)

THE RECENT CASE OF POISONING BY COLCHICINE.

AT the meeting of the Société de Médecine Légale of the 11th inst. a discussion took place on the case of poisoning by colchicine which was reported in THE LANCET some months ago. Professor Brouardel read a note, giving the results of his researches with a view of elucidating the difficult points of the subject. In referring to the chemical part of his work, the author declared that a search for metals in the different viscera and organs of the woman supposed to have been poisoned by colchicine gave no result. The search for alkaloids, of which the reactions are known were equally fruitless. An extract, however, obtained by maceration and division of the kidneys of the woman, to which some nitric acid was added, produced a violet tint, which by the addition of some potash became an orange red. Professor Brouardel remarked that in the present state of our knowledge this double reaction may be legitimately considered characteristic of colchicine, as all the samples of this substance, treated with nitric acid and potash, always produce the same reaction; the urine of a dog to which a certain quantity of colchicine had been administered produced the same tint by the same reagents. Moreover, this reaction has not as yet been produced in any other substance than colchicine. In referring to the physiological parts of his report, M. Brouardel declared that fragments of the viscera of the supposed victim which were injected into the veins of animals, produced no phenomena characteristic of poisoning by colchicine. In conclusion, the author observed that in a case of poisoning there must be perfect concordance between the points of information furnished: (1) By chemical examination, (2) by the necropsy, (3) by chemical analysis, (4) by physiological experiments. In the case under consideration, the hypothesis of poisoning by colchicine was justified by the symptoms observed during life. As regards the autopsy which was performed more than a year after death, no lesion was discovered which would permit one to attribute death to a natural cause. Moreover, the body was in a perfect state of preservation; but it was ascertained that the soil of the cemetery in which the body was interred had the property of preserving corpses for a considerable time. In performing some experiments in view of ascertaining the toxic character of colchicine, Professor Brouardel obtained the following results: Administered in from four to five centigrammes colchicine is dangerous, and ten centigrammes are sufficient to cause the death of a man.

M. PASTEUR ON RABIES.

A young man who was bitten two days ago by a dog immediately took it to the Veterinary School at Alfort to have it examined, but as the animal did not appear to be affected with rabies it was returned to the owner—a proceeding, in my opinion, rather strange, for certainly the animal should have been kept under observation at least for some days. The young man, however, being naturally anxious about himself, wrote to M. Pasteur asking him to appoint an hour to receive him. The illustrious *savant* immediately replied by letter, and, as it is rather instructive, I give it here in its entirety:—"It is useless for you to come. Every mad dog, whether it eats or not, dies from rabies in a few days; if it eats, death takes place a little more slowly, but it never exceeds eight or ten days. In the interval it manifests rabic symptoms. Confine the dog to his kennel, where he must be fed with precaution for at least twelve days. This had better be done under the supervision of a veterinary surgeon. If the dog lives after the time indicated, you may be assured that it is not mad. Meanwhile you have nothing else to care about than the wound caused by the bite. This should not be neglected. The saliva of a dog, even that of a healthy one, contains microbes foreign to the rabic virus, as those microbes might produce abscesses, and, in certain exceptional cases, septicæmia. In case the dog should go mad, come to me without delay, 45, Rue d'Ulm, at 11 A.M., where I will apply the preservative treatment for rabies."

LOUISE MICHEL.

Citoyenne Louise Michel, who has benefited, against her will, by the clemency of the President of the French Republic, in the form of a free pardon, has, since her exit from prison, been in a very excited state. She scarcely ever eats. She is evidently a monomaniac on the subject of revolution, and many people think that she is more fit for a lunatic asylum than a prison. One peculiarity in her may be noticed: she does not eat flesh, alleging as the reason that it comes from animals which have been killed.

The following changes in the staffs of the Paris hospitals are announced:—M. Mesnet takes M. Vulpian's place at the Hôtel Dieu, M. Troisier is appointed to the Saint Antoine, M. Cuffer to the Tenon, and M. Moizard to the Bicêtre. Prof. Gosselin has been elected Vice-President of the Academy of Sciences for the present year. In Bordeaux, M. Gervais has been appointed Surgeon to the Saint André Hospital.

Dr. Hayem has been elected a member of the Paris Academy of Medicine.

The following awards of prizes offered to the internes

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resident medical officers of the Paris hospitals are announced:—Seniors: Gold medal and 1000 francs, Gilbert, of the Hôpital Saint Louis; accessit, silver medal, M. Queyrat, of the Hôpital Tenon. Juniors: Silver medal, M. Lejars, of the Hôpital Saint Antoine; accessit, M. Dumoulin, of the Hôpital de la Pitié.

Paris, Jan. 19th.

INTRAVENOUS INJECTIONS IN CHOLERA.

(*From a Correspondent.*)

DURING the epidemics of cholera which visited France in 1884 and 1885, among the various treatments adopted was that of intravenous injections, which had been proposed and practised about fifty years ago. The hospitals where this treatment was largely employed were St. Antoine, at Paris, and the naval hospital of St. Mandries, at Toulon. In the former this treatment was carried out during the epidemic of 1884 by M. Hayem, to whom we are indebted for any exact knowledge of the subject, and who embodied his results in an interesting little book. In the latter the treatment of M. Hayem was adopted by M. Spiller, during the epidemic which raged at that place last year, and his results formed the subject of a communication to the Académie de Médecine on Oct. 27th. This being the most recent attempt at a definite line of treatment on a large scale the results obtained are of undoubted interest. The history of the subject is briefly this: In the year 1830, during the epidemic of cholera at Moscow, Dr. Hermann first conceived the idea of preventing the thickening of the blood by means of intravenous injections, and his practice was followed by Dr. Tannichen, of that city, but without any lasting result. In 1832 intravenous injections were used in Scotland, especially by Dr. Latta, of Leith, and five successes were recorded out of fifteen cases in which the injections were used in patients in an apparently hopeless state of collapse. Many were the adverse opinions on this method of treatment, and it was regarded as requiring further extension and experiment before it could be reckoned as one of the means to be adopted in treating cholera. Practically, this was the state of the question when the cholera appeared in Paris in 1884; and M. Hayem, well known for his researches on the blood, set himself to restudy the question and determine the real value of this plan of treatment. His opportunities were ample, for his service was at the Hospital St. Antoine, situated in the low quarter of Paris, where the cholera made its chief ravages. He had already determined the fact that the injection of distilled water into the circulatory system of a dog up to the extent of from one-tenth to one-twentieth of its body weight had no effect beyond a passing hæmoglobinuria—that is to say, the amount of fluid in the vessels could be doubled without producing any unpleasant symptoms; and believing that the chief symptom in the algid stage of cholera is the altered condition of the blood due to the drain of fluid from the alimentary canal, he came to the conclusion that the right line of treatment was that of intravenous injection, as there was no hope of the restoration of fluid by the alimentary canal. According to this view, the phenomena of the algid stage of cholera were due to the state of the blood and the hindered circulation, and he proved by numerical enumeration of the blood-corpuscles that the fluid in the blood was much reduced—in fact he found an augmentation of 1,500,000 corpuscles per cubic millimetre, and from this he concluded that the total volume of blood was reduced by about one quarter. The fluid which he used for injecting was—

Distilled water	1000
Chloride of sodium	5
Sulphate of sodium	10

The amount injected varied from two litres to two litres and a half, and it was heated up to 38°C. Sometimes a second, and even a third, injection was made. The injections were only made in the gravest cases, a fact which must be borne in mind in looking at the results. Altogether the injections were made in ninety cases, of which sixty-three died and twenty-seven survived—that is to say, the percentage of cures was thirty. But the general impression left on the mind of the observer was that this mode of treatment was of great value, and "that intravenous injection in cholera constitutes the surest and quickest means of bringing about the reaction. It exposes the patients to no danger, and therefore it is the duty of the physician to adopt it as quickly as possible, before this terrible disease has determined grave lesions in the body which offer obstacles to a reaction. In a word, transfusion ought now to be considered as a regular and not exceptional method of treatment, which, rational and scientific as it is, promises to soon hold the first rank among the treatments of the choleraic collapse."

Such being the results obtained by M. Hayem, it was natural that the method found a further extension in the cholera epidemic of last year; and in the naval hospital of St. Mandries at Toulon, this method of treatment was adopted in fifty-five cases, of which thirty-seven died and eighteen recovered, or a percentage of cures of 33, which approaches the figure obtained by M. Hayem. The cases in which the treatment was tried were extremely grave, and it was adopted as a last resource, after other means had been tried, and when, in spite of these, the patients were in a state of collapse and asphyxia. The physician of St. Mandries was also convinced of the value of intravenous injections as a means of bringing about the reaction in the algid stage of the disease. Whatever be the views held as to the nature of cholera, it would appear that in intravenous injections a valuable means exists to combat the asphyxia and collapse, which must soon end in death, caused, as they appear to be, by the reduced condition of the blood and general dehydration of the whole body, which in its turn owes its origin to the intestinal flux. The opinion as to the origin of the intestinal drainage varies with the view we adopt as to the essential nature of cholera; a point into which I will not now enter.

Obituary.

WILLIAM BOUSFIELD PAGE, F.R.C.S.

WILLIAM BOUSFIELD PAGE died at his residence, St Ann's, near Carlisle, on January 6th, and by his death there has passed away a notable figure in the social and professional life of Cumberland. Born of a good Essex family in the year 1817, he early chose surgery as his profession, and with a view to its study entered the London Hospital as an apprentice to the late Mr. John Scott. There his ability soon gained him recognition, and he became a favourite pupil of his great master. In 1841 the edifice of the Cumberland Infirmary was complete, and it became necessary to appoint to it an acting staff. An able physician was readily found in the person of the late Dr. Barnes; but owing to difficulties with the local medical men—the memory of which is best forgotten—an influential deputation of county gentlemen, of which Bishop Percy was the head, entered into communication with Mr. Scott with a view to the selection of a competent surgeon for the institution, and he, being especially rich in the brilliancy of his pupils, offered the post first to Mr. Curling, then to the late Mr. Critchett, and next to Mr. Page. This association with those who have become cosmopolitan leaders in surgery stamps the early reputation and acquirements of him whose loss we deplore as being of the very highest. In an address delivered to the Medical Society of Carlisle last year, and of which he was the first president, he described how cold and cheerless his first winter journey to the North was, a forecast it may well have seemed to him in after-times of the character of his reception by his professional brethren, and of the then aspect of the institution to which he was appointed, for he found "it with an old man and woman occupying the kitchen, and otherwise every room empty." But he was daunted by neither. Patients soon came to him, and the empty hospital wards, with their comparatively aseptic atmosphere, soon became the location of many brilliant successes in surgery. In these times, when the use of anæsthetics is universal, when ovariotomy is justly regarded as one of the most beneficent of surgical operations, and when the results of excision of the knee have established its value as an operative procedure, it may seem strange that there was opposition to the introduction of any one of them, and especially strange that

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obloquy should have attached to those who were bold enough in earlier days to carry them out. But so it was, and it is strong proof of the force and the faculty Mr. Page possessed when we find him a pioneer among those whose labours have rendered, by the establishment of the procedures referred to, our art richer and more beneficent, and suffering humanity still more largely our debtors. In THE LANCET of April 5th, 1845, appears the first notice of his success as an ovariotomist, and although within a comparatively short time (December, 1846) he published in the pages of the same journal an unsuccessful case, his hand was not stayed as an operator, and happily recovery followed in his succeeding operations. The case which terminated unsuccessfully was one of incomplete operation—extensive intestinal adhesions the cause of this; and in its result Mr. Page deplores, what even the vast experience of to-day has not altogether solved, the difficulty of diagnosing the existence and the situation of pronounced adhesions. Excision of the knee was also successfully carried out by him at a time when its reputation was of a very uncertain character; and the fact that in 1846 he had attained perfect results in two cases shows how alive he was to the advantages of conservative surgery. His predilection in this direction is further evidenced by a paper which was brought before the Medico-Chirurgical Society in 1850, and which we believe has a place in the Transactions for that year, as to the advantages in certain cases of disease of the os calcis of excision of the bone over the then almost universal treatment by amputation of the foot. The plan upon which he performed the operation is a good one, for it enabled him, had he in the progress of the excision found the other bones of the tarsus implicated, to have completed by the addition of the dorsal incision an ordinary amputation at the ankle. In the *Monthly Medical Journal* for February, 1847, there appears from his pen a most able, interesting, and instructive article on a case of spina bifida, in which the external tumour was successfully removed. Success in this operation, sometimes regarded as one of the triumphs of antiseptic surgery, was thus attained even in other days, and although the benefit which followed it was so great that its subject is now a woman in her prime, Mr. Page, with that sagacious character of mind which so distinguished him, defines in the most unmistakable way the small number of cases in which this method is applicable, the reason for adopting it, and the dangers which may follow its employment.

In such a sketch as this it is impossible to notice all the many ways in which he proved himself an able and enterprising surgeon, but those to which we have made reference may be regarded as typical of the method of the man: always interested in what was new and likely to be of benefit; always anxious to ascertain for himself the measure of this, and, despite the issue, to give his experience in the interests of his art. Lithotomy, of which he had many successful cases; acupressure in the arrest of hæmorrhage; the treatment of ununited fracture; the successful treatment of tetanus by the administration of aconite—on all these subjects he has left important records, which, though written long ago, may be studied now with interest and with gain.

What the profession thought of his labours is marked by the fact that in 1858 he was made a Fellow of the College, and that at even an earlier date the late Sir Benjamin Brodie used such influence as he possessed to induce Mr. Page to become a candidate for the post of surgeon to St. Mary's Hospital, a post which, singularly enough, is now held by his eldest son, Mr. Herbert Page. As, however happens to few men at so early a period of their lives, his time became too fully occupied to have leisure for literary work, for we soon find him the confidential adviser of the best families in Cumberland, and a recognised leader in his profession; and this position he maintained for nearly forty years, carrying on a family practice of the most select class, acting as a consultant over the greater part of the north of England and far across the Scotch border, always full of vigour, full of resource, and of wisest counsel. Added to all this, he had certainly one of the largest and widest connexions in the county as a railway surgeon; in this especial walk he began his work, as he did it in the Cumberland Infirmary, with the rise of the field for its exercise. The Lancaster and Carlisle Railway joined Carlisle to the southern systems, and Mr. Page was requested to act as medical adviser to its board of directors. This was a delicate post for the young surgeon to occupy, for it of necessity involved, not the mere dealing with traumatisms (with which he was perfectly familiar), but with that of compensation for injuries received—always, as we believe, a difficult task. With Mr. Page, however, there was no difficulty; the combination of abilities he possessed, and which we once heard well expressed by a man who was no mean judge of men, "that he was by nature gifted to be a good surgeon, a greater advocate, or a still greater financier," carried him through all exigencies, and in examining a "railway case," or in giving his testimony regarding it, it was felt that the opinion given was one that only a man gifted with perspicuity and wisdom could have formed. These gifts of perspicuity and wisdom, associated as they were with extraordinary shrewdness and ripe experience, made him much sought after as a consultant, and with medical men in the north there now arises the feeling that a wise friend and a prudent counsellor has passed from them. Educated at a time when the art of physical diagnosis was comparatively in its infancy, and when the training of the student was very different from what it is to-day, Mr. Page still managed to keep well abreast of the time, and to some of us it frequently seemed little short of marvellous how, without the use of such means as we of necessity employ, he with that acumen which the long years of work had given him, could make a more rapid and often a more accurate diagnosis.

Within a few days after his death the regret and sense of loss which had come to the profession in Carlisle and its neighbourhood found eloquent expression through Mr. Hull, the president of the local branch of the British Medical Association, who dwelt with emphasis upon the fact that one of the most successful endeavours in Mr. Page's life had been to better in every way the status of the medical man.

A man of iron physique, of strongest mental capacity, full of restless energy and of indomitable power of will, he yet possessed withal, and so largely, the better gift of a tender heart, that, directly through its influence, rest came to him, for he died from one of those mysteriously progressive forms of anæmia the starting-point of which seemed to lie in the shock of a heavy personal sorrow. Thus has closed a career of remarkable ability, singular usefulness, and extraordinary personal influence; and the thought comes to us sadly how much of wisdom, how much of knowledge, how much of the light collected by a life of experience and observation has perished with him, for the position he held never appeared more truly unique than it does now: it was one that no other man will ever hold.

THOMAS CECIL MORGAN, L.R.C.S. EDIN., L.K.Q.C.P.I.

NEW SOUTH WALES has sustained severe losses in the medical profession during the last six months; George Fortescue, Annesley West, and now Cecil Morgan, having joined the great majority. Cecil Morgan was one of a large family, and was born Jan. 13th, 1837, at Selsey Rectory, Sussex. Entering Trinity College as an engineering student, he changed his mind and turned his attention to medicine, qualifying in Edinburgh and Dublin in 1857 and 1858 respectively. He went to New South Wales almost immediately, and began practice at Gundagai, a town on the banks of the Murrumbidgee, where he remained for two years, returning to England in 1860 and entering the Army Medical Department. After some service in India he was invalided home, and was placed in charge of the ophthalmic wards at Netley. Retiring on half-pay, he was appointed resident surgeon at Moorfields, which office he held for some years, but the first warning of phthisis compelled him to seek a milder climate, and he went again to New South Wales. He was elected surgeon to the Sydney Hospital in 1878, and senior ophthalmic surgeon to the Ear and Eye Branch at Moorcliff in 1882. In 1883 he was appointed ophthalmic surgeon to the Goverment institutions at Parramatta and Liverpool, which office he held till his death on Nov. 24th, 1885.

Cecil Morgan's death leaves a great gap in the ranks of the profession in New South Wales. As a general operating surgeon he had few if any equals, and as an ophthalmic surgeon he was for years at the very head of his profession. As a teacher he was unrivalled. Unassuming and retiring almost to a fault, he did not make many friends, but those who were intimate with him, and were privileged to call him friend, knew well the gentle and amiable heart that beat under so quiet an exterior.

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THOMAS WILLIAMSON, M.D.

ON the 30th ult. the death occurred at Leith from apoplexy of Dr. Williamson. Born at Greenock in 1815, the deceased received his medical education at Edinburgh University, and in 1836 obtained the degree of Doctor of Medicine, in the same year becoming a Licentiate of the Royal College of Surgeons, an institution of which he was elected a Fellow in 1857. He was one of the oldest members of the Medico-Chirurgical Society and of the Royal Society, Edinburgh. He practised for half a century in Leith, and was universally and deservedly respected and esteemed. For thirty years he was surgeon to the local hospital, and at the time of his death held the appointments of parochial medical officer and public vaccinator for the parish of South Leith and medical officer of health for the entire burgh.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their Primary Examination in Anatomy and Physiology at a meeting of the Board of Examiners on the 13th inst., and when eligible will be admitted to the Pass Examination:—

ANATOMY AND PHYSIOLOGY.—Sidney A. Bontor and Francis W. Tunnicliffe, St. Bartholomew's Hospital; Herbert V. Hickman and Edward H. Baldock, Guy's Hospital; George A. Ballingall, Edinburgh University.

ANATOMY ONLY.—Edmund R. Kavanaugh, Guy's and Westminster Hospitals; Albert B. Harman, Henry B. Falconer, and William J. Rugg, King's College Hospital; David T. Jones, Guy's Hospital; C. J. Paterson and Leslie M. Stocken, University College Hospital; Daniel J. P. McNabb, Newcastle and London Hospital; Edward J. Cross, St. Thomas's Hospital; Charles M. Leakey, London Hospital; George E. G. Metcalfe, St. Bartholomew's Hospital; Arthur G. N. Goldney, Charing-cross Hospital; Reginald F. H. Newton and Sidney D. Graham, St. George's Hospital; James D. H. Smyth and Robert B. Fergusson, St. Mary's Hospital.

PHYSIOLOGY ONLY.—Philip Johnson and George D. Parker, St. Bartholomew's Hospital; Henry B. Statter, Robert W. Rouw, and Arthur R. F. Evershed, Guy's Hospital; Hubert E. Blake, University College Hospital; Reginald Hedley, Bristol Medical School; Charles J. P. Hogarth, Melbourne and St. Bartholomew's Hospital; Ernest Carter and James L. S. Sherlock, London Hospital; Arthur Charles A. Lovegrove, Westminster Hospital; Robert R. Hatherell, St. Thomas's Hospital; Reginald Thorpe, St. George's Hospital; Alfred R. Sieveking, St. Mary's Hospital; Murdock Chisholm, McGill College, Montreal.

Passed on the 14th inst.:—

ANATOMY ONLY.—Frederick R. Hird and Arthur James Lambert, Leeds School of Medicine; Joseph Farrall Wright, Owens College, Manchester; William C. Costine, University College, Liverpool; Harry F. Devis, Bristol Medical School; Charles Graves, St. Mary's Hospital; Frank Osborne and Charles H. Andrews, St. Thomas's Hospital; Hubert A. Bray, King's College; Richard A. Smith and William W. Craig, University College; James V. Albert and George T. Mould, St. George's Hospital; Thomas H. Valintine, St. Bartholomew's Hospital; Albert E. Tebb and Richard G. Pollock, Guy's Hospital; John P. De Buriatta and Joseph R. Gallard, London Hospital; Reginald Roberts, Middlesex Hospital.

PHYSIOLOGY ONLY.—George Thorpe, Sheffield Medical School; Neal Nelson, Dublin; Edward Foxton, Kingston, Canada; Abraham J. Mener, New York; Henry W. C. B. Cave, Queen's College, Birmingham; William V. Tanner, Hugh C. Addison, and William D. Wells, King's College; George H. Thompson, Richard H. Wellington, and Charles S. Fisher, St. Bartholomew's Hospital; Norman Robinson and William H. Robinson, St. George's Hospital; Daniel F. Roberts, Manchester and Guy's Hospital, Joseph S. Bradish, Frederick M. House and Campbell R. Adams, St. Thomas's Hospital; Philip K. O'Brien and Arthur L. Fuller, University College; Edward O. Kingdon, St. Mary's Hospital.

The following gentlemen, having undergone the necessary examinations, were admitted Members of the College at a meeting of the Board of Examiners on the 18th inst.:—

Benson, Matthew, L.R.C.P. Lond., Wigan.
Burnett, Reuben, L.R.C.P. Lond., Onecote, Staffs.
Clarke, Edmund Wearne, M.B. Edin., Edinburgh.
Edye, John Simpson, L.S.A., Elgin-road.
Furrer, Edward, M.B. Toronto, St. Louis, Canada.
Hawley, Harold Heber, M.B. Toronto, Trenton, Ontario.
Logan, John Rannie, M.D. Toronto, Toronto, Canada.
McNabb, Daniel J. Patrick, L.R.C.P. Ed., Newcastle-on-Tyne.
Maloney, William Robert Nuttall, L.S.A., Melbourne.
Niven, George, M.B. Cantab., Greenwich.
Pickthorn, Alfred John, L.S.A., Wetherby-terrace.
Rendall, Percy John, L.S.A., Ladbroke-square.
Revely, Joseph Smith, M.B. Durham, South Shields.
Trask, John Ernest, Bath.

Admitted on the 19th inst.:—

Daniel, Frederick Edwin, Birmingham.
Dawson, Arthur Willan, M.B. Durham, Liverpool.
Evans, Williams, L.K.Q.C.P.I., Liverpool.
Facey, William Edwin, M.B. Cantab., Abergavenny.
Felix, Edward, L.R.C.P. Lond., Shirland-road.
Harvey, John Thomas, M.B. Edin., Victoria, Australia.
Hill, Alfred William, L.S.A., Adelaide.
Jolly, Sydney Blake, L.S.A., Lansdown, Bath.
Jowers, Reginald Francis, L.S.A., Brighton.
Male, Herbert Christopher, M.B. Edin., Stone, Staffs.
Montague, Arthur John Helm, L.S.A., Notting-hill.
Roach, George Ernest, L.S.A., Plymouth.
Sharman, Mark, M.B. Glasgow, Wellingborough.
Sugden, Edgar Brewitt, L.S.A., Hampstead.
Weaver, John James, L.S.A., Southport.
Wright Robert Wallace, Holland-road.

Admitted on the 20th inst.:—

Bates, George Tweedie, L.S.A., Bredwardine.
Billups, Percy Christopher C., L.R.C.P. Lond., East Dulwich.
Cavell, Herbert Bertram, L.S.A., Brook-street.
Cottell, Reginald James Cope, L.R.C.P. Lond., Cheyne-row.
Freeman, Ernest Carrick, L.R.C.P. Lond., St. George's-square.
Girvin, John, Mecklenburgh-square.
Hill, Joseph Shuter, L.R.C.P. Ed., Mecklenburgh-square.
Hughes, Morgan, Croydon.
Lyndon, Arnold, L.S.A., South Hampstead.
Otway, Henry Carrol, L.R.C.P. Lond., Kennington-park-road.
Rigge, John Arthur, L.S.A., Grays, Essex.
Roberts, Leonard, L.S.A., Bishopsyford.
Thorpe, Vidal Gunson, L.S.A., Camberwell.
Thomas, John, L.R.C.P. Lond., St. Peter's-street.
Volckman, Bernard, L.S.A., Stapleford, Notts.
Watts, Alfred Thomas Guy, L.S.A., Buckingham-palace-road.

The following gentleman passed in Anatomy on the 12th inst., but was omitted in the list published:—

N. Sisca, of Naples.

COLLEGE OF PHYSICIANS IN IRELAND.—At the January examinations the following obtained the Licences in Medicine and Midwifery of the College:—

MEDICINE.—Sydney Joseph Armstrong, William Vincent Barré, William Evans, George Fisher, Frederick Hall, Frederick Bernard Musgrave, Edward Nangle Smartt, Graves Stoker.

MIDWIFERY.—William Vincent Barré, Michael Patrick Dunlea, George Fisher, Henry Croker Garde, Frederick Hall.

The undermentioned were admitted Members:—

Ephraim MacDowell Cosgrave; W. Beatty.

SOCIETY OF APOTHECARIES.—The following gentleman passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received a certificate to practise, on the 14th inst.:—

Oakman, Joseph John, The Priory, Battersea.

The following passed the examination in the Science and Practice of Medicine, and received certificates to practise:—

Pisani, Lionel John, Rockmound-road, Upper Norwood.
Teasdall, Walter John, M.D. University of Victoria, Aurora, Ontario, Canada.
Thorpe, George, Stoke Newington-road.
Wilkin, Griffith Charles, Hyde-park-street.

The following gentlemen passed the examination in Arts on the 8th and 9th inst:—

FIRST DIVISION,
Winter, George Mitchell.
SECOND DIVISION.

Atkinson, J. C.	Knox, S. G.
Bonner, E. A.	Laver, P. G.
Buck, A. H.	Liversidge, A. A.
Chater, A. R.	Moore, H. St. B.
Davies, A. N.	Nall, J. F.
Denne, F. V.	Ouston, T. G.
Eastment, J. W.	Ringrose, E.
Flegg, F. A. M.	Savery, W. H.
Fuller, G. S.	Shepard, R. H.
Garrard, G.	Soltan, H.
Hern, G.	Whitehead, E. T.
Johnston, D. C.	Wood, G. E. M.
Kellman, J. C.	

Passed in Elementary Mechanics alone:—

Addie, A.	Lockyer, G. E.
Barnes, H. C.	Long, H. B.
Castellotte, B. A.	Meadows, A. H.
Dudley, A. D. P.	Rayner, D. C.
Dunn, R. A.	Sutherland, F. C.
Dryland, L.	Twynam, A. E. E.
Everett, E. W.	White, E. T.
Holden, G. B.	Garrett, J. H.
Jones, J. H.	Sheen, F. F. S.
Lang, E. J.	

ON the 20th inst. the death of a young man from hydrophobia occurred in Guy's Hospital.

Senores Sanchez Ocana, Candela, and Ledesma have been appointed Court physicians to the Queen of Spain.

EDUCATION OF THE BLIND AND THE DEAF AND DUMB.—The Queen has, on the recommendation of the Home Secretary, approved of the inquiry now being held by Royal Commissioners into the education of the blind being so extended as to include the education of the deaf and dumb and such other cases as would seem to require exceptional methods of educational treatment.

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THE Hospital Sunday collection at Poole was held on the 10th inst.

IT is proposed to erect, by public subscription, a wing to one of the Melbourne Hospitals as a memorial to Sir Moses Montefiore.

AT the usual bi-monthly meeting of the Hackney District Board of Works on the 13th inst., Dr. Tripe, the medical officer of health, reported a severe outbreak of typhoid fever at the convent in Hassett-road, South Hackney.

DOVER HOSPITAL.—The annual meeting of this institution was held on the 20th inst. It was stated that the number of patients treated during the year was 4459, and the expenses had been kept well within the income, which had amounted to £1137.

QUEEN'S COLLEGE, BIRMINGHAM.—THE INGLEBY LECTURES.—The second of these lectures, "On Some Functional Disorders of Females," will be delivered by Dr. Wade, F.R.C.P., Senior Physician to the General Hospital, on Thursday, the 28th inst., in the Theatre of the College, at 4 o'clock. Subject: "Some Nervous Disorders."

NEW HOSPITAL IN HABANA.—The new hospital of Our Lady de las Mercedes, in the neighbourhood of Habana, is expected to be complete and ready for the reception of patients, who will be transferred from the old hospitals of St. Philip and Santiago. The new building is said to have been constructed in accordance with the most approved hygienic models.

BIRMINGHAM AND MIDLAND SKIN AND LOCK HOSPITAL.—The Committee of this hospital have taken a piece of land in the centre of the town on which they intend building a new hospital. This will enable them to provide medicinal baths and beds for in-patients. For a long time past their present premises have been insufficient for the accommodation of the increasing number of patients applying for relief.

BOURNEMOUTH SANITARY HOSPITAL.—This new institution, which has been erected at a cost of £3900, was opened on the 13th inst. Accommodation is provided for six adults two children. Attached to the hospital is a very complete and apparatus for the disinfection of clothing by steam, and the sanitary arrangements are of a most satisfactory character.

ST. JOHN AMBULANCE ASSOCIATION.—A most promising centre has been formed in the Isle of Man. The inaugural meeting was held at Douglas on Monday, Jan. 18th. Surgeon-Major Hutton delivered an address on the aims and objects of the association. His Excellency Spencer Walpole, Lieutenant-Governor, President of the Centre, occupied the chair, and was supported by a considerable number of the local practitioners and committee-men.

NORTHERN HOSPITAL AMBULANCE.—The members of the Liverpool Junior Reform Club some time ago made a collection for the benefit of the deserving poor. The whole of the money was not expended, and a balance of £60 has just been handed to the treasurer of the Northern Hospital Ambulance Fund, on the condition that the ambulance is maintained at work during the whole of the present year, a condition which has been gladly assented to by the committee of the fund.

INSANITARY HOUSES.—In an action recently brought by a landlord to recover rent for a house, the defendant alleged that the insanitary state of the drains and the dampness of the building had caused such severe illness to himself and family that his medical attendant had advised his leaving it. The judge directed the jury that in the case of an unfurnished house there was, in letting it, no implied contract that it should be fit for the purpose of the person who took it. Judgment was accordingly given for the plaintiff.

THE FRENCH ACADEMY OF MEDICINE.—The names submitted by the Committee of the French Academy of Medicine, in addition to that of Sir Joseph Fayrer, who as we announced last week, was elected to fill the vacancy in the foreign corresponding members, were those of M. Thybaïdos of Athens, and Dr. Bateman of Norwich. The voting was as follows:—Fayrer, 43; Thybaïdos, 16; Bateman, 6. For the vacancy occasioned in the ordinary members, section of Therapeutics, by the death of M. Déchambre, founder and editor for some twenty years of the *Gazette Hebdomadaire*, and editor of the magnificent "Dictionnaire Encyclopédique des Sciences Médicales," five names were proposed—MM. Desmos, Dumontpallier, Hayem, Hallopeau, and Ferrand. The contest lay between MM. Hayem and Desmos, M. Hayem obtaining 44 votes against 38 given to M. Desmos. M. Hayem was therefore declared elected.

NORTH-WEST LONDON HOSPITAL.—A concert for the entertainment of the patients and friends of this hospital took place on the 14th inst. in the male ward of the institution.

SANITARY ASSURANCE ASSOCIATION.—At the Parkes Museum of Hygiene on the 20th inst., Mr. T. Roger Smith, Professor of Architecture, University College, delivered a lecture on "A Damp House." The chair was occupied by Sir Joseph Fayrer, and at the close of the address an interesting discussion, in which several members of the association joined, took place. On the 27th inst., a lecture on "Preventable Diseases" will be delivered by Mr. Jesset medical officer of health for Erith. These lectures are free to all, no tickets being required, and discussion is invited.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—The third of six winter evening conversaziones was held at this hospital on Friday, Jan. 15th. The surgeons present were Mr. Cowell and Mr. Hartridge. The following were among the cases shown: Glaucoma in a child aged fourteen; New Growth in Vitreous; Atrophy of Choroid; Dislocation of Lens; Large Hœmorrhage at Macula (three cases); Hœmorrhagic Retinitis; Optic Neuritis; Optic Atrophy; Congenital Crescent; Embolism of Central Artery of Retina; Conical Cornea, &c. The conversazione was largely attended.

LIVERPOOL MEDICAL INSTITUTION.—At the annual meeting, held on Thursday, Jan. 14th, the following list of officers, council, and microscopical committee was adopted:—President: Dr. J. Birkbeck Nevins. Vice-Presidents: Mr. Frank T. Paul, Dr. Burton, Dr. Alexander, and Dr. James Barr. Hon. Treasurer: Dr. F. J. Bailey. Hon. Gen. Secretary: Dr. Bernard. Hon. Sec. of Ordinary Meetings: Dr. W. Williams. Hon. Librarian: Mr. R. Williams. Council: Dr. J. Cameron, Mr. R. Hamilton, Dr. Harvey, Dr. Prytherch, Mr. Sheldon, Mr. H. O. Thomas, Dr. A. Davidson, Dr. Davies, Dr. Robert Gee, Mr. N. K. Marsh, Mr. D. Harrisson, and Dr. Wollaston. Microscopical Committee: Dr. Alexander, Dr. Barron, Dr. Braidwood, Dr. Briggs, Dr. Hyla Greves, Mr. G. Hamilton, Dr. Hicks, Dr. Logan, Mr. Rushton Parker, Mr. Frank T. Paul, Dr. J. Wiglesworth, and Dr. W. Williams. Auditors: Mr. C. G. Lee and Dr. H. Harvey.

MANCHESTER MEDICAL SOCIETY.—At the annual meeting of this Society on the 13th inst., a highly satisfactory report was read. The number of members is 242, an increase over the number of the previous year; and the balance in the hands of the treasurer is £253, as compared with £139 at the date of the last annual report. The following is a list of office-bearers for 1886: -President: Dr. J. Hardie. Vice-Presidents: Dr. Julius Dreschfeld, Dr. C. E. Glascott, Mr. G. W. Smith, and Mr. A. W. Stocks. Treasurer: Dr. David Little. Secretary: Mr. F. Armitage Southam, M.B., 242, Oxford-road, Manchester. Other members of Committee: Drs. C. J. Cullingworth, W. Young Martin, Siegmund Moritz, P. H. Mules, F. Morrish Pierce, C. Jeremiah Renshaw. T. Wemyss Rhodes, J. Ross, W. Japp Sinclair, and W. Yeats, Mr. E. Stanmore Bishop and Mr. A. Harry Young, M.B.

GREAT NORTHERN CENTRAL HOSPITAL.—The general council of this hospital met this week in the board-room of the institution, Caledonian-road, when Mr. C. T. Murdoch, M.P., who presided, reported that an eligible freehold site for the new hospital had been secured in the Holloway-road at a cost of £7500. Provision would be made for 150 beds, and the cost would not exceed £200 each bed. £2000 was necessary for the out-patients' department, and altogether £32,000 was required for the building, without furniture. It was estimated that £5000 would cover the expense of furniture and other charges. Towards the total cost £10,500 had been actually subscribed and promised, out of which the cost of the site had already been defrayed. Then there was a realisable asset in the long lease of the present hospital premises, which were ill-adapted to the purposes they had hitherto served. It was anticipated that the foundation stone of the new hospital would be laid during the ensuing spring.

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Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

COUNSELL, H. E., M.R.C.S., has been appointed Resident Obstetric to Guy's Hospital.

DONALDSON, R. L. S., A.B., M.B., B.Ch.Dub., has been appointed Assistant-Resident Medical Superintendent to the Monaghan and Cavan District Lunatic Asylum, Monaghan.

FENTON, GEORGE, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer to the Western Dispensary, Rochester-row, S.W., vice Francis Pearse, M.R.C.S., L.S.A.Lond., resigned.

HARSANT, J. G., M.B., B.S.Lond., has been appointed Resident Obstetric to Guy's Hospital.

MARSDEN, R. S., M.B., C.M.Ed., has been appointed Medical Officer for the Billington District of the Malton Union.

NIVEN, J., M.A., M.B., has been appointed Medical Officer of Health for the Borough of Oldham, vice Hill, deceased.

PHILPOTS, E. P., M.D., has been appointed Resident Physician to the Mont Dore, Bournemouth.

WALDO, F. J., M.A., M.D.Cantab., M.R.C.S., has been appointed Honorary Medical Officer to the Kensington Dispensary.

WARWICK, PERCY, L.R.C.P., M.R.C.S., has been appointed Medical Officer for the Second District of the Blything Union.

Births, Marriages, and Deaths.

BIRTHS.

BARLOW.—On the 18th inst., at Alma Villa, Dalston-lane, E., the wife of T. Carey Barlow, L.R.C.P.Ed., of a son.

BRUCE.—On the 17th inst., at City-road, the wife of Robert Bruce, M.R.C.S., of a daughter.

JOHNSTON.—At Spital-hill, Sheffield, the wife of Dr. Johnston, of a son (stillborn).

KIDD.—On the 15th inst., at 2, Cromwell-road, West Brighton, the wife of Leonard Kidd, M.R.C.S., L.R.C.P.Ed., of a son.

KILNER.—On the 12th inst., at Guildhall-street, Bury St. Edmunds, the wife of Charles Scott Kilner, M.B., of a son.

MOORE.—On the 19th inst., at Woodside, Keston, Kent, the wife of Norman Moore, M.D., Warden of the College of St. Bartholomew's Hospital, of a daughter.

ROSSITER.—On the 16th inst., at Cairo Lodge, Weston-super-Mare, the wife of George Frederick Rossiter, M.B.Lond., of a son.

THOMSON.—On the 17th inst., at Sinclair-road, Kensington, the wife of G. Crawford Thomson, M.B., M.R.C.S., of a son.

MARRIAGES.

CHAPMAN — MACKENZIE. — On the 14th inst., at 31, Regent-terrace, Edinburgh, by the Rev. P. Hay Hunter, Minister of the Parish of Elie, James Milne Chapman, M.B.Edin., M.R.C.S.Eng., of Inverness, to Eliza Georgina, daughter of the late A. F. Mackenzie, of Kessock, Inverness-shire.

FERGUSON—BOOTE.—On the 13th inst., at the Parish Church, Ashton-on-Mersey, James Mitchell Ferguson M.B., of Hounslow, to Jane Beatrice Margaret, elder daughter of Daniel Boote, of Ashton-on-Mersey and Manchester.

HUMPHREYS — DIGHT.—On the 13th inst., at Tollerwhelm Church, Richard Humphreys, M.B., C.M.Ed., of Grassendale, Liverpool, to Amy Mary, eldest daughter of John Dight, Esq., of Tollerwhelm, Beaminster, Dorset, and late of Martock, Somerset.

LINDSAY—ELLIOT.—On the 14th inst., at Brinsop Church, Herefordshire, W. Lindsay, M.R.C.S., to Anne Alison, elder daughter of the Rev. W. Elliot, Vicar of Brinsop.

MCGEAGH—MORICE.—On the 14th inst., at St. Stephen's, Paddington, London, by the Rev. W. S. Carter, R. T. McGeagh, M.D., Surgeon, A.M.S., to Ida C. Napier, eldest daughter of Morice Pacha, R.N., of Alexandria, Egypt.

VERITY—HOGG.—On the 13th inst., at Melbourne, Herbert Wilfred Steele Verity, M.R.C.S., L.R.C.P., fourth son of G. Hamilton Verity, Esq., to Agnes Emily, elder daughter of the late Captain W. Dinwiddie Hogg, D.A.C.G., H.E.I.C.S.

DEATHS.

FOWKE.—On the 17th inst., at Walton-on-the-Naze, Essex, Frederic Gustavus Fowke, M.R.C.S., formerly of Manor House, Charwelton, the eldest surviving son of the late Rev. Thorpe William Fowke, Vicar of Sudbury, Suffolk, in his 71st year.

KIRKMAN.—On the 11th inst., at Westergate, Melville-road, Redland, very suddenly, Joseph Thos. Kirkman, F.R.C.S., late of Horndean.

LEESON.—On the 13th inst., at Bath, Margaret Anne, the dearly-loved wife of J. R. Leeson, M.D., F.G.S., of Twickenham, after three days' illness of acute rheumatism and cardiac thrombosis, aged 36.

LITTLETON.—On the 16th inst., at his residence, Well-park, Saltash, Nicholas Littleton, M.R.C.S., Fleet-Surgeon R.N., aged 66.

MORGAN.—On the 14th inst., at Feltham, Middlesex, Charles Morgan, M.R.C.S., late of Bedford-row and Bedford-place, Russell-square, in his 86th year.

OSBORNE.—On the 13th inst., at Southwell, Notts, of concussion of the brain, John Henry Osborne, M.R.C.S., L.S.A.Lond., aged 64.

ROWBOTHAM.—On the 17th inst., at Woolwich, Wm. Rowbotham, M.R.C.S., son of the late S. Rowbotham, of Manchester, in his 67th year.

SMITH.—On the 14th inst., at Bishop's Lydeard, John Smith, M.R.C.S., L.S.A.Lond., aged 67.

WORKMAN.—On the 11th inst., at Titherley, Teignmouth, Charles John Workman, M.D., aged 46.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, January 25.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

SOCIETY OF ARTS.—8 P.M. Prof. H. S. Hele Shaw: Friction (Cantor Lecture).

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Thudichum: On the Theory of the Febrile Process, its accompanying Chemical Changes and the Modes in which it produces Death and Immunity.—Mr. Walter Pye: Pyæmia after Removal of a Sarcomatous Tumour from the Base of the Skull.

Tuesday, January 26.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 3.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Mr. R. Stuart Poole: Naucratis.

ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8 P.M. Annual General Meeting.

SOCIETY OF ARTS.—8 P.M. Mr. Arnold White: The Importance of a National Scheme of Emigration for the Best Interests of British Commerce.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Dr. William Ogle: Mortality in the Medical Profession.—Mr. Henry Lee: On the Tapetum Lucidum.

Wednesday, January 27.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department 9.30 A.M., on Tuesdays and Fridays.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department: 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.

HUNTERIAN SOCIETY.—8 P.M. Dr. Braxton Hicks: (1) Note on a Condition of Uterine Displacement in which Pessaries are Contra-indicated; (2) A case of Cephalic Version in Arm Presentation.—Dr. Galabin: On the Relative Advantages of Axis-traction and Ordinary Forceps, and on the Mode of making Correct Axis-traction with Ordinary Long-curved Forceps.

SOCIETY OF ARTS.—8 P.M. Mr. Henry Davey: Machinery in Mines.

BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens will be shown. Address by Mr. Lawson Tait.

Thursday, January 28.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. W. Chandler Roberts-Austen: Metals as affected by Small Quantities of Impurity.

SOCIETY OF ARTS.—8 P.M. Mr. Wm. Bottomley, jun.: The Magnetism of Ships and the Mariner's Compass.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8.30 P.M. Dr. Thomas Reid: (1) Polarisation Spectroscope for Achromatopsia; (2) the same for determining the neutral points in Dichroic Vision; (3) A Perimeter for Colour Vision; (4) Ophthalmoscopes adapted for the Electric Light.—Mr. E. Nettleship: Fatal Meningitis after Enucleation.—Mr. Priestley Smith: Primary Glaucoma in relation to Age.—Mr. W. H. Jessop: On Herpes Ophthalmicus affecting the eye.—Mr. G. L. Johnson: (1) Atrophy of Iris, &c., following a blow on the head; (2) Conical Cornea improved by Stenopaic Glasses.—Mr. W. Lang (for Dr. J. W. Barrett): New Microtome.—Mr. H. Juler: Refraction Ophthalmoscope arranged for the Electric Light.—Dr. C. E. Fitzgerald: A new Instrument for facilitating Refraction Tests.—Mr. W. H. Jessop: A new Pupillometer.—Mr. W. Adams Frost: A new Model showing the Movements of the Eyes.—Mr. G. Hartridge: (1) Glaucoma in a girl aged fourteen; (2) Small Lenses.—Mr. R. M. Gunn: (1) Optic Atrophy after Wound of Orbit; (2) Amblyopia from Bisulphide of Carbon; (3) Result of Operation on Eye damaged by severe Sympathetic Disease.—Living and Card Specimens at 8 P.M.

Friday, January 29

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—9 P.M. Sir Wm. Thomson: Capillary Attraction.

Saturday, January 30.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

MIDDLESEX HOSPITAL.—Operations 2 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Mr. Archibald Geikie: The History of Volcanic Action in the British Isles.

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, Jan. 21st, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain al..	Remarks at 8.30 A.M.
Jan. 15	29·84	N.	41	40	...	48	33	...	Overcast
,, 16	29·74	N.W.	36	34	...	44	34	...	Fine
,, 17	29·53	N.W.	38	36	...	44	34	...	Cloudy
,, 18	29·06	W.	36	3	...	40	35	...	Overcast
,, 19	29·33	W.	30	...	...	37	27	...	Hazy
,, 20	29·52	N.E.	30	...	...	35	28	...	Fine
,, 21	29·34	N.E.	35	34	...	35	30	...	Snowing

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

"FROM DARKNESS TO LIGHT."

UNDER this heading a Liverpool contemporary recently published a sensational account of the recovery of sight by a man who was under the care of Mr. Emrys-Jones, of Manchester. The account was garbled and inaccurate, and we are glad to learn that Mr. Jones has promptly and publicly disclaimed all connexion with the production. The profession has always rightly set its face against the parade of medical technicalities in the lay press, an attitude which we venture to hope will be long maintained.

Hon. Surgeon-Major.—We think not. A bearer corps composed of undrilled men would be worse than useless.

"WAKES AND THE SPREAD OF SMALL-POX."

To the Editor of THE LANCET.

SIR,—Your Liverpool correspondent gives in your last issue (p. 133), under the above heading, some interesting particulars of a successful prosecution under Sect. 126 of the Public Health Act of 1875, but does not state explicitly the nature of the act of the "exposure" upon which the proceedings were based. If, as he seems to imply, the conviction was for holding a "wake" upon an infectious case in a private house, it is an important precedent. In somewhat similar circumstances I have always had to prove to the satisfaction of the magistrates that the place of exposure was, in the words of the section, a "street, public place, shop, inn, or public conveyance." The practice of holding "wakes" in such cases cannot be too strongly condemned; but even in towns where this foolish custom is happily rare, instances are of constant occurrence in which there is the most culpable and reckless exposure of infected persons, but which are, as it were, privileged by the well-meant limitation of the scope of the section.

I am, Sir, yours faithfully,

B. A. WHITELEGGE, M.D.

Nottingham, Jan. 16th, 1886. Medical Officer of Health.

"HYPERIDROSIS."

To the Editor of THE LANCET.

SIR,—In reply to "Enquirens," who asks in your last issue for a remedy in a case of hyperidrosis, I would venture to suggest the use of fluid extract of coca, to look well to the alimentary tract from beginning to end, and to observe if the saliva is acid, as also the perspiration. I have used nitro-muriatic acid with a certain amount of success when the saliva gives an acid reaction and when there has been excess of perspiration. If the above suggestion fails, I would first see that the liver was unloaded and acting well, and then administer hypodermic injections of quinine.

I am, Sir, yours faithfully,

Jan. 20th, 1886. DOUBLE QUAL.

NEGRO MORTALITY IN THE UNITED STATES.

THE statistics of mortality in the United States seem to show that the negro question—so far as it still exists—is likely to settle itself without extraneous interference. In six cities the negro death-rate has been kept quite distinct from that of the white population, and the result is certainly striking. In Louisville the white death-rate is 20·04 per 1000; among the blacks the death-rate is 34·76. In Washington it is 17·80 for whites; 35·45 for blacks. In Richmond, 19·12 and 31·95. In Baltimore, 22·71 and 37·61. In New Orleans, 25·41 and 35·61. In Charlestown, 25·76 and 45. Thus, in two of these cities the mortality among the blacks is almost exactly double that among the white population; in the others it is more than a third greater. If this rate of mortality be kept up, by the end of another century the black man will have almost disappeared off the face of the North American continent.

C. V.—The case is very interesting, and one not unlikely to arise, till the risk of high temperatures and the sometimes amazing efficiency of cold water in reducing them are better understood by the public. We fear there is no legal way out of our correspondent's difficulty. The fee is of the nature of an honorarium, which the bye-laws of the College forbid to be made the subject of a legal process. The satisfactory thing is that our correspondent and his consultant did what was right, and what they would have been blamed for not doing if their conduct had been submitted to any competent professional judge. It is quite likely that the father will come to realise this after a time, and a little allowance should be made for the difficulty of the parental and non-professional mind realising that all the distress, and death itself, were the result of a burning up of the body, which in many instances has been arrested by the cold bath. We should be glad to hear further from our correspondent.

Dr. Rummo (Naples).—We cannot exchange.

THE ADMINISTRATION OF THE CORONER'S "'QUEST."

To the Editor of THE LANCET.

SIR,—It is to be sincerely hoped that during the forthcoming session the Legislature will have sufficient time at its disposal to introduce a Bill for the better working and administration of the coroner's "'quest." The existing Acts are anything but a security and protection for human life. In this division of the county no fees whatever are paid either to jury or to witnesses. Half-a-crown is paid for the hire of the inquest-room, and, with the exception of the coroner's travelling expenses and the medical fees, the cost of an inquest amounts to a few shillings only. I could quote many cases that have lately come under my immediate notice where inquests should have been held. I will not, however, unnecessarily trespass upon your space, but will give one case as an example.

I was called on the 5th inst. to the Selling railway station, and found a healthy-looking woman of forty in the waiting-room, holding in her hand the fare which she was about to tender at the ticket-office, when, without a moment's warning, she fell down and expired without a murmur. About two hours elapsed before a county constable could be found, and when he arrived he was sent to communicate with the coroner. The constable did not search the woman, nor did he in any way examine her, but simply took my letter to the coroner, in which I reported that "the cause of death was quite unknown." The coroner sent a verbal message to the effect that a post-mortem examination or inquest was unnecessary.

After a case like this, it would appear that in certain instances a coroner's "'quest" is useless. If a coroner can sign the cause of death upon the report of a county constable, a medical man might say that he was justified in certifying the cause of death upon the statement made by a well-educated but unqualified assistant. What was the cause of this poor woman's death I cannot say. Whether she took cyanide or died from aneurysm, &c., I do not know.—I remain, Sir, yours truly,

Faversham, Kent, Jan. 11th, 1886. CHARLES CHITTENDEN.

"JEMIMAS."

To the Editor of THE LANCET.

SIR,—In answer to "One of your Non-professional Readers," will you allow me to say that "jemimas" may be bought at Thornton's, Boar-lane, Leeds. The price is 7*s.* 6*d.*, not 7*s.*, as I stated, and by parcel post 8*s.* In my original letter the address of the shop was not given, as I supposed that the snow-boots referred to were to be had in most large towns.

I am, Sir, yours faithfully,

Leeds, Jan. 18th, 1886. T. PRIDGIN TEALE.

SEA VOYAGE FOR INVALIDS.

To the Editor of THE LANCET.

SIR,—Can any of your readers inform me if there is any good work published which would give information on the treatment of delicate persons on a long sea voyage? Or I should be obliged to any who could inform me whether a sailing vessel or steamer is preferable for such persons undertaking a voyage to Australia, and the difficulties likely to be encountered in each case. I am, Sir, yours faithfully,

Jan. 19th, 1886. PRESUMAN.

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...PPOSED RUSSIAN CURE FOR HYDROPHOBIA.

P. ... to give an account of an alleged treatment and cure of ... It is inferred that certain pustules are always present ...gue. The treatment consists in rupturing the pustules ...d taking every precaution to prevent the patient from ...e contents of the pustules. There is, however, nothing ...t that bears on the face of it any great degree of ...

Pr... (Manchester) has not enclosed his card.

Mr... (Tasmania) should consult Dr. Michael Foster's Physiology.

...AGNOSIS OF THE SEX OF THE FŒTUS.

To the Editor of THE LANCET.

...wing made a long series of observations on this subject (men... annotation in your issue of Jan. 9th, page 82), the results ...ay be of interest to your readers, as throwing a little more ... subject not much studied.

...ed patients at every period of pregnancy, from the fourth ...full term, and a large number during labour. The earliest ...which I heard the fœtal heart was the latter half of the fifth ..., on account of variations at different periods and the diffi... accurately counting the heart-beats, I kept strictly to observa... during the last fortnight of pregnancy in drawing my ... I found that observations made during labour had several ...error, and I presume that this partly accounts for the high ...n in your extract from Señor Bidart's paper. Perhaps also ...ave something to do with it. I have often had occasion to ... peculiarly slow pulse of those of Scandinavian origin (fre... ...ty to fifty per minute in health), and the normally rapid ...me of the coloured races; so I conclude that the Chilian ... have a more rapidly beating heart than its British contem... Having eliminated all observations during labour, and those in ...uld not be certain of the exact heart-rate, I concluded from ...of the remainder that it is generally safe to conclude when ... the heart-beats is under 130 per minute that the fœtus is a ... over 140 that it is a female. Between 130 and 140 it is rash to ...y. Further, I found that the cause of error between these ... the size of the fœtus, for a small boy may have a rate of 137 ..., while a large girl has only 133. That those who wish to test ...lieves the correctness of observations on this subject may not be ...d by failure, I may mention some of the causes of difficulty in ... fœtal heart in the last month. The commonest are (1) dorso... ...positions of the fœtus, (2) excess of liquor amnii, (3) thickness ...minal parietes in fat women, and (4) excess of flatus in the ... It is essential to success to have (1) absolute quietness, ...examination should be made if possible late at night; (2) an ...wledge of the position of the fœtus, obtained by external pal... (3) repeated examinations; (4) patience. The movements of ... greatly modify the rate of the heart-beats, but the rate is not ... by variations in the maternal pulse. I cannot give my ... on the influence of drugs and articles of diet on the fœtal ...ey were not completed.—I am, Sir, yours faithfully,

..., Isle of Man, Jan. 14th, 1886. ERNEST BLACK.

A ...IGN BODY IN THE ARM FOR TWENTY-TWO YEARS.

To the Editor of THE LANCET.

Whilst assisting in the practice of Dr. J. Brindley James of ... my the following case came under my notice.

...d inst. G. F——, aged fifty-five, a porter, sought advice. He was ... from a swelling on the flexor surface and ulnar side of the arm, ... inches above the wrist. The history of the case is as follows:— ...1863, the patient was "letting off" a rifle-cap by means of ... with a hammer when the cap discharged, part of it striking ... and penetrating the skin on the radial side, about two inches ... wrist. Becoming alarmed on account of there being severe ...ge, he went to Guy's Hospital, where he was told that he had ... an artery. The wound was not examined by a probe, but ...ad of lint and a bandage applied, which had the desired effect of ... the hæmorrhage. Everything went on well until five weeks ... to my seeing the patient, when he began to experience slight ...in occasionally on the opposite side from that on which the ... been inflicted. Finding when I saw him that the swelling ...ined to possessed all the characteristics of an abscess, I followed ... plan of treatment—that of incision, evacuating about half a ...pus. I then examined the interior with a probe, and detected ... foreign body. Enlarging the opening, I withdrew by means of ...dissecting forceps what appeared to be about one-third of a side of ...ary gun-cap, which presented no peculiar feature, excepting ... become black.—I am, Sir, yours obediently,

...road, S.E., Jan. 18th, 1886. C. FRANKLIN WRIGHT.

THE ALBO-CARBON LIGHT.

To the Editor of THE LANCET.

...ply to Mr. J. Hopkins Walters, I may state that I have used ... exclusively ever since its introduction (about six or seven ... ...ting of my entrance-hall, and have never found it ... deficient in the air-passages.

I am, Sir, yours faithfully,

...m. 16th, 1886. G. T. THOMSON, M.D.

FOUR PERFECT ARMS AND LEGS.

A WOMAN at San Vicente, in Spain, has lately been delivered, after a very difficult labour, of a female child, perfectly formed, but with two perfect supernumerary arms springing from the scapulæ, and two corresponding supernumerary legs arising from the ischia. The supernumerary limbs move with the others. The child is in perfect health; but the father, not, of course, liking such a monstrosity for a daughter, proposes to take the child to Barcelona, to see whether the surgeons of the medical faculty there will accept the responsibility of removing the redundant limbs.

Quæritor.—We advise no such communication. Time and experience may induce a better estimate of the value of medical service. But the dignified course is absolutely to leave the patient to his own freedom.

PRURITUS AND COFFEE-DRINKING.

To the Editor of THE LANCET.

SIR,—In several of your late issues the connexion between the habitual use of coffee and pruritus ani has received attention from various correspondents. That this is one of the effects of the practice has long been known to me; and I would suggest that it may arise from the effect upon the liver which coffee is popularly supposed to have, and that is, of rendering it inactive. But there are also in coffee constituents some of which may give rise to this symptom. There is a highly flavoured essential oil which gives its characteristic odour to the urine, while at the same time some of the colouring matter is excreted by the kidneys. Possibly coffee may be like other spices which produce irritation about the anus. My chief object in writing to you, however, is to inform your correspondent, "A. W." (THE LANCET, Jan. 9th, p. 92), that there is a remedy for pruritus ani which I have found to give the greatest relief—viz., to lightly smear the anus and its immediate neighbourhood with the glycerine of carbolic acid of the Pharmacopœia, and then gently wipe it off with a soft handkerchief, next morning washing it with good glycerine soap and warm water. A few days of this treatment will, in my experience, effectually relieve this distressing symptom. Probably it is some of the extractive matters of coffee which give rise to the symptom complained of; for I do not find that the administration of caffeine in large doses for a considerable time produces it, which is a fortunate circumstance in the matter of so useful a drug as caffeine.

I am, Sir, your obedient servant,

Leamington, Jan. 11th, 1886. THOS. W. THURSFIELD, M.D.

SPINA BIFIDA.

IN the report of Mr. Clutton's case at the meeting of the Clinical Society (THE LANCET, Jan. 16th, page 108, twenty-second line from top of second column) the word "running" should have been omitted.

MEATH HOSPITAL, DUBLIN.

To the Editor of THE LANCET.

SIR,—With your usual kindness, would you allow me to mention through your columns to the many readers of THE LANCET who were students at the Old Meath Hospital, Dublin, that I am at present engaged in tabulating in book form the names, addresses, period of study, qualifications, and present appointments of all old students of the hospital, no matter in what part of the world they are at present located. In order that my compendium should be complete, if those who see this letter would kindly forward to me as soon as possible the desired information, it would be esteemed as a very great favour. To save trouble, a postcard will in most cases be sufficient, provided the name and address are clearly and plainly written.—I am, Sir, yours truly,

D. HEPENSTAL ORMSBY, M.D., F.R.C.S.,
Surgeon to the Meath Hospital and Co. Dublin Infirmary.

4, Merrion-square West, Dublin, Jan. 16th, 1886.

SEPARATE EXAMINATION IN MECHANICS.

To the Editor of THE LANCET.

SIR,—A student who has passed an examination recognised by the General Medical Council, but which does not include mechanics as one of its subjects, can obtain a separate examination here in that subject, and a certificate of having passed it will be accepted by the General Medical Council for registration. "An Anxious Parent and a F.R.C.S." need not, therefore, send his son so far from home for examination in mechanics, as is suggested by your correspondent, "Wm. M. D. G.," in your issue of the 16th inst.—I am, Sir, your obedient servant,

T. PEREGRINE, M.D.,
Secretary to the Board of Examiners.

Apothecaries' Hall, Blackfriars, E.C., Jan. 19th, 1886.

VOLUNTEER CHOIR.

To the Editor of THE LANCET.

SIR,—The London Diocesan Council for the Welfare of Young Men are instituting a volunteer choir for the services on Sunday afternoons at St. Martin's-in-the-fields. Among the students at the London hospitals there are no doubt many who would volunteer to join, and the Secretary, Mr. J. Johnstone Bourne, Northumberland-avenue, will be pleased to receive their names and give any further particulars required.

I am, Sir, yours obediently,

Arma House, Onslow Gardens, Jan. 11th, 1886. EDGAR P. STRINGER.

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NITRO-GLYCERINE.

Mr. Foy writes that the necessity of the profession having some elected members on the Medical Council is fully proved by the action of that body in the preparation and editing of the recent edition of the Pharmacopœia. Our correspondent states that of new drugs which the profession has adopted, nitro-glycerine is perhaps the most largely and generally used, and it is desirable that it should be prepared in a form easily carried, quickly obtained, keeping well, readily administered, and inexpensive. These advantages, Mr. Foy contends, are obtained in a greater degree in an alcoholic solution than in the chocolate creams, and, in his opinion, this is the preparation that should have gained the approval of the Council.

Fidelis.—Certainly so. B's successor has doubtless bought the practice subject to the engagement of A to B not to practise. B's having become qualified only enhances his moral obligations.

TREATMENT OF A SPLIT FINGER-NAIL.

To the Editor of THE LANCET.

SIR,—In reply to your correspondent, "Rus," who asks for advice as to the treatment of his split finger-nail, I would suggest the following plan, which I have tried with complete success in a similar case:—A groove, one-eighth of an inch long and parallel to the root of the nail—i.e., at right angles to the split—should be made with a knife or small file in the sound portion of the nail, between the root of the nail and the split. This will form a barrier which the split cannot pass, and when the groove grows to the free margin of the nail there will be no further tendency for the trouble to recur.

I am, Sir, yours truly,

Upper Berkeley-st., W., Jan. 16th, 1886. R. C. PRIESTLEY, M.R.C.S.

SIGNS OF FŒTAL DEATH.

To the Editor of THE LANCET.

SIR,—The absence of a certain sign of fœtal death whenever the question of version and forceps comes up is acknowledged to be one of the weak points in obstetrics. Now, I would suggest that the hand should be introduced into the uterus and placed on the fœtal heart. By this means absolute certainty would be attained, and many a mother saved from the dangers of forceps, and especially from the dangers of version where the waters have drained away. Of course, if no fœtal heart movements were felt, then perforation would be resorted to. I hope the above suggestion will prove useful when there is any doubt as to the death of the fœtus. I am, Sir, yours truly,

ALF. BELL WHITTON, M.B., C.M.Edin.

Maternity Hospital, Glasgow, Jan. 18th, 1885.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Godlee, London; Dr. Brailey, London; Dr. Hassall, San Remo; Mr. Emrys-Jones, Manchester; Mr. J. H. Morgan, London; Dr. Stanley Haynes, Malvern; Mr. Ford, London; Mr. Stanley Nelson; Dr. Wilkinson; Mr. F. W. Allwright, Wooburn; Mr. A. J. Smith, Dublin; Mr. W. H. Browne, Aldbrough; Dr. Whitelegge, Nottingham; Mr. C. Macalister, Manchester; Mr. B. Bast, London; Dr. Thomas, Sheffield; Mr. C. S. Jeaffreson, Newcastle-on-Tyne; Dr. Ormsby, Dudlin; Mr. Sweeting, London; Dr. Barrett Roué, Clifton; Prof. Dunstan, London; Mr. A. Braxton Hicks, London; Dr. Ozanam, Paris; Surgeon-Major Staples, Gibraltar; Mr. G. C. Richardson, Bury; Dr. Gowers, London; Mr. E. Black, Douglas; Dr. Huggard, Geneva; Dr. Illingworth; Mr. Stites, Morristown, N.J.; Mr. Rowling, Paramatta; Mr. C. d'A. Collins, Guernsey; Mr. Barlow, Dalston; Mr. R. Griffiths; Dr. Macdougall, Carlisle; Dr. Peregrine, London; Mr. Stringer, London; Dr. Burney Yeo, London; Mr. Lindsay, Leith; Mr. G. Foy, Dublin; Dr. Playfair, London; Dr. E. F. Willoughby, London; Mr. Sisca; Mr. Pridgin Teale, Leeds; Mr. Mansergh, London; Dr. Peddie; Dr. Downes, Chelmsford; Dr. Thomson, Clifton; Mr. Priestley, London; Mr. Ellis Lever, London; Dr. Bampton, Plymouth; Messrs. Edis and Co., Huntingdon; Dr. Maunsell, Welford; Mr. Darke, London; Mr. H. H. Clutton, London; Dr. Richardson, London; Mr. O'Donovan, Liverpool; Mr. Verlaj, Wiesbaden; Mr. Roberts, Penygroes; Dr. Hawer, Wirksworth; Mr. Percival; Dr. Canter, Italy; Messrs. Maclachlan and Co., Edinburgh; Messrs. Cassell and Co., London; Mr. Yolland, London; Dr. Seaton, Sunbury; Mr. Bennett, Liverpool; Messrs. Lee and Nightingale, Liverpool; Mr. Engleby, Manchester; Mr. Wheeler, Ilfracombe; Messrs. Lee and Martin, Birmingham; Messrs. Roberts and Co., Manchester; Messrs. Dale and Co., London; Messrs. Allen and Hanburys, London; Mr. Knowles; Mr. Birchall; Mr. Burgess, Walworth; Messrs. Bennett Bros., Salisbury; Dr. Leeson, Twickenham; Mr. Triefus, London; Messrs. Thomas and Co.; Mr. Fidler, St. Helens; Messrs. Towers and Co., Bayswater; Messrs. McEmery and Co.; Mr. Armstrong, Manchester; Dr. Philpots; Mr. Maxwell, Lasswade; Mr. Hodgkinson, London; Dr. Byers, Belfast; Messrs. Weiss and Co., London; Dr. Gordon, Worthing; Messrs. Schomoele and Co.; Mr. Gilbert Smith, Birmingham; Mr. Radley; Mr. McDonagh, London; Mr. Harrison, Liverpool; Mr. Craske, London; Dr. Cribb, London; Mr. McNicoll, Southport; Captain Joynson; Herr Kreidel, Wiesbaden; Dr. McKeown, Belfast; Mr. D. M. Lamond; Mr. Simeon Snell, Sheffield; Mr. Whitton, Glasgow; Mr. E. P. Quinn, Manchester; Mr. Hadley, London; Surg.-Major Boustead; Mr. Chauncy Puzey, Northwich; Deputy Surg.-Gen. Hanbury; Messrs. Simpson and Renshaw, London; Dr. Knowles; Mr. Northey; Messrs. Stead and Co., Leicester; Mr. Baker, Newport; Messrs. Clarke and Co., Leicester; Mr. Andrews, Stockport; Mr. Wylde, Exeter; Mr. Russell, Liverpool; Mr. Unsworth, Liverpool; Mr. Partridge, Brompton; Mr. Tumner, Harrogate; Dr. Palm; C. F. M.; J. C. S.; Fairplay; N. P.; M.B.; Quæritor; Graduate, Bournemouth; C. V.; Fidelis; X.; J. N. W.; M. O. D., Liverpool; Double Qual.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Charteris, Glasgow; Mr. Holtby, York; Mrs. Blumenthal; Messrs. Towers and Co., Bayswater; Dr. Brooks, Wellington; Mr. Paterson, South Stockton; Mr. Idenden, Hastings; Mr. Sime, Sheffield; Mr. O'Flaherty, Wallsend; Dr. Saville, Redforth; Mr. Roberts; Mr. Chavasse, Birmingham; Mr. Draper, Huddersfield; Mr. Gard, London; Mr. Kidd, West Brighton; Mr. Palmer, Chard; Mr. Rugg, Dover; Mr. Lyon, Hodnet; Mr. Woolhouse, Sheffield; Mr. Low, Plumstead; Dr. Adam, West Malling; Mr. Davidson, Aberdeen; Mr. Atkinson, Darlington; Mr. Hayward, Grantham; Mr. Anderson, Kirkwall; Dr. Grant, Manchester; Dr. Kennedy, Hammersmith; Mr. Honey, Bath; Mr. Heap, Bournemouth; Dr. Sutton, Scinde; Mr. Milward, Brixton; Mr. Dixon, Manchester; Messrs. Thompson and Co.; Mr. Plowman, North Curry; Dr. McGeogh, Liverpool; Mr. Wheeler, Ilfracombe; Mr. L. Dodd, Teignmouth; Dr. McKenzie, Leith; Messrs. A. and C. Black, Edinburgh; Mr. Morgan, Islington; H. F., Tunbridge Wells; Medicus, Southsea; M.B., C.M., Rhyl; M.B., London; Matron, Bedford Infirmary; Cocaine; A. W., Whitby; M.B.; S. B., Wandsworth Common; Surgeon, Manchester; Secretary, Bath; R. C. P., London; Medicus, Bristol; Treasurer, Rotherham Hospital; H. E. P.; E. G., Spennymoor; A. L. M., Chichester; G. P., Southampton; A. B. C., South Kensington; J. H., Pentonville; A. X. P.; W. T., Shepherd's Bush; M.R.C.S., Grantham; Beta, Llanfyllin.

Bournemouth Visitors' Directory, Liverpool Mercury, Nottingham Daily Express, Port Elizabeth Telegraph, Scotsman, Edinburgh Evening News, Leith Herald, Belfast Northern Whig, &c., have been received.

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Lectures
ON THE
SURGICAL TREATMENT OF EMPYEMA.

Delivered at the Hospital for Consumption and Diseases of the Chest, Brompton.

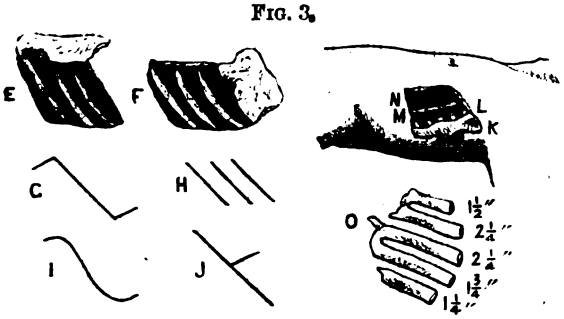
By RICKMAN J. GODLEE, M.S., F.R.C.S.,
SURGEON TO THE HOSPITAL, AND SURGEON TO UNIVERSITY COLLEGE HOSPITAL.

LECTURE II.

(*Concluded from page 145.*)

If the operation be decided upon, the surgeon must, after ascertaining the size of the cavity, make up his mind as to the method of exposing the ribs to be removed. One way of doing this is by means of incisions parallel to the ribs. Through one such incision, carried through all the soft parts down upon one rib, portions of one or two others may be removed. I have not employed this method myself, but feel sure that, if it be decided upon, it is wise first to expose one of the ribs bounding the sinus and take a portion of it away, as it is clear that no exploration with any form of probe can give anything like such an accurate idea of the cavity to be dealt with as can be obtained by the introduction of the finger. After this has been done, the method of several incisions may, if desired, be employed. I have generally employed one of the flap operations indicated by the accompanying diagram (Fig. 3)—i.e., either turning one flap upwards or

FIG. 3.



The above illustrates different methods of performing Estlander's operation. E, Three ribs exposed by a flap turned forwards. F, Three ribs exposed by a flap turned upwards. G H I J, Other incisions which may be conveniently employed. The figure to the right was taken from C. W. (Case 5, *vide infra*). K, Flap turned backwards. L, The ends of the five ribs divided. M, Edge of thickened pleura which has been cut away. N, Cavity laid open. O, Parts of fifth, sixth, seventh, eighth, and ninth ribs removed, showing how the ends became rounded off and sometimes joined together after a previous removal of portions in front of those excised at this operation.

inwards, or making two flaps by means of a T-shaped or zig-zag cut. In doing this the muscles may be left adherent to the bones, or turned up with the flap, according to the position operated upon. For instance, it is more convenient to turn up the pectoralis major with the flap, than to make several cuts across its fibres; but, on the other hand, if one or two ribs only are to be removed in the axilla, and the surgeon does not intend to remove the periosteum and pleura, the serratus may conveniently be left behind, a skin flap only being turned aside. The parts over the ribs are often very vascular, and it is not uncommon to meet with hæmorrhage, which in a child is rather alarming, especially in the weak anæmic condition it will probably exhibit. The hæmorrhage takes place from a large number of small arteries along the intercostal spaces. It is not worth while to spend much time in attempting to secure these vessels. It is very difficult to do so, and after the rib has been removed they cause no further trouble. After the periosteum has been removed from the outer surface of the whole length of the rib to be excised with a square periosteum elevator, a blunt and slightly curved one with a rounded end is slipped beneath the rib, and it is found in these old cases that the dense pleura and periosteum are separated much more readily than the thinner corresponding structures in a recent case. Generally, when the instrument has been introduced at one point, it can with a firm pressure upwards and downwards at once clear the whole of the required length of rib. This may then be divided, either in the middle of the exposed portion, or, as I am in the habit of doing, at one end of it. By grasping the detached end the other is then divided without difficulty. It is very seldom that a rib even of a strong man cannot be divided with cutting pliers—either an ordinary pair, bent on the flat at the joint, or else such a pair as I showed you at the last lecture. But in case of difficulty the surgeon may be provided with a small saw, made on a convenient pattern. It is long, however, since I have used any instrument except cutting pliers for this purpose. Having, then, removed a sufficient length—three four, five, or more inches—of the rib from what is considered a sufficient area of the chest wall, the object being to render as far as may be possible the whole of the part that has to fall in pliable, or, in other words, to make the ends of the excised portion of rib correspond as nearly as possible with the anterior and posterior limits of the cavity it is intended to close, the question next arises as to what is to be done with the periosteum and pleura. The great rapidity with which a rib is reproduced if the periosteum be left soon puts a stop to the process of contraction; and, indeed, it appears that in some cases a large mass of callus is developed, forming a complete bony wall, which is, if possible, more incapable of yielding than the closely imbricated ribs which it has replaced. It is wise, therefore, to remove as much as possible of this thickened periosteum and pleura, so as to leave, in fact, a great gaping hole instead of a cavity with a small outlet. This may be thought to be a serious undertaking, and I used to be in the habit of applying several ligatures to the proximal portion of the mass before removing it. Subsequent experience, however, shows that this precaution is not necessary; for though the superficial vessels bleed freely, little or no trouble is given by the trunks of the intercostal arteries themselves. I have often removed some square inches of this dense material without having to ligature a single vessel; and if it be removed by snipping gradually away with curved scissors, the vessels, if any are met with, are easily secured directly they are divided, and no hæmorrhage of consequence occurs. The further back the vessels are divided, of course, the larger they are. The surgeon now has the opportunity of making a thorough investigation of the cavity. It is not likely that the interior will bleed much, and he may, if he thinks fit, adopt means for stimulating, and what is more important, purifying the interior. For this purpose many scrape the interior with a Volkmann's sharp spoon, and consider it a very valuable proceeding. I have done it several times, but it is very difficult to distinguish any good that arises from this procedure from that which arises from the operation itself. Its chief use, probably, is in removing the septic surface of the pleura, and preparing it for the application of the antiseptic materials to be next applied. I cannot help feeling that it is rather a rough proceeding, and when we reflect that the spoon may be scraping over the surface of the pericardium, and may be passing very close to important branches of the vagus and sympathetic, and also that the amount of good to be obtained is, to say the least, problematical, I think we may safely urge caution in its exercise.

While speaking on this subject I must make a divergence to say a few words concerning the occurrence of sudden death during the injection of the pleural cavity. Injection of the pleura was, I believe, much more freely practised at one time than it is at present. It may be used for two purposes, one to diminish the fetor of the discharge, the other to stimulate the granulations to a more healthy action. The latter object I conceive to be altogether futile and imaginary, and indeed I believe that as regards the development of granulations it is positively mischievous, tending to break down and destroy those that already exist. As regards the purification of the surfaces, injection is no doubt sometimes very useful, and indeed sometimes essential to the comparative comfort of the patient—that is, in those cases where it is hopeless to attempt a closure of the cavity and the system is being

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poisoned by the putridity of the discharge. We sometimes practise it here, and are in the habit of employing a method which is perhaps the safest that can be devised:—A glass vessel with a perforation near the bottom, from which passes a caoutchouc tube, is filled with a solution of iodine of a pale sherry colour. To the caoutchouc tube is fitted a piece of gum-elastic catheter small enough not to fit tightly in the sinus. The caoutchouc tube is compressed by a pair of bull-dog forceps while the catheter is being introduced into the chest. When this is done the pressure is relaxed, and the bottle is raised very slightly above the level of the patient's body. In this way it is impossible to exert too great pressure inside the cavity, for the pressure itself is slight to begin with, and, moreover, the fluid runs out alongside the catheter as soon as or before the cavity is filled. The only sources of danger are that too large a catheter may carelessly be employed, or that the bottle may thoughtlessly be raised too high. But at the same time it must be remembered that a considerable number of cases are on record where the injection, though it has been perhaps frequently repeated without serious consequences, has led to sudden death or the most alarming symptoms. One such case I saw years ago at University College Hospital; it was that of a small boy, whose cavity, reduced at the time to very small dimensions, was daily washed out, by means of a syringe, with a weak solution of iodine. The boy used to sit up while it was being done, and one day during the process he suddenly died, and we were not able at the post-mortem examination to find any cause whatever for the disaster. The cavity was small, surrounded by thick fibrous walls, and there was no sign of thrombosis to be discovered. In the tenth volume of the Clinical Society's Transactions (1876) is a paper on this subject by Dr. Cayley, detailing a case in which the practice was to withdraw the pus through a cannula and then to inject about four ounces of iodine solution, repeating the process several times. On one occasion six ounces were being injected into the cavity, which at the post-mortem it was found would hold twice that quantity, when the patient suddenly became deadly pale, with slow pulse, dilated pupils, and gasping breathing. This gave place to profound unconsciousness, flushed face, rapid pulse and respiration, and right-sided convulsions. The temperature rose to 107°, and he died sixteen hours after the injection; but the necropsy revealed nothing to account for the death. Dr. Cayley refers to several other cases more or less similar, some ending fatally, and others recovering from the most imminent danger; and I well recollect at the discussion which followed not a few speakers referred to cases which had come under their own cognisance in which similar results had followed. Now, though two explanations have been hazarded for these phenomena, according to which they may be attributed either to thrombosis or to reflex irritation, it must be owned that we are altogether without a satisfactory one. It does not appear to depend upon the fluid employed, for it has occurred when carbolic acid, iodine, or even simple water were being used; it does not depend upon the side of the chest affected, for some cases have been left-sided and others right; and it has always happened in cases in which the injection had been frequently practised before without serious consequences. We are therefore at present left with the fact that a serious issue may any day follow what appears to be the simplest of surgical procedures. It is this which makes me not only avoid injections except when it seems urgently indicated, but also rather shy of resorting to very heroic measures in the way of scraping the pleura. It is true that I have frequently mopped out the surface with a strong solution of chloride of zinc (forty grains to the ounce), and have not seen any evil results follow; but I always do it with a degree of dread, and endeavour to apply it as gently as possible—not with a syringe, but with a piece of lint or a sponge.

Having, then, done all that seems safe or wise in the way of purification (and amongst the simplest and safest means I must not omit to mention the thorough application of iodoform to the surface), the next thing is the introduction of the drainage-tube. Bearing in mind what has been said about the method of closure of the cavity, it is clear that the tube must be placed as high up in the cavity as possible; that is, at the upper rather than the lower part of the opening that has been made. It may sometimes seem advisable, in order to facilitate this, to stitch up the lower part of the wound, as was done in the case of J. H. (Table II., Case 4). In this case it will be advisable to introduce a small and temporary drain below the part which is sutured, while the main and more permanent tube comes out above. A few stitches may often be introduced into the wound with advantage.

I will now, in conclusion, give a very brief account of the cases in which I have endeavoured to follow this line of treatment; but I must repeat a doubt as to whether it has been in all of them so fully carried out as the necessities of the cases may have required. This, perhaps, accounts for the comparatively unsatisfactory results which I have to record—namely, that only one of the cases is at the present moment actually healed, and that only after the making of a second posterior opening by another surgeon. For all that, I think it highly probable that some, if not all except J. H. (Table II., Case 4) and J. E. (Case 1), who will probably never be completely cured, have a very good chance of permanently closing in the course of time. In consequence of what has been done, all of them (with the exception, perhaps, of Alfred D., Case 7, who was not in a very bad state before, and Jane E., Case 1) have been very markedly improved as regards their general condition, so that, even if no more good should follow, I feel quite encouraged to continue this line of treatment, hoping to carry it out yet more efficiently in future cases with confidence of thus obtaining better results.

CASE 1.—Jane E——, aged seven, a delicate, anæmic, emaciated child, is under my care at University College Hospital. She has an empyema of very old standing, and has marked clubbing of fingers and nose. In August, 1884, there was a sinus discharging putrid pus below the left nipple, and reaching up into a cavity which occupied the front and side of the left chest, and extended to the right of the sternum. There was but little deformity behind, but a sharp ridge in front, parallel with the sternum. On August 12th, 1884, I removed from two to three inches of the third, fourth, and fifth ribs, including the whole of the cartilage (the length may have been greater). This has caused a great improvement in the deformity; but the cavity on the right of the sternum could never be satisfactorily dealt with as it lay immediately in front of the arch of the aorta. She had a slight attack of pneumonia while under treatment, but it soon passed off; she is now (October, 1885) in fair general health; but the sinus continues to discharge fetid pus, and, in fact, it cannot be said that she is much better for the operation except as regards the deformity.

CASE 2.—Harriet S——, aged eleven, came under my care at University College Hospital in August 1883, with an old empyema on the right side of seven years standing, and a sinus below the angle of the scapula leading to a small cavity. There was much flattening of the chest and clubbing. Parts of the eighth rib (2½ in.), ninth (1½ in.), and tenth (¾ in.) were removed. The wound rapidly closed and a mere sinus remained, but when last seen, several months after, it had not completely closed.

CASE 3.—Miss C——, aged four, had an empyema of two years' standing. I saw her with Dr. Barlow in April, 1885. There was a very imperfect opening below and outside the nipple on the left side leading to a cavity, which reached the apex of the pleura, but did not extend to the back. I removed pieces of two ribs (fifth and sixth or sixth and seventh) and left a large gaping wound into the cavity, but I hear that it has not yet completely closed, though the child's general health has much improved.

CASE 4.—James H——, aged ten, was admitted to the Brompton Hospital on Dec. 28th, 1883, with a left empyema, which had lasted for five years. He was pale and anæmic, with much clubbing and extraordinary contraction of the chest. There were two fistulous openings, one near the nipple, and the other in the second space near the sternum, from which there was a daily discharge of from one to two ounces of fetid pus. On Feb. 7th, 1884, I removed pieces of the fifth, sixth, seventh, and eighth ribs, with the subjacent pleura, opening into a cavity, containing six to seven ounces of fetid pus. The cavity involved practically the whole pleura. The result of this was an almost complete closure of the lower part of the cavity, a mere sinus leading up to the dome of the pleura. Sponge-grafting was then tried, but failed. On July 11th, 1884, several more pieces of rib were removed, some probably from those previously excised, some from the third and fourth. This operation resulted in a more complete closure of the lower part, and as there seemed no prospect of the upper part closing, on Nov. 20th I made with great difficulty an opening in the first intercostal space, and introduced a straight celluloid tube, two

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inches and a half long, into the upper part of the pleura. This the boy still wears, and will probably have to continue to do so. All the lower openings are now closed, and his general health when he left the hospital was excellent.

CASE 5.—Charles W——, aged twenty-five, was admitted more than two years ago into University College Hospital with a chronic empyema, which was opened by an incision in the right axilla in March, 1883. In May, 1884, Mr. Marshall removed portions one inch long of the sixth, seventh, and eighth ribs, opening freely a cavity containing about eight ounces of pus. In March, 1885, he had still a sinus leading to a cavity of comparatively small size, not reaching to the apex and not extending far forwards; and on April 2nd I removed portions of three ribs, 1½ in., 2½ in., and ¾ in. respectively, the longest piece being in the middle and the smallest above. The patient at this time had some albuminoid changes of the viscera, as shown by a large liver and some albumen in the urine, but his general condition was good. The result of this was a great diminution in the size of the cavity and falling in of the chest; but as there was clearly a cavity of some size left, Mr. Beck, under whose care the patient has passed, removed on Oct. 15th 1½ in. of the fifth, 2¼ in. of the sixth, 2¼ in. of the seventh, 1⅝ in. of the eighth, and 1½ in. of the ninth ribs, with the subjacent pleura. This has practically taken away the bony part of all the external wall of the cavity; and as increased falling in is rapidly occurring, it is probable that this will lead to complete closure of the cavity.

CASE 6.—Francis S——, aged twenty-three, was admitted into the Brompton Hospital in June, 1883, with empyema of two years' standing, which he was expectorating. The general condition was very bad, and the expectoration very profuse. On September 6th I opened the pleura in the right axilla, excising a portion of the rib. By November 15th he had been healed some time, but expectoration had recommenced a few days previously, so the wound was reopened. Healing was almost complete, when expectoration again set in; so on Feb. 28th, 1884, I excised three inches of the two ribs which formed the wall of the cavity. The patient greatly improved, but left the hospital with a sinus in June. Since this time he has come under the care of Mr. Cross of Clifton, who made a second opening further back, the result of which has been the closure of the cavity.

CASE 7.—Alfred D——, aged thirty-six, was admitted into Brompton Hospital on July 15th, 1885, with a very chronic empyema. There was an opening in the back leading to a straight sinus five or six inches long, passing upwards and backwards, but there was no regular cavity. A piece of rib about four inches long was removed from the chest wall over this sinus, which it is hoped will prove sufficient, and a large drainage-tube was inserted, but at present the sinus is not closed. [This patient was shown at the lecture.]

CICATRICIAL STRICTURE OF THE OESOPHAGUS,

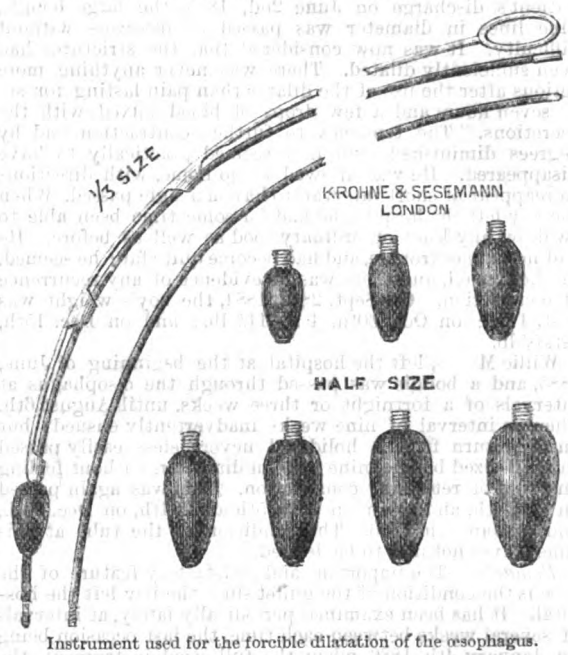
TREATED BY GRADUAL AND AFTERWARDS BY FORCIBLE DILATATION.

BY SIR WILLIAM MAC CORMAC,
SURGEON TO ST. THOMAS'S HOSPITAL.

WILLIAM M——, aged twelve, was first admitted to St. Thomas's Hospital on Aug. 13th, 1884. Three-quarters of an hour before admission he had swallowed some strong liquor potassæ in mistake for vinegar. He was discharged on Aug. 28th. He then felt some soreness of the mouth and throat and slight trouble in swallowing. This passed off, and for a week subsequently he had no difficulty in taking food, but he then noticed a gradually increasing difficulty in swallowing, until his readmission on Sept. 28th. At this time he stated he had been totally unable to swallow for the preceding twenty-four hours, and this continued till the following afternoon (the 29th), when he was able to swallow a little cocoa and some soaked bread. He had been fast losing flesh, and presented marked retraction of the abdomen, although by no means emaciated. Nutrient enemata were ordered to be administered every six hours. The patient was then transferred from the medical to the surgical ward, as a case probably requiring gastrostomy.

On Sept. 29th I examined the œsophagus, and discovered a tight stricture, only admitting, after many trials and great difficulty, a No. 4 urethral bougie. The obstruction was six inches from the edge of the upper teeth. A second less marked constriction was felt lower down. The bougie was passed into the stomach, and the patient was somewhat benefited, being afterwards able to swallow milk more easily and without pain. Bougies were now passed regularly, and gradually increased in size until Oct. 6th, when a No. 11 bougie could be introduced. And now, by means of an olive-ended instrument, a third well-marked constriction, not appreciable before, was discovered near the cardiac orifice of the stomach. This period of treatment need not be dwelt upon in further detail. Urethral and afterwards small-sized œsophageal bougies were passed twice a week, the patient's power of swallowing improved, and he was able to take soft food, such as bread-and-butter and minced meat, without much trouble. In the four weeks ending Oct. 30th he gained ten pounds in weight. It was found, however, to be quite impracticable to get further than No. 11; the strictures refused to dilate beyond this point. It was therefore determined, all efforts by means of gradual dilatation appearing futile, to attempt to dilate the strictures forcibly.

On Oct. 31st the patient was partially anæsthetised, but



Instrument used for the forcible dilatation of the œsophagus.

he became so much cyanosed that the anæsthetic was discontinued. I nevertheless forcibly dilated the strictures by means of an instrument which had been made for me. It is represented in the accompanying woodcut. It consists of three parts: (1) A thin flexible whalebone guide, which is first passed into the stomach, shown in the woodcut in two portions, which can be screwed together; (2) a rather flexible metal stem to travel along this guide, and retained in connexion with it by short lengths of tube placed at intervals on one side, the lower end of the stem being hollowed out to contain a female screw; into this may be screwed in succession (3) a series of olive-shaped heads terminating at the upper extremity with a male screw; these are graduated in size, and perforated from base to apex to run over the guide. The instrument was used thus:—The guide having been first passed into the stomach, one of the olive-shaped heads, the diameter of a No. 17 bougie, was screwed to the end of the metallic stem, passed along the guide into the stomach, and moved two or three times up and down the œsophagus. The tube was thus at once forcibly dilated, and the several obstructions could be felt to yield in succession. The amount of force employed was not excessive, but greater far than one would have ventured upon in the absence of the conviction that the guide prevented all chance of a false passage being made. A few drops of blood were afterwards coughed up; there was also a little pain, which soon subsided; other-

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wise no ill effects whatever were experienced. From Oct. 31st to Dec. 7th a bougie No. 16 on the urethral scale was passed every other day, and the patient's power of swallowing improved. On the last-mentioned day a No. 18 bougie could be passed through all three strictures, and No. 19 through the upper two. On Dec. 18th the patient was anæsthetised, and by means of the instrument above described the œsophagus was dilated to the size of a No. 26 urethral scale. A No. 24 olive-headed bougie was afterwards easily passed into the stomach. From this date bougies were passed almost daily. About the end of January I again used the dilator and forcibly stretched the tube with an olive seven lines in diameter. The operation was repeated on February 27th, when one eight lines in diameter was passed through to the stomach, another of nine lines in diameter passing only the first stricture. No. 26 olive-ended sound was then easily passed every second or third day through all three strictures. On April 14th the boy was again put under chloroform and the guide introduced, but owing to violent vomiting it could not be retained long enough for the dilator to be adequately used; but an olive nine lines in diameter was forced through the obstructions. An ordinary œsophageal bougie, tapering to the point and eight lines in diameter at its thickest part, could be easily passed. For a few weeks previous to the patient's discharge on June 2nd, 1885, the large bougie, nine lines in diameter was passed at intervals without difficulty. It was now considered that the strictures had been sufficiently dilated. There was never anything more serious after the use of the dilator than pain lasting for six or seven hours and a few drops of blood mixed with the secretions. The tendency to further contraction had by degrees diminished, and now seemed practically to have disappeared. He was allowed to go home, with directions to reappear at short intervals to have a bougie passed. When the boy left the hospital he had for some time been able to swallow any kind of ordinary food as well as before. He had no pain or trouble, and had become quite fat; he seemed, in short, well, and there was no evidence of any recurrence of contraction. On Sept. 28th, 1884, the boy's weight was 4 st. 1 lb.; on Oct. 30th, 4 st. 11½ lb.; and on Dec. 15th, 6st. 5½ lb.

Willie M——, left the hospital at the beginning of June, 1885, and a bougie was passed through the œsophagus at intervals of a fortnight or three weeks, until August 6th. Then an interval of nine weeks inadvertently ensued; but on my return from a holiday I nevertheless easily passed the full-sized bougie, nine lines in diameter, without feeling any sign of returning constriction. This was again passed on Oct. 8th, and again on Nov. 5th and 24th, on Dec. 30th, and on Jan. 4th, 1886. The condition of the tube at this time leaves nothing to be desired.

Remarks.—The important and satisfactory feature of the case is the condition of the gullet since the boy left the hospital. It has been examined periodically lately, at intervals of several weeks between each time, the last occasion being on January 4th, 1886, when the full-sized instrument, the largest ever introduced, nine lines in thickness and twenty-seven lines round, was passed readily from the mouth to the stomach without difficulty or any evidence of contraction in the tube. This instrument is probably as large as the normal œsophagus of a boy of this age will admit. The adult œsophagus, according to Dr. Mouton's measurements, obtained by filling the tube with plaster-of-Paris, is a little over half an inch at its narrow part, and three-quarters of an inch (nine lines in diameter), the size to which I dilated this boy's œsophagus, elsewhere. In all other respects the lad feels well, is stout and well-nourished, and able to swallow his food as well as he could before the accident took place. As now for a period of seven months no tendency to a recurrence of the contraction has shown itself, a cure may reasonably be counted upon.

The operation of gastrostomy was at first contemplated in this case, as the contraction in the gullet was extreme; indeed the boy was sent to me with that object in view. Trendelenberg has performed this operation in a case of the kind, and the patient, also a boy, was alive and well years afterwards; but he was compelled to feed himself entirely through the artificial opening, the food being first masticated in the mouth and then spat down a tube into the stomach. How incomparably superior the condition of my patient is does not require to be insisted upon. I took care to perform the overstretching or forcible dilatation in several successive operations about four in all, so as to better avoid the risk of infiltration or extravasation into the cellular tissue of the neck, which might have been incurred by doing over-much at one time. So far as may be judged by the result of one case the method seems safe, and in this instance it has certainly proved successful. I should scarcely have performed these forcible dilatations had not the method of gradual dilatation completely failed to carry one further than the size of a No. 11 urethral bougie. I preferred this method to the use of the œsophagotome introduced into practice by Maisonneuve. Its employment has been attended with very serious risk of mediastinal or pleural abscess, or of possibly uncontrollable hæmorrhage. Of seventeen cases recorded, four of these patients died within fifteen days of the operation, and it is probable that unfavourable results followed in some of the other cases. After partial dilatation had been accomplished there was no pressing need for so serious a measure as gastrostomy at this stage of the malady; but by the means adopted the boy had been only very partially relieved, and the contraction would have been pretty sure to reappear as soon as he left the hospital. It was needful, therefore, to attempt to secure some more permanent benefit for him, and this appears to have been permanently realised by the method of forcible dilatation of the œsophagus.

ON A NEW METHOD OF INHALATION AND A NEW FORM OF APPARATUS.

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IT is possible that the method of inhalation which I am about to describe may have been already employed in an imperfect manner; but, so far as I am aware, the principles on which it is based have not been described, and thus the method has not been reduced to a system.

The air, owing to the law of the diffusion of gases and vapours, contains a variable quantity of the vapour of water; the scale from the point at which the air is entirely free from moisture to that at which it becomes saturated with the vapour, and will therefore hold no more, has been divided into 100 parts or degrees, "0" representing perfectly dry air and "100" the point of saturation. The relative humidity of the air is determined mainly by the rainfall, temperature, and the pressure of the atmosphere. Bearing in mind the preceding particulars, it occurred to me that, if air more or less dry were passed through a medicated solution, it would take up an amount of that solution sufficient for medical purposes. In order to test whether this supposition was correct or not, I devised the following apparatus. This consisted of a glass cylinder, nine inches high and nearly two inches in diameter, closed at the top by an accurately fitting cork. In the cork were inserted four tubes; one of these, larger than the rest, pierced the cork and entered the cylinder for about three-quarters of an inch; the other three were much smaller and longer, reaching almost to the bottom of the cylinder. In this itself were placed 175 cubic centimetres, equal to 2700 grain measures of a mixture consisting of distilled water and 17½ grammes of pure crystallised carbolic acid. The three smaller tubes were used in preference to one large one, because by this arrangement the air passed into the solution in the form of a number of small instead (if only one tube had been used) of a few large bubbles. In the latter case the air would not have been brought into sufficient contact with the water, and such a commotion would have been created as to cause spirting of the liquid and the liability of its occasional entrance into the mouth. This occurrence is entirely avoided provided that the due proportions of the apparatus are observed and a sufficient space be left between the surface of the medicated liquid and the end of the tube which forms the mouth-piece. When this apparatus is in operation the air is drawn through the three small tubes; from the bottom of these it freely escapes, ascending through the liquid in bubbles, which burst on the surface, and the air thus charged with the medicament is inhaled by means of the tube placed in the mouth, as in the accompanying figure.

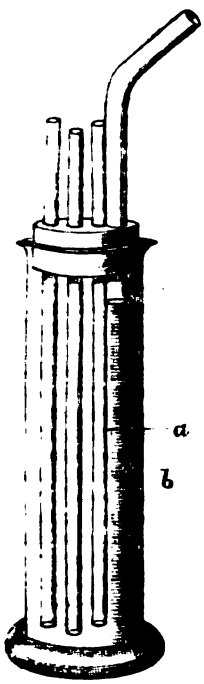
The earlier experiments about to be detailed were made

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with the above-described simple apparatus; in other experiments the three small tubes were attached by means of indiarubber unions to a large tube filled with dried chloride of calcium, the object being of course to deprive the air of the moisture which it contained, and thereby to increase its power of absorbing the solution through which it was passed. Except when otherwise stated, the inhaler was charged with 175 cubic centimetres of a mixture of water and carbolic acid in the proportion of 10 grammes of the acid in 100 cubic centimetres of the mixture. The inhalation was continued for one hour, and the nares were kept closed.

Experiment 1.—Temperature of the air 58° F.; relative humidity 79°. The carbolic acid was dissolved in a mixture of glycerine and water. It was found at the end of an hour's inhalation that 3·5 cubic centimetres of the mixture (= 54·0 grain measures only) had disappeared; also, that the residual mixture possessed nearly the same strength as at first. The 3·5 cubic centimetres of the mixture therefore contained 5·4 grains of carbolic acid.

Experiment 2.—Temperature 58° F.; relative humidity 77°. In this case no glycerine was used, and the mixture in place of being clear was milky, owing to a part of the carbolic acid being suspended in it in the form of minute droplets, which under the microscope resembled those of milk. The loss in this case was the same as in the previous case, and the residual mixture was found to possess the same strength as at first.



Experiment 3.—Temperature 59° F.; relative humidity 60°. The nares in this case were not closed. Loss 6·0 cubic centimetres, containing 9·2 grains of carbolic acid.

Experiment 4.—Temperature of air 88° F.; relative humidity 81°. The air was passed through about half an ounce of chloride of calcium; the loss amounted to 7 cubic centimetres, and since the mixture after inhalation was found to possess precisely the same strength as before, the loss of carbolic acid amounted to 10·8 grains.

Experiment 5.—Temperature 57° F.; relative humidity 82·5°. In this experiment the carbolic acid was increased to 15 grammes in 100 cubic centimetres — that is, the mixture was made half as strong again and a larger quantity of chloride of calcium was used. The loss was 11·5 cubic centimetres, and since the residual mixture retained its original strength 26·6 grains of carbolic acid had disappeared.

Experiment 6.—Temperature 60° F.; relative humidity 55°; the air being consequently decidedly dry. In this case also 15 grammes of acid were contained in 100 cubic centimetres of the mixture. The air was passed as before through chloride of calcium, and the apparatus was placed in a jug of hot water, the temperature of the liquid in the apparatus rising at first to 70° F. The vapour which came over was very strong, especially at first, and the loss amounted to 12·5 cubic centimetres containing 28·9 grains of carbolic acid.

Experiment 7.—Temperature 57° F.; relative humidity 77°. The nares in this experiment were not closed. The mixture was of the same strength as in the first experiments, and the air was passed through chloride of calcium. The loss amounted to 8·0 cubic centimetres, representing, as confirmed by analysis, 12·3 grains of carbolic acid.

Experiment 8.—The conditions were precisely the same as in the previous case, only that the nares were kept closed. The loss was 7·25 cubic centimetres, representing 11·2 grains of carbolic acid. In both these experiments the foot of the glass cylinder was placed in a shallow dish of warm water, which raised the temperature of the mixture to a small extent only. These two experiments show that it makes little difference so far as the loss of carbolic acid is concerned, whether the nares are closed or allowed to remain open.

Experiment 9.—Temperature 57° F.; relative humidity 80°. The apparatus was placed in a jug containing hot water, which at the commencement of the inhalation had a temperature of 120°. The inhalation at first had to be carried on slowly and intermittently, as the air was so strongly charged with the acid as to cause the throat to become painful. At the end of half an hour it was found that 8·5 cubic centimetres of the mixture were vapourised, this being at the rate of 17 cubic centimetres in the hour, representing a loss of 26·2 grains of carbolic acid.

Experiment 10.—Temperature 49° F.; relative humidity 80°. The chloride of calcium was dispensed with, the nares were not closed, and the inhaler was placed in a jug of water which had a temperature of 120°. This heat caused the temperature of the carbolic acid solution to rise to 62° F. The air inspired contained so much carbolic acid that in a few minutes it caused the throat to become sore and painful. At the end of thirty minutes 8·5 cubic centimetres of the mixture had passed over, or 17·5 cubic centimetres, containing 27·0 grains, in an hour. This and the previous experiment show in a marked manner the effect of even a very moderate elevation of temperature in increasing the amount of watery vapour and of acid in the air inspired. The residual mixture was as strong after the inhalation as before. It is therefore evident that if the temperature of the medicated liquid be raised even a few degrees in the simple manner described, passing the air over chloride of calcium and closing the nares may both be dispensed with. It should be stated that the respiratory capacity of the person using this inhaler was fully one-third below the normal standard; had it been of the average capacity, the amounts of carbolic acid inhaled, as recorded in the above experiment, would have been considerably increased.

The results of the above experiments are highly satisfactory. They show, first, that if the air contain much moisture and the temperature of the liquid is low, the quantity of medicated liquid taken up by the air is comparatively small; secondly, that if the air be artificially dried, the amount is greatly increased; and, thirdly, they show that if the temperature of the solution be raised to even a very moderate extent, the quantity is still further augmented; indeed, the effect of warming the solution is so great that it is not necessary to dry the air by means of chloride of calcium at all, and the apparatus may be employed in its simplest form.

The apparatus used in the experiments I made myself. For the chloride of calcium tube I took the chimney of an ordinary petroleum lamp: this was closed below by a cork, perforated for the entrance of three small tubes, corresponding in size with those of the glass cylinder, the two sets being united by small pieces of indiarubber tubing. At the bottom of the long narrow part of the chimney a piece of muslin was placed to prevent the chloride of calcium blocking up the tubes; the chimney itself was filled, or nearly so, with the lime salt, which, when properly dried, may be used repeatedly.

It is manifest therefore, from the experiments detailed, that by means of the inhaler I have devised it is possible to introduce into the lungs a great variety of medicaments, and this to such an extent that the quantities would have to be carefully regulated in order to avoid any undesirable consequences. That the medicaments do really enter the lungs is unquestionable, because if the nostrils be closed, as they were in most of the experiments, respiration is almost entirely carried on by the air which has been made to pass through the medicated solution. The nostrils may be easily closed, either by means of the fingers or by a small clip, such as chemists use to close indiarubber tubes; but the medicated air may be made to enter the lungs freely enough, and of sufficient strength for all purposes, even when the nares are not closed. Of course a portion of the medicament carried over by the air becomes, in its passage towards the lungs, deposited on the mucous membrane of the throat and the other parts with which it may come into contact situated above the epiglottis. When 10 grammes of carbolic acid are made up with distilled water to 100 cubic centimetres, part of the acid remains undissolved if the water be of a somewhat low temperature; when the mixture is agitated, however, it becomes opaque and white, like milk, the undissolved portion of the acid being in the form of globules of various sizes. When the apparatus is in use, the milky condition of the liquid is maintained, and the globules freely

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pass over in the carbolised air at each inspiration. When the temperature of the mixture is raised, the acid becomes dissolved and the mixture loses its milky character, regaining it again as it cools. This complete solution of the carbolic acid is readily effected by simply placing the glass cylinder in a jug of water at a temperature of about 120° F.

Certain modifications of the apparatus were experimented with. In one case a longer cylinder was employed, with, of course, longer tubes and a greater quantity of the mixture. In another the air was passed through two cylinders placed side by side, the idea being that in both cases the air would become charged to a larger extent with the carbolic acid; but the results were disappointing, and it was found that while the smaller apparatus requires but little exertion to work it, much greater force is required in the case of both the modifications referred to.

In using this apparatus the inspirations should be slow, deep, and effective, so as to cause full expansion of the lungs, whereby at length the power of inspiration is increased and strengthened, a result highly beneficial in many cases. The cylinder should be graduated in spaces of 10 cubic centimetres, so that the amount of the medicated solution inspired may be accurately measured. Once charged, the apparatus may be used several times in succession without being refilled, trouble thereby being avoided.

This inhaler is, I believe, one of the most effective which has hitherto been devised, and if the tubercle bacillus be the cause of consumption, and if it be possible to destroy this bacillus by means of medicaments, this apparatus is capable of conveying to the lungs the requisite amount of any medicament which possesses even a lower degree of volatility, such as do most of the remedies employed in affections of the lungs. For non-volatile substances the inhaler is of course not effective.

It having come to my knowledge that a difficulty has been experienced in procuring my oral and oro-nasal inhalers, I wish to be permitted to state that they may now be obtained of Messrs. Maw, Sons, and Thompson.

San Remo.

ON THE

REMOVAL OF DEEP-SEATED TUMOURS OF THE NECK.

BY ARTHUR E. BARKER, F.R.C.S.,

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WITHIN the last year or so a good many cases have presented themselves to me which have offered the opportunity of testing an opinion I have long held—namely, that under the new *régime* of antiseptic surgery deep-seated tumours of the neck may be dealt with far more freely than is generally supposed, in spite of the advance we have already made. In other words, I believe the conclusion justified that tumours of the neck which a few years ago would have been held to be incurable from their deep situation and relations may now be removed without extreme difficulty, and with the best results. This is but another way of saying that when we use proper antiseptic precautions the old nightmare of deep-seated cellulitis in the neck need have no terrors for us, that with anæsthetics and deliberate dissection bleeding and shock are not prominent dangers, and that we are only limited now in the extent to which we shall attempt the removal of these tumours by anatomical considerations. Even the latter, I think, will be shown by some of the following cases to be more elastic than many are inclined to believe. Four cases are selected as being the last and most serious, and as having all been treated in the same way, both during and after operation.[1] They offer, besides, a basis for the above reasoning, some details which appear worth notice. In the first place, all the tumours lay beneath the sterno-mastoid muscle, and on this ground alone would a few years ago have been considered as outside the range of operation. In Case 1, so deep seated was the growth that the scalenus anticus muscle and internal jugular vein were implicated in it, and had to be cut away with it above and below after careful double ligature of the vein. Again, it is noticeable that there were no symptoms either during or after operation that any of the nerves of the neck had been injured, even in the last case, in which the phrenic and other important trunks were in relation to the tumour. Nor was there any evidence that ligature of one or more of the larger veins of the neck gave rise to trouble of any kind. Further, we find these wounds healing from bottom to surface by first intention as simply as the least important incision in other parts. Again, it is shown that the omission of the carbolic spray in these particular cases for special reasons did not leave any gap in the otherwise complete antiseptic precautions, and that the substitution of salicylic wool for carbolised gauze admitted of more decided, more elastic, and more evenly applied pressure being applied on and about the wound than would have been borne with the inelastic gauze. This last point is, I venture to think, of no little importance. Finally, it has not escaped my notice that in most of these cases there has been some transient rise of temperature within the first twenty-four hours. This I have closely watched, but as it has been unaccompanied by any signs of septic absorption, such as headache, malaise, sickness, anorexia, pain, throbbing, or tenderness about the wound, or any constitutional disturbance, I have felt little or no uneasiness in any case, and have not felt it necessary to change the dressings at once to inspect the field of operation. I have put the pyrexia down in each case where present to tension from serum in the wound, the firm bandaging contributing perhaps a little. At all events, the course of convalescence and the sequel showed that no pus was formed, and that nothing was left to be desired as regards the results immediate and remote.

CASE 1.—Mr. E. A. T——, aged thirty-five, was placed under my care by the kindness of my colleague, Mr. Heath, in February, 1885. He was a gentleman of strong and healthy appearance, with a good personal and family history. In January, 1883, he first noticed a small lump about the size of a pea on the right side of the neck, about three inches from the middle line. This increased gradually until four months before I first saw him, when it had attained about the size of an egg. At Christmas, 1884, it began to increase very rapidly, and soon became as large as the patient's fist. No pain was experienced nor difficulty in swallowing. About a year before there was loss of voice for a week or ten days, but at that time there was no change in the tumour. On examination on February 24th, I found a conical tumour on the right side of the neck with the apex below almost resting on the clavicle, and the base all but touching the lower border of the jaw above. Its posterior border was overlapped by the sterno-mastoid muscle, under which it ran for a considerable distance. In front the most prominent part reached the middle line of the thyroid cartilage; but above and below this point its outline fell away. The skin over the tumour was healthy and freely movable on it, and the growth itself was freely movable on the subjacent parts. It did not move up and down with the larynx. The vessels of the neck were not pressed upon appreciably. The swelling was cystic above, but apparently solid below and behind, and was accompanied by two distinctly enlarged glands lying in the posterior triangle of the neck immediately above the clavicle. Neither the pharynx nor mouth were encroached upon in any way. On aspirating the part, I drew off three ounces of dark-brown serous fluid, followed by about a drachm of pure blood; but before the patient had left my consulting-room the sac had filled up again, presumably with blood. In the aspirated liquid were several flocculent masses, which showed under the microscope a delicate papillomatous structure. From this examination of the growth I came to the conclusion that it was a cystic sarcoma, but was uncertain as to the exact point of origin. In consultation with Mr. Erichsen, who endorsed this diagnosis, it was determined to remove it. This I did on March 12th, 1885, as follows. Adopting all the most careful antiseptic precautions except the spray, I made an incision over the anterior border of the sterno-mastoid from an inch below the lobe of the right ear just to the sterno-clavicular articulation. With a little dissection the tumour was laid bare. I now made a second incision from the termination of the first towards the symphysis of the jaw for about two inches. The flap so formed was turned forwards and the dissection was carried

[1] I am indebted to Mr. F. Penrose for the abstracts of the cases on which these notes are based.

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deeper. Here some small vessels spouted and were secured, as well as some small veins. The descendens noni nerve was found adherent to the tumour, and was dissected off. Deeper down the internal jugular vein was found to be involved in the growth, and seeing this I ligatured it below the mass with a double ligature. I then traced the distal part in its surroundings up to its bifurcation into two trunks, presumably the facial communicating branch with the temporal and the continuation of the internal jugular itself, and these being tied, the lower part, equalling about an inch and a half, was left in the wall of the tumour between the two ligatures. At this stage of the dissection the thin cyst burst and gave exit to dark-brown fluid, some clots, and some shreds of solid growth. This collapse of the cyst made the deeper part of the dissection now easier than would otherwise have been the case; although, had I not been careful to prevent it in the earlier part of the operation, I should have been completely baffled in attempting to separate its thin walls from the surrounding structures. The tumour was now found adherent to the scalenus anticus muscle, the middle portion of which had to be removed with the growth, which came away easily on the division of the muscle above and below. Leaving a carbolised sponge in the large resulting wound, the glands in the posterior triangle were removed by an incision just above the clavicle. Through the incision I passed a drainage-tube under the sterno-mastoid into the larger cavity, and then brought the skin wounds together with silk sutures. Before doing this the whole space was well dried out with sponges and dusted with iodoform. I now carefully adjusted pads of salicylic wool over the seat of operation, so as to bring all the wounded surfaces firmly into apposition, and over these pads I placed a very large quantity of wool, in order to be able to exert considerable pressure by bandages while allowing a certain amount of play of the parts for respiration and deglutition. The tumour removed consisted of a solid mass about the size of a Tangerine orange, from which a smooth-walled cyst projected of about the size of an ordinary orange; into this a soft, friable, villous mass projected from the solid portion. The glands were evenly enlarged, and homogeneous on section. After the operation the patient spent a very good night, and suffered no pain. The wound was dressed for the first time on the sixth day, and was found united almost completely by first intention. There was a little serous oozing from the drainage-tubes, but no pus. Both tubes were shortened, and the part was dressed as before. These dressings were again changed on the tenth day, and a trace of turbid fluid, hardly pus, was found about the drainage opening. The latter was washed, and all was dressed as previously. The next day, as the whole wound had united soundly except where the tubes lay, they were removed. On the thirteenth day the drainage openings were closed, and the patient was up on the fourteenth day, quite well, and went home on April 1st, feeling no inconvenience about the seat of operation. The temperature had risen on the evening of operation to 100·6°, but was subsequently usually below 100°. On the eighth day it rose, for some reason, to 102°, but fell almost immediately, remaining nearly normal for the rest of the patient's sojourn in bed. No symptoms accompanied these rises, and the wound showed nothing to account for them. In short, convalescence was uninterrupted by anything giving the slightest cause for anxiety. During the operation only a mere trace of blood was lost, and this more than anything accounts for the fact that even the deepest part of this very deep dissection in the neck gave very little more trouble than the most superficial. The fact that the scalenus anticus was divided close to its origin and not far from its insertion, and removed to this extent, is a sufficient indication of the depth of this dissection and of the important structures encroached upon by the tumour, as also the fact that the internal jugular was doubly ligatured and severed designedly. Moreover, it should not be forgotten that the sterno-mastoid muscle was not divided, and that the whole field of operation lay practically beneath it, and yet the walls of the large resulting cavity came together under pressure and healed by first intention, without any bagging of fluid, as might possibly have taken place had not firm pressure been kept up upon its walls throughout the healing process. It is interesting to speculate as to what became of the phrenic nerve. The dislocation of parts by the tumour in its growth prevents any certain conclusion being formed upon this point. This much may be said, that during the dissecting off of one [illegible] nerve from the anterior and inner aspect of [illegible]

the growth respiration was noticed to become of a sobbing character, becoming quite normal again when this was completed and before the close of the operation. One considerable nerve is also noted to have been divided of necessity in the middle of the operation, but I do not believe this could have been the phrenic from its situation. No symptoms referable either to division of nerves or excision of the internal jugular vein were observed after operation, although closely watched for. This gentleman was examined for me at his home in the autumn by a medical man who was present at the operation. He found him in perfect health, with no evidence of recurrence, and with all his sensations normal. I have since seen him, ten months after operation, and he says he feels as well as ever he did in his life. There is no trace of recurrence anywhere. The growth, which is a very peculiar one, about the exact nature of which there might be some difference of opinion, will be described shortly at the Pathological Society. I still regard it as a cystic sarcoma, starting probably in an accessory thyroid gland.

CASE 2.—H. W——, aged fifteen, was admitted into University College Hospital, under my care, on March 23rd, 1885, on account of a large swelling on the left side of the neck. He was a weakly lad, and had had several of the diseases of childhood, the last being measles in March, 1883. In the family history lumps in the neck appear in two members. In 1882 the patient first noticed lumps in the neck on the left side and under the jaw; these became hard, but not painful. During the attack of measles in March, 1883, they are said to have completely disappeared, returning again during convalescence, and then growing more rapidly than before. They soon extended behind the ear and down the neck, though almost painless and giving rise to no symptoms of pressure. On admission, March 23rd, the swelling was mainly below the body of the jaw on the left side, but overlapped the bone considerably. It extended forwards to the middle line downwards to within two inches of the clavicle, and backwards under the sterno-mastoid to within two inches of the middle line. The tumour was felt to consist of four large masses, freely movable on the subjacent parts and more or less on one another. Below the main swelling there was a chain of smaller glands running beneath the clavicle. There were no other enlargements of superficial glands to be felt either in the axillæ, groins, or on the other side of the neck, and the spleen was of normal size. The red corpuscles of the blood were 40 per cent. below the normal standard; the ratio of white was 4 to 400 red. On March 27th, I first made an incision from below the tip of the left ear to the left sterno-clavicular articulation directly over the tumour. The external jugular vein was then divided between two catgut ligatures. The tumour was now carefully enucleated by blunt dissection underneath the muscle, until the four great lobes shelled out of their bed, remaining still attached by the chain of smaller glands extending downwards along the great vessels of the neck, which were freely exposed. With very great care these glands were also freed from their surroundings with blunt instruments, the closeness to the great vessels demanding extreme caution. The carotid, only covered by its sheath, was exposed for a considerable distance, and the internal jugular vein from its junction with the subclavian upwards for an inch and a half was seen distended with blood. In spite of the proximity of many vessels, very little blood was lost throughout the whole operation. The glands were found to be less and less enlarged as the dissection was carried downwards, and I believe none were left behind in an abnormal state. When the whole mass had been removed, an opening was made into the resulting cavity behind the sterno-mastoid and a little above the clavicle for drainage. In this a tube was placed, as also in the lower angle of the main incision. The latter was then sewn up (a sponge being left in to the last moment), dusted with iodoform, and dressed with carefully adjusted pads of salicylic wool, so as to bring the deeper internal surfaces of the cavity into contact. Over these pads a large mass of the same wool was firmly bandaged to give strong elastic pressure. Three hours after operation the temperature was 98·2°, from which it rose steadily for six hours and a half, until at 1.30 it had reached 102·2°, then falling as steadily again to 99°; the next night it again rose to 101·8°, and remained the next day between 100° and 101·4°. The patient seemed very comfortable, slept well, and had no pain or other subjective symptoms accompanying the rise of temperature. On the 30th the wound was dressed for

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the first time, and a free discharge of odourless serum was found in the wool round the tube. Otherwise the seat of operation was all that could be desired: it was soft, and not even tender. The tube was shortened and the dressings applied as before. The temperature came down after this first dressing, and remained almost normal throughout. The drainage-tube was again shortened on the 31st, and on April 4th was removed, the stitches being taken out on the 6th. After this there is nothing to note except that union appears to have been almost entirely by first intention even in the deepest part of the wound, there being no trace of pus from beginning to end of the process. The patient was out of bed on the thirteenth day, and the drainage openings were definitively closed on the nineteenth day. The mass of glands removed weighed 15½ oz., and showed no trace of inflammatory action or degeneration on section, being simply generally hypertrophied. I heard later from the lad's father that he remained quite well.

CASE 3.—W. G——, aged twenty-three, clerk, was admitted into University College Hospital on June 19th, 1885. He was a delicate-looking man, subject always to night-sweats. There was a family history of phthisis. Six weeks before admission the patient first noticed a swelling in the lower part of the neck on the left side, just above the clavicle. This rapidly increased, but there was no pain. On admission it was found to be a lobulated glandular mass, 3½ in. by 2 in., freely movable on the subjacent structures and under the skin. No other enlarged glands were to be felt in the body. Heart and lung sounds were normal. From their rapid growth and hardness it was considered possible that these nodules might consist of a new growth, and it was therefore determined to remove them. On June 24th, 1885, I first made an incision for three inches parallel to the anterior border of the trapezius down to the clavicle. Through this I was able to enucleate the entire mass of glands, including a prolongation of the chain downwards and inwards under the clavicle, which could not be detected until the body of the tumour was dislodged. This blunt dissection was very deep, and the subclavian vein was exposed for a considerable distance. Nevertheless, the glands came away entire and cleanly, and with little or no loss of blood, owing to the use of blunt instruments for dissection—i.e., director or curved elevator. The wound was dusted with iodoform after it had been well dried out, and was stitched up, a sponge being left in until the last moment. It was drained at the lower angle and then dressed with well-adjusted pads of salicylic wool as in the last case, and firmly bandaged. The arm was also fixed to the side with bandages, so as to keep the clavicle and deeper surfaces of the operation cavity at rest. The glands removed were much enlarged individually, and each had a large caseous focus; those running under the clavicle were least affected. The night after operation the patient had no pain and felt well, but did not sleep until he had some morphia on account of the patient in the next bed disturbing him. The next morning, though he still felt well, his temperature was 103·2°, pulse 100, respiration 20, and his face flushed. From this time until the evening of the day following, the temperature steadily fell, and was normal throughout afterwards. There was a complete absence of any other symptoms pointing to constitutional disturbance. For this reason I did not touch the dressings until the third day, and then only to loosen the bandages a little, leaving everything else undisturbed. The first dressing was on the seventh day, when the wound was found healed by first intention except at the drainage opening. On the fourteenth day the patient was well and up, only one point where the tube was removed being unhealed; this was quite closed on July 10th, and the next day the patient was discharged. I have seen him since, in December, 1885, six months after the operation. He then looked and felt very well, and had gained flesh and colour. There was no trace of enlargement of glands near the seat of operation, but on the opposite side of the neck some could be felt, but he said they were getting smaller.

CASE 4.—Mr. A——, aged twenty-five, came to me from Wales on June 20th last on account of a fistulous track leading from the edge of the sterno-mastoid inwards to a hard mass of caseating glands lying over the bifurcation of the great vessels of the neck. This sinus had existed for some years, and had given much trouble, especially when it closed and the matter was retained. On examination, I came to the conclusion that nothing but complete enucleation of the mass of diseased glands would give complete security against the persistence of the fistula for an indefinite time. As the patient was very anxious to be freed, and was of delicate constitution and likely to suffer from the continuous discharge and to run considerable risk of generalisation of the tubercular infection from the glands, I agreed to do what might otherwise be thought an unnecessarily severe operation—namely, to dissect down all round the glands and remove them *en bloc*. This I did in the way described in the last case through an incision running along the anterior border of the sterno-mastoid for about three inches. In this dissection the great vessels were exposed considerably, and planes under the sterno-mastoid opened freely. The glands were difficult to isolate on account of the chronic suppuration, but were removed without breaking into the inflamed area. The wound was dressed and treated as in the last two cases, and healed by first intention and without a bad symptom.

Experience in these and several other similar cases has certainly dissipated many of the apprehensions inherited from a former period, and encourages me personally to extend the sphere of operative procedure in the deeper parts of the neck very considerably.

Harley-street, W.

ACUTE PARENCHYMATOUS MYOCARDITIS.

BY SAMUEL WEST, M.D., F.R.C.P.,

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THE classifications of myocarditis are somewhat confusing. Accepting the general term of "carditis" as indicating inflammatory conditions of the heart generally, the terms "endocarditis" and "pericarditis" speak for themselves; but myocarditis, or inflammation of the solid substance or mass of the heart, is less clear; and of the classifications suggested I prefer greatly that of Virchow, who applies to myocarditis the same epithets used in distinguishing the various forms of nephritis, hepatitis, &c., and divides the whole group into the parenchymatous and interstitial varieties, each of which may occur in the acute or chronic form, and affect the whole or only part of the organ. Chronic interstitial myocarditis is what we usually speak of as fibroid disease of the heart. The small abscesses found in the heart in some forms of blood-poisoning are instances of one form of acute interstitial myocarditis. The term "parenchymatous" is open to the same objections when applied to the heart as to the kidney, and the same difficulty arises in drawing the line between inflammatory and degenerative changes; but it is a term which is in common every-day use, and which represents certain broad facts, and it may be used with advantage in reference to the heart in the same general sense.

The common classification of myocarditis into primary and secondary forms is etiological, the group of primary or idiopathic myocarditis being reserved for those cases in which no cause for the affection can be found. We do not speak any longer of idiopathic or primary nephritis, and it would be well if we ceased to apply this term to the heart. 1. Acute parenchymatous myocarditis may exist alone, and we may place with Virchow in this group all those acute changes observed in the myocardium in such severe fevers as typhus, small-pox, &c., as well as those rare cases in which the muscular substance alone is attacked in the course of rheumatic fever. To this group most of the cases to be described belong. 2. It may occur coincidently with some other acute affection of the heart—viz., pericarditis or endocarditis,—as it probably did in Case 8. 3. Lastly, it may follow some antecedent affection of the heart—old pericarditis, old endocarditis, or even chronic interstitial myocarditis.

Where acute parenchymatous inflammation passes into the chronic form and ceases to be inflammation and becomes degeneration is as difficult and perhaps as impossible to determine in the heart as in the kidney. The classification, like that of nephritis, is purely pathological. It is not perfect, but, on the whole, it is, I think, the most clear and

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satisfactory. The classification of myocarditis will, therefore, stand as in the following table:—

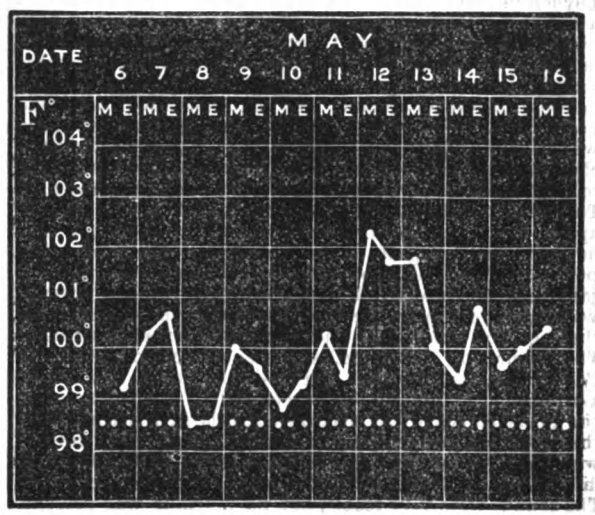
- Myocarditis
  - parenchymatosa (*a*) partialis (*b*) universalis
    - acuta
      1. No other part of heart attacked.
      2. In coincidence with endocarditis or pericarditis.
      3. In sequence to endocarditis, pericarditis, or even chronic interstitial myocarditis.
    - chronica — ? chronic parenchymatous degeneration.
  - interstitialis
    - acuta — suppurative. non-suppurative.
    - chronica — fibroid disease of heart.

The cases which follow all belong, so far as post-mortem evidence is forthcoming, to the group of parenchymatous myocarditis. In only one was old interstitial change present as well.

CASE I. *Myocarditis; no other lesion in the heart; liver cirrhotic.*—John L——, aged twenty-seven, was admitted into the Royal Free Hospital on May 6th, 1884. He had been a heavy drinker for many years, but had been in good health until about three years ago, when he was confined to bed for some weeks with rheumatism and weakness of the legs, and for this was an in-patient in the hospital under Dr. Baxter. He was an in-patient a second time a year ago under myself, suffering from general *muscular tremors* and from the effects of drink. These tremors were referred at that time to drink, aggravated perhaps by the effects of lead-poisoning, from which he was also suffering. After a few weeks these symptoms entirely disappeared. Lately the patient had been out of work and living badly. He had been much exposed to wet weather, and had doubtless been drinking. Three weeks before admission the weakness and tremulousness of the legs returned. He had at times a great feeling of *coldness* followed by perspirations, suffered much from *nausea*, and occasionally vomited. A week before admission he was much distressed with *pain* across the upper part of the abdomen (chiefly in the epigastric region), and shortly afterwards he became slightly *jaundiced*. The patient was a stout, flabby, unhealthy-looking man, with a pasty, slightly jaundiced, and dusky complexion, and puffy face. The whole body was affected with a peculiar tremulousness, increased by movement. This was most striking on the chest, where it was constant, and not in any way timed with respiration. The tongue was similarly tremulous and covered with yellow fur. Pulse 120, small and weak; respiration 32, shallow and somewhat laboured; temperature 99·5°. The heart's apex was in the nipple line, and the cardiac dulness increased upwards and to the left, but it could not be made out beyond the right edge of the sternum, probably on account of the emphysema present. Over the whole præcordial region a soft systolic murmur was present, which was heard also for some distance into the axilla. The heart sounds were audible, but weak and distant, and the pulmonary second accentuated. Slight rhonchus was heard over the whole of the lungs. The abdomen was greatly distended, and the superficial veins large, chiefly over the upper part. The liver dulness commenced at the upper border of the seventh rib, but its lower edge could be felt on a level with the umbilicus. Its surface appeared smooth, but resistant. There was slight ascites, and slight œdema of feet and legs. The patient was troubled with frequent cough and fairly copious watery expectoration. The urine (sp. gr. 1015) contained bile and a little albumen. What was most striking in the patient's appearance was the dusky and slightly jaundiced colour, the general tremors, and his great prostration.—May 10th: Pulse 100, and stronger; heart's sounds more distinct; urine of higher specific gravity (1022), still containing bile, but free from albumen.—12th: The patient had been wandering for the last two nights, and was extremely restless, requiring constant watching to keep him in bed. Temperature 102°.—13th: Patient weaker, constantly muttering to himself, and very restless; complained of nausea and dyspnœa. To-day were noticed for the first time twitchings of the face muscles, which recurred frequently, and during the evening and night (May 14th) he had three epileptiform fits, the arms being most affected. The fits were followed by deep sleep. The urine passed was small in quantity, sp. gr. 1028, but free from albumen.—15th: There had been no more fits, but the patient was more drowsy and feeble and the dyspnœa was much greater. Tongue dry, with sordes in mouth. Urine passed in bed. Pulse 130, very feeble; temperature 100°. Attacks of twitching in face were frequent, lasting about half a minute at a time.—16th: The dyspnœa was greater, and at midday the patient suddenly sat up in bed, became livid, struggled for breath, and died in about an hour's time, the final change being sudden. (See Chart.)

The post-mortem disclosed old adhesive pleurisy with emphysema and extreme congestion of lungs. The larynx was healthy. The pericardium was healthy, and contained but a very small amount of clear serous fluid. The heart was universally dilated; the valves healthy, but the muscular substance yellow and mottled with fatty change. It was easily torn and teased up, and showed under the microscope considerable fatty and granular disintegration of fibres. The coronary arteries were normal and there was no cause for the fatty change found in the heart. The abdomen contained a little fluid. The liver weighed 89 oz., and was markedly granular and firm. The spleen weighed 8 oz., and the kidneys 6 oz. each. These organs were much congested, but otherwise not abnormal. The brain and spinal cord were carefully examined, and no change discovered.

In brief, a young man, aged twenty-seven, addicted to drink, from the effects of which he had seriously suffered on many occasions, after more heavy indulgence than usual became weak and tremulous and suffered from attacks of cold perspirations and faintness, with epigastric pain, dyspnœa, and slight jaundice. On admission the patient was dusky and slightly jaundiced, with marked dyspnœa and



constant, though not severe, epigastric pain, a very rapid and feeble pulse, and considerable pulmonary congestion. The cardiac dulness was enlarged, the sounds rapid and very feeble, and accompanied by blowing systolic murmurs. Gradual increase took place in all the symptoms, but especially in the dyspnœa, and the patient died suddenly and somewhat unexpectedly.

All the clinical phenomena pointed to the heart as the source of trouble; and the post-mortem examination confirmed this view, for the only other organ diseased was the liver, while the heart itself was in a condition of extreme degeneration, though the pericardium, endocardium, and valves were unaffected.

Accepting the view taken during life, confirmed as it was by the necropsy, as correct—viz., that the case was one of acute muscular degeneration of the heart,—there remain for decision two questions: (1) The name by which it would be best described, and (2) the cause to which it may be attributed. It is impossible in most cases to draw the line sharply between inflammation and acute fatty degeneration, for, as we see in acute nephritis, fatty change follows so quickly upon inflammation as to form almost part of the process. We may, therefore, without refining too much, I think fairly apply the term myocarditis to the case, and, as the change was general and of short duration, we may add the terms diffuse and acute, and describe the disease as myocarditis acuta diffusa. The only ground for hesitation in thus naming the disease would be the stated rarity of the affection,

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except when associated with and secondary to other changes in the heart, such as pericarditis or endocarditis, the absence of which in this case was proved by necropsy. The next question to be considered is the cause of the disease in the present instance. No local cause, in the first place, existed in the heart. Of the general causes to which myocarditis is often referred, there was no history or distinct evidence of rheumatic fever, and all the common forms of blood-poisoning were absent, and there was no evidence of any ordinary fever, such as typhoid, &c., or even pneumonia, nor of pyæmia or other septic fever. The only other diseased organ in the body was the liver, and although the disease of the heart may be connected with the disease of the liver in the sense that if the liver had been healthy the myocarditis might not have occurred, still the causal relation between the two affections is somewhat remote and impossible of proof, and we may be justified, therefore, in describing the present case as one of primary rather than secondary myocarditis. Every disease must have a cause, and I should be rather inclined to refer the heart affection in this patient to the toxic effect of the recent drinking bout, than to the chronic and probably not very advanced change in the liver. My own observation leads me to believe with Prof. Köster and Rühle that acute myocarditis is not by any means so rare a disease as is commonly stated, nor that it is always of short duration or necessarily fatal.

CASE 2. *Myocarditis; cirrhotic liver.*—This case, almost the exact counterpart of the preceding, is published by Leyden in the *Charité Annalen* for 1883. The patient was a male, aged thirty-four, who was admitted into the hospital on December 26th and died on January 16th (twenty-one days)—a drunken "ne'er-do-well," who had lived on his wits for the last six years, and had had syphilis two years before his present illness. He had been ailing for some years; he said he had been in his usual health until three weeks before admission; he then suffered from pain in the chest and oppression in breathing, and had been confined to bed. Twelve days previously his testicles had swollen. The present complaints were of great weakness and want of appetite, pains in the chest, and shortness of breath, so that he could hardly speak. The patient was of moderate size, poorly nourished, but not emaciated. The skin was slightly jaundiced and the trunk and back of the thighs covered with numerous petechiæ, and there was slight œdema of the legs and scrotum. The temperature was not raised. The respiration was rapid, shallow, and costo-abdominal. Pulse rapid, 128, irregular, and of small volume. There was a diffuse feeble impulse felt over the whole cardiac area, but the apex could only just be localised in the fifth space outside the nipple line, and could not be seen. The cardiac dulness was increased slightly upwards and towards the left, but did not extend beyond the usual position towards the right. The sounds were very feeble, but no murmur was present. The urine (sp. gr. 1007) contained no albumen and no bile; there was slight ascites. The diagnosis was made of dilatation of the left ventricle, without valve or kidney mischief, probably of syphilitic origin.

In the course of the next few days the patient improved, the petechiæ disappeared, the temperature continued normal, and the pulse was reduced to 80, though occasionally it rose to 113. The digitalis was stopped. On Jan. 2nd the pulse was again quicker (120) and more feeble; there was more jaundice, the hepatic region was somewhat tender, and the patient not so well. On the 8th there was slight wandering. Temperature 98·4°; pulse 90; specific gravity of urine 1030, no albumen; the patient weaker. The digitalis was again administered, and quickly reduced the pulse. On the 13th the pulse fell so low as 48, and on the 14th to 40; it was at the same time irregular and weak, so that the digitalis was stopped. On the 15th the patient complained of headache, and on the 16th he became suddenly faint and died in a few minutes.

The post-mortem examination showed slight œdema of the feet, legs, and scrotum, with a little ascites, but no fluid in the pericardium or pleural cavities. The pericardium was adherent over a small part of the right auricle, and thickened a little in patches over the front of the right ventricle. Elsewhere it was smooth, and there was no evidence of recent pericarditis anywhere. The valves and endocardium were healthy, but the muscular substance was spotted here and there with yellowish patches. The lungs were congested, but otherwise normal; the liver hob-nailed. On microscopical examination the muscular substance of the heart was found to be fatty, the change being most marked on the inner surface. Here and there were several small patches of old fibroid induration, and in two places the arteries corresponding with them were occluded by endo-arteritic change.

Professor Leydon discusses the question whether the dilatation to which the symptoms and death were due is to be referred to the old syphilitic change, or to more intense myocarditis in the earlier part of the present illness, or whether both the dilatation and fatty change are to be referred to the cachexia and consequent general malnutrition. He leaves these questions unanswered, but suggests that all these factors had their share in producing the condition. The dilatation he diagnosed from the position of the apex beat with the alteration in the cardiac dulness and the weak heart from the feeble heart sounds and small pulse. He draws attention to the fact (1) that the patient's complaint did not point very directly to the heart, and that he suffered from discomforts rather than actual pain in the cardiac region, and from oppression of breathing rather than dyspnœa; (2) that the pulse was so small and irregular, and varied much in form and frequency, and was especially subject to the influence of digitalis; (3) to the dropsy without reduction in the amount of urine; and (4) to the sudden syncope which ended in death.

It would be difficult to find two cases of an obscure and not very common disease which resemble one another more closely in all respects. In one important point only do they differ—namely, in the temperature; for in my case the temperature was slightly raised, and in Professor Leyden's was normal. Both patients were young men, and complained of similar symptoms; both had jaundice, slight ascites, and œdema, both had the evidence of weak dilated heart, both died suddenly, and in both were found a fatty heart and cirrhotic liver; in both the diagnosis was made during life, and confirmed after death.

Although of the six cases which follow three died, in two only of these was the diagnosis established by post-mortem examination, and I have therefore thought it well to take the two cases just described first, as establishing a firm pathological basis upon which the other cases may stand. In connexion with them I may place next another completed case which I quote from a paper written by me in the St. Bartholomew's Hospital reports for 1878, for the use of which I was indebted to the kindness of Dr. Bristowe.

(To be continued.)

A NOTE ON MALARIAL ICTERUS AND HÆMOGLOBINURIA.

BY C. H. EYLES, L.R.C.P. & S.EDIN.,
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AFANASSIEW,[1] in endeavouring to account for the variable and disproportionate icterus accompanying hæmoglobinuria, finds, among other things, that, for the production of hæmoglobinuria, solution of the hæmoglobin into the blood-spasm is a necessary and invariable antecedent, though the latter condition may exist without necessarily producing the former. When icterus and hæmoglobinuria co-existed, the animals experimented on "bore it badly," the urine responded to Gmelin's test, and the kidney showed casts of bile-pigment and hæmoglobin. So far as the liver was concerned, in the cases where hæmoglobinuria alone was produced, histological changes in that organ were observed; while, when icterus likewise was present, these changes were more or less pronounced, and the bile in the gall-bladder and bile-ducts was found to be of increased consistence. The form of icterus which he proposes as explaining the phenomena is one he terms "hæmo-hepatogenous" icterus—i.e., it is a hepatogenous icterus determined by pre-existing hæmic changes, in so far that these bring about an increased formation of biliary constituents which are subsequently absorbed. Applying these facts to clinical observations, we find that while this "hæmo-hepatogenous" icterus may account wholly or partially for the discolouration of the skin in some cases, it cannot be said to cover another series of cases in which,

[1] Virchow's Archiv, vol. xcviii., p. 469, *et seq.*

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together with icterus, there is no response to Gmelin's test in the urine, as in malarial fevers, &c.

On the west coast of Africa, where malarial fevers, from the mildest to the most malignant, are met with, one form of remittent occurs in which hæmoglobinuria is so prominent a symptom that it furnishes the popular name "Blackwater fever." In these cases there is acute hepatic tenderness, with enlargement, accompanied by hypercholia, as evidenced by the stools and the vomit, which, when other than ingesta, is a tenacious, viscid, golden-yellow fluid when the stomach is very irritable, and a copious green liquid when the stomach permits of accumulation; there is more or less profound icterus, and a tendency to suppression of urine, which in three fatal cases was icteric as well as hæmoglobinous. In these three cases the clinical phenomena—i.e., the icteric and hæmoglobinous urine, hepatic complication, and character of the vomit—lend countenance to the adoption of "hæmo-hepatogenous" icterus as an explanation of the discolouration of the skin. But what of the other cases in which the urine was non-icteric? It might fairly be urged that the hepatic symptoms were the result of the over-action to which the liver was urged by the condition of hæmoglobinæmia; and the appearance of profound icterus, without corresponding response by the urine to Gmelin's test, shows that, though the conditions necessary for the production of hæmo-hepatogenous icterus may exist, the discolouration of the skin may not be due to it in the first instance, though in some cases it might be partially accounted for thus.

Are we, then, to adhere still to a "hæmatogenous" icterus, meaning by that term a jaundice produced by chemical changes occurring in the blood itself, by which its colouring matter is converted into material capable of imparting a yellow appearance to the skin and conjunctivæ? As a reply to this, we find that "the formation of pigment in blood which is actually circulating is not carried beyond the first stage (the breaking up of red corpuscles) within the vessels; the completion of the process is effected outside the vessels."[2] Hepatogenous icterus being, then, inadmissible on the clinical evidence, pigmentary material not being formed in the blood as such, can it be that, the first stage of the process—the liberation of the hæmoglobin—being already accomplished in cases of hæmoglobinuria, the pigment formation is completed outside the vessels—i.e., in the tissues themselves? in other words, that the icterus arises in the same manner as the discolourations following extravasation of blood, the difference being that in the former case it is general and rapid, owing to the transudation of serum holding hæmoglobin in solution, while in the latter it is limited and tardy in appearance, owing to the fact that the extravasations are limited, and the corpuscles have first to be destroyed before the connective tissue corpuscles can act on the hæmoglobin? This seems probable. "It may even be" says Quincke,[3] "that under certain circumstances icteric pigment may not only be formed in tissues other than the liver, but may be formed so extensively and under such conditions that general icteric discolouration results; the formation of this pigment in the connective tissue, after extravasations, for example, permits us to speak of an *icterus icterus* as possible; this would be a special form of an hepatogenous icterus; another special form would be the hæmatogenous—if it were known.

If this be accepted as the explanation of icterus accompanying hæmoglobinuria, and the malarial fevers in which this latter occurs, can it account for the icterus of malarial fevers, at least, in general? that is, are we to assume that because icterus occurs in these fevers, it is preceded by hæmoglobinuria? Recent research, I believe, spares us the trouble of assuming. Remarking on the observations of Laveran and Richard on the microbe of paludism, recently confirmed and extended by Marchiafava and Celli,[4] THE LANCET[5] says: "The organism has a special habitat, the red corpuscle of the blood, in which it develops, and which it leaves when it has arrived at a perfect stage of development. During the attack of fever many globules are seen which possess a small, perfectly round spot, but they have otherwise the normal appearance, and possess [illegible] elasticity. In other corpuscles the evolution of the parasite is further advanced, the clear spot is enlarged and is encircled by small black granules, while around it the hæmoglobin, recognisable by its greenish-yellow tint, forms a ring, which becomes narrower and narrower as the parasite increases in size. Ultimately the substance of the corpuscle is reduced to a narrow decolourised zone, from which the hæmoglobin has disappeared"; and this disappearance of the hæmoglobin from the corpuscle and its consequent passage into the plasma supplies the requirement of hæmoglobinæmia necessary for the production of general inogenous icterus. Another matter is not uninteresting in this connexion—viz., that urobilin occurs in the urine in fevers generally,[6] and in cases where there has been extravasation of blood.[7] In continuation of the remarks above quoted, THE LANCET says: "Many other phenomena of the disease—the remarkable anæmia, the action of quinine, and the persistence of the infection—are all perfectly explained by these facts"; and among these phenomena, icterus, hæmoglobinuria, and congestion of the liver and spleen, seem to claim a place as being produced by the hæmoglobinæmia resulting from the presence of the parasite.

It might be asked if we are to consider the presence of hæmoglobinuria a sure and certain sign of the intensity of malarial poisoning. Thus, it might be said, when the poisoning is but mild, as in intermittent fever, the amount of hæmoglobin set free is such as can be dealt with by the liver, spleen, and bone-marrow; when more severe the additional hæmoglobin is employed in the production of inogenous icterus, as in remittents; the appearance of hæmoglobin in the urine, indicating a still further amount set free, shows intensity of the poisoning; while the addition of hæmo-hepatogenous icterus indicates a very high degree of intensity. Here, however, we are checked in arriving at any such conclusions, for the urine may be hæmoglobinous even in cases of mild remittents without any icterus, as I have seen, or it may be so in intermittents; and in Europe an apyrexial manifestation of malaria is met with in paroxysmal hæmoglobinuria, in which there might be no icterus whatever; or it may be present out of all proportion to the hæmoglobinuria. Why this should be we know not; and even in experimental pathology we find that under conditions apparently the same, in the one instance hæmoglobinuria alone is produced, while in another the urine is first icteric and subsequently hæmoglobinous.[8] To say that this is due to the varying capacity for work of the organs and tissues in different individuals is to offer no explanation, for yet the question would remain to be answered, Whence the varying capacity? That there is some difference even the old woman who prefers her family doctor because "he knows her constitution" is aware: but the family doctor deludes himself when he believes he explains the matter by veiling his ignorance behind the six-syllabled word "idiosyncrasy."

Gold Coast Colony.

[illegible] Pathol. Anat. (Macalister's translation), part i., p. 101.
[illegible] Archiv, vol. xcv., p. 125, *et seq.* To avoid seeming [illegible] I translate as "icteric pigment" the word "[illegible]," which, as will be observed, includes hæmatoidin as [illegible] pigments in the passage above quoted.
[illegible], Luigi, 16th, 1885. [5] June 17th, 1882.

[6] Landois' Text-book of Physiology, Stirling's translation, p. 542.
[7] Ziegler, op. cit., part ii., p. 31.
[8] Afanassiew, op. cit., experiments 4 and 5.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quampluirmas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

ST. MARY'S HOSPITAL.

A CASE OF CONTRACTED GRANULAR KIDNEY; DEATH; NECROPSY.

(Under the care of Dr. SIEVEKING.)

THE following case is a very instructive one. A female, aged thirty, had a convulsive seizure without apparently any previous symptom of importance, and died within three weeks afterwards from uræmia, the result of pronounced renal disease. Contracted granular kidney is not common at this age, and the disease was far advanced when the patient came under treatment. The urine was greatly diminished in quantity, there was slight general anasarca, considerable

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arterial tension, and much cardiac hypertrophy. Headache, nausea, vomiting, convulsive seizures, and other symptoms of uræmia rapidly came on, and the patient died comatose a fortnight after admission. The kidneys were extensively diseased, and together weighed only an ounce and a half. The notes of the case have been furnished by Mr. Geo. Spear.

Lydia P——, aged thirty, an anæmic; weakly-looking woman, was admitted to this hospital on Nov. 10th, 1884. The patient had a fit ten days previously; while talking to her mother and sister she suddenly fell, striking her head against the fender. She remained unconscious for "several hours," and during the fit had bitten her tongue. She has been in a very weak state ever since, becoming faint and giddy, and trembling on the least exertion. Her previous history showed that she had been subject to cough and cold every winter for several years, and generally had to get medical advice for it. She suffers from rheumatic pains in the joints, but has never had rheumatic fever. The patient has noticed that her face and the lower extremities have swollen occasionally for some time past. Does not think she has passed more urine than usual lately. She has frequently had pain under the left breast, with shortness of breath on walking quickly or going up-stairs. Patient gave birth to a child seven years ago. The catamenial flow has been regular until four months ago—absent since then. The family history showed that patient's father died of "chest disease and rheumatism" at the age of fifty. The mother was living, but in delicate health; she suffers from some chest affection and is nearly blind. There have been eight brothers and sisters. One sister died of consumption at the age of eleven years; the rest are living. One brother suffers from rheumatic gout, and another was troubled with fits during childhood. Some relatives of her father have died of consumption.

On admission, there was slight puffiness of the face with patches of ecchymosis, and a nearly healed scar over the outer angle of the left orbit. Skin warm, slightly moist; tongue coated with white slime, and a dark streak down the centre; temperature normal. Chest fairly well arched; impaired resonance over both fronts; respiratory murmur fair. At the back of the thorax slight dulness, with increased vocal resonance at both bases and at lower angle of left scapula. Cardiac dulness greatly extended. The heart's impulse was very forcible at the lower part of the fifth space; a systolic thrill was felt at the apex; there was a loud mitral systolic murmur at the apex propagated towards the axilla; an aortic systolic murmur was heard at the base, and a little above and below in the sternal line. Liver full size; dulness begins at the fifth rib. Spleen enlarged. Urine very pale; sp. gr. 1011; neutral reaction; albumen present, equal to one-tenth. The patient was ordered five-grain doses of citrate of iron and quinine in an ounce of peppermint-water three times daily, and an ounce and a half of compound decoction of aloes every other morning.

Nov. 13th.—Patient has had a sharp pain under the left breast during the night. The aortic and mitral systolic murmurs are louder and rougher; there is also a pulmonary murmur, persistent on increasing pulmonary tension. Pulse 90, hard, cordy, incompressible; temperature 97°; some nausea; urine pale, sp. gr. 1013, faintly acid, slightly albuminous.

15th.—Face slightly puffed. Patient was sick yesterday, and complains still of nausea and almost constant headache. Feels giddy at times. Pulse 96, regular; temperature 96·2°; last evening normal. A blister ordered to be applied to back of neck.

17th.—Patient complains of pain over the region of the kidneys. Face more puffed to-day. Pulse 104, hard, cordy. Both murmurs very marked; second sound reduplicated. Patient was slightly sick this morning. Ordered thirty grains of compound jalap powder every morning.

18th.—Patient had a fit last night and again early this morning; each attack lasted from four to five minutes. There was no cry. The fit began with clonic spasms, affecting both arms and legs and the muscles of the face and body. In the first attack the patient bit her tongue. The bowels being constipated, a simple enema was administered; later a three-ounce dose of black draught was given, which caused four loose stools. An injection of pilocarpine (one-tenth of a grain) was given hypodermically; this caused free but not excessive perspiration for about an hour. In the evening a vapour bath was given. The pulmonary and mitral murmurs are more marked. About eighteen ounces of faintly acid urine passed in twenty-four hours (bowels relaxed four times); sp. gr. 1013; one-tenth albumen. Nausea continues. Tongue coated. To take twenty minims of spirit of nitrous ether and ten minims of tincture of digitalis, in one ounce of water, three times a day.

19th.—Patient has had a good night, but complains of headache this morning. Tongue moist at the edges, covered with white slime, and having a dry brown streak down the centre. Pulse 96, hard, cordy, regular. Temperature 97·3°; last evening 99·1°.

20th.—Patient had four fits last night between 6.30 and 12. After the last attack she was partly unconscious for three-quarters of an hour, the hands twitching convulsively. She was unable to articulate; the left eye was directed inwards. A dose of bromide and chloral mixture was given, but she vomited it almost directly; a second dose at 4 A.M. was retained. The injection of pilocarpine was administered daily and the vapour baths were continued, but only moderate action of the skin was induced. Bowels open three times yesterday. The aortic and mitral systolic murmurs continue about the same. The heart's impulse is in the sixth space, forcible and heaving in character, but does not convey the impression of the same vigour as when patient was admitted. The face is much puffed; the right eyelids discoloured and erysipelatous. Pulse 96, regular, incompressible. Urine very pale; sp. gr. 1011; one-fourth albumen; deposits granular and epithelial casts. There is pulsation in the jugular veins and a loud venous hum, both stopped by making pressure below.

21st.—Patient had two fits last night, both lasting longer than the previous ones. The convulsive movements began in an attack on the right side of the face, then went to the right arm, then to the left arm and leg, and finally back to the right side again. After these attacks patient remains unconscious for half an hour or longer. Urine is generally passed during the fits; during the last fit both urine and fæces were voided. Patient is unable to answer questions to-day, and at times is in quite a frenzied condition for a moment or two. There is increased fulness and pulsation in the external jugulars. The heart could not be examined. Pulse 102, hard, cordy. Bowels open five times. Temperature 96·4°; last evening 99·4°. There has been slight epistaxis upon two occasions. Patient remained in a comatose condition the greater part of the day; she stares vacantly at anyone who goes near, and if she makes any answer to questions, it is always, "I don't know." Strong coffee was ordered three times a day. Four leeches to be applied behind the ears.

22nd.—Still unconscious, but there has been no return of the fits. The tip of the tongue, the teeth, and lips are covered with sordes. She refuses everything brought to her, so that only one cup of the strong coffee could be given. Pulse 104, regular, softer. Temperature 97·2°; last evening, 96·4°. Some urine was voided in the bed this morning; none passed during the night. A nutrient enema, consisting of half an ounce of brandy, an ounce and a half of beef jelly, and half an ounce of strong coffee, to be given every four hours.

24th.—Patient has not recovered consciousness. Little or nothing has been swallowed; the nutrient enemata have been retained. Respiration is deep, the intercostals and scaleni acting visibly at each inspiration. The bowels have been opened after two enemata of castor oil. A little urine has been passed in the bed. A hot pack was used last night and there seemed to be a momentary return of consciousness. The pilocarpine has now little or no action upon the skin. Pulse 100, full, jerky; temperature 99°; last evening 98°. Patient is much emaciated.

25th.—Patient is evidently sinking. Pulse 100, regular; temperature 99°. The nutrient enemata are generally retained; no liquid or food given by the mouth is swallowed. Fæces and urine are passed involuntarily. Conjunctiva sensitive. A hot pack was used last night, but caused no sweating. The respirations gradually became deeper, slower, and catchy, and the patient died at 1.20 P.M.

A post-mortem examination was made twenty-five hours after death. Rigor mortis was well marked; body much emaciated. The heart was hypertrophied, particularly the left ventricle; substance pale; aortic valves slightly thickened. Congestion and œdema of both lungs, especially the lower lobe of the right. The kidneys were extremely small: weight of left, one ounce; right, half an ounce.

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Substance red and very granular; the cortical portion almost gone; only about one-sixteenth of an inch in thickness. A little fat was deposited from degeneration. Liver congested. Brain substance normal; slight effusion in the cerebral ventricles. A section of the kidney examined microscopically showed the organ to be so fibrosed as to be almost unrecognisable; every grade of fibroid degeneration was seen, from the crowd of indifferent cells between the tubules, to the masses of dense, almost homogeneous, fibrous tissue. The vessels were enormously thickened, and their nuclei increased. The glomeruli were much altered: the best of them were much over-nucleated; the worst were simply homogeneous fibroid masses. The capsules were much thickened. Considerable congestion of the organ was evident, apparently from the supervention of an attack of acute inflammation at the end of chronic nephritis. Not a single normal tube was to be seen; some were lined by degenerated cells, others by embryonic cells; some were reduced to fibrous bands, while others, again, were mere chains of cysts.

KASHMIR MISSION HOSPITAL.

ABSCESS OF KIDNEY COMMUNICATING WITH BOWEL; OPERATION; NECROPSY; REMARKS.

(Under the care of Mr. A. NEVE.)

THE following may well be classed among the cases of difficult diagnosis lately published by Dr. Fenwick. It is one which a more careful examination might have helped to elucidate. But in Kashmir the endeavour to obtain reliable accounts from the patients or intelligent notes from any hospital assistant is nearly hopeless.

A man, aged about forty, was admitted on Oct. 6th, 1884. He was spare, with a careworn expression, complaining of constipation for twelve days and of a painful lump in the left side. It was diagnosed as obstruction of the descending colon, and treatment by enemata was ordered. One or two thin motions followed, but the swelling remained with increasing fever and loss of appetite, but no vomiting. Mr. Neve's attention was not called to him till the fourth day after admission. He then found a considerable swelling of the left abdomen, between the ribs and the spine of the ilium. Fluctuation was perceptible, but the tumour was partly tympanitic. It was not very tender to the touch, and there was some gurgling on pressure. The puzzling point was the connexion between the swelling and the severe constipation. Another enema was ordered, which, however, was fruitless. Next day (Oct. 11th) a large enema was given, the body being inverted. The fluid seemed slowly to percolate through the whole length of the large intestine. Evidently the tumour was separate from the bowel. It was aspirated, and some very offensive fæcal fluid escaped, but the needle was blocked by small sloughy fragments. The enema returned, bringing away a large quantity of fæces.

Operation.—A few hours later, under the spray, an incision was carefully made into the tumour. A large quantity of most offensive liquid, of brownish colour and fæcal smell, escaped: also some flocculent matter and sloughs, one piece, six inches long, being a fragment of the intestinal mucous membrane. The finger entered a large cavity, crossed by numerous soft rotten bands. It appeared shut off from the rest of the abdominal cavity by firm adhesions. Above it entered a round movable aperture like an anus. In the position of the kidney was an ill-defined soft pulpy mass. The wound was well washed out, and a large drainage-tube applied, over which a sawdust pad was fixed. At the close of the operation the true nature of the case was still doubtful.

Next day (Oct. 12th) the temperature had fallen from 103° to 99°. There had been one or two motions. Urine normal in appearance. Pain slight. Pulse very weak. Wound dressed and washed out.

13th.—He was much weaker. About midday he had a rigor and became pulseless and insensible. Sixteen ounces of saline fluid were injected into a vein, with some marked improvement for a few hours. At night he died.

Necropsy.—Lungs much congested. In the right pleura there were twelve ounces of serous fluid. Liver congested and fatty in texture. Spleen enlarged. In the right kidney pelvis was a small encysted stone (weight 2 dr.). The descending colon was found to be much displaced towards the middle line, and to pass through a mass of inflammatory adhesions which formed the inner wall of the abscess cavity, with which the colon communicated by a small aperture. This cavity extended from the diaphragm to the iliac fossa. It was lined with a greenish gangrenous material. In the floor of it, amidst much sloughy material, were the remains of the kidney, the anterior wall of the pelvis being absent, revealing large cavities in the substance. The psoas muscle contained several ounces of pus.

Remarks by Mr. NEVE.—Throughout this case my diagnosis was in error. I had considered the possibility of hydronephrosis &c., but all the symptoms pointed towards the bowel. There was prolonged constipation; much thickening around the colon; a tympanitic tumour containing gas and fæcal fluid; also sloughs. I diagnosed a fæcal abscess, connected in some way with obstruction of the bowels, some portion of the wall of which had, I thought, sloughed, but had been repaired by adhesions. By the light of the post-mortem and the stone in the right kidney, I believe the starting-point to have been a hydronephrosis, due to blocking of the ureter; this was followed by rupture of the wall, perinephritis, communication with bowel, fæcal contamination and decomposition, obstruction, &c.; making a most puzzling combination of signs. If the man had come earlier he would probably have recovered. Immediate benefit followed the treatment, which was perhaps the best that could have been adopted, but it came too late.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Mortality in the Medical Profession.—Tapetum Lucidum.

AN ordinary meeting of this Society took place on Tuesday last, Dr. George Johnson, F.R.S., President, in the chair. The papers were both of peculiar interest, and the meeting was prolonged for half an hour.

Dr. WILLIAM OGLE, the successor of Dr. William Farr as Superintendent of the Statistical Department at the Registrar-General's Office, read a paper on Mortality in the Medical Profession. The paper, of which the following is a detailed abstract, has not only special interest for the medical profession, but is also, from a statistical point of view, a valuable contribution to statistics of class mortality, a subject upon which our information is at present mainly dependent upon figures derived from facts deficient in number and often not beyond all suspicion of inaccuracy. The basis of facts on which Dr. Ogle's conclusions are based is wide enough to inspire confidence, and the source of his information is above suspicion. At the last census in 1881 the number of "physicians, surgeons, and general practitioners" enumerated in England and Wales was 15,091, and after the census was over the causes of the deaths of all males aged fifteen years and upwards in England and Wales during the three years 1880, 1881, and 1882 were abstracted from the National Death Register, in combination with the occupations of the deceased persons. The result of this process, as regards the mortality of medical men, was to show that their mean annual death-rate in those three years was 7·40 per 1000 between twenty and twenty-five years of age, 11·57 between twenty-five and forty-five, 28·03 between forty-five and sixty-five, and 102·85 per 1000 at sixty-five years and upwards. Among all medical men aged upwards of twenty years, the mean annual death-rate was 25·53 per 1000. The first question suggested by these figures is whether the death-rate is high or low, and this inquiry naturally divides itself into two other questions. In the first place, is this death-rate of medical men in the three years 1880-1-2 higher than that of medical men in former times? and secondly, is it high compared with the death-rates of men engaged in other occupations? For an answer to the first of these questions, Dr. Ogle refers to the calculations of his predecessor, Dr. Farr, based upon similar investigations in 1860-1 and 1871, from which it appears that the annual death-rate of medical men aged upwards

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of twenty years was 23·60 in 1860-1, and rose to 24·98 in 1871, whereas it had further increased to 25·49 in 1880-1-2. These death-rates are all corrected for differences in the age-distribution of the profession at the successive periods, each of the rates being calculated on 1000 medical men having the same age-distribution as existed in 1881. The fact of the progressive increase in the mortality of the medical profession between 1861 and 1881 is therefore established. It is to be noted, however, that the increase in 1880-1-2, compared with the earlier periods, is practically confined to the later periods of life, while among medical men under forty-five years of age the rates had generally declined. The increase at all ages is due to the increase at the later ages being greater than the decline at the earlier ages. Dr. Ogle points out that these features of the mortality statistics, the decrease at the earlier and the increase at the later ages, are not peculiar to the medical profession, being common to most of the other professions and industries. These features are discussed at some length in Dr. Ogle's report to the Registrar-General on the mortality of the country in the decennium 1871-80. Contrary, however, to the case of the medical profession, "the lives saved at the earlier ages were in excess of the lives lost at the later ages" in most other occupations, and among the male population generally, independently of occupation. In part explanation of this increase of mortality among the male population of England at the later ages coincidently with a decrease of mortality in the earlier stages of life, it is urged that it is due to the "increased wear and tear of adult life, brought about by the growth of population, and by the keener struggle and competition which this growth necessarily brings with it." In the second place, it is suggested that a certain "number of comparatively weak lives, which in pre-sanitary times would have perished in infancy or childhood, have been preserved, and by their survival may have diminished the average vitality of the population at more advanced ages." Dr. Ogle then passes on to compare the mortality of medical men in 1880-1-2 with that of men engaged in other occupations, and gives a table showing the annual death-rates in those three years in a number of different professions and trades. Each of the rates is calculated for 1000 males, aged upwards of twenty years, with the same age-distribution as the medical profession. The death-rate of medical men is shown to be far in excess of that in other professions. Thus the death-rate is 15·93 in the clerical profession, 20·23 in the legal profession, and 19·90 in the scholastic profession, while in the medical profession it is, as has been stated, 25·53. The rate in the medical profession is not only higher than in any of the other learned professions, but also compares unfavourably with the rates in most other trades and industries, and is indeed "only exceeded by the rates in certain trades and occupations that are notoriously unhealthy." Having established beyond doubt the fact of the marked excess in the mortality of the medical profession, Dr. Ogle proceeds to consider what are the causes to which this excess is attributed, or rather what are the diseases under which it occurs. This information has been derived from copies of the entries in the Death Register relating to the deaths of 3865 medical men during the years 1873-82, forwarded to the General Medical Council in accordance with legislative enactment for the due correction of the Medical Register. Dr. Ogle's information based upon these facts is, as he asserts, unique in character. No similar information unfortunately exists for any other profession or industry. The number of deaths dealt with is fairly large. The deaths were spread over a period of ten years, and they occurred in all parts of the country; they may therefore with full confidence be accepted as a fair sample of the causes of death of medical men. The 25,535 deaths estimated to occur annually among 1,000,000 medical men are therefore assumed to be caused by the various diseases in the proportion shown by the classification of the causes of the 3865 deaths. The result of this distribution gives the annual death-rate per 1,000,000 medical men from each cause of death dealt with. A table is appended giving, side by side with these death-rates from the several causes among medical men, the rates from the same causes among all males in England and Wales, irrespectively of occupation, and duly corrected for differences of age-distribution. The result of this comparison is to show that, with very few exceptions, the mortality of medical men is higher from every disease or group of diseases than is the mortality of males generally. Under some of the headings the "medical mortality is twice, or thrice, or even more times greater than the average." The table gives the comparison for twenty-six headings, in only five of which is the medical death-rate lower than that for all males. It is pointed out, moreover, that only three of these five headings, under which the advantage is on the side of medical men, are of any numerical importance—namely, phthisis, diseases of the respiratory organs, and accident; and, as regards accident, the rate among medical men is really excessive if compared with that among other males, if a small number of highly dangerous occupations, such as mining, quarrying, and sea-fishing, be included. There remain, therefore, only two headings under which the medical mortality is markedly below the general average—namely, diseases of the respiratory organs and phthisis; the medical mortality from diseases of the respiratory organs was 27 per cent., and that of phthisis no less than 45 per cent. below the average for all males. These causes of death are most fatal among those classes of the population liable to destitution, and it is therefore possible that mortality statistics for other sections of the middle or professional classes would show death-rates from phthisis and diseases of the respiratory organs as low as those prevailing among the medical profession. One of the most interesting features in the comparison between the rates of mortality from various diseases in the medical profession and among all males is the contrast presented by small-pox and other zymotic diseases. The annual death-rate from small-pox among all males aged upwards of twenty years is 73 per 1,000,000, whereas in the medical profession it is only 13, showing that although the profession is of course very much more exposed to the risk of infection than any other class of male adults, their mortality is scarcely more than a sixth of the average. The only possible explanation of the fact appears to be the great probability that medical men are more generally and better vaccinated than the rest of the male population. In the case, however, of other infectious diseases "against which no similar prophylactic remedy is known, the comparison gives a very different result. The mortality of medical men from scarlet fever, typhus, diphtheria, enteric fever, malarial fever, and erysipelas is very largely in excess of the average. The excess of mortality from remittent and intermittent fever is attributed to the large proportion of the profession who have served abroad in the army or the navy, or who have practised in India or the colonies. The death-rate from scarlet fever in the medical profession is 59 against an average of 16; from diphtheria, 59 against 14; from enteric fever, 311 against 238; and from erysipelas, 172 against 136. The marked excess in the death-rate from liver diseases, which is 1744 in the medical profession against an average of 744, may, it is suggested, be partly due to the same cause to which is attributed the greater fatality of malarial diseases. It is pointed out, however, that the death-rate from gout is 291 against an average of 78; from diseases of the bladder and prostate, 634 against 287; from other diseases of the urinary system, 1520 against 665; from diabetes, 284 against 108; and from alcoholism, 178 against 130. With regard to these figures Dr. Ogle says: "It becomes difficult to resist the conclusion that the main part of the enormous mortality from hepatic diseases is due, despite the indignant protest of Professor Casper to the contrary, to the neglect by medical men, as a body, of those wise rules of diet which they lay down for the guidance of their patients." The excess of mortality from liver diseases in the medical profession is 134 per cent., and from urinary diseases 128 per cent.; while, on the other hand, the excess from diseases of the organs of circulation is only 41 per cent., and from diseases of the nervous system only 7 per cent. above the rate among the general population. The excess in the death-rates from diabetes and malignant diseases is attributed to the probability that the diseases to which medical men succumb are more correctly diagnosed and more carefully stated in the death certificates. With regard to the death-rate among medical men from accident, it appears certain that if this could be compared with the rate from the same causes among men engaged in other professions and belonging to the middle-class, the accident-rate in the medical profession would show a considerable excess, whereas it is below the average for all males, including those engaged in mining, quarrying, and sea-fishing. The death-rate from suicide is 363 per 1,000,000 among medical men, against an average of 238 for all males; and it is further pointed out that

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the tendency to suicide is increasing in the medical profession, whereas no corresponding increase is shown in the figures for the general male population. In order to facilitate a comparison between the death-rates from suicide in the three principal professions—legal, clerical, and medical—the annual rates were specially calculated for the six years 1878-83; they are given as 128 for the clerical, 354 for the legal, and 464 for the medical professions. The numbers upon which these rates were calculated are comparatively small, but it is urged that the rates, at any rate, conclusively prove that suicide is far more common among the medical than among either of the two other professions. The suicide figures show that medical men, as regards the methods of self-destruction, show a notably preferential choice for poison. In 26 of the 55 cases of suicide among the 3865 deaths of medical men, taken as a sample of the causes of death in the profession, or 47 per cent., death was effected by poison, and it is further noticed that in no less than 14 of these cases of poison prussic acid was the selected agent. In conclusion, it is remarked that the statistics given in the paper prove the fallacy of the ancient belief that "the life of a medical man is, as a rule, longer and healthier than that of other men"; but while the "results of this pitiless test of statistical inquiry are utterly incompatible with that ancient and optimistic view, it is at any rate not unsatisfactory to note that they offer on the whole a much less gloomy view of the condition of the profession than the figures given by former inquirers, such as Prof. Casper and Dr. Escherich."

—Dr. GEORGE JOHNSON said the comparatively few numbers of deaths from small-pox in medical men was a favourable item. Deaths from other infectious diseases were numerous, and this was what one might have expected from the great exposure of medical men to such affections. The reason why the mortality was so high from enteric fever was a question of much importance, and could not be explained on the assumption that the houses of medical men were not in as good a sanitary condition as the generality of people. He thought that the attendance on the poor at their own homes, where medical men had to enter the worst dwellings in London, was the chief way in which they contracted this disease, which would, he thought, be found to fall chiefly on that class of medical men who attended the poor. The great exposure to cold of many country practitioners would probably be one reason for the frequency of urinary diseases, and not alcoholism.—Mr. NOEL HUMPHREYS ventured to offer some remarks on the purely statistical part of the paper. It had been most conclusively shown that the death-rate was much in excess of males generally and of other professions, and also that it was increasing. With regard to the causes of death, he considered that Dr. Ogle's paper made a comparison between medical men and the working classes, which composed the majority of the male population, and this fact prevented the comparison having full weight. The comparison should be made with other members of the middle class. As to phthisis, it had been shown that the mortality was below the general average, but the general male population were more exposed to the weather and to the hardships of poverty than, as a rule, medical men were. He considered that this immunity was due to a class difference, and not peculiar to medical men, but enjoyed by other members of the upper and middle classes. The extent of respiratory diseases bore a direct proportion to the degree of poverty. The greater frequency of liver and digestive diseases was probably to be attributed to the excessive eating and drinking, as well as to want of exercise, and this was probably also a class difference. He regarded Dr. Ogle's paper as a most valuable contribution, especially to class mortality statistics. In the existence of the Medical Register he considered that there were unusual opportunities for constructing a real life-table of medical men.—Mr. NEWBATT, the well-known actuary, criticised Dr. Ogle's paper from the statistical point of view, and doubted whether its results completely disposed of the difficulty. The numbers, he pointed out, were comparatively small, and therefore liable to errors; 15,000 was not a large number to work with, and when these became distributed the results would be still less reliable in each of the sections. They would be required to be received with some little caution. A very slight difference in the mode of grouping would cause a remarkable difference in results; an incorrectness in the statement of the age, even, would make a difference when small numbers were dealt with; these peculiarities were well recognised by students of vital statistics. He was rather startled to hear that the death-rate in the medical profession was excessive, for he believed that most statisticians had arrived at a different conclusion. Dr. Guy, forty years ago, read a series of papers on Longevity in the Learned Professions, and showed that there was little difference between the professions, though even then there was a slight difference in favour of medical men and of the clergy as compared with lawyers. True, these statistics were based on unscientific methods, but as such they were of equal value with Caspar's; yet, as a matter of comparison between the professions themselves, they were of some value. Dr. Ogle's statistics were scientific and original, and could not be compared with data from other professions, because such data did not at present exist.—Dr. C. H. F. ROUTH joined in the discussion.—Dr. J. G. GLOVER doubted whether thirteen deaths from small-pox was a credit to the profession; he considered that there ought to be none, seeing that nurses and attendants on cases of small-pox could protect themselves absolutely from the disease by effective revaccination. Dr. Ogle's statistics showed that the annual death-rate of the profession in England and Wales was about 386 a year, and even doubling this number so as to include Scotland and Ireland, we then had 772 as the waste of the profession; this number, he pointed out, was greatly in contrast with the 1600 given as the annual loss to the profession by Dr. Lyon Playfair. If Dr. Ogle's statistics included deaths of unqualified and unregistered practitioners, that might prove a source of error. The night-work, the irregularity of habits, the wear and tear of medical life, and the want of care that medical men took of their own health, would probably explain partly the excessive mortality.—Dr. C. T. WILLIAMS was surprised that respiratory diseases should prove so comparatively rarely fatal to medical men, seeing the amount of exposure to weather that they experienced. He argued that, as medical men were able to ward off death from respiratory diseases, there was hope that they could do something to reduce their mortality from hepatic and digestive diseases. Could Dr. Ogle give any information as to the relative value of a medical man's life according as he was resident in town or country? The public ought to know of the excessive mortality of their medical attendants, and would probably sympathise with the hardships of their lives; but insurance offices, on learning the information, might be inclined to "rate up" the lives of medical men.—Dr. DOUGLAS POWELL said that Dr. Guy's results were appended in a foot-note to Dr. Ogle's paper.—Dr. OGLE, in reply, said that no doubt the comparison between medical men and the general male population was a faulty one in some respects, but it was the only comparison available. We had at present no means of obtaining the mortality of other learned professions. In reply to Mr. Newbatt, he admitted that he had dealt with a small population, but that could not be helped. He said, however, that the number dealt with for three years would really mean three times 15,000. Still, additional credit might be given to his results, since they coincided with the figures of the census of 1861 and 1871, and so had the additional support of similar results. The only authorities that he had quoted, Caspar and Escherich, gave an even higher mortality than he had obtained. The number of unregistered practitioners included in his statistics would certainly be small, even if there were any, and he did not think that this item could lead to any flaw of appreciable dimensions. He did not enter into the reasons for the deaths from different causes, but simply stated them, and he had no information which would enable him to give an answer to the question put by Dr. Williams.

Mr. HENRY LEE read a paper on the Tapetum Lucidum. The object of the paper was to show that the rays of light from different points which pass through the pupil and impinge upon the tapetum lucidum are reflected again in a concentrated form, as from a concave mirror. In the ox and in the sheep the greater part of the rays so reflected are brought to an ill-defined focus near the mouth. In the dog and the cat the reflected rays are more nearly parallel and are projected forward and downward in a direction nearly parallel with the median plane. In relation to the orbit in the ox and the sheep, the tapetum is principally on the outer side. In the dog and the cat it is principally on the inner side. In relation to the optic nerve, the tapetum in the ox occupies almost exclusively the upper and outer part of the back of the eyeball. In the cat and the dog it is situated above the entrance of the optic nerve, equally to its inner and outer side. In the horse the tapetum

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is very well developed. It extends fully two inches in its transverse diameter when spread out. The vertical diameter is larger on the outer than on the inner side. The reflected rays from the former are directed downward and inward, as in the ox. The rays from the latter are directed more downward and forward, as in the dog and cat. Fish have no tapetum. Birds, supposed to have the longest and keenest vision, have no tapetum. The conclusions arrived at were: That by reflected and concentrated light the tapetum has an illuminating power which enables animals which possess it to see better in the dim twilight than those which have it not; that this power can be utilised only at comparatively short distances; and that the rays of light reflected from the surface of the tapetum are concentrated and directed in accordance with the habits and instincts respectively of different classes of animals.—Mr. W. H. JESSOP said that the tapetum lucidum is situate between the chorio-capillaris and the ground substance of the choroid, so as to be pierced by bloodvessels. There were two kinds of tapeta: the tapetum fibrosum, as seen in the horse and ruminants; and the tapetum cellulosum, as met with in carnivora and seals. Fishes possess in the lamina suprachoroidea a crystalline layer called the argentea, which is from its position not homologous to the tapetum; but in many deep-sea fishes a distinct tapetum exists in addition. Mr. Lee's observation on the position and use of the tapetum was valuable if such a position of the tapetum were found constantly in all animals possessing it. Against the view is the fact that many animals which undoubtedly needed a help of the kind that Mr. Lee supposed the tapetum to give—as bats, mice, and rats—did not possess it. The probability was that in these animals the retina is very sensitive to light, and that in those animals possessing a tapetum the retina is less sensitive. The use of the tapetum was probably to increase the stimulation of the retina in animals whose retinæ were not so sensitive as those who had no tapetum. Animals capable of good vision in a dim light were provided with irides having marked powers of contractility.—Mr. HENRY LEE, in reply, doubted whether deep-sea fishes had a real tapetum; there was very little light at the bottom of the sea, and so no need of black pigment. The tapetum was a distinct membrane from the choroid. The choroid may be coloured, as Hunter showed, but then it was not a true tapetum. He believed the tapetum was only of use for vision at short distances; it was always situate above the entrance of the optic nerve, and collected the dispersed light from the ground or from some near object.—Mr. BRUDENELL CARTER said that the giraffe fed from above, and this might explain why its tapetum was situate below the optic nerve.—Dr. B. O'CONNOR asked what was the microscopic structure of the tapetum.—Mr. JESSOP inquired for the evidence proving that the tapetum was altogether distinct from the choroid.

CLINICAL SOCIETY OF LONDON.

Ununited Fracture of Clavicle, with Symptoms of Writer's Cramp; Resection and Wiring of Fragments; Disappearance of all Symptoms.—A New Symptom of Megrim and Epilepsy.—Chronic Simple Ulcers of Stomach and Duodenum without Symptoms until the occurrence of Perforation.—Complete Recovery from Amaurosis of Malarial Origin.

AN ordinary meeting of this Society was held on the 22nd inst., Dr. W. Cayley, Vice-President, in the chair.

Mr. BARKER read a paper on a case of Ununited Fracture of the Clavicle causing Pressure on the Brachial Plexus and Writer's Cramp, for which excision of the false joint, with wiring of the fragments, was done, perfect union of the bone and complete relief of the nerve symptoms supervening. The patient was a boy aged twelve, perfectly healthy, and with an excellent family history. The right clavicle was found soon after birth to be broken. The labour was natural, and no accident happened to the child. The mother had had a fall on the ice when pregnant three or four months. Up to three years ago the condition gave rise to no inconvenience, though there was free mobility in the false joint which had formed. He then began to complain of pain down the right arm and a sense of weight in it. Two months before admission into University College Hospital he noticed, besides the pain, that his fingers became stiff and fixed over his pencil when writing. The fingers then tended to close, and he could not get them straight without a good deal of rubbing. On admission, the right clavicle was found to be an inch and a half shorter than the left, and the shoulder to be lower on that side. The inner end of the outer fragment dipped under and behind the outer end of the inner. The broken ends were rounded off and freely movable. He was set to copy out a sheet of foolscap, and in the course of a few minutes spasmodic movements were noticed in the hand, and at the end of half an hour his writing was totally illegible, and he could not unclose the hand, while the pain in the arm was severe. Rest in hospital did not give any relief, the result being always the same. A special examination by Dr. G. V. Poore showed "some wasting of the thenar eminence, and mottling of the skin of the right arm, which was also smaller than the left. No abnormalties of sensation were noticed, but the cords of the brachial plexus in the axilla and large nerve-trunks in the arm were found more tender than on the left side. The faradaic current showed reaction in all the muscles except the first right dorsal interosseous, which made no response to a weak current, but gave a good response on the other side." On August 26th, 1885, Mr. Barker raised a semilunar flap of skin and muscle from the clavicle, resected the false joint, and wired the cut surfaces together. All was done antiseptically, and the arm and shoulder were put up in a plaster-of-Paris corset. The wound was not touched for fourteen days, when it was found quite healed without a drop of suppuration; a moist spot remained where a catgut drain had been inserted. The dressings and corset were left on for a fortnight longer, and were then finally removed, the scar being sound and the bone firmly united with callus. Shortly after, he was set to do some writing as before, and all the former symptoms were found to have disappeared. The electrical examination showed a corresponding improvement, and the finger-nails now began to grow normally, a furrow marking the difference before and after operation. Since then the arm has rapidly regained strength, and all the symptoms noted have disappeared; it is now like its fellow in power. The rarity of ununited fractures of the clavicle was illustrated by an examination into the literature of the subject, all the recorded cases being collected. The present case was shown to stand alone, both in the phenomena exhibited and in the treatment and favourable result. The rapid and perfect union of the bones was attributed by the author, in a great measure, to the complete immobilisation of the fragments by the use of the plaster corset.—Dr. G. V. POORE thought that exception might be taken to the description of the nervous disturbances as those of writer's cramp. The case was, however, a good instance of the fact that slight degrees of weakness were best ascertained by the disturbance of delicate muscular actions. The serious disturbance in writing was due to pressure of the bone on the brachial plexus. The tenderness of nerve trunks in the arms was a conspicuous symptom in this case. A tender median nerve was exceedingly common in cases of writer's cramp in Dr. Poore's experience. The diminished irritability to the faradaic current that was noticed in the right first dorsal interosseous, which was the muscle *par excellence* of manual precision, was probably a secondary phenomenon, and due to the great effort that the boy had to make in order to write. The right pectoralis major was less developed than the muscle on the left side. As to trophic changes, there was slight mottling of the skin and slight grooving of the thumb-nail, and the left finger-nails grew very much more rapidly than those of the right. A further interesting point was the complete recovery from all the symptoms after the operation.—Dr. HUGHES BENNETT said he could not but agree with the previous speaker that much confusion arose from using the term "writer's cramp" indiscriminately. Writer's cramp was a peculiar general neurosis that set in as the result of exhaustion due to excessive writing. In Mr. Barker's case the local irritation of the brachial plexus disturbed the powers of writing by the cutting off of cerebral influences from the hand; but it was unlike genuine writer's cramp, which ran a totally different course, and was regarded by some as an incurable disease, though others asserted that by various measures a cure could be effected.—Dr. R. J. GODLEE congratulated Mr. Barker on the success of his surgery. In a conversation with Sir James Paget, that gentleman observed that he had only

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seen two or three cases of non-union of bone dating from birth. Sir Wm. Fergusson had seen one of the cases, and had said there was no chance of obtaining a union; after this opinion Nélaton performed some operation in the same case, with only a temporary success, for the union broke down. In Sir James's second case amputation was resorted to, as all other measures failed. Mr. Godlee had seen one case in a child three years old, in which there was non-union of fracture of both bones of the leg; in this case resection had been performed twice without success.—Mr. A. E. BARKER, in reply, said he would not like to defend the expression "writer's cramp," but had used it for convenience of description.

Dr. ANGEL MONEY read a paper on a New Symptom of Megrim and Epilepsy. The patient in whom the new symptom was noted was a man aged twenty-nine. He had suffered from many of the symptoms that are usually put down under the heading of megrim, such as transient hemiopia, spots and flashes of light, headache with and without nausea, and abnormal tactile sensations. When about eleven years old he used to faint with a queer sensation at the epigastrium. The new symptom consisted in an apparent momentary lengthening of a written or printed word during reading, caused by a reduplication of one or more of the letters in the word. The patient observed that this annoying symptom was most frequent when the flashes of light were most troublesome. Another noteworthy fact in connexion with his visual organs was the long persistence of negative images, a condition which was not always present, but only at the times when he felt "bilious." There had never been convulsions or motor spasm of any kind; nor, with the exception above mentioned, has he ever lost consciousness. At times the patient was troubled with a ringing noise apparently in his right ear; he was, however, distinctly though not very deaf on the right side. Reflecting on this symptom of apparent lengthening of a word, it occurred to Dr. Angel Money to ask his patient whether he ever experienced a similar alteration in the length of spoken words. This was answered in the negative. There was no weakness of any ocular muscle, and only a trifling degree of myopia. The author remarked that there were many ways of interpreting this symptom. He did not think there was any fraud, or reasonable doubt that the symptom was a real one. Was it due to some transient disturbance in the muscular mechanism of the eyes? The author thought this supposition not at all improbable. But he considered that, theoretically, it must not be overlooked that we might have to do with a symptom belonging to what may turn out to be an altogether new field of sensory nervous symptoms, by which he meant a group of symptoms which might best be designated as "reduplicated sensory nervous actions." If the patient be right in his opinion that one of the letters of a word is doubled in the apparent lengthening, then it would not be at all absurd to regard the phenomenon as due to the reduplication of a nervous discharge in the visual word centre.—Dr. STEPHEN MACKENZIE said he did not gather whether the phenomena occurred whilst the patient was writing or at other times also. He had observed a similar thing in some cases of aphasia, in which there was a doubling or more frequent repetition of a sound, the phenomenon being known as "barrel-organism." The portion of the brain involved in the mechanism would be readily indicated if the phenomena described by Dr. Money were of this nature.—Dr. B. O'CONNOR said that he had observed something of a similar kind in a printer with whom he had considerable difficulty in the matter of correcting proofs. He thought such symptoms were not of infrequent occurrence in cerebral affections. Half a line may seem to some nervous people to be absent in reading. He did not know whether it was not a case of obtrusive observation of symptoms which at other times passed unnoticed.—Dr. ANGEL MONEY, in reply, said the phenomenon was purely subjective, occurring to the patient only during reading.

Dr. SAMUEL WEST read a paper on Chronic Simple Ulcers of Stomach and Duodenum without Symptoms until the occurrence of Perforation. Hannah A——, aged forty-eight, while eating, was seized with sudden severe pain in the epigastrium, which continued until her admission into hospital a month later. She had vomited, but food produced neither pain nor sickness. She had rapidly lost flesh and strength, and had recently perspired at night, and for a few days had had a cough which caused her pain in the right side and back. She had been all the time confined to bed, and a bedsore was found upon the right buttock a fortnight before admission. Though she had been losing strength lately, there was no history of any ailment before the present illness. There had never been any pain or discomfort after food. The patient looked very ill. The respiration was 46, shallow, with some general rhonchus; the pulse was 120; the temperature was 99°: the urine contained a trace of albumen; the liver was uniformly enlarged. Some tenderness was noted above the umbilicus and towards the right hypochondrium. There was no ascites, but some œdema of legs. Two days after admission, she passed with a stool about six ounces of dark blood, and also on the two following days. She rapidly became weaker, and died on the fifth day after admission. At the necropsy some old chronic pleurisy and pericarditis was shown to have existed. The liver was enlarged, with a superficial abscess between it and the abdominal walls. This abscess had two openings—one leading from the duodenum, and due to perforation of an old ulcer; the second into the colon, probably accounting for the hæmorrhage. Another large chronic ulcer was found upon the lesser curvature of the stomach, which had also perforated, and led into a cavity with thick fibroid walls, the base of which was formed by the liver. The two ulcers were of very old date, the symptoms being produced by the perforation of the duodenal ulcer and the formation of the abscess. Two points were noteworthy—1, the extent and duration of the ulcers without symptoms; 2, the lowness of the temperature in spite of active suppuration.—Dr. CAYLEY related the case of a healthy working man who died two days after admission to hospital. There was an ulcer of the duodenum that had burst into the peritoneal cavity. The man was certainly in the best of health till the onset of the perforative peritonitis.—Mr. TAYLER narrated the case of a servant, an anæmic girl aged twenty, who had no symptoms of gastric disease, and died very suddenly from an ulcer of the stomach that had perforated.—Dr. S. WEST remarked on the lowness of temperature in his case, notwithstanding the occurrence of suppuration.—Dr. S. MACKENZIE alluded to a paper in THE LANCET (vol. ii., 1885). In the fatal cases of gastric ulcer that occurred at the London Hospital for a period of ten years not one was recorded as without symptoms. But in 1874 Dr. Mackenzie met with such a case, in which death occurred in two days from the onset of symptoms of perforation.—Dr. F. J. GOODHART considered that cases of ulcer of the duodenum were in a different category from those of gastric ulcer. Duodenal ulcers were not very common, and probably owned the same pathology as gastric ulcers.—Mr. R. J. GODLEE referred to the case of a man who had a tumour in the femoral region that contained peritoneal fluid. The man was supposed to be suffering from lead colic. The hernial sac was found to contain highly offensive purulent fluid. The case did not progress satisfactorily, and the patient died with swelling of the parotid. An ulcer was found in the second part of the duodenum.—Dr. S. WEST felt quite certain that there was not even anything that could be called dyspeptic in his case. He had known a case of duodenal ulceration to be attended with considerable symptoms.

Mr. BRUDENELL CARTER read a case of Recovery of Vision after Amaurosis consecutive to Malarial Fever. The patient was a gentleman about thirty-five years of age, who was chief of the police in a West Indian colony. He came to the author on July 15th, 1884, his vision being then reduced to little more than qualitative perception of light. His history was that, in November, 1883, after very fatiguing duty in unhealthy parts of the colony, he was seized with a fever of malarial origin and malignant type, which nearly proved fatal. When he had otherwise fairly entered upon convalescence, his pupils remained widely dilated and insensitive to light, and it was observed that he had to feel for a feeding-cup or other object which was offered to him—a condition from which he made no advance. Mr. Carter found the optic nerves very white, as if from atrophy, and the larger vessels lifted up in bold curves as they crossed the margin of the disc, showing that the atrophy was consecutive to pre-existing swelling. The ophthalmoscope also showed hypermetropia 4 D, with some astigmatism. There could be no doubt that the fever had been attended by optic neuritis, probably connected with meningeal trouble, and that vision was being destroyed by the contraction of effused material. Notwithstanding the unfavourable prospects of the case, the author determined to carry out the plan of treatment which he had several years ago laid down as

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appropriate for similar conditions—namely, to endeavour to promote the absorption of effused material by mercury and iodide of potassium, and to stimulate the nutrition of the optic nerves by strychnia. The patient wished to take up his temporary residence in Birmingham, and Mr. Carter had the good fortune to obtain the co-operation of Mr. Bartleet in carrying out the necessary measures. Perchloride of mercury and iodide of potassium were administered by the mouth, in moderate doses; and sulphate of strychnia hypodermically, in doses which commenced with one-sixtieth of a grain, and were gradually increased to as much as one-seventh, when the injections were followed by stiffness and rigidity of the muscles of the legs, and the dose was necessarily reduced. On Aug. 4th, or rather more than a fortnight after the commencement of the treatment, the patient reported that although he could not see to read or write, he thought he had improved in sight as far as concerned general objects, and he was thereupon encouraged to persevere. In another month the improvement was no longer doubtful, and after five months of treatment, in December, 1884, the error of refraction being corrected by suitable glasses, he was found to have one-third of normal vision, and to be able to read No. 6 of Jaeger in the hand. On Jan. 10th, 1885, Mr. Carter received a letter from him in perfectly good and legible handwriting, except that the lines were uneven and irregular. In this letter he said, "Will reading the newspaper by gas-light hurt my eyes? After reading a little time the words appear as if coming out of a fog, if I may so describe it, and occasionally a sort of flash of colours (similar to colours which appear on cut glass when the sun shines upon it) comes before my eyes. It is, however, a great comfort to be able to read at all." By March 20th, 1885, his vision had increased to one-half, and he read No. 2 of Jaeger. By July 21st vision had reached two-thirds, and in another month it was normal, and No. 1 of Jaeger was read easily. The patient was not conscious of any remaining impairment, except that he saw badly on coming from a stronger light into a weaker one, as if the retina required a decided stimulus. At this time the optic nerves were still pale, but many small vessels, previously invisible, were to be seen upon their surfaces. The patient wrote in even lines, and in the following month he returned to his official duties. At a somewhat late stage in the course of the treatment it became necessary to relinquish the hypodermic injections, in consequence of every puncture having for some time past become the seat of painful inflammatory swelling; and, from thenceforward, the strychnia was given by the mouth, alternately with mercury and iodide. The author remarked upon the great perseverance of the patient, and bore grateful testimony to the way in which he had been assisted and supported by Mr. Bartleet.—Dr. S. MACKENZIE said that in this country cases of malaria were not accompanied by optic neuritis, but in countries where malaria was both frequent and severe optic neuritis was more common, as Dr. Hammond had pointed out. The value of treatment by iodide of potassium was to be witnessed even in cases of cerebral tumour, where the optic neuritis could be seen to subside, though the patient died from the effects of the tumour. He inquired with what object strychnia was given subcutaneously, and asked why it might not have been combined with the other medicines. It was rare to meet with cases of optic neuritis, in which the deterioration of sight was so great as in Mr. Carter's case, that improved so markedly by treatment.—Dr. J. ANDERSON inquired for a history of syphilis, and also as to the state of the optic discs when the patient was last seen.—Dr. S. COUPLAND mentioned the case of optic neuritis that Mr. Henry Jones had so greatly relieved by a course of mercury.—Mr. B. CARTER, in reply, said that by employing the hypodermic method of administration of strychnia he obtained more trustworthy results than by administration by the mouth. The patient was a gentleman of high official position, and of decorous conduct and wholesome life, and there was no history of syphilis. The patient had suffered from ocular troubles due to hypermetropia, and was a moderate smoker. The optic discs were still pale when last seen, and the small vessels were reappearing. Mr. Carter believed that strychnia acted as a stimulant to the nutrition of the optic nerves.

The following living specimens were shown:—Dr. Stephen Mackenzie: A case of Elephantiasis of the Leg. Mr. R. W. Parker: Congenital Tumour in Lumbo-sacral Region, containing Bone. Mr. A. E. Barker also showed the boy whose case he narrated.

MEDICAL SOCIETY OF LONDON.

Theory of Fever.—Pyæmia after removal of Sarcoma from Base of Skull; recovery.

AN ordinary meeting of this Society was held on Monday last, Dr. W. M. Ord, President, in the chair.

Dr. THUDICHUM read a most elaborate and abstruse paper on the Theory of the Febrile Process, its accompanying Chemical Changes, and the Modes in which it produces Immunity from further Attacks and Death. He believes that an alteration in the atomic volume of bodies is a considerable factor in the development of heat. In febrile processes the atomic volume appears to undergo contraction with the appearance of free heat. Immunity from further synochal disease is to be explained also on the same assumption, for the atomic volume of the tissues remains more or less permanently diminished in dimensions. Speaking of the mode of death in fever, Dr. Thudichum considered that death was sometimes to be explained on the assumption of a coagulation of certain complex chemical bodies called phosphatides, and resembling, though not identical with, phosphates. Amidomyelin, one of these complex bodies derived from brain-substance, has the property of passing into the solid state by the application of a fever heat, say about 40° C. or 104° F. In certain frigid conditions, such as pertained in cholera, a fluidification of colloids took place, with the necessary production of cold. Dr. Thudichum considers therefore that pyrexia is due not only to excessive oxidation or abnormal accumulation, but also to some peculiar molecular alteration of the tissues, which, indeed, would appear to be in his theory the most important factor in showing us how it was that fever conferred immunity from further attacks of the same fever, and even, according to the author, immunity to a less degree from all fevers. Vaccination, Dr. Thudichum suggests, may not only prevent the development of small-pox, but even render the body less liable to become the seat of other acute specific fevers.

Mr. WALTER PYE read a paper on a case of Removal of Sarcoma of the Base of the Skull followed by Pyæmia, but ending in recovery. A male patient aged sixteen was admitted into St. Mary's Hospital on June 22nd, 1885. Bleeding from the throat and left nostril for eighteen months was the chief symptom. A growth behind the soft palate blocked the left nostril, interfered with deglutition, and caused several alarming attacks of dyspnœa. Preliminary tracheotomy was performed on June 24th, and the pharynx having been plugged, the soft palate was divided in the middle line; the tumour was then found to have wide connexions with the basilar process of the occipital bone, and possibly to the atlas. A stout cord of twisted wire was used to cut through the broad base of the tumour by means of a large screw écraseur, which was manipulated through the nostril. One hour and a half was spent in dividing the tumour, which was exceedingly vascular. The hæmorrhage was checked by ice. The patient left the hospital apparently well twenty-six days after the operation. The tumour was a myxosarcoma. Ten days after his discharge he was readmitted with a temperature of 105·4°, with pain in the shoulders, knees, wrists, and one ankle. His illness resembled an acute attack of rheumatic fever rather than a pyæmia. The patient remained very ill for two months and a half. The joints remained swollen and became purulent when they were opened, discharging thin curdy pus. A large ulcer formed in the muscles of the right thigh, and another in the gluteal region. Abscesses appeared and disappeared till the end of October, since when he has made a slow but steady recovery. The unusual nature of the operation, its successful issue, and the possible connexion between the operation and the pyæmia, were made the subject of remarks. The employment and manipulation of the écraseur through the nostril was the only practicable method of operation in the case in question. Mr. Pye considered the subsequent illness as of a pyæmic nature.—Dr. THUDICHUM had had two cases in which he had operated; bleeding was very severe, but was controlled by the galvano-cautery and perchloride of iron.—Dr. KINGSTON FOWLER asked what the microscopical nature of the tumour was, and whether the spleen or liver was enlarged.—Mr. W. PYE replied that there was no visceral enlargement; the growth was a myxosarcoma. He should not have used perchloride of iron in his case.

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HARVEIAN SOCIETY.

Annual Meeting and Conversazione.

THE annual meeting of this Society was held on Jan. 21st, at the Stafford Rooms, Titchborne-street, Edgware-road, and was largely attended. The business of the evening included the adoption of the report of the Council, and the election of officers for the ensuing year, of which the following is a list:—President: *J. Hughlings-Jackson, M.D., F.R.S. Vice-Presidents: Malcolm Morris, Esq.; Charles Vasey, Esq.; *T. Bryant, Esq.; *J. Cavafy, M.D. Treasurer: Thomas Buzzard, M.D. Honorary Secretaries: J. Ernest Lane, Esq., *E. Clifford Beale, M.B. Council: G. C. Field, Esq., F. Otley Lovell, Esq.; P. Kirkpatrick Picard, M.D.; W. H. Platt, Esq.; Henry Power, Esq.; T. Gilbart Smith, M.D.; John Williams, M.D.; *J. S. Brookfield, M.D.; *Arthur W. Edis, M.D.; *W. Ewart, M.D.; *T. Morton, M.D.; *H. W. Page, Esq. (An asterisk is prefixed to the names of those gentlemen who did not hold the same office the preceding year.) The thanks of the Society were voted to the members of the Council on the motion of Mr. Adams, seconded by Mr. Bartleet; Mr. Vasey replied. A vote of thanks to the Treasurer was proposed by Mr. Adams Frost, seconded by Mr. Noble Smith, and acknowledged by Dr. Buzzard. Dr. Sansom, seconded by Dr. Felce, proposed a vote of thanks to the Secretaries, to which Dr. Ewart replied. The vote of thanks to the retiring President, Dr. T. Morton, proposed by Dr. Buzzard and seconded by Dr. Davson, was carried by acclamation. In his reply, Dr. Morton congratulated the Society upon its increasing prosperity and usefulness. After a brief review of the work of the past year he proceeded to deliver the annual address. The subject was one of wide and practical interest—the Relation of Public Morals to the Public Health,—and was eloquently treated by the orator, who concluded amidst the applause of the meeting. The new President, Dr. Hughlings Jackson, took the chair vacated by Dr. Morton, and, having accorded to the latter the thanks of the Society for the address to which they had listened, declared the conversazione open. The room was tastefully decorated, and contained many objects of interest lent by members and their friends. Music had been provided, but Mr. Lazarus kindly added two solos on the clarionet to the programme which had been announced, and gave the audience a musical treat, which possessed the additional charm of being a surprise.

CAMBRIDGE MEDICAL SOCIETY.

Disease of Finger-nails.—Faith-healing.—An unusual case of Broken Neck.

AT a meeting of this Society held on December 4th, 1885, Professor Humphry, M.D., F.R.S., in the chair,

Mr. LAURENCE HUMPHRY showed a patient, aged fifty-three, a married woman, suffering from a peculiar Disease of the Finger-nails. All the nails of both hands were attacked with very accurate symmetry, but not the feet. The nail was opaque, thickened and heaped up, the edges and surface broken up, irregular, and filled with dirt. The patient described it as commencing under the free edge of the nail, and then working round to the root, the nail becoming black, split up, and finally coming off. It was accompanied by a hot itching sensation, and tingling and numbness down the sides of the fingers. There was no skin eruption, or soreness by the side of the nail. Her history gave no evidence of gout or syphilis. Mr. Laurence Humphry referred to Plate 17 of Hebra's Atlas of Skin Diseases, where a similar condition was figured, and described in the catalogue as "Chronic General Onychitis."

Mr. HODGSON (Bishop Stortford) related two cases of Recovery from Empyema, in which the aspirator had been used; and a case of Pleurisy with an unusually large serous effusion, which had been treated in the same way.—A discussion followed, in which Dr. Paget, Mr. Carter, Mr. Laurence Humphry, and others took part.

Dr. RANSOM read the notes of a case of so-called Faith-healing. A married woman, about forty-five years old, in comfortable circumstances, was operated on in January, 1882, for cancer of the breast. She made a good recovery but the disease returned in the cicatrix some twenty months later, and also in the other breast and abdominal organs. Her health and strength gave way, and she became much depressed, and ceased to carry on her ordinary duties in the household. After a while she was induced by her friends to try the system of "faith-healing," but after studying the books and letters published by its advocates she could arrive at no decision for some time, till one day in June, 1885, she sent to Dr. Ransom and told him she was well, that the pain was gone, and that she was going to London to join the faith-healing sect. From June until September she went about proclaiming herself cured, and that her faith had made her whole. She gained flesh and strength, became cheerful, and resumed her household duties. In September, however, she sent for Dr. Ransom, being attacked with peritonitis, and she expressed the greatest disappointment at finding that she was not so well, and saying that she had fully believed herself to be cured. Dr. Ransom said that this was a remarkable illustration of the power of mind over matter. That she really did believe in her own cure was obvious, for otherwise how was it possible to explain the remarkable change not only in her mental but in her physical condition, her freedom from pain, and renewed bodily activity? She was not influenced by personal contact, but by studying the subject and by prayer.

Mr. FRANCIS was able, through the kindness of Mr. Carver, under whose care the patient was, to bring forward a somewhat unusual case of Broken Neck. The patient, aged fifty, was admitted into Addenbrooke's Hospital on October 8th, 1885. He had fallen backwards off a ladder, a distance of twenty feet, striking the upper and back part of his head against a plank. He was unconscious for a few minutes, and on recovering his senses was found to have lost the use of his limbs. He lay in bed with his head thrown slightly back and fixed by muscular effort in the middle line, rotation causing pain. He had perfect control over his sphincters, and his pupils were equal. Paralysis was complete in both upper limbs and the left lower limb, and there was slight loss of sensation. Examination of the spine revealed no evidence of displacement, nor was there any pain in the cervical region, but he complained of pain about the third and fourth dorsal spines. Pulse 80; temperature 97°. Urine acid; no albumen. For a month he made steady progress, had regained much power in his limbs, and the anæsthesia had disappeared. His head still remained fixed, and he was much troubled with constipation. On November 4th, there was a sudden change for the worse; the temperature was considerably raised, and suppuration manifested itself; profuse acid sweats, and acute migratory pains and tenderness in the joints succeeded, and finally effusion took place into the right knee-joint. He became delirious at night, and suffered from constant pain at the back of the neck. The paralytic symptoms returned and in four days was complete, and he lost control over his sphincters; bedsores rapidly developed, and he died thirty-seven days after the accident. At the necropsy small collections of pus were found between the muscles of the neck. The posterior part of the ring of the atlas was broken off and was freely movable; the line of fracture on both sides passed just behind the groove on the vertebral artery. The axis was also fractured, but the fragments were not movable on one another, the line of fracture passing through the posterior part of the atlanto-axial articular surfaces, between the pedicles and the body of the vertebra, the arch being separated from the body. There was no displacement, and no sign of repair. There was no evidence of hæmorrhage or pus within the meninges, and no signs of pressure on the cord or injury to the medulla. The heart and lungs were natural.

HEALTH LECTURES.—Sir Andrew Clark, Bart., F.R.S., Lord Randolph Churchill, Sir Frederick Pollock, Bart., and other influential friends of health, have, we understand, promised to take part in a comprehensive course of Health Lectures organised by the National Health Society, to commence on the 29th inst., at the Public Baths, Queen's-road, Bayswater. One novel feature to be introduced, with a view to enforcing the Society's motto, "Prevention is better than cure," is a simple description of the causes of disease and the way to avoid them. The lectures will begin at 8 P.M., in order to allow those engaged during the day to attend.

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Reviews and Notices of Books.

A Practical Treatise on Fractures and Dislocations. By FRANK HASTINGS HAMILTON, A.B., A.M., M.D., LL.D., late Professor of Surgery in Bellevue Hospital Medical College, and Surgeon to Bellevue Hospital, New York, &c. Seventh American Edition, revised and improved. Illustrated with 379 Woodcuts. London: Smith, Elder, and Co. 1884.

Fractures and Dislocations. By T. PICKERING PICK, F.R.C.S., Surgeon to and Lecturer on Surgery at St. George's Hospital, Member of the Court of Examiners, Royal College of Surgeons of England. Illustrated with 93 Engravings. London: Cassell and Co., Limited. 1885.

ALTHOUGH dealing with the same subjects, and treating of them in a very closely similar order, these two books are by no means alike in design and worth. Dr. Hamilton's work on fractures and dislocations is one of the modern surgical classics which presented when published the only treatise on this subject in the English language which was at all complete. It was then the result of very extended literary research and much practical observation, and, as edition after edition has been called for, its distinguished author has with unstinted labour endeavoured to incorporate into it the results of the work and observations of other surgeons, and to make it as far as possible an exhaustive treatise on this important branch of surgery. And though, in view of the progressive nature of our science and art, it is certain that finality has not been reached, yet it is impossible for a reader of Dr. Hamilton's work not to be impressed with the great amount of labour and care he has bestowed upon it, or to be unconscious of the conspicuous value and merit of the volume, which is, and will probably long remain, the standard treatise on fractures and dislocations in the English tongue.

Mr. Pick's book is one of Messrs. Cassell and Co.'s clinical manuals—an unpretentious volume of 500 small pages, in which the author has sought to present to his readers a "concise and practical treatise of the causes of the various fractures and dislocations, the signs by which they may be recognised, and the appropriate treatment to be adopted for their cure." We believe that candid readers of the volume will feel that in this Mr. Pick has succeeded. The description of these injuries is in all cases clear, although brief, and the subject is everywhere presented in a practical manner. The scope of the work has rendered it necessary that it should be dogmatic to a certain extent, but throughout opposing views are dealt with in a broad and liberal manner. This is by no means a drawback, for the readers of such a manual seek for guidance from the writer's own experience. We can therefore commend Mr. Pick's work highly. At the same time, it is open to question how far the work meets any felt want, and how far it owes its production to the determination of Messrs. Cassell and Co. to publish a series of clinical manuals, which would not be complete without one devoted to fractures and dislocations. We find, for instance, that in the last edition of Erichsen's Surgery almost as much space is devoted to this subject as the whole of Mr. Pick's manual, and the discussion of it is nearly as full; so that a reader of the larger work would have no need to supplement his knowledge by consulting this special manual. Good as the work is, it is therefore open to doubt how far the publishers' anticipation of its success will be realised.

The order in which the subjects are discussed in the two works under review is so closely alike that it might almost appear that one was borrowed from the other, were it not evident that the subject hardly admits of any other order of discussion; and it is quite apparent that Mr. Pick has in no way derived more from Dr. Hamilton than any writer must who avails himself of the latter's elaborate treatise. It is interesting to note how one or two points that are much discussed are dealt with by the two authors. Thus, with regard to the immediate treatment of fractures by the application of immovable apparatus such as a plaster-of-Paris casing, Dr. Hamilton says: "The immovable apparatus, of whatever materials constructed, is under some circumstances a very simple, safe, and efficient dressing, while under other circumstances it is, as we think, eminently unsafe and inefficient. ..... Whatever its advocates may say to the contrary, the simple fact is before us that the number of accidents resulting from this practice is out of all proportion with any other yet introduced." He further on specifies the cases for which he considers it safe or unsafe. Mr. Pick says: "In the majority of fractures, however, we shall, I think, be best consulting the welfare and interests of our patient by not applying the immovable apparatus until after the subsidence of all swelling." In reference to the treatment of compound fractures, when the wound is of such a nature that its union by "primary adhesion" is not to be expected, Mr. Pick says: "Under these circumstances there is no plan of treatment which will give such favourable results as the antiseptic treatment of Sir Joseph Lister." Dr. Hamilton is, however, "far from being convinced that, in the case of compound fractures or of other wounds," the Listerian treatment "is capable of doing all that is claimed for it..... In short, if the method of Mr. Lister has any advantages—and it no doubt has,—these advantages consist in the continuous application of a mild stimulating lotion, &c., and not, as has been taught by some surgeons, exclusively, or even mainly, in the employment of an antiseptic." Most of our readers will agree that the English author has expressed a sounder estimate of the value of antiseptic surgery in the treatment of compound fractures than his American *confrère*. Nor is the reason far to seek, for Dr. Hamilton's description of the Listerian dressing scarcely bears evidence of a thorough familiarity with its precise details. After noting this divergence of views we will quote Dr. Hamilton's opinion on the use of a metallic suture for primary simple fracture of the patella. After quoting many opinions adverse to this procedure, he says: "To the testimony thus accumulated against this operation I wish to add my own—that it is offering a very grave and dangerous substitute for others perfectly safe, and, so far as is yet proven, equally efficient methods; it is hazarding the life of the patient without offering any equivalent." Mr. Pick says: "I would not consent to have this operation performed on myself, and I do not, therefore, feel justified in recommending it to my patients." From this view very few surgeons either in Europe or America will now dissent.

We have been disappointed in not finding a notice in Hamilton's work of fracture of the shaft of the femur by torsion; and his account of subastragaloid dislocations of the foot is far from complete and singularly out of proportion with the long descriptions of dislocations of the astragalus.

OUR LIBRARY TABLE.

Manuel des Injections Sous-cutanées. Par MM. BOURNEVILLE et BRICON. 2e Edition. 1885.—*Manuel de Technique des Autopsies.* Par MM. BOURNEVILLE et BRICON. Paris: Delahaye et Lecrosnier. 1885.—These two compact and handy little books belong to the series of *Publications du Progrès Médical*, and have been compiled with a care and completeness that must render them of considerable utility. The manual on subcutaneous injections opens with a description of methods, instruments, precautions, &c., and then deals in turn with every drug that has been at one time or another prescribed for administration in this manner, the authors prudently refraining from endorsing many of these medicaments

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with their personal recommendation. The alphabetical arrangement of the articles greatly facilitates reference, and we have no hesitation in commending the book to notice. The other manual deals with its subject in two parts; the first being devoted to a recital of the regulations for post-mortem examinations in France and abroad, and a comparison of the facilities afforded, with many other details of administration, means for instruction, &c.; whilst the second part is that which gives the title to the work, the several stages of a complete autopsy being fully detailed. As may be expected, preference is given to the method of examining the brain by vertical sections, and reproduction of Pitres' well-known figures illustrate this portion of the work. The plans of pathological institutes of the best and completest type are appended. The authors do not seem to have inquired much into the practice of British institutions (with the exception of Edinburgh), but they contribute some interesting information upon various continental institutes—viz., as to post-mortem examinations being compulsory or not; and we cannot forbear quoting the following statement: "A Edinbourg, l'autopsie n'est pas obligatoire, les parents et les amis peuvent s'y opposer. Les Catholiques s'opposent généralement à l'autopsie, mais cette opposition peut-être levée par le prêtre à la demande du médecin." We learn also that in Paris and in some other continental cities post-mortem examinations are forbidden upon members of the Jewish community; and the facts on this head and others have evidently been collected with the laudable desire to get rid of certain restrictions which obtain in Paris.

University College Hospital and St. Bartholomew's Hospital Reports.—The first of these volumes deals with the surgical and medical cases that have been treated in the hospital during the year 1884. It is without exception the most complete and detailed report that has ever been issued from this hospital. The labour which has evidently been spent in its production reflects great credit on its chief author, Mr. Bilton Pollard. The medical cases at this hospital, as at so many other institutions, are given simply statistically. We think this is to be regretted. The surgeons at University College must feel the value of so exhaustive a guide to the surgical work of the past year. Such a report as the one before us practically does away with the necessity of referring to the case-books, for all the important and interesting cases are carefully recorded in detail. Considerable judgment has been exercised by the author in the selection of cases for detailed treatment. The labour attendant upon the production of hospital reports is so great that by common consent criticism has always been of the most tender description, though there has often been room for it. Mr. Bilton Pollard's report, however, would stand the test of severe criticism.—The report of St. Bartholomew's Hospital consists of statistical tables of the patients under treatment during 1884. Its scope is not the same as that of University College Hospital, still a large amount of information has been brought together by its authors, Dr. S. West and Mr. A. A. Bowlby. In the surgical appendix we observe that there were three cases of varicella gangrenosa and three of hydrophobia. Several of the more interesting cases have been reported in the journals and at the Societies.

Handbuch der Physiologischen Optik. Von H. von HELMHOLTZ. Zweite Auflage. Erste Lieferung. Leipzig: Leopold Voss. 1885.—The first edition of this valuable work in the original [illegible] has long been exhausted, and even the French [illegible] has become exceedingly rare; it is therefore with great pleasure that we welcome the first instalment of the second edition. The author states in his preface that he has himself been unable to verify all the more important facts given, as he had the time and ability to do for the first edition; but he has endeavoured to incorporate all the essential points of progress that have accumulated in the course of the last twenty years. He has thus been enabled to make many of his former statements more clear, and to corroborate them by recently ascertained facts when they required support. Many of the illustrations have been replaced by newer and better ones. The present part, extending to eighty pages, is chiefly occupied with the anatomy of the eye. The ophthalmometer is described, and an account given of the mode of ascertaining the precise curvature of the cornea. The remainder is occupied with the commencement of the subject of physiological optics.

Histoire du Choléra aux Indes Orientales avant 1817. Par J. SEMMELINK. Utrecht: C. H. E. Breijer.—Dr. Semmelink, who was formerly principal medical officer to the army in the Dutch eastern possessions, has compiled an interesting work on the history of cholera in the East prior to 1817. Much of the work had been done before, and the author quotes largely from many English physicians and surgeons who had studied and written on the same subject. Dr. Semmelink holds to the view that Asiatic cholera had existed from time immemorial in what now constitutes British India, and that it was only in 1817 that it quitted its normal abode to spread into Asia and subsequently into other parts of the world. The work, which does not profess to be much more than a compilation, dives into the most ancient literature relating to the subject, and will be useful as a book of reference to all who are interested in the history of cholera.

Under the Red Crescent; or, Ambulance Adventures in the Russo-Turkish War of 1877-78. By R. B. MACPHERSON. pp. 213. London: Hamilton, Adams, and Co. 1885.—This volume gives a very readable account of the scenes through which Mr. Macpherson passed during a service of about five months as surgeon with the Red Crescent Ambulance in Bulgaria in 1877-78, and the hardships which the medical officers endured. His description of the treatment they received from the Russians when taken prisoners by them at Sofia is anything but flattering to the officers of that army. The personal adventures of the author form the chief subject of the book, and no details are given of the professional work done by the medical staff of the ambulance.

Hints on the Use and Handling of Firearms. By Lieut. H. O. CURLING. pp. 42. London: Dulau and Co. 1885.—A study of this little work, and compliance with the instructions given in it with regard to the handling of firearms, would undoubtedly have a beneficial effect in reducing the number of accidents which unfortunately result so frequently from ignorance and carelessness. The necessary precautions are clearly laid down and easily carried out.

New Inventions.

THE ELECTRIC LIGHT APPLIED TO THE OPHTHALMOSCOPE.

THE incandescent form of electric light is so convenient in many ways, that it is not surprising to find it has been adapted to sundry medical instruments. To adapt it to the ophthalmoscope I finally decided upon the following plan—viz., to fix a small incandescent Swan lamp close to the oblique mirror of an ophthalmoscope, arranged in such a way that the light from the lamp should be reflected to a focus in a direct line with the sight-hole, so that the brightest illumination should always be exactly in front of the sight-hole. As the lamp is fixed to the ophthalmoscope and moved with it, it follows that the relation of the illuminated spot and the sight-hole never varies. For helping me to carry out this idea into detail I am

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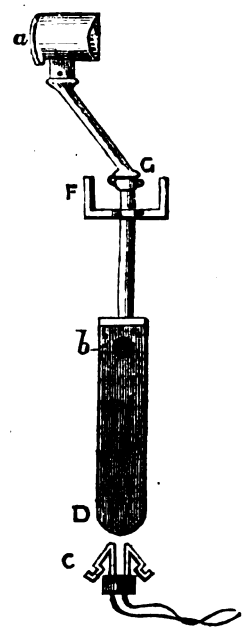
much indebted to the skill of Mr. Panton, of the firm of Messrs. Pickard and Curry. The electric lamp and handle I have had adapted to Morton's ophthalmoscope, but such an arrangement could be adapted to any ophthalmoscope.

The construction of the instrument is simple, as can be seen by a glance at the accompanying woodcut. Fig. 2 shows the small cap (*a*) which encloses the Swan lamp. The cap is silvered on the inside with a reflector, seen shaded dark in Fig. 1. The Swan lamp is in the middle of the cap, and in front is a small bull's-eye lens which concentrates the light on the mirror. This cap is covered externally with wood, so as to insulate the heat from the lamp, which becomes hot if kept at full incandescence for ten or fifteen minutes. The Swan lamp is so fixed as to be easily removed and replaced by another, in case of any damage. The wires from the lamp are carried down within the handle, and entirely concealed from view. Contact with the battery is made by pushing a little contrivance (C) into the end of the handle (D). It holds by the little notch seen on each side (*e*). It can be at once detached by pressing the two little projections at the side seen at *e*, Fig. 1. This avoids the delay and inconvenience of

FIG. 1.



FIG. 2.



having to screw and unscrew the connexions. Any of the flexible conductors may be used to make contact with the battery. The button (*b*, Fig. 2) enables the surgeon to turn the light on or off, as desired. In Fig. 2 (F) is shown the means for fastening the handle with the electric lamp to the ophthalmoscope. The two pins slip into two spring clips added to Morton's ophthalmoscope. A collar (G, Fig. 2) enables the handle to be rotated, and thus the lamp can be turned to the right or to the left side of the mirror, so as to suit the examination of the right or left eye of a patient. A small catch (G) stops the rotation when the lamp is in proper position. This is the whole arrangement about the lamp. The only additions I have made to Morton's ophthalmoscope are the two clips already mentioned, and an oblique mirror of short focus, with a sight-hole oval laterally. This mirror fits into the clip, where the larger mirror of the ophthalmoscope is placed. This smaller mirror is set so that it lies at an angle of 45° to the plane of the ophthalmoscope. Thus, when the lamp is fixed at the side thereof, parallel to the plane of the ophthalmoscope, it follows that the light is focussed exactly in a line with the sight-hole. Fig. 1 shows the instrument adjusted for examination of a patient's left eye, since it is convenient to have the lamp to the outer side of the eye under examination, otherwise the patient's nose would come in its way. To adjust it for examining the patient's right eye, all that is necessary is to rotate the handle of the lamp to the opposite side, till the catch (G, Fig. 2) stops it. It is then in the same plane as the ophthalmoscope. The oblique mirror, of course, has to be turned round, so as to face the lamp. In doing this I find it is best to look straight down the sight-hole, keeping the eye about eight to ten inches from the mirror, and to turn it till the image of the incandescent filament appears round the sight-hole.

This instrument is intended for the direct method of examination of the eye, and is used precisely in the same way as the ordinary ophthalmoscope. The light is pleasant, and quite as well borne as the usual gas or lamp light used in ophthalmoscopic examinations. By this arrangement it is easy for an inexperienced person to see the fundus oculi, and especially so if the pupil be dilated. The light is on the spot he looks at, and always follows the movements of the instrument. The light is never lost. On this account it may prove a useful demonstrating ophthalmoscope. The colour of the parts is nearer that seen by daylight than can be got by the ordinary artificial light. The lamp can be detached in a second, and used independently for oblique illumination in examining the cornea or lens. I have used this lamp in needling operations. The ophthalmoscope can be used in the ordinary way, since the oblique mirror can be removed, the additions in no way interfering with it.

As to the source of the current, I have used lately four cells modified Leclanché battery. This gives a moderate light for about eight minutes, and then requires twenty minutes' rest. The bichromate battery, as employed at Moorfields Eye Hospital is probably the best form of stationary battery. Two small Grove cells will give a good light with this lamp for three or four hours or more. Pocket accumulators have hitherto disappointed me. Mr. Joseph Swan has recently made a reliable accumulator, which is quite portable, and, fixed with a specially constructed Swan lamp, gives a good light for twelve hours. It can then be re-charged. Mr. Swan is now perfecting these accumulators still further, and it is very probable that medical men will then be provided with a portable and trustworthy source of electric current, which will not only be useful for lighting purposes, but also for galvano-cautery, &c.

J. MCKENZIE DAVIDSON (Aberdeen).

THE TREATMENT OF PERTUSSIS.

To the Editor of THE LANCET.

SIR,—With reference to Dr. Cory's remarks on the above subject in your issue of the 9th inst., and especially with regard to the antiseptic treatment of the same, I am very pleased to have this opportunity of corroborating his view and of adding a view of my own. I would suggest that the carbolic acid, or anything else which is used, should be in the form of a spray. The carbolic acid may be very successfully given by means of an ordinary steam spray, simply allowing it to be diffused through the apartment. A solution of 1 in 20 will be found very suitable, and this should be directed towards the patient's face and as near the face as may be found agreeable. By this plan no internal drug should be necessary so far as the pertussis is concerned. The system, if judicially carried out, ought to cut short an attack in an individual, and it will at the same time act as a disinfectant generally. These remarks so far have a special bearing on pertussis, but they will be found equally applicable in many other diseases, such as measles, scarlatina, croup, diphtheria, and phthisis, or any other affection of the air-passages. I consider this idea, when properly carried out, will open up a new field in the treatment of disease generally, and the above may come within the range of the surgeon. I have adopted this system in a number of cases, and found it most satisfactory as far as the patient was concerned, but not so very satisfactory (from a financial point of view) for me.

I am, Sir, yours respectfully,

Bury, Lancashire, Jan. 13th, 1886. GEO. C. RICHARDSON.

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THE LANCET.

LONDON: SATURDAY, JANUARY 30, 1886.

THE Profession is under a deep debt of gratitude to Dr. WILLIAM OGLE for the paper read before the Royal Medical and Chirurgical Society on Tuesday evening, on Mortality in the Medical Profession. We commend it to the deep study of every medical practitioner, especially those portions of it with which he may feel least pleased or which he may regard as least creditable to the profession. The science of statistics is a very impartial one, and in the hands of Dr. OGLE we may be sure that nothing has been set down in malice to the profession of which he is a distinguished member. We have only therefore to be grateful to him for a contribution of deep significance to the statistics of the profession. Statistics, though impartial, are capable of being so grouped and crystallised as to convey wrong impressions. We may hope that further investigation and criticism will show that this is the case with regard to some of Dr. OGLE'S conclusions. But we shall do well to assume that in the main they contain a good deal of truth, and impress on the physician to regard his own health with that of his patient as being equally within his responsibility.

Our readers will peruse the carefully prepared abstract of Dr. OGLE'S paper (published in another column) for themselves, and they will see that his account of the mortality of the profession is on the whole unsatisfactory. According to his tables that mortality is high, and is increasing. It was not only higher in 1880-1-2 than that of other callings and professions, but higher than that of medical men twenty and ten years before—in fact, a progressively increasing mortality. While the mortality of the legal profession in 1880-1-2 was 20·23 per 1000, and that of the clerical profession only 15·93, that of the medical profession was 25·53. Compared with other callings—with trades not very favourable to health—the medical profession is more deadly. Thus, the mortality of medical men is greater than that of teachers of the same age, commercial travellers, bakers, shoemakers, printers, bookbinders, masons, and coal-miners. It is less than that of innkeepers, brewers, butchers, earthenware manufacturers, cotton, woollen, and worsted manufacturers, painters, plumbers and glaziers, cutlers, and quarrymen.

Dr. OGLE has with much pains prepared a table of a unique character on the Causes of the Deaths of medical men. The material for this table has been got from copies of the entries in the Death Register relating to medical men, which registrars are paid to send to the General Medical Council. One fact of much interest is that in 1880-1-2 there were 1156 deaths of medical men in England and Wales. This may be taken for practical purposes, as a measure of the actual [illegible] the profession in this division of the kingdom. We may consider it settled that 385 deaths of medical men occur yearly in England and Wales. If we consider the mortality of medical men in Scotland and Ireland [illegible] to double this number—which is an extreme supposition—this would give us a loss of 770 medical men in the United Kingdom by death, a number which is exceeded by hundreds every year of additions to the Register, and one which falls short of Dr. PLAYFAIR'S estimated waste of the profession by about 800! Still, Dr. OGLE'S statistics, and especially his interesting table in which he gives the comparative mortality of medical men over twenty and that of other males in the general population of similar age, remain to be considered. We can only here indicate its principal points. According to it, medical men die in much larger proportion than other men of corresponding age of the following chief diseases. The two figures after the disease mentioned show at a glance the deaths per 1,000,000 of medical men and of all other men respectively—thus: scarlet fever, 59, 16; typhus, 79, 38; diphtheria, 59, 14; enteric fever, 311, 238; malarial fever, 46, 11; erysipelas, 172, 136; alcoholism, 178, 130; gout, 291, 78; rheumatic affections 251, 215; malignant disease, 879, 790; diabetes, 284, 108; diseases of the nervous system, 4565, 4268; diseases of the circulatory system, 4142, 2934; liver disease, 1744, 744; other diseases of the digestive system, 973, 632; calculus, 86, 39; diseases of bladder and prostate, 634, 287; other diseases of the urinary system, 1520, 665; suicide, 363, 238. In regard to phthisis and diseases of the respiratory organs, medical men compare very favourably with other classes.

The remarkably greater fatality from epidemic diseases, save small-pox, from which medical men protect themselves by vaccination, but not to the extent that they might—will correct the public impression that they have charmed lives and hidden means of resisting infectious disease. They are like soldiers: their profession involves high risks, with a certain amount of unwise contempt for them, bred of familiarity. Much of the other excessive mortality of medical men is only a natural consequence of the arduous and anxious calling which they follow, in which competition is great and increasing, and in which sleep and food, that come to all else with regularity, come to them brokenly and irregularly. However, to be forearmed is to be forewarned, and we cannot doubt that in the clear light of Dr. OGLE'S information medical men will set themselves to counteract the causes of their ill-health. The glory of the medical profession is that it promotes the health of others rather than that of its own members. But example is better than precept, and we may do yet more good by exemplifying the powers of medicine in our security as we do in the case of small-pox. The part of Dr. OGLE'S paper that needs the most serious consideration is that which seems to show the greater liability of medical men to gout, liver disease, urinary disease, &c. This is largely to be explained by the irregularities of medical life and feeding, and the tendency of a busy and worried medical man to put himself off with a hasty glass of wine or beer instead of a regular meal. Dr. PARKES used to measure his alcohol in a minim glass. This is the lesson of medical science in regard to alcohol, and to no man is it of more importance than to those who have so many more risks and so few more comforts than other men.

GENERALISATION is the aim of pathological inquiry; but the attempt to attain it has too often been the source of much error and confusion. Nor is this to be wondered at,

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seeing how incomplete is our knowledge upon many essential points of pathological investigation. So far as generalisation is the outcome of a collation of well-observed facts, and in proportion as it comes to be less the offspring of theory, is it likely to be sound and just. Too often, however, has theory or *a priori* conception been suffered to form the basis of a general inference, and the inevitable overthrow of the superstructure occurs in progress of time. There could hardly be selected a better instance of pathological generalisation than the doctrine of "arterio-capillary fibrosis" which was propounded by Sir W. GULL and Dr. SUTTON more than ten years ago. It had much support in observed facts, both clinical and pathological, and was rendered even more attractive by the wide-reaching speculation which sought to place it almost amongst the normal physiological changes of the organism. In spite of this, the doctrine has failed to be received with that universal assent which, were it really the expression of a law of nature, it must have commanded. Probably this is in some measure owing to the theory upon which it was based, and not so much to the actual connexion between the vascular lesions and fibroid changes in organs. A similar conception, but one approached from a different point of view, has been during the past few years a favourite theme of M. HIPPOLYTE MARTIN, to whose article on the subject in the current number of the *Revue de Médecine* it may be useful to direct attention.

Briefly M. MARTIN's thesis is this: that sclerosis and allied changes in tissues and organs are not inflammatory nor due to any primary lesion of the tissue itself, but constitute a passive process, a dystrophic change, depending upon the progressive obliteration of the smallest nutrient vessels by endarteritis. Many diseases in which sclerosis plays a part are induced by conditions which would favour the production of a progressive obliterating arteritis. Such poisons as alcohol and lead, for example, may rationally be supposed to exert their initial effect upon the delicate lining of the vessels traversed by the blood they contaminate; and few will question that the coarser arterial lesions of syphilis are evoked in a similar way. But the etiology of sclerosis is not by any means limited to such gross agencies, and in order to explain the far wider occurrence of fibroid changes than can be thus accounted for, M. MARTIN is compelled to invoke the agency of trophic nerves and to imagine that, deprived of their influence, the arterial endothelium swells and proliferates. To do this he has first of all to prove the existence of a tropho-neurosis, and thus meets at the outset with difficulties which may prove insuperable to the acceptance of his generalisation. At the same time, whether by trophic agency or not, the fact remains that in all the conditions he enumerates the smaller arteries are to be found obliterated in the very earliest stages of the degenerative change. Thus, taking atheroma of the aorta as an instance of what he terms a "dystrophy," he has detected obliteration of vasa vasorum in the affected area even in those cases where minute atheromatous patches are met with in childhood. The effect of the failure of nutrition to the wall is to cause a fatty degeneration of the higher tissues—e.g., the muscular fibres—and a compensatory increase of fibrous tissue. This is in one sense a reversion to the old doctrine of atheroma, for it obviously does not regard it as an inflammatory condition. In support of this view M. MARTIN avers that the smaller arteries which escape atheromatous changes are just those which have no vasa vasorum, but, like the latter, they are disposed to become the seat of obliterative endarteritis, and thereby bring about sclerosis of the organs they supply Applying this doctrine all round, he ascribes the sclerotic changes of the cardiac valves and in the cardiac muscle itself to obliterative inflammation of the intima of their nutrient vessels. In the kidney the same process plays naturally a great part in the production of these changes, which when advanced form the granular or cirrhotic kidney; but he finds it impossible to ascribe more than the initial stages of this disease to pure denutrition. Consequently, to explain the contraction that ensues, and the extent to which fibrous tissue replaces the wasted and shrivelled tubules, the intervention of inflammation is invoked; but not as an esential part of the process, for in his doctrine renal cirrhosis may be wholly free from interstitial nephritis, being solely and simply the outcome of defective blood-supply. In this paper he touches but lightly upon sclerosis of the nerve-centres, having previously discussed its origin in more detail; but it is plain that he regards even posterior spinal sclerosis as produced by the obliteration of nutrient arteries, and not as primarily a disease of the nerve tubules. The change they undergo is, as in the parenchyma of other organs, purely a passive regressive change. The same chain of events, primary progressive obliterating endarteritis, secondary degeneration of higher tissues with fibroid substitution, is he holds, to be found, or at any rate to be expected, in sclerosis of the lungs, liver, spleen, alimentary tract, skin and indeed in all parts of the body. In point of fact, this widespread lesion of increase of the fibrous tissue of an organ, with destruction of the functional cells, owns but one immediate cause; and this is to be found, to use Sir W. GULL'S expression, within the vascular area. If inflammation intervene, it only hastens the process already initiated by the gradual diminution of the blood-supply due to a process which is almost physiological.

It will be remembered that Sir W. GULL and Dr. SUTTON regarded "arterio-capillary fibrosis" as a condition rather of natural senility than as a specially morbid change. So here we find M. MARTIN expressing the belief that "progressive obliterative endarteritis" is the natural process that eventuates in the hardened organs of old age. On either view, the process only becomes pathological when it anticipates the advance of years or predominates in one part of the body out of due proportion. There are individual proclivities to early degeneration, and there are agencies which promote the advance of degenerative lesions. The whole matter, on M. MARTIN'S hypothesis, is referred one step further back; it requires, for instance, that we should regard atheromatous change, not as being a primary inflammatory or degenerative lesion, but as being itself dependent upon a change in the ultimate ramifications of arteries concerned in maintaining the nutrition of the affected bloodvessel. On his doctrine, then, the cardiac hypertrophy of Bright's disease is not to be regarded as dependent on interstitial nephritis, nor arterial atheroma as solely respon-

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sible for the visceral disease that accompanies it, but rather that one and all are due to a "progressive pathogenic process which advances slowly from infancy to age."

THE British National Society for Aid to the Sick and Wounded in War during the Egyptian Campaign in 1884-85 has just issued a report of its operations, together with a statement of receipts and expenditure, and correspondence. The report is short and very laudatory, and thanks are profusely tendered to all who were concerned in the work undertaken by the Society. We observe with much satisfaction that the committee have taken advantage of the occasion to remove a very unpleasant feeling created by one of their previous reports, that there had been neglect on the part of the Army Medical authorities in not having made adequate provision for the sick and wounded: "They desire to take this opportunity of correcting an error which unintentionally appeared in a paragraph of a previous report, by which it might possibly be inferred that the Society claimed to be doing work on the Nile, by means of their steam launch and dahabeah, which the Army Medical Department could not of itself have carried out. Any such inference was unintentional, and would have been unjustified. With the British Army sent out to Egypt the Government provided complete supplies of medical appliances, comforts, and transport for the sick and wounded, and there was consequently not so large a scope for the operations of the National Aid Society as has hitherto existed when working with Continental armies." The *amende* appears to us, however, to confirm the doubts we have on a previous occasion expressed (*vide* THE LANCET, May 2nd, 1885) whether the expenditure of a sum close upon £20,000 was justifiable, not to supplement an already efficient service, but to provide luxuries which were by no means required for the class of persons to whom they were sent. We fully appreciate the expression of sympathy on the part of those who took an active interest in providing the funds and in carrying out the requisite service; but we think their energies were expended in a wrong direction, and that a more judicious and fully as sympathetic a course would have been followed had a large portion of the money been employed in relieving the wants and alleviating the sufferings of the women and children left at home, instead of being devoted to providing what may fairly be deemed luxuries for the troops in Egypt. The Society seems to have purchased a small steam launch and a stern-wheel steamer for the transport of their stores and to assist in bringing down invalids. But apparently the latter service was already sufficiently provided for by the Government. They also sent out trained nurses, who did very good service in the hospitals; and if we except the provision of newspapers, this seems really to have been almost the only useful work done by the Society. Soda water and effervescing drinks figure largely among the stores sent out by the Committee, and twenty-seven dozen pints of eau-de-Cologne and 359 dozen pots of jam appear also in the list.

The appendix to the report fills seventy pages, and consists, to a considerable extent, of reports of a very roseate hue, from Major J. S. YOUNG, one of the Commissioners of the Society, to H.R.H. the Princess of WALES and to Sir R. LOYD-LINDSAY, and from Mr. V. B. KENNETT-BARRINGTON, the other Commissioner, to Sir R. LOYD-LINDSAY. But while reading these reports we cannot forget that Dr. W. H. J. BROWN, one of the medical men sent out by the Society, who is spoken of very favourably by Major YOUNG, has given a different account of the manner in which affairs were conducted, or how little was being done at home for the women and children while the funds of the Society were being thus expended abroad.

It is satisfactory to learn from the report that throughout the campaign most amicable relations subsisted between the army and navy medical officers and the civilians sent out by the Society. On the subject of the arrangements made by the former, Dr. SQUIRE thus writes: "As a civilian who had exceptional opportunities for observing the medical arrangements of the force, I cannot resist mentioning the admirable nature of the preparations made. I found a hospital, almost in the desert, arranged and provided in a manner which would have done credit to a hospital at home, while nothing in the way of medical and surgical necessaries for the sick was wanting." Surely this corroborates our view of the supererogatory nature of a great portion of the service rendered by the Society. It is painful to us to speak of it in such terms, but we do so in the hope that its exertions on any future occasion may be turned in a more profitable direction.

IN the two cases of alleged criminal abortion recently investigated by the coroner for Central Middlesex, and subsequently at the police-court and the Old Bailey, there were several points of medico-legal interest and importance. Our remarks, however, will be limited to the consideration of the question as to how far the corpus luteum may be relied upon as furnishing evidence of recent pregnancy. It may be taken for granted that the assertion made by HALLER that "the corpus luteum is the effect of pregnancy alone" is demonstrably contrary to fact. The researches and expositions of Dr. ARTHUR FARRE and other distinguished observers have shown that, whether the ovum is fecundated or not, the corresponding Graafian follicle presents after its rupture certain determinate characters, which collectively negative the conclusion arrived at by HALLER. Again, the terms "true" and "false," as applied to the corpora lutea of ovulation and pregnancy respectively, are based upon unscientific data; for the initial stages of development in both instances are essentially the same. Responding to the excitation of the generative organs incidental to pregnancy, the lining membrane of the Graafian follicle takes on active change. The plicated lining becomes thicker, it assumes a deeper hue, and it vascularises and becomes firmer in consistence; or, to quote the words of an eminent writer, the construction of the corpus luteum of pregnancy is "conducted upon a larger scale and with a greater abundance of materials" than is obtained in the absence of impregnation. The plication above referred to is asserted by some to depend on the contraction of the external coat of the ovisac, but this can scarcely be an adequate explanation, for it fails to account for the increase in size which the corpus luteum undergoes up to about the fourth month of gestation. The history of the corpus luteum of ovulation is played out in about two months, whilst that of pregnancy extends over a period of

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thirteen or fourteen months. COSTE, in his dissertation, says the corpus luteum of pregnancy becomes as large as the ovary itself—a somewhat exaggerated statement, whether regarded in its relation to any individual case or as a general indication of what habitually obtains. It is curious how widely at variance are our standard text-books on medical jurisprudence in the estimation of the amount of reliance that can be safely put on the evidence furnished by an examination of the ovaries *quoad* the existence of pregnancy. In the last edition of TAYLOR'S standard work the reader will find that the author, apparently rather from an analysis of the conflicting testimony of others than from direct investigations of his own, shows but little tendency to adopt the positive views entertained by GUY in his "Manual of Forensic Medicine." The latter author would lead one to believe that the corpus luteum of pregnancy is not only different from the corpus luteum of ovulation, but that it is sufficiently so for the practical purposes of enabling the medical jurist to form a trustworthy opinion in support or refutation of the contention of recent abortion—an opinion, in fact, which he would not hesitate to express on oath in a criminal court. It is not given in so many words, it is true, but the general tenour of the writer's views is such as to leave no doubt on the mind of one not specially conversant with the subject. We have no hesitation in saying that in certain cases the development of the corpus luteum is such as to warrant the conclusion that there has been a recent pregnancy—take, e.g., what was found in the right ovary on examination of the body of the girl CLIFFORD who died at TURNBULL'S house. The medical men engaged by the Treasury reported that it contained a corpus luteum more than five-eighths of an inch in diameter, of a deep orange colour, contrasting strongly with the reddish-grey tint of the ovarian parenchyma. In the absence of chronic disease of the pelvic organs, and of ascertainable signs of other sources of irritation calculated to give rise to unusual nervous and vascular disturbance in the ovary, it is but reasonable to subscribe to the judgment formed and formulated in this case. On the other hand, it must be allowed that there may be circumstances—notably, when the ovarian stroma and capsule are indurated from protracted inflammation—capable of preventing the normal development of the corpus luteum of pregnancy. In the case of the woman BURTON, in whom it was alleged TURNBULL was guilty of having illegally procured abortion, there could be no shadow of doubt that a miscarriage had happened, for, in addition to the enlargement of the womb, a considerable portion of the placenta was found attached to the uterine wall; and yet the corpus luteum observed in the left ovary, although it presented a corrugated outline, was small and of a dull grey colour, features not inconsistent with the supposition that it might have been merely the consequence of ovulation without impregnation. The capsule of the ovary, however, was so thick and dense as to effectually prevent its expanding to more than a very limited extent. The views originally held—(1) that the corpus luteum was proof positive of pregnancy, and (2) that the so-called false corpus luteum of ovulation differed in nature from the true corpus luteum of pregnancy—serve to explain the irreconcilable statements met with in the various text-books on obstetrics and legal medicine. Descriptions have been handed down from author to author either in their original integrity, or with incomplete and misleading corrections, so as to obscure the subject in too many instances by equivocal expressions and false deductions. It is, on the one hand, matter of regret that a possible valuable source of evidence should be held in disfavour, and, we may say, disrepute; and, on the other, that it might, inadvertently no doubt, be resorted to unconditionally, and so tend to the discredit of medical science and the prevention of the administration of justice. The entire question deserves and requires full investigation, and to this end it is desirable that a number of observations should be made and recorded of the exact conditions of the corpus luteum, in respect to its relation to ovulation and pregnancy. The Obstetrical Society would do well to initiate the movement, and carry it out under its direction and supervision.

THE question of the digestion of albumen in the intestine has been the subject of many experiments. By some, as by THIRY, it has been held that the intestinal juice possessed almost as much activity as that of the stomach itself; whilst others, as MASTOFF, denied its efficacy as a digestive agent altogether. The point has again been investigated by WENZ, who has given the results of a long series of researches in the *Zeitschrift für Biologie*. Many difficulties surround the inquiry. It is difficult to obtain perfectly normal intestinal juice. If a portion of the small intestine be isolated, as in the method suggested by THIRY, and the fluid which collects in the loop be experimented with, it is easy to object that the natural secretion is seriously modified by the operation; and if, on the other hand, proteid substances are injected into an artificially produced fistula, it is difficult to entirely prevent the intermixture of the gastric and pancreatic secretions.

WENZ, from a review of the work of previous observers, came to the conclusion that no satisfactory results could be obtained unless some means were devised by which the intestinal juice could be obtained free from foreign enzymes, and indeed from any organised ferment, whilst the observer should be sufficiently instructed to be able to recognise and to isolate the new substances which might be expected to result from the operation of the enzymes produced by the intestinal mucous membrane. Proceeding on this basis, and upon the fact generally admitted by chemists, that all hitherto known enzymes can be extracted and isolated by appropriate treatment with water, very dilute acids, alkalies, and glycerine, without any loss or impairment of their power of decomposing albumen, he first thoroughly cleansed an unopened tract of intestine of all pepsine and trypsine ferments, that strongly adhere to the mucous membrane, by washing it for a long time with water, till this fluid passed through perfectly clear. The intestine was then opened upon a glass plate, and the mucous membrane detached and subjected to somewhat complicated treatment, ending in the obtainment of a glycerine extract. In two other experiments which were made for him by Professor KÜHNE, intestinal fistulæ on THIRY'S plan—that is, by the isolation of a loop of ileum by means of a ligature and the establishment of an external opening—were made in dogs, and the intestine included in the ligatures was daily washed out for six days with normal saline solution. The maximum

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amount of secretion obtained in this way from a loop thirty centimetres (about one foot) in length was 1 to 1·5 cubic centimetres; on mechanical irritation it was transparent and yellowish, possessed invariably an alkaline reaction, became slightly cloudy on neutralisation, and after precipitation with ammonium sulphate contained no peptone. To prevent putrefaction in the experiments on digestion of albumen, a small portion of thymol or a drop or two of a 25 per cent. of an alcoholic solution of thymol was added. The substances which were looked for after the action of the juice on proteids were those which have been described by KÜHNE and CHITTENDEN under the names of deutero-albumose, proto-albumose, hetero-albumose, and dys-albumose, as well as those termed anti-albumose and anti-albumid. Now, all these substances are precipitable by ammonium sulphate, but peptone is not, and an excellent means of separating them is thus afforded. WENZ, after satisfying himself on this point by many experiments, proceeded to examine the influence of acid, neutral, and alkaline extracts of the mucous membrane of the small intestine, with the result that such extracts possessed, when free from trypsin, little or no power of peptonising the proteids. The experiments on the dogs with intestinal fistulæ were not very satisfactory, owing to the serious effects upon their general health of the administration of pilocarpine, which had been given to them with a view of clearing their alimentary canal, but so far as they went they also showed that little peptonising power was possessed by the juice. These experiments, which appear to have been carefully performed by a competent observer under the supervision of so excellent a chemist as KÜHNE, are therefore in opposition to those of THIRY, LEUBE, DOBROSLAWIN, KROLOW, GRÜTZNER, GARLAND, VILLA, and others, some of whom found that fibrine appeared to be converted into peptones in acid and others in alkaline mixtures, and are in accordance with the observations of CZERNY and LATSCHENBERGER, MARKWALD and DÉMANT,—thus adding one more to the many vexed questions in modern physiology.

Annotations.

"Ne quid nimis."

SORE-THROAT AT SANDRINGHAM.

IF a triangle is drawn, having a base stretching from King's Lynn to Walsingham, and the apex at Docking, it will include that portion of Norfolk mainly embraced by the three registration districts named after these respective places. The estate of Sandringham, the seat of the Prince of Wales, including about 7000 acres, and consisting of several parishes, occupies a portion of this area. It consists of a large portion of very wild, unreclaimed sporting land, and some rich meadow and pasture, and salt water marshes. Sore-throat of a diphtheritic character, from which the Princess and, we believe, members of the household have suffered, appears to have a natural home in this locality. For example, statistics gathered from the Registrar-General's returns show that the death-rate from diphtheria in the Docking and Walsingham districts bear the proportion of [illegible] to 0·9 in the Norwich registration district and 0·3 in other districts of the same county. The death-rate from diphtheria in this portion of Norfolk is in excess of the death-rate from the same diseases in St. Giles', Shoreditch, Bethnal-green, Whitechapel, or St. George's-in-the-East, which are among the poorest and least sanitary districts of London. Yet here is the home of the Heir Apparent and his family, purchased by the advice of the Government at a cost of £220,000. We cannot suppose that in the house at Sandringham insanitary conditions have been permitted to prevail, for it was here the Prince was so seriously ill from typhoid, by which attention should have been forcibly directed to the sanitation of Royal residences. The Prince Consort lost his life at Windsor, though it is suspected he contracted the disease at Sandhurst. The Prince of Wales nearly lost his life at Sandringham, though it is not quite clear where and how he contracted the fever. The Duchess of Connaught's life was in danger in the newly-erected residence in Bagshot-park; and at last the Princess of Wales has been subjected to risks, and with her in all probability others of the family and the many distinguished visitors who have been at Sandringham since Christmas. Yet all this danger and inconvenience is removable by well-understood and simple methods. Any gentleman would regard it as a paramount duty to his family to select his home in a district where sanitary statistics were satisfactory, or he would set about at once to remedy the defects as far as practicable. We suspect the undrained marsh lands in this portion of Norfolk, as elsewhere, to be at the bottom of this diphtheritic tendency, and till they are drained diphtheria will prevail. The Prince of Wales can scarcely, with his many duties, be expected either to understand or attend to such matters, but his advisers should. Had the Princess died, what would have been the verdict of the people?

INFECTIOUS HOSPITALS IN RURAL DISTRICTS.

DR. WOODFORDE'S annual report for 1884 on the combined sanitary districts of Berkshire reaches us at a date when public interest in the sanitary circumstances of the district for the period in question is necessarily to a great extent a matter of the past. One or two points of general interest are, however, raised in the report. In the Abingdon rural district Dr. Woodforde has had to consider the advisability or otherwise of providing a hospital for the isolation of cases of infectious disease, and he has felt that the practical difficulties which would have to be overcome are such that his advice has been that the spread of infection could be more effectually controlled by obtaining the assistance of thoroughly trained nurses to deal with all known cases of infection occurring in a given locality than by hospital provision. Besides a number of difficulties, such as the concealment of first attacks, which apply more or less to all districts in the United Kingdom where compulsory notification is not in force, the fact that scarlet fever is a disease which would largely have to be dealt with, and that the sufferers would in consequence be mostly young children, is adverted to. As to this we would point out that, according to the official report on Hospitals for Infectious Diseases, it was found that this drawback is more imaginary than real, and that out of a total of 4758 admissions at all ages into hospitals provided by sanitary authorities, no less than 2673, or 56 per cent., varied in age from a few months to ten years; and that in one rural district 81 per cent. (nearly all being scarlet fever cases) had been admitted at that age out of a total of 220 patients at all ages. One great difficulty as to the alternative system advocated is that the provision of nurses, except in hospitals, is not authorised under the Public Health Act. Another suggestion is, however, contained in the report—namely, the removal of the healthy members of a family to an empty cottage with a view to their being kept under supervision for a period equal to the incubation of the disease, and the retention of the infected

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cottage as a temporary hospital for the first patient attacked, and for any that may follow. This provision of a temporary hospital would appear to be clearly within the powers of the authority, who would only have to secure the assent of the landlord and tenant to the proposal; but how the payment for the other cottage could be legally made we are by no means clear, and what the authority would do if the hitherto healthy people were to refuse to submit to the suggested "supervision," which rather savours of quarantine, we do not know. Doubtless, however, there are districts in which, under judicious management, much useful work in the direction of the isolation of infectious diseases can be done which may not come strictly within the letter of the law; but it is certain that these schemes cannot be regarded as universally applicable to sparsely populated and rural districts. The difficulty of providing special buildings as hospitals in such districts is, in some important respects, a real one; but there are many localities where the authorities would not object to erect the simple four-bedded hospital of which plans were last year issued by the Local Government Board, whereas they might with reason object to the provision of means of isolation on a larger or more expensive scale.

ANTIPYRIN AND CALOMEL COMPARED IN PNEUMONIA.

THE *St. Petersburg Weekly Clinical Gazette* publishes some observations which have been made by Dr. Posadski, under the direction of Prof. S. P. Botkin, on the comparative results of the antipyrin and calomel treatments in croupous pneumonia. He thus treated a group of twenty-five cases with antipyrin alone, giving from half a gramme to two grammes (seven and a half to thirty grains) for a dose, and one to eight grammes (fifteen grains to two drachms) per diem. A second group of twenty-three cases, as similar as possible to those of the first group, was treated with calomel in doses of one-eighth of a grain four times a day. The average age of the patients in the first group was twenty-seven years and a half, and that of those in the second twenty-five years and a half. Those treated with antipyrin retained their full consciousness, but in the course of two or three days failed greatly in strength, the heart's action becoming exceedingly weak. They suffered from cough, and with difficulty expectorated a small quantity of slightly-tinged sputum. After the first few doses there was a fall in the temperature, but not of a permanent character; sometimes, indeed, there was no fall at all, and when there was, notwithstanding the continuance of the drug, a rise followed. The crisis took place with a fall of temperature on the average on the seventh day of the disease, the mean number of days of fever being 8·1, but the local physical signs lasted 13·5 days. Complications occurred in nearly all the cases, sometimes being of a serious nature, collapse even being noted. In the urine there was nearly always albumen in considerable quantity, also antipyrin. The fall in weight averaged 20·34 zolotniks (about twenty-seven ounces), which was less than the mean fall of the patients treated with calomel, but the latter recovered their weight more rapidly during convalescence. When the doses of antipyrin were frequent, vomiting was often induced, and in two cases an antipyrin rash made its appearance. Those treated with calomel frequently presented a typhoid condition, and in some cases there was delirium. They were not much distressed by cough, the sputum was expectorated easily and in considerable quantity, and they did not suffer from sweats. The temperature rose high. The mean duration of the fever before the critical fall was 7·1 days, which was generally accompanied by drenching perspiration. The local physical signs lasted on the average 9 days (against 13·5 in the other group). There was rarely albumen in the urine, and when it existed there were only traces. Complications were infrequent. The general conclusion arrived at was that antipyrin, in spite of its power of reducing fever, has no beneficial effect on the course or result of the disease.

THE CERTIFICATION OF LUNATICS.

ATTENTION is again directed very painfully to the fact that there may be insuperable difficulty in legally certifying the unsoundness of mind of a person who is actually in peril of committing a deed of violence for which he or she will afterwards be held irresponsible on the ground of insanity. Beyond question this is a most anomalous state of matters, full of danger to the public, and yet it arises inevitably out of the most unsatisfactory state of the laws relating to the certification of lunatics. If only the power existed to place persons who are obviously—perhaps even self-consciously—on the borderland of insanity under protection and treatment, with their own consent, without branding them as lunatics, few of the distressing occurrences which now harass the public mind and too often involve the loss of life, as in a recent deplorable case now *sub judice*, would arise. It is unjustifiable to blame medical men for what an uncertifiable lunatic may do. Unless there be express evidence of insanity in act, or of the existence of some delusion, the form of certificate provided by the Acts in force cannot be filled up, and the issue must be left to the chapter of accidents. Coroners are far too ready to blame medical men when anything goes amiss. They seem to think somebody must be to blame, and practitioners of medicine are regarded as fair game. Against the undiscriminating condemnations thus heaped on the heads of members of the medical profession we protest. The existing state of the law affords an abundant explanation of the scandals which from time to time arise in connexion with the certification or non-certification of lunatics. Until the Legislature can find a convenient time for reform there will be no means of preventing these occurrences.

WHAT CONSTITUTES A NUISANCE?

IT is certainly curious how certain localities and people cling to nuisances, however gross, on the ground that they have been long accustomed to them. In the Forfar Police-court proceedings were taken against an occupier for allowing a nuisance in close proximity to a draper's work-room where young women are employed, this nuisance being, it was contended, injurious to health. The alleged nuisance was in a court adjoining the workshop, the court measuring twelve feet in breadth. In this confined area, on to which a window of the draper's premises opened, were four pigs, a privy, and a lot of manure, and this although some four cartloads had already been removed. But plenty of people were found to declare that it was no nuisance at all, and one witness maintained this view as the result of twenty-five years' experience of it. Although we are fast getting rid of such abominations as the storing up of many tons of pig and other dung in courts, yet even down south we still meet with similar opinions. But they do not, as a rule, emanate from, and receive the support of, medical men, and we can only hope that the practitioner whose evidence is quoted in the *Forfar Herald* has been erroneously reported. He is alleged to have declared the state of affairs to be no real nuisance; indeed, whereas pigs are proverbially the producers of such foulness as to call for special bye-laws against such animals, he thinks that pigs keep down the smell because they trample down the manure, and he is of opinion that "six loads" of such stuff can be kept in the

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court without injury to health. It was also shown that a drain on the draper's premises might have contributed to the nuisance. Judgment was reserved when the account reached us. We trust it will not be based on such retrograde views as we have referred to, and we commend to the sanitary authority the bye-laws issued by the English Local Government Board as to the prevention of nuisances from the keeping of animals as annotated by Messrs. Knight and Co.

EMBOLISM AND CHOREA.

IN the first number of THE LANCET of the present year we published an article on the relations of Embolism and Chorea, by Dr. Howship Dickinson. Anyone who is conversant with the literature of chorea—using the term in its widest sense, as including every phenomenon that has ever received the name, and their number is legion—will grant without hesitation that there never was a problem that presented more diversity of aspect, more change of opinion, and less likelihood of arriving at a satisfactory solution. Mr. A. H. Benson has reported in the current number of the *Ophthalmic Review* a case of partial embolism of the inferior division of the central artery of the retina associated with repeated previous attacks of chorea. The patient was a man, aged twenty-one, who had had rheumatic fever in 1881, chorea in 1882, again in 1883, and once again in 1884. The retinal embolism was, however, unaccompanied by symptoms in other parts of the nervous system. Mr. Swanzy in 1875 recorded the case of a girl, aged ten, who developed chorea, and at the same time facial paralysis and embolism of the left central retinal artery. In neither of these cases was there any evidence of heart disease. The occurrence of such associated phenomena lends considerable countenance to the embolic theory of "chorea," but cannot be regarded as conveying anything in the nature of proof.

THE DENTISTS IRATE.

THE organs of dentistry are again very angry with us because we have dared to say anything about the teeth. They feel much hurt with the remarks we recently made about Hunter's views of decay of the teeth, and our reference incidentally concerning his opinion as to the legitimate line of demarcation between general surgery and dentistry. We can assure the specialty that we had not the slightest intention of wounding their feelings or of trenching on the province they have so cleverly monopolised. Our observations were entirely made for the medical profession; and so solicitous were we to avoid the use of irritating language that, in quoting John Hunter, we made a garbled quotation, omitting the words, "The diseases which may arise in consequence of those of the teeth are various, such as abscesses, carious bones, &c., many of which, although proceeding originally from the teeth, are more the object of the surgeon than of the dentist, who will find himself as much at a loss in such cases as if the abscess or carious bone were in the leg, or any distant part. All the diseases of the teeth, which are common to them with the other parts of the body, should be put under the management of the physician or surgeon; but those which are peculiar to the teeth and their connections belong properly to the dentist." In point of fact, our claim was a smaller one than Hunter's; and we thought of being complimented for our modesty, instead of being rated for the mingled audacity and ignorance of our proposals. Let this pass. It is further objected that we could not have read Hunter's work because when stating his view of the nature and causes of decay we said, "It is not due to external or accidental causes." As a matter of fact we had read Hunter's work, and moreover it lay before us when we wrote. His precise words are these: "It does not arise from any external injury, or from menstrua which have a power of dissolving part of a tooth, for anything of that kind could not act so partially; and we can observe in those teeth where the disease has not gone deep that from the black speck externally there is a gradual decay or alteration leading into the cavity, and being fainter and fainter. We may therefore reasonably suppose that it is a disease arising originally in the tooth itself," &c. In the reference we ventured to make to the subject of "acids," we spoke of ordinary acid foods and beverages, not of acid medicines. In regard to the latter we quite agree with our dental contemporaries. We had not the least notion of asserting the finality of Hunter's opinions, still less of setting them up as against the opinions of more recent authorities. Our sole object was to direct the attention of members of the medical profession, as distinguished from dentists, to the fact that decay of the teeth is a matter which ought to be studied from the medical standpoint. In the treatise from which we quote Hunter was very careful to observe what he believed to be the limits of the specialty of dentistry. Thus in writing for dentists he said, "I shall purposely avoid entering into common surgery; not to lead the dentist beyond his depth, or to matters of which it is to be supposed he has not acquired a competent knowledge." Our remarks were, as we have said, for physicians and surgeons, not dentists.

SYPHILIS, ACQUIRED AND INHERITED.

THE Lettsomian Lectures on "Some Moot Points in the Natural History of Syphilis," delivered at the Medical Society by Mr. Hutchinson, raise questions of great social importance. The acceptance as an established fact that apparently pure vaccine lymph from an infant inheriting syphilis can communicate syphilis to a non-syphilitic individual through vaccination naturally gives rise to some very grave problems. If, as Mr. Hutchinson contends, secondary symptoms may follow chancroid ulceration as well as true chancre, and further that it is impossible to say that an apparently simple gonorrhœa may not have a syphilitic urethral ulceration blended with it, then the area of the natural history of syphilis becomes very much extended. The primary sore, whether chancroid or true chancre, is as a rule subjected to specific treatment, and the liability to secondary constitutional mischief is reduced to a minimum. But it is quite different with syphilitic urethral ulceration blended with gonorrhœa. This is subjected to the ordinary treatment of gonorrhœa, and the syphilitic nature is only suspected when in due course secondary symptoms present themselves. This would appear to call for a very minute examination of every case of gonorrhœa, with a view to determine its syphilitic or non-syphilitic character. Other points of equal interest arise out of Mr. Hutchinson's lectures. It is beyond a doubt that the offspring of a syphilitic parent may be free from all apparent syphilitic inheritance, and, on the other hand, the offspring may present features of a syphilitic taint inherited from a parent in whom all symptoms of the syphilitic taint are in abeyance. When, then, is sanction to marry justifiable in the case of one who has suffered and apparently recovered from syphilis? It is within the experience of most medical men to have seen cases of newly married couples in which the wife as soon as she becomes pregnant presents unmistakable signs of secondary symptoms. The husband, however, may have been unsuspicious of having a syphilitic taint. Many of the skin eruptions of married women have their origin in this taint, unconsciously acquired and unconsciously communicated. Many a puny child owes the blight in its nature to an inherited taint. The disposition to sore throat at every little fluctuation in health is often an indication of this taint. The question how best to reduce

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these evils to a minimum has not yet been fully answered. One point especially has never been adequately explained—that is, why the syphilitic taint, whether acquired or inherited, should have such a predilection for the skin, mucous membrane, and especially the throat,—for the latter is as reliable an index of the disease as the barometer is of the weather. The non-mercurial treatment has been fairly tried and found wanting in cases of true syphilitic infection. Mercury in small doses continued over a long period of time, supplemented by the local application of the same remedy, and followed by an equally lengthened course of potassium iodide, beginning with ordinary doses and gradually increasing to half-drachm doses two or even three times a day, will subjugate the virus more than will any other remedies. But these may need repeating on the least re-development of symptoms, whether these be in the form of the graver internal complications, or skin eruption, ulceration of mucous membrane, or sore-throat.

THE VENTILATION OF SEWERS.

THE grievously vexed question of sewer ventilation is again pressing for an answer. There never will or can, we are convinced, be a final settlement of this issue until the absurd theories and devices of those who confound the behaviour of gas and vapour with that of water, and whose judgment is vitiated by other fallacies, have been utterly cast aside and abandoned. The particularly ridiculous notion that sewers can be ventilated by an arrangement which amounts to the construction of an inverted syphon—the pure air to be drawn at the mouth of a low-level pipe, and the foul air ejected at the open mouth of a high-level pipe—is probably one of the most mischievous and obstructive of prevailing misconceptions. As a matter of fact, there is only *one* way of effectually ventilating close drains and sewers, and that happily is an easy one. Pipes, which ought to be not less than four inches in diameter, as perpendicular as possible, and protected by a cowl at the summit, should be carried up from the drain or sewer to a point well above the level of the roofs of adjacent houses, and placed far away from chimneys. By means of these pipes the sewers may be properly ventilated. Much may be accomplished by any householder who has the spirit to place two or more ventilating-pipes of the construction indicated on his own premises. Sooner or later low-level or "surface" ventilators will be prohibited. We believe that to the agency of such apparatus, as disseminators of sewer gas, is to be ascribed much of the sickness which prevails in many localities. The effluvia rising from too many of these surface-gratings and low-level ventilating-pipes afford conclusive evidence of their dangerous character.

MITRAL DISEASE.

THE perennial interest that hangs around the study of diseases of the valves of the heart is strong testimony of the lack of definite knowledge concerning the physical signs of valvular lesions. Two papers in the first number of the *International Journal of the Medical Sciences*, which is also the 181st number of the new series of the renowned American journal, continue the interest and develop new phases in the study of mitral lesions. Dr. Austin Flint treats of mitral cardiac murmurs, but Dr. Broadbent is concerned only with mitral stenosis. There are four mitral murmurs according to the American author: (1) The systolic regurgitant; (2) the systolic intraventricular not due to regurgitation; (3) the presystolic; (4) the diastolic. Each of these four murmurs has distinctive characters; there may be a combination of any number of them. Hayden's nomenclature of post-diastolic and post-systolic appears to Dr. Flint an unnecessary refinement: in this view, regarded clinically, we are disposed to agree, but think that the refinement is not excessive when viewed in the light of differentiation, as an aid to the promotion of a scientific knowledge of murmurs. Dr. Broadbent considers that mitral stenosis is on many grounds the most interesting valvular affection of the heart. Its frequency and dangerousness—being second in peril only to aortic incompetence, and indeed the more serious of the two in early life—impart to it a very practical interest. The circumstance that it presents far greater difficulties in diagnosis than any other disease of the valves has been the chief reason for Dr. Broadbent's paper. It was the last of the valvular lesions to be associated with distinctive physical signs, and even now its existence is entirely overlooked by physicians, and it is not unfrequently confounded with the less serious form of mitral disease. The difficulty is largely to be accounted for by the fact that the physical signs are extremely varied, sometimes requiring careful prolonged examination by a skilled ear before a diagnosis can be made, and at other times so marked that the youngest student may diagnose with certainty. An attempt to elucidate the significance and appraise the diagnostic and prognostic importance of the physical signs is the chief object of the paper.

THE NEUROLOGICAL SOCIETY OF LONDON.

WE have to announce the birth of a new association—the Neurological Society of London. Informal meetings have been held, and a committee appointed to frame a constitution. A recent meeting has sanctioned the laws thus framed; and a council has been elected, with Dr. Hughlings Jackson as president, and Dr. S. Wilks and Sir J. Crichton Browne as vice-presidents. Dr. Bristowe is to be the treasurer. Drs. Bastian, Broadbent, Bucknill, Buzzard, Ferrier, and Savage, and Messrs. Galton, Hutchinson, Romanes, and Professor Schäfer are also members of council. Dr. Hughes Bennett and Dr. de Watteville are acting as hon. secretaries. The scope of the Society is of the widest, including not only the physiology and pathology of the nervous system, but also that section of neurology which is concerned with psychology, both normal and morbid. The Society chiefly owes its existence to the enthusiasm of the acting editor of *Brain*, Dr. de Watteville.

THE THREE TOWNS' MEDICAL INSTITUTION.

A GOOD deal of correspondence between the medical officer of this institution and the executive has appeared in the local papers, and the general result is to confirm our oft-expressed opinion that these institutions aim at getting out of their medical officer a very unreasonable amount of work for a very disproportionate payment. It shows, moreover, that the unfortunate medical man is expected to do horses' work. Dr. Keily says in one letter that he had sometimes to pay twenty visits a day to infectious cases. With so many cases, such long distances, and a day of only twenty-four hours, a cab was indispensable; but this was begrudged, save for one hour a day; and he was asked, in addition to his abundant work, to supply the committee with a few interesting statistics—such as a list of home patients, the time given to each, how long the hansom was at the door, and the cost of each prescription. Fancy a medical man, with a district nearly twenty miles in circumference, with twenty infectious cases a day to visit, temperatures to take, and all his other patients to see, being thought of as having infinite leisure, with time to construct statistics like the above. Dr. Keily properly declined to give such statistics unless he was supplied with a secretary and when asked what he would take as a substitute for cab

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fare said £100 a year. Moreover, he wisely threw upon the committee the whole responsibility of refusing proper allowances for cabs, and ceased to see a number of the permanent or distant cases. It is significant to see such men renounce these appointments, and expose the shabbiness and unreasonableness of the societies that expect so much from and give such pittances to their medical officers. After Dr. Maunsell's experience at Bath and Dr. Keily's at Plymouth, gentlemen taking these appointments will deserve no sympathy from the profession. The new rules are more ungenerous than the old ones; they involve, too, the undertaking on the part of a medical officer not to go to law, and to submit every grievance to the Committee of Management, and as a last appeal to the General Committee.

UNUNITED FRACTURE OF CLAVICLE.

THE case that formed the subject of a communication to the last meeting of the Clinical Society by Mr. A. E. Barker possessed considerable interest from many points of view. As Mr. R. J. Godlee and the author pointed out, the presence of an ununited fracture early in life generally carried with it the impression that there existed some vice of the constitution rendering normal processes of osteal repair impossible of occurrence. Mr. Barker is therefore to be congratulated on the successful issue of his operative procedures. The case in question was, however, not solely interesting from the surgical point of view, but practically successful in the mending of the clavicle as well as in the relief of certain nervous and muscular symptoms, which constituted a source of annoyance and disability to the remarkably intelligent boy. Dr. Poore supplied the detail of the medical facts: tenderness of the trunks of the brachial plexus; diminished faradaic irritability of that important muscle of manual prehension and precision, the right first dorsal interosseous; want of development of the pectoralis major on the affected side; slight mottling of the skin and grooving of the thumb-nail, with diminished rate of growth of the finger-nails. From personal examination Dr. Poore was able to testify to the disappearance of all these morbid phenomena. A conspicuous symptom, however, that probably determined the application for relief, was the inability on the part of the boy to continue writing for more than a few minutes. At the end of ten minutes the manuscript was altogether illegible, and the difficulty with which any strokes of the pen were made was great and painful. The symptoms, so far as the writing was concerned, had a kind of resemblance to those of "writer's cramp," though the difference between the genuine disease and this imitation was sufficiently obvious, justly calling forth the remarks of Dr. Poore and Dr. Hughes Bennett. The last point that remains to be related is the absolute recovery of the power of writing—a desired result that ensued so distinctly on the operation that surgery may justly claim another success in diseases of the nerves.

TOXIC ACTION PROPORTIONAL TO ATOMIC WEIGHT.

THE salts of the rare metal rubidium act as heart poisons like those of potassium and lithium; and Richet, who has examined the action of these substances on both warm- and cold-blooded animals, finds that these metals are poisonous in almost exactly the inverse ratio of their atomic weights (lithium 7, potassium 39, rubidium 85), so that the minimum lethal dose of rubidium is about a twelfth of that of lithium, that of potassium being intermediate between these. It appears, therefore, that the toxic action is really a chemical one, the chlorides of the metals acting by displacing molecule for molecule, the chloride of sodium in the tissues.

THE LAW RELATING TO VACCINATION.

AN important question under the Vaccination Acts has been raised in a case in which counsel on behalf of Lord Clifton moved for a *certiorari* to remove into the Court of Queen's Bench an order made by magistrates in the Isle of Thanet in respect of Richard Fox, Lord Clifton's valet, that his child should be vaccinated. The Court having granted a rule *nisi*, the case will doubtless come on for discussion. It appears that the valet had an unvaccinated child, and that he objected to its being vaccinated with humanised lymph; and the child remaining unvaccinated, the man was summoned, and Lord Clifton arranged either to appear himself on behalf of the valet, or to engage the services of a solicitor. But being absent in connexion with electioneering duties, he asked the magistrates to adjourn the case; the request was, however, not complied with, and an order was made directing the child to be vaccinated. The clause under which the order was made is Section 31 of the Vaccination Act, 1867, which enables a magistrate to order the appearance of the defaulting parent or person with the child before him, and "upon the appearance" he may, if he deem fit, make an order as to the vaccination of the child. In this case the parent failed to appear either with or without the child, either in person or by any legal representative, and it is contended that the order was, in consequence, invalid. It has already been decided in the case of Dutton *v.* Atkins, 6 Law Reports, Q.B., 377, that the appearance of the child is not an absolute necessity, provided the magistrates are able to judge that it remains unvaccinated; but the question as to whether the order can be issued in the absence of the parent has, as yet, never been decided. The parent may appear by any member of his family, or any other person authorised by him in this behalf, but apparently his non-appearance can only be dealt with under Jervis's Act, 11 and 12 Vict., cap. 42, sec. 2.

INJECTIONS INTO THE LUNGS.

A DISCUSSION has recently taken place in the Medical Society of the Paris Hospitals, chiefly between M. Gougenheim and M. Dieulafoy, on the advantage of practising antiseptic injections into the tissues of the lungs in cases of phthisis. M. Gougenheim had injected bichloride of mercury in thirty-three cases of advanced phthisis with considerable amelioration, the loss of flesh being retarded and the râles as also the expectoration diminished. M. Dieulafoy, on the other hand, had in 1881 practised injections of glycerine of carbolic acid, colouring this with cochineal, by which means he was able to assure himself by inspection of the sputa that the antiseptic had entered a cavity. He found, however, that the patients suffered great pain from the injections, and that no beneficial effects followed, so that he soon abandoned this treatment.

THE DRAINAGE OF DWELLING-HOUSES.

THE Plumbers' Company are taking a step in the right direction. For some reason or other, justly or unjustly, the plumber has for years been the pet aversion of the householder and the favourite butt for the wit of those who delight in holding up "the British working man" to ridicule. On the 24th inst. a special court of the Company was held to confer with a meeting of the plumbing trade of London, with respect to certain resolutions which had been passed to give practical effect to the decisions of a conference of metropolitan and provincial plumbers and to secure the greater efficiency of plumbing and draining work in connexion with dwelling-houses. These resolutions provide for a system of registration, the register to be open to the admission of those who give evidence of their present status and experience in the trade—to those who pass a qualifying

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examination, or to those who produce certificates of competency. A plumber who is doing dishonest or unskilful work is doing an evil to the public, and a thorough system of registration will go a long way towards the removal from the trade of those who now disgrace it. At present there is in this country no requirement of evidence of qualification—a state of things which we believe is not tolerated in any other trade or profession which involves the security of the health and life of the public. A council composed of distinguished sanitarians, members of Parliament, medical officers of health, and members of some of the chief municipal bodies, has been formed to carry out the object which the promoters of the scheme have in view, and it is to be hoped that their efforts towards the attainment of a result so pregnant with good may be attended with success.

INTRA-UTERINE BRAIN DISEASE.

CASES of micro-cephalus are of frequent occurrence, and this clinical sign, together with want of intellectual development, are together or alone the chief features of most congenital diseases of the brain. The size of the head appears to be a more or less accidental circumstance, and certainly gives but little clue to the anatomical condition of the concealed brain. From the material that has already been collected, it would appear that the morbid anatomy of congenital brain disease is far more varied than the clinical pictures of such cases. It is true that motor symptoms are frequent accompaniments of mental defect in such cases, but the number of symptoms is small, from the circumstance that there has been an actual want of development of normal functions. In congenital brain disease the chief feature is sometimes atrophy, more especially of the motor convolutions; this forms one variety of porencephaly. At other times we have to do chiefly with sclerotic conditions. Tumours and cysts have also constituted the anatomy of some cases. As a contribution to the pathology of sclerotic conditions of the brain, the cases narrated by Dr. Ashby and Dr. T. Barlow at the last meeting of the Pathological Society are of much interest and importance. Congenital syphilis is probably responsible, for many cases of intra-uterine cerebral sclerosis and syphilis may act in the ordinary way by producing patches of fibroid induration, or by causing characteristic changes in the vessels, with consequent atrophy and sclerosis. Dr. Barlow also considered that meningitis, however produced, may lead to sclerosis of the cerebral tissues. The subject is one which urgently requires more extensive post-mortem experience, and it is a field in which there is much room for original investigation.

THE "JAW-JERK."

UNDER this name, compounded of familiar terms, Dr. de Watteville describes in the current number of *Brain* a phenomenon analogous to the "knee-jerk" or patellar tendon reflex. As the extensor muscle of the leg when suddenly stretched contracts by a sharp tap on the tendon, so the masseter and other muscles of mastication contract when similarly excited by an extensile impulse. The latter is best imparted by applying a flat object, such as the handle of an ivory paper-knife, on the teeth on either side of the jaw, and using an ordinary percussion hammer to strike the required blow. The jaw should not be fixed by any voluntary muscular contraction, and the blow should be struck as near the teeth as possible. The short period of latency of the jaw-jerk, ·02 of a second, is held to be another argument against the reflex nature of the tendon reaction. The jaw-jerk is exaggerated in many cases of disease, and may even pass into a regular clonus. The latter phenomenon was observed five years ago by Dr. Beevor in a case of amyotrophic lateral sclerosis, published in the current number of *Brain*. Dr. de Watteville mentions a case of hysterical spasms in which the jaw-clonus was present. Further experience alone can show what variations in the jaw-jerk are compatible with health, and determine what diagnostic value its exaggeration and abolition may possess.

A TERRIBLE OPERATION.

IN a recent number of one of the leading medical serials of continental Europe, several pages are devoted to the description of a truly terrible operation. The patient, a middle-aged woman, of strong constitution, had suffered from mammary cancer for upwards of fifteen years. The disease, slow at first, had lately made rapid progress to induration and ulceration. The axillary cavity was obliterated, and the largely swollen arm could not be abducted. The patient being thoroughly anæsthetised, and all antiseptic precautions taken, the operator divided the clavicle at the junction of its inner and middle third. Raising the acromial end, and dividing the subjacent structures, hard sclerotic tissue was found surrounding the subclavian vessels. The artery and vein were tied separately near the scaleni, after separating with much difficulty the lymphatic glands infiltrated with carcinomatous tissue which was continuous with the hardened ulceration in the chest and strongly adherent to the rib. This procedure occupied an hour, and it was followed by amputation of the arm and excision of the scapula and of considerable portions of the second, third, and fourth ribs. The patient was still alive, but pale and with a thready pulse; yet, wonderful to relate, death did not occur until four hours later. We are assured that the procedure was sanctioned by a formal consultation of surgeons, and the operator closes his description with the hope that his example may be followed under more favourable circumstances. But on what grounds, anatomical or clinical, is there reason for believing that such a terrible mutilation can have any other result than the patient's speedy death? Our motives in suppressing names and place will doubtless be correctly interpreted by our readers, who must accept our abstract as an authentic record of proceedings in the chief hospital of one of the principal European cities in 1885!

INFLUENCE OF HOT DRINKS ON DIGESTION.

VARIOUS opinions are held by the public, and we believe by medical men also, on the effect of hot drinks on the digestion of food. This matter has lately been investigated by Dr. V. E. Nyeshel of St. Petersburg. The plan he adopted was to make use of twenty patients in the surgical wards of the Obukhoff Hospital suffering from fracture of the fibula, contusion of the foot, and such-like affections, and dividing them into two sets of ten each, to find out first by a three days' experiment the length of time an ordinary meal of soup, meat, potatoes, and black bread required for digestion. For this purpose the stomach-tube was employed at periods varying from five to seven hours and a half after the meal, and the condition of the contents of the stomach examined. In all the cases complete breaking down appeared to have taken place in about six hours and a half. The exact time required by each individual for the digestion of the specified meal being noted, further observations were made on a subsequent day, the patients in the first group being given after the meal hot tea at a temperature of from 40° to 75° C., the quantity taken varying from two to eight tumblerfuls. The contents of the stomach were drawn off at the time when, as former experiments had shown, digestion would under ordinary conditions have been complete. The result was that, when not more than three tumblerfuls of hot tea had been swallowed, it was found that digestion had pro-

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greased just as well as without it, but a larger quantity of hot tea appeared distinctly to retard the digestive process. The second group of patients were given a meal similar to what they had had before, but hot. On examining the contents of their stomachs no difference could be detected between the rate of digestion of hot and cold food. The author found that by painting the pharynx with a 5 per cent. solution of hydrochlorate of cocaine the tube passed easily and quickly.

DISEASE OF THE MEDULLA OBLONGATA AND HEMIANÆSTHESIA.

M. VULPIAN made an important communication to the Académie des Sciences on the 11th inst. on the subject of hemianæsthesia. Following up a former note on the subject in which he had pointed out the connexion between this affection and bulbar lesions, he detailed a case where the right side of the bulb had been diseased and in which there had been cross-anæsthesia—the right side of the face and the left limbs. Experiment had given results of a similar character. He had performed unilateral section of the bulb in animals, and thus produced experimentally a hemianæsthetic condition exactly corresponding with that existing in the case above mentioned. The explanation is to be found in the anatomical disposition of the nervous fibres of the medulla, where the sensitive root of the trigeminus of the same side is in juxtaposition with the encephalic fibres which cross at the same level.

"A MEDICAL MAN"—QUERY.

SOME of our contemporaries, who would not willingly tarnish the fair name of the medical profession, occasionally do so inadvertently in their police reports. Cases not infrequently are reported in the daily papers in which a person charged is described as "a medical man," "physician," &c. In these cases a reference to the Medical Register generally fails to corroborate the inference that they are legally qualified members of our profession. We do not hesitate to admit that now and again, even within the bounds of the Register, a "black sheep" does appear. But that is no reason why anybody who pleases should call himself "a medical man," and have his claim allowed. We would point out that copies of the Medical Register are annually distributed to the Law Courts, in order that, amongst other things, such mistakes may not be made.

TRAMWAY AND 'BUS MEN.

It seems strange, in this age of "short hours" and "early closing" movements, that a resolution should need to be moved to the effect "That the directors (of a tramway company) be requested to reduce the hours of work for drivers and conductors from sixteen hours to fourteen, giving every other Sunday off duty." Except railway, tramway, and 'bus servants, probably no members of the so-called labouring classes in the country work more than twelve hours out of the twenty-four. The most urgent reasons for a change in this particular are set forth clearly enough in "The Story of Our Tram-car Men"—a pamphlet which we commend to the attention of all who are interested.

RHODOMYCES.

Rhodomycosis, according to Dr. Wettstein, is a fungus closely allied to oïdium albicans, but differs in the appearance of the conidiophores, the modes of formation of the conidia, especially in its unseptated hyphal branches. The fungus was found in the fluids ejected by patients suffering from pneumonia. It presents itself as a dense, delicate, pink growth, containing enormous numbers of conidia.

MANGANESE IN PLANTS.

"DETERMINE the place and mode of action of manganese in the vital processes of protoplasm." When may such an imperative proposition be asked the student with any probability of obtaining an answer? An interesting paper by Professor Flückiger in the *Pharmaceutical Journal* (p. 621) opens by asserting the wide extension, though limited amount, of manganese in the vegetable world. Certain plants are said to have the power of absorbing the metal, others are unable to assimilate it. Much more striking facts of a similar order may be noticed with regard to iodine. Flückiger showed in 1872 that the plants of the natural order Zingiberaceæ are remarkable for the manganese that every part of most of the plants contains. Trapa natans, especially its fruit, is rich in manganese, although it grows in swamps that contain only an extremely small amount of that metal. There are two species of Trapa in the East, playing a most important part in the food of the Indian and Chinese population. Herr Lofander succeeded at Flückiger's laboratory in demonstrating the presence of manganese in the ash of the fruits of Trapa bicornis. According to some authorities, Trapa natans appears to be dying out, but this would appear on Tägçi's belief to be a correlative of the disappearance of swamps, which is the natural habitat of the "water-nut." Trapa bispinosa, indigenous in Bengal and the Peninsula, in the Punjaub as well as in Cashmere, yields enormous quantities of a most valuable contribution to the provisions of the people of India, where as Drury says in his "Useful Plants of India," the plant is largely cultivated.

SUPRAPUBIC LITHOTOMY.

M. POLAILLON recently showed at the Société de Chirurgie the urinary organs of a calculous patient upon whom he had unsuccessfully attempted suprapubic lithotomy. The bladder was distended by an injection of 150 grammes of fluid, and the rectum was distended in the usual manner; but in spite of these steps M. Polaillon found, when he made his incision through the linea alba, that the peritoneum extended over the bladder quite down to the pubes. He verified this by making an incision into the serous sac, through which he introduced his finger and exactly traced the reflection of the peritoneum. He therefore sewed up the wound and abandoned the operation. The wound healed, and several months later the patient died of pyelonephritis. At the necropsy the bladder was found to be hypertrophied and contracted, fitting closely around a stone measuring in circumference four centimetres by two. The peritoneum passed quite down to the pubes. The ureters were much dilated even to their orifice into the bladder, and M. Polaillon suggests that the fluid thrown into the bladder passed into the ureters and distended them instead of the bladder, that the rectal dilator passed in above the bladder, and that thus both these means failed to raise the bladder. However, without an actual demonstration of the truth of these views—and this was not made a the post-mortem—we are not forced to accept them as the explanation of the failure of the operation.

DISCHARGE OF AN OVARIAN CYST PER RECTUM.

SOME months ago the *New York Medical Record* contained an account of a case in the practice of Dr. H. W. Carpenter of Oneida, N.Y., in which a patient had been tapped of thirty-five quarts of fluid, albuminous to the extent of 75 per cent., in an ovarian cyst. She was then in extreme distress from distension and peritonitis, and hopeless of life. "She rallied well from the operation," says Dr Carpenter, "and in about six weeks there was per-

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foration of the colon, as near as could be ascertained, at the sigmoid flexure, and the fluid which had slowly accumulated in the sac was discharged *per rectum*, and on May 15th *the entire sac passed off*." The patient soon began to improve in strength and flesh, and was able to ride five or six miles without fatigue, and, with the exception of slight pain in the right iliac region, she felt quite well. This is a remarkable case. It would be interesting to have two or three questions answered: Did the sac come away per anum? was its pedicle or attachment divided? was it a single sac or cyst? and what were its size and weight?

EBERTH'S BACILLUS IN EMPYEMA.

AN observation which may be mentioned, as it concerns an interesting subject, has been placed on record by M. de Gennes in *La France Médicale*. The glass slips smeared with pus from a case of purulent pleurisy resulting from typhoid fever were stained in methyl blue and methyl violet. Microscopical examination revealed the presence of numerous micrococci, diplococci and bacilli. The last mentioned were elongated ellipsoidal rods, having a clear centre, but deeply stained at each extremity, in every way corresponding to the bacillus described by Eberth and Artaud as characteristic of enteric fever. M. de Gennes opines that the micrococci were the cause of the purulent pleurisy, but the bacilli he regards as the irrefutable witnesses of the enteric origin of the broncho-pneumonia that accompanied the pleurisy.

FROM the report of the examination made by Colonel Sir Francis Bolton of the water supplied by the several metropolitan water companies during the month of December, 1885, it appears that the Thames water distributed by the Chelsea, West Middlesex, Southwark, Grand Junction, and Lambeth Companies again contained, in consequence of the flooded state of the river, a much larger proportion of organic matter than, until November, had been present in it for many months past. The water drawn from the Lea showed little change from that distributed from the same source in the previous month. All the samples were clear and bright on delivery. The number of micro-organisms found by the gelatine method in one cubic centimetre of the various waters were as follows:—Chelsea, 9; West Middlesex, 15; New River, 18; Southwark, 73; Lambeth, 124; Grand Junction, 134; East London, 317; River Lea (unfiltered), 2831; River Thames (unfiltered), 4650.

ON the 26th inst. the costly and nearly new office furniture and effects of the Lower Thames Valley Main Sewerage Board were sold by auction at Kingston-on-Thames, consequent on the dissolution of that ill-fated authority. The joint board being practially now at an end, several of the late constituent authorities, including the Richmond Select Vestry, the Heston and Isleworth Local Board, and the Kingston Corporation, have now taken independent action with regard to the drainage of their several districts, and have already adopted schemes which it is hoped will be accepted by the Local Government Board.

THE death has been announced of Deputy Surgeon-General M'Nab, M.D. Glas., who retired from the army in October, 1875, after a service of twenty-five years. He assisted in the suppression of the Indian Mutiny, and was present with the 64th Regiment in the operations at Cawnpore under General Windham, in the defeat of the Gwalior mutineers on the 6th of December, 1857, the action at Khalee Nuddee, and the occupation of Futteghur, receiving the Mutiny Medal for his services.

A CATALOGUE of the Library of the Faculty of Physicians and Surgeons of Glasgow has recently been issued. It is in the form of an alphabetical list of authors, accompanied by an index of subjects in alphabetical order, the authors under each subject being arranged chronologically. This is the plan on which the catalogue of the library of the Royal Medical and Chirurgical Society of London has been compiled, and it possesses many advantages. Mr. Duncan, the librarian of the Faculty, to whom credit for the work is due, is to be congratulated on the successful and satisfactory result which has crowned his labours.

AT a meeting of the City Commission of Sewers on the 26th inst., Dr. Saunders, the medical officer of health, reported that the death-rate during the past five weeks was at the rate of 5·05 per 1000 per annum, the lowest ever recorded in the City, and marvellously small considering the resident population and the fact that over three-quarters of a million of people frequent it daily. As showing the extreme fickleness, however, of the rate in the city, it may be mentioned that at the corresponding week last year it was 27·29 per 1000.

ON the arrival of the troopship *Serapis* at Portsmouth on the 22nd inst. from Bombay, it was announced that five days after leaving India, Staff-Surgeon M'Carthy died suddenly from fatty degeneration of the heart, and was buried at sea with military honours. The deceased had served in the ship for three years, and was forty-eight years of age.

AT the monthly meeting on the 25th inst. of the Board of Management of the Manchester Royal Infirmary, Dispensary, and Lunatic Asylum, a resolution congratulating Sir Wm. Roberts on the honour which has recently been conferred upon him was carried unanimously.

OWING to the recent introduction of small-pox into Cardiff by two seamen from a vessel arriving from Antwerp, it has been decided by the local authorities to apply for an inspector from the Local Government Board to visit the town.

THE strain of attention involved in the struggle between Zukertort and Steinitz, at the chess tournament in New York, is stated to be evidenced by the existence of insomnia in both combatants.

SIR HENRY ACLAND is, we learn, about to proceed to the Mediterranean, to seek, in two months' rest and change, the means of recruiting his somewhat enfeebled health.

MR. TEALE, of Leeds, will deliver a discourse at the Royal Institution on Friday, February 5th, at 9 o'clock, on the Principles of Domestic Fire-place Construction.

MR. J. BLAND SUTTON, Sir Erasmus Wilson Lecturer for the current year, has been appointed Assistant-Surgeon to Middlesex Hospital.

ANTHROPOLOGICAL MUSEUM.—A project has been started in Berlin to establish there an anthropological museum, which will do with regard to the races of men what zoological gardens do with regard to animals. In the exhibition, or garden, it is intended that representatives of various races shall permanently reside; while of such races as cannot stand the cold of the climate, representatives will be brought to Germany to reside there during the summer. An ethnological museum is to be established in connexion with the exhibition, which is said to have the support of several capitalists.

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Pharmacology and Therapeutics.

AGARICIN IN THE NIGHT SWEATS OF PHTHISIS.

THE action of agaricin in arresting or modifying the sweats of phthisis was known to De Haen as early as 1767. It has since been employed by various observers for this purpose—Barbut, Andral, Trousseau, and Peter in France; Seifert, Proebsting, Pribram, Piering, and Senator in Germany; and Wolfenden, Murrell, and Young in Great Britain,—with more or less success. A series of observations has recently been published by Dr. Vitali Miller, of St. Petersburg, on seventeen cases of phthisis in which night-sweats were a prominent feature. In the majority of cases doses of from one-twelfth to one grain (a Russian grain is equal to ·996 of an English grain) produced a decided diminution in the sweats, in some cases arresting them entirely. Generally there were no concomitant unpleasant symptoms; but in a few instances some disturbance of the primæ viæ was set up, tending to justify the dictum of the old physicians, "Cutis laxa, alvus sicca; cutis sicca, alvus laxa." There were, however, cases in which even two-grain doses failed to produce any impression on the perspiration. Of the seventeen cases observed, a more or less decided diminution of the sweats was produced in twelve, while in the remaining five little or no effect could be detected. In one of these five, two-grain doses produced absolutely no effect. In another, although the first two doses produced arrest of the sweating, the succeeding five doses, which were larger, were followed by no diminution. In another case, in which agaricin was given for ten nights, complete arrest occurred twice and diminution three times, but on the remaining five nights no effect at all was observed. In another case, where the drug was given for four nights, there was arrest one night, an increase the next night, and very profuse sweats on the subsequent two nights. In another case there was only a very slight diminution produced. With regard to the twelve cases in which more satisfactory results were obtained, the following figures give the number of nights in which sweating, in each case in regular order, was diminished—6, 2, 0, 4, 5, 4, 6, 3, 1, 1, 3, 3. The nights in which the sweats were arrested were—0, 2, 4, 3, 5, 2, 4, 7, 3, 4, 3, 5; and those in which there was no diminution—4, 0, 3, 2, 3, 0, 1, 2, 3, 2, 1, 0.

TOBACCO.

The trustees of the Fiske Fund at their last annual meeting announced that they had awarded the prize to an essay on the "Physiological and Pathological Effects of the Use of Tobacco" bearing the motto "Quid nimium probat, nihil probat." The author was found to be Dr. H. A. Hare, of Philadelphia. The conclusions at which the author has arrived are thus summed up:—Tobacco-smoking does not decrease the urine eliminated, but rather increases it; tobacco does retard tissue waste; tobacco and its alkaloid cause convulsions in the primary stage of the poisoning by depressing the reflex inhibitory centres in the cord; it causes the palsy of the second stage by paralysing first the motor nerve trunks and then the motor tract of the spinal cord; the sensory nerves are not affected by the drug; nicotine contracts the pupil by stimulating the oculo-motor and paralysing the sympathetic, this action being peripheral; nicotine first lowers the blood-pressure and pulse rate, secondly increases pressure and rate, and finally decreases pressure. The primary lowering of pressure and rate is due to pneumogastric stimulation, associated with vaso-motor dilatation; the second stage is the result of vaso-motor constriction and pneumogastric paralysis; the third is due to vaso-motor dilatation returning. Death by poisoning from this drug results from failure of respiration, the action being on the central nervous system. The blood-corpuscles are broken up and crenated by the action of the poison. In death from nicotine-poisoning the blood shows changes in the spectra. Death can be brought about by cutaneous absorption of nicotine. Tobacco increases intestinal peristalsis in moderate doses, and produces tetanoid intestinal spasm in poisonous ones. The liver appears to destroy the poison, although this destruction is participated in by every [illegible] in other parts of the body. Tobacco-smoking increases pulse rate and decreases arterial pressure.

ANTIPYRIN IN RHEUMATISM AND MIGRAINE.

Professor M. A. Khomyakoff and Dr. L'voff, writing in the last number of the *Vrach*, highly praise antipyrin both in acute and chronic rheumatism. They prescribe it in from fifteen- to twenty-grain doses four times a day, and find that in acute rheumatism it very quickly relieves the pain and reduces the swelling without producing any unpleasant effects. It was successful, too, in two cases in which salicylate of soda in large doses had entirely failed to afford relief. Antipyrin proved equally valuable in muscular rheumatism, rheumatic pains in the head and limbs, and in neuralgia of rheumatic origin. It was also employed in twenty-five cases of migraine and pains in the head arising from various causes. In most of these cases the first dose of from fifteen to twenty grains of antipyrin produced a marked alleviation of the pain within twenty minutes. If no effect were produced, a second dose was administered half an hour after the first, and even in the severest cases this did not fail to relieve. Unfavourable symptoms did not present themselves at all throughout the investigation.

ADONIS VERNALIS AND ADONIDINE.

M. Henri Huchard has reinvestigated the action of adonidine on the heart and vessels. Durand has related a case in which he had been able to give sixteen centigrammes a day with impunity. But Huchard avers that he would never dare to go beyond two or three centigrammes of the glucoside, and even then nausea, vomiting, and epigastric pains may be caused. The action of the medicine is rapid, and even on the first day the effects on the urine and on arterial tension may be observed, as well as on the heart. Its elimination probably takes place rapidly, since all its results disappear a few days after the suspension of the drug. Notwithstanding the value of adonidine, Huchard thinks it cannot be regarded as the successful rival of digitalis.

A SOPORIFIC IN DYSPNŒA.

Withania somnifera, which was known to the ancients as a sleep-inducing drug, has recently been employed by Dr. Trabut of Algeria in cases of alcoholism, emphysematous dyspnœa, and phthisis, for the purpose of inducing sleep, with a considerable amount of success, greatest apparently in the former two classes of cases. In some respects it appears to Dr. Trabut to be a more trustworthy hypnotic than opium. A tincture, which is very bitter, a crystalline sulphate, and an extract have been prepared by M. Duval, professor of chemistry, who recommends the extract in pills. It is stated not to have a mydriatic effect.

THE INTERNATIONAL CONGRESS OF HYGIENE.

To all who have realised that a high degree of perfection in sanitary matters will not be easily attained unless sanitary reforms assume an international character, the announcement that the sixth Congress, which was to have been held at Vienna this year, has been postponed will be received with regret and surprise. The International Congresses of Hygiene have met regularly every other year for the last ten years. The towns of Brussels, Paris, Turin, Geneva, and the Hague all faithfully fulfilled their promises, received and gathered their guests from all parts of the world, carrying out the programme established by common consent with much skill and hospitality. For some reason, as yet unexplained, Vienna has thought fit to break through the traditions and postponed for a twelvemonth its invitation to the Congress. Three years must therefore elapse before this, the most catholic of all gatherings on the subject of hygiene, can take place—a fact which, in the face of the cholera epidemic that still menaces Europe, is more especially unfortunate. One advantage, however, will accrue: the delay will give English sanitary reformers more time to prepare themselves. At these Congresses, to which some twenty to thirty nationalities send delegates, England is usually but inadequately represented. As the Congress is not confined to the medical profession, English doctors apparently take but little interest in the proceedings, and the fact that the majority of the members are medical men seems to keep engineers and architects away. On the Continent, however, though sanitation is not so fully developed as

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in England, it is well understood that medical men are not alone responsible for the preservation of public health. The services of the chemist, the architect, the engineer, and the public administrator are also indispensable; and it is the special merit of these international Congresses of Hygiene that they have brought together eminent men belonging to all these professions, and representing all the important and many of the less powerful nations of both hemispheres. There is now, in consequence of the postponement, eighteen months to prepare for the next Congress; and we trust that by that time not only will England be powerfully represented, but the English delegates will be able to propose that the Congress hold its seventh meeting in London. No nation has taken a more active part in the development of hygiene, and Englishmen should not be slow to impart their knowledge and practical experience to the representatives of foreign countries. It seems strange that we should remain comparatively inactive in such a cause when small continental towns like the Hague and Geneva have given proof of boundless hospitality and great public spirit.

The report of the work of the sections at the fifth Congress has recently been published. It is issued for the Congress by the Imprimerie sud Hollandaise at the Hague, and was compiled by the secretary-general, Dr. Van Overbeek Meijer. Each speaker was requested to write a summary of his own speech either in French or German. These, when printed, were sent to the author for correction, and then gathered together in the present volume. We thus have before us in compact form the opinions of eminent hygienists belonging to various nations. The accompanying graphic maps and charts serve to illustrate the theories propounded. These embrace, among other subjects, the rival systems of drainage, the English water-carriage, the Dutch Leirnur, and the French Berlier pneumatic drainage; the influence of wood plantations on climate, with the views of the representative of the Russian Government on this question; conclusive evidence from the Dutch delegates concerning the spread of epidemics by the importation of rags; Dr. Brouardel's proposals and arguments in favour of international laws to prevent the adulteration of food; a learned theory by Dr. Thirzinga on over-pressure at school; Dr. Vallin's experiments in conveying tuberculosis to animals by milk from diseased cows; Dr. Roth and Van Dooremaul on the prevention of blindness; speeches, charts, and statistics on the effects of alcoholism in Switzerland and Holland; Dr. Napias, on the factory legislation of all nations; Dr. Layet, of Bordeaux, on voluntary restriction of procreation; Dr. J. Bertillon, speeches and maps showing the districts of Paris most affected by the leading zymotic diseases, and some very interesting statistics and charts on the comparative mortality in the various professions and trades of Switzerland. Thus it will be seen that the problems studied were of considerable practical interest, and we have mentioned but a few out of the number.

REPORT ON THE SANITARY MEASURES IN INDIA IN 1883-84;

TOGETHER WITH MISCELLANEOUS INFORMATION UP TO JUNE, 1885. VOL. XVII.

THE information contained in this volume, so far as regards the health of the European and native armies, the prisoners in the gaols, and the civil population of India, has already appeared in the report of the Sanitary Commissioner with the Government of India. As we noticed the more important facts in our review of that volume, it seems unnecessary to go over the ground again. (See THE LANCET, April 11th, 1885.) There are, however, some points to which we may call attention.

There seems to be a fair progress in vaccination, though it is still very far from being general. During the year under review there was an extension of the Compulsory Vaccination Act in Bengal to fifty-six towns and four thannahs. The value of vaccination is shown by the fact that, while the mortality from small-pox was ·25 per 1000 in unprotected areas, it was only ·07 per 1000 in those that were thoroughly protected. The use of bovine lymph was extending, and the demands for it increasing so much that the establishment was scarcely able to meet them. It is stated that in Madras inoculation is very much practised by the people, and "as it interferes greatly with the progress of vaccination, the Inspector of Vaccination has suggested that an Act should be passed prohibiting inoculation in those districts where vaccination can be had."

In Calcutta the operation of the Contagious Diseases Act was suspended from March 15th, 1883, and apparently with the same result as at home, an increase of venereal disease. Surgeon-General Payne, reporting on the effect of this during the remainder of the year, stated "that the measure had in the course of nine months undone all the good that had been accomplished. The statistics furnished by Dr. Payne apparently show that the withdrawal of the Act had resulted in injury to the health of certain classes of the population."

The report of the medical schools appears to be satisfactory. At the Calcutta Medical College, and the Grant Medical College, Bombay, female students were for the first time admitted, and it is stated that some very promising candidates have presented themselves.

Throughout India the questions of the water-supply and drainage of the towns appear to be receiving increased attention, and the works for these purposes to be making steady, though we fear slow, progress. In Madras the extension of the water-supply throughout the town was completed, and in Bombay considerable progress was made in the works for its improvement. Among the military works in Bengal may be specially noted "the completion of the Peshawur water-supply scheme, the extension of the Umballa water-supply, the provision of water to Pishin, and the commencement of the supply of water to Chakrata." In Madras the water-supply of Bangalore was receiving attention, and steps were being taken to "put a stop to the long-standing nuisance in Fort St. George, caused by the discharge of fetid sewage from the main drain into the sea, just outside the fortification." At Secunderabad, also, a scheme for the much-needed improvement of the drainage of the town was under the consideration of the Resident.

At a time when so much attention is being directed to the most advisable measures for the prevention of the spread of cholera, the following remarks by the Army Sanitary Commission are of special interest: "Were it not that we have other experience in India than that furnished by the civil population, our hope of reducing cholera mortality, by the removal of its local causes, would be very small. But such experience as we have throws a totally different light on the figures of the preceding table [of the registered cholera deaths], and converts them into indices of great local sanitary negligence. For example, local fairs and pilgrimages, which used formerly to be the real foci of local epidemics, have ceased to be so wherever cleanliness has been enforced, pure water provided, and overcrowding prevented. This rule holds universally—subject, however, to a very instructive exception, and this is, that the absolute immunity of the people at these fairs depends, to a certain extent, on the epidemic intensity in the district where the fair happens to be held. If the district mortality be not excessive, the fair-people will escape; but if the district mortality be high, some of the fair-people will suffer, but never to the ratio of the local population. That is on the supposition that the usual precautions are adopted." Under the head of General Remarks (p. 141) the Army Sanitary Commission has given a short but very clear and interesting account of "the attempts which have been made by the use of the microscope, and by other methods of inquiry, to obtain some knowledge of the pathology and etiology of the disease," and of the discussions which have taken place regarding it, with special reference to Professor Hallier's rice fungus theory, and the investigations by Koch, Klein, Lewis, and others into the subject of the cholera bacillus. The practical conclusion at which they have arrived is that expressed by Dr. Cuningham, "Once accept the great principle that the improvement of local conditions is the one and only principle on which the State can act with advantage in matters of public health, and the solution of the whole question will be comparatively easy. Sanitary administration will then no longer attempt to accomplish impossibilities, but will be directed to those great practical reforms which cannot fail to improve the health and thereby add to the happiness and prosperity of the people." The report contains a great mass of information respecting the distribution of disease throughout the various divisions of India, and the means which have been adopted, and those which are still in progress, to improve the sanitary conditions alike of the military and civil population.

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SUCCESSFUL EXTIRPATION OF AN ENDO-CRANIAL TUMOUR.

THE latest *Bullettino* of the Royal Academy of Medicine of Rome (1885, No. 7, p. 247) reports a communication of exceptional interest by Dr. Durante. The patient, Signora C. B——, of Narni, aged thirty-five, was of sound constitution. The left eyeball projected forwards and outwards, but its movements and functions were unimpaired. The deformity had commenced about three months previously, and was preceded by the following symptoms: gradual loss of the sense of smell to complete extinction; perceptible impairment (*affievolimento sensibile*) of memory, particularly with reference to names; a feeling of uncertainty on movement, and, to use the patient's words, a sense of emptiness (*vacuità*) about the person. Motility and sensibility to heat and pain were experimentally proved to be normal. Hearing, taste, and the gastro-enteric functions were normal. The nasal cavities were explored with negative result. The lady's husband stated that her formerly gay disposition had become melancholy, although she did not seem much impressed by her ailment. The disturbance of memory, loss of sense of smell, and the subjective and objective state of the patient, convinced Dr. Durante of the existence of a tumour within the cranial cavity, which had destroyed the olfactories, compressed the anterior lobes of the brain, and penetrated into the orbital cavity through its roof. The patient, fully warned as to the importance and uncertainty of the operation, assented to it, and Dr. Durante performed it on June 1st in the presence of several colleagues. He commenced by making a curved incision from the inner angle of the left palpebral aperture to the glabella, and hence in a straight line upwards almost as far as the hair. The soft tissues having been raised from the bone, an opening was made into it layer by layer (*a strati a strati*) with a hammer and chisel. A portion of the frontal bone was removed to the extent of about two square inches (*circa cinque centimetri quadrati*). We proceed to translate the conclusion of Dr. Durante's narrative:—"I found that the frontal sinus had disappeared, the inner wall having been forcibly pushed against the outer one. On removing the inner table I found myself in the presence of the tumour, which I began to remove very carefully by means of a spoon. After having removed the greater part of it, I perceived that its only point of attachment was the dura mater covering the left lobe; hence I found it easy to enucleate it throughout its whole extent from the left anterior fossa and part of the corresponding right fossa at the base of the brain. The tumour reached as far back as the anterior clinoid tubercles of the sella turnica. Corresponding to the left cribriform plate of the ethmoid, a prolongation of the tumour descended into the ethmoid cells. Having excised the tumour from its connexion with the dura mater, I noted that it had depressed the orbital roof without penetrating it, and had reduced to the smallest limits the left anterior cerebral lobe and flattened the right one. The left lobe appeared substituted by the tumour, which in its entirety was equal in volume to an apple. Having carefully arrested the flow from the bleeding surface and introduced a drainage-tube into the cranial cavity through the left nasal fossa, I united the wound of the soft parts for healing by the first intention. The operation lasted about an hour. The loss of blood was relatively not great. The patient bore chloroform very well, and woke up slowly. Reaction was complete the third day. The wound had a perfectly aseptic course, the drainage-tube acting well in carrying off a very large quantity of serum slightly tinged with blood. The fourth day the patient was very prostrate. She was sleepy, indisposed to talk, and complained of great mental confusion. The drainage-tube had ceased to act during the night. I drew it a few lines downwards, and it began to yield a few drops of turbid serum. With a small indiarubber pump I injected the external aperture of the tube, and thus obtained about thirty grammes of liquid. The dropping was constantly re-established, and continued the whole of the following day and night. The alarming symptoms disappeared step by step the subsequent day. On the seventh day I removed the points of suture, and on the ninth the drainage-tube. In fifteen days the patient returned home perfectly well, without, however, having recovered the sense of smell or much improved in memory. In spite of general weakness, due to the operation, the patient said she no longer experienced the indefinite sense of emptiness around her. There was no appreciable sign of reproduction of the portion of bone removed; the displacement of the eyeball was in part reduced. Three months later I again saw Signora B——. She was very happy to inform me that her mental faculties and her normal state had been restored, and that gradually she had regained the sense of smell. This fact surprised me all the more that I was convinced of having destroyed the left olfactory during the operation, in removing that portion of the tumour which had penetrated the cribriform plate of the ethmoid. I therefore made some experiments, causing the patient to smells some aromatic substances with either nostril. I found that smell was normal on the right side, and entirely lost on the left. Microscopic examination of the tumour proved it to be a fusi-cellular sarcoma arising from the dura mater. Only one such operation is recorded in surgical history. That was performed by Amidon in America some months since, but the patient died of meningitis on the eleventh day."

ACTION OF SUNLIGHT ON MICRO-ORGANISMS.

AT the last meeting of the Royal Society, on Jan. 14th, a paper on the Action of Sunlight on Micro-organisms was read by Dr. DOWNES, medical officer of health for the Chelmsford combined districts. In previous papers to the Society in 1877, 1878, and 1879, the author, conjointly with Mr. T. Blunt, showed that sunlight was fatal to saprophytes by a process of hyperoxidation thereby induced. In this process the more refrangible rays were the most active. In the course of the research two other facts of importance also came out. It was found that in the presence of free oxygen the molecule of oxalic acid might be entirely resolved into water and carbonic acid by the action of light, more especially of the more refrangible rays, $C_2O_4H_2 + O = 2\,CO_2 + H_2O$. Further, it was discovered that the alterative ferment of cane sugar (a representative of the singular and important bodies, the diastases, which play so important a part in animal and vegetable economy) was oxidised by sunlight. These investigations have not as yet been repeated as a whole, but each point put forward in them has now been confirmed by independent observers.

After a reference to the results obtained by Professor Tyndall in 1881, and by others, the author summarises the recent work of Professor E. Duclaux, who finds that micrococci are apparently far more sensitive to sunlight than the spore-forming bacilli. Dr. Downes and Mr. Blunt, in their original memoirs, had noted the variation of resistance of different organisms—e.g., of the hypho- and saccharo-mycetes—as compared with the ordinary putrefactive bacteria; and the former now describes a specially resistant form of bacterium, resembling, but not identical with, the asco-bacteria of Von Teighem. Duclaux coincides with Downes and Blunt in regarding the process as an oxidation, and confirms their results as to the destruction of diastase by sunlight.

In refuting the conclusion of Dr. Jamieson, an Australian observer, that the injurious effect of sunshine on micro-organisms is simply a result of heat, Dr. Downes gives an account of recent experiments of his own, which indicate that a similar action, though of course in less degree, is exercised by diffused light. He concludes with a reference to the well-known observations of Pringsheim on the destruction of vegetable protoplasm by light, and claims them as evidence of the truth of his former generalisation that the hyperoxidation of protoplasm by light is a general law, from the action of which living organisms are shielded by a variety of protective developments of cell wall, aggregation of tissue or colouring matter, and in other ways.

AMONG the members of the recently formed Royal Commission to investigate and report upon the condition and education of the deaf and dumb are Drs. T. R. Armitage, R. M'Donnell, and W. T. Robertson.

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VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5813 births and 3966 deaths were registered during the week ending January 23rd. The annual death-rate in these towns, which had been equal to 22·5 and 23·8 per 1000 in the preceding two weeks, declined again last week to 22·4. During the first three weeks of the current quarter the death-rate in these towns averaged 22·9 per 1000, and was 1·5 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 10·4 in Birkenhead, 16·1 in Leicester, 17·2 in Oldham, and 17·3 in Halifax. The rates in the other towns ranged upwards to 26·3 in Liverpool, 27·9 in Plymouth, 30·0 in Blackburn, and 30·4 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 448 and 435 in the preceding two weeks, further declined last week to 407; they included 159 from whooping-cough, 100 from measles, 38 from "fever" (principally enteric), 38 from scarlet fever, 38 from diphtheria, 31 from diarrhœa, and 3 from small-pox. No death from any of these zymotic diseases was recorded last week in Halifax, whereas they caused the highest death-rates in Blackburn, Bolton, and Nottingham. The greatest mortality from whooping-cough occurred in Newcastle-upon-Tyne and Nottingham; from measles in Oldham, Plymouth, and Nottingham; from scarlet fever in Leeds and Sunderland; and from "fever" in Portsmouth, Sunderland, and Birkenhead. The 38 deaths from diphtheria included 20 in London, 5 in Liverpool, 2 in Wolverhampton, 2 in Birmingham, 2 in Hull, and 2 in Sunderland. Small-pox caused 3 deaths among the residents of London and its outer ring, 3 in Liverpool, and not one in any of the twenty-six other provincial towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had declined in the preceding ten weeks from 90 to 35, had further fallen to 26 on Saturday last; only 2 patients were admitted to these hospitals last week, against 11 in the previous week. The Highgate Small-pox Hospital contained 3 patients on Saturday last, no case having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 518 and 534 in the preceding two weeks, declined last week to 477, and were 63 below the corrected weekly average, a noteworthy fact if the recent cold weather be borne in mind. The causes of 95, or 2·4 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Nottingham, Leicester, Sunderland, Oldham, and in five other smaller towns. The largest proportions of uncertified deaths were registered in Liverpool, Halifax, Sheffield, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 22·9 and 23·9 per 1000 in the preceding two weeks, was 23·1 in the week ending January 23rd, and exceeded by 0·7 the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 11·8 and 13·0 in Leith and Paisley, to 25·4 and 28·8 in Dundee and Glasgow. The 570 deaths in the eight towns showed a decline of 19 from the number in the previous week, and included 14 which were referred to diphtheria, 7 to diarrhœa, 6 to "fever" (typhus, enteric, or simple), 6 to whooping-cough, and 1 each to small-pox, measles, and scarlet fever; in all, 36 deaths resulted from these principal zymotic diseases, showing a further decline from 45 and 40 returned in the preceding two weeks. These 36 deaths were equal to an annual rate of 1·5 per 1000, which was 0·8 below the mean rate from the same diseases in the twenty-eight English towns. The deaths referred to diphtheria, which had been 2, 6, and 8 in the previous three weeks, further rose last week to 14, of which 7 occurred in Glasgow and 4 in Aberdeen. The 7 deaths attributed to diarrhœa showed a decline from recent weekly numbers, and included 4 in Dundee. The 6 deaths referred to "fever" corresponded with the number in the previous week; 4 occurred in Glasgow. Five of the 6 fatal cases of whooping-cough, showing a considerable decline from recent weekly numbers, were returned in Glasgow; and the death from small-pox occurred in the same city. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 132 and 145 in the preceding two weeks, further rose last week to 160, but were 36 below the number returned in the corresponding week of last year. The causes of 77, or nearly 14 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 28·8 and 33·3 per 1000 in the preceding two weeks, declined again to 29·6 in the week ending Jan. 23rd. During the first three weeks of the current quarter the death-rate in the city averaged 30·6 per 1000; the mean rate during the same period did not exceed 22·7 in London and 19·2 in Edinburgh. The 200 deaths in Dublin last week showed a decline of 25 from the number returned in the previous week, and included 24 which were referred to the principal zymotic diseases, against 15 and 30 in the preceding two weeks; 17 resulted from whooping-cough, 2 from "fever" (typhus, enteric, or simple), 2 from measles, 2 from scarlet fever, 1 from diarrhœa, and not one either from small-pox or diphtheria. These 24 deaths were equal to an annual rate of 3·5 per 1000, the rate from the same diseases last week being only 2·5 in London and 0·6 in Edinburgh. The fatal cases of whooping-cough, which had been 8 and 19 in the previous two weeks, declined again last week to 17. The two deaths referred to "fever" were fewer than in any recent week, as were also the fatal cases of scarlet fever. The 2 deaths from measles were the first recorded since the beginning of this year. Eight inquest cases and 4 deaths from violence were registered; and 46, or nearly a quarter, of the deaths were recorded in public institutions. The deaths of infants showed a further increase upon the numbers in the previous two weeks, while those of elderly persons had declined. The causes of 25, or nearly 13 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

WAR OFFICE.—Army Medical Staff: Surgeon-Major John Joseph O'Reilly is granted retired pay, with the honorary rank of Bridgade Surgeon.

MILITIA MEDICAL STAFF.—Surgeon-Major Edward Allen Waterworth, M.D., 3rd Brigade, Southern Divison, Royal Artillery, resigns his commission.

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Fleet Surgeon James Thomson has been placed on the retired list, with permission to assume the rank and title of Deputy Inspector-General of Hospitals and Fleets.

The following appointments have been made:—Staff Surgeon Richard S. P. Griffiths, to the *Serapis;* Surgeon Cyril J. Mansfield, to the *Excellent*, additional, for disposal; Surgeons Octavius S. Fisher and Herbert P. Shuttleworth, to the *Royal Adelaide*, additional, for Plymouth Hospital; Surgeon John Lonney, to the *Lion*, additional, for disposal; Surgeon George J. Trevor-Roper, to the *Indus;* Surgeon Robert Hickson, to the *Cambridge;* Surgeon John Moore, to the *Duke of Wellington;* Surgeon John S. Fogerty, to the *Asia;* and Mr. George H. Johnson, to be Surgeon and Agent at *Teignmouth*.

RIFLE VOLUNTEERS.—5th Durham: Acting Surgeon Frederick William Gibbon resigns his appointment.—1st London (the City of London Rifle Volunteer Brigade): Arthur John Hubbard, Gent., M.B., to be Acting Surgeon.—1st Volunteer Battalion, the Royal Fusiliers (City of London Regiment): Surgeon William Johnson Walsham resigns his commission.—4th Volunteer Battalion, the Norfolk Regiment: Edward Thurlow Prior, Gent., to be Acting Surgeon.

ROYAL MATERNITY CHARITY.—The 129th annual meeting of the governors of this charity was held on the 27th inst. The number of women who received medical and other help during the past year, without removal from their homes and families, was 3331, and of these only twelve died. The financial condition of the charity is most unsatisfactory, and the trustees have been compelled to sell out £1000 of the funded stock to meet the large and constantly increasing number of patients applying for its help.

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Correspondence.

"Audi alteram partem."

ROYAL COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—With reference to the article in your issue of the 23rd inst. regarding the constitution of the Council of the Royal College of Surgeons, I would beg to remark that the College was founded in order to promote the art and science of surgery; this fact is reiterated in all the charters granted to the College. It was "in order more effectually to promote and encourage the study and practice of surgery" that the class of Fellows by examination was instituted. I believe that in the interests of surgery it is desirable that the College should continue to have the power to confer honours in surgery, and that the honours should carry with them any privileges which it is in the power of the College to bestow; and, consequently, that those only who gain the Fellowship should be entitled to a seat on the Council. It is open to any Member of the College to pass the examination for the Fellowship, and I should very much like to see the second examination or that in the practice of surgery alone insisted on for Members of twelve years' standing and upwards.

It is urged that one of the reasons why Members of the College should have seats in the Council is because it is desirable that the views of general practitioners should be heard at the Council. But a very large proportion of the Fellows are in general practice. If, therefore, general practitioners have interests which it is the province of the College to advance, as distinct from those of consulting surgeons, there can be no reason why their views should not be advocated at the Council by Fellows who are engaged in the work of general practice. What I mean is, that the fact of a man being a Fellow of the College in no way lessens his power to appreciate the feelings of general practitioners, especially if he is engaged in that line of the profession; the idea above referred to consequently appears to me to be groundless, so far as it applies to Members being elected to the Council.

On the other hand, by only permitting Fellows to be elected to the Council it is possible we enhance the privileges of the Fellowship, and may lead men to seek this honour, and thus forward the objects for which the College was founded. Beyond this it seems to me most objectionable to have anything like class distinctions or interests in the Council; at the same time, to my mind, there are many sound and valid reasons why Members of the College should have a voice in the election of the Council. It is feared that if all Members of ten years' standing are allowed to vote for candidates for the Council, the voice of the Fellows will be swamped; but there are means by which this difficulty may be overcome. It is, however, useless entering into details until we know what the opinion of the Fellows is upon the subject. There can be no question that the Fellows of the College are in possession of all the rights and privileges of electing members of Council; but it is impossible for anyone at present to know what their feelings, if they have any, on this matter may be. It was to ascertain this point that I brought forward my resolution at the Council of the College of Surgeons on Jan. 14th.

I am, Sir, yours truly,

Grosvenor-street, Jan. 25th, 1886. C. MACNAMARA.

"MR. HORSLEY'S CRITICISM ON PROF. SCHIFF."

To the Editor of THE LANCET.

SIR,—The necessarily incomplete nature of the abstract of my lectures that appeared in your issue of Jan. 2nd has provided Dr. Huggard with a favourable opportunity of reviving an old story. The moral which adorns his tale, however, does not apply to my experimental demonstration of the condition of the spinal cord when subjected to Professor Schiff's experiments, for I have never injured the motor tract in any of my operations. I pointed out in my lectures that the tension of wound-exudation (not suppuration of course) on the one hand, and interference with the vascular supply of the postero-lateral portion of the cord on the other, determined a *local* degeneration in the motor tract of the same side of the cord, the area of degeneration never extending more than about two millimetres on each side of the point of section. Further, I also showed that the result described by Schiff—viz., absence of movement in the fore limb of the same side as the cord lesion, when, nevertheless, the corresponding motor centre in the opposite cortex was excited—appeared in exact proportion to the degree of degeneration observable in the motor tract, and that in two cases where the degeneration was very slightly marked, Schiff's result did not appear, although the posterior column had been perfectly divided. I am about to publish in *Brain* the full details of the experiments on which my criticism of Professor Schiff's work is based, and I trust that we shall soon have the unusual opportunity of seeing Professor Schiff's methods, details of experiment, drawings of the lesions produced, and, last but not least, a full account of the state of the motor tract (opposite the seat of operation) published *in extenso* for comparison.

Dr. Huggard's praiseworthy energy in reporting Professor Schiff's experiment last summer leads me to hope that he will furnish us with the foregoing details, since until we know, for instance, that Professor Schiff has examined the motor tract as I have described, &c., it is somewhat premature to depart from the language of ordinary criticism, and to explain my opposing results as due to "lack of success."

I am, Sir, yours faithfully,

VICTOR HORSLEY.

Park-street, Grosvenor-square, W., Jan. 26th, 1886.

THE CONNEXION BETWEEN THE PAROTID GLANDS AND THE GENERATIVE ORGANS.

To the Editor of THE LANCET.

SIR,—The interesting letters in your issues of the 9th and 16th inst. from Mr. Stephen Paget and Dr. F. L. Tayler on this subject induce me to record the following cases, which will be seen to bear on the subject from both sides of the question—viz., the occurrence of parotitis from irritation of the genito-urinary system, and, conversely, the occurrence of ovaritis in connexion with parotitis.

The first case was that of an old gentleman aged eighty-five, who was much troubled with irritable bladder. I had passed a flexible catheter on several occasions without any subsequent irritation, and as there was but little enlargement of the prostate to account for his increasing trouble, I introduced a sound, easily and without much pain, to make sure that he had no calculus. This proceeding set up great irritation, and on the second day he had violent rigors, and complained of stiffness and pain about the right parotid, which became much enlarged and suppurated, and caused death from exhaustion in about a fortnight. During the whole time the catheter was required to relieve the bladder, owing to the inflamed and swollen condition of the prostate.

The next case was that alluded to by Mr. Stephen Paget, in which an acute attack of parotitis was induced by the introduction of a Hodge's pessary, although the pessary had given great relief, and caused no apparent local irritation. This patient was fifty-eight years of age, and long past the climacteric period. As she had never borne children, we may assume that the genital organs were in a very quiescent state. She has since been able to wear the pessary with great benefit. The parotid attack lasted about ten days, but began to subside on the removal of the pessary.

The other two cases were so similar to one another that one account will serve for both. They occurred in single ladies about twenty to twenty-two years of age, both in fairly good health, when they contracted mumps from infection, and for a week seemed to progress as usual. They were then attacked with rigors and pain in both ovarian regions, the pain being intensified by moving in bed. The ovaries could be felt swollen and very tender. The acute attacks subsided in about a week, but left the ovaries still tender and enlarged for some time. In both cases the general health of the patients was considerably impaired for some months.

These cases seem to expand the idea of the connexion of the parotid with the testes and ovaries into some unexplained association of the parotid on the one hand with the whole genito-urinary system on the other; the first two cases indicating sympathy between the parotid and the

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prostate and vagina respectively, and the last two between the parotid and the ovaries.

In none of these cases was there any reason to believe that the peritoneum was implicated, and in the first two the affections were evidently secondary parotitis, not mumps. Nor do I think that Dr. Tayler's septic theory can be admitted except in the first case.

I cannot help thinking that ovaritis would be found more frequently associated with mumps if it were carefully inquired for, as we know young women are very apt to conceal pains occurring in those regions unless expressly questioned about them.

I am, Sir, yours truly,

Highbury-place, Jan. 1886. ARTHUR J. CRIBB, M.D. Lond.

PROSTATIC CASTS.

To the Editor of THE LANCET.

SIR,—In a paper recently read by Sir Andrew Clark, at the Clinical Society of London, on a "Case of Acute Prostatitis, with Discharge of Hyaline Cylinders resembling Renal Cylinders," and to which your annotation of Jan. 16th directs further attention, the author remarks: "These cases with prostatic casts in the urine may be only curiosities of medical experience, but since in none of the standard works on urinary affections, and in no monographs dealing with diseases of the prostate, can any reference be found to the discharge of hyaline cylinders in prostatitis, and without careful examination they might very easily be mistaken for cylinders originating in the kidney, I have thought the case was of sufficient importance to bring it before the notice of this Society."

Sir Andrew Clark is mistaken in supposing that he has made an original observation. In two papers published by me in THE LANCET (Oct. 14th and 21st, 1882) on Prostatorrhœa—a by no means infrequent disease—a case is referred to in which prostatic casts were believed to exist in the urine, and an illustration of the deposit is given, while the subject is referred to, not by any means as an original observation, but as one generally recognised. In his book on the "Male Sexual Organs," S. W. Gross, of Philadelphia, in the chapter on Prostatorrhœa, remarks: "If the patient be requested to pass the first two or three ounces of urine in a glass, that fluid will be found to contain delicate filiform shreds, which are sometimes more than half an inch in length, and which are muco-purulent casts of the follicles and ducts of the prostate. This highly characteristic sign of the affection, when considered in connexion with the local signs and the minute examination of the discharge, the composition of which has already been sufficiently considered, is quite sufficient to establish the true nature of the trouble." Delafosse (Paris, 1885) gives an illustration of these casts, and they are described by many other authors, to whom it is superfluous to refer.

I am, Sir, yours &c.,

Glasgow, Jan. 25th, 1886. D. CAMPBELL BLACK.

THE METROPOLITAN ASYLUMS BOARD.

To the Editor of THE LANCET.

SIR,—I have read with interest a leading article relative to the Metropolitan Asylums Board in your issue of the 23rd inst.

The evils and abuses likely to arise under the system of divided or multiple and co-ordinate authority hitherto exercised in the asylums and hospitals under the control of the managers appear within the last few years actually to have arisen, and some of them have been sufficiently demonstrated in the late Eastern Hospitals inquiry. The question therefore presents itself to the managers for their consideration, whether, if not already done, the time has not now arrived when free effect should be given to the order of the Local Government Board, dated Feb. 10th, 1875, by which sufficient authority is vested in the medical superintendent to enable him to control in their duties the officer's attendants and servants of each establishment, if duly supported by the managers. This step would, at all events, serve the one good purpose of enabling the managers with fairness to fix responsibility.

I am, Sir, your obedient servant,

Harley-street, W., Jan. 1886. JAMES ADAM, M.D.

MANCHESTER.

(*From our own Correspondent.*)

MEDICAL SOCIETIES.

THE annual meeting of the Medical Society evidenced a flourishing condition of its affairs, the number of members being 242, whilst the treasurer was able to show a balance on the right side of more than £100 on the year's receipts and expenditure, whilst there is invested in the name of the trustees, on behalf of the Society, £1110. Another member of the surgical staff of the infirmary, Mr. Hardie, has been elected president for the current year, this making the sixth year in succession that the presidential chair has been occupied by one of the staff of the Royal Infirmary. It would have been good policy on the part of the committee to have nominated someone outside the charmed circle, for there is a widespread feeling amongst many members of the profession that this distinction is confined rather too much to the infirmary staff. The Medico-Ethical Society has nominated Mr. Walmsley for re-election as president, thus following the precedent of the previous two years, when Dr. Lloyd Roberts held the same office.

HEALTH LECTURES.

The popular lectures given this winter on sanitary and popular medical subjects are more numerous than usual. Before Christmas, Miss Emily Hall delivered a very useful series on Personal and Domestic Hygiene. Then we have the annual course delivered under the auspices of the Sanitary Association, which has again this year arranged a series having a certain amount of connexion the one with the other; they all relate in some manner to food or drink, the different lecturers taking each a special article of diet. And, lastly, a course is being delivered at the Ancoats Hospital by the staff of that institution, much resembling the ordinary ambulance course. Mr. Bishop delivered the first on Surgical Emergencies, and Dr. Niven the second on Medical Emergencies. There will shortly be a vacancy on the staff of this institution, owing to the appointment of Dr. Niven to the post of medical officer of health to the neighbouring borough of Oldham. A very interesting paper on the sanitary work carried on by the Health Committee of the Corporation was lately read by Mr. Whiley, the superintendent of the department, before the Statistical Society. The magnitude of its operations is shown by the expenditure on this work, which amounts to no less than £86,000 per annum, and another £60,000 is about to be expended upon a sewage farm on Carrington Moss. Municipal work in Manchester is carried on in no pigmy style: the Water Committee are bringing us water from the lakes of Cumberland, at an estimated cost of something like a quarter of a million sterling, the engineering skill shown in this undertaking rivalling the work of a similar nature for the supply of water to Ancient Rome.

EDUCATIONAL MATTERS.

In all probability we are to have an important experiment tried in connexion with our Board Schools. A deputation from the Manchester and Salford Trades Council waited upon the School Board at their last meeting, pointing out the great importance of attempting to attract young people, boys and girls who have just left school, to evening classes; seeing that it was between the years of thirteen and eighteen that young people acquired those habits which more or less affected their whole after-life, they asked the Board to assist them in endeavouring to counteract the attractions and facilities which existed in all large towns for young people to form idle and vicious habits. Allusion was made to work of a similar kind being done in Nottingham, and the Board promised their careful consideration of the matter. At the last meeting of the Salford School Board there was rather a lively passage of arms between some of the members over the management of the industrial schools. If the statements made be correct—viz., that the children have to attend at 6 A.M., that little children of ten years of age have to clean the floors, and that their dinner consists of suet-pudding six days in the week and pea-soup on the sixth—they are certainly not being reared as hothouse plants.

BUTTERINE.

It cannot be said that the Adulteration of Food and Drugs Act is a dead letter here, for scarcely a week passes without

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prosecutions being instituted against offenders. The latest raid has been upon the butter-dealers, a number of whom were recently convicted and fined for selling butterine in lieu of the genuine article. It is a pity that this article is not sold in an open and honest manner, as it is undoubtedly a useful and legitimate food stuff, and, as was admitted by the public analyst, very preferable to the common sort of butter which alone could be got for the same price. As one of the dealers put it, "the people know quite well what it is they buy; they like it, and come again for it."

LIVERPOOL.

(From our own Correspondent.)

THE PROVIDENT DISPENSARY SCHEME.

THE public meeting called to discuss the provident dispensary scheme, which was alluded to in THE LANCET of last week is calculated to do a great deal of good. If its promoters can succeed in substituting it for the many clubs which still exist, and which give little or no satisfaction either to the members or their medical attendants, they will have done an excellent work. The history, however, of most provident dispensaries shows that they are most successful in small towns or in certain districts of large towns. Whether one of so comprehensive a character as shall comprise the whole of Liverpool be feasible remains to be seen. It should be stated, however, that our medical charities are neither too numerous nor more abused than those of other cities. If anything, Liverpool has been somewhat slack in recognising the necessity for hospitals. The Royal Infirmary was not established until the middle of last century, and when rebuilt in 1824 only contained 200 beds, though the population in 1831 was 205,000. It remained the only hospital till 1834, when the Northern Hospital was established. In 1841 the Southern Hospital was founded, the population of the borough and neighbourhood being then 286,000. At none of these three hospitals are out-patients seen, except casualties and former in-patients; while at the three Dispensaries, the Eye and Ear Infirmary, the Infirmary for Children, and the Hospital for Women, the patients' pence amount to a very considerable sum. The Stanley and Bootle Hospitals are of comparatively recent date, and seeing that the population of Liverpool and its suburbs now reaches nearly 600,000, our hospitals cannot be said to be in excess of what is reasonably required, nor disproportionate with those of other cities.

THE INFIRMARY FOR CHILDREN.

At the annual meeting of the Infirmary for Children, held on the 26th inst., it was stated that the number of in-patients during 1885 was 1012, the out-patients were 9577, and the attendances 27,131. The drainage having been found to be defective, this was rectified at a cost of £857. Although every economy consistent with efficiency was practised, the financial position of the charity was such as to cause anxiety to the committee, the depression of trade seriously affecting the receipts, while the expenditure had been increased.

PROPOSED REMOVAL OF ANOTHER CITY CHURCHYARD.

Notice has been given by the authorities of their intention to remove a portion of St. Thomas's Churchyard for the purpose of city improvements. When first erected this church and churchyard were situated outside the city, in a lane leading to Toxteth Park, still called Park-lane. Now it is surrounded by buildings, many of the most squalid description; the churchyard is a dreary waste of tombstones, the receptacle for stray rubbish, and as unsightly as a burial-ground can be. It was closed in 1854. Most of the interments are in vaults.

THE MERSEY TUNNEL.

The new tunnel under the River Mersey, which will be open to traffic on the 1st prox., will be a great boon to all who are now compelled to cross the river in steamboats in foggy or tempestuous weather. Most welcome will it be to persons who are specially subject to sea-sickness and those who have delicate chests. Many a severe illness and even death might be traced to crossing over in a fog. It is very gratifying to add that, by adopting all the most recent improvements in tunnel ventilation, the air of the new tunnel is stated to be remarkably clear.

Liverpool, Jan. 27th.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

NEWCASTLE HOSPITAL SUNDAY.

THE final official lists of the collections made on behalf of the Newcastle Hospital Sunday Fund in October last have been published. The amount realised from places of worship was £1974 19*s.* 4*d.*, as compared with £1888 9*s.*, in the previous year. The sum collected in manufactories, collieries, and other works amounted to £1437 5*s.* 9*d.*, the amount of the corresponding list of 1884 having been £1474 18*s.* 11*d.* The total product of the two sources of revenue in October last was £3412 5*s.* 1*d.*, as compared with £3363 7*s.* 11*d.* in 1884. There has thus, it will be seen, been a slight falling off in the amount derived from workpeople, but with the increased sum obtained from places of worship there is altogether an improvement to the extent of £48 17*s.* 2*d.*

POISONING BY LUCIFER MATCHES.

Since I last wrote another case of attempted suicide by steeping lucifer matches and drinking the infusion has been before our magistrates. The girl recovered, but has been in a very weak state for some time. She was discharged after a sharp reprimand. A fatal case, however, has just taken place in South Shields from the same cause, and an inquest has been held. It appears that the young woman, aged twenty-four, after some misunderstanding with her sweetheart, steeped thirty boxes of matches in water and drank the fluid. Dr. Young deposed to having seen the deceased, who exhibited the usual symptoms of poisoning by phosphorus—viz., burning pain in the chest and stomach, great thirst, and exhaustion. The vomit smelt strongly of phosphorus, and was luminous in the dark. The coroner deprecated the practice of the press publishing full reports of such cases, thus giving love-sick girls a cheap and easy receipt for destroying themselves.

HALFPENNY BREAKFASTS.

The head master of the Board School at Wallsend (Mr. Tocher), seeing so much distress about, and that many of the children attending his school were badly prepared to face the lessons of the day for want of sufficient food at home, and being, it is said, a firm believer in oatmeal, once the chief of "Scotia's food," determined to do something on his own account without waiting for "a committee." So he ordered a good supply of oatmeal from a mill in Berwickshire of the finest quality. The cooking operations commence at 6·30 A.M., and the porridge is allowed to boil for fifty minutes, and is cooled and ready for serving out at a quarter past eight. Each child is supplied with about a pint of porridge—more or less according to size and appetite—and a little more than half a gill of good skimmed milk. About 120 children are thus receiving breakfasts at a cost of about one halfpenny each, and in most cases they are given free. In times gone by oatmeal was also the staple food of the north of England; it will be curious if it comes again into use. Its value as regards nutrition for children is beyond dispute; high wages have conduced to a high-class, though not better, food for the children of our working classes.

Newcastle-on-Tyne, January 26th.

EDINBURGH.

(From our own Correspondent.)

THE CHAIR OF AGRICULTURE.

AT a recent meeting of the Highland and Agricultural Society it was decided to renew the grant of £150 per annum towards the endowment of the University Chair of Agriculture. For several months this grant has been in abeyance pending the result of a discussion upon the subject of agricultural education generally. The chair has in the past been maintained by University endowments, by an annual Government grant, and by the grant from the Society already mentioned. The committee of the Society, to whom the question of educational arrangements was handed over, have not yet been able to bring forward any definite scheme for adjusting the matter. In the meantime, the Society has been approached on two sides: by the Uni-

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versity authorities, who request a continuance of the old arrangement, for a time at least, till a new Universities Bill may deal with the larger question of agricultural education; and by Sir Francis Sandford, Under Secretary for Scotland, who represented that the Government were prepared to continue their grant in the annual estimates only on condition that the Society's grant was also continued. This latter intimation settled the matter; the Society at once agreed to continue their endowment. The result is satisfactory; for not only would a contrary conclusion have probably signified the abolition of the chair, but would have seriously interfered with the prospects of the newly appointed professor, whose class has already been greatly increased, and whose energetic treatment of his subject bids fair to make the course of lectures one of the most complete which the University offers.

THE FEVER HOSPITAL AND CLINICAL INSTRUCTION.

The Public Health Committee, who are charged with the administrative arrangements of the City Fever Hospital, have brought in a report to the Town Council in which they propose a settlement of the questions which have been recently discussed as to the propriety of appointing clinical lecturers on fevers and admitting students to the use of the hospital wards. They propose that a competent visiting physician should in the first place be appointed for a term of three years; and that he should be capable of giving instruction to any students who may attend, should it be decided to allow such attendance. The committee do not in the meantime propose to attach any emolument to this post, as they believe there will be little difficulty in obtaining the services of a thoroughly qualified physician who will be prepared to discharge his duties gratuitously. Should the teaching of students be superadded to his visiting duties, some other arrangement would be submitted. Till the appointment is made the committee reserve further suggestions as to clinical teaching, in the hope that when this point is beyond the range of controversy the various medical bodies will combine in suggesting some comprehensive scheme for conducting the instruction which will satisfy the wishes of all parties, both teachers and students alike. While admitting the importance of this branch of education in the training of medical men, the committee consider it an imperative duty to see that these arrangements in no way interfere with the primary object of the institution—the careful treatment and nursing of its inmates; and they show no inclination to further arrangements which might make this course of instruction a compulsory adjunct to either the University or extra-academic curriculum.

AMBULANCE INSTRUCTION FOR THE POLICE.

A project is at present under the consideration of the Town Council by which instruction in first aid to the injured is to be given to the whole of the city police force by members of St. Andrews Ambulance Association. A commencement was made in this direction last year, when Dr. Skene Keith trained a small number of the force in the elements of ambulance drill; and so good were the results of this training that it is now hoped that the whole body of police may be instructed in the same system, and rendered capable of supplying efficient aid in those cases of emergency which occur from time to time in the streets.

ROYAL PHYSICAL SOCIETY.

At the January meeting of this Society, Professor Turner, the newly-elected President, inaugurated the session by some introductory remarks on the present position and future prospects of the Society, which he considered satisfactory. An obituary notice of the late Dr. W. B. Carpenter was read by Professor Cossar Ewart. A number of communications followed, amongst them one by the President on the Distribution of the Bottle-nosed Whale and its occurrence in Scottish Waters, which was illustrated by a series of charts and diagrams.

Edinburgh, Jan. 27th.

PARIS.

(From our own Correspondent.)

DEATH OF DR. JULES GUÉRIN.

ONE of the most remarkable characters of the profession of this country has just passed away in the person of Dr. Jules Guérin, who died suddenly at Hyères, whither he had gone to recruit his health, which had been declining for some time. Dr. Guérin left Paris on the 14th inst. for the above-named place. He was so weak that he had to be carried from the railway station to the train in a chair. He suffered from disease of the heart, complicated with an intestinal affection, which was contracted some years ago. Travelling by easy stages, on his arrival at Hyères, and being accompanied by Madame Guérin, he felt very much better, so much so that he thought of soon returning to Paris; but on Monday, the 25th inst., he had an attack of syncope, for which he had to take to his bed, and expired a few hours afterwards. Dr. Guérin was the type of a general practitioner of the old school, but he had a greater predilection for surgery than for medicine, and in the early part of his professional career he distinguished himself as an orthopædist. He was the author of several works of great value, and those on teratology are amongst the most remarkable ever written on the subject. He was very firm in his opinions, which, whether right or wrong, he maintained with great tact and ingenuity. For instance, to the day of his death his theory as to the unique nature of cholera was unshaken, on which subject he only lately distinguished himself in the debates that took place at the Academy of Medicine. He was about eighty-five years of age and one of the senior members of the profession in Paris, having taken his degree in 1826. He had been a member of the Academy of Medicine since 1842 in the section of Medical Pathology. He was also a Commander of the Legion of Honour.

OPERATIONS BY M. TILLAUX.

On entering the operating theatre at the Hôtel Dieu last week I found M. Tillaux performing an operation. It was, however, impossible to see what he was doing, as the operating table was completely surrounded by his assistants and other visitors, and were it not for a few *vivâ-voce* explanations, the spectators could have formed no idea of what was going on. What is said here may be applied to all the French operating theatres. M. Tillaux's operation consisted, as he afterwards explained, in the removal of a fibro-myxomatous tumour, which occupied the naso-pharyngeal region, and was about the size of a small hen's egg. It occurred in a young provincial coachman, aged twenty-four years, and had been seven years reaching that size. The palate was divided to get at the tumour, the pedicle of which was found attached to the vomer. There was scarcely any hæmorrhage. Three silver wire sutures were put in. The patient bore the operation very well. No anæsthetics were employed, but the local application of a solution of cocaine prevented the patient from suffering any pain during the section of the palate, which was performed in the median line from the osseous portion through the soft and unattached parts. I saw the patient on the 24th inst.—that is, a week after the operation; the sutures had been removed, and the patient was ready to return to his native village, full of gratitude, as he had not been able to breathe so freely for some time. On the same day M. Tillaux drew off about three litres of a clear colourless fluid from a cyst in the liver of a man thirty-five years of age. The operation was performed with a Dieulafoy's aspirator, and the patient left the hospital three days after, feeling quite well and experiencing no inconvenience from the operation. One of the lads who underwent Estlander's operation about four months ago at the Hôtel Dieu, and whose case was reported in THE LANCET of Oct. 10th last, was lately presented to the Société de Chirurgie by M. Bouilly, the operator, who stated that the cavity containing the purulent matter was filling up; but as the patient was not recruiting his strength as quickly as could be desired, he was allowed to return to his home. The other patient, who was operated on by M. Tillaux, and whose case was also reported at the same time, is still in the hospital, and it strikes me that he, too, should be sent away, as his health is not by any means improving, though there is now scarcely any discharge from the chest.

BANQUET IN HONOUR OF DR. MATHIAS DUVAL.

A very interesting entertainment in the form of a banquet was offered last week to Dr. Mathias Duval on the occasion of his appointment to the Professorship of Histology at the Paris Faculty of Medicine. The banquet was presided over by Professor Gavarret, Inspector-General of the Medical Schools of France, who had opposite to him at the table Professor Béclard, Dean of the Faculty. Many interesting speeches were made on the occasion, and referred par-

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ticularly to the attainments of the guest as an anatomist, physiologist, and histologist of the highest order. One of the speakers in his enthusiasm spoke of histology as being a science peculiarly French, thus ignoring what has been done in other countries in that direction.

M. PASTEUR.

Owing to the numerous applications that are made to M. Pasteur for his remedy against hydrophobia, he is receiving liberal donations from all quarters to enable him to meet the expenses incurred by him, as most of the applicants belong to the poorer classes, and he is obliged to keep them during the time they are under treatment.

THE RIGHTS OF "OFFICIERS DE SANTÉ."

Till now the "officiers de santé" were not allowed to practise out of the department in which they obtained their diploma. A proposition has just been laid before the Chamber of Deputies to abrogate this law, and to allow them to practise without any restriction in any part of the French territory without any other authorisation, or without even obtaining a fresh diploma. This is considered a crying injustice, as by this means they will be placed on the same footing as the doctors who have to pass a superior examination, and consequently pay higher fees for their degrees.

Paris, Jan. 27th.

BERLIN.

(From our own Correspondent.)

SECRET REMEDIES.

THE Berlin Committee for the "Suppression of the Nuisance of Secret Remedies" have decided to present a memorial to Prince Bismarck, with the following propositions: 1. In place of the Imperial ordinance of Jan. 4th, 1875, there ought to be issued one which assigns the preparation, and the keeping and offering for sale, of all kinds of medicaments, inclusive of secret remedies and pharmaceutic specialties for sanitary purposes, in retail, exclusively to the apothecaries' shops. 2. For the restriction of the sale of secret remedies in the apothecaries' shops there ought to be instituted an Imperial board, acting as a technical central office, having the function to examine and test every secret remedy before permitting it to be sold; to fix the price of such remedy; and to determine whether the drug or compound may be issued to the public otherwise than in the form of a physician's prescription. 3. To prevent an inundation of the market with foreign secret remedies and pharmaceutical specialities, it is suggested that they should be subjected to a duty *ad valorem*.

DISINFECTION BY THE SALT-WATER STOVE.

A year ago Professor A. Dobroslawin of St. Petersburg published a preliminary communication on a portable disinfecting stove constructed by him, which acted through over-heated air. The author obtained the high temperature simply by the use of solutions of common salt instead of plain water. To produce a higher temperature some different salts may be employed. In 100 parts of water, 41·2 parts of common salt gave the boiling-point at 108·4° C.; 61·5 parts of nitrate of ammonia, gave it at 121·0°; 205·0 parts of carbonate of potash, 135·0°; 325·0 parts of chloride of calcium, 179·5°; 88·9 parts of chloride of calcium, 114·2°. The stove requires from 40 to 50 litres of the solution, and fills with a solution of common salt after two or three hours. After four hours' working it must be refilled. To prove the effect on micro-organisms, silk threads saturated with the spores of bacillus subtilis were submitted to the stove, and were completely killed, after remaining three or four hours in the stove, at 102° to 104° C. The price of the apparatus is 250 roubles (£25), to be procured through the St. Petersburg Metallfabrik.

Berlin, Jan. 21st, 1886.

ST. LEONARDS CONVALESCENT HOME FOR CHILDREN.—The annual meeting of the subscribers to and governors of this Home was held on the 20th inst. In the report it was stated that the institution was doing fairly well, and that during the year 640 children had been admitted to its benefits, of which came from London and its suburbs, 99 [illegible], 19 from Kent, and 28 from Middlesex.

ROYAL COLLEGE OF PHYSICIANS.

AN ordinary Comitia of the College of Physicians was held on the 28th inst., Sir W. Jenner, Bart., President, in the chair. The President drew attention to the fact that in addition to the case considered at the last Comitia, three charges of unprofessional conduct on the part of members and licentiates had been investigated by the Censors' Board, proving, Sir William maintained, that the College was active in vindicating the honour of the profession.

The President nominated Dr. Pavy to deliver the Harveian Oration and Dr. Dreschfeld to give the Bradshawe Lecture this year. The Treasurer announced that the late Dr. Gavin Milroy had bequeathed the sum of £2000, together with certain manuscripts and books, to the College, the money to be devoted to founding a lectureship in State Medicine and Public Hygiene.

Three gentlemen were admitted to the membership, and the licence was granted to 86 successful candidates at the last examination.

Dr. P. W. Latham, Dr. Playfair, Dr. Ringer, and Sir J. Fayrer were elected on the Council; and Drs. Stone and Duckworth were appointed examiners for the Murchison Scholarship.

The quarterly report of the Finance Committee was received and adopted. The annual report of the examiners was read, from which it appears that during 1885 1136 candidates presented themselves for the first examination for the licence, of whom 633 were approved; and 394 for the final examination, of whom 242 were approved. These figures include those who have been examined under the new scheme, and the rejections were in one or more subjects of the examination. A report from the Building Committee was received. It stated that the works connected with the new examination hall were proceeding satisfactorily, and proposed that the laying of the first stone of the buildings should be marked by a public ceremony.

MEDICAL NOTES IN PARLIAMENT.

Overhead Wires.

IN the House of Commons on the 25th inst., in reply to Sir H. Tyler, Lord J. Manners stated that his attention had been drawn to the failure of telegraph wires during the recent snowstorm, and that no case of accident to any human being had been caused by the wires belonging to the Post Office. The policy of the Post Office for many years past has been to substitute underground for overhead wires in London, and also in other large cities, wherever the extra expense involved could be justified. The mileage of postal telegraph wires in the metropolis on the 31st of December was 9832 miles, of which 9005 miles, or about 11-12ths, were underground wires. In the eastern central and western central postal districts, which comprise the half of the metropolis, there were only 44 miles of overhead wires the property of the Department.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Board of Examiners on the 21st inst.:—

Bertill, Alfred, Oltom.
Bridgewood, John Francis, Stafford.
Brown, Frederick Nathaniel, Chobham.
Christopherson, Cecil, L.S.A., Blackheath.
Clark, Francis William, East Croydon.
Creagh, Arthur George Mellefont, L.S.A., Ballinrollin.
Evans, Oliver Conrad Penrhys, L.R.C.P. Lond., Hadlow, Kent.
Fraser, Paul Wilkes, Wolverhampton.
Hassard, Edward Moresby, Hoddesdon.
Hawkins, Frank Sidney, Bristol.
Ireland, Charles John, Amwell-road.
Pisani, Lionel John, L.S.A., Upper Norwood.
Robinson, Arthur William, Longleat.
Williams, Hugh Lloyd, Waenfawr, Carnarvon.
Young, Charles Wheeler Forrest, L.S.A., Clapham-common.

Admitted on the 22nd inst.:—

Bennett, Frederick Thomas, L.S.A., Denmark-hill.
Brown, Edward Vipont, Tufnell-park.

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Candler, Wallace Harry Charles, L.R.C.P. Lond., Lee.
Darlington, Alfred Naylor, L.S.A., Birmingham.
Déqué, Laurent, L.R.C.P. Lond., Derby.
Evill, Frederick Claude, L.R.C.P. Lond., Worcester-park.
Greenwood, George Spencer, Ossett, Yorks.
Hodge, Sydney Rupert, L.R.C.P. Lond., Hornsey-lane.
Holderness, John Cautley, Bishops Wilton, Yorks.
Horner, Charles, Julian, Walthamstow.
Le Quesne, Ferdinand Simeon, L.S.A., Brighton.
Morgan, Frederic James, L.R.C.P. Lond., Junction-road.
Okell, John Bathurst, L.R.C.P. Lond., Chester.
Pollard, Charles, Wade Bridge, Cornwall.
Roughton, John Paul, Kettering.
Russell, George Herbert, L.R.C.P. Lond., Barking-road.
Snow, Lionel Mason, King Henry's-road.
Sturdee, Alfred Hobart, Southsea.
Symes, George Dickinson, Dorchester.
Tonks, Henry, Knowle, Warwickshire.
Williams, Lionel Henry, Clifton, Bristol.
Williams, Thomas Henry, L.R.C.P. Lond., Seymour-street.
Wordsworth, William John, Harley-street.
Wright, Alfred, Cape Town.

Admitted on the 25th inst.:—

Barber, Percival Ellison, L.R.C.P. Lond., Sheffield.
Birt, Joseph, Brighton.
Burghard, Frederic François, Brixton.
Castle, Richard Feild, Delamere-crescent.
Combes, Reginald Hare, L.R.C.P. Lond., New South Wales.
Crisp, John, L.R.C.P. Lond., Kennington-park-gardens.
Gardner, William Thomas, L.R.C.P. Lond., Hampstead.
Griffith, Christopher Arthur, Finsbury-park.
Harrison, Sidney Hope, Tamworth.
Holt, Joshua, Leeds.
Hubbard, James Printer, Dudley.
Smith, Robert Gillies, Durham.
Smith, John Anderson, Hull.
Ward, John Oddy, L.S.A., Crossgate, near Leeds.
Warde, Arthur Waldemar Brougham, Yalding.

Admitted on the 26th inst.:—

Bond, Barnabas Mayston, L.R.C.P. Lond., Hastings.
Dickinson, Charles, Sloane-street.
Ewens, George Francis William, West Hammersmith.
Hope, George, L.R.C.P. Lond., Ventnor, Isle of Wight.
Hulke, Frederick Backhouse, L.R.C.P. Lond., Deal.
Pollard, George Frederick, L.S.A., Falmouth-road.
Totsuka, Kankai, L.R.C.P. Lond., Tokio, Japan.
Williams-Freeman, John Peere, M.B. Durham, Southampton.
Wood, Arthur Thorley, Melton Hall, Suffolk.

Admitted on the 27th inst.:—

Collingwood, Frederick William, L.R.C.P. Lond., Manor-road.
Crosse, William Henry, L.S.A., Terrington, Norfolk.
Evans, Evan, M.B. Cantab., Dorchester-place.
Francis, Harry Arthur, L.R.C.P. Lond.
Gifford, George Taylor, L.S.A., Manchester.
Harris, Percy Reeves Trier, L.S.A., Amhurst-park.
Mariette, Ernest Paul Alphonso, L.S.A., St. Stephen's-square.
Morris, Colin Dwight, L.S.A., Philpot-street.
Parsons, Frederick Gymer, L.R.C.P. Lond.
Stadden, Walter Joseph, L.R.C.P. Lond.
Staveley, William Henry Charles, L.R.C.P. Lond.
Wacher, Sidney, L.R.C.P. Lond.

SOCIETY OF APOTHECARIES.—The following gentlemen passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on the 21st inst.:—

Beer, Louis Edward Simon, Hampstead-road.
Parker, Charles Arthur, Claxby, Alford, Lincolnshire.
Pound, Clement, Odiham, Hants.
Toogood, Frederick Sherman, Manor-park-road, Willesden.

The following passed the examination in the Science and Practice of Medicine, and received certificates to practise:—

Creagh, Arthur George Mellefont, Ballenvollin, county Cork.
Owen, Samuel Walshe, M.R.C.S., Landroft-road, East Dulwich.

Mr. Oliver Pemberton and Mr. Lawson Tait have been elected trustees of Sir Josiah Mason's Science College.

DURING the past year £1015 has been collected by the Cardiff Infirmary Saturday Fund Committee.

THE annual meeting of the Salisbury and South Wilts Provident Dispensary was held on the 16th inst., when a highly satisfactory report was presented by the committee.

AT the annual meeting of the Council of the Metropolitan Hospital Sunday Fund, which was held in the Mansion House on the 22nd inst., committees and officers for the year 1886 were elected.

THE Vice-Provost of Trinity College and the Astronomer Royal, Ireland, each received the honour of knighthood on Monday last, at the hands of his Excellency the Lord Lieutenant.

AT a general meeting of the members of the Hospitals' Association, on the 27th inst., a deputation was received from the British Medical Association, on the hospital out-patient question. The views of the visitors having been stated, a lengthy discussion followed.

AT a meeting of the Sanitary Committee of the Leeds Corporation on the 25th inst., rules for the regulation of the various cowsheds, milkshops, and dairies in the borough were passed.

CARDIFF MEDICAL SOCIETY.—The following gentlemen have been elected office-bearers for 1886-87: President: Dr. William Thomas Edwards, President of the British Medical Association. Committee: A. P. Fiddian, M.B., C. T. Vachell, M.D., A. Plain, M.B., W. M. H. Evans, M.R.C.S. Hon. Secretary: T. Garrett Horder.

VICTORIA UNIVERSITY, MANCHESTER.—The following appointments have recently been made: Brackenbury Professorship of Physiology: William Stirling, M.D., D.Sc., Regius Professor of the Institutes of Medicine in the University of Aberdeen. Lectureship in Medical Jurisprudence: John Dixon Mann, M.D., M.R.C.P.

NEW INFIRMARY FOR PADDINGTON.—On Tuesday a new infirmary for the use of the sick poor of Paddington was opened for the reception of patients. The building occupies a site adjoining the workhouse in Harrow-road, is provided with 284 beds, and has been erected at a cost of something like £50,000.

WESTMINSTER HOSPITAL.—On Thursday and Friday evening last an entertainment was given to the nursing staff and patients of this hospital. The programme comprised a short extravaganza, entitled "A Romance under Difficulties," which was played by the resident medical officers, and was the source of much hilarity. The decorations were very ornate and tasteful.

AT the annual meeting of the subscribers to and friends of the Pendlebury Hospital and Dispensary for Sick Children attention was called to the practice, common among the poorer classes, of insuring the lives of their children, and it was stated that 75 per cent. of the children dying at the institution were in a club. Clubs in which an infant of a few days old may be insured for any sum up to £6 offer a premium on neglect and carelessness.

CITY DISPENSARY.—The ninety-seventh annual meeting of the governors of this institution was held on the 20th inst. The number of patients on the books on Jan. 1st, 1885, was 1296, and 13,476 were admitted during the year. The total receipts amounted to £1825, and the expenditure to £1404, leaving a balance of £421 in the hands of the treasurer, against £692 at the corresponding period of last year.

THRIFT AND THE WORKING CLASSES.—Dr. Robert Rentoul of Liverpool will read a paper to the Metropolitan Provident Medical Association on Thrift and the Working Classes. We believe that Dr Rentoul intends describing "compulsory insurance against sickness and accident as it now exists in Germany," also Canon Blackley's "compulsory national insurance." The Association meets at 5, Lamb's-conduit-street, and the chair will be taken at 4.30 A.M. by W. Boustield, Esq.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—On Wednesday, January 13th, the quarterly Court of the Directors of the above Society was held, Sir Henry Pitman, Vice-President in the chair. Grants amounting to £1338 were given to 63 widows, 9 orphans, and 3 orphans on the Copeland Fund. The expenses of the quarter were £66 17*s*. One member was elected, and the death of one reported. The death of a widow in receipt of £50 per annum was announced. There were no fresh applications for relief. The Christmas present, £172 10*s*. had been distributed in December last.

PRESENTATIONS.—Mr. J. C. Smith, medical officer at the workhouse of the parish of Great Yarmouth, was on the 12th inst. presented, on behalf of the Poor-law officials of the parish, with a pair of bronze figures and a congratulatory address, commemorative of the attainment of the fiftieth anniversary of his wedding day.—Mr. C. Lowsley, who recently resigned his post as medical officer to the Reading Dispensary, has been presented with a clock and pair of bronze ornaments by upwards of 600 of his former patients.—On the 23rd inst. Mr. R. Prosser, L.R.C.P., of Bromsgrove, was presented with a dessert service of solid silver as a token, on the attainment of his fiftieth birthday, of the esteem in which he is held by his numerous friends in the town in which he resides.

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Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BRABAZON, HENRY MOORE, M.B., B.Ch.Dub. Univ., has been appointed House-Surgeon to Sir Patrick Dun's Hospital.

CHAMPNEYS, FRANCIS H., F.R.C.P., has been appointed Acting Physician to the General Lying-in Hospital, York-road, Lambeth, vice Williams, resigned.

CORBOULD, HENRY F., L.R.C.P.Lond., M.R.C.S., has been appointed Assistant Medical Officer to the Infirmary of the Wandsworth and Clapham Union.

ENTAGE, EDMUND W., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the First District of the Holsworthy Union.

HERMAN, G. ERNEST, F.R.C.S., F.R.C.P., has been elected Physician to the General Lying-in Hospital, York-road, Lambeth, vice Champneys.

HOGBEN, EDGAR, M.B., has been appointed Physician to Out-Patients to the Queen's Hospital, Birmingham.

LANGHORNE, T. GRANT, M.R.C.S., has been appointed Resident Medical Officer to the Eccles and Patricroft Hospital, Eccles.

WILLIAMS, JOHN, M.D., F.R.C.P., has been appointed Consulting-Physician to the General Lying-in Hospital, York-road, Lambeth.

Births, Marriages, and Deaths.

BIRTHS.

COGAN.—On the 21st inst., at Gibraltar, the wife of Surgeon-Major M. Cogan, Medical Staff, of a son.

DAUNT.—On the 24th inst., at Pierpoint, Lindfield, the wife of Elliot Daunt, L.R.C.P.Lond., M.R.C.S., of a son.

GOULD.—On the 23rd inst., at 16, Queen Anne-street, Cavendish-square, the wife of A. Pearce Gould, F.R.C.S., of a son.

HOPKINS.—On the 23rd inst., at Liverpool-gardens, Worthing, the wife of Surgeon-Major Nathaniel Hopkins, of a son.

STEVENSON.—On the 21st inst., at Camberwell-grove, Denmark-hill, the wife of Leader Stevenson, M.D., of a son.

MARRIAGES.

AINSLEY—HILL.—On the 14th inst., at St. Stephen's, Westbourne-park, Thomas George Ainsley, M.B., M.R.C.S., of Hartlepool, to Wilhelmina Caroline Hill, of Albrighton, Shropshire, daughter of the late H. T. Hill, Esq., of Notting-hill.

CONOLLY—RENWICK.—On the 20th inst., at St. Mark's, Notting-hill, Stephen Fullom Conolly, M.R.C.S. and L.R.C.P.Edin., third son of the late Captain Conolly, Surveyor-General's Department, War Office, to Helen Elizabeth, daughter of General Renwick, R.E.

JERAM—SMITH.—On the 25th inst., at Christ Church, Ealing, W., James William Jeram, L.R.C.P.Ed., L.R.C.S.Ed., of Hambledon, Hants, eldest son of George Jeram, Esq., of Havant, Hants, to Annie Caroline, daughter of the late Captain Charles Mayvore Smith, Madras Native Infantry, and granddaughter of the late Colonel Smith, of Plympton, Devon, and Charles G. E. Ford, Deputy Surgeon-General, Madras Army.

THOMAS—LITTLE.—On November 4th, at St. Andrew's, Lutwyche, Walter Duncan Thomas, M.B.Lond., of Bundaberg, Queensland, second son of the late Benjamin Thomas, F.R.C.S., of Llanelly, to Leila Boyle, third daughter of Robert Little, of Whyteleaffe.

YELLOWLEES—WILLIAMSON.—On the 20th inst., at Bellmoir, Bridge of Allan, N.B., by the father of the bride, D. Yellowlees, M.D., of Gartnavel, Glasgow, to Federata, eldest daughter of the Rev. H. M. Williamson, of Belfast, and granddaughter of the late Major James Robert Robertson, of Cray, Perthshire.

DEATHS.

BOWMAR.—On the 23rd inst., at his residence, St. Martin's, Leicester, Charles Bowmar, M.R.C.S., aged 83.

BROOKS.—On the 24th inst., at Henley-on-Thames, Oxon, James Henry Brooks, M.R.C.S., in his 80th year.

COWEN.—On the 24th inst., (his 69th birthday), at Drayton-park, N., Surgeon-General Henry Lionel Cowen, Army Medical Department (retired).

CURRY.—On the 21st inst., at Barnstaple, suddenly, William Curry, F.R.C.S., L.S.A.Lond., J.P. for the county of Devon, second son of the late Admiral Curry, C.B., aged 77.

DA SILVA.—On Dec. 25th, 1885, at Ghadichi Bhownugra, Kathiawar, India, Pascal M. Da Silva, M.R.C.S.Eng., L.R.C.P.Lond., L.S.A.Lond., Surgeon-in-Charge, Bhavnager-Gondal Railway, aged 34.

POTHECARY.—On the 23rd inst., at Clyde-road, Addiscombe, Charles Pothecary, M.R.C.S., aged 72.

SMITH.—On the 22nd inst., at 2, Stanhope-terrace, Gloucester-gate, N.W., Herbert Ross (Bertie), youngest son of Walter Smith, M.D., M.R.C.P.Edin., aged 11 years.

SUTTON.—On the 20th inst., at Hoylake, Cheshire, John Maule Sutton, M.D., J.P. and D.L. for county Pembroke, aged 56.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, February 1.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
SOCIETY OF ARTS.—8 P.M. Prof. H. S. Hele Shaw: Friction (Cantor Lecture).
ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—8 P.M. Casual communication by Mr. Storer Bennett.—Mr. J. Bland Sutton: Dental and Oral Cases in Animals.—President's inaugural address.
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Jonathan Hutchinson, F.R.S.: Some Moot Points in the Natural History of Syphilis (Lettsomian Lecture).

Tuesday, February 2.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Mr. R. Stuart Poole: Naucratis.
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Specimens of Tumours of the Brain and its Membranes will be exhibited by Dr. Ashby, Dr. Barlow, Dr. Beevor, Mr. Butlin, Dr. Chaffey, Dr. Goodhart, Dr. Hadden, Dr. P. W. Macdonald, Dr. G. Ogilvie, Dr. Ord, Mr. D'Arcy Power, Mr. Peeke Richards, Dr. Saundby, Dr. F. Taylor, Dr. Charlewood Turner, and Dr. Samuel West. Dr. Hale White will show Specimens of Thinning of the Skull from Cerebral Tumours. Microscopical Specimens will be on view at 8 P.M.

Wednesday, February 3.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.
SOCIETY OF ARTS.—8 P.M. Mr. George Simonds: Artistic Bronze-Casting.
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Annual Address by the President (Dr. Potter). Specimens will be shown. Mr. Knowsley Thornton: A case of Removal of both Ovaries during Pregnancy.—Dr. Lewers: A case of Circumscribed Sarcoma of Uterus and Vagina.—Dr. Matthews Duncan: On Contraction, Inhibition, and Expansion of the Uterus.

Thursday, February 4.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. W. Chandler Roberts-Austen: Metals as affected by Small Quantities of Impurity.
PARKES MUSEUM OF HYGIENE.—8 P.M. Dr. G. A. Heron: How it is Shown that Living Things cause some of the Diseases of Man. The lecture will be illustrated by microscopical specimens.
HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Dr. D. B. Lees: The Neurotic Treatment of Catarrh.—Mr. Shirley Murphy: Animal Vaccination.

Friday, February 5.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—8 P.M. Mr. Percy Dunn: (1) A Morbid Growth involving the Right Ligament and Ovary, causing Complete Obstruction of the Intestinal Canal; (2) Chronic Suppuration of the Lung following Pneumonia.—Dr. Campbell Pope: Large Urinary Calculus passed per urethram.—Mr. Hurry Fenwick: Photographs of twelve cases of Extroversio Vesicæ.—Mr. Bruce Clarke: On Abdominal Exploration.—Dr. Herringham and Mr. Edmonds: A case showing the results of Infantile Palsy.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—8 P.M. Clinical Evening. Mr. Power and Mr. Juler.
ROYAL INSTITUTION OF GREAT BRITAIN.—9 P.M. Mr. T. Pridgin Teale: The Principles of Domestic Fireplace Construction.

Saturday, February 6.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
MIDDLESEX HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Mr. Archibald Geikie The History of Volcanic Action in the British Isles.

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Jan. 28th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp.	Rain.	Remarks at 8.30 A.M.
Jan. 22	29·54	N.E.	33	...	...	37	31	·07	Overcast
,, 23	29·45	N.W.	36	35	...	37	32	·10	Snowing
,, 24	29·49	W.	35	33	...	38	32	·10	Cloudy
,, 25	29·36	E.	37	36	...	42	31	·25	Foggy
,, 26	29·50	W.	38	36	...	45	36	·05	Fine
,, 27	29·83	E.	39	38	...	44	36	...	Overcast
,, 28	29·88	S.E.	34	34	...	...	32	...	Foggy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

QUACKERY AND ITS PUNISHMENT IN HOLLAND.

A ROTTERDAM jeweller, who has been for some time past carrying on the trade of "cancer curer," which he seems to have found much more profitable than that to which he was brought up, has found to his chagrin that the Dutch laws do not allow of the perfect freedom in the treatment of the human body which is doubtless considered as an important part of the liberty of the subject by the whole confraternity of charlatans. Had his impostures been carried on in this country, it is questionable whether he could have been successfully prosecuted at all, and under the most favourable circumstances he would only have been compelled to disgorge a few pounds of his ill-gotten gains by way of a fine. The Dutch court, however, marked its sense of the gravity of offences of this character by sending him to prison for fifteen days.

Justitia.—We regret we are unable to answer the questions. Probably the information might be obtained from the publishers.

QUINQUENNIAL CENSUS.

To the Editor of THE LANCET.

SIR,—I was extremely pleased to see in your issue of Jan. 16th (p. 122) an annotation advocating the propriety of a quinquennial census. It is a matter that has long pressed on my mind, and I have spoken of it in high political quarters, but have been told that the great argument against it is its expense. My feeling is that the advantage we should derive would far exceed the expense. Statistics are sometimes said to be very misleading. This can only be true if the statistics are false, and our great concern is in every case to prevent this. The circumstance of the immigration of our populations as affecting the census of towns, in addition to the natural excess of births over death, is a matter too plain for more than mention, but its effect in falsifying the official death-rate tables is very serious in a number of cases. I am informed that the quinquennial census has already been adopted in Germany—a circumstance worthy of consideration in the argument.

I am, Sir, yours obediently,

Bideford, Jan. 20th, 1886. JOHN THOMPSON, M.D.

TOUTING FOR PATIENTS.

To the Editor of THE LANCET.

SIR,—Can you tell me if it is in accordance with professional etiquette for one practitioner to send round an agent to call at the doors of other practitioners' patients to ask them to join his "club" (not a charitable one) for a weekly payment of 2*d*. I am, Sir, yours truly,

Jan. 23rd, 1886. G. G. B.

*** We need scarcely say that such a procedure is highly unprofessional. —ED. L.

RENAL SURGERY.

Mr. Clement Lucas writes that the operation for total suppression of urine performed by him on a patient of Mr. Atkins of Sutton, previously noticed in THE LANCET, has proved completely successful. The wound healed soundly, and the single kidney, relieved of the stone which blocked its outlet, is working as well as before the operation, whilst the patient's general health is quite restored. Thus a new way of saving life in particular instances has been successfully pioneered. Mr. Lucas explored a kidney for calculus on Jan. 19th in a young gentleman who had been under the care of Dr. Theard, and for some time under the observation of Professor Humphry at Cambridge, for frequent paroxysmal attacks of acute pain in the region of the left kidney, which had been ruptured two years before. No stone was found, but a cicatricial adhesion between the colon and kidney. On Jan. 22nd Mr. Lucas operated in Guy's Hospital on a patient of Dr. Boyce of Maidstone, for a dilated strumous kidney, which he drained through the loin. These patients are progressing favourably.

Enquirens.—The course is undoubtedly legal. The risk attending it must be judged of by our correspondent.

"PARALYSIS AGITANS" AND "CEPHALALGIA."

To the Editor of THE LANCET.

SIR,—In reply to "Inquirer" and Mr. Hunt, whose letters appeared in your issue of Jan. 9th, p. 94, I beg to recommend a medicine which I have found of great service in similar cases. It is the biniodide of mercury. The descriptions given point, of course, in both cases to meningeal mischief; in the former over the motor centres of the vertex, and in the latter at the base of the brain. I prescribe the biniodide in a mixture, as follows:—Solution of bichloride of mercury (P.B.), ℥i–℥iss; iodide of potassium, ʒ ss—℈ ij; infusion of gentian or of calumba to ℥ viii; half an ounce to be taken every three or four hours. In "Inquirer's" case I would add from five to eight grains each of chloral and bromide, sweetening the mixture well with simple syrup to cover the taste; whilst in Mr. Hunt's case I would blister the parts where the pain is severe. Thus prescribed, I regard the biniodide as a specific for all forms of meningitis. When occurring in young children, as it so frequently does, during teething, for instance, I have found the mixture act "like a charm." I generally prescribe it one-fourth of the strength given above, and with grain-doses of chloral every two hours. Of scores of cases treated during the last year I have never found it fail to cure. Its action, I argue, is to rapidly absorb that effusion which, to a greater or less extent, must accompany or follow meningeal congestion, and thus to relieve that pressure upon the great nerve centre, which, from the unyielding nature of the cranium, would otherwise cause convulsions. When quiet sleep has been secured with eight or ten doses of the medicine I omit the chloral, but when convulsions are a marked symptom I give two-grain doses of that drug in a separate bottle, with directions to give it every hour or two, or as occasion may require.

I am, Sir, yours faithfully,

Jan. 14th, 1886. C. R. ILLINGWORTH, M.D. Ed.

To the Editor of THE LANCET.

SIR,—Mr. Hunt, in a letter in your issue of the 9th inst., p. 94, asks for suggestions as to treatment in a case under his care. Has galvanism been tried? I remember a girl of about the same age as Mr. Hunt's patient who complained of acute pain in the spine, had a very high temperature, and had apparently quite lost the use of her lower limbs who rapidly recovered under the use of galvanism. Does the total cessation of symptoms at night indicate hysteria?

I am, Sir, yours obediently,

Jan. 21st, 1886. A SURGEON.

FRACTURE OF THE CLAVICLE.

To the Editor of THE LANCET.

SIR,—It is unusual for the surgeon to see the accident the results of which he has to treat. This happened to me recently, whilst engaged in a game of curling at the Glaciarium in this town. One of the players was walking on the ice towards me when his feet slipped from under him and he fell on his back. I could not have said that he fell more upon one shoulder than the other, but no doubt, in the effort to save the back of the head, he did so. He got up and complained about its being a "nasty knock"; but it did not appear that he could have hurt himself much and he continued the game to the end, about an hour afterward. I noticed that he kept the left hand very steady, but thought that some slight muscular injury only had been received, and advised him to foment the limb. Two days afterwards his wife brought him to me, and said that she wished him to be examined as he kept complaining. Upon stripping him I found a fracture of the left clavicle, near the acromial end. As is common in this situation, there was little or no displacement. The double curvature of the bone was very strongly marked, and the muscular development large. These elements no doubt contributed to the result. The artificial ice upon which the fall took place is entirely without elasticity—as unyielding as stone; whereas natural ice with water under it is not so bad to fall upon. We do not often hear of broken bones from falling whilst sliding or skating; nor do I think that fracture of the clavicle often occurs from falling backwards.

I am, Sir, yours faithfully,

Southport, Jan. 19th, 1886. EDWARD DAY MCNICOLL

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A WORLD'S SABBATH.

MR. LUIS JACKSON of Chicago proposes the formation of a World's Day of Rest League. He claims, from a practical study of the subject, that human capacity is becoming so great that unless the working men of all denominations take measures to preserve a uniform day of rest, they may lose it altogether. He desires the League to be untrammelled by any question of particular belief, simply advocating that which he believes was the original and humane intent in Mosaism—namely, the guaranteeing to labour a day of rest. He has already proposed to his Jewish brethren that at a convention of representative Jews from all parts of the world, to be held at Paris in the year 1900, the Jewish Sabbath be transferred to the national day of rest by authoritative edict. He fully believes that when this measure is considered by his co-religionists they will make the sacrifice of transferring their sabbath, thus recording on the imperishable tablet of chronology the benevolent and influential action of an ancient church, still vigorous in the cause of civilisation. The movement has obvious bearings on the physical and mental well-being of the human race.

Fairplay.—A is not legally bound not to practise, there being no contract; but practising in a suburb two miles distant would make his situation often very delicate and difficult with reference to B, unless he can get B's hearty consent. With this, and a friendly and honourable disposition on both sides, no great harm need be done to either.

Messrs. Leonard and Co. (New York).—We cannot exchange.

"FRIENDLY SOCIETIES' MEDICAL INSTITUTIONS."

To the Editor of THE LANCET.

SIR,—It was my lot to be in one of the above. Thinking it consisted only of poor men, and judging from the pay that the work would be light, one went in with the idea of studying each case well and doing all that lay in one's power to make it more prosperous and effective as a beneficial aid. That was the idea before going in. The opinion was soon altered by facts, as, instead of working men alone, many of the members were in a good position, above that of a member of a friendly society at least, above the position of obtaining medical advice at a rate that is a tax on the goodwill and energies of medical men and only intended for poor men above the position of those applying to the parish. Two members were town councillors. One member walked into the sitting-room one evening, without the ordinary civility of a maid-servant, and demanded attention to his case. Another time a lady answered the private door to the knock of a member; the member stepped back, stared at her, and asked in a most insulting manner who she was, and this being reported to the committee, was passed by as of no consequence. It would fill a volume to enumerate the outrages committed on common sense and civility at that place. No member ever seemed to grasp the idea that work was being done at the smallest cost by medical officers, who, in performing it, lost caste, heart, and interest in the profession. Instead of a feeling of gratitude and a desire to lessen worry and lighten the work, which, especially under such circumstances, should be the spirit, the reverse was the case, and if objection was raised to an insult, you were immediately reminded that you were paid to do the work. A demand would be sent, where only a message or request was needed. Here was seen all the selfishness, ignorance, and silliness of the public unchecked. Mothers, then, the guides and advisers, were dictated to by working men; children came in repeating the mothers' message, who had prescribed for herself; and in cases where a bottle of medicine and careful directions were all that was required, the advice was thrown to the winds and the contents of 100 or more bottles readily and needlessly taken. The waste of drugs was disgusting; sufficient would be given to last for four or five days, and the next night the bottle was returned for refilling.

Do the members of these places ever think that by the degrading treatment they subject their doctors to, and the poor pay they give them, they are really sowing a bad harvest for themselves? A man's mind is inhibited under such circumstances; his interest lags; he does not put forward determination, energy, or perseverance, and bring his faculties to bear on the cases before him. There is no hope of reward. They really gain nothing by harassing the medical profession with cheap practice, which soon loses its value; many cases are lost that can be saved, but the public are more to blame than the profession, for a doctor is but a human being, and needs rest and recreation to bring his faculties to be of use in working out cases. A man of inferior mind thrives in a social atmosphere, where he is free from insult, worry, degrading circumstances, and morbid surroundings in general, will be more useful than one suffering and labouring under such disadvantages. On having this appointment and going into private practice the benefit of the change was felt at once. Now there was something like being rewarded for work, and interest in the profession encouraged and stimulated. Cases were studied instead of being slurred, hastily prescribed, and the respect shown to one's opinion raised the mind from a drowsy condition, and gave freedom to the judgment. There are, however, difficulties. In these institutions the committee take all the money from the medical officers and give the latter only a portion. In this place the committee must have come to £900 a year, but only £300 was given to the doctors, about £200 to the senior and £100 to the junior. The medical officers should receive all and pay the expenses themselves. It is something to see members swallowing a camel and straining at a gnat by allowing their medical officers to be treated thus, which diminishes the general value of their services, and making a great stir about any little grievance, or fancied grievance, respecting the treatment of a case.

The great alteration required in the club system is for members only to pay—say, 2s. 6d. per member per annum, or some such sum as may be thought fair, and pay a reduced sum for each bottle of medicine and visit. This will do a great amount of good by putting a check on members sending for every trifling thing at all hours. Night visits will of course be more than day. The doctor will not be so annoyed and worried; less waste of medicine will take place; the member will feel more independent, more respect will be felt for him, and, consequently, a better feeling will exist. There will be greater inducement to attend to cases as people under this system will not trifle so readily with medical attendance. At the same time, an effort should be made to allow only artisans, labourers, and such like, to be members of a club, as at the best the remuneration is a tax on the profession.—Yours faithfully,

Jan. 18th, 1886. FAIRPLAY.

"WAKES AND THE SPREAD OF SMALL-POX."

To the Editor of THE LANCET.

SIR,—In reply to Dr. Whitelegge, I must explain that the conviction alluded to in my letter published in THE LANCET of Jan. 16th was not for holding a wake, but for exposing a child suffering from small-pox by removing it from home to another house after having been duly warned of the nature of the disease and that the child ought to be sent to the hospital. It was mentioned as an aggravation of the offence that a wake had been held upon the body of another child, also deceased from small-pox, and that neither child had been vaccinated. Dr. Whitelegge is correct as to the circumstances necessary to ensure a conviction; but I may remind him that under Section 142 of the Public Health Act the dead body of any person who has died of an infectious disease may be removed, and a wake may be thus prevented. Such has been frequently done in Liverpool. The wake is not only a drunken carousal, but also a means whereby a sufficient sum is often, if not always, raised to pay all the funeral expenses; hence the artful devices adopted to prevent the sanitary authorities hearing of the proposed intention to hold a wake, and the difficulty of suppressing the practice.

I am, Sir, yours faithfully,

Jan. 26th, 1886. YOUR LIVERPOOL CORRESPONDENT.

ROMAN CATHOLICS AND INTEMPERANCE.

IT appears that no church can boast of being absolutely free from the vice of drunkenness in its members. No one can refuse a meed of praise to Cardinal Manning for his untiring labours and highly consistent example in the cause of temperance. Some of his speeches have been singularly earnest and powerful. His last utterance on this subject was in favour of a Home of Rest for Roman Catholic inebriates at 41, St. Julian's-road, Kilburn, the first of the kind in the Catholic body. He bore warm and well-merited testimony to the zeal of members of other churches in this cause, and enforced his argument by quoting the calculation that from 60,000 to 120,000 persons in England died annually directly or indirectly from intemperance.

"THE RATIONAL METHOD OF TREATMENT OF HYDROPHOBIA."

To the Editor of THE LANCET.

SIR,—May I be allowed to say a few words about Dr. G. C. Roy's suggestion regarding the subcutaneous injection of diluted cobra poison in cases of hydrophobia, as published in THE LANCET of the 9th inst. Dr. Roy calls it a new and startling suggestion; but some years ago similar experiments were made in Germany, France, and Italy on lower animals. I am not in a position to say if these experiments were made with the poison of the cobra or some other venomous snake; but, so far as we know, there is no difference in the *modus operandi* of the different snake poisons. Until Dr. Roy can show any defects in the above experiments of continental medical men, or any difference in the poisons from different species of venomous snakes, it will be useless to try them again. Perhaps Dr. Roy was not aware of these experiments, or he would have alluded to the same. While admiring the highly scientific way of reasoning out the rational mode of treatment as discussed in his article, I must ask Dr. Roy to find out another specific antidote for rabies, by the same thoughtful study of the physiological actions of different poisons which characterises his last article.

I am, Sir, your obedient servant,

Ealing, Jan. 21st, 1886. N. P. SINHA, M.R.C.P. Lond.

THE ALBO-CARBON LIGHT.

To the Editor of THE LANCET.

SIR,—In my reply in your last issue to Mr. Walters' inquiries regarding the effects of burning albo-carbon, I omitted to state that I was careful to remove the deposit of anhydrous sulphate of copper, which collects in the form of an impalpable powder on the surface of the plate above the burner. Should the above precaution be neglected, I can readily imagine that irritation of the air passages might be caused by the powder being suspended in the atmosphere.

I am, Sir, yours obediently.

Clifton, January 27th, 1886. G. S. THOMSON, M.D.

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"LYE-TEA."

A VERY large quantity of what is known as lye-tea has, it appears, recently been sold in the market. It is a spurious tea, and calculated to do immense injury to those who, under the mistaken idea that cheapness and quality are synonymous, consume it. The tea trade itself could easily put a stop to the importation of this poison by simply refusing to look at it; but in the absence of such a happy state of things it ought to be made law that all tea not passed shall be immediately destroyed. As matters now stand, importers of this stuff know that they cannot make a very ruinous loss. If they succeed in placing it on the market and it is passed, well and good; if not, the worst that can happen is that it is has to be transhipped to the Continent at a merely nominal loss. Until such action as we have indicated the necessity for be taken, it is to be hoped that the Custom-house inspectors will by vigorous action check the importation of a compound, the selling of which, either wholesale or retail, ought to be made penal.

Dr. W. W. Skinner.—We are unable at present to entertain the proposal.

Dr. James Oliver's paper will appear in an early number.

"NOISELESS COAL FIRES."

To the Editor of THE LANCET.

SIR,—In an annotation on the above subject in your issue of the 16th inst. (page 125) no mention is made of what is of much importance in a sick-room—the prevention of sound from coals and cinders falling from the fireplace. For many years past I have advised, in ambulance lectures (second or "nursing" course) that, besides wrapping fresh coals in pieces of newspaper (not brown paper), a thick layer of fine ashes should be allowed to remain under the fireplace. Most people dislike the appearance of a dirty hearth; but easily-disturbed patients much appreciate the difference between a noisy and a noiseless fire—a reason why I prefer a gas and asbestos fire in a sick-room. For sick-room purposes the coal should not be of a bituminous, gassy, or flaring kind.

I am, Sir, yours obediently,

Jan. 20th, 1886. S. H.

ALBUMINOMETRY.

To the Editor of THE LANCET.

SIR,—Referring to Mr. Blomfield's description of Esbach's method of albuminometry, in your last issue, p. 153, I am sure most of us recognise the advantage of his plan; there is only one drawback—viz., a special apparatus is required. I have been in the habit of testing quantitatively for albumen in the following manner, with results, I believe, quite as accurate as those obtainable by Dr. Esbach's plan; every consulting-room contains the necessary apparatus. I first measure out a drachm of the urine, test for albumen, taking, of course, the usual precautions, and pour back into the drachm-measuring glass; allow to settle for twelve hours, and then read off the amount of precipitate; say, it is up to the five-minim mark, then I note, "Albumen one-twelfth." The actual amount passed per twenty-four hours can thus be found either by weight or bulk.

I am, Sir, yours truly,

Clifton, Jan. 25th, 1886. ARTHUR PRING, B.A.Camb.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir William Mac Cormac, London; Mr. Macnamara, London; Mr. Godlee; Mr. A. Clark, Bath; Dr. Leibowitz, Vienna; Dr. Thomson, Clifton; Mr. R. Wooton; Mr. Harries, Aberystwith; Dr. Oxley, Liverpool; Mr. F. F. Bond, Rastrick; Mr. H. E. Richardson, Birkenhead; Mr. V. Horsley, London; Mr. S. W. Hambleton, London; Mr. Sparrow, Ystrad-Rhondda; Dr. O. H. Allis, Philadelphia; Mr. A. R. Aubrey, Surbiton; Mr. J. D. Farquharson, Newcastle-on-Tyne; Dr. J. Adam, London; Dr. R. Savage, London; Dr. Illingworth, Clayton-le-Moors; Mr. Axford, London; Dr. H. Campbell, London; Mr. Challis; Mr. A. G. Chitty, London; Mr. Archer, Liverpool; Mr. W. T. Jackson; Dr. Matthew Hay, Aberdeen; Mr. H. W. Allingham, London; Dr. Cory, Bournemouth, Dr. Bampton, Plymouth; Mr. J. Oliver, London; Mr. H. E. Bramwell, Nottingham; Dr. Mackern; E. Garrett Anderson, M.D., London; Dr. Campbell Black, Glasgow; Mr. Simeon Snell, Sheffield; Mr. Noble Smith, London; Mr. Walker, Spondon; Mr. A. E. Barker; Mr. McKinney, Nunhead; Mrs. Reaney; Prof. Buchanan, Glasgow; Dr. Leftwich; Mr. Buchanan, Wigan; Mr. F. Lankester, London; Dr. Thompson, Bideford; Mr. Holland, London; Mr. E. O. Day, London; M. Dupratz, Paris; Mr. Sinha, Ealing; Mr. Hincks, London; Mr. Lycett, Wolverhampton; Dr. Murray, Forfar; Mr. E. Owen, London; Mr. N. E. Davies, Sherborne; Mr. Hume, Edinburgh; Mr. Bellamy, London; Mr. Donstan, Tottenham; Mr. Pring, Clifton; Mr. Newman, Bowness; Dr. Rentoul, Liverpool; Dr. W. Ewart, London; Dr. Tate, Notts; Mr. Freeman, Bath; Dr. Cachin, Cowes; Mr. Palliadieuse, London; Col. Burneau; Dr. Hamerton, Hendon; Mr. Quicke, Brixton; Dr. Davies, London; Mr. Maythorn, Biggleswade; Mr. Da Silva, Ghadichi; Mr. Evans, Cardiff; Dr. Scott, Florida; Messrs. Roberts and Co., Manchester; Messrs. Oliver and Boyd, Edinburgh; Mr. Back, Norwich; Mr. Pullin; Mr. Millar, London; Dr. Chattelateau, Montreaux; Messrs. Smith and Son, Manchester; Mr. Hope, London; Mr. Bell, Dover; Dr. Dowding, Bournemouth; Mr. Kings, London; Messrs. Edmondson and Co., Skipton; Mr. Wallace, Clapham; Mr. Wood, Chelsea; Mr. Knight, Northampton; Messrs. Horsfall and Co., Wakefield; Messrs. Squire and Sons, London; Messrs. Waltham Bros., Stockwell; Messrs. Lee and Martin, Birmingham; Mr. Cuthbertson, Leeds; Messrs. Slinger and Co., York; Mr. Thelwall; Mr. Hinde, Baildon; Messrs. Bell and Co., Edinburgh; Messrs. Cornish Bros., Birmingham; Dr. Griffiths, London; Sir B. Robert; Dr. Adams, West Malling; Messrs. Fannin and Co., Dublin; Messrs. Anderson and Co., Sunderland; Mr. Taylor, London; Messrs. Christie and Co., London; Messrs. Lorimer and Co., Holloway; Mr. Hunt, Cosham; A Subscriber for Twenty-four Years; Octogenarian; Fairplay; Sans Succès; M.R.C.S.; A General Practitioner; A Surgeon; F. J. W.; M.D., Llanelly; G. B. B.; A. B.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Skinner, Paris; Mr. Evans, Roath; Mr. Fiddler, St. Helens; Mr. Oldfield, Camberwell; Mr. Kemp, Castleford; Dr. Hunter, Notts; Mr. Clinton, Blandford; Mr. Learmonth, Kentish Town; Mr. Robinson, Bury St. Edmunds; Mr. Shute, Greenwich; Dr. Morton, Sheffield; Dr. Blair, Scunthorpe; Mr. Jones, Manchester; Messrs. Anderson and Co., Sunderland; Mr. Apel, Hastings; Dr. Evans, Festiniog; Dr. Eberle, Thirsk; Dr. Needham, Gloucester; Mr. Landor, Bath; Mr. Newill, Bishop's Castle; Mr. White, Bayswater; Mr. Bennett; Mr. Gowan, Newtown; Mr. Plowman, Taunton; Mr. Wood, Leyburn; Mr. Boyeau, Paris; Dr. Kennedy, Albury; Mr. Smith, Winchcombe; Mr. Leggat, Rastry; Miss Waugh, Bow; Mr. Moorhouse, London; Mr. McMullan, Turnham-green; Mr. Logan, Glasgow; Messrs. Maclehose and Sons, Glasgow; Mr. Brockelbank, Worcester; Messrs. Matthews and Co., Birmingham; Medicus, London Hospital; Beta; X. Y. Z.; Z. Z.; J. C. B., Islington; Chronos, Leeds; Delta; Churchman; Medicus, Cardiff; Antizime; Azegos, Bayswater; Veritas; A. C.; B. J. A., New Ross; T., Windermere; Medicus, Southsea; H. H.; Principal, Westgate-on-Sea; Matron, Bedford Infirmary; F. H., Dublin; Peter; Asthma.

Manchester Courier, Charity Record, Wiltshire County Mirror, Mansfield and North Notts Advertiser, Berkshire Chronicle, Forfar Herald, Western Mail, Liverpool Mercury, Birmingham Daily Gazette, Aberdeen Daily Free Press, &c., have been received.

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Introductory Lecture

TO THE COURSE OF

CLINICAL THERAPEUTICS.

Delivered at King's College Hospital.

BY I. BURNEY YEO, M.D., F.R.C.P.,

PHYSICIAN TO THE HOSPITAL, AND PROFESSOR OF CLINICAL THERAPEUTICS IN KING'S COLLEGE.

GENTLEMEN,—In addressing you for the first time as Professor of Clinical Therapeutics in this College, my first duty is to thank the Council of the College for the honour they have done me in entrusting to me the duties and responsibilities of this new chair. It will be expected of me that I should on this occasion set before you some account of the objects and practical ends which should be aimed at in the course of instruction which may legitimately fall under the designation of Clinical Therapeutics.

Nothing, perhaps, would surprise an intelligent lay inquirer into our system of medical education more than to hear of the great number of subjects to which the student of medicine is compelled to give a large amount of attention, and to learn at the same time that the subject of therapeutics—the subject which is especially concerned with the practical application of all these other subjects, for which alone they are taught—has been, for most practical purposes, omitted altogether. It would, I imagine, be extremely difficult to offer any satisfactory reason why the subject of therapeutics—the subject of the treatment of disease—should have been so long allowed to occupy such a very subordinate and almost effaced position in our system of medical education. It is still more difficult to understand why that curious fiction should be persistently and authoritatively maintained, that it is possible to teach therapeutics as well as materia medica and pharmaceutical chemistry in the short summer course devoted to these subjects. I observe that in eight out of eleven London medical schools a course of from thirty to thirty-three lectures is all that is available for the teaching of those subjects; and it is expected that in this short summer course the natural history and the physical and chemical properties and compositions of about 250 vegetable substances, of over 140 mineral and 25 animal substances, as well as nearly 500 of their compounds, shall be taught and learnt, and that the student shall acquire the ability to recognise, identify, and describe them. In addition to all this, it is further pretended that in this short course the physiological action, uses, doses, and applications of this enormous number of remedies in the various diseases in which they may be employed is examined and taught. It may probably be urged that the subject of therapeutics falls largely under the head of the Practice of Medicine, and so in a measure it does; but every professor of the theory and practice of medicine will tell you that he finds it impossible to discuss fully the treatment of disease in the limited time allotted to him for dealing with the vast number of other important subjects which he has to consider. It is thus clear that a vast field of inquiry, a vast field of practical study, of the very highest importance to our art, has hitherto received little or no systematic recognition or consideration in our system of medical education. In undertaking the task of supplying in some measure this defect, I must ask you to extend to me that indulgence of which a more competent exponent than I am might well feel in need in attempting so new and possibly so difficult a work.

And now allow me to explain to you what I understand to be the meaning of "clinical therapeutics." By clinical therapeutics I understand the rational examination and discussion of all the various means and methods that can be applied to the amelioration and cure of disease. Clinical therapeutics is not the study of therapeutics in the physiological laboratory; it is the study of therapeutics side by side with disease. It is not the work of the experimental physiologist; it is the work of the practical physician; it is the supreme test of all therapeutic work. I am not in the slightest degree undervaluing the labours of the experimental physiologist when I say that, so far as practical medicine is concerned, his results are but the raw material which clinical therapeutics has to sift, examine, select, accept or reject. And it is unwise to overlook the fact that the complexity of the conditions which exist in many forms of disease, and the impossibility of always, or even commonly, ascertaining all of them, tend to render the results obtained under the far more simple conditions of physiological experiment, and the reasonings founded on them, occasionally more embarrassing than helpful. It has been objected to the "clinical" study of therapeutics that it is faulty as a method, and not calculated to lead to precise "scientific" conclusions. This criticism is itself most open to be criticised. In the first place, I would say that no real and lasting gain to knowledge comes from the attempt to be more precise than the subject matter of our inquiry admits of. To affect to be absolutely precise in a study in which precision is not possible is only, in the end, to confuse and mislead. In the doctrine of the treatment of disease, in many of its forms the *à peu près*, the "more or less," alone is accurate and true. Of what use is it to lay down precise laws as to the action, for instance, of opium and its derivatives in disease, which may be contradicted in the very first case in which you administer that drug? It is not a law, and it may be wholly without precision, but it is nevertheless an important fact in therapeutics, that a sixth of a grain of morphine will in some persons produce alarming syncope and nausea, while three times that quantity in another person will produce a sense of extreme comfort and enjoyment. This is a clinical fact in therapeutics; it cannot be called a "precise scientific" conclusion; but it is only one striking instance of a vast number of like facts that could only have been discovered by this method. It may sound somewhat paradoxical when I say that if the clinical *method* of studying therapeutics is faulty, it is because it has not been sufficiently *methodised*. Every accomplished and intelligent physician and medical practitioner possesses a series of therapeutic facts and observations, many of which he has acquired for himself, many he owes to a sort of unwritten tradition, and these for the most part he keeps to himself. I intentionally state it as a reproach, that the physicians in the largest practices rarely communicate anything to the profession of their modes of treatment. They will read elaborate papers and lectures on more or less disputed pathological doctrines, but as to the therapeutic methods they practise, as to the therapeutic observations they have made in the course of their vast experience, they are, for the most part, as silent as their own door-plates. The clinical method in the study of therapeutics would prove far more useful and fruitful than it is if the best and most experienced clinical observers were to make some attempt to systematise their conclusions, and freely to compare and test one another's observations. Moreover, a fact observed clinically in therapeutics, I mean carefully observed and tested by several observers independently, has not only its own immediate practical value, which may be enormous in its direct and indirect consequences, but it may also be most important and useful in affording to the experimental pharmacologist and physiologist most pregnant hints as to the course his investigations should take. Let me instance to you a few out of many facts in our knowledge of the treatment of disease which have been arrived at by the clinical method, and to which physiological experiments could hardly have conducted us: although the experiments of pharmacologists may subsequently throw important light on the mode of action of some of those remedies.

It has seemed to me that one of the most remarkable gains in the treatment of disease in recent years has been the employment of large doses of iodide of potassium in the treatment of internal aneurysms. In common with many physicians, I have seen more satisfactory results follow this mode of treatment than any other. Yet when first I began the use of iodide of potassium in the treatment of internal aneurysm my results were disappointing and my belief in the remedy slight. I found the same to be the case with some eminent physicians and surgeons whom I met in consultation. But in the year 1877, on the occasion of the meeting of the British Medical Association at Manchester, I was fortunate enough to see in the infirmary of that city a number of cases of thoracic aneurysm which had been collected together by Dr. Simpson for the purpose of showing the members of the Association the value of the iodide of potassium treatment in such cases. It was certainly a remarkable

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series of cases, and the results were excellent; and it was then I found that whereas in London I and others who had tried this treatment had been content with giving five-grain doses three times a day, Dr. Simpson had given twenty, thirty, and forty grain doses instead. Now, as soon as I began using these large doses of iodide of potassium in the treatment of internal aneurysm I realised its great remedial value, and I have had the happiness of seeing most admirable results follow the prolonged administration of these large doses. It is only by the *clinical* method of observation that we could have established a fact of this kind. Many suggestions were made as to the mode of action of the iodide in these cases. The first to be put forward was that the cases in which the iodide proved of value were syphilitic cases, and that its beneficial effects were due to its anti-syphilitic properties. But this view, as Dr. Balfour has pointed out, would only make its action more mysterious. Another suggestion was that the iodide increased the coagulability of the blood, and this it may possibly do; but post-mortem examinations seem to show that the process of cure is obtained chiefly by "some peculiar action on the fibrous tissue," causing thickening and contraction of the walls of the sac. It had been noticed clinically [1] that in some cases, under the influence of the iodide, the pulsations in the aneurysmal sac and throughout the arterial system were much diminished in force, and this was referred to a reduction in the intra-arterial blood-pressure brought about by the action of the drug. Physiological experiments appear to confirm this view, and to show "that one of the chief actions of iodide of potassium is to lower blood-tension uniformly throughout the body by dilating the arterioles," and at the same time diminishing the force of the heart's action.

Next, let me call your attention to the therapeutic uses and value of arsenic as established by the clinical method. I need scarcely mention its well-known influence in the cure of certain affections of the skin; it is rather to other uses of this drug, such as Dr. Wilks and Dr. Clifford Albutt have borne witness to, that I would call your attention. Dr. Wilks, whose skill, caution, and insight as a clinical observer will be universally admitted, has satisfied himself by clinical observation solely that arsenic has the power of preventing attacks of gout and of angina pectoris. He is impressed, too, with its remarkable value in relieving some forms of asthma, in certain neuralgias, in cases of anæmia and impaired nutrition, and especially in certain cases of general cachexia of doubtful origin.[2] Dr. Clifford Allbutt has also borne unhesitating testimony to its value in the treatment of many forms of visceral neuralgia. Now these observations, the accuracy of which has never been seriously called in question, are due entirely to the clinical method. Let us see what amount of agreement exists amongst experimental pharmacologists as to the action of arsenic. Sklarek considers his experiments to have demonstrated that arsenic impairs sensibility and leaves the motor functions unimpaired; on the other hand, Ringer and Murrell's experiments, it is maintained, prove that Sklarek's conclusions are incorrect, and that motor paralysis precedes the loss of sensibility.[3] Then it has been established, or at any rate authoritatively stated, that the effects of arsenic on the circulation are not the same in warm- and cold-blooded animals; so that inferences from observations made on the vaso-motor system of cold-blooded animals cannot be applied to the case of mammalian animals, and therefore to human beings. The statement of Saikowsky, that arsenic causes fatty degeneration of the liver, kidneys, heart, and other organs, would scarcely have led us to any great enterprise in its application to the cure of disease, nor does it throw any light on the well-known fact that the arsenic-eaters of Southern Austria and Styria, who take enormous quantities, "improve in bodily condition, gain in breathing power, and become stronger and more pugnacious and also more salacious."[4] Moreover, it has been stated as the result of experimental investigations that arsenic arrests the formation of glycogen in the liver, and by one observer that it lessens the excretion of urea (C. Schmidt), and by another (Prof. Gäthgens) that it causes an actual increase of the amount of urea excreted. So I think we may fairly say, with regard to the therapeutic uses of arsenic, that we have acquired more precise knowledge from our clinical method than we could have derived from the results of pharmacological experiments.

Another fact in therapeutics which could only have been derived from clinical observation is the much greater efficacy which aconite possesses in arresting or modifying the febrile process in children and young people than in persons of mature age. It is quite remarkable how a few doses of aconitine will rapidly subdue the febrile attacks which are commonly associated with local inflammation or other disturbances of health in children and young people, but if you look for the same results in persons of riper years you will be constantly disappointed. Now, here we see an opportunity for a precise clinical investigation, in which, however, a considerable number of observers would have to be associated—viz., to ascertain the exact relation of the activity of aconite to the age of the patient.

No other method could have taught us the extreme value of the topical application of opium in the relief of local inflammations, especially when traumatic, than the clinical method. And I may here express my surprise at the comparatively little use that is made of this method of relieving the pain and distress of local inflammations by practitioners in general.

The value and applicability of the different forms of counter-irritation, and the appropriateness of one form rather than another in various diseases, are wholly the outcome of the clinical method; and this, again, is a subject which might be brought to a great degree of precision by the combined observations of a considerable number of practitioners.

(To be concluded.)

[1] Balfour: Clinical Lectures on Diseases of the Heart.
[2] THE LANCET, April 11th, 1885.
[3] Bartholow's Materia Medica and Therapeutics, fifth edition, p. 149.
[4] Ibid., p. 146.

Introductory Lecture

TO THE COURSE OF

OPHTHALMOLOGY.

Delivered at University College, Liverpool.

BY EDGAR A. BROWNE,

SURGEON TO THE EYE AND EAR INFIRMARY, AND LECTURER ON OPHTHALMOLOGY IN THE COLLEGE.

GENTLEMEN,—In entering on a new study, as in visiting a new place, it is well to begin with a plan. Think for a moment how two travellers in a strange town may learn much or little according as they proceed in an orderly method or in a tourist's hurry-skurry to make their observations. One, it may be, is provided with a handbook and a map, and sits down for an hour or so after his arrival, learns the names and directions of the main streets, the situation of the principal buildings, the meanderings of the river and number of its bridges, and perhaps secures the services of an intelligent guide, who takes him over the ground. In a short space of time he acquires a fair knowledge of his bearings, glances at the sights, and selects for more leisurely examination those which appeal to his taste. However limited his time may be, he makes his exploration on some kind of system, sees what he desires to see, and neglects the things that do not interest him. The other scarcely allows himself time to secure rooms; hurries out into the streets, bent on seeing pictures, statues, and ancient buildings; asks his way of the first bystander, who misunderstands him first and misdirects him afterwards; becomes involved in a labyrinth of side-streets, and after an infinity of trouble arrives, footsore, weary, dirty, and ill-tempered, at, let us say, the barracks in a remote suburb, and has no resource but to charter a cab to take him back to his hotel. Think of the different results of travel on these two men: the one returns home with pleasant memories and some useful knowledge, the other with a recollection of innumerable worries and a phantasmagoric jumble of erroneous impressions. So is it exactly with explorers in the vast territories of modern knowledge. As we enter into fresh tracts we require fresh guidance, multitudinous facts surround us on every side, confusing us by their number and bewildering us by their complexity. The confusion is mainly due to our seeing facts all alike, without being able to estimate their varying degrees of importance. We have no mental perspective, and cannot relegate facts to

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their relative positions—as a child, who has not yet learned to estimate the value of his visual impressions, has no idea of the distance of objects, and deems he may make a plaything of the moon. It is my duty to help you over these early difficulties. I shall essay to supply you with a plan; to direct your attention to the facts of greatest importance; to aid you in avoiding the distracting influence of those of less consequence; to show you the relationship of these facts one to another, so that you can afterwards, if you choose, add detail to detail till you have mastered as much of the subject as may be necessary for your purpose. In a word, I shall tell you what you ought to learn, and shall arrange and describe for you the principal objects you will be required to study. I shall give you, as it were, a bird's-eye view of the subject, and shall endeavour to make you understand which are the chief landmarks, and what renders them important. Then having, so far as we are able, gained an intelligent idea of our subject, I will, if you permit me, act as the guide I have already referred to, and aid you in your application of this knowledge, and in the simplification of the bewildering mass of material that is afforded by the practice at the Eye and Ear Infirmary. You will gain comparatively little by your attendance at the hospital if you do not first of all acquire some idea of what you are going to see, and a moderately definite notion of how you should methodise your observation.

Let us begin at the beginning. Why has ophthalmic surgery developed into a distinct and special branch? How is the eye differentiated from all other organs we are called upon to treat? In this manner: The eye is an optical instrument; its function is to deal with light, to refract rays, to measure the extent of illuminated areæ, to estimate the velocity of luminous undulations, and to transform the vibrations of the luminiferous ether into those coarser vibrations which constitute nervous impressions. In every pathological process that takes place, in every surgical procedure that we undertake, there is involved the destruction or the preservation of the optical integrity of the eyeball. If that optical integrity be not preserved our labour is in vain. So far as the mere optical mechanism of the eye is concerned, it may be said to be simply a camera obscura, differing only in detail from the instrument used by photographers. You are all acquainted with its structure. In front is the pellucid curved surface of the cornea for the refraction of rays of light to a focus on the retina; then the iris, with its mobile aperture, the pupil, which acts as a diaphragm according to the varying amount of light; behind this the crystalline lens, with a convexity that can be altered when a change of focus is required. In front of the lens is the aqueous humour; behind it the vitreous body: both serving, by means of their surfaces and their indices of refraction, to render the eye as nearly achromatic as is needful. These structures fulfil their optical purposes exactly as if they were constructed of so many different kinds of glass. But they are not simply optical structures, as they would be if they were constructed of different kinds of glass; they are at the same time vital structures. They subserve two purposes. They are essential to the optical functions of the eyeball, it is true; but they are equally essential to the vital economy of the whole organ, and are subjected to the same physiological and pathological laws as the other tissues of the body.

Let me illustrate these propositions. The cornea is a transparent, curved, refractive surface—a lens. Optically, there is an end of the matter. Structurally, it is, as you know, a continuation of the sclerotic, having its connective tissue modified so as to render it transparent. In furtherance of that end it is deprived of its bloodvessels, and its nutrition is maintained by means of numerous lacunæ which freely anastomose one with another by means of canaliculi. Through these channels lymph passes freely, and in inflammation migrating cells in great numbers have been observed thronging the passages. Given a membrane of this character, largely constructed of connective tissue, freely supplied with lymph, but at the same time wholly extra-vascular, and moreover—except for the brief protection afforded by the blinking of the eyelids—much exposed to external influences, you would be inclined to predicate that it would be likely to inflame, that its passages were likely to become gorged and infiltrated with leucocytes, that it would form a favourable soil for septic infection, and would on the least interruption to its nutrition easily ulcerate. This is so; but unfortunately every one of these pathological processes impairs the transparency of the medium. A comparatively slight and temporary infiltration of the cornea will permanently alter the refractive index of its layers and produce a permanent impairment of sight. An ulceration of the anterior surface may give rise to so little inconvenience that it is not noticed till the beginning of cicatrisation. The ulcer itself escapes recognition because it is transparent; but when Nature begins to heal, she heals with the same journey-work that does duty in similar tissues in other parts of the body, and produces a white speck which is visible to the observer and detrimental to accurate vision. Or take the iris. Its primary function of regulating the amount of light admitted into the eye is purely optical, but it is a highly vascular structure, serving a distinct purpose by secreting lymph for the nutrition of the lens and vitreous. Clinically, it may be said to conduct itself like a serous membrane—just as one man exposed to cold may have pleuritis, so another exposed to cold may have iritis. When the iris inflames, disturbance of its surface secretion occurs, and lymph of an adhesive character is exuded. The edge of the pupil lies, as you are aware, in contact with the anterior capsule of the lens. After the inflammation has subsided, it is frequently found that adhesions have been formed and the margin of the pupil is bound down to the lens capsule. The first effect of this is to destroy its power of expansion and contraction. The pupil has become fixed and its optical function impaired. But a further and more serious consequence may follow. Normally, the lymph secreted by the ciliary body and the posterior surface of the iris should pass from the posterior chamber, between the lens and the margin of the pupil, into the anterior chamber, and thence into the canal of Schlemm, and so into the general circulation. But when the communication is obstructed, the pent-up lymph, unable to escape, presses the iris forwards till it will yield no further, and then, increasing the pressure of the whole vitreous chamber, thrusts the surface of the optic nerve backwards through the sclerotic opening and causes the fibres to atrophy. Blindness of course results, if relief be not given by a timely iridectomy.

In both these instances you will perceive the optical function and the nutritional character of the structure are both involved, that they are both closely connected, and the one reacts upon the other. It is this dual character of the tissues of the eyeball that differentiates it from other organs, and ophthalmic surgery differs from general surgery in involving a constant reference to optical considerations.

But it were in the highest degree unphilosophical to consider the optical mechanism of the eyeball as constituting the whole of the organ of vision. The chief purpose of the optical mechanism is to render the images very much smaller than the objects. If we were unprovided with this reducing apparatus we could only see a very fractional portion of our surroundings at one time. We can conceive an eye without a dioptric apparatus, but we cannot conceive it without a retina—without a nervous screen for the reception of impressions, or without a nervous centre for their appreciation. A camera without sensitive plates and certain chemicals is a mere collection of lenses far less essential for photographic purposes then the plates themselves. Some sort of a photograph can be made by the plates without a camera, but no sort of photograph can be made by the camera without the plates. In like manner the dioptric contrivances of the eyeball—the lens, the humours, the mechanism of accommodation—are valueless by themselves; the final cause of their existence is the large mass of intra-cranial nerve structure that is concerned in the function of sight. Rightly considered, the eye begins in the orbit and ends in the occipital lobes. The retina, I may remind you, lines the eyeball; the optic nerve-fibres, collected into a bundle, pass through the sclerotic ring, and thence into the cavity of the cranium as far as the chiasma. Here a partial decussation takes place. The fibres from the temporal half of the retina proceed to the same side of the brain along the optic tract; those from the nasal retina crossing to the opposite side, thence to the corpora geniculata, and upwards through the white substance of the brain to the grey matter of the occipital lobe. Now, disease anywhere along this tract will give rise to visual disturbance or even blindness, and when the lesion is limited, indications of its position are afforded by the character of the sight affection. Thus, a lesion situated anywhere between the chiasma and the occipital lobe will affect the function of the nasal retina of the opposite eye and the temporal retina of the eye on the same side; the patient sees only the half of objects. You will remember a temporary condition of this sort that occurs in the course of those curious nerve-

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storms called migraine. But we are not confined to inference alone. A portion of this nerve structure is visible. By means of the ophthalmoscope the retina and the optic disc can be seen and their pathological changes noted during life. By actual observation we have learned that inflammation is likely to be followed by atrophy. Atrophy means blindness—the *gutta serena* of the old authors—the disease that probably plunged Milton into darkness for half his lifetime. You will have to make yourselves thoroughly acquainted with the appearance of inflamed nerve-surface; not necessarily because it is part of ophthalmic medicine, but because it is of the utmost value as a diagnostic sign in nervous diseases. The nerves lie, as you are aware, in close proximity to the membranes of the brain; indeed, their sheaths are derived from those membranes. Meningitis is a common disease; not only pronounced meningitis, with its frightful array of symptoms and its fatal termination, but partial meningitis, involving only small patches at the base of the brain. It has been found that inflammation of the meninges—invisible, and only to be inferred from symptoms—has a distinct tendency to spread downwards and cause optic neuritis, which can be seen with the ophthalmoscope. Again, it has been found that a tumour of the brain—any kind of lump, whether formed by a strumous deposit, a malignant growth, or a syphilitic gumma—may give rise to neuritis. Hence it has become part of the commonplace of medicine that all cases of severe or persistent headache should be examined with the ophthalmoscope. Persistent headache with double optic neuritis is strong presumptive evidence of coarse disease of the brain. The ophthalmoscope enables us to see the actual extension of a process that is taking place far back within the cranium. I need not dilate on the enormous value of this fact. If the ophthalmoscope could do nothing else for us, this would make it an instrument of extraordinary use in diagnosis. These instances are sufficient to show you how ophthalmology contributes to the general efficiency of medicine.

Besides the essential portions of the organ of sight contained in the orbit and within the skull, we have certain accessories in the shape of muscles: the extrinsic muscles, to direct the movements of the eyeballs; and the intrinsic muscles, that affect the iris and lens. These are governed by very important nerves—the third, fourth, and sixth; and I shall have to show you that the movements of the eyeball and its focussing apparatus are often affected in such a manner as to give rise to optical difficulties.

If I have succeeded by these instances, hastily sketched out, in making my meaning clear, you will perceive that ophthalmology inclines on the one side towards the science of optics, and on the other towards neurology. I wish to impress upon your minds this borderland character of our study, because it gives you a clue to the direction in which we shall travel, and also because it shows that ophthalmology is not something separated from what you have already learned, but an additional aid to you in the most general work. I propose in this place to impart to you such instruction as may give you a clear view of your subject. I have already shown you that scarcely any lesion can occur to the visual organ in the orbit, the brain, or the accessory nerves and muscles, without producing optical disturbances. Some instruction therefore in the principles of the dioptrics of the eyeball you must have. Without such instruction you will be liable to err even in what may seem at first sight purely medical cases. I have already said that double optic neuritis and headache may presage coarse intra-cranial disease. But the same symptoms may be present, and on investigation prove to be due to a short antero-posterior diameter of the eyeball (hypermetropia). The prognosis between a case of cerebral tumour and a case that can be cured by a pair of spectacles is of course widely different, and yet the wrong opinion may easily be given. In the same manner an enormous proportion of cases of trigeminal neuralgia, that are even now too frequently treated with quinine, arsenic, belladonna, gelseminum, &c., are due to the same or a similar error of refraction, and are also curable by glasses. And squint, which is often thought to depend upon teething or worms, or the oblique example of a nurse-girl's eye, is in the majority of cases merely a condition of development, determined by an error of refraction, and curable by its correction. Thus you will see the optical and nutritional functions of the eyeball are inseparably yoked together, and the one reacts upon the other, so that cause and effect frequently appear to change places, and the beginning in one case is the end in another.

ACUTE PARENCHYMATOUS MYOCARDITIS.

By SAMUEL WEST, M.D., F.R.C.P.,

PHYSICIAN TO THE CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, VICTORIA PARK, AND TO THE ROYAL FREE HOSPITAL; MEDICAL TUTOR AND MEDICAL REGISTRAR TO ST. BARTHOLOMEW'S HOSPITAL.

(*Continued from page 198.*)

CASE 3.—Eliza S——, aged twenty-four, single, was admitted on February 19th into St. Thomas's Hospital. She had been quite healthy up to the present attack. On February 15th she was seized with pain in her great toe, and on the 16th she could not walk, as her feet and knees were swollen and painful. On admission she had pain in both knees, both hands, and both wrists, with considerable effusion. She complained also of pain in the precordial region. Pulse feeble, 100; respiration quick and shallow, 60. Heart's impulse, the apparent apex, felt on a level with and just within the nipple. There was also pulsation, wave-like, in the left third intercostal space; superficial dulness increased a little upwards, reaching the nipple on the left, but scarcely if at all beyond the left edge of the sternum towards the right; heart's sounds somewhat muffled, but no murmur and no friction (? pericardial effusion, but, if any, very slight). No cough; tongue dry and coated; thirsty; appetite bad; sleeps badly; no headache; urine acid, slight trace of albumen. She was ordered ten grains of Dover's powder, fifteen grains of bicarbonate of potash, and ten minims of tincture of hyoscyamus, in an ounce of camphor-water, every four hours. — Feb. 20th: Pulse 144, small. Heart-sounds very feeble; no murmur; no friction. Pain less. Had a bad night. Patient looks very pale and anxious, complexion having a bluish tint. Has been very sick this morning. The vomiting was thought to be cardiac, and the patient was ordered a blister to the pericardium and some brandy. She got better and the vomiting ceased. At 4.45 P.M. her friends raised her up a little in bed to give her some food, and she fell back dead.

On post-mortem examination the pericardium contained a small amount of serous fluid; the right and left ventricles were considerably dilated. There was a little lymph upon the pericardium, but a good deal of sub-pericardial ecchymosis. The cavities contained a considerable amount of firm decolourised clot, which was probably forming for some time before death; this was adherent in the right auricular appendix. The left ventricle was much dilated; the valves healthy. The pulmonary arteries contained in their larger branches clots, probably post mortem, but further on they were obstructed by what might have been emboli. The walls of the heart below the endocardium looked uniformly pale and streaky to some depth, and in the substance of the muscular tissues were numerous large patches. The spot at which this appearance was most marked was about the junction of the upper with the middle third of the left ventricle. At this point the heart appeared bulging, and approached nearest to the surface, corresponding closely with the spot at which the pulsation of the apparent apex was described above. The spleen was considerably enlarged. The knee-joints, which were still somewhat swollen, contained a good deal of golden-coloured, rather viscid, and somewhat turbid fluid, but beyond a slight vascularity of the synovial fringes there was nothing further abnormal. Microscopical examination showed that in these white patches in the heart the muscular tissue had undergone acute granular (fatty) degeneration, its fibres being converted into granular cylinders. There was no intestinal growth.

This case, again, is complete, and the necropsy demonstrated the very advanced changes in the muscular tissue of the heart, and explained fully the clinical condition of the patient.

In the next case the patient also died, but no post-mortem was permitted.

CASE 4. *Probable myocarditis; death; no necropsy.*—I saw the patient in consultation with Dr. Rosser of Croydon. The account of the case is taken from the brief notes which I made at the time. Mr. C——, aged thirty-six, almost immediately after his return from a short visit to the Continent, was seized with pains in the joints, which Dr. Rosser thought to be probably due to rheumatic fever, and ordered

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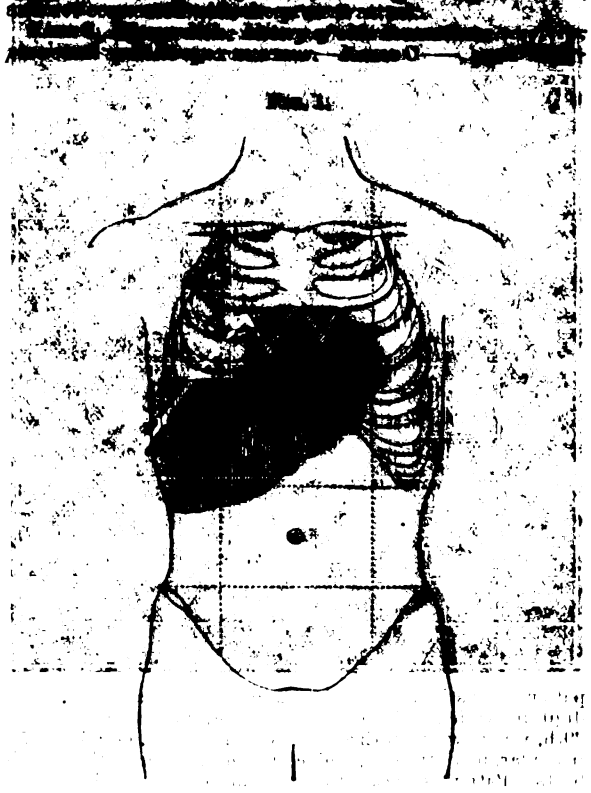
him to lie up at home. There was no history of any previous illness, and the patient had been in his usual health the only change from his usual condition being that he had gained flesh rather rapidly during the last two years. From the commencement of October, when the attack came on, until October 16th, the joint pains had continued, though they were not severe, and the temperature remained about 101° or 102°. On the 16th the respiration became rapid (40), and the patient complained of shortness of breath; the pulse was 140 and ill-sustained. I saw the patient on October 18th. He sat propped up in bed, being unable to lie down from shortness of breath. The respiration was panting and laboured; the complexion somewhat dusky; the pulse rapid and small. The lungs were congested; the heart-sounds extremely feeble, but the apex-beat could not be felt nor the cardiac dulness determined on account of the obesity of the patient. No murmur or friction was audible. The temperature was 102°. There was slight general œdema, but no albumen in the urine. The patient was much troubled with flatulence, and his appetite was poor. It was clear that the heart was the organ chiefly in fault, and stimulants and digitalis were ordered. On October 21st the patient seemed a little better, and the œdema was less; but he had been slightly delirious at night, and seemed a little wandering, even in the daytime, when I saw him. On the 22nd the delirium had increased, and the patient was more feeble. The same treatment was pursued; but the weakness increased, and with it the delirium. He gradually sank, and died the next day. No post-mortem examination could be obtained, so that absolute demonstration of the cause of the illness is not forthcoming; but I consider that I was justified, from the clinical evidence, in referring the case also to the same group as those preceding—viz., the group of acute myocarditis.

The next case was developed in the course of rheumatic fever, the patient, however, recovering completely. It was published in the St. Bartholomew's Hospital Reports for 1878, in an article on Rheumatic Fever.

CASE 5. *Rheumatic fever; myocarditis; recovery.* — John H——, aged fifteen, was admitted on Nov. 15th, with rheumatic fever. It was his first attack, and he stated that he was taken ill on the 11th, and that on the 12th he had severe pains in his joints. On admission the temperature was 102·5°, which rose towards evening to 103°, and many of the joints were in a state of rheumatic inflammation; but what was most striking about the case was the dusky, half-cyanotic tint of the complexion and the embarrassment of his respiration. The distress of the patient rendered much examination undesirable; but it was clear that there was no pericardial effusion, and friction-sound was absent. The patient complained of no pain in the chest, and his expression was not that of severe pericarditis. On auscultation, the heart-sound was so weak as to be almost imperceptible. The first sound was just audible within the apex-beat, but that was all. The next day the patient had lost nearly all the pain in his joints; but the dusky tint persisted, though perhaps it was not quite so marked, and the heart-sounds began to be more audible. No friction; no murmur. Temperature 101°; pulse 96, dicrotous; respiration 30. — Nov. 17th: No pains; temperature 98·6°; cardiac dulness slightly increased upwards and to the left; no friction; slight amount of albumen in the urine.—18th: The patient looks more dusky and pinched; is very drowsy; has no pains, but has been sick several times during the last twenty-four hours, especially after food. Cardiac dulness increased towards the right, reaching to the right edge of the sternum; apex not to be felt; heart-sounds very feeble, as yesterday; temperature 99°; pulse 84, very dicrotous. As it was thought some of the sickness might be due to the salicylate of soda which he was taking, it was stopped.—19th: Better; pulse 76, dicrotous; heart-sounds very feeble, especially the first apex-sound; no friction; no murmur; no albumen in the urine. The patient now commenced gradually to improve. — On the 26th this note was taken: Heart very feeble, at the apex first sound weak, second prolonged; no murmur; deep cardiac dulness increased slightly upwards, but more considerably towards the right.—29th: Cardiac dulness less than on the 26th; sounds still very feeble, but stronger than they were; faint systolic murmur within the apex, loudest at the left base over the pulmonary valves, at the base the sounds were hardly audible at all. From this time the heart gradually recovered itself, but convalescence was interrupted by a short relapse, and subsequently by slight pleurisy at the right base behind. When the patient was discharged at the end of December the cardiac dulness was normal, and there were no traces of cardiac lesion.

This case was by far the most serious of the forty cases referred to in the paper quoted as regards the general condition of the patient during the acute attack, so much so that on November 18th his state was such as to cause very grave anxiety. It was evident that he was suffering from some affection of the heart, but it was also clear that it was not pericardial, and equally clear that it was not endocardial. The only conclusion to be drawn, therefore, was that it was myocardial. It is often stated that it is doubtful whether recovery has ever taken place after myocarditis. This of course refers to general myocarditis, for the scars found not unfrequently in the muscular tissue of hearts post mortem are sufficient evidence that partial myocarditis is not by any means necessarily fatal. If the interpretation of the above case is correct, and it is difficult to see what other will account for the symptoms, an additional interest is given to it from this fact.

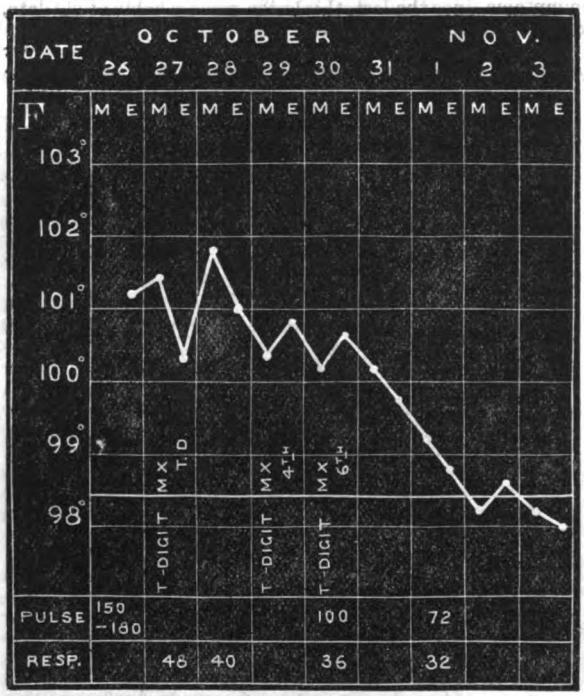
The next (sixth) case differs from those described only in the fact that a faint systolic apex murmur was left after the patient's recovery; but inasmuch as prior to this illness there had been three attacks of rheumatic fever, with cardiac symptoms since the last, this lesion was probably of old date,



On admission.

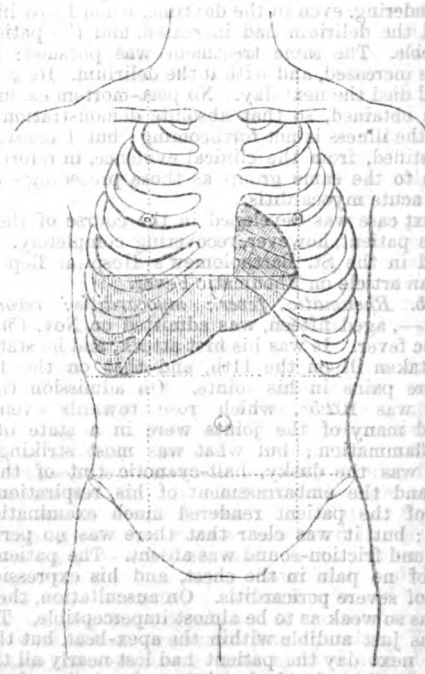
four, knife-grinder, was admitted into the Royal Free Hospital on Oct. 26th, 1883, with cyanosis and dyspnœa. When four years old he had his first attack of rheumatic fever. The date of the second attack is uncertain, but the third occurred at the age of thirty-seven. For three years before this, and ever since, he had been troubled with dyspnœa, palpitation, and pain in the cardiac region on exertion, and for the last three years had suffered from winter cough and cold hands and feet; recently he had been losing flesh. His present illness had been coming on gradually. The patient was a spare, thin man; the face and body were cold to the touch; skin dusky and mottled; the mottling being most marked on the lower extremities, where it formed round the ankles livid patches, and upon the legs small circular but not petechial spots. Except for slight general bronchitis the lungs were healthy, but the respiration was chiefly abdominal. The impulse of the heart was felt in the fifth intercostal space, slightly outside the nipple, but was not visible. The area of cardiac dulness (see Fig. 1) was

increased upwards and outwards, and reached a little way beyond the right border of the sternum. The heart was beating very rapidly, about 188 in the minute. The sounds were short, sharp, and faint, like the ticking of a chronometer, this peculiarity being most marked just to the left of the sternum. No distinct friction or murmur was audible. The radial pulse was very weak and fluttering; it was difficult to count, but was about 150 in the minute, showing a loss of thirty to forty beats as compared with the heart. The abdomen was resistant, and the liver was enlarged downwards, reaching to about two and a half to three inches below the ribs. The tongue was clean and moist, the bowels regular, and the appetite bad. The urine was alkaline, sp. gr. 1022, and contained some albumen. Temperature 101·4°. The patient was excitable, restless, and somewhat delirious. He was given ten minims of tincture of digitalis and ten grains of bromide of potassium every four hours, with light food and some brandy.—Oct. 31st: The condition was much the same; there was the same panting dyspnœa, but the cough seemed more troublesome. The expectoration was scanty and viscid. The temperature, which had been gradually falling, was to-day 99·8°; the pulse 80, irregular, but much stronger, as were also the heart-sounds; respiration 36 and shallow as hitherto. The food was taken better, but the



patient was still very restless and delirious at night. The digitalis, which had been reduced to every six hours on the 29th, was now given three times a day.—Nov. 1st: Pulse 72, irregular, but stronger, and equal in number to the heart's beats. Patient somewhat drowsy, but on the whole less delirious. A soft blowing systolic murmur was heard to-day at the apex for the first time.—2nd: Drowsiness and restlessness continue, and to-day there has been some twitching of the arms and legs. Breathing still difficult and panting, but the heart's action is steadier, slower, and stronger. Pulse 76, irregular, like the heart, but of good volume and more power. The patient complained to-day of "feeling very bad."—5th: The drowsiness has continued during the last three days, but the delirium has given place to slight wandering only at night-time. The heart and pulse beats, which were still irregular, were now much slower, the latter varying from 48 to 56 only in the minute. The albumen had quite disappeared from the urine. The digitalis and bromide of potassium, which had been on the 3rd increased again to every six hours instead of three times a day, was now stopped entirely, and a mixture of solution of strychnia (fifteen minims) with ether and ammonia substituted with great advantage; for the pulse rose to 60 next day, and in the following days continued to rise to 70 and 76; but though the drowsiness became less, there was more delirium, especially at night, due no doubt to the giving up of the bromide. The temperature, which fell on the 2nd to normal, did not rise again during the illness. (See chart.)—13th: Systolic apex murmur well marked. Patient began to take solid food with enjoyment, and the brandy was reduced from 6 oz. to 3 oz.—15th: The liver had returned almost to its normal dimensions, and the cardiac dulness was much reduced. The improvement was steady, and with increase of strength the loudness of the murmur increased.—22nd: The medicine was altered to perchloride of iron and strychnia, with ether and chloroform. — Dec. 3rd: The cardiac dulness could hardly be detected to the right of the sternum, and the systolic murmur, though distinct at the apex, could not be heard far into the axilla, and was hardly audible at all behind. The patient was now allowed to sit up for a short time; but, as this seemed to cause some breathlessness, he was kept in bed again, but on the 21st he was able to be up without discomfort. Pulse 116 while standing.—31st: The patient could walk about without discomfort. The cardiac dulness, though still increased, was much smaller than before, and the apex murmur could not be heard. This, however, varied. On some days it seemed absent, and on others it could be heard, but never more than faintly.—

FIG. 2.



On discharge.

Jan. 5th: The patient was discharged at his urgent request but on the 15th he returned, finding himself not strong enough for work, which he had tried to do and failed. The condition of the heart on the 16th was as follows: Apex under nipple in fifth space, the cardiac dulness a little increased upwards and outwards, but not reaching beyond the left edge of the sternum. (See Fig. 2.) Systolic apex murmur heard faintly immediately over apex beat and nowhere else. This murmur varied in intensity from day to day, but was never loud, and could at no time be heard anywhere except in the immediate neighbourhood of the apex beat. The patient rapidly gained strength, and left the hospital fairly well.

The next case differs from all the rest in the fact that the myocardial symptoms were associated with evidence of fresh endocardial and pericardial mischief. This case forms a link between the rarer primary myocardial inflammation and those more common forms secondary to or associated with lesions of other parts of the heart substance.

(To be concluded.)

A POLISH surgeon, Dr. Roman Oswald, who went to the Servio-Bulgarian war to render professional assistance, was shot in the battle of Slivniza, the wound necessitating amputation of the leg.

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ON

TREPHINING IN EPILEPSY RESULTING FROM OLD FRACTURE OF THE SKULL.

BY HENRY E. CLARK, F.F.P.S. GLASG., M.R.C.S.,
SURGEON TO THE GLASGOW ROYAL INFIRMARY.

THE case of traumatic epilepsy recorded by Mr. Holmes in THE LANCET of September 5th, 1885, recalls to my memory a somewhat similar case under my own care, the details of which may be of interest as a contribution to a rather difficult subject. As the result is much more favourable than in Mr. Holmes's case, and two years having now elapsed since the operation, my communication may serve to correct a little the unfavourable impression which his note undoubtedly leaves.

J. M'L——, a boy twelve years of age, a native of Campbelltown, first came under my notice in July, 1883, having been sent to me by Dr. Middleton. Between five and six years before he had received an injury to his head, and there was at this time present a depressed cicatrix over the right frontal eminence, evidently the consequence of a fracture of the skull. About six months before I saw him he began to have epileptic fits; these at first were infrequent and mild, but had latterly increased in number and severity. He was put on small doses of bromide of potassium combined with borax, and was kept on this treatment for about eight weeks, but with little or no improvement; he therefore became an inmate of ward 16 in the Glasgow Royal Infirmary on September 22nd, 1883. We were now able to observe him closely, and were satisfied that the fits were essentially epileptic. The boy always became completely insensible, the convulsive movements were general, and it was impossible to make out that either side of the body was more affected than the other; there was no foaming at the mouth, but the characteristic pallor was well marked. On the day following his admission he had a fit while I was in the act of examining him, and at the instant I made pressure on the cicatrix, but on no subsequent occasion were we able to produce the same result by this means. There could scarcely be said to be a distinct aura preceding the fit, but after he had been under observation for about six weeks he stated that before the fit came on he felt some pain in the cicatrix; we rather suspected that this statement was made to satisfy our oft-repeated inquiries. The mental state was not quite satisfactory; he could not be said to be idiotic, but he was clearly not so sharp as a boy of his age should be. In the ward he was regarded as "not all there." From the time of his admission a record of the number of fits was kept, and for about a month his temperature was taken night and morning. It is unnecessary that I should give the latter particulars, as there was no distinct deviation from the normal, but the statement of the number of fits each day during the month of October will be useful for comparing with the state after operation, and I therefore append it:—

Date.	No. of fits.	Date.	No. of fits.
October 1st	2	October 17th	1
„ 2nd	1	„ 18th	4
„ 3rd	2	„ 19th	5
„ 4th	3	„ 20th	2
„ 5th	5	„ 21st	1
„ 6th	2	„ 22nd	2
„ 7th	4	„ 23rd	1
„ 8th	2	„ 24th	4
„ 9th	3	„ 25th	2
„ 10th	5	„ 26th	3
„ 11th	2	„ 27th	2
„ 12th	2	„ 28th	4
„ 13th	4	„ 29th	2
„ 14th	5	„ 30th	3
„ 15th	5	„ 31st	5
„ 16th	4		

Total number of fits, 92.

Before admission the patient had on more than one occasion bitten his tongue when in a fit, and while under observation in the hospital he twice created some stir in the ward by being seized with a fit while eating, a morsel of bread getting into his air-passages, which was only dislodged by the house-surgeon promptly inverting him and thumping him on the back. I have no reason to doubt that in the latter instances he ran serious risks of suffocation, and this circumstance had some weight with us in deciding upon operating. Although he was taken into the hospital with a view to trephining being performed, there was so little to indicate any localised lesion of the brain, so slight a reference of the origin of the fit to the site of the injury, and so long a time had elapsed between the injury and the commencement of the seizures, that I had much difficulty in making up my mind to perform the operation. However, after he had been nearly two months an inmate of the ward, it was finally decided that the experiment of trephining should be tried.

The operation was performed on Nov. 14th with antiseptic precautions (including the spray). A crucial incision was made down to the bone at the site of the old injury, and the flaps and the periosteum being turned back, a medium-sized trephine was applied and a disc of bone removed. There was not found to be any spicule or rough edge of bone projecting inwards, and the dura mater was perfectly healthy and its pulsation normal; but there was found to be general thickening of the frontal bone at the part where the trephine was applied, the bone measuring fully three-eighths of an inch in thickness, which is certainly excessive for a boy of that age. The circle of bone removed was reinstated after its inner edge had been bevelled off, so as to prevent its pressing on the dura mater; a notch was also cut on the side of it to serve for drainage, and a few pieces of carbolised catgut were inserted to act as a drain. The flaps were then brought together with catgut stitches, and the wound dressed with carbolic gauze.

The next morning, when I saw him, he was sitting up in bed, and the nurse reported that she had difficulty in preventing him from getting up and playing with the other boys. There had been no rise of temperature, nor was there any throughout the further progress of the case. The wound was dressed antiseptically on Nov. 17th (three days after the operation), then on the 24th, and lastly on the 28th, after which, the wound being now superficial, it was dressed with boracic lint alone. The restored circle of bone did not necrose, as we thought might possibly be the case, but united satisfactorily to the part whence it had been taken. The operation therefore caused the least possible disturbance, and the integrity of the skull was only temporarily interfered with. The point of special interest, however, was the effect on the fits. These did not cease, as we had hoped might be the case, but they were materially diminished in number and were much less severe; the insensibility was now incomplete, the convulsive seizure much less marked and shorter in duration, and, as is shown by the following table, free days alternated with those on which the attacks took place:—

Date.	No. of fits.	Date.	No. of fits.
November 14th	2	November 30th	0
„ 15th	0	December 1st	2
„ 16th	2	„ 2nd	0
„ 17th	0	„ 3rd	3
„ 18th	2	„ 4th	0
„ 19th	0	„ 5th	2
„ 20th	3	„ 6th	0
„ 21st	0	„ 7th	1
„ 22nd	4	„ 8th	0
„ 23rd	0	„ 9th	2
„ 24th	4	„ 10th	0
„ 25th	1	„ 11th	2
„ 26th	1	„ 12th	0
„ 27th	0	„ 13th	0
„ 28th	0	„ 14th	1
„ 29th	1		

Total number of fits, 33

From this time the seizures became much less frequent, and when dismissed from the ward on Jan. 12th, 1884, he had not had a fit for a week. Since his dismissal he has been under the observation of Dr. M'Neilage of Campbelltown, who writes to me under date of Sept. 11th, 1885: "The lad, J. M'L——, has just been here to report himself, at my request. For sixteen months prior to April of this year, covering the whole period since his discharge from hospital, and up till April, he was perfectly free from epileptic fits. His mother states that four times since then he has had slight attacks in bed, generally early in the morning; she attributes these attacks to over-indulgence in sweets, and

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has a suspicion that he suffers from worms. She states that the attacks were slight, and that he did not seem to be hazy mentally after them, and that, whereas he was formerly childish, his mind is now quite vigorous. His general health is very good, and his condition mentally and physically much improved."

Remarks.—Trephining for epilepsy is by no means a novel operation, having been practised many times in the early part of the present century, and even dating as far back as the middle of the seventeenth century. Echeverria, in two admirable papers in the *Archives Générales de Médecine* for 1878, collects 145 cases where the trephine was used for the relief of epilepsy, and I have been able to collect about fifty more. In a very large number of these the lesion was a gross one, being either a compound fracture of the skull with large or deep depression, an extensive syphilitic caries, or a tumour connected with the dura mater. The case just detailed differs from these in the apparently slight change which had taken place at the site of the old fracture, nothing but a general thickening and slight condensation of the bone having been found. In this respect, however, my case is not singular, for in a patient operated on by W. Parker, an American surgeon, there was nothing found but abnormal thickening and density of the bone, yet as the result of the operation the symptoms passed off, and at last report, two years after the operation, the patient was well. A similar case is reported by Brainard of Chicago, another cited by Russell, and a third as far back as 1771 by La Motte; while in recent years parallel cases have been detailed in full by West of Birmingham, Bellamy and Lees of London, and one or two have occurred in the practice of my colleagues. The long period which elapsed between the injury and the onset of the disease led to a little doubt in our minds as to whether the injury and the disease stood in the relation to each other of cause and effect; yet we find the interval is small compared with what it was in one of Echeverria's cases, where the fracture of the skull took place in infancy, and the epilepsy did not show itself till the patient was eighteen years old.

It should not be forgotten that cases of traumatic epilepsy invariably tend to grow worse, and are little, if at all, affected by medical treatment; they are most commonly accompanied by distinct enfeeblement of the intellect. In this lad, this amounted only to his being regarded as "not all there," but in not a few patients it develops into some definite form of insanity. Echeverria dogmatically asserts: "Once declared, traumatic epilepsy caused by injury to the head leads to early insanity or to feebleness of intellect.[1]

The question of localisation unfortunately did not come into my case. The injury being in the frontal region and not implicating the motor area of the brain, we could not expect any distinct localisation of the convulsive seizures; but this formed one of the difficulties in the way of deciding upon operation, and we were equally in want of a definite aura, or the existence of pain in the cicatrix. It is true that he did sometimes tell us that he felt pain in the old wound just before the fit came on; but he had been asked the question more than a dozen times before the symptom appeared, and we had a strong suspicion that he fitted this manifestation to our wishes.

The cure was not immediately effected, and indeed we were rather disappointed with the small improvement that was at first apparent. Contrasting, as our case did, in this respect with such remarkable cures as that of Cline, where the patient had his last epileptic fit on the operating table immediately before the disc of bone was raised, this disappointment was natural; but it is noticeable that in similar cases where there was a gross lesion, such as a large depression of bone, a projecting spicule, or a clot, the relief was immediate; but in those which showed simply chronic thickening and induration of the bone the seizures continued for some time after the operation, but were less frequent and much milder. We were satisfied that although we had so far gained that the fits only occurred on alternate days, there was the irritation of the wound to be considered in accounting for their continuance, and, what was perhaps of more importance, the brain had got into a "habit" of periodic explosions, which took place almost automatically, and it was extremely difficult to break through this and upset its automatism. As the wound healed the fits became less in number and degree, and in about two months ceased altogether.

It may be asked in what way did the operation benefit the patient, seeing that no gross lesion was found? Now, I think we are too ready to believe that injuries of the brain may take place, depressions of bone press upon it, or thickened bone prevent its due expansion, and yet the individual be none the worse mentally or physically. It is true that many persons have performed all the duties of life in a fairly satisfactory manner after serious head injuries, and have lived for years in the enjoyment of good health with depression of one of the bones of the skull to the depth of half an inch or more; but I am satisfied that in all these cases, if a searching inquiry had been made, it would be found that there remained as the result of the accident enfeeblement of memory, loss of the power of application to study, or perhaps an inability to perform certain muscular acts, or at least to perform them with the same ease as before. Every accident of this nature, I believe, leaves its mark upon the brain, and, to my mind, the general hypertrophy of the frontal bone at and about the seat of fracture in this case was quite sufficient to account for the epilepsy. By removing a disc of bone the pressure on the brain at the part was taken off, and when reinstated the disc had been thinned so as not to press on the dura mater, but allow of free expansion of the brain. In more than one recorded case a depressed and neuralgic cicatrix served as the exciting point of epileptic seizures, without there being any thickening of the bone or dura mater; but I was satisfied that the cicatrix in this case was not the starting-point of the attacks.

One interesting detail in the operation deserves more than a passing notice—namely, the mode of dealing with the disc of bone removed by the trephine. It has been so much the custom to throw away this piece of bone that in my search through the literature of the subject the only cases in which mention is made of the re-implantation of the disc are those of my colleague, Dr. Macewen. As Dr. G. H. B. Macleod also informs me that he practised it on one occasion during last year, it is probable that other instances are not wanting; but I think I am safe in assuming that it has not been very generally done. In my patient it was most successful; the bone joined again as easily as if it had been a simple fracture, and the boy's skull is as complete as ever it was. That this is a decided gain over the condition so common after trephining—where an opening is left, covered indeed by a membrane, but often this covering is so thin that the pulsations of the brain can be felt or even seen—no one will probably be found to dispute, especially as the ordinary conditions of such openings is a source of possible danger to the patient throughout life. Putting aside, therefore, the value of this communication in its relation to the treatment of epilepsy, it has not been written in vain if it directs attention to the possibility of returning the bone removed by the trephine, and satisfies anyone that this is a safe and reasonable proceeding.

Glasgow.

[1] Archives Générales de Médecine, loc. cit., p. 551.

ON THE SYNTHESIS OF URIC ACID.

By P. W. LATHAM, M.A., M.D., F.R.C.P.,

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By adopting the following method I have succeeded in producing uric acid in the manner indicated by Horbaczewski. The precise details are here given, and the process can be very easily and successfully repeated.

I took thirty grains of glycocine and three hundred of urea, and put them into an ordinary test-tube (6 in. by ¾ in.). Having inserted a thermometer, to note the exact temperature, the test-tube was then placed in an oil bath, the temperature of which had been previously raised to 230° C. The bath was maintained at this temperature, and the heat so arranged that the bath could be raised in a few seconds to 240°. The mixture of glycocine and urea quickly melts; at 110° it begins to boil, and ammonia is given off; as the temperature rises it begins to froth up, and between 175° and 180° does so to a considerable extent. By raising the test-tube from the bath from time to time this action can be controlled, and the temperature kept at 180° for some minutes, until the ammonia comes off much less freely, and the mixture acquires a very faint yellowish tinge. The heat of the bath must then be rapidly raised to 240° and the temperature of the mixture

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in the test-tube quickly raised to 210°. By lifting the tube from time to time out of the bath the temperature must be kept exactly between 210° and 212° for five minutes, when the mixture will acquire the colour of brown sherry, but remains perfectly clear. The test-tube can now be removed from the bath and allowed to cool, when the mass will assume a very pale fawn colour. The mass can now be almost dissolved in three ounces of warm water, and perfect solution takes place on the addition of solution of potash. The fluid is then supersaturated with ammonium chloride, and a considerable excess of ammonia added, otherwise a mixture of urate and cyanurate of potash may be precipitated. A mixture of two fluid drachms of the solution of ammonio-nitrate of silver of the British Pharmacopœia, the same quantity of the solution of ammonio-sulphate of magnesia and of strong solution of ammonia, is now added to the other liquid. A considerable brownish precipitate of the mixed urate and cyanurate of silver is thrown down. Let this stand for twenty-four hours and allow the precipitate to subside. Decant off the supernatant liquid, and wash the precipitate with water, to which a little ammonia has been added. Take now two parts of solution of potash, and, having saturated one part with sulphuretted hydrogen, mix it with the other part. Add sufficient of this solution to decompose the argentic precipitate, heat the mixture gently, and filter from the insoluble sulphide. To the filtrate add sufficient hydrochloric acid to produce a slight but distinctly acid reaction. Boil the mixture until all the sulphuretted hydrogen is driven off, and, on cooling, uric acid mixed more or less with cyanuric acid, with very little colouring matter will be deposited. Pour off the mother liquid and evaporate it down, when a further amount of uric acid may be obtained. The presence of uric acid at this stage is shown very distinctly by the murexide test. In the earlier stages the murexide reaction is very faint indeed. To separate the uric acid from the cyanuric, the crystals must again be dissolved in a little solution of potash, this supersaturated with ammonium chloride and ammonia, and the uric acid separated from the cyanuric by means of the ammoniacal solution of silver and magnesia, and the precipitated argentic urate treated as before. In this way, though the yield is comparatively very small, I have obtained extremely well marked crystals presenting all the characteristics when seen under the microscope of ordinary uric acid, and responding perfectly to the murexide test. Horbaczewski's first paper appeared in the *Berichte* for November, 1882, in which he directed the glycocine and urea to be heated to a temperature of 200° to 230° C. I tried the experiment then, but failed—owing, I now believe, to the temperature used being too high or too low. A second paper by the same author appeared in the *Monatshefte für Chemie* last May, giving further details, but simply directing the substances to be heated in a test-tube over a Bunsen's burner until the fused mass becomes opaque. This induced me again to try the experiment, and I am glad to be able to confirm the statement that uric acid can be produced in this fashion. Why I adopted a temperature of 210° to 212° C. in the experiment, and the bearing this synthesis has on the formation of uric acid in the animal body, I shall endeavour to explain in my lectures at the College of Physicians at the end of next month.

Cambridge.

ON THE

EFFECTS OF TOTAL AND OF PARTIAL DESTRUCTION OF THE SUPRA-RENAL BODIES.

BY T. CHURTON, M.D.,

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THAT any disease which produces the essential or pathognomonic signs of Addison's disease must be capable of first entirely, or almost entirely, destroying the adrenals, seems a proposition likely to be established. Neither partial atrophy nor partial destruction by new growths appears to be able to cause obvious, or even perhaps clearly recognisable, symptoms and signs. A single case, however, of Addison's disease, or of symptoms practically undistinguishable from the group known by that name, without any disease of the adrenals, on the one hand; or a single case of entire or almost entire destruction of the adrenals, in which the symptoms of Addison's disease had been "observed not to exist," on the other hand,—would of course be fatal to the theory. It is said that these organs quite normally undergo atrophy in old people; but I wonder whether Professor Humphry would admit that. It seems possible, however, that if such atrophy be not quite normal in old people, the symptoms due to it might be in many cases less marked, as are the symptoms of some other diseases in them, so that even when present they may often escape notice. I shall return to this latter point. The first case to be now mentioned is a typical one according to the old view: complete caseation of both organs, and apparent absence of all other disease.

F. B——, aged nineteen, a farm labourer, of middle height, but spare build, dark-brown hair, brown eyes, and having several decayed teeth, was admitted into the Leeds Infirmary on Sept. 8th, 1884. He complained of weakness, giddiness, constipation, short cough with some expectoration, and loss of colour. He had not felt well for four months. His illness began with anorexia, obstinate constipation, gradually increasing pallor, and dizziness. He could not account for the illness. Nothing unusual had happened to him, except that at his work he was, of course, much exposed to the weather, and "one day he caught a cold" bad enough to remember; he had never been well since. His house and district were healthy. His family history, imperfectly known, furnished no clue. He had had no other illness since childhood. On examination, nothing remarkable was found in any of the chief organs. He seemed, however, strangely dull, slow and apathetic; and it was noticeable that his skin was somewhat dark and bronzed in many places; and several small, deep-brown, almost black, sharply defined spots were visible on his face and neck. He said that these freckles had appeared since his illness began, and that their number was increasing. Temperature 99° and 100°. He had lost flesh. In the absence of signs of disease in other organs, a diagnosis of disease of the adrenals was made. On Sept. 27th, upon trying to get up and dress, the patient felt sick and prostrate; thenceforward he lay in bed. On Oct. 9th, at 3 A.M., he was found out of bed in a semi-maniacal condition, but the nurse was at length able to persuade him to go back to bed, where he lay quietly, except for occasional muttering, until 9 A.M. He then became completely maniacal—writhing, shouting, striking at persons near him, &c. After taking twenty minims of laudanum in an ounce of wine he became quiet in a short time, and remained so all day. During the attack the pulse was observed by Mr. Morris, the junior house-physician, to be quiet and feeble, and the respiration unaltered. Next morning, at about 8 o'clock, he again became maniacal; and as the opium and wine seemed then to have less effect, a dose of bromide of potassium with hydrate of chloral was given. He became quiet, but died in the evening. The adrenals were the only organs in which disease was found. Dr. Griffith, resident medical officer, gives the following account of the necropsy: "Body rather poorly nourished. Skin earthy-looking. Axillæ dark in colour. Many small dark spots on the skin, found on microscopic examination to be caused by increase of pigment in the rete Malpighii. Brain apparently normal. Much congestion and œdema of lower part of lungs; evidence of old pleurisy. Heart small; weight, 6½ oz.; right auricle contained large pale clot, passing into ventricle and pulmonary artery. The kidneys, liver, and spleen were normal to naked-eye examination, but on microscopic examination the small arteries and capillaries were found to contain an unusually large number of blood-cells. The supra-renal capsules were evenly and markedly enlarged, being each of them 2½ in. in width, 2 in. in length, 1 in. in thickness, and 1 oz. in weight. The cut surface, smooth and hard, had a white and rather cartilaginous appearance, with yellow patches interspersed—sections of caseating nodules. Microscopically, the greater part of them was found to consist of a small-celled growth with very numerous giant cells; the usual granular débris was found in those parts undergoing caseation. Many of the smaller arteries were affected with obliterative inflammation of the inner coat. No bacilli could be found. The semilunar ganglia appeared normal. There was no matting of the tissues around the adrenals, and no disease of neighbouring structures."

In the following cases I have recently observed at the infirmary more or less disease of the capsules has been

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found which had not caused any recognised symptoms during life.

CASE 1.—Male, aged twenty-four. Strumous disease of wrist; amputation. Death from pulmonary phthisis. Ulcers in both small and large intestines. Each adrenal contained four or five caseous nodules larger than peas. Nothing remarkable in other organs.

CASE 2.—Female, aged forty-five. Cut throat. Mania came on two days after self-inflicted wound; exhaustion. Kidneys slightly granular. Spleen remarkably small. Œsophagus very thick. Small intramural uterine myoma. Right adrenal contained a cyst as large as a nut.

CASE 3.—Male, aged seventy-four. Death from hernia. Caseous growths in one testis, both epididymes, mesenteric glands, spleen, liver, kidneys, and in adrenals. Both adrenals were much thickened throughout by the caseous growth, but were not enlarged in other dimensions.

CASE 4.—Male, aged twenty-nine. Dropsy of cerebral ventricles, including fourth. Right adrenal contained blood. (About three years ago I saw a case of hæmorrhage into both capsules in a boy who died from a severe burn.)

CASE 5.—Female, aged forty-two, but looked older. Atheroma of vessels. Granular kidney. One adrenal contained nodules; giant cells were found in these. Nothing of the kind in other organs.

The adrenals are described in my notes as being soft and very friable in a woman aged forty-five, who had died of cancer of the peritoneum; and in a man aged thirty-four, who had died of septicæmia after excision of knee. They were thin and shrivelled in the case of a man aged fifty-three, who died of phthisis, and in a man aged forty-five, who died of pneumonia. And in many other examinations of old, of middle-aged, and even of young persons who died of various diseases, I have noticed that the adrenals were very thin walled, and either hollow or having easily separable sides. This is a very common condition. In the case of a woman aged sixty-nine, however, who died, not from disease, but from an accident, the adrenals showed no such wasting, but were as large in every dimension, and microscopically of as perfect structure as in young subjects. Nor could even this person be accepted as a specimen of healthy old age, since her kidneys were markedly granular.

In none of the cases briefly described above in which abnormality existed had any symptoms or signs been observed during life—in none of them, probably, were any looked for—indicating disease of the capsules. For my own part, I have not until recently thought of examining elderly patients for symptoms of Addison's disease, although it is not unusual to perceive a change in the complexion and in the colour of the skin of the arms and legs of old persons. But a short time ago I happened to observe that the hands of a gentleman aged seventy-two, occasionally seen by me in consultation, were as brown as those of anyone long exposed to the sun, although he very rarely left the house. On further investigation his elbows and abdomen were found to be distinctly brown, and the areolæ of the nipples very dark; and he voluntarily pointed out the change of colour in the abdomen and a large number of light-brown freckles which had recently appeared there. He has had an unusually weak stomach all his life, and during the last year or two has suffered from debility, nausea, sinkings at the epigastrium, small ulcers on the tongue, and periods of great depression; indeed, he never at any time feels any desire for exertion of mind or body, though his intellect and senses when roused do not seem to be much impaired, and he has no stiffness or special want of power in his limbs. Both his regular medical attendant and myself had been urging him to try change of air and scene, inasmuch as hitherto we had discovered no organic disease; but I have now become somewhat more cautious as to the language and arguments with which I encounter his decided opposition to the course we recommend; for it seems possible that his adrenals are atrophied; and the case of the woman of sixty-nine, whose adrenals were demonstrably perfect in size and structure, has made me doubt whether it is really normal for these organs to become atrophied in old age. The observations which have led to the opinion that such normal atrophy does occur may possibly have been made in hospital post-mortem rooms; but unless many old persons are brought there who have died shortly after accidents such an inference cannot be justified. I say many, for probably most of the street accidents of London and other large towns occur to persons who are not in good health, and who are in consequence less able to guard themselves against accident. Perhaps one might even venture to say that really healthy old people are not excessively numerous. It will, however, sometimes happen that a fairly sound man of over seventy years of age is killed: his are the organs to be investigated.

A NEW TREATMENT OF GONORRHŒA CHRONICA BY MEANS OF GROOVED BOUGIES.

BY LEOPOLD CASPER, M.D.,
PRACT. ARZT IN BERLIN.

THE extraordinary difficulty of healing some cases of chronic gonorrhœa is well known. There are men who have every morning an exudation, although they have tried every possible remedy against the evil. Frequently, especially after coitus, the chronic disease becomes acute, which often, more particularly in young married men, leads to disagreeable results. The difficulty of healing chronic gonorrhœa is to be sought less in the means used than in the way in which they are used. This will appear when we more closely consider the anatomy of the urethra and chronic gonorrhœa.

The male urethra is a tube from fifteen to eighteen centimetres long, which in its separate parts is constructed so differently that it appears unjust *a priori* to place a disease of one of these parts under the class named "gonorrhœa chronica." For the same reason that the cervix uteri is to be separated from the uterus, the pars spongiosa must be separated from the partes membranacea and prostatica. An inflammation of the pars spongiosa does not necessarily imply that the pars membranacea is also inflamed, or, *vice versâ*, that an inflammation has its seat in the membranous portion while the spongious part is normal. In fact, most cases of chronic gonorrhœa are located at the end of the bulbus, or at the juncture of the end of the bulbus to the pars membranacea. They begin as acute inflammation in the fossa navicularis and slowly extend to the bulbus. This will be clearly seen by the following:—Of 100 cases of callous stricture, about seventy occur in the bulbus, or at the place where the bulbus becomes the pars membranacea, twenty in the fossa navicularis, and ten in other parts of the pars spongiosa. Never does a callous strieture appear in the pars prostatica. The callous stricture being the result of gonorrhœa, the favourite seat of this disease will of course be the above-mentioned places, where strictures mostly occur. Although, as regards the pars cavernosa, the abundance of cavernous tissue will favour hypertrophy of the stricture-producing tissue in a higher degree than in the partes membranacea and prostatica still there would be more strictures in the posterior half of the pars membranacea and in the prostatic part, if all chronic gonorrhœæ were to extend to the bladder. Of course the inflammation sometimes extends to the posterior part of the urethra, but this is not a rule. In this respect the acute and chronic gonorrhœæ resemble each other. Rarely does the inflammation extend to the bladder in acute cases, whereas this frequently happens in chronic cases. Thus we speak of a "gonorrhœa anterior" when the inflammation does not pass the bulbus; if it extends further we call it "gonorrhœa anterior et posterior"; if the disease disappears before the bulbus and remains located in the posterior part of the urethra, we call it "gonorrhœa posterior." The bulbus is therefore a boundary in respect to the pathology of gonorrhœa. This will appear more comprehensible when we consider that the bulbus is also a boundary in an anatomical respect. The lamina media fasciæ perinei (Dittel) or the fascia perinei propria (Hyrtl), the important boundary between those organs which lie within the pelvis and those which lie outside of it, is closely connected with the bulbus. In front of this membrane is the pars cavernosa of the urethra, with the musculus transversus perinei superficialis and the musculi bulbo-ischiocavernosi; behind it is the membranous and the prostatic portion, with the glandes Cowperi, the prostata, and the important musculus constrictor urethræ, also called "compressor partis membranaceæ urethræ." This muscle is composed of two bundles, of which the upper lies above and the lower under the pars membranacea; both join at the median line, together with the same muscles coming from the opposite

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side, so as to form a broad muscular ring to compress the urethra.

The importance of the bulbus as a boundary of the anterior and posterior urethra is apparent when we consider the treatment of gonorrhœa as hitherto practised—viz., injections by means of syringes. This method is suitable for most cases, but not for all, for the fluid injected into the urethra does not pass the bulbus without the use of force which no one would care to employ. If an injection is made slowly and with moderate pressure, the fluid extends to the front part of the urethra, and passes to the musculus compressor, but not beyond it; for, were this the case, the fluid would run through the posterior urethra into the bladder and remain there, whereas it is known that after a common injection the fluid comes back on removing the finger from the meatus. The in-going solution causes a reflex action of the musculus compressor, which results in a spasmodic closing of the urethra. The inefficiency of the usual syringes for treating gonorrhœa chronica posterior is therefore clear. At the same time we must remember that, if we wish to irrigate the posterior portion of the urethra, we must not push the catheter so far that its point touches the bladder; for in this case the catheter fills the urethra, and the injected fluid flows out again through the eye of the catheter without having touched the walls of the urethra.

Concluding from the foregoing that (1) all that which gathers before the musculus compressor in the urethra flows towards the orificium cutaneum, and that (2) a fluid gathered in the posterior part of the urethra runs into the bladder because of the inferiority of the musculus sphincter vesicæ internus as against the musculus compressor, we receive a hint as to the diagnosis between gonorrhœa anterior et posterior. If we see a drop on the orificium cutaneum, or that the lips stick together, or we find yellow spots in the washing, the gonorrhœa is surely seated at the bulbus, as all that which accumulates in front of the bulb flows towards the meatus. If these signs are absent the diagnosis is more difficult. The passing of a button-ended bougie causes in most cases only a slight burning and discomfort to the sound portions of the urethra, but when we touch a sore part the patient feels severe pain. If there is tenesmus, we have surely to deal with a gonorrhœa posterior; if tenesmus is present, if a drop appears on the orificium cutaneum, if the lips are glued together, or there is a spot in the washing, a gonorrhœa anterior et posterior is proved. On the other hand, if there is no tenesmus, we are not justified in the conclusion that there is no gonorrhœa chronica posterior. In acute gonorrhœa posterior tenesmus always appears; in chronic we often miss it.

The examination by means of the endoscope is always decisive, but the irritation which even the most careful introduction of this instrument will cause renders its application undesirable. Less painful and much more simple is the following proceeding. Tell the patient to hold his urine for five or six hours, and then to pass it into two glasses. If the first glass contains flakes or films, while the second glass remains clear, a gonorrhœa anterior may be diagnosed; should both glasses appear turbid, then a gonorrhœa posterior is present. To distinguish between gonorrhœa posterior and cystitis, which is likewise accompanied by turbid urine, is exceedingly easy; for, whereas in chronic posterior gonorrhœa the first portion of the urine passed is more turbid and contains more films than the second, in cystitis the reverse is the case. The reason of this is that the pus formed in the bladder will, according to the law of gravitation, sink to the fundus vesicæ, and will therefore only appear in the urine expelled last.

Considering now the pathology of gonorrhœa, it is known that the inflammation, as differing from urethritis, does not remain in the mucous membrane. Beginning in the mucous membrane, it continues into the submucous tissue, in the corpora cavernosa, and in the muscles. The product of the inflammation is an infiltration of the cells of the diseased parts. This infiltration gradually becomes fibrous tissue (Bindegewebe), which in its turn produces the cicatrix—the so-called "stricture." At the same time epithelial cells are formed, reaching to the surface of the mucous membrane and forming a thick epithelial stratum. The upper cells of this stratum, constantly sloughing, exfoliating, and mingling with the mucous secretion of the glands, constitute the crude pus which characterises chronic gonorrhœa. The glands and lacunæ of the urethra are also affected. From the fossa navicularis to the bulbus there are many lacunæ Morgagni, from eight to twelve millimetres long and half a millimetre wide, and several Littré's glands. The catarrh extends to both glands, and Dittel considers the well-known flakes or films and the goutte militaire as a product of the catarrh of Littré's glands and of the sinus Morgagni.

From this short review, it is clear that many chronic gonorrhœæ already represent the first stages of strictures, or, as Otis calls them, "large-sized strictures," which naturally cannot be cured by astringent solutions, or even such as are fatal to gonococci. If they are to be cured, local pressure must be used to remove the cell infiltration, while medical treatment is adopted to affect the catarrh. For these reasons treatment with bougies against chronic gonorrhœa has been mostly practised. Some went a step further and used bougies covered with simple salves; others, as Unna, employed bougies covered with a paste composed of butyrum cacao and different medicaments, which dissolves at body temperature. Similar considerations influenced me in the treatment of gonorrhœa chronica. But the usual bougies and the bougies covered with salves and paste not being successful in obstinate cases, I tried a modification. I was convinced that the paste bougies did not sufficiently fulfil their purpose, for very often the bougie does not reach the bladder, because the narrow walls of the urethra will not permit it to pass with the hardened paste; consequently one would have to wait, as Unna says, until the paste was dissolved, and then the melted salves would not reach the places behind the stricture where the catarrh is very often located, and for which they are intended. Further, cacao butter should not be allowed to enter the bladder if it can be possibly avoided; for after such treatment I have seen a simple gonorrhœa anterior become a gonorrhœa posterior and a cystitis colli with severe tenesmus; twice I have observed epididymitis after it, but I cannot decide whether *post hoc* or *propter hoc*.

These considerations caused me to devise a method which would have the advantages of the combined mechanical and chemical treatment, and at the same time avoid the evils I have mentioned. For this purpose I constructed nickel-plated bougies with grooves. These bougies are slightly conical and twenty-five centimetres in length. They have six grooves, which are about a millimetre and a half deep, and become shallower towards the point, stopping entirely at about five centimetres from the point, so that the front part of the bougie is entirely smooth.[1] Into the grooves of these bougies I pour a paste, which hardens at the ordinary air temperature. With respect to the composition of the paste, I recommend the following:—Cacao butter, 100 parts; nitrate of silver, 1 to 1·5 part;[2] balsam of copaiba, 2 parts. I tried, also, other preparations, such as resorcin, iodoform, zinc, and iod-natrium, but found them all inferior to the nitrate of silver. With regard to the preparation of the bougies, I must lay stress on the fact that the salve must not be heated too much, for in that case the nitrate of silver would be reduced to silver and would be inefficient. Therefore, put about two teaspoonfuls of the paste into a small vessel and heat it slowly and carefully. The vessel must not become so warm that it cannot be touched with the bare hand. Such a degree of heat is not necessary to dissolve the paste, and, as I have shown, is injurious. Neither is it necessary to wait until the entire contents of the vessel are melted, for if so the already dissolved salve becomes too hot and reduced. After dissolving, the salve is poured over the bougie, which is horizontally laid over a vessel to catch the drippings. After the salve has become hardened the bougie is smoothed with any sharp-edged tool. Care must be taken that the smooth front part of the bougie is left uncovered by the salve. Before using, draw the bougie several times through the hand, the warmth of which will cause sufficient of the salve to melt to lubricate the metallic surface of the bougie. The smooth front part of the bougie is rubbed with glycerine so that the instrument, if the size corresponds to the diameter of the urethra, will easily pass. The grooved bougie leads the salve beyond the narrowed places. At the temperature of the body the salve melts in one minute.

The greater efficiency of medicaments in this form over injections is clear, as the oily cacao butter will keep the

[1] Weiss and Son, of 287, Oxford-street, London, manufacture these bougies, for which an English patent has been applied for.

[2] Old-standing cases require more than one part of nitrate of silver, but I should not recommend more than 1·5.

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ingredients in closer and longer contact than water. As to the glands and laminæ of the urethra, it is probable that the thick fluid matter enters them more easily after they have been dilated by the bougie. Of the bougies described, I use Nos. 18 to 23, French (Charrière). I never use smaller than No. 18, but prepare the urethra with soft bougies until this size will pass. As soon as this is accomplished I begin the cure with my grooved bougies, which I pass daily. If there is difficulty in passing No. 18, I employ the same sized bougie the next day, and then pass on to No. 19, &c.

After using these bougies I have never witnessed a case of chill or fever, but I will not say that this could not occur just as after passing ordinary bougies. The pain or disagreeable feeling is not greater than that caused by the introduction of any other instrument into the urethra. Nay, the well-known burning in the urethra frequently experienced by patients in passing urine after the first application of the bougie will often be entirely absent. The longer the bougie is left in, the more favourable is the effect on the infiltration. Some patients feel burning and tenesmus after a few minutes, others after half an hour, and others still later. The time during which the bougie may remain in is dependent on these circumstances. Although the salve is so prepared that it cannot injure the normal parts, I avoid introducing it unnecessarily into the posterior portion of the urethra, whence it would flow into the bladder. I effect this by passing the bougie, in a case of gonorrhœa anterior, only so far that its point just touches the musculus sphincter vesicæ internus. As the grooves with the salve begin at a distance of five centimetres from the point, none or very little of the salve will flow into the posterior urethra. In a case of gonorrhœa posterior I push the bougie further, so that its grooved part lies in the partes membranacea and prostatica. Here we cannot avoid a little of the salve flowing into the bladder. The results I have obtained with this treatment are satisfactory. On an average I succeeded by ten applications to effect a cure of cases of chronic gonorrhœa which had before proved very obstinate. In a few cases twenty and more applications were necessary. Frequently after using a very small number of bougies a striking improvement was visible.

Whether a chronic gonorrhœa which no longer shows a secretion at the meatus will improve can be decided by simply examining the urine with the naked eye. The quantity of gonorrhœal flakes, their size, and length will diminish with the gradual process of cure. The microscope teaches us that at the beginning the thick flakes are almost entirely composed of pus-corpuscles, while epithelial cells are but few. With the improvement of the chronic gonorrhœa the quantity of pus-corpuscles diminishes, and that of epithelial cells increases, till at last but few pus-corpuscles are to be found here and there embedded in the epithelial cells. Thus we are enabled exactly to observe the different stages of chronic gonorrhœa. More than once I could readily, after two applications, perceive a difference in the composition of the flakes in so far as the proportion of epithelial cells to pus-corpuscles had changed in favour of the former. Altogether by this procedure I have cured about fifty obstinate cases of chronic gonorrhœa, which had resisted all other methods: twenty-seven of these had been cases of a year and a half's standing, twelve of more than a year's standing, and others less.

Berlin.

THREE CASES OF SLOUGHING ULCER OF THE PENIS.

By FREDERICK W. LOWNDES, M.R.C.S. ENG.,
SURGEON TO THE LIVERPOOL LOCK HOSPITAL.

CASE 1.—James P——, aged twenty-three, a coach-smith, consulted me on Oct. 22nd last for phimosis and ulcers. The inguinal glands on the left side were indurated. He first noticed the fact that he was sore a week after sexual intercourse, and he had been suffering for three weeks before he came to me, having been under the care of a chemist. Hearing this, I examined him very carefully, and as the prepuce could not be retracted, I syringed it out repeatedly with warm water. There was no offensive odour nor any evidence of slough. I ordered him to inject black wash under the prepuce several times a day, and to take a pill containing two grains each of grey powder and Dover's powder night and morning. Late in the evening of the 24th I was sent for to see him at his residence in consequence of hæmorrhage. On arrival I found a most offensive discharge coming from under the prepuce mixed with blood. I at once slit the latter up, and found that a considerable portion of the glans had sloughed away. The patient stated that the discharge began to be offensive in the evening of the 22nd, and that the bleeding had been going on all the afternoon. I stopped the pills and gave him a mixture containing carbonate of ammonia and laudanum, to be taken every few hours. There was no further hæmorrhage after the glans was fully exposed, and the parts were dressed with lead and opium lotion. The next day he was much better and the slough had separated. I therefore had the parts well dusted over with iodoform powder, which was repeated at short intervals. The patient made a rapid recovery. There was no induration or any other indication of syphilis, and the parts were perfectly healed in a few weeks.

CASE 2.—John D——, aged eighteen, a tramcar guard, was admitted into the Lock Hospital on Nov. 9th with phimosis and ulcers. He stated that he began to feel sore four days after sexual intercourse, and that he had been suffering for one month previous to his admission. There had been some hæmorrhage latterly, and he had received no proper medical treatment. I saw him on his admission, and, finding a most offensive discharge, at once divided the prepuce. Part of the corona glandis had sloughed away with a portion of the furrow between it and the inner prepuce, leaving so deep a cavity that I feared lest the urethra should become involved. Iodoform, in fine powder, was applied; a mixture containing carbonate of ammonia and laudanum was given thrice daily; and the patient was ordered to keep in bed. He progressed most favourably until 3 A.M. on the morning of the 14th, when severe hæmorrhage occurred from the wound. The resident superintendent (Mr. Serjeant) was called up, and, finding him in a very weak state, sent for me. On my arrival I found that the hæmorrhage, which had been evidently venous, had ceased, but the patient was in a very exhausted state. Brandy had been administered, and I ordered this to be repeated at short intervals. I cleared away all the clots, cleansed the wound, and plugged it up with lint saturated in a strong solution of perchloride of iron. There being no further hæmorrhage, in a few days the iodoform powder was resumed, and the patient completely recovered. There were no manifestations of syphilis, and it was evidently a case of chancroids taking on sloughing action from neglect, and exposure of the patient to cold and wet in consequence of his calling.

CASE 3.—Wm. D——, aged thirty-eight, seaman, was admitted into the hospital on Dec. 7th with a sloughing ulcer of the furrow, corona glandis, and part of the glans. It was superficial, was of short duration, and separated in three days, leaving a healthy surface. The treatment was the same as in the previous cases, except that strong opium lotion was used at first, followed by iodoform ointment. There was no hæmorrhage whatever.

Cases of sloughing ulcer are much less frequent than they were twenty years ago; hence the appearance of these three cases within so short a period seems to me to deserve notice. My connexion with the hospital as surgeon extends to ten years, and the comparative rarity of this form of sore, with its much greater frequency twenty-five years ago, when I attended as a student, is very striking. During a period of eighteen months I can remember three cases where the whole of the penis was lost, in addition to many others where there was considerable mutilation. My colleague, Dr. Bernard, who saw all the above cases, informs me that during his period of office, now nearly four years, he has had about four cases, two of which were complicated with hæmorrhage. We both rely upon opium, administered internally, as a most valuable remedy; and we also employ iodoform, partly as a very useful application in promoting the healing process, partly as a most powerful deodoriser to the horrible effluvium which generally arises from sloughing ulcers of any kind, wherever situated. A very convenient mode of application is by keeping it finely powdered in a box with a lid perforated like a pepper-box (though not quite so finely), and with one or two Tonquin beans, which render it more pleasant, but no less effective.

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A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

SEAMEN'S HOSPITAL, GREENWICH.

NECROSIS AND NON-UNION FOLLOWING COMPOUND FRACTURE OF FEMUR; AMPUTATION OF THIGH; SECONDARY HÆMORRHAGE; LIGATURE OF COMMON FEMORAL ARTERY; REMOVAL OF REMAINDER OF FEMUR; RECOVERY; REMARKS.

(Under the care of Mr. JOHNSON SMITH and Mr. TURNER.)

In this case, where an unsuccessful attempt had been made to save a compound fracture of the femur, there are several points of interest. The chief one is, as Mr. Turner remarks, the secondary hæmorrhage from the stump after amputation of the thigh, an operation which was only resorted to after the removal of much necrosed bone and the failure of attempts to cause union. The hæmorrhage was very profuse, and there was considerable difficulty in arresting it before the common femoral was ligatured. In cases of hæmorrhage from a stump such as this, the course open to the surgeon, provided the wound is too sloughy to permit the application of a ligature to the bleeding point, is to ligature either the external iliac artery or the common femoral. At one time the external iliac was ligatured by preference under such circumstances, but the greater ease with which the common femoral can be reached is an important consideration, and this case is an evidence amongst others of its efficacy. The cases of varicocele are an illustration of a method of successful operation for that disease. Although no injury to the joint followed aspiration of the knee in the case of fracture of the patella, so little good has been produced by it, in the operator's experience, that he is opposed to the practice.

William M——, aged eighteen, a sailor, was admitted on Sept. 12th, 1882, under the care of Mr. Johnson Smith. Four months before admission the patient fell down the hold of his ship and received a compound fracture in the middle of the right thigh-bone. The wound healed at sea. On admission there was about two inches shortening, and the femur was bowed outwards. There was but slight union, and the opposed ends of the upper and lower fragments of the shaft were much thickened by the deposit of new bone. Over the most prominent part of the outer surface of the thigh was a sinus leading down to the bare bone. Several sequestra were removed from this on Oct. 24th by Mr. Makins. During the winter and spring the patient suffered from renewed ostitis of ends of fragments, with much pain, and free discharge from the wound. In consequence of the necrosis, continuous pain and exhausting discharge, amputation of the thigh just above the seat of fracture was performed by Mr. Johnson Smith in June, 1883. The soft parts were sodden and inflamed. A silk ligature was used for the femoral artery. This came away on the sixteenth day. Three days afterwards—i.e., on the nineteenth—very profuse bleeding, evidently from the main vessel, came on. This was temporarily arrested with considerable difficulty by Dr. Penny, by pressure on the stump and common femoral artery, until assistance arrived. Mr. Turner, in Mr. Smith's absence, tied the common femoral artery three-quarters of an inch below Poupart's ligament. A chromicised catgut ligature was used. There was no recurrence of the hæmorrhage, and the patient, as far as ligature of the artery was concerned, did well.

In August, 1885, the man came under the care of Mr. Bates, to whom we are indebted for the further account of the case. The patient was then complaining of [illegible] in the stump. There was a good deal of purulent discharge from the end of the stump, through three sinuses situated near the line of the incision; a probe passed into these sinuses carious bone extending for some distance up the shaft of the femur, which was considerably thickened. He was sallow and losing flesh, his appetite was bad, and he suffered [illegible] loudly for morphia injections to relieve the pain at night and give him sleep. On Aug. 28th he was placed under ether and the bone examined. This was found to be in a dry carious condition for a considerable distance, and was removed at the hip-joint. An attempt was made to reflect the periosteum, but was only partially successful. The wound was dressed antiseptically. He did well afterwards, having much less pain, and was soon able to do without morphia. An abscess formed over the front of the stump, but evacuated without incision. He got up towards the end of September, and left the hospital in October. The wound has since continued closed, and the stump is firm. Now (January, 1886) he is strong and muscular, and able to get about with considerable facility, wearing a stop-action artificial leg, and walking with the aid of a stick.

Remarks by Mr. TURNER.—The interest of the above case consists chiefly in the secondary hæmorrhage following the amputation of the thigh. The bleeding was so excessive that it is probable it was caused by an extension of sloughing and ulceration to the main vessel, above the seat of ligature, and that some considerable part of the artery had given way. Pressure or ligature near the spot was obviously out of the question; the tissues, even at the time of the amputation, were sodden and inflamed, so that the arterial coats on the occurrence of the secondary hæmorrhage must have been softened and diseased for some little distance above. The parts around the common femoral artery were healthy, and the catgut ligature easily applied.

TWO CASES OF VARICOCELE IN WHICH THE VEINS WERE LIGATURED BY KANGAROO-TAIL TENDON; REMARKS.

(Under the care of Mr. TURNER.)

A. B——, aged thirty, a sailor, was admitted in June, 1884, with a considerable varicocele on the left side. He complained of much testicular pain, amounting almost to neuralgia, and had been twice operated on before at other hospitals; on one occasion the veins had been subcutaneously divided between two hare-lip pins, in the manner advocated for varix by Mr. Henry Lee, and on another, a twisted silver wire had been applied round them. He was given ether, and an incision was made over the upper part of the scrotum exposing the cord. The vas deferens having been separated from the other constituents, an aneurysm needle was passed round the dilated veins and threaded with a kangaroo-tail tendon. The latter was then tied tightly round the veins in a double knot, cut off short, and the wound united with silver sutures. He did very well, and except for a little œdema of the scrotum he made a rapid recovery. He was admitted about six months afterwards for another cause, and was then free from all testicular pain, and there was no return of the varicocele.

The second case—also a sailor—requires no lengthy description. The patient had, however, not been operated on before. The veins were tied with kangaroo-tail tendon, as in the first case, and the wound united almost by first intention. The varicocele was cured—at any rate, for the time,—but he has not reported himself since. In both cases antiseptic precautions were employed.

Remarks by Mr. TURNER.—The above method of treating varicocele I first saw practised by Mr. Holmes. It has the advantage of simplicity; the wound can be closed and may unite at once; the operator can see exactly what he is doing; the vas deferens and attendant spermatic artery run no risk; and it is easy not to include the whole mass of veins, and consequently, the testis is in no danger of sloughing.

CASE OF FRACTURED PATELLA TREATED BY ASPIRATION OF THE JOINT.

(Under the care of Mr. TURNER.)

R. S——, aged sixty-six, was admitted on Dec. 11th, 1884, with a transverse fracture of the patella. There was considerable swelling of the joint, and the fragments were separated some two inches or more. Aspiration of the joint was performed, but only about half to three-quarters of an ounce of blood could be abstracted, although the bottle was repeatedly exhausted. There was no appreciable difference in the swelling after the operation; during its performance the tube was several times obstructed by blood-clot, which required removal. Martin's elastic bandage was applied, and no bad results of any kind followed. On the subsidence of the swelling the fragments were approximated by means of Malgaigne's hooks and strapping, and the patient made

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a good recovery. On his discharge on Jan. 31st there was about half an inch separation of the fragments.

Remarks by Mr. TURNER.—The practice of aspirating the joint in cases of fractured patella has been resorted to some five or six times by my colleague, Mr. Johnson Smith, at the Seamen's Hospital. One case died the next day of cardiac disease, a result quite unconnected in any way with the operation. The other cases have been followed by no bad symptoms; except in one where the blood in the joint was fluid, very little has been drawn off, and no very evident good has followed the practice. At St. George's Hospital about a dozen cases have been treated in this way; some have derived benefit from it, but in others only very little blood has been withdrawn. No harm has followed in any case.

NORTH-EASTERN HOSPITAL FOR CHILDREN.

REMOVAL OF A PORTION OF A TRACHEOTOMY TUBE WHICH HAD BEEN LODGED IN THE RIGHT BRONCHUS FOR TWO DAYS; REMARKS.

(Under the care of Mr. RICKMAN J. GODLEE.)

WE are indebted for the following notes to Mr. C. D. Green, registrar.

A. L——, male, aged three years and a half. Tracheotomy was performed on Nov. 19th, 1884, for the relief of dyspnœa from acute catarrhal laryngitis; the child had been unable to breathe for more than a few minutes without the tracheotomy tube since the operation, but was otherwise in perfect health. On Nov. 14th, 1885, attention was drawn to the child not breathing comfortably, and on examination it was found that the shield of the tracheotomy tube it was wearing (a vulcanite one) had become displaced and the intra-tracheal portion could nowhere be found. A bent probe was introduced into the trachea, but no certain evidence of the presence of a foreign body was obtained. Another tracheotomy tube was introduced without difficulty, and the breathing was relieved. Two days later (November 16th) it was found that the breath sounds over the right lung were distinctly less than over the left, there were some general bronchitic signs, and the temperature had risen to 103° F. A careful search had been made for the missing portion of the tube, but it had not been found. It was then inferred that it must be lodged in the bronchus. Chloroform was administered through the tracheotomy tube, and the child being fully anæsthetised, the tube was removed and a pair of curved tracheal forceps (Mr. R. W. Parker's pattern) introduced through the tracheal opening, and the missing portion of tube grasped and removed, after several unsuccessful attempts both with the forceps and with a bent wire. It was believed that the bifurcation of the trachea was once grasped; there was a little bleeding, and a small piece of mucous membrane was brought away. The child had no bad symptoms, and is still under treatment for the restoration of the natural manner of breathing.

Remarks.—The fact of a second tracheotomy tube being worn during the two days preceding the removal of the foreign body, and the absence of urgent dyspnœa, leave little doubt that it must have passed beyond the trachea into the right bronchus, which it must have pretty completely filled; its smooth surface being covered with mucus, and the fact of the forceps readily entering its cavity, rendered it sufficiently difficult to grasp. It was removed without the slightest enlargement of the original tracheotomy wound, which, having been made over a year previously, was an aperture only just sufficient to admit the tube. The delay of two days was due to there being some doubt as to whether the tube had slipped down the trachea or had been otherwise lost.

ROYAL UNITED HOSPITAL, BATH.

TWO FATAL CASES OF PERFORATING ULCER OF THE DUODENUM; REMARKS.

(Under the care of Dr. Fox.)

For the following notes we are indebted to Mr. E. J. Cave.

CASE 1.—M. A——, a widow, aged fifty-six, general servant, was admitted on Jan. 10th, 1885. She states that she had an attack of "vomiting of blood" between three and four years ago, but has had no other illness, and enjoyed good health until two months ago. She then began to suffer from epigastric pain, at first only on taking food, but soon becoming constant, tormenting her night and day; it was, however, still aggravated by taking her meals. Within a week or two she began to vomit. The vomiting did not appear to be influenced by the ingestion of food, not uncommonly occurring at night, and she would vomit large quantities, almost a chamberful, two or three times a week. After an attack of vomiting the pain would cease for a few minutes. For the last month the vomiting has recurred more frequently, latterly two or three times every day, a much smaller quantity being ejected at each attack; and for the last fortnight the vomit has been dark, and, as she thinks, contained blood. From the commencement her appetite has been bad, and she has gradually lost ground, getting perceptibly thinner. Her bowels were mostly constipated until the day of admission, when they were open several times while in bed, the motions being quite loose and black. She has kept her bed for the last three days. The family history is unimportant, except that she had three miscarriages and twelve children at term, all of whom died within a year of their birth. All, she says, died of "dropsy"; none had a rash on the skin, nor did any of them "snuffle." There is no history nor sign of syphilis to be discovered in the patient herself.

On admission the temperature was 98°. She looked thin and anxious; eyes sunken; skin cold to the touch, and covered with a clammy sweat. The pulse could not be felt at either wrist. The tongue was rather dry, with a thin brownish fur. Respiration 40; rather sighing; purely thoracic. Lungs resonant in front; a little dulness at the bases posteriorly. Her collapsed condition precluded a complete examination. The heart's apex was very indistinctly felt in the fourth interspace, just inside the nipple line; sounds feeble and more clearly heard in fourth space than lower. Liver dulness began at the fourth space in the nipple line, and extended to the costal margin. Abdomen distended and tympanitic. Some little tenderness, generally diffused; no signs of fluid effusion: spleen impalpable. The urine was passed in the bed; but a little, withdrawn by the catheter, was acid in reaction and free from albumen. Opium was freely administered, but the collapse persisted, and she died in two hours.

The post-mortem examination disclosed intense peritonitis, with false membrane, puro-lymph, and chyle in the peritoneal cavity. In the first part of the duodenum, just beyond the pylorus, were two ulcers—one as big as a half-crown, with slightly thickened edges, sloping to the base; the other, in the upper wall of the bowel, was as big as a sixpence, clean, and punched out in appearance, with no thickening around. The base was perforated, permitting a free escape to the contents of the bowel. There was also a cleanly punched out ulcer in the lesser curvature of the stomach, nearer the œsophagus than the pylorus, and extending as deeply as the muscular coat. There were no other morbid appearances throughout the alimentary canal. The vessels appeared healthy to the naked eye, but the aorta was considerably atheromatous. The heart was healthy, with an adherent white patch on the pericardium. There was some collapse and œdema of the bases of the lungs. The liver, kidneys, and spleen were healthy. The contents of the intestinal canal were yellowish; there was no blood.

CASE 2.—H. H——, aged forty-five, a housemaid, single, was admitted in December, 1884. She enjoyed good health until a week before her admission, when she began to complain of pain in her abdomen and general malaise. Her bowels being constipated, she took some patent aperient pills, which procured a daily evacuation. On the evening of the second day before admission she attended a meeting of the Salvation Army, where she was taken suddenly ill and had to be carried home. The next morning she began to vomit, and for the previous twenty-four hours the vomiting is said to have been almost incessant, and she is said to have also had retention of urine.

On admission the temperature was 96°. She was in a state of extreme collapse, with rapid, feeble, almost imperceptible pulse. Lips livid; cheeks blue. Extremities very cold; skin cold and clammy. She lay on her back with her knees drawn up. Was very restless; complained of intense abdominal pain. Thoracic organs normal; respiration purely thoracic; no abdominal movement. Abdomen moderately and evenly distended, and everywhere tender, but the tenderness especially marked in the right hypochondriac region. The bladder contained about half a pint of normal urine, which was drawn off. She did not vomit after admission.

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Opium was administered. She remained sensible, and died collapsed the same afternoon.

Necropsy.—General peritonitis. A good deal of thin brownish fluid in peritoneum. Some adherent lymph in the sulci between adjacent coils of intestine, here and there glueing them together. There was a round perforation in the anterior wall of the first horizontal portion of the duodenum, the perforation being the whole base of a small ulcer situated about half an inch beyond the pylorus. The edges were sharply cut and sloping, so that while the inner surface was as large as a fourpenny-piece, the perforated base was smaller, the ulcer being funnel-shaped. The rest of the alimentary canal was healthy; there were no other ulcers, and the vessels appeared quite healthy. There was slight atheromatous change in the aorta. The remaining viscera were normal in appearance. The morbid specimens in this and the preceding case were exhibited at a meeting of the Bath Pathological Society.

Remarks by Mr. CAVE.—Although these ulcers are comparatively rarely met with in the duodenum, yet clinically and pathologically they differ little from the common round ulcers of the stomach; they are only separated by the pylorus. The second case illustrates very forcibly the latent course which gastric and duodenal ulcers not very uncommonly pursue, and which is said to be even more common with duodenal than with gastric ulcers. These acute cases appear strongly to support the theory of causation by interference with the vascular supply first propounded by Virchow. Both these women were *in extremis* on admission to hospital; but keeping in view the recent advances in abdominal surgery, one would very carefully consider the advisability of opening the abdomen in similar cases seen at an earlier period and in less desperate straits. Beyond the fact of the sudden onset of peritonitis, the exact diagnosis of the primary lesion must often remain doubtful; and the question arises, Should the abdomen be explored in such cases? I think the answer must be in the affirmative.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Intra-cranial Tumours.

THE special meeting devoted to the Pathological Anatomy of Intra-cranial Tumours took place on Tuesday last before a most numerous gathering of members of this Society, the President (Dr. J. S. Bristowe, F.R.S.) being in the chair.

Dr. J. S. BRISTOWE showed a Tuberculous Tumour, the size of a marble, occupying the corpora quadrigemina and pressing on the iter a tertio ad quartum ventriculum. The boy was seven years old; had general paralysis and tremors of limbs and also of articulation, and bore clinically some resemblance to the general paralysis of the insane. Tubercular meningitis closed the scene. The case was published in full in *Brain*.

Dr. GOODHART showed a specimen of Gliomatous Enlargement of the Cerebellum, Pons Varolii, and Medulla Oblongata obtained from a boy aged nine years. The chief symptoms were staggering gait and difficulty in swallowing, inability to close the right eye, with complete right hemiplegia, occipital headache, some rigidity of left arm and leg, and a semi-comatose state. It was an illustration of a somewhat rare form of disease of which Dr. Wilks had shown a specimen to the Society in 1856, and on which Dr. Angel Money had read a paper before the Royal Medical and Chirurgical Society. The second specimen was a Psammo-sarcoma of the Brain growing from the junction of the tentorium with the falx cerebri and in the longitudinal fissure; it was of large size, but produced no tangible symptoms; the man died with malignant endocarditis and aneurysm. Two specimens of Tumours on Nerves at the Base of the Brain were shown. The first possessed one on each seventh nerve; it was removed at a post-mortem examination in 1873 by Dr. Goodhart. The case had been under the care of Dr. Wilks, and was that of a woman aged twenty-six. Deafness, with very severe pain in the eyebrow and forehead on the right side, with paralysis of the right eyeball, and the face drawn to the left side, were the chief symptoms. She was hardly able to walk, but there was no actual paralysis and no anæsthesia. The tumours were of a fibro-sarcomatous nature. The second specimen occupied the seventh nerve on one side. The patient had been five years deaf on the right side, and ultimately completely deaf. The voice was lost, and paralysis of the face had been present for three or four years. Some trouble in swallowing, so that the patient had to be fed with a tube, atrophy of the right sterno-mastoid, and aphonia, were the other chief symptoms. During life it was thought not to be a tumour, but a gummatous infiltration of membranes at the base of the brain. The next specimen was a more fibrous tumour, situate at the left Gasserian ganglion. There were anæsthesia of the face and severe pain, with ophthalmoplegia externa and interna. The optic disc was healthy. Large glands in the neck and cardiac murmurs were also noted. The patient died of cellulitis of the neck and arm, to which disease a tendency existed in her, for she had suffered from it two or three times previously. The tumour was found to press on the nerves in the wall of the cavernous sinus. A tumour of the temporo-sphenoidal lobe, taken from a lady aged sixty-six, was also shown. She had been epileptic throughout life, and imbecile for years. There was much pain and tenderness in the right temporal region, and the left side had been losing power one week. The left side of the face was paralysed, and the left arm powerless and rigid, but not the leg. The patient was not deaf. The diagnosis lay between tumour and apoplexy or softening. At the necropsy a tumour was found occupying the middle of the first temporo-sphenoidal convolution, and extending inwards beneath the lower part of the two central convolutions. This case was interesting from a point of view of localisation. The patient was not deaf, although the "auditory" centre was involved. In Dr. Goodhart's experience our knowledge of cerebral tumours was against the idea that many tumours could be submitted to surgical interference. Tumours tend to occupy the cortex, but did not flourish therein; they luxuriate in the white matter. They cause symptoms in proportion to the amount of cortex involved. Three conditions—(1) accessibility, (2) want of infiltration, and (3) reasonable size of tumours—were the requisites for surgical interference, and these conditions were, he submitted, but seldom met with together.—Dr. MONRY said that one of the objects of his paper was to show that "gelatiniform enlargement of the pons" was of a gliomatous nature.

Dr. FREDERICK TAYLOR showed, first, a Tumour of the Cerebellum from a boy aged nine. The chief symptoms were: pain, frontal and vertical; the right eye squinted outwards; inclination to the right in walking and falling to the right; he also walked unsteadily. On admission, there was paralysis of both external recti with other symptoms of intra-cranial tumour; increasing blindness and emaciation were followed by death. The glioma had a pinkish-violet appearance, and involved the floor of the fourth and the left half of the posterior part of the pons Varolii; it grew chiefly from the left side of the cerebellum; there was some internal hydrocephalus. The tumour was not distinctly encapsuled, and was of a gliomatous or a sarcomatous nature. The second specimen had been described in the Guy's Hospital Reports for 1879; it was a Glioma of the pons Varolii obtained from a man, aged forty years, in whom there was partial right hemiplegia. The third specimen was also a Glioma, occupying the frontal region and involving the right corpus striatum and adjacent parts, chiefly the right lenticular nucleus of the corpus, and not the caudate. The man suffered from rigidity of the left arm, left leg, and right arm, and lay in a semi-unconscious state, with double optic neuritis, but chiefly of the right side; the olfactory lobes were in a state of grey softening. The fourth specimen was a Fibro-sarcomatous Tumour growing out of one side of the flocculus of the cerebellum; it measured half an inch by one-third of an inch broad and a quarter of an inch thick, and gave rise to no demonstrable symptoms.

Mr. PEEKE RICHARDS showed a Tumour of Translucent Cystic Aspect, occupying the third ventricle, the size of a Tangerine orange. The specimen was referred to the Committee for Morbid Growths. The woman had been in Hanwell Asylum for six weeks, and was somewhat demented, but a state of extreme drowsiness, lasting twenty-three out of twenty-four hours, was the chief symptom; there was also left hemiplegia.

Mr. H. T. BUTLIN showed a Cerebellar Glioma of fourteen years' preservation. It was situate rather to the right of the middle line of the cerebellum, and had a spherical shape

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with soft consistence and semi-translucent aspect. The tumour was single, and therefore primary. There was a history of a severe fall two months before admission into the Hospital for Sick Children; the blow struck the right side of the forehead. The corporeal movements were awkwardly performed, especially those of the left side, and there was continual shaking.—Dr. HALE WHITE, speaking of the influence of traumatism in the production of cerebral tumours, said he had examined 100 cases of tumours in adults, and found the proportion of ten males to six females to hold good in them as in children; he concluded that injury played but little part in the production of tumours.

Dr. ORD exhibited specimens and drawings of Tumours of the Cerebral Cortex, with a view of showing the possibility of localising lesions on the cortex. The first tumour occupied the left hemisphere at the upper part of the fissure of Rolando, involving the ascending frontal and the posterior parts of the two superior frontal gyri. The dura mater was thickened over the spherical gumma. The second specimen was from a case of tuberculosis, and occupied much the same cerebral area, but more of the posterior parts of the two superior frontal gyri, and it also extended deeply into the white substance. The symptoms were convulsions on one side, but no loss of consciousness in the first case, though unconsciousness was present in the second. The convulsions were followed by hemiplegia, at first partial, ultimately complete.

Dr. SAUNDBY exhibited a microscopic section and diagram of a case of Glioma of the Brain. Ataxic gait, with mental disturbance, but no distinct paralysis, were the chief symptoms, and death took place while in a comatose state. The growth involved the left second and third frontal convolutions, also the ascending frontal and the island of Reil, pressing on the corpus striatum of the left side. The second specimen was one of Multiple Tubercular Tumours, taken from a boy aged eleven, who had twitching of the left side of the face, with spasm of the left arm, and deviation of the eyes to the left. The lower half of the left ascending frontal convolution was the only lesion in the motor region, which was therefore on the same side as the motor symptoms. Other tumours existed in the occipital, temporo-sphenoidal, and hippocampal convolutions. These cases supported what Dr. Goodhart said in regard to the difficulty of localising tumours with a view to surgical interference.

Dr. COUPLAND showed (for Dr. MacDonald) a Cystic Tumour from the brain of a man aged fifty-two, who was admitted into an asylum for acute mania, on which dementia ensued six months before death. Right hemiplegia of slow onset and marked imbecility were the chief symptoms. The cyst covered the entire left hemisphere and caused considerable atrophy; there was no adhesion to the dura or pia mater, but a small vessel entered it from the pia mater. Dr. Macdonald regarded it as a congenital cyst. Dr. Coupland believed that it was a hæmorrhagic cyst, although bounded by firm investing membrane; microscopically, crystals and granules of hæmatoidin were discovered; the cyst was possibly of intra-uterine origin.—Dr. BRISTOWE said that in an early volume of the Transactions a large cyst of this kind was placed on record; there was no affection of the dura mater.

Dr. CHARLEWOOD TURNER brought forward a specimen of Tumour in the Left Hemisphere, taken from a man aged thirty-one, whose symptoms lasted three months, and began with a spasmodic seizure in the right arm and leg, and morbid creeping sensations down the same limbs, lasting five minutes. When first seen there was paresis of the right leg, but no anæsthesia. The tumour involved the centre of the white substance and those fibres which went to the anterior part of the corpus callosum, beneath the ascending frontal and parietal convolutions; it had a rounded triangular shape, and did not actually involve the grey matter. The growth was a soft glioma. The second specimen was a hard glioma, which began in the cortex and extended into the white matter; it came from a man aged fifty-five, whose symptoms lasted six months, and began with headache. He became unconscious at times, and left hemiplegia followed; also some hemianæsthesia. The posterior part of the parietal lobule, where it joins the temporo-sphenoidal lobe, was diseased in a line with the Sylvian fissure, and the growth extended into the posterior part of the corpus striatum and optic thalamus. In reply to Dr. Bristowe, he said he considered that a tumour in the lung of the first case was independent of that in the brain.

Dr. SAMUEL WEST showed a specimen of Tumour in the Temporo-sphenoidal Lobe taken from a man aged sixty-two, whose illness lasted six months and began with an accident, soon after which it was noticed that his speech was peculiar. He had also aphasia of the amnesic kind—i.e., loss of memory of nouns. He dragged the right leg, and later the right arm became weak, and other symptoms of coarse brain disease finally appeared. The tumour was situate in the left temporo-sphenoidal lobe, and did not reach the cortex, but displaced the basal ganglia and internal capsule towards the right. The presence of cavities in this soft glioma, which was primary and interesting from its size, extent, and position, was remarked upon. The absence of characteristic symptoms of tumour till three weeks before death was noteworthy, as was also the fact that he had occasional tremors, most marked on the left side. Dr. West considered that there might be some influence in the rate of growth in the production of symptoms.

Dr. HADDEN exhibited: (1) Drawings of the naked-eye and microscopical appearances of psammomata of the choroid plexus. (2) Specimens (with drawing) of a myxo-chondroma of the falx cerebri pressing on and embedded in the right paracentral lobule; there were no symptoms during life. (3) Round-celled sarcoma involving the white matter and deeper layers of the cortex of the left ascending frontal and adjacent parts of the second and third transverse frontal convolutions; the patient died soon after admission, but there was a history of numerous epileptic attacks. (4) Glioma involving the right caudate nucleus, the posterior two-thirds of the lenticular nucleus, the claustrum, external capsule, the posterior half of the motor part of the internal capsule, and all the sensory portion, as well as the upper two-thirds of the optic thalamus; the only localising symptom was slight anæsthesia of the left leg. (5) Simple cyst in the left lobe of the cerebellum, one inch in diameter, containing clear limpid fluid. There were no traces of old hæmorrhage or of hydatid membrane. The chief symptoms were paroxysmal occipital headache, vomiting, optic neuritis, and staggering gait.

The following gentlemen showed card specimens of tumours of the brain:—Dr. Ladiard, Dr. Savage, Dr. Beevor, Dr. Ogilvie, Dr. Hebb, Dr. Ashby, Dr. Chaffey, Mr. D'Arcy Power, and Mr. Ernest Clarke (living specimen).

MEDICAL SOCIETY OF LONDON.

Moot Points in Syphilis.

LAST Monday, at this Society, Mr. JONATHAN HUTCHINSON, F.R.S., delivered his third Lettsomian Lecture; Dr. W. M. Ord, President, being in the chair.

The lecturer said that the number of important questions still undetermined in respect to the transmission of syphilis from parent to child is very great. Indeed, it is remarkable how comparatively young almost all our knowledge is on this subject. It is not long since contagion during parturition was held to be the only method by which the mother could convey syphilis to her child. Whether the father could transmit it was a vexed question, and this idea was ridiculed by a leading physiologist not many years ago. Almost everyone now accepts the doctrine that a tainted father may beget tainted offspring; but some of our best authorities hold that if a pregnant woman contracts syphilis it is quite impossible that her disease can hurt the child in her womb. Great and peculiar difficulties beset the investigation of the transmissibility of inherited syphilis. The evidence on questions relating to the inheritance of syphilis is but seldom absolutely conclusive; it yields at best only a strong probability. Mr. Hutchinson said that the general tenour of facts conveyed much more of conviction to his mind than did the seeming lesson of an isolated case, however clearly stated. The evidence which leads to the belief that the father can transmit syphilis independently of the mother is peculiarly of the kind referred to. It was next to impossible to prove that the mother has never suffered. Inheritance from the father is not only possible but common. It is possible that the mother may show but few symptoms of the disease, but that she always first receives the disease without the occurrence of primary and secondary symptoms is possible now and then, but it cannot happen often. It is common, however, for the mother to show no symptoms. Many years ago Mr. Hutchinson published a series of cases apparently confirming the observations of Ramsbotham, Harvey,

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and others, that the fœtus might infect the mother, but there is the objection that the mother might possibly have had syphilis herself. We want proof of two things: (1) that a woman may carry a syphilitic child without herself suffering in any obvious manner, and (2) that although she shows no symptoms, yet she does in reality receive a taint. Of the first there was abundant proof; of the second the evidence was less convincing. Does Colles' law (that a sucking infant cannot infect the nipple of its own mother) stand the test of time? Mr. Hutchinson considered that it did. In not one case of chancre of the nipple in Mr. Hutchinson's experience was the infant which conveyed infection the offspring of the woman who acquired the chancre. To those who, with Kassowitz and others, doubt that the fœtus infects the mother, Mr. Hutchinson would suggest that there is nothing improbable in such an occurrence. The next question touched upon was the possibility of a mother who contracts syphilis during her pregnancy infecting the fœtus. Mr. Hutchinson has met with cases which appeared to prove the affirmative. He considers that it matters not whether the father or the mother be the cause of the inherited syphilis; its transmission is just as certain or uncertain, and the resulting disease does not differ in severity. Inheritance from both parents instead of one probably makes no greater difference to the child than does vaccination on both arms instead of one. Mr. Hutchinson was not forgetful that multiplicity on the part of the primary lesion does to some slight extent heighten the disease, but still contagion acquired or inherited from one source is sufficient for the full result. With regard to transmission to many children in succession, he remarked it was but seldom that proof could be obtained of a tendency to transmit syphilis extending over many years. But the lecturer narrated exceptional cases in which children of the same parents, though born at long intervals, yet suffered definitely from the taint, and in doing so he directed attention to some questions which are still matters of debate. (1) Is there any reason to believe that when syphilis shows itself in several children of the same family its degree of severity is less in the younger than the elder ones? (2) Is it usual for some children to escape entirely when elder and younger ones suffer severely? (3) When children in the same family show very widely different degrees of severity in symptoms during infancy, can anything be predicated from that fact as to their proneness to suffer later on in life? Mr. Hutchinson believes that there is no reason to think that the transmission of syphilis is ever a thing of less or more, but rather that if a child inherits any taint it inherits the whole malady; the varying degrees of severity are to be explained in the same way as we explain the differences observed when scarlet fever is passing through a community. Many cases were narrated in support of his views, and some remarkable ones, showing that a younger child may suffer most. The lecturer next passed on to the consideration of bone affections in relation to syphilis, adducing the hypothesis of M. Parrot that rickets was due to syphilis, and quoting the investigations of Dr. Barlow and Dr. Lees on syphilitic osteal affections during the early months of life. He saw no reason why syphilis and rickets should not mix. The question as to whether deep ulcerations of the palate and pharynx, when met with in young persons, are usually due to syphilis or to scrofula, was next discussed, and evidence was brought forward pointing strongly to the conclusion, in Mr. Hutchinson's opinion, that syphilis was chiefly responsible for such ulcerations. A few words were said as to the possible dependence of what has been called ringworm of the tongue upon inherited taint. Whilst admitting that some cases were due to congenital syphilis, he could not allow that all owned this etiology. The next subject entered upon is comprised in the question, "Are there any chronic skin diseases which are due to inheritance of syphilis?" The chief feature of this subject was Mr. Hutchinson's declaration that such diseases as psoriasis and lichen occurring after the infantile period of life had passed away were not syphilitic; inherited syphilis may cause such cutaneous lesions during the early years of life, but not later on. Coming next to diseases of the nervous system, Mr. Hutchinson still maintained that they were rare from congenital syphilis. Dr. Barlow had published cases showing that meningitis, neuritis, gummata, and vascular disease did occur in congenital syphilis, and might be responsible for impairment of mental powers and coarse brain disease, but still he (Mr. Hutchinson) considered that such cases were not frequent. Epilepsy and chorea might be due to syphilis, but they differed, on Dr. Hughlings Jackson's authority, in no respect from the same affections differently acquired. No case of locomotor ataxy had been ascribed to congenital syphilis; paralysis of single ocular muscles was practically unknown. Mr. Hutchinson had seen one case of ophthalmoplegia externa from inherited syphilis. True tertiaries are rare in congenital syphilis. A case of defective brain development, with atrophy of optic discs in association with inherited syphilis, was narrated. It was not unfrequent for congenital syphilis to damage in some slight degree the whole bodily development. Sometimes there appeared to be a special defect in the sexual development. Idiocy and juvenile dementia are occasionally due to congenital syphilis; but the lecturer did not concur in Dr. Judson Bury's belief that atrophic and sclerotic conditions of the brain, due to inherited syphilis, were of rather frequent occurrence; the experience of Dr. Langdon Down also supported him. As to the nature of pemphigus in infants, Mr. Hutchinson asked, Why should the inherited taint so deviate from the rule as to appear during the first week and end fatally before the second week, as happened in pemphigus? Why should it show its effects so soon after birth? and why should a local and not very severe disease be so prone to end in death? Another interesting question was why syphilis so often caused abortion, seeing that syphilitic infants are generally healthy at birth, and remain so for three or four weeks. Why, if it can kill the fœtus so commonly, does it at the same time leave so many in perfect health until the influence of open-air life has been brought to bear through a definite period? Nor is it easier to explain why one sex should suffer more frequently from the results of inherited taint than the other. Mr. Hutchinson suggested that cases in which twins, one or other, or both, suffer from inherited syphilis should be followed up through as long a period as possible; that cases in which women acquire syphilis during pregnancy, with especial attention to the question of the freedom of both parents from any former taint, also required investigation. In these cases it is desired to ascertain the effect upon the previously healthy fœtus of syphilis acquired of the mother at different periods of pregnancy. All instances of exception or apparent exception to Colles' law, all instances of children born alive with indications of syphilis upon them, all cases of pemphigus infantum or of other syphilitic eruptions making their appearance during the first week of life, ought to be diligently recorded, and here there was a wide field for investigation by "family doctors."

At the close of the lecture a vote of thanks to Mr. Jonathan Hutchinson was proposed by Mr. WILLIAM ADAMS, seconded by Dr. STEPHEN MACKENZIE, and carried with acclamation.

OPHTHALMOLOGICAL SOCIETY.

Shrinking of Conjunctiva.—(? Pemphigus) Spectroscopes.—Amblyopia from Bisulphide of Carbon.—Synchysis Scintillans.—Atrophy of Iris.—Meningitis after Excision of Eyeball.—New Instrument for Refraction Tests.

AN ordinary meeting of this Society was held on the 28th ult., Mr. Henry Power, Vice-President, in the chair.

Dr. W. A. BRAILEY showed a case of Shrinking of the Conjunctiva, with a view to obtaining the opinion of members as to the nature of the disease. Already Mr. Lang thought it was a case of pemphigus; but Dr. Brailey said it was sufficiently reconcilable with the previous existence of granular lids. The right eye showed a pannus of the cornea above and opacity of the cornea below; the conjunctiva was much contracted. The left eye was cicatricial on the surface of the upper eyelid, and there was also opacity of the cornea.—Mr. LANG said there was no evidence of pemphigus on the mucous membranes or skin in the case he now showed, and no evidence of granular lids; still he regarded the cases as pemphigus of the conjunctiva. In reply to Dr. C. E. Fitzgerald, Mr. Lang said that there was little that could be done for his patient in the way of treatment.—Mr. B. CARTER considered that there was no appearance of pemphigus; the case was one of chronic conjunctivitis. The patient had been under his care a few years ago, at which time he had operated, having dissected off the conjunctiva from the lower half of the cornea and transplanted a piece of healthy conjunctiva from a rabbit; th

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new conjunctiva, however, underwent gradual degeneration and shrinkage. He had never been able to see any likeness of the disease to pemphigus.

Dr. REID (Glasgow) exhibited a Polarisation Spectroscope, designed to detect colour defects in the spectrum and their exact position; a similar instrument could be arranged to determine the position of the neutral point or points in dichroic vision. He also showed a perimeter for use in achromatopsia; and an ophthalmoscope adapted for use with the electric light; and provided with a grating by which the condition of the superficial layers of the retina as to transparency could be ascertained.

Mr. JULER exhibited his Ophthalmoscope for Electric Light; it had a concave mirror of short focal length and a small Swan light.—Mr. B. CARTER said that his own ocular fundus had been examined by Mr. Juler, and the light was more pleasant than that from the gas or ordinary lamp.

Mr. MARCUS GUNN brought forward a man suffering from Toxic Amblyopia due to the action of Bisulphide of Carbon, which he used in preparing oil from cocoa-nut fibre. He had worked at the same occupation for fourteen years, but about sixteen months ago he changed his situation, and four months later the symptoms of illness began; the ventilation of the workshop was defective, and no doubt was a cause of the development of symptoms. There was complete red-green blindness, which might have been congenital, but probably was not. Jaeger 19 was the smallest he could read. There had been no improvement even in four months. He also showed the result of an operation on an eye damaged by severe Sympathetic Disease.

Mr. RICHARDSON CROSS showed a case of Synchysis Scintillans, in which the vitreous humour was not fluid. The pathology of these cases was, he believed, widely different. In this case neither the ciliary body nor the choroid was affected. The process was closely allied to atheroma of vessels.

Mr. G. L. JOHNSON showed drawings of a case of almost complete Atrophy of the Iris. The patient was a man aged forty-nine, who had perfect vision till eighteen years ago, when he met with an accident in which the right eye was struck by a wheel, and had to be excised. Nothing fresh was observed till three years ago, when it was noticed that the left eye was becoming impaired, and its pupil getting slowly larger and larger. After correcting errors of refraction the patient could read Jaeger 4. There was a very general atrophy of the choroid, and the iris had participated, so that a mere band remained above and below; the optic disc and macula were unaffected, and also the fundus in their immediate neighbourhood.

Mr. E. NETTLESHIP read a paper on Meningitis after Excision of the Eyeball. The case on which the paper was based occurred at the Moorfields Hospital in July, 1885, the patient being a young man who was operated upon unsuccessfully for dislocation of the lens into the anterior chamber. The eye was excised, in a state of early, but violent, suppurative inflammation, seventy-two hours after the attempted removal of the lens. The man became restless and excitable, with high temperature within forty-eight hours, and died seventy-five hours after the excision. He was attended by Dr. Stephen Mackenzie. Purulent meningitis was found at the base and between the cerebrum and cerebellum; there were no tubercles. It was remarkable that well-marked tough thickening of the pia mater and firm adhesion of the opposite edges of the longitudinal and Sylvian fissures were found, undoubtedly indicating a previous attack of general meningitis, but the early history of the patient was almost negative. All the other cases of meningitis after excision of the eye known to the writer, twenty-nine in number, were arranged in a tabular form at the end of the paper, making, with the author's own case, thirty. No cases were included in which it was known that the operation was complicated by injury or disease of the walls of the orbit. Of the thirty cases, twenty-six were fatal, and eighteen of these were examined after death and meningitis found in all; the remaining four cases recovered, usually after a long and severe illness. In a considerable majority the meningitic symptoms set in within forty-eight hours of the enucleation; but the duration of the illness, when fatal, varied more than the period of onset. Except that the meningitis usually affected the base, and was sometimes more marked towards the front and on the side of the excised eye, and that twice there was thrombosis of the cavernous sinus, there was very little macroscopical evidence of transmission from the orbit; but microscopical examination in four cases showed inflammation in or around the optic nerve, and in one inflammation and micro-organisms in the sixth nerve. It was suggested that, in spite of the rarity of visible thrombosis, the veins may in some cases be the carriers, and that (owing to the numerous anastomoses) the blood-current in the cerebral veins may sometimes be reversed, allowing septic material to pass from the orbit upwards to the brain, instead of into the jugular vein. In some cases only the convexity was affected, and in others the disease was more marked on the side opposite to the excision. In a considerable majority the excised eye had been wounded; but the author dissents from von Graefe's statement (1863) that the risk of meningitis is much greater if the eye were suppurating when excised, since it appears that in exactly half of the cases no visible suppuration was going on, or had occurred, in the lost eye. The disease is probably due to infection of the orbital wound, either by the decomposition of discharge pent up by tight bandaging, or (as was probable in two cases) by erysipelas. Complications were present in a few cases (menstruation twice, old cerebral disease twice). It is believed that, with care, the cases may be rendered much more rare than they had even hitherto been, especially by providing free drainage from the orbit when there is much inflammatory swelling. The author at present prefers excision, with suitable precautions, in all cases to evisceration, which has not yet proved its inability to cause sympathetic disease. Particulars were then given of cases of meningitis following other operations upon the eyeball; only four such were known to the writer, and in only one was a post-mortem examination made. In certain cases of meningitis after excision sympathetic inflammation had set in some time before the meningitis, a fact which seems to militate against the theory that sympathetic disease passes from the exciting to the sympathising eye by the meningeal coverings of the optic nerve.—Mr. HENRY POWER referred to a case in which he had excised the eye and some of the tissue of the orbit; chloride of zinc was used as an antiseptic to syringe out the orbit; meningitis developed, and ended fatally. This was the only case in his own experience.—Mr. BRUDENELL CARTER had never met with this accident in his practice. He always remembered the dictum of von Graefe not to remove an eye that was in a state of suppuration. Referring to the recommendation of M. Panas to employ a solution of biniodide of mercury as an antiseptic solution, he recounted how such a dilute solution could not be obtained. In one case of cancer of the eyeball, in a child, he had excised the diseased parts, and used the actual cautery to stop the bleeding; it was curious to observe how the thin roof of the orbit had offered a perfect barrier to the passage of inflammation.—Mr. CHARLES HIGGENS criticised Mr. Nettleship's paper, and said his belief was in favour of the suppuration having something to do with the meningitis, for it occurred in half the collected cases. He had never employed tight dressings for more than four hours, considering that they might do harm by favouring the absorption of septic material.—Mr. MARCUS GUNN believed that it was good practice to remove suppurating globes in a large number of cases. In his practice no pressure bandage was kept on for more than four hours.—Mr. MCHARDY referred to two other cases of fatal meningitis. One occurred in a man aged forty-six, with commencing sympathetic ophthalmitis; the offending eye was removed and was followed by suppurative meningitis, with rapid death. The other case was that of a young man aged twenty-four, who was insane, and had enucleated his own globe by means of his finger; the optic nerve was torn off close to the commissure. Death ensued in four days from acute suppurative meningitis. In some cases of extraction of cataract he operated with the patient in the prone position, which aided the lens in falling forward into the anterior chamber.—Mr. W. H. JESSOP asked whether Mr. Mules had met with any cases of sloughing of the sclerotic in his cases of evisceration.—Mr. MULES replied that since using bichloride of mercury he had not encountered any evil consequences. — Mr. J. TWEEDY had never seen any mishap after excision. In one case of an old man nearly eighty years of age, who had received a blow on the orbit, the globe was excised, and the man died the next day either from senile failure or from some accident to the brain at the same time as the injury to the eye. The man before operation was observed to be in a dazed mental condition.—Mr. PRIESTLEY SMITH had had two cases of the kind. The second case taught him a lesson as to the danger of

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tightly bandaging the orbit. He could not agree that it was not well to excise a suppurating eye. The use of powdered iodoform to the orbit after operation was exceedingly valuable, and at all events harmless. If any fever arose, removal of the dressing and syringing the orbit with frequent injections of Condy's fluid should be practised, and he believed that by this timely intervention he had saved the patient's life in the second case alluded to above.

Mr. J. B. LAWFORD read for Mr. Waren Tay an account of the case of a boy aged nine who was struck on the right eye, producing a Wound of the Sclerotic on the inner side below the horizotal line. Nothing happened for ten days; then the iris became "muddy-looking," and there was complaint of pain in the eye, restlessness, and vomiting. The day after changes were noted in the vitreous humour; a day later still the eyeball was removed; in it there was evidence of incipient suppuration and commencing shrinking and puckering of the sclerotic wound. The temperature was 102° at the end of twenty-four hours. Delirium and unconsciousness set in with further fever, the temperature rising to 103·8°. He died seventeen days after the injury, and four days after excision of the eyeball. At the necropsy there were signs of extensive meningitis both at the base and over the vertex of the brain, but no evidence of tubercle or old mischief, or of the right side being more affected than the left, or of the inflammation having spread from the orbit, the tissues in which showed no special changes. The cavernous sinuses were healthy, and also the joints of the body and the other organs, with the exception of hæmorrhage into the upper lobe of the right lung and hypostatic congestion. There was a little blood in the sheath of the right optic nerve, but no microscopical evidence of optic neuritis.

Mr. P. H. MULES said that he had not seen a single case of evisceration of the globe which had not progressed satisfactorily. Far from leaving suppurating globes alone, he had always regarded suppuration as an indication for excision, and had never seen any ill symptom result. It was his practice to wash the surface of the eye with a solution of chloride of zinc, ten grains to an ounce, and also to inject the wound after the operation with the same solution, and this was daily continued. Excision of a suppurating globe always led to immediate relief of pain.—Mr. G. L. JOHNSON asked Mr. Tweedy whether a suppurating globe ever gave rise to sympathetic ophthalmia.—Mr. TWEEDY said he could not answer definitely the question.—Mr. HENRY POWER said that years ago a free excision of the globe was held to be the correct treatment of suppurating panophthalmitis.—Mr. NETTLESHIP briefly replied, and said that, as rabbits with suppurating orbits *frequently* died with suppurative meningitis, they could not be said to be in the same case as human beings. He now never put any dressing between the eyelids, though this used to be the practice of at least one ophthalmic hospital.

[Mr. Nettleship writes to us that he has ascertained since the meeting that the solution of biniodide of mercury with which he syringed out the orbit was made with iodide of potassium, in which the biniodide is freely soluble.]

Dr. C. E. FITZGERALD showed a new instrument for facilitating Refraction Tests.

Mr. LANG showed, for Dr. J. W. Barrett, a new and large-sized Microtome.

Mr. JESSOP showed a new Pupillometer.

OBSTETRICAL SOCIETY OF LONDON.

Dr. Heywood Smith. — The Oblique Pelvis of Naegele. — Gastrotomy for Extra-uterine Gestation.

A meeting of this Society was held on Jan. 13th, Dr. J. E. Potter, F.R.C.P., President, in the chair.

The PRESIDENT stated, with regard to Dr. Heywood Smith's conduct in the Armstrong case, that the Council, after careful and anxious consideration, had come to the conclusion that they were not justified in recommending the Fellows to put in force the law which provides for the removal of a Fellow. He then read the following resolution of Council:—"Having heard Dr. Heywood Smith's explanation of his conduct in the Armstrong case, it is resolved that the Council emphatically disapproves of his action in this case. That this resolution be read from the chair at the next meeting of the Society."

The following specimens were shown:—Ruptured Uterus: Mr. Drage. Section of Cancer of the Body of the Uterus, removed by enucleation: Dr. Galabin.

Dr. HERMAN read a paper on the Production of the Shape of the Oblique Pelvis of Naegele. The author said he did not propose to discuss the nature of the disease resulting in the pelvis, but only the reason of the change of shape. He showed by measurements that the disease (whatever its nature) produced dwarfing of the sacrum and destruction of part of the ilium on the affected side. He did not think that the explanation of the pelvis put forward by Dr. Matthews Duncan—viz., that it was the result of ankylosis of the sacro-iliac joint—was an adequate one. There were three main forces which produced the shape of the pelvis: (1) The body weight; (2) the action of muscles and ligaments; and (3) the innate tendency of the bones in their growth to assume a particular shape. The action of muscles and ligaments he believed to be far less effective in modifying the shape of the pelvis than the body weight, and, in the case of the Naegele pelvis, did not materially differ on the two sides. The most powerful force he considered to be the tendency of the bones to grow into their proper shape in spite of mechanical influences. In the Naegele pelvis the bones retained this power; and that was an essential difference between the Naegele pelvis and pelves, such as the rickety and osteomalacic, in which the bones were rendered by disease abnormally flexible. The Naegele pelvis was one of the simplest of all pelvic deformities, because in it we had little to deal with except altered distribution of the body weight. This was carried by the iliac beams on to the femora at angles differing on the two sides. The author believed that, as had been shown by Dr. Champneys (in opposition to what was generally taught), the effect of the pressure of the femora was to carry the acetabula upwards and outwards. He adduced in support of this view the evidence of experiments, which showed that when the femora were pushed upwards in a parallel direction the pubic bones were divaricated; and that of the pelves wasted from disuse of one side, in which the acetabulum on the side on which the unopposed pressure of one femur was exerted was carried upwards and outwards. The shape of the Naegele pelvis he believed due to the differences in the effect of this pressure on the two sides. The outward pressure was exerted to greater advantage on the sound side; therefore the acetabulum was on this side carried outward, and the symphysis pubis dragged over to that side. The iliac portion of the pelvic brim was less compressed on the sound side of the Naegele pelvis than in the healthy pelvis, owing to the pressure of the femora being less directly upwards. The author adduced measurements in support of these assertions. According to his view, the lessened breadth of the sacrum and the iliac bone on the ankylosed side was the essential change, not the ankylosis. In support of this view he cited cases in which oblique deformity resulted from atrophy of the sacrum without ankylosis, and also cases in which with ankylosis and oblique deformity the degree of obliquity was proportionate to the breadth of the sacrum. Lastly, he showed that the shape of the transversely contracted pelvis of Robert was explicable on his view.—Dr. GALABIN said that the action of the body weight on the posterior sacro-iliac ligaments, exercising force on the iliac beam and tending to evert its lower extremity, would be abolished if the joint were ankylosed. The body weight and the pressure of the femora must act vertically, but besides this there was an inward pressure of the femora, and a corresponding outward pressure of the pelvis upon the femora, due to muscles. He agreed with the paper of Dr. Champneys on this subject quoted by the author, and had taught the same views himself. The outward thrust of the lower end of the iliac beam could not be subjected to the parallelogram of forces, as the author had done; the important point was the relative length of the arms into which the sacral beam was divided by the incidence of the body weight. He thought that the study of certain pelves showed that on the whole inward pressure at the acetabula predominated. He agreed, however, with the author in one thing—viz., that the obliquity of the Naegele pelvis could be accounted for by other causes than the ankylosis, and that the deficiency of the sacral wing was more important. If for any reason the acetabulum and tuber ischii were displaced towards the middle line, the forces causing obliquity acted with constantly increasing force. There was one peculiarity of the shape of the Naegele pelvis, which supported strongly Dr. Duncan's

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theory of the leverage exercised through the posterior sacro-iliac ligaments: this was the absence of curvature at the posterior end of the innominate line on the affected side. In the scoliotic pelvis and in the oblique pelvis from disease of one leg the posterior part of this line is more curved than usual, in the Naegele pelvis less curved, and this can only be accounted for by the ankylosis preventing the action of the iliac beam on the affected side.—Dr. MATTHEWS DUNCAN alluded to the increasing difficulty of making progress as the subject advanced. He was himself indebted to the work of Dr. Champneys, particularly as correcting his former view of the direction of the upward push of the head of the femur in standing. Dr. Champneys showed that the pressure, as unaffected by the action of the adductors, was not upward and inward. The ultimate result, as Dr. Galabin pointed out, of the pressure as modified by the adductors, was upward and inward. He regarded the Naegele pelvis rather as a malformation than as the result of disease; it was congenital, and might be due to the deficiency of the ossific centres. The discussion at present should be confined to the normal pelvis and its modifications in the pelves of Naegele and Robert. The introduction of others plunged one into an insoluble mass of complexities, while these pelves were well marked and uniform, and as to their shape, congenital character, and absence of bone disease, there was unanimity. He was still inclined to believe that the absence of one or both sacro-iliac joints was the great factor in these pelves. In the other morbid pelves there were several factors of cardinal importance whose influence it was difficult to ascertain and weigh.—Dr. CHAMPNEYS said that Dr. Herman's interesting paper had not succeeded to his mind in finally settling the question as to the essential cause of deformity in the Naegele pelvis. The whole subject of pelvic deformities was most difficult, and the great facts finally settled were few. As regarded the assertion that ankylosis of the sacro-iliac joint could not prevent bending of the iliac beam, he could conceive that, besides the objection brought forward by Dr. Galabin, another might be urged—namely, that a wooden beam laid across a wooden block might not be so easily bent if glued to the block as if not glued. Again, with regard to the statement that in the Naegele pelvis the bones retain their power of growing into their proper shape, we must remember the abolition of action caused by ankylosis and its effect on the nutrition of the component bones. In the pelvis of a child in which disease of one sacro-iliac joint had produced oblique deformity, which he had brought before the Society in a paper, the whole side of the sacrum as far as the coccyx was dwarfed on the side of the ankylosis. Whatever disorders the equal balance of the "couple of forces" produced by the downward pressure of the body weight at the sacro-iliac joint, and the upward pressure of the heads of the femora (which normally falls outside the line of action of the body weight) on each side, tends to a progressively increasing disorder of the balance of the two sides, as Dr. Galabin had just remarked, and as he had himself set forth in the paper alluded to. Moreover, as he had there explained, the overweighted side is naturally the side of the greater muscular action, including increased pressure of the femora and increased muscular and therefore osseous nutrition. To Dr. Galabin and also to Dr. Herman he would say that in his paper he endeavoured to prove (1) that the action of gravity must tend to evert the distal end of the iliac beam (this being directly contrary to the accepted view); (2) that the "inward pressure of the femora," which undoubtedly exists in the malacosteon and other pelves, could not be due to this action, but could only be accounted for by the action of muscles. As to the question whether outward or inward pressure predominated, he was not at present prepared either to agree or disagree with Dr. Galabin. No doubt in a softened pelvis inward pressure eventually predominated, but he thought more than one explanation was possible.—Dr. WALTER GRIFFITH said that until the question as to the cause of the sacro-iliac ankylosis was settled, the effects of it were but to be guessed at. He referred to a case of oblique deformity, described by Mr. Sinclair in the *Dublin Medical Journal* for 1855 as being exactly like those described by Naegele, and due to disease of the joint in childhood. The study of four pelves with extroversion of the bladder showed great differences as regards the shape of the pelvis. Cases of extreme scoliosis were found with little or no obliquity of the pelvis. He asked how it was, according to the explanation given by previous speakers, that the pressure of the femora stopped short when the side of the pelvis was straight and when it ought to act at the greatest advantage. He believed that the whole deformity was congenital.—Dr. HERMAN, in reply, did not think that the fact of ankylosis of the sacro-iliac joint would affect the shape of the part of the ilium between that joint and the acetabulum. His grounds for rejecting Dr. Duncan's theory of the Naegele pelvis were that ankylosis was found without the oblique deformity and the deformity without ankylosis, and that the degree of obliquity was proportionate to the degree of lateral dwarfing of the sacrum. He differed from Drs. Galabin and Champneys in thinking that no comparison could be drawn between the Naegele and the scoliotic and malacosteon pelves, on account of the softening of the bones present in the two latter. He thought that the effects of use and disuse of a limb and of vascular supply were comparatively small.

Dr. BRAITHWAITE read a paper on a case of Gastrotomy for Extra-uterine Gestation, in which the placenta never came away. In this case a full-grown fœtus, which had been dead about three weeks, was removed from the abdominal cavity. The placenta fitted on the uterus like a cap, and spread posteriorly on to the neighbouring parts. The operation was done aseptically, and the wound closed except at its lower part, where the funis was left hanging out. The recovery was perfect, though slow. The placenta never came away, except a morsel about twenty grains in weight on the sixth day. The placenta must have been slowly absorbed, and in this the case is unique.—Mr. THORNTON referred to the extraordinary description, and asked Dr. Braithwaite if some mass representing the atrophied placenta were not still to be detected. He had shown to the Society a placenta undergoing remarkable changes after a similar operation, but its condition was by no means suggestive of atrophy.—Dr. BRAXTON HICKS remarked that, whether the placenta had been absorbed or encysted, the fact was of much importance, for he had for some time thought that it would be best to treat the wound antiseptically and close it, leaving in a drainage-tube. In four of six cases on which he had operated, however, the sac was already putrid.—Dr. CHAMPNEYS thought that Dr. Braithwaite only meant that the placenta had not come away, and in this respect his title was more cautious than his description; it might quite possibly have grown in its site, receiving progressive nutrition. He intended, when occasion offered, to strip off the amnion if possible from the interior of the sac and to wash out the vessels of the funis with boroglyceride; this would be a powerful aid to prevent sepsis and could do no harm if absorbed.—Dr. GRAILY HEWITT believed that the placenta might disappear. The vascular connexion was very intimate, and it would probably shrink up and be for the most part absorbed.

MIDLAND MEDICAL SOCIETY.

A MEETING of this Society was held on January 20th, Dr. Holmes Joy, President, in the chair.

Mr. Furneaux Jordan's Operation for Naso-pharyngeal Growths.—Mr. WALTER FOWLER showed a boy, aged sixteen, who had been subjected to this operation. When he was first seen there were symptoms of nasal polypus; this was removed by a snare, and found on examination to be an alveolar sarcoma. It recurred at once, and after a month's interval Mr. Fowler completely removed the growth by dividing the upper lip and the nose on one side of the septum and turning this flap outwards, so as to thoroughly expose the nasal cavity, in the manner adopted by Mr. Furneaux Jordan. The line of cicatrix was hardly visible.

Ophthalmoplegia Externa cured by Iodide of Potassium.—Dr. SUCKLING showed a man, aged sixty-seven, who had been sent to him in November last by Mr. Wood White, suffering from paresis of the muscles supplied by the third nerve on the right side, and total paralysis of those supplied by the third and sixth nerves on the left. The pupils were a little dilated, the left one the larger, and responded to light and accommodation; there were no changes in either fundus. The knee-jerk was present, and there was no history of syphilis or rheumatism. The patient attributed his illness to the cold weather, to which he had been much exposed. Five weeks after Dr. Suckling saw him, he had, after exposure, conjunctivitis of the left eye followed by dropping first of the left and then of the right upper lid. The patient was treated with large doses of iodide of

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potassium (thirty-six grains thrice daily); he rapidly improved, and had now completely recovered.

Case of Athetosis.—Dr. SIMON showed a woman, aged twenty-four, who had left hemiplegia when two years of age. At seven she began to walk, and it was noticed that she had rhythmical contractions of the fingers of the left hand, as well as talipes equino-varus on the same side. The movements have continued ever since, though she has been told they cease during sleep. The arm is shorter than the healthy one, but there is marked muscular hypertrophy due to the excessive movements.

Some Injuries and Malformations of the Urethra.—Mr. THOMAS read a paper on the above subject. It was illustrated by the histories of various cases which had come under the author's care, and a considerable portion of it was devoted to extravasation of urine in boys, four cases of which were related.

Dr. MALINS showed the following specimens:—1. An iron hammer-head, weighing 5 oz., removed from the vagina of a girl aged fourteen. 2. Cystic ovaries taken from a patient aged thirty-three, weighing respectively 6½ drs. and 5½ drs. 3. Fibroid polypus, weighing nearly 8 oz., removed from a patient aged forty-six. The cervix was divided antero-posteriorly by the thermo-cautery a fortnight previously, and the tumour removed by the écraseur and extracted by midwifery forceps. Before admission to the hospital she had been in bed two years and four months. At the present time she is practically well.

NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY.

THE fourth monthly meeting for the session of the above Society was held in the library of the Newcastle-on-Tyne Infirmary, on Thursday, Jan. 21st, Dr. Fielden, President, in the chair.

Aneurysm of the Right Subclavian Artery.—Mr. PAGE showed a girl, aged twenty-one years, sent to him alleged to be suffering from Aneurysm of the Right Subclavian Artery. On careful examination Mr. Page found that there was no aneurysm, but that the vessel was raised over an exostosis growing from the transverse process of one of the cervical vertebræ. This condition was proved by the fact that when the girl stood upright the radial pulse on the affected side was arrested by the stretching of the vessel over the growth. The pulse returned at once whenever she assumed the recumbent position. The vessel could also be slipped forward over the growth. The condition was a very rare one, and excited considerable interest. As the girl was in good health and had no urgent symptoms, no operative measures were proposed.

Loose Cartilage.—Mr. PAGE also exhibited a loose cartilage, 2½ in. long, 1½ in. broad, and ½ in. thick, removed from the knee-joint of an old woman aged eighty. The patient did well.

Leucocythæmia.—Dr. LIMONT exhibited a very large example of uterine myoma and a spleen from a case of leucocythæmia. In the latter there was no alteration in the red corpuscles, but the white corpuscles were very much increased in number. No examination was made of the bone or bone marrow.

Dr. LIMONT also exhibited a specimen of Acute Ulceration of the Colon.

Gastrostomy.—Dr. PHILIPSON showed the stomach and œsophagus from a patient on whom gastrostomy had been performed for malignant disease of the œsophagus and cardiac end of the stomach. The patient lived for three weeks after the operation. The case produced an interesting discussion on the difficulties sometimes encountered in the diagnosis of malignant disease of the œsophagus, and also in regard to the benefits derived from operation.—Dr. HUME believed that the operation of gastrostomy was one which would ultimately be abandoned in cases of cancer.

Uterine Myoma.—Dr. HUME exhibited the tubes and ovaries removed from a woman the subject of a uterine myoma of very large size. The woman made a capital recovery, and at the last examination the operator was of opinion that the tumour was reduced in size. No menstrual flow had taken place since the operation, and there had not been discharge of any kind.

Renal Calculi.—Dr. MURPHY showed two kidneys, the pelves of which contained a large number of renal calculi. The specimens were removed from a boy, the subject of a compound comminuted fracture of the femur, who had passed several calculi during life. In connexion with the case Dr. Murphy also exhibited a series of calculi, all either passed by, or removed from, patients who had sustained fractures of the femur.

Obstruction from Gall-stone.—Dr. MORRIS read a paper on a fatal case of obstruction of the intestine from gall-stone, and a fatal case of perforating ulcer of the small intestine. The gall-stone in the first case was the size of a walnut, and had become impacted in the small intestine, a short distance below the orifice of the common bile duct. In the second case the chief interest lay in the entire want of symptoms of perforation. There was no pain and no very sudden collapse.

Dr. JAMES DRUMMOND read a short note on a case of Intestinal Calculus.

Antisepticism.—Mr. PAGE submitted the results of major amputations treated antiseptically in the Newcastle-on-Tyne Infirmary during the year 1885. From this statement it appeared that during the year there were performed fifty-one major amputations, with two deaths (3·9 per cent.). Of the hip-joint, there were three amputations for disease, with one death; thigh, one for injury, not fatal, and twelve for disease, with one death; knee-joint, one for injury, not fatal; leg, one for injury and five for disease, with no deaths; ankle-joint, two for injury and nine for disease, and no deaths; shoulder-joint, one for disease, not fatal; arm, three for injury and one for disease, with no deaths; forearm, five for injury and six for disease, and no deaths; wrist-joint, one for injury, not fatal. Adding the amputations of 1855 to those of 1884 and 1883, there is a total of 156 major amputations, with eight deaths (5·1 per cent.).

WOLVERHAMPTON AND DISTRICT MEDICAL SOCIETY.

A MEETING of the above Society was held on Thursday, Jan. 7th, Dr. S. A. Smith, in the chair.

Medical Consultations.—The discussion on this subject, adjourned from the previous meeting, was concluded after several members had spoken.

Simple Fracture of the Patella.—Mr. VINCENT JACKSON exhibited two patients who had suffered Simple Fracture of the Left Patella, and in each case the fracture had occurred twice. 1. A gentleman, aged forty-eight, was seen by Mr. Jackson seven years ago on account of a simple transverse fracture of the left patella. The treatment consisted in apposing the fragments and extending the limb on a back splint, with a foot-piece; this was continued until the union (fibrous) permitted progression, and the gentleman resumed his avocation. Six months afterwards he tripped and fell from the top to the bottom of some stairs, refracturing the patella. The treatment was repeated, and the same favourable results followed. 2. The patient, a man twenty-one years of age, was admitted into the hospital with a simple fracture of the left patella. Two days after, when seen by Mr. Jackson, it was determined to wire the fragments together, and for this purpose ether was administered, and when the patient was almost anæsthetised, respiration stopped, and a very alarming condition ensued; fortunately, the means used to restore animation were successful. Mr. Jackson decided not to perform the operation, and directed that the fracture should be treated in the ordinary way, the result being perfectly successful. Two years after his discharge he fell again and refractured the patella. Treatment was for the second time employed, and in the course of time he went home and resumed his work. Mr. Jackson, in a few observations, stated that he exhibited these patients as evidence, if any were wanted, that the wiring of the fragments together in fractured patella was not necessary. Mr. Jackson showed a patella he had removed from a male patient who many years before his death had sustained a transverse fracture of this bone. This specimen was exhibited as an example of bony union which occasionally follows when similar treatment to that already mentioned is employed for these injuries.

Radical Cure of Hernia.—Mr. JACKSON also exhibited a man, aged twenty-four, sent to him by Mr. Clendinnen of Coseley, to be radically cured of a large hernial tumour of

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the left side, the circumference of which was twelve inches, and its extent downwards seven inches. The hernia was readily reducible, and could be retained within the abdomen by a truss, but as the man wished to be relieved of the disagreeableness of wearing such an instrument, he readily submitted, seven weeks since, to the necessary operative treatment. No truss is now worn, the external ring and the inguinal canal being completely obliterated.

DEVONPORT AND PLYMOUTH MEDICAL SOCIETY.

Exhibition of Cases and Specimens.

THIS Society held its first monthly meeting at Plymouth on the 27th ult., when demonstrations of the distinguishing features in a series of spinal nerve lesions were given by exhibitors of cases.

Dr. C. ALDRIDGE (Plympton) showed a typical case of Tabes Dorsalis associated with Ophthalmoplegia Externa; also a case with anomalous symptoms.

Dr. A. H. BAMPTON (Plymouth) showed and compared a case of Infantile Paralysis with two cases of Progressive Muscular Atrophy; one of the latter with a history of long-continued masturbation; the other of obscure origin.

Mr. A. BUCHAN exhibited a case of Lateral Sclerosis and Iritis, rapidly improving under specific treatment.

Fleet Surgeon ASTLEY COOPER, R.N., brought forward a pathological specimen showing Perforation of the Duodenum occurring in a sailor, with a healthy history, after a drinking bout of beer.

Mr. G. JACKSON (the President) showed a Malignant Growth of the Head of the Humerus of a youth after slight injury; also, a pathological specimen of Cancer of Omentum, weighing several pounds, taken from a patient who pursued a laborious occupation up to a few days of his death from peritonitis.

Mr. B. W. MURLAY narrated cases of Colles Fracture treatd with Carr's splint, giving excellent results.

Reviews and Notices of Books.

The Blot upon the Brain: Studies in History and Physiology. By WILLIAM W. IRELAND, M.D.Edin., Corresponding Member of the Psychiatric Society of St. Petersburg, &c. Pp. 374. Edinburgh: Bell and Bradfute.

The volume before us, whether regarded as an exposition of mental science or an historical sketch of the mental obliquity betrayed by many great ones of the past who have left their "footprints on the sands of time," will find many enthusiastic admirers, and serve at the same time to instruct and interest the thoughtful reader.

Dr. Ireland, always a cautious and painstaking student of life and character, has given us a lucid exposition of some of the most difficult problems in mental philosophy, and, what is more, he has succeeded in translating his ideas in graceful and eloquent language. It is not often that one meets with a book treating of a difficult, and we might say indeterminate subject, so cleverly constructed, and illustrated by facts gleaned from the world's history. The opening paper treats of "Hallucinations, especially of the Sight and Hearing." The second and third are devoted to the consideration of the hallucinations betrayed by such interesting characters as Mohammed, Luther, Swedenborg, and Joan of Arc. A perusal of these studies will enable the reader to grasp more fully the nature of the "ruling passion" possessed by those who have come under the author's contemplation and review. "Insanity of Power" is worked out in three chapters. After discussing the questions of the "Limitation of Life" and the "Debasing Effects of Unchecked Power," the writer follows up his train of thought and reasoning by reference to episodes in the lives of several Roman emperors, Mohammed, Toghlak, and the autocratic rulers of Russia.

Possibly the chapter on the "Hereditary Neuroses of the Royal Family of Spain" will be the one that will find most admirers. No more complete demonstration of the numerous ways in which hereditary neurosis may manifest itself could be imagined than is contained in the description, pathological and historical, here referred to. It is shown how in one the want of mental equilibrium was portrayed by turbulent passion, such as was evinced by our own Henry VIII., who is said to have been tetchy and wayward in infancy; desperate, wild, and furious in youth; daring, bold, and venturous in manhood; and subtle, sly, and bloody in age; and in another by the absence of judgment, and power to regulate the ordinary duties and courses of life. After a complete, though somewhat tiring narrative of the history of St. Francis Xavier, the Apostle of the Indies, the author again betakes himself to the analysis of certain problems in mental pathology. Thus in succession we have an account of "Fixed Ideas," "Folie à Deux," "Unconscious Cerebration," "Thoughts without Words, and the relation of Words to Thoughts," "Left- and Right-handedness," "Mirror Writing," and lastly of the "Dual Functions of the Middle Brain." Our limited space prevents a full discussion of the merits evinced by the author in the treatment of these difficult and contested "points." To those who desire the pleasure derivable from the perusal of a work learned and interesting we heartily recommend Dr. Ireland's book.

Rome in Winter and the Tuscan Hills in Summer: a Contribution to the Climatology of Italy. By DAVID YOUNG, M.D., &c., late Professor of Medical Botany in the Grant Medical College, Bombay. Pp. xv.—283. London: H. K. Lewis. 1885.

SOME fifteen years' professional work among his compatriots in Central Italy has enabled Dr. Young to write with intelligence and authority on the health aspects of residence in Florence and Rome. His own experience he has supplemented by diligent study of Italian fellow-workers in the same field, and the result is the little volume before us—an able contribution to a subject systematically treated by no English physician since Sir James Clark's publication half a century ago.

A book of the kind was needed, for, of all the centres of attraction for the travelling Englishman, Rome, by the testimony of successive generations of practitioners within her gates, is, as a winter residence, the least understood and the most misrepresented. Of the 18,000 English-speaking visitors that resort to her annually, the vast majority return in every way the better for their sojourn, with a desire to revisit her all the stronger the more time they have had to give her. "Rome," says an eminent German physician, "would be the healthiest of capitals if she were not Rome"—if she were not, that is to say, an agglomeration of ruins, catacombs, draughty basilicas, and ice-cold halls of marble, into which the art-votary or historic enthusiast plunges in all weathers and conditions of body, eager to crowd as much as possible into the twelve hours, especially if his time is limited (as it too often is) to a few days. The practitioner who knows how the Englishman abroad disdains precaution, and how in Rome he so frequently makes himself a candidate for whatever hygienic harm is to be encountered, can only marvel that the victims to the Dea Febris are so very few. In his third chapter Dr. Young puts it beyond question that out of London there is no city in Europe where his compatriots are less likely to contract typhoid than in Rome; and he might have added that in no other European city does the English resident who suits his life to his surroundings arrive at greater longevity.

Having shown how risks are best to be avoided in Rome, Dr. Young leads up by a careful induction of climatic and

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hygienic conditions, to the cases for which a winter residence in the city is specially indicated. All that he has to say on the malaria, the water-supply, and the improved drainage will have little novelty for our readers, compiled as it is from authorities frequently quoted in these columns; but his *catena* of cases, in which observance or violation of the maxims he lays down has been rewarded or punished by improved or impaired health, is exceedingly interesting as deduced from the experience of an extensive *clientèle*. He has disappointed us, however, under the section of "Cases Suitable and Unsuitable for Rome," by the scantiness of his references to a class of visitors increasingly numerous in the Eternal City—the Anglo-Indian officer, combatant or civilian, who having contracted the malarial cachexia in one or other of the Presidencies, requires special rules for guidence when wintering in Rome. His own Indian experience entitled us to expect a fuller consideration of this part of his subject.

As to his style, let us say at once that Dr. Young writes with clearness, facility, and force, and that when called upon, as in the descriptive chapters on the Alban and Sabina Uplands and the Tuscan Hills, he can rise with his theme. But too frequently he disturbs us with "pleonasm" and "anacoluth," and we have now and again to readjust his punctuation to give the sentence a main verb. These marks of haste, we trust, will be removed in an early edition.

Bericht über die Allgemeine deutsche Ausstellung auf dem Gebiete der Hygiene und des Rettungswesens. Herausgegeben von Dr. PAUL BOERNER. I. Band. Berlin. 1882-3. Breslau: S. Schottlaender. 1885.

AMONGST the numerous services rendered to the cause of medical and social science by the late Dr. Paul Boerner, few demand such recognition as the work he undertook in connexion with the great Hygienic Exhibition, which was held in Berlin two years ago. Dr. Boerner was indefatigable in promoting the objects and assuring the success of that Exhibition, and to him accordingly was allotted the duty of supervising the records, of which the first volume is before us. The editor himself contributes but little to the work beyond the introductory chapter, which relates the steps taken to found the Exhibition, the destruction of the first building on the eve of its opening in 1882, and the manner in which the second and better constructed building was completed and equipped within the ensuing twelve months, the opening ceremony, and the lectures &c. delivered during the progress of the Exhibition. These are the matters which are discussed in the opening pages. The bulk of the volume consists of a series of articles upon the several departments, each being written by acknowledged authorities, and the result is a work of permanent interest and utility. Thus we have described by Drs. Sell and Löffler the laboratory of the Imperial Board of Health, a fully equipped pavilion in the grounds being one of the features of the Exhibition, where demonstrations were daily given. The methods of research upon micro-organisms are detailed, as well as the process of analysis of foods, &c., which belong to this institute. The various apparatus employed in hygienic research is described by Drs. Wolffhügel and Fritsch and Professor Gruner; meteorological instruments by Dr. Löwenherz. Very useful articles upon foods and articles of diet are contributed by Drs. König and Sell, including the methods of preparation and the composition of the more common articles. The hygiene of infancy and that of schools are discussed by Drs. A. Baginsky and S. Guttmann, especial attention being paid to the dietetics of infancy and the composition of artificial foods. Considerable space is allotted to an article upon boots by Herr Beely, the importance of which is hardly sufficiently recognised by the community. The writer enters into full detail respecting the best construction of these articles of clothing, in accordance with anatomical facts. Baths and bathing institutes are assigned to Dr. Lassar, under whose auspices a cheap public bath was open to the visitors to the Exhibition. Workhouses, prisons, reformatories, model dwellings, barracks, &c., form other subjects written upon by Herrn Albrecht, Volkmann, and Kuhn, and illustrated by numerous drawings and plans. The whole forms a handsome, well-printed, and fully illustrated volume, which will be much appreciated by all who take any interest in the advance of sanitary science.

Nouvelles Archives d'Obstétrique et de Gynécologie.

WE have received the first number of this publication. It is issued under the direction of Charpentier, Duplay, Bernutz, Guéniot, and others, Doléris being the chief editor. The present number contains four original papers. The first is by Charpentier, on the Persistence of the Hymen as a cause of Dystocia. Another is by Doléris, on Shortening of the Round Ligaments. The third paper is on Twin Pregnancy, by Verrier; one twin was well developed, the other papyraceous. The fourth paper is on Uterine Dilatation, by Betrix. The rest of the number contains a summary of the work of Societies and work done abroad. There is room for a good obstetrical journal, for there are plenty of bad ones. The object of a good journal at the present time should be to guide and not to follow; to publish scientific, and to reject unscientific, work; to destroy the bad by multiplying the good.

New Inventions.

URINARY TEST CASE AND UREAMETER.

RECENT observations made in THE LANCET induce me to bring prominently before the profession a urinary test-case specially constructed, and a ureameter. Both cases were made for me by Mr. Hume, Scientific Instrument Maker, 1, Lothian-street, Edinburgh, the price of the test-case being 5*s.* 3*d.*, and of the ureameter, packed in case, 18*s.*

Last winter I instituted a series of comparative estimates of the value of the various new urinary tests with the older



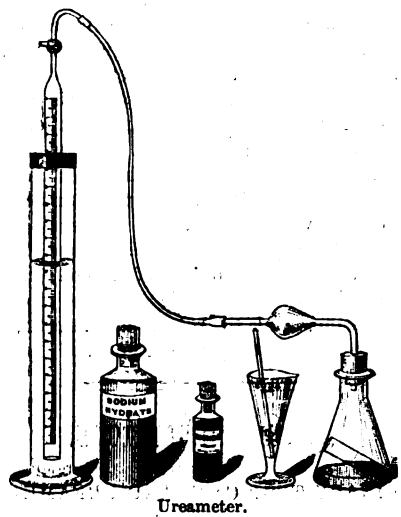
Urinary test-case.

and better known ones, and I came to the conclusion, without any preconceived opinion, that the older tests were more accurate and less liable to be misunderstood, and on these two cardinal points were superior to Oliver's tablets or Picric acid. The difficulty in competing with their new rivals was the non-portability in a cheap form of the various liquid reagents necessary for testing the urine. This consideration has been solved by the handsome, safe, and compact case of

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Mr. Hume. Nitric acid, Fehling's solution, and alcohol are secured in well-stoppered bottles; and the case is also provided with litmus-paper, test-tubes, and a small cup in which spirit can be poured and, after lighting, heat can be applied to the urine in a test-tube. The accompanying engraving will give a good idea of the urinary test-case.

The ureameter has been considerably altered from the one I suggested in 1880. Defects have been remedied, the tubing has been made to fit so exactly that there is no chance of the liberated gas escaping, the form of the bottles has been changed, and the means, as a whole, rendered easier of application. The accompanying engraving gives an excellent idea of the form of the instrument and the reagents



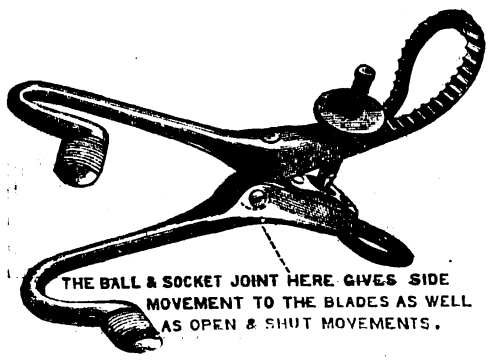
Ureameter.

employed. There is no doubt that the detection of the daily excretion of urea is of great importance in the treatment of diseases, and bears largely on the prognosis of chronic Bright's disease, acute rheumatism, and gout. More accurate treatment can, by the estimation of the urea, be adopted. This ureameter is easily worked. It gives perfectly accurate results, and the daily testing may be done by an experienced nurse at the patient's house, and the result noted with the temperature-chart and other details of the sick room.

MATTHEW CHARTERIS, M.D.,
Professor of Therapeutics and Materia Medica, Glasgow University.

MASON'S GAG.

THE accompanying illustration represents a modification which Mr. Francis Mason has had made in his well-known Gag, which was first introduced to the notice of the profession in 1871. The improvement consists in the addition of a small ball-and-socket joint, by which a slight



universal movement is provided. It will be the experience of most surgeons that in children, and even in adults, the teeth are often brittle or loose, and that in using the ordinary gag they are apt to get either broken or displaced. The instrument above depicted, whilst still retaining the lower jaw in firm position, yet allows it just sufficient movement to obviate such accidents. Moreover, it is small, being about four inches in length, and yet is of such strength as to meet all the requirements in operation on the mouth of the most robust and muscular subjects. Messrs. Matthews Brothers, of Carey-street, Lincoln's-inn, are the makers.

THE "VISCOUNT" VENTILATING SHOOTING AND MILITARY BOOT.

THIS boot is the invention of Mr. J. Morgan of Frome. Royal letters patent have been allowed him for the following novelties connected with its construction. It is waterproof, but not air-tight. This great desideratum, and apparently contradictory condition, is attained by the introduction of ventilating air-tubes passing behind the ankles to permanent outlets on either side of the boot. The act of walking causes a pumping action, thus a current of fresh air is drawn through the boot. By this means the feet are kept dry, and at the same time free from the perspiration from which so many persons suffer, and which is not only an annoyance and impediment to exercise, but a prolific cause of chills and colds. This boot can be put on and taken off with great rapidity, for lacing, unlacing, and tying are done away with, the "lacing" being very ingeniously effected by simply drawing the lace tight, passing it two or three times round the ankle, and inserting it through a patent "grip catch," which holds it effectually. The boots are manufactured as ordinary walking, shooting, and military boots, and from our own experience we can state that they are both healthy and convenient; the last variety, considering the above description of their construction, seems to be well worthy of the attention of the authorities at the War Office.

ARMY MEDICAL SCHOOL, NETLEY.

THE prizes gained during the last session by the students in connexion with the Army Medical School, Royal Victoria Hospital, Netley, were distributed on the 1st inst. by Dr. Quain, in the presence of a large assembly. Previously to the distribution, Professor Longmore read a list of the awards, and after the ceremony,

Sir T. Crawford congratulated the successful students on having gained their commissions. He remarked that the army was different from the civil profession in this—that when his hearers left that school they were charged with all the duties of a medical man. There are no specialists in the army. There is no opportunity of taking counsel with the heads of the profession when they had to deal with the lives of those in the field. It would therefore be necessary for them to continue their habits of study, and he expressed a hope that when they arrived at his age they would be able to look back and thank God that they had done their duty. Sir T. Crawford concluded by moving a vote of thanks to Dr. Quain.

Sir J. Fayrer, in seconding the vote of thanks, also congratulated the students on their success, and expressed the hope that they were entering upon a long, brilliant, and successful career. He said that they had a great future before them in the greatest service in the world, for such he considered the British and Indian Medical Service, and he felt certain that they would do justice to it. He entreated them when they went abroad to go with open and free minds, to see and search for themselves, to study facts, to watch carefully, to be observant, and, above all, not to force facts to fit theories. It was more necessary than ever to be careful and watch for themselves, and never come to hasty conclusions.

Professor Longmore afterwards briefly addressed the students, after which the proceedings terminated.

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THE LANCET.

LONDON: SATURDAY, FEBRUARY 6, 1886.

WE cannot congratulate Mr. MACNAMARA on his letter which we published last week; it is not likely to add weight to his position as a member of Council. Were it needed, it is another proof that the possession of the Fellowship does not necessarily carry with it the logical mind and special business capacity such as are claimed for the holders of this diploma by admitting them alone to a voice in College management. The letter is a weak plea for the *status quo* as regards the Members, the chief argument why Fellows alone should vote and sit in Council being "in order to promote and encourage the practice of surgery," and "that the College should continue to have the power to confer honours in surgery."

Mr. MACNAMARA tells us that a very large proportion of the Fellows are in general practice, and he thinks that the interests of the Members could be looked after by sending these Fellows to the Council. He elsewhere in the letter tells us, in the words of the Charter, that "it was in order more effectually to promote and encourage the study and practice of surgery that the class of Fellows by examination was instituted." Now "general practice" is honourable in every way; but can anyone reasonably argue that general practice tends *more effectually* to promote the study and practice of pure surgery? Does not the fact that so many of the Fellows are in general practice itself show that the objects for which the Fellowship was founded have been carried out very imperfectly indeed? On the other hand, are there any facts to show that Fellows make better general practitioners than Members? and unless they do, on what grounds would Mr. MACNAMARA make the one representative of the other on the Council? We must nevertheless thank him for the admission conveyed in his proposal that the Members ought to be represented. We wait in vain for substantial reasons why Members should not sit on the Council. The arguments *unanimously* agreed to and set forth by the Council, and presented to the last general meeting at the College, were specious and too frivolous to be considered, and were more than met by Mr. HOLMES's philosophical reply. Failing the Council itself, we have looked among the Fellows at large for some reasonably logical arguments against granting the full franchise to Members, and as yet in vain.

Mr. MACNAMARA, however, has introduced a new element into the discussion. While unable to bring any positive evidence against the fitness of Members for the Council, he tries to show that "by only permitting Fellows to be elected to the Council it is possible that we enhance the position of the Fellowship, and so may lead men to seek the Fellowship, and thus forward the objects for which the College was founded." This is the last straw. The Fellowship is to be enhanced at the expense of the Membership, the leading object for which "the class of Fellows by examination was instituted"—the promotion of the study of surgery—is to be accomplished by excluding the Members from all voice in the management of the College, which their work and their fees have made what it is! It is well for the Members to know how matters really stand, and the use to which Mr. MACNAMARA would put them.

Seriously, the Members must bestir themselves; it is quite obvious that they will get very little from the present Council. What with delays and adjournments, the determined opposition of some members of Council, the half-hearted support of a few, and the want of administrative capacity in others, the Members stand a poor chance of being restored to the position they occupied prior to the institution "of the class of Fellows." We have pointed out over and over again, without any effect, the advantages which would accrue to the College, the gain it would be to the profession at large, the cohesion it would give to the scattered Members, and the political power that would ensue, from their enfranchisement. The real function of the College of Surgeons is to supply the country with general practitioners; and the union lately effected with the College of Physicians for this purpose is a wise one, and shows that the Council have recently realised this fact and that they are acting on it. The Fellowship is a something superadded. Its object is to provide a certain number of hospital surgeons—men who teach and practice surgery entirely. This diploma, therefore, is a special scholastic distinction, and should only be attainable by those who devote themselves to pure surgery; it ought never to have conferred any special political rights, and never would have done so had those who instituted it thought more of the promotion of the study of surgery and less of their own personal aggrandisement. The Members must rouse themselves, and if the Council continues to ignore their just claim, an independent effort must be made to secure those changes in the Charter which, endorsed by the Association of Fellows, and, as their mouthpiece, Mr. HOLMES claimed at the meeting lately held at the College.

We may reasonably ask whether the time has not come when the Council—whatever its composition may ultimately be—should be strictly representative? The affairs of this country are carried on by a representative Parliament; why should not the College be governed in the same way? Our readers will remember the indignant protest which a present member of Council addressed to us some time ago because the Association of Fellows had ventured to sound him as to his views on College matters. Ministers of the Crown see nothing derogatory to their dignity in being thus questioned. The public expression of a man's views on current College policy previously to his election would enable voters to select those who showed themselves most conversant with such matters, and it would ensure for the Council men who had taken the trouble to make themselves familiar with the objects on which they would be called upon to speak and vote if elected.

WITHOUT committing ourselves to an acceptance in full of the pictures which Dr. ROBSON ROOSE has painted in the *Fortnightly* of the routine lives of barristers, judges, physicians and surgeons, Cabinet ministers, and ordinary members of Parliament, in some of which the

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outlines are too vague and the details inadequate, there can be no question as to the fact that life in London does involve a special amount of wear and tear not sufficiently recognised. It is true that "every age is characterised by the presence or prevalence of special disorders of health which have a more or less obvious causation," and the "wear and tear" on which the above-named author descants are undoubtedly causes of disorders of health which characterise the present age so far as the health of the particular classes to which he alludes is concerned. We may go further, and admit that what we suppose to be implied by the not very precise term "want of tone" is the—or it may be better to say *a*—characteristic feature of disorders in general just now, and that "in none is it more obvious than in those which peculiarly affect official and professional men working at high pressure." What we understand by "want of tone," so far as any precise meaning can be attached to the phrase, is the inertia of exhaustion. There are many varieties of inertia or lack of potential energy arising from different faults in the organisation or working of the brain and body. And there may be want of power from some fundamental organic defect which renders the evolution of force impossible. In this case the result will take the form of incapacity rather than "want of tone." We cannot but think that no inconsiderable proportion of the disorders which the writer of the paper would appear to attribute to the effect of undue "wear and tear" should rather be ascribed to the natural incapacity of men, and women too, who, without a physical organism capable of evolving force sufficient for the needs of the lives their ambition impels them to try to lead, place themselves in situations calling for more power than they can possibly evolve in response to the requirements of an unsuitable environment. It must never be forgotten that—whatever view may be taken as to the existence of a soul inhabiting the body—*mind*, properly so called, is simply and solely brain-function; and in working the brain mentally we are doing a precisely similar thing to working the muscular system by locomotive exercise, or the digestive and nutritive glandular system by eating and drinking so as to necessitate activity of the assimilative and disassimilative apparatus. The one process is as directly and purely physical as the others. Excessive thought means cerebral hyperæmia as inevitably as excess in the use of a gastric stimulant means active congestion of the mucous membrane of the stomach; and just as habitual excessive use of too irritating food and drink may induce passive congestion in the intervals, or as the sequel, of active congestion of the gastric organ, so may too persistent and excessive brain work tend to the production of a chronic engorgement of the vessels of the encephalon, with whatever that physical fact involves or entails. We speak of only *one* form of disorder which may be induced by excess of brain work, not to the exclusion of others, but simply by way of illustration. The point on which we wish to insist is that a perfect similarity of law governs the development of disorders of brain and body; and, as a consequence of this indisputable proposition, it must be understood that just as some individuals have a natural congenital incapacity for great muscular exercise or excessive efforts of digestion or disassimilation, so certain persons have a natural congenital inability for considerable or prolonged brain work; and these persons are almost sure to break down ultimately, although they may be propped up for a time by stimulants and other temporary aids to exertion, if they persist in undertaking mental work which is too great for them. The inability of which we speak does not necessarily imply any want of intelligence, or even of cleverness. On the contrary, it not uncommonly happens that the men and women who are unfitted by nature for continuous exertion of the mind are capable of exceptionally brilliant exploits of intellectual energy, which resemble the sudden discharges of a leaky accumulator overcharged with electricity. Such persons are in danger of being betrayed into false positions by the misleading effect of sudden successes, and the too impulsive appreciation of those with whom they are brought into contact. Many a signal collapse in statesmanship, in literature, in science, in art, and in many other walks of life may be explained in this way, and we believe ought to be so regarded, rather than as the result of overwork or fair wear and tear even in London life. There is far more over-reaching than over-working in this modern life of ours. Success is too generally accepted as a conclusive proof of capacity, instead of being attributed, in part at least, to the chapter of accidents. Those who wait on the development of character, and study the evolution of organism and force through long periods, know that the plant which springs up and bears fruit quickly has too often no deep root. An explosive liberation of energy is far more likely to take place in the prematurely energised than in the slowly and steadily growing organ.

We quite agree with Dr. ROOSE as to the importance of mending the fashion of the time as regards work and enterprise; and, subject to certain reservations which it is necessary to make, we are willing to concede that "progress" may be too rapid. It is just as foolish to haste to be great and successful as it is to haste to be rich; but looking at these matters from a practical point of view, we cannot help thinking the medical practitioner may accomplish the largest amount of real good by warning those with whom he comes in contact against the over-estimation and undue strain of limited capabilities. It is not for the interest of the race or of the individual happiness of mankind, and particularly the English community at this epoch of our national history, that every young man and young woman who evinces a little capacity or shows "cleverness" should be encouraged and incited to make efforts which demand not simply an accumulation but a reserve of energy, and, what is even more important still, the physical capacity for producing force, almost indefinitely, to replace that which is called out by exceptionally exigent circumstances. The times in which our lot is cast, and the life we are called upon to live, demand powers of endurance and a productive capacity for the evolution of energy such as, perhaps, man has never needed before.

NINE months ago Mr. MITCHELL BANKS related at the Medical Society of London a case of strangulated scrotal hernia, in which, on opening the sac, he found several inches of gangrenous intestine. The sphacelated bowel was excised, and the two ends of intestine were united and returned within the abdomen. The patient recovered. This case excited some discussion at the meeting at which

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it was related, and we commented on it. We find that, within a few days of the reading of this paper, and before a report of it had crossed the Atlantic, a very similar operation was performed in America, and with an equally successful issue. The case is recorded in the current number of the *International Medical Journal*, and was under the care of Dr. CLARK STEWART, of New York. The patient was a man aged sixty-eight, who was admitted to hospital with a strangulated femoral hernia which had been irreducible for three days. On opening the sac, fæcal matter and fluid escaped, and there was then exposed to view a coil of intestine three inches long, "on the convex surface of which was a diverticulum about one inch in diameter, having a small ragged opening at its extremity." The walls of this diverticulum were very thin, as the mucous membrane of the gut was here destroyed, leaving only some peritoneum and dilated veins. About four inches of the bowel were then excised, the corresponding portion of the mesentery being ligatured in segments half an inch from its attachment to the gut. All bleeding vessels in the bowel were tied, and the two ends were then united by fine gut sutures, and the part returned within the abdomen after free irrigation with corrosive sublimate lotion. On the following day the man took three cups of milk; on the third day whisky and sarco-peptones were added to the dietary. On the sixth day one large stool and on the seventh day two natural motions were passed. Subsequently, the patient showed signs of congestion of the base of the left lung, and gave much trouble from active delirium. The wound healed by first intention, and the patient eventually left the hospital quite well.

This case will lend considerable support to the views originally advocated by Mr. MITCHELL BANKS, and will induce surgeons to look with more favour upon a procedure which has provoked a good deal of criticism. The published report of this case is deficient in many particulars. Thus no mention is made of the state of the coil of intestine in the hernia, but only of the diverticulum, except that it is once called "diseased"; and it is only from the heading of the report that we infer it to have been gangrenous. Nor is there any satisfactory mention made of the state of the coverings of the hernial sac. The sequel of the case is also given in a very imperfect manner. In spite of these defects, however, the report is valuable, and suggests one or two points for discussion.

First, as to the advantage of the operation. Dr. STEWART says that out of twenty herniotomies he has seen, gangrenous gut has been found in two instances, and in both the bowel was opened and left *in situ*, "both patients dying early from septicæmia." It was this adverse experience which led him to prefer excision of the intestine when this case presented itself to him. We have little doubt that in this particular instance the right line of practice was followed, for at the time of the operation the patient's pulse was only 80, and we are led to infer that there were no local conditions to render such a proceeding particularly difficult or dangerous. There appears to have been just the combination of local and constitutional conditions which favours recovery after enterectomy. In one particular, however, the principle of the operation differed from the ordinary one, in that it included a V-shaped piece of mesentery, this peritoneal fold was tied and divided close to and parallel with the bowel. The advantage of this plan is that it does not interfere with the blood-supply to the bowel on either side or imperil its vitality. One of the great dangers attending the excision of a V-shaped piece of mesentery is the occurrence of gangrene in the bowel left behind. Where the length of bowel to be removed is not great, the practice pursued by Dr. STEWART is undoubtedly the best; and where a greater length of bowel has to be removed, a combination of the two plans might afford the best results, a small V-shaped piece being removed from the central part of the detached mesentery.

Still more important inquiries are suggested by the subsequent treatment of the patient. Mr. BANKS used every precaution to secure prolonged rest to the bowel, giving only ice for four days, then for eight days more ice and beef-juice, and the bowels were not relieved until the twenty-third day. Dr. STEWART, on the other hand, gave milk after a few hours, and quickly added alcoholic stimulants and liquid food in "large amounts," while the bowels acted on the sixth day. The one case was a man aged twenty-five, the other sixty-eight; but this by no means sufficiently explains or justifies such a wide divergence in practice. We must confess to being strongly of opinion that the plan carried out by Mr. BANKS is the better of the two, for it alone secures that rest to the injured parts which is so important in securing their speedy and firm union, and the prevention of extravasation from the intestine, with subsequent peritonitis. Dr. STEWART'S patient seems to have been a very troublesome one to deal with, and all praise is due to the surgeon for the successful issue of the case, but we believe that if the diet had been more rigorously restricted, and stimulants lessened or withheld altogether, the opiates exhibited would have exerted more power in restraining the peristaltic action of the intestines. That, in spite of all these adverse circumstances, the stitches held, and no fæcal extravasations occurred, is a striking testimony to the skill with which the intestinal suture was made and the rapidity with which peritoneal wounds may heal.

IN entering upon his duties as medical officer of health for the borough of Bradford (Yorks), Dr. HIME takes the opportunity of reviewing the work done by the Corporation during the ten years which have elapsed since the passing of the Public Health Act of 1875. The borough of Bradford covers an area of 10,776 acres, or 16·8 square miles; and in 1884 the population per acre was 19·4; it varied, however, from 100 per acre in the west ward to 2 per acre in Allerton. The population in 1884 numbered 209,564, it having increased to that number from 118,098 in 1864. The birth-rate has varied largely during the decennial period 1875-84. In the earlier part of that period it averaged some 38 per 1000, but it had latterly fallen to but little over 29. In this connexion it should be noted that the proportion of marriages has steadily declined; indeed, whereas every 68 persons in the borough provided one wedding in 1872, it now requires 105 persons to bring about the same result; and it seems evident, from what Dr. HIME says, that other causes than diminution of commercial prosperity must account, in part at least, for this decline in the marriage rate. But if the birth-rate has diminished, there is satisfaction in also noting

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a very decided diminution in the death-rate, which, with but comparatively insignificant oscillations, has fallen from between 26 and 27 per 1000 in 1865-74 to 21·0 per 1000 during 1875-84, the mean during the last five years of the latter period being only 20 per 1000. This point is illustrated in different ways by Dr. HIME; and a diagram in which the excess over 20 during each of the ten years 1875-84 is shown by means of columns must convey to the most uneducated the lesson that a satisfactory result has been achieved in so far as the saving of life is concerned.

Taking up the question of mortality at different ages, it appears that immediately prior to 1875 the deaths under one year were at the rate of about 20 per 1000 births, whereas during the last five years of the decennium under consideration they had fallen to an annual mean of 166 per 1000, and this notwithstanding a somewhat exceptional excess in 1884. Dealing next with the mortality at school ages, a subject which has recently occupied a good deal of attention, it will be remembered that in 1882 the Registrar-General was able to point out that whilst the general rate of death at the school age had diminished somewhat considerably, there was a very slight increase in the mortality at that age from nervous diseases, and that the rate from tubercular meningitis and hydrocephalus was 0·22 per 1000 during 1881 and 1882, whereas during the ten years 1861-70 it had averaged 0·20. Dr. HIME, examining the statistics for Bradford, points out that whereas in Bradford the decline between the mean rate for the ages of from five to fifteen years between 1875-79 and 1880-84 amounted to 25 per cent., yet there had been an increase amounting to 3 per cent. in the "local diseases," including affections of the brain and nervous system at the school age, and this notwithstanding a diminution of 7 per cent. in this group when all ages are taken into consideration. And taking up several classes of diseases, he shows that between five years and fifteen years the differences between the rates in the periods 1875-79 and 1880-84 were as follows:—Nervous diseases exhibited an increase of 42·5 per 10,000, hydrocephalus showed a diminution of 34·2 per 10,000, and convulsions an increase of 180 per 10,000. As regards the latter rate, however, it is pointed out that its significance is diminished by reason of the small number of deaths occurring from convulsions between five and fifteen years. The outcome of this investigation shows that the very satisfactory improvement which is observable in the various classes of deaths during recent years has not prevailed amongst the "nervous diseases," which at the ages referred to have become more fatal, and this increased fatality at this special period of life is regarded as indicating the bad effects of injurious agency in connexion with schools. At the same time Dr. HIME, whilst pointing to the facts as deserving of the earnest attention of the authorities concerned, gives his opinion that the whole mischief cannot be attributed to schooling alone. In every way the population "lives faster," and this is especially the case amongst children, who are brought forward to an extent not thought of in former years.

Comparing the deaths from the several specific fevers during the two periods of five years forming the decennium 1875-84, it appears that the small-pox rate per 10,000 had fallen from 0·10 to 0·05, scarlet fever from 11·88 to 4·52, diphtheria from 1·03 to 0·49, and the "fevers" from 3·52 to 2·20, whereas there had been an increase as regards measles and whooping-cough; diarrhœa also had slightly increased; but phthisis, and the pulmonary diseases most likely to be confounded with it, had undergone some diminution.

In many respects this report almost resembles a text-book of practical hygiene, as regards such matters as the precautions to be taken against consumption, the history of woolsorter's disease, the notification of infectious diseases, the pathology of the infectious fevers, and the hygiene of factories. In each of these matters the experience of Bradford is given, and the report, as a whole, cannot fail to be of great local value, and to form an admirable introduction to the series of annual reports which we may expect Dr. HIME to prepare.

SIR ANDREW CLARK does not confine himself to the limit of his consulting-room in dispensing good advice. His conception of the function of the physician is a large one. According to it the physician is a public teacher, whose duty it is to enunciate the laws of health, and not to stop there, but, in the style of the old prophets, to threaten the very judgments of heaven to all who break them. The laws of health, according to Sir ANDREW's view, are synonomous with the commandments of GOD, and disease comes of sin, ignorance, and folly. "All men ought to be healthy; men were not made to be diseased," but they rebel against the laws of health, they prefer to take their instincts for their guide, and so they incur disease. Instincts, inclinations, appetites, can never be trusted alone with safety; they must be controlled and guarded by two policemen — experience and understanding. In London, Sir ANDREW said, in his speech, in presiding at the National Health Society, at least half the population are ill from not recognising that mental health depended on the health of the body, and because they would not deny themselves and obey the laws of health. There is something very absolute in these teachings, and some may be disposed to question whether they are not too severe and impracticable. But in the main they are right, and it must be conceded that a very large part of the need for doctors arises from the sins, ignorance, and follies of mankind. Absolute health, indeed, may be unattainable. Many of the longest and the most useful lives do not exemplify it. Women exceed men in their longevity, though they are by no means models of conduct as regards observance of the laws of health. But in the main, we repeat, Sir ANDREW is right, and half the diseases of the world, and especially of our civilisation, will disappear when men have learnt to live "soberly, righteously, and godly." It is amazing to notice the ignorance of the laws of health and the functions of the body displayed by even enlightened people. It is equally so to observe their notions of the possibility and nature of medical help. When Dr. JOHNSON was attacked with paralysis of speech he was very anxious to see Dr. HEBERDEN, and, in a letter containing much sound medical sense, expressed his opinion that much could be done by stimulants, and suggested that "a vomit, vigorous and rough," might rouse the organs of speech. Equally crude are the views that obtain among otherwise educated people nowadays, who are apt to divide their faith between coarse drugs and impalpable doses, and who make the

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fundamental mistake of supposing that medicine is the great preservative of health, apart from observance of the laws of health. The members of our profession need be in no fear of having no work to do. Their occupation is not likely to go and universal health to prevail, for a few centuries yet. For the present men study everything before their health, and come to the medical man to extricate them from the consequences of their inattention. It would be no unwise thing for people to consult the physician as to the prevention of disease in themselves and their children. But this presupposes that something short of actual disease will make them willing pupils of the physician. This is a somewhat violent supposition, and raises the question whether even the eloquence of Sir ANDREW CLARK will induce men to regard the laws of health until they have to learn their existence from the consequences of breaking them.

LITTLE, if anything, would be gained by discussing the question of lunacy law reform until the Legislature shall have found it possible to make time for at least the most urgent of ordinary business in the interests of domestic peace and prosperity. At present the attention of the governing authority seems to be monopolised by matters of no moment to the masses of the people, and meanwhile the real needs of the community wait. This is a very unsatisfactory, we had almost said a discreditable, position of affairs, but there seems to be nothing left for us but to put up with it as best we may. It is, however, only reasonable to expect that, so far as most questions are concerned, executive bodies administering the law as it stands will not, pending the delay, make themselves more than necessarily offensive in the discharge of their immediate duties. The Commissioners in Lunacy sorely need a little pointed advice on this subject, and, whether they accept it or not, we will make bold to offer our counsel. Until it is finally decided whether local authorities are to be entrusted with the provision of asylum accommodation for the paying as well as the pauper lunatics of a county, the Commissioners in Lunacy might with very good grace forbear to put into execution perfectly new ideas with respect to the construction of asylum buildings. For example, nothing can be more absurd than for the Board at Whitehall—which we earnestly hope is on the eve of being reformed or superseded—to lay down and enforce a rule that a county asylum must needs be erected on a plateau of twenty-five acres of land, and have a frontage extending some 600 feet. Why, in the name of sanity, "twenty-five acres"? and why "600 feet"? The first of these conceptions is manifestly a pure phantasy, and the last mentioned is a project having in it all the elements of madness. We strongly recommend the magistrates of Middlesex to withdraw their scheme and take refuge from the vagaries of a demented board in a masterly policy of inaction. *Quis custodiet ipsos custodes?* will have a new application if the official guardians of the insane do not speedily place themselves under some of the restraints of decency and common-sense.

Dr. FRANCISCO VINALS has been unanimously elected by acclamation of the Faculty of Medicine of Madrid as [illegible]

Annotations.

"Ne quid nimis."

THE FELLOWSHIP OF THE ROYAL COLLEGE OF SURGEONS.

AT a meeting of the Committee of the Association of Fellows of the Royal College of Surgeons of England, held on Monday last, the following resolution was passed unanimously: "It being understood that a committee of the Council of the Royal College of Surgeons is considering a proposal made by one of the members of the Council to the effect that fifty Members of the College shall be elected annually and without examination to the Fellowship, the committee of the Association of Fellows—though favourable to the institution of increased facilities for Members of the College to become Fellows by examination—hereby expresses its disapproval of any attempt to lower the acquired academical status of the Fellowship, and pledges itself to resist such to the uttermost." A copy of this resolution has been forwarded to the President and Council of the College.

"HER MAJESTY THE QUEEN."

PROBABLY there is no Sovereign in the world whose health and happiness are so frequently an expressed desire of the people as that of "Her Majesty the Queen," for whenever a few of the English-speaking race meet together, if any sentiment is to be proposed, the health of Her Majesty stands first, and is loyally responded to by any gathering from among the many millions of the Queen's subjects in all parts of the globe. Those of our readers who have read the Greville Memoirs, the life of the Prince Consort, the life of Lord Palmerston, and that of Bishop Wilberforce, will have gathered that the cares of State press very heavily at times on the Sovereign of these realms, as well as on those high in office. Those who can call to memory the touching description in the "Four Georges," of the dear old "Farmer King," when a gleam of reason returned to him, his thanksgiving, his hopes, and his resignation, will be able to gauge the extent to which the "cares of State" may undermine a monarch's health. It should not be overlooked that Her Majesty has now reached the age of sixty-seven, and at this period most people are admitted to be fully entitled to some repose from the jostle and strife of life. The Queen, not less than the poorest of her people, is subject to the laws of nature, and at her period of life may fairly claim the affectionate consideration of her subjects at this the most trying crisis of Her Majesty's reign. The statesman who has just relinquished office has no doubt given every consideration to Her Majesty nor can we doubt that his successor in office will be equally mindful of what is due to the Queen. It is, however, "not only the constitutional right, but a constitutional duty, of the Sovereign to discuss with him (the Premier) confidentially all the aspects of the proposed ministerial changes, and to submit to the aspirant Premier such considerations as may suggest themselves bearing upon the expediency or the possibility of a successful issue." This sentence (from *The Times* of Feb. 1st) will convey to our readers some idea of the weight of responsibility resting on Her Majesty. Medical men can estimate better than others the possible and probable effect of this anxiety. There is a limit to what human nature can bear, and the Queen is no exception to the rule. If, however, Her Majesty could for a time remove the Court to Windsor, if not to London, the convenience to public business and to her ministers would be very great during the present political crisis.

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PORRO'S OPERATION; SURVIVAL OF MOTHER AND CHILD.

La Gazzetta degli Ospitali (Jan. 20th, 24th, and 27th) reports the case of C. C——, admitted June 10th, 1884, in the Gynæcological Clinique of Pavia under Professor Cuzzi. The patient had suffered much from infantile rickets, and only walked with difficulty at seven years of age. She menstruated at twelve, was married at twenty-six, and had a history of seven pregnancies. The first resulted in the birth of a living child at seven months, the second in abortion at three months, the third in a living child at full term, the fourth in twins born alive at seven months, the fifth and sixth in living children at full term. The patient remained in comparatively good health for five years, when she again became pregnant. Her health suffered greatly, she endured intense pain, and sought admission into the Pavia Clinique in the eighth month of gestation. She was greatly debilitated, and the pelvis so much deformed that the lower outlet barely admitted the exploratory finger. Labour pains commenced at 1 P.M., July 22nd. As natural delivery became obviously impossible, in the absence of Professor Cuzzi, who had foreseen the probable necessity of operative interference, this was undertaken, with competent assistants, by Dr. Guzzoni degli Ancarani. The patient having been placed under chloroform, and strict antiseptic precautions adopted, an incision eight inches long was made in the middle line, and, according to Müller's modification of Porro's operation, the uterus was bodily brought out through the wound and an elastic tube applied round the cervico-uterine cone (*sul cono cervico-uterino*). Having divided the uterus, broken the membranes, and extracted the fœtus, the operator replaced the elastic ligature with a wire one; he then amputated the uterus and applied perchloride of iron to the stump. Having quickly completed the peritoneal toilette, the stump was fixed with a strong needle passed below the metallic ligature, the wound sutured with antiseptic silk, styptic colloid applied to the edges, and the dressing completed. The operation lasted for a few minutes over the hour. The woman woke in good condition, and had some repose after a hypodermic injection of sulphuric ether. The child, a male, was living. All the sutures were removed the seventh and eighth day. Convalescence was uneventful; the patient left her bed the forty-fifth day, the clinique for home the eighty-second day after the operation, and continued in fairly good health when seen a year afterwards.

THE PERILS OF FOOTBALL.

THREE weeks ago we called attention to a sad fatality at football, the third that had then occurred this season. In the short interval from then till now three more deaths have been recorded in the papers. On Jan. 22nd, John Francis Ashmore died from the effects of an injury received whilst playing in a match at Eckington. It is stated that after playing between five and ten minutes he was charged by one of the opposing players, who, it is alleged, kicked him in the stomach. Nothing serious was expected, as Ashmore continued playing; but shortly afterwards he went home, and became much worse, with intense pain in the stomach, and death ensued within twenty hours after the injury. On Jan. 27th a youth named Nathan Pilling died at Widnes. A few weeks previously he is said to have taken part in a football match at Penketh, near Warrington, when he received a kick in the stomach, and was carried off the field in an insensible condition. He was afterwards for a time in fair health, but two days before his death he was seized with fits, which continued until he expired. Last Saturday, during a football match played at Keighley, a young man named Benjamin Walker picked up the ball from a "scrimmage" and attempted to get away with it. He was, however, "tackled" and fell, the opposing players in the rush falling upon him. Walker's head was doubled under his breast, and it being evident that he was seriously injured he was taken to Keighley Cottage Hospital, where it was found the spinal cord was ruptured. The unfortunate man lingered until Sunday evening, when he died. We regret not to have seen any account of the inquests held in these cases. Some more strong expressions of opinion on the part of juries might have a good effect. It is obvious that something will have to be done to modify the extremely dangerous way in which football is at present played. Six deaths, accidents innumerable, and who can tell how much suffering and deprivation to the victims' friends, emphasise strongly the need for radical measures of reform.

PTOMAINES AND LEUCOMAINES.

THE physiological action of ptomaines from putrefying meat has been studied by M. Gautier by extracting the alkaloids and examining them according to their solubility in ether, chloroform, and amylic alcohol. The alkaloids obtained by digesting with ether caused convulsive movements, rapid action of the heart, injection of the ears, stupefaction and contraction of the pupil in dogs. The chloroform extractives accelerated markedly the respiration, and slightly the action of the heart, and also injected the conchæ; the symptoms disappeared in fifty minutes in a dog of medium size. The amylic alcohol alkaloids paralysed the movements of frogs, dilated the pupil, and killed with general relaxation of the muscles. Free ptomaines are more dangerous than their salts, and especially those that are soluble in ether. Dilatation of the pupil, tetanic convulsions soon followed by muscular flaccidity, slowness of the heart's action, absolute loss of cutaneous sensibility, and loss of muscular contraction were the chief phenomena observed in frogs. Irregularity ending in contraction of the pupil, remarkable injection of the concha of the ears due to vasomotor paralysis, slow respiration, somnolence succeeded by convulsions and death, and loss of muscular contractility were the main effects witnessed in dogs. For a long time M. Gautier has averred that the alkaloids of putrefaction vary according to the nature of the soil in which they are developed. MM. Brouardel and Boutmy have considered that they varied also according to the time at which the bacterial fermentation began. Further, M. Gautier has noted that, whatever be the nature of the soil, the compound hydropyridic alkaloids, and especially hydrocollidine, are found in a constant manner, and appear to be the alkaline products of bacteria that have most vitality, and suffocate all the other kinds. Turning to leucomaines, M. Gautier in 1881 announced that the excretions of animals contained bodies of the nature of ptomaines. If the elimination of these leucomaines were diminished by any of their ordinary routes of exit, it is not improbable, in M. Gautier's view, that they might lead to disease. With the object of confirming his preliminary observations he has studied the muscular juice of large animals, and has extracted five new alkaloids, perfectly defined and crystallised, endowed with a more or less powerful action on the nervous centres, causing sleep, fatigue, even vomiting and purgation, after the fashion of the alkaloids of venom, but less actively than the cadaveric sorts. He appears also to have shown that these alkaloids are produced side by side with carbonic acid and urea in the ordinary metabolic activity of the tissues. It remains to consider by what mechanism these alkaloids are produced; whether they are engendered by physiological or pathological decomposition; what is the consequence of their incessant formation in the economy; what happens to them, and how we escape from their evil effects. Thanks to the respiration and to the

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circulation of the blood, oxygen is able to penetrate everywhere in the animal organism; it does not follow, however, that the successive phenomena of assimilation and disintegration of tissues in animal life are essentially aerobic—in other words, oxidative. M. Gautier endeavours to prove, on the contrary, that many of the transformations in the tissues of higher animals are anaerobic. The mode in which we resist the action of the alkaloids formed in our tissues is twofold—elimination and destruction by oxygen. Elimination is effected by the kidneys, alimentary tract, and skin; oxidisation is probably chiefly effected in the circulating blood. Any cause that diminishes the access of air to the blood, or causes a decrease in the amount of hæmoglobin in the body (as in chlorosis and anæmia), or the introduction into the blood of substances that prevent the respiratory changes, leads to the accumulation of azotised substances of the nature of ptomaines and leucomaines.

ALLEGED DEATH FROM VACCINATION.

UNDER the title "Alleged Death from Vaccination" the *Earlestown Guardian* of Jan. 30th gives an account of an inquest which was held on Jan. 22nd, at Lowton, on a female infant aged three months, who had been vaccinated on the 19th inst., and who died on the morning of the 22nd inst. The mother took the child to bed on the previous night, and she slept quietly until 5 o'clock in the morning, when she screamed. The mother, believing the child required food, supplied its wants, when the deceased closed her eyes and died without a struggle. The child, who had been vaccinated on the right arm, was found to be greatly discoloured on the right side of the body and neck. The parents believed that vaccination had something to do with the death of the child, and hence an inquest was held, but they objected to a post-mortem examination, and in the absence of any evidence as to the cause of death an open verdict was returned by the coroner's jury. It is a matter for regret that all the circumstances attending the death of the child were not fully investigated. The newspaper report of the proceedings does not make it clear whether the discolouration referred to was due to post-mortem changes. If the child had suffered from septic poisoning, the result of vaccination, its condition would have been apparent to the mother before she took it to bed on the 21st inst. Its death may have been due to asphyxia caused by the feeding, or to convulsions, which had no relation to the vaccination. The exact cause will probably never be known.

THE CORPUS CALLOSUM.

THE current number of the *Liverpool Medico-Chirurgical Journal* contains a paper by Professor D. J. Hamilton, in which he clearly sets forth the discoveries he has made upon the structure of the corpus callosum, which were brought before the Royal Society and have important bearings upon the presumed function of this part of the brain. Professor Hamilton has shown, by means of most carefully prepared sections of the whole brain in the adult and of the fœtal human brain, as well as of the brains of animals possessing a corpus callosum, that the general belief in this structure being a commissure between homologous parts of the cortex of the two hemispheres is erroneous. He describes the corpus callosum as composed in its whole extent of decussating fibres, which arch upwards, outwards, and downwards into the centrum ovale. What one may perhaps term the incoming bundles of fibres (as regards the corpus callosum) of this crossed callosal tract can be traced from all parts of the cortex, passing down mostly along the margin of the great longitudinal fissure; whilst the out-going bundles, instead of forming, as ordinarily taught, a similar but opposite series, turn downwards into the inner and outer capsules. The proofs of this rest upon three groups of facts—viz., (1) that the "crossed callosal tract" corresponds in extent with the whole extent of the corpus callosum; (2) the arching of the fibres outwards and downwards, a fact long since noted by Foville, but disputed by Meynert; and (3) the actual tracing of bundles of fibres from the cortex of one hemisphere to the capsules of the opposite. The special methods of preparation employed by Professor Hamilton have aided him in making this demonstration, rendered the more difficult by the various directions in which the fibres seem to converge at the inner capsule, so that it is impossible to make sections in any plane which do not divide some of the fibres. In his paper in *Brain* (July, 1885) Professor Hamilton showed that in the fœtal brain the crossed collateral tract could be well demonstrated. As he does well to point out, these fibres have no direct relation with the motor tract, and it is absurd to suppose that he intended to demonstrate that there was a higher decussation of the motor fibres than that in the pyramids. The motor tract is perfectly distinct from the callosal, the office of which appears to be to connect the cortex with the basal ganglia; and it is only in accordance with what seems to be a general law of the nervous system that such connecting fibres should decussate. As yet pathology has contributed little to confirm Professor Hamilton's discovery—viz., in the occurrence of secondary degeneration of the callosal fibres; but he refers to a case recently in the Aberdeen Asylum of a woman sixty-two years of age, imbecile from birth, in whose brain there was absence of portions of the cortex on the right side, and of the capsules and island of Reil on the left, with concomitant absence of the left crossed callosal tract.

THE USELESSNESS OF INQUESTS WITHOUT POST-MORTEM EXAMINATIONS.

WE have frequently pointed out the inutility of inquests without post-mortem examinations, but never have had a better illustration of our remarks than an inquiry concerning the death of a boy held at the Foundry Inn, Wigan, on Wednesday, the 27th ult. The boy, aged thirteen years, was said to have received a kick from another boy on the 16th. He did not complain till Monday the 18th, and he went to school on the morning of that day. At noon he complained of pain below the knee and pain in his head, with vomiting. Medical aid was sought on Wednesday, the 20th, and on examining the leg no mark of violence could be seen. Warm applications were ordered, and the vomiting and head symptoms were treated. On the 21st there was slight swelling below the knee, some stiffness, a good deal of pain when the leg was moved, head symptoms more marked, conjunctiva suffused, slight delirium, temperature 101°, and restlessness. Linseed-meal poultices were now applied. The symptoms increased, the delirium became more marked, and on the evening of the 23rd the temperature was 104°, with redness and swelling below the knee and very slight fluctuation. On the 24th another practitioner was called in, who considered it to be a case of blood-poisoning from the kick. He incised the swelling and some pus escaped; the head symptoms, however, increased, and the boy died the same evening. A certificate of death from septicæmia was given but the registrar, being informed of the kick, communicated with the coroner, who decided to hold an inquest. This was done, as we have stated, on the 27th ult. No post-mortem was ordered and no medical evidence called. The jury, after hearing the evidence of the father and another witness, found the following verdict: "Died from blood-poisoning caused by a kick received whilst playing with another boy," and that no one was to blame. The medical men of Wigan have, we believe, as a rule no ground of complaint against their coroner, who generally consults them, orders post-

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mortems frequently, and calls them to give evidence. Here therefore we have an exception to prove the rule, but it is in a case which surely demanded both a post-mortem and medical evidence, especially as another boy was supposed to have caused all the mischief, and if so should probably receive some share of blame. But we are of opinion that, had a post-mortem been made, evidence would have pointed to acute meningitis as the cause of death, with the suppuration as a coincidence. At all events, it is not usual to have acute septicæmia without broken skin or an open wound. Inquiries of this nature, therefore, are useless unless accompanied by both post-mortem examinations and medical evidence.

RUPTURE OF THE UTERUS.

AN inquiry was recently held at the Black Swan, Brighouse, Yorkshire, by Mr. Barstow, the district coroner, into the circumstances attending the death of Elizabeth Gath, aged thirty-eight. It appears from the evidence that the deceased woman was taken in labour on Jan. 12th, at 2.30 A.M., and that a midwife who had been engaged to attend her was then sent for. The latter person on her arrival found that parturition was in progress, the membranes having ruptured. Upon vaginal examination she found that there was an unusual presentation, but what she actually did to expedite labour and with what result was left in doubt. Within an hour, more or less, deceased was seized with "a sick fit," as narrated by the midwife, from which she never rallied. Recognising the gravity of the case, she sent for a medical man, but not until more than an hour had elapsed from the onset of the fatal symptoms. When he reached the house he found the patient dead. It was admitted by the midwife that she seized a leg of the fœtus and brought it down, using, according to the testimony of an eye-witness, very great force. There can be no reasonable doubt that the so-called fit was an attack of syncope caused by rupture of the uterus, and the questions at issue were whether such rupture occurred spontaneously or through the instrumentality of the midwife, and, in the latter event, whether there was culpable and criminal negligence. Dr. Bond, the doctor consulted, asserted that the midwife told him in the first instance that the attempt to assist delivery was made prior to deceased evincing symptoms of shock before referred to. At the inquest she stoutly denied the truth of this, and persisted in her statement that she made traction on the leg subsequently to the "fit." At the post-mortem examination made by Dr. Bond, a rent twelve inches long was found in the uterus on the left side towards the front, and in that portion of the uterine wall which had impinged on the pubic bones there were some extensive bruises extending through its whole thickness. It became a matter for consideration whether these bruises could have been produced by the uterus being driven against the pelvis by its own contraction, or whether it was not more likely that they were caused by forcibly pulling on the leg of the fœtus. To say the least, it is not usual to meet with extensive bruisings distant from the rupture, but we are far from denying that such may not occur independently of the application of extraneous force. The jury found a verdict that deceased died from syncope brought on by rupture of the uterus, but how the rupture was induced there was not sufficient evidence to show. They censured the midwife for not having called a medical man earlier, and the coroner observed that she had contradicted herself whilst giving her evidence, and administered a caution to her as to her conduct of midwifery cases in the future. We are of opinion that the demands of justice were fully complied with. It is highly probable that had the midwife been committed for manslaughter the grand jury would have ignored the bill of indictment. In the first place, the accident which happened is of such an appalling nature that, whether it occur spontaneously or be caused by artificial means, it is not to be wondered at that persons in charge of the case should be unnerved, seeing they are utterly helpless to avert the catastrophe. Whilst we admit that it is an excellent system for trained and competent midwives to attend the poor in their confinements, we contend, nevertheless, that whenever the slightest difficulty arises in the course of labour it is the bounden duty of the midwife to summon medical aid without a moment's delay. The recorded cases of spontaneous rupture of the uterus are so numerous, that the fact of rupture in a given case is not in itself at all convincing that it arose from other than natural causes. We cannot subscribe to the editorial article in a local paper, where it imputes blame to Dr. Bond. From our reading of the case, that gentleman acted in an exemplary manner, and gave his evidence with the greatest fairness.

THE RATING OF CHARITIES.

THE *Charity Record* is doing good work in directing the attention of members of Parliament to the measure that is being promoted by an association just formed "to obtain a Bill to secure for public charities the restoration of the exemption from local rates which they enjoyed prior to the year 1866." The replies to inquiries on this subject from twenty-six metropolitan members are very interesting. We are not the less gratified with them because they are not all blandly favourable to the proposal of exemption. But they show an intelligent appreciation of the questions involved, and a disposition to be considerate to the charities. When the voluntary charities of this country are duly estimated, as they can only be by comparison with the State-supported charities of other countries, Parliament will feel the force of the argument for exempting them. The charities of this country save the ratepayers and the taxpayers by doing that which in other lands is done by the State. Surely the least the State can do in return for such generous action of individuals on behalf of the poor and the pitiable is to exempt the buildings from rates. We know only too well the burdens of the ratepayers. But the charities immensely relieve the burdens, and should themselves be relieved of rates. According to a rigid political and fiscal doctrine perhaps they should be rated, but if this hard political doctrine is pushed it will give another blow to our voluntary system, which in these hard times it is very difficult to maintain.

PAUPERS AND PORRIDGE.

THE casual wards, or rather the cells, attached to the Westminster Union workhouse have been particularly crowded this winter. Comparing the first five weeks of this year with the corresponding period of last year, the following is the number of casuals who have obtained relief. During the first week of 1885 casuals of both sexes numbered 49, and during the first week of this year there were 78; the second week of 1885, 62, and 115 in 1886; the third week, 71 and 98 respectively; the fourth week, 84 and 102; the fifth week, 73 and 80. Such a notable increase seemed due to the prevailing commercial depression and the number of persons out of employment. The master of the workhouse, however, did not agree with this suggestion. He said that the increase followed immediately upon the improved dietary now given. Formerly only half a pound of bread was included with the night's lodging; now a pint of porridge is given, and this is a fairly substantial meal, for as much as a pound and a half of oatmeal is mixed with eight pints of water. On the other hand, this district has availed itself of the new and optional Casual Wards Act of 1882, by which the applicants are detained during two nights and a day.

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formerly the labour test was completed at about eleven in the morning, and the casual then released. It was argued that this was not sufficiently severe, and also that eleven was too late in the day to obtain work. The unfortunate men and women are therefore kept overnight, and then released at seven or eight on the following morning. Thus we have a clear proof that a bowl of porridge is sufficient to determine a considerable increase in the number of persons seeking shelter in the casual ward, though this little advantage is counterbalanced by two nights' imprisonment and a day's oakum-picking. The cells are not so comfortable as those occupied by ordinary criminals, yet in one single district more than a hundred persons during the course of the fourth week in January voluntarily submitted to imprisonment and hard labour for the sake of a little oatmeal porridge. What a picture of suffering and starvation these few figures afford. No wonder that illnesses due to insufficient nourishment are of frequent occurrence. Nor is it surprising that a cry should be raised in favour of organising the unemployed, and securing for them, from the State if needs be, work of a more remunerative and useful character than mere oakum-picking. For our part, without intervening in this economical problem, we can at least insist that energetic measures must be adopted to provide food where it is absolutely wanted, otherwise the public health will be gravely compromised.

THE PARASITICIDE TREATMENT OF LUPUS.

PROFESSOR WHITE, of Harvard University, starting upon the basis that lupus is a form of tuberculosis of the skin, and that it consists of chronic inflammatory changes in the tissues produced by the presence of a bacillus, has sought to found a simple and rational treatment by bringing into contact with the bacteria some substance which, without injuring the animal tissues, will destroy the life of the bacteria. Stimulated by a paper by Doutrelpoint, he has used in twelve cases bichloride of mercury ointment and lotion in the strength of 1 to 2 grains to the ounce, and in some salicylic, 2 to 4 per cent. dissolved in castor oil. He found the lesions of lupus in their early forms rapidly acted on. The tubercles quickly shrivel and become paler, and the skin returns to its normal condition in a few months. In the ulcerating forms the action of the sublimate is slower and much more uncertain. He recommends the sublimate ointment as the more effective, to be used twice daily, but in the ulcerating forms he prefers the lotion. It is necessary to be on one's guard against salivation when the remedies are used about the mouth.

FOOD REFORM AND WORKING MEN.

THE meeting of working men interested in food reform, over which Dr. Richardson was invited to preside on the 27th of last month, was a remarkable indication of the deep and intelligent interest which working men of all classes are now taking in social and scientific progress. It is true that, as the audience was selected from the employés of over forty of the great firms of the metropolis, it may be considered as intellectually above the average of those whom it represented; but anyone looking into the City and Colonial Club during the sitting might easily have supposed that the conference was being carried out by members of the professional and so-called learned bodies, rather than by men who had been all day at some handicraft industry. The speakers understood the rules of debate; they spoke with excellent knowledge of their subject, and they elicited cheers as men knowing that even the legislators at Westminster could not touch any topic more important for the national life than that on which they themselves were then and there engaged. The matter under discussion was a cheap, well-cooked, and substantial dinner for working men and school children. The proposition, made by Mr. Tallerman, whose interesting lecture was well received, was to this effect: that near all great centres of work there should be a food depôt, where food, bought at first price, should be prepared in such a form that it could be cooked in a water-bath provided at the workshops. Each man would thus receive each day one pound of food, consisting of meat, flour, and vegetables, ready to be cooked, and would have nothing more to do than take his "digester" off the water-bath, open it, and find a dinner, varied every day in the week, which would satisfy his wants, and cost him altogether threepence at most. The plan seemed to take so well that a committee of representatives from sixteen societies or firms was elected to confer on the whole scheme, to meet the members of the Farmer's Association (if that were possible), and to report to another general meeting on Wednesday next. Should the report of this committee be favourable to the scheme, an experimental trial will be carried out for one month, the results of which, whether they prove a full success, a partial success, or even a failure, will lead to a certain good by opening the way to the solution of a weighty problem, second, as the Chairman said, to none other in the present national difficulties—namely how to make our food supplies so secure that under no pinch could famine, the mother of revolt, bring forth revolution.

THE SOUTH KENSINGTON EXHIBITIONS.

IT is stated that the Inventions Exhibition has resulted in a deficit. The loss is said not to be likely to exceed £5000, but the surplus of former successes has now disappeared. We are very sorry to hear this, since the disappearance of the surplus means, we fear, the annihilation also of our hopes that the hospitals, which are so sadly in want of funds, might materially benefit by the popularity of these gigantic "shows." The electric lighting last year was a complete success, and afforded as beautiful a sight as the eye could desire to look on; the Austrian band discoursed dance music most tunefully; but if it is true that the former cost nearly £40,000 and the latter £6000, our memory of them cannot but be tinged with regret and jealousy. One-half of this sum would seem a large one to spend on recreation; how well might the other half have been devoted to the relief of suffering!

MENINGEAL AND CEREBRAL MANIFESTATIONS IN MUMPS.

As a contribution to the study of nervous disorders consecutive to acute diseases, the article by MM. Lannois and Lemoine in the current number of the *Archives de Neurologie* deserves careful attention. The authors wish to demonstrate that the occurrence of aphasia and paralysis in the course of mumps is dependent on lesions of a grave nature of the brain itself. These serious lesions are not transitory, but last a certain length of time. Dr. Monro's case, published in THE LANCET, August, 1883, is quoted. It was that of a boy, aged fifteen, who contracted mumps, and after apparently recovering was attacked with delirium, fever, and, one day later, orchitis. The fever increased to 106° on the fifth day; the pupils were dilated and insensitive to light, and there was marked constipation. The delirium increased and necessitated restraint. On the eighth day coma set in and the pulse became almost imperceptible. Although the temperature abated slightly, still the patient had several maniacal attacks. At last he returned to complete health. But he had much difficulty in walking for six months, and also considerable trouble in speaking and writing. The pupils

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remained dilated, and the patient was highly emotional. In another case aphasia and localised paralysis of the right arm lasted for more than five days. The authors detail a case in which the aphasia and right hemiplegia lasted many months. It is their province to inquire into the nature of such cerebral disorders in mumps. Whilst admitting that hyperæmia or embolism might account for some of the cases, the hypothesis of a meningo-encephalitis is suggested. Generally this inflammation leads to nothing more than a superficial irritation, that rapidly passes away after having given rise to symptoms far more formidable in appearance than in reality. At other times, though fortunately of infrequent occurrence, the congestive stage is followed by encephalitis, which accounts for the long duration of the symptoms. The local removal of blood in cases of cerebral symptoms supervening in mumps is regarded as sound treatment.

THE FINANCIAL ASPECT OF A MEDICAL LIFE.

SPEAKING generally, we may say that, in the case of medical men as of others, unsteadiness and incapacity have more to do with the production of poverty than any other cause. On the other hand, wealth is not usually to be acquired in the practice of medicine. What we may call small fortunes are not uncommon; but, as a rule, the rewards of practice are such as most men sketch into their future when they enter on a medical life—namely, a large amount of useful work not wholly remunerative, means sufficient to maintain comfort and refinement at home, and retirement in easy though not affluent circumstances. These conditions, though they do not assuredly come about without effort, ought to be attained within a term considerably short of that allowed to the life of man. Some method will doubtless be necessary to accomplish this end; but in no calling probably is its final accomplishment more to be relied upon. With this view economy must, of course, find a place among the principles of the practitioner. In some directions the practice of this virtue at the present day might, perhaps, be improved upon, though the omission where it exists is by no means an error of choice with most of our medical brethren. There are, for example, the working expenses—among them the dispensing system. Many practitioners maintain that this custom pays them. In some respects perhaps it does; but undoubtedly there are those on whom it levies a very heavy tax indeed, particularly where it adds a fruitless bounty to a bad debt. Then there is the professional carriage. This is often regarded as one of the standing requisites of practice. Here, again, a rule would seem to have been formed where the fixity of law is undesirable. We are aware that all doctors do not drive. Some very busy men do not. Nevertheless the old order on the whole prevails, and forms a needless bugbear and incubus on many a young practitioner. Medical men would do well to consider how far such working expenses are indispensable. In many cases the public would not be prejudiced by their abolition. If we pass to other spheres of economy, something may still be learnt. The practitioner, once established, who would reap from professional work its monetary due, should not be slow to begin saving. If he cannot for a time lay by much, he can at least in most cases insure his life, and we presume usually does thus much. But further, if disposed, he may, better than many, provide for some return within his own lifetime. The uncertainty of his engagements does not permit profuseness in hospitality. His life is in this respect a somewhat quiet one. It lacks something of social display, of which there is already more than enough elsewhere, but it does not therefore deny him the best culture of which human nature is capable. He may fairly avail himself of this arrangement, which he did not contrive, and live and entertain modestly. Extravagance does not seek him as it seeks some men—it has to be sought for, and his blame is the greater if it swallows up his revenue. Some medical men are very fond of watching the share market. They follow its fluctuations, buy in and sell out. If their judgment is good they may prosper, as some conspicuously have done. Others have lost as heavily. The capacity of men in this direction must necessarily depend very much on the time they can devote to their ventures. Obviously, therefore, those who are most employed in practice run some risk in the market. Their safest plan would be to act like keepers of a trust, to invest in a well-known and approved stock, and there let their money lie. These few hints appear to us to indicate in some sort the plan of financial development which belongs to the life of the practitioner of medicine.

SHOW-CHILDREN IN THE STREETS.

WE have long been accustomed to hear that mortality amongst young children is in great measure the result of parental neglect or mismanagement. The saying appears almost too trite for repetition, were it not that examples of its truth so frequently force themselves upon our notice and call for practical and exemplary correction. The present season contributes its share of this kind of cruelty. Many will have observed with regret that the practice of exposing infants for begging purposes continues to disgrace our streets. Infants and children generally are notoriously less capable of resisting cold and wet than adults. A bronchial cough is one of their most fatal troubles, yet here we find these begging children scantily clad, and out at all hours, and in any kind of weather, in order to excite the charity of passers by in favour of those who lead them about and live upon their misery. How often the child's companion is a parent, or how often both are equally homeless, no one can say. Almost any shelter were better than the street. In very many cases there is reason to believe that the shivering singing child or carried baby is a castaway, nobody's offspring, and anyone's means of livelihood for the day, till its own days are numbered. It is somewhat difficult to see how any one plan would meet every form of this abuse of infant life. The exercise of individual charity would only augment the evil. The wholesale consignment of such children to homes or workhouses might not be much happier in its results. Probably the best plan, however, would be to allow the police considerable discretionary power to take in charge and transfer to the workhouse or to charitable institutions infants who are thus exposed.

HEREDITARY GENIUS.

MR. GALTON, in an address lately delivered to the Anthropological Society, gives the results of his inquiries into hereditary stature and hereditary genius. He proposes a scheme for the formation of an Upper House of Legislature in Utopia on purely scientific principles; and, in the evolution of this scheme, remarks that men who earn distinction of a high but subordinate rank to that of the nobility, and whose wives have hereditary qualifications, should transmit those qualifications to their children. He calculates—roughly and very doubtfully, because many things would have to be considered—that there would be about twelve times as many persons hereditarily qualified to be candidates for election as there would be seats to fill. A considerable proportion of these would be nephews, whom he would be sorry to omit, as they are twice as near in kinship as grandsons. Setting aside the question of the closeness of relationship, which seems open to discussion, it is natural to ask, What would happen if the father of the nephew happened to marry a woman without hereditary qualifica-

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tions? would not the strain be detected? or might it not, if the selection were injudicious, be actually deteriorated? We have not the text of Mr. Galton's address before us, but imagine that what he desired to impress on his hearers was that those who possess unusual abilities in any direction would do well to select for helpmates those who are healthy and strong, and possess an average if not an unusual degree of intelligence. With careful breeding, high mental qualifications may descend with such physical qualifications as long limbs, powerful muscles, or large and active brains.

A RUSSIAN PRACTITIONER PUNISHED FOR REFUSAL TO ATTEND.

WHEN a doctor in this country ventures to excuse himself from attending to some case, perhaps at a long distance, he runs the chance of a so-called censure by a coroner's jury, which he, knowing that in reality he has committed no fault, generally manages to bear without much loss of dignity. In Russia, however, a medical man renders himself liable to a much more serious punishment than a mere barren vote of censure. A short time since, a practitioner in Kieff, long past the prime of life and by no means in good health, received a visit from a lady requesting his immediate attendance at a confinement some five or six miles off. The lady stated that the patient was a multipara, and that a doctor who was with her had twice attempted to apply the forceps, but had been unsuccessful, and wished another doctor to be fetched to perforate the head. Two assistants in the obstetric clinic had been applied to, and they had stated that the instruments were locked up and the professor had the key! Two other practitioners had also excused themselves, giving as a reason their want of the necessary instruments. The elderly practitioner did not refuse to go, but mentioned that his fee would be 25 roubles (£2 10*s.*). To this the lady made no objection, but merely remarked that she would make inquiries. She did not, however, return, having found another practitioner, who visited the patient and perforated. Shortly afterwards an article appeared in a local newspaper giving a distorted version of the facts. The consequence was that the elderly practitioner was prosecuted in a court of justice and sentenced to eight days' arrest in his house and a fine of 5 roubles (10*s.*). Against this he appealed, his counsel urging on his behalf that the circumstances were not such as the law contemplates when it compels a doctor to attend to dangerous cases; that he, not receiving any written communication from the doctor who advised perforation, did not clearly understand the condition of things; that plenty of other medical men were available; that he did not refuse to attend; and, finally, that the law did not insist on a practitioner going to a case where another qualified man was already in charge. Notwithstanding all this, the higher court increased the sentence to fourteen days' arrest at the guardhouse, 5 roubles (10*s.*) fine, and the expenses of the trial.

QUACKS AND THE PUBLIC.

A CONTEMPORARY, discussing the leading characteristic of quacks of all classes in their relation to the public, justly points out that it is the pertinacity of their profession of ability to cure. "The quack has his pills and ointments, warranted (if taken in sufficient quantity) to restore health and vigour to the dying; and the ignorant and cowardly pin their faith on him, spurning the counsels that might assuage their sufferings, and consume the noxious drugs that precipitate their fate." This is a *fact* of which the orthodox and educated practitioner of medicine has daily evidence, of the most conclusive strength, and often driven home with painful force. We quite admit that there is sometimes too great a readiness to accept the hypothesis of incurability; but, speaking generally, the public are losers by the persistence with which they pursue the phantom of recovery, running from doctor to doctor, only to undergo new experiments and court fresh disappointments, rather than take prompt and full advantage of the practised skill of the experienced family counsellor in devising a method of minimising the injurious effect of their maladies, and finding a *modus vivendi* with disease. There is a spirit of quackery abroad in the profession of physic, as well as one that prevails outside and hovers on its borders. We do not know which is the most obstructive to true progress and most baneful in its influence on the health of the population—the quackery that professes to cure by irregular means, or the quackery that affects to be able to accomplish by accepted methods that which it is perfectly well known they are inadequate to achieve.

INTRA-CRANIAL TUMOURS AT THE PATHOLOGICAL SOCIETY.

A WONDERFUL array of cerebral tumours was exhibited before the crowded meeting of the Pathological Society. The specimens illustrated the tendency of cortical gliomata to remain limited to the grey matter, the opposite infiltrating characters of these tumours in the white substance, the rarity with which it is possible to localise with certainty the site of tumours, the difficulty of determining their size, and the extent to which they infiltrate their surroundings; the vast variety of clinical phenomena, and the variations in their anatomical and histological structure. The most conspicuous expression of opinion on the advisability or possibility of operating with a view to the removal of tumours was that essayed by Dr. Goodhart, who considered that the number of tumours which could with any degree of probability of success be regarded as suitable for surgical interference was very limited. It is needless to say that nothing of a novel nature was forthcoming, but the *tout ensemble* of the collection was effective and successful. The exhibition is to be continued at the next meeting of the Society.

THE ITALIAN HOSPITAL AT CONSTANTINOPLE.

SINCE Italy became a united kingdom she has revived that interest in the East which, during the supremacy of the Venetian Republic so profoundly affected her policy. In 1876 at Constantinople she established a hospital in the Tophané quarter, with an outlook on the sea, covering an area of some 3800 metres, and costing her about 300,000 fr. The edifice has two floors over the ground floor and eight windows in the façade. A hospital-villa would be its proper description, with its elegant aspect, its green shutters, and its verdant garden to the front. Two physicians are attached to it—Dr. Salvator, with 6000 fr., and his assistant, with 2000 fr., salary. Fourteen Sisters of Charity, with four male helps, are in attendance on the patients, and their chapel is quite a triumph of bijou architecture. Contagious maladies have six rooms reserved for them. On the first floor a large hall contains ten beds for females and three private rooms; on the second floor another hall has twenty beds for males and five private rooms; and there is also a ward with twelve beds for syphilitic cases. The two higher floors are reached by a lift, and provided with dressing-rooms and waterclosets, all in excellent order. Much care has been bestowed—successfully bestowed—on the ventilation, and a constant current of pure water, both fresh and salt, circulates through the building. Italian patients are charged six francs a day for private rooms, while foreigners pay eight francs, and in the common wards three francs and four francs. In 1884 the hospital received 309 male and 41 female patients, with

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14·610 days for the former and 5·376 for the latter. There were 28 deaths. The paying patients in 1884 yielded 9600 francs, or about a third of the expenditure, not including the medical treatment. The rest is covered by the Ministry of Foreign Affairs. Adjacent to the hospital are a building for the insane capable of holding twenty patients, and the consular prison.

MEDICAL SCHOOLS AND STUDENTS IN THE UNITED STATES.

THE Illinois State Board of Health has recently issued a pamphlet entitled "Medical Education and Medical Colleges in the United States and Canada, 1765-1885," in which the most suggestive facts revealed by tables and data are: First, that the number of medical colleges has not increased during the past year; secondly, that the number of medical students and of medical graduates is decreasing; and thirdly, that there is a more marked uniformity in the requirements of colleges. There are still 128 institutions for medical instruction in the United States and Canada, the same aggregate as at the date of the last report. But there were 760 less students in attendance upon, and 273 less graduates from, the sessions of 1884-85, than upon and from the sessions of 1883-84. In the United States there were 953 fewer students and 278 fewer graduates; in Canada there were 176 more students and 5 more graduates. The schools are classified as follows: regular schools, 101; homœopathic 13; eclectic, 11; physio-medical, 1; and miscellaneous or mixed schools, 2. The number of medical students in 1882-83 was 13,088; in 1883-84, 12,762; in 1884-85, 12,002. In 1881-82 the number of medical graduates was 4555; in 1882-83, 4215; in 1883-84, 4101; and in 1884-85 only 3831. The increase in past years in students is most conspicuous in the smaller provincial schools; while in the large cities—Boston, New York, Philadelphia, Baltimore, Cincinnati, Chicago, New Orleans, and St. Louis—there has generally been a decrease. Thus the number of matriculants in medical schools in New York has fallen from 2209 in 1880-81 to 1826 in 1884-85. This fact may be interpreted in two ways. It may either mean that the metropolitan schools are getting more rigid in their requirements, or that the provincial schools are getting to be better educational institutions. We incline to the latter belief. The decrease in the number of graduates, noted above, is most satisfactory, indicating as it does a recognition on the part of the rising generation of the fact that in the United States, of all professions the medical is and for years has been the most overcrowded.

OCULAR TRAUMATISM AND FATAL MENINGITIS.

A PAPER read by Mr. Nettleship at the Ophthalmological Society deserves attention, not only from the gravity of the disease with which it dealt, but also from the obscurity of the pathology and the interest to general medicine of fatal meningitis following upon ocular mischief. The combination of traumatic diseases of the eye with meningitis is said to be of rare occurrence, and for this statement we have the evidence of all practical ophthalmic surgeons. The rarity with which the association is met, an association having also a time relation—for the eye injury precedes the meningitis,—naturally makes the logical mind suggest whether there is any causal relationship between the two phenomena, or whether we have to do with a mere coincidence. But tetanus is a rare complication of wounds; yet it is generally agreed that some close connexion exists between the nerve disturbance and the injury. Strictly logical methods would not allow us to deny altogether the impossibility of the idiopathic development either of meningitis or tetanus, even in cases where a traumatism exists. It would be easy to infer that the meningitis or the tetanus was related to the wound, even though it be impossible to state in what circumstances the wound with a sequel differed from the wound that healed without subsequent mischief. Guided by the light of modern researches on infectivity, we should probably adopt the view that the presence of some rare infective agent made all the difference.

PROPOSED ASSOCIATION OF THOSE QUALIFIED IN SANITARY SCIENCE.

MR. FOTHERBY writes, from St. George's Infirmary, Fulham-road, proposing the formation of an association of medical men who are specially qualified in sanitary science. The objects of the association would be: (*a*) To further the legitimate interests of all medical men who at the cost of much labour and expense have obtained a sanitary qualification; (*b*) to obtain a better general recognition of these degrees and certificates; and (*c*) to be a bond of social and professional union between all duly qualified practitioners of State medicine. We fully recognise the need for better recognition of the value of the special knowledge which is implied by these certificates, and the force of the arguments of our correspondent; but we doubt if great advantage would arise from the formation of another society. There are already several throughout the country devoted to furthering the interests of public health and of those who practise this branch of the profession, notably the Society of Medical Officers of Health; and we would suggest for the consideration of our correspondent whether he would not be better able to attain his object by utilising the already existing organisations than by the creation of a new one.

EPILEPSY AND OPTIC NEURITIS.

AT first sight the title of M. Galezowski's communication to the Académie de Médecine led us to expect a revelation somewhat similar to that experienced when Dr. Gowers asserted that chorea and anæmia may be efficient causes of optic neuritis. The matter, though interesting, is not so remarkable as that. Galezowski has recorded a remarkable case of epilepsy that supervened six years after a wound of an eye, and may with considerable show of reason be ascribed to morbid changes resulting in the stump of the eye. The useless eye had been reduced to the condition of a stump by amputation of the anterior hemisphere of the globe. Six years after the accident the sound eye became the seat of an optic neuritis, and at the same time the patient developed the typical seizures of epilepsy. Removal of the ocular stump was followed by perfect restoration to health, the epilepsy ceasing and the other eye recovering. Galezowski believes that sympathetic ophthalmitis is the result of the spread of disease along the vascular walls, probably by means of the vaso-motor nerves, thrombosis and sympathetic endarteritis being the consequence.

AN AMENDE HONORABLE.

AT the meeting of the St. Pancras vestry on Wednesday, at which the report of Mr. Shirley Murphy, the late medical officer of health for the parish, was presented and discussed, a graceful acknowledgment of the services of that gentleman during his tenure of office was made. Mr. Nathan Robinson proposed, and Mr. Churchwarden Dixon seconded, that the report be received and adopted, and that the best thanks of the vestry be engrossed on vellum, sealed with the official seal, and presented to Mr. Murphy. The significance of this act on the part of the vestry was enhanced by the remarks with which the proposal was accompanied, conveying as they did an admission of error, if not of something worse, in the dealings of the parish authorities with their late medical officer.

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MEDICAL RISKS FROM INFECTIOUS DISEASES.

ONE of the most interesting features in Dr. Ogle's paper on Mortality in the Medical Profession, recently read before the Royal Medical and Chirurgical Society, is the comparison between the mortality of medical men from the principal infectious diseases, with the average mortality from the same causes among all males. That the mortality in the medical profession from these diseases should show a marked excess can cause no surprise to those who consider the constant risk of infection to which it is exposed. Dr. Ogle's figures are, however, mainly interesting from the exceptional position held by small-pox among these diseases. The death-rate of medical men aged over twenty years from scarlet fever is nearly four times the average rate of all males of the same ages; the medical rate from typhus is more than twice, from diphtheria nearly four times, and from malarial fever nearly five times the average rates for males of similar ages. Medical men are also liable to a markedly excessive rate from enteric fever and from erysipelas. The death-rate of medical men from small-pox, however, is considerably less than a fifth of the rate among all males. Dr. Ogle suggests the only possible explanation of this remarkable contrast between the relative incidence of these infectious diseases on medical practitioners when he attributes their low death-rate from small-pox to more general and better vaccination and revaccination; and their excessive death-rate from the other diseases to the fact that no prophylactic is known wherewith to counteract, as in the case of small-pox, their exceptional risks of infection. Dr. Glover, in the discussion which followed the reading of Dr. Ogle's paper, expressed disappointment that the profession did not show complete immunity from fatal small-pox, and it is well therefore to point out that the rate of 13 deaths of medical men from small-pox per 1,000,000 living implies that during the ten years 1873-82 only 2 deaths from this cause, out of 3865 deaths from all causes, occurred in the profession in England and Wales, numbering about 15,000. There were in England and Wales during those ten years 19,377 deaths from small-pox, and it is fair to assume that one or more medical practitioners were brought into personal contact with each of these deceased persons. Bearing these facts in mind, the deaths of but 2 medical men from this disease during these ten years induces overpowering evidence both of the value of vaccination as a protection from small-pox, and of its general and effectual adoption by the profession.

MOSQUITOES IN MEXICO.

THE city and environs of Mexico suffered so severely during the early part of last year from an invasion of mosquitoes in unwonted numbers that the Pedro Escobedo Medical Society appointed a committee to investigate the matter, and advise as to the measures which should be taken for the purpose of freeing the country as far as possible of these insect pests. The report of this committee is printed *in extenso* in the organ of the Society, entitled *El Observador Médico*. This report does not reveal any new points in the life history of the mosquito, but it recommends that, Mexico being surrounded by marshes and lakes full of putrefying matter which form admirable breeding-grounds for successive generations of mosquitoes, measures should be taken for draining the inundated localities in the valley of Mexico, observing that the most suitable time for carrying out work of this kind is undoubtedly the winter season, and requesting the Medical Society, if it approve, to lay the report before the municipal authority recommending immediate action. It is to be hoped that the *Ayuntamiento* will pay more attention to this memorial than is generally given by the local civic authorities in Central and South American States to hygienic measures, however warmly advocated by their medical faculties. If Mexico and other cities like it were really well drained, the inhabitants would probably find a diminution of many evils worse than mosquito bites, though even these, the committee were informed, had caused the deaths of children.

THE INCUBATION PERIOD OF VARIOLA.

PROFESSOR H. EICHORST, of Zurich, reports three cases in which the duration of the incubation of small-pox seems very clearly ascertained; and in each instance the time proved to be rather more than nine days. The first was the case of Dr. Kuhn, who travelled to Zurich to visit his father, who was suffering from the disease. Dr. Kuhn had not been in contact with small-pox until his interview with his father at 9 A.M. on Oct. 20th. The interview lasted three minutes, but there was no contact with the patient; yet in spite of this and as thorough a disinfection as possible, the son fell ill of small-pox on Oct. 29th, or nine days after exposure. The two other cases were those of medical students attending the small-pox hospital on one occasion only; they had both been revaccinated without effect, one within three weeks of exposure to contagion, which was accurately noted. In each case the symptoms of the disease appeared in a few hours over nine days from the date of exposure. Professor Eichorst says that he has treated more than 300 cases of small-pox in the last two years; but in no other cases than the above has he been enabled to determine with certainty the period of incubation; commonly this is assigned to twelve or fourteen days; but although variations may exist, no observations are trustworthy that admit of any possible fallacy.

MEDICAL EDUCATION IN RUSSIA.

IN England the cost of medical education is usually borne by the students' parents. In Russia, however, medical students are to a very large extent supported and educated by the Government, under not a mere understanding, but a well-defined pledge, to serve in any capacity that may be fixed for a certain number of years after qualification. This pledge is not uncommonly felt to be a burden, and a number of medical men at present under the obligation of serving the State have petitioned to be absolved from it. The *Pravitelstvenui Vestnik*, or "Government Messenger," has just published a ministerial hint to these gentlemen that only the cases of those who have appended to their petitions receipts for the return of the Imperial money expended on their education can possibly be considered.

THE SANITARY STATE OF CAIRO.

THE Egyptian newspapers are complaining loudly of the sanitary state of Cairo with regard both to its water-supply and the means of drainage. Briefly stated, the former is polluted, and as to the latter, there is nothing which deserves the name of a system of sewerage and drainage. The water-supply is derived from a stagnant canal, which at times emits abominable odours from human filth; it is filtered through sand excavated from an old cemetery, and there is strong reason to believe that further impurities reach it on its way to the consumers. Great difficulty is anticipated in securing an improvement in this supply, and this because, as alleged, the President of the Council of the Ministry is president of the water company, and derives a revenue from it. The drainage question has long been under discussion, but it is very much to be feared that, unless considerable pressure is brought to bear upon the authorities, the solution of the problem will be deferred to the Greek Kalends. In the

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meantime the mortality of Cairo has reached a point which has very naturally caused alarm. It is just about three or four times as great as that of London, being at the rate of 60 to 80 per 1000. And not only so, but it is largely due to causes which result from the use of foul water or from the breathing of foul air. Typhoid fever is very prevalent, and so also are a number of other forms of fever which are less distinctly defined; and this prevalence is in striking contrast to the comparative absence of such diseases at Boolak, where the inhabitants derive their water direct from the Nile. Diphtheria, too, is very fatal; also a hybrid disease resembling cholera has been prevalent all the summer, and still continues. The general influence of these conditions upon the population of Cairo may be judged by the fact that for the last quarter of a century the deaths have exceeded the births by 37,000. And yet the climate is fine, the inhabitants are sober, and the waters of the Nile should conduce to healthiness. Dr. Grant Bey has taken an active part in pointing out the existing shortcomings; and it is to be hoped that his protests will receive the attention they demand.

STRAY MISSILES.

THE perils of the streets are considerably increased if to the ordinary ones is added that of stray missiles, carelessly or wantonly discharged. On January 26th excision of the right eye was performed at St. Thomas's Hospital for wound of the globe received two days previously. The patient, a man aged twenty-three, was walking, about 8.30 P.M., in the Lower Richmond-road, Putney, when he felt something strike him in the eye, the sight of which was immediately lost. He did not see anyone nor hear any unusual noise, and thought that he had been struck by a stone. On examination of the eye after removal, it was found to contain one of those leaden pellets or shots usually discharged from an air saloon pistol. It is probable that it will not be known who discharged the pellet, but we would try to impress upon the public the necessity of greater care in the use of these silent but dangerous toys. Had the pistol been discharged at a shorter range, the man would probably have lost his life. As it is, he is rendered ineligible for service in any of Her Majesty's forces, and has had to submit to a serious mutilation.

THE METROPOLITAN ASYLUMS BOARD.

THE Metropolitan Asylums Board at their last meeting, which was held on the 30th ult., resolved to take steps for the closing of the North-Western Hospital and for the reduction of the staff; and Sir Edmund Hay Currie, who presented a report from the General Purposes Committee, which contained a recommendation that this course should be adopted, commented on the fact that, with the exception of the autumn of the year 1879, London had not been so free from infectious disease for the last fifty years. During the fortnight preceding only six cases of small-pox had occurred in the metropolis, and these had been taken to the ships at Long Reach, where there were only twenty-eight patients under treatment.

"CURE FOR BLINDNESS."

A PARAGRAPH has appeared in several of the papers that a Dr. Emile Martin has invented an apparatus which will enable the blind to see. The mechanism, so the statement runs, is of platinum, and can be affixed without pain, so as to excite in the optic nerve the sensation of light and the power of vision. So high is the opinion the Paris Academy of Medicine has formed, *primâ facie*, of Dr. Martin's invention, that a committee of its members is reported to be now engaged in practically testing its merits. It is to be feared that the testing will end in disappointment. The word "blind" is very comprehensive. Will Dr. Martin's invention render the cornea transparent when opaque, and thus cure half the blind at a stroke? or will it restore the functions of the atrophic nerve with cupped disc too often seen in chronic glaucoma? or is it only a modification of the ordinary treatment by electricity?

SMALL-POX IN ONTARIO.

CONSIDERABLE efforts have been made by the Board of Health of Ontario to control the spread of small-pox which was recently prevalent in that province. Special regulations have been issued as to dealing with persons discovered to be infected with the disease, the systematic inspection of passengers, the performance of vaccination, and the conveyance of articles suspected of being infected. A codification of the laws relating to compulsory vaccination has also been prepared and addressed to local boards of health, medical officers of health, and members of the medical profession of Ontario.

THE HYPODERMIC SYRINGE AS A MILK-TESTER.

AN ordinary hypodermic syringe may be used, according to Dr. Hélot, for estimating the quality of human milk. He finds that the number of drops from the syringe of good milk are thirty-five or thirty-six to make up the same volume that can be dropped in thirty drops of distilled water. Similarly, when the milk is very poor the same volume can be dropped in thirty-three drops, and when extremely rich as many as thirty-eight drops are required.

FOREIGN MEDICAL APPOINTMENTS.

COUNT MAGAVLI, Doctor of Medicine and oculist to the Imperial Court, has been appointed a member of the Medical Council of the Russian Empire. Dr. A. J. Danielevski, formerly of Kazan, has been appointed Professor of Physiological Chemistry in the University of Kharkoff.

THE editors of the *Liverpool Medico-Chirurgical Journal* have introduced a new and useful department into their columns, in the form of half-yearly reports upon advances in medicine and surgery, the new remedies and methods of treatment noticed being first investigated and approved by a committee consisting of Dr. W. Alexander, Dr. James Barr, Dr. J. E. Burton, Dr. W. Carter, and Mr. R. Harrison. The current number of the journal contains two such reports—one on Antipyretics, drawn up by Dr. Barr, and the other on Antiseptics, by Dr. Alexander.

SEVERAL cases of scarlet fever have occurred in Canterbury, and it is alleged that the disease originated through the drinking of infected milk. In consequence of these reports, the dairies sub-committee of the Town Council have made a raid upon the dairies and milk-shops in the city, some of which have been found to be in a highly insanitary condition.

MR. WHEELHOUSE, of Leeds, has issued as a small tract, bearing the title "The Special Temptations of Early Life," the substance of the statement he brought before the Ripon Diocesan Conference last October. The pamphlet ought to be bought and read by heads of families and of educational establishments far and wide.

THE Special Board for Medicine at Cambridge University have issued a report recommending that papers on elementary physics should be introduced into the previous examination, instead of, or in addition to, the present examination in elementary mechanics.

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THE new story by "Pen Oliver" (Sir Henry Thompson) will bear the title of "All But: a Chronicle of Luxenford Life." It will contain twenty-one miniature illustrations by the author, and will be published almost immediately by Messrs. Kegan Paul and Co.

THE medical officer of health of Stourbridge has reported to his Sanitary Authority the existence of a very severe epidemic of measles, necessitating the closing for a time of the elementary and Sunday schools.

PROFESSOR FILEHNE, of Erlangen, has been nominated Professor of Pharmacology at Breslau. The clinical chair at the University of Erlangen has been apportioned between Professors Strümpell and Penzoldt.

DR. HENRY MAUDSLEY is reported to be busy over a new volume of psychological research. It will bear the title "Natural Causes and Supernatural Seemings."

HEALTH OF THE NAVY.

THE Statistical Report on the Health of the Navy for the year 1884 shows the average force afloat, at home and abroad, to have been 43,000 officers and men. The cases of disease and injury among them were in the ratio of 1158, the deaths of 9·0, the number invalided of 49·34, and the mean daily sick of 51·61 per 1000. These ratios are all considerably higher than in the preceding year; the sick- and death-rates closely approximate the average of the last ten years, but there has been an increase in the proportion of invalids and of mean daily sick. The excess of sickness compared with 1883 has been chiefly from fevers and diseases of the digestive system, and in the deaths from fevers and injuries; the latter included 50 men drowned by the wreck of the *Wasp* on the Irish Coast. The following table shows the relative sickness and mortality of the different naval stations:—

RATIO PER 1000 OF AVERAGE STRENGTH.

	Cases.	Deaths from		Invalided.	Mean sick.
		Disease.	Injury.		
Home	902	4·30	3·93	40·54	51·85
Mediterranean	1431	5·75	1·24	81·49	52·39
North America and West Indies	992	2·48	1·23	22·31	35·06
S.E. Coast of America	1073	4·87	—	24·39	31·14
Pacific	997	4·0	0·66	26·0	39·95
West Africa and Cape	1117	5·72	1·42	36·42	38·92
East Indies	1741	15·03	8·29	75·12	53·11
China	1541	5·40	2·40	20·12	50·05
Australia	1003	3·31	3·30	23·14	44·70
Irregular	1422	10·51	3·62	77·75	66·19
	1158	5·84	3·16	49·34	51·61

Omitting the "irregular force," the East Indian station furnished the highest proportion of cases, deaths, invalids, and mean sick, upwards of one-fourth of these having been due to fevers, which were nearly twice as prevalent, and caused more than twice as many deaths and thrice as many invalids, as on the average of the last ten years. The *Euryalus* had 61 cases of remittent fever, occurring chiefly at Massowah, and of these 8 died; the *Briton* had 88 cases at Bombay, and their occurrence was believed to be connected with the insanitary condition of the *Auckland*, in which the crew were hulked while their ship was in dock. The *Auckland* has since been condemned as unfit for further use as a receiving hulk, and has been withdrawn from the service. The *Osprey* had 78 cases of remittent fever while cruising off Zanzibar and off the coast of Madagascar, and the *Tourmaline* had 47 while employed in the same service. There were only 4 cases of enteric fever reported on this station, all in different ships, but 3 of them terminated fatally. No cases of cholera occurred during the year. Thirteen out of the 45 deaths in this portion of the force were from wounds received in action among the men of the Naval Brigade employed in the Soudan, 3 at El Teb and 10 at Tamai; 9 of the latter were by spear and sword wounds, the others by gunshot. There were also 3 deaths from fractured skull by falls—2 from aloft, 1 into the hold. Next to the East Indies the China station had the highest proportion of cases, which, however, differed very little from the average of the last ten years, while the deaths were about 2 per 1000 under it. Diseases of the cellular tissue and cutaneous system, chiefly phlegmon, abscess, and ulcer, furnished one-fifth of the cases. Fever of the continued type was prevalent at Amoy and at Tamsui in Formosa. Ten cases of enteric fever were returned, 4 of them at Nagasaki and 2 at Hankow; the former were attributed to Japanese-made lemonade, partaken of while on leave on shore. Five cases of cholera occurred, 4 at Amoy and 1 at Shanghai, and 4 of them died; they are believed, like the enteric fever cases, to have been the result of drinking lemonade. "The exceedingly dangerous character of the aerated waters made in China and Japan ought to be constantly kept in view on the station, and their consumption prevented as much as possible."

The Mediterranean fleet had a higher ratio of cases than usual, chiefly due to fevers, but the deaths, exclusive of injuries, very closely approximated the average. The prevalence of fevers was attributed to the insanitary state of the harbour at Malta, to the turning up of the soil in the formation of a new dock, and the extensive drainage-works for the town of Valetta.

On the African station fevers were much above the average, but without any fatal case. The increase was due in a great measure to the occurrence of remittent fever on board the *Alecto*, at Akassa and Anamba creeks on the Niger, two very malarious localities.

The returns for the home station show a marked increase in the prevalence of syphilis and gonorrhœa; in most of the other classes of disease, there has been a decrease. The deaths were above the average, owing to the loss of 50 men in the *Wasp*. Excluding deaths from injuries, the ratio amounts only to 4·30 per 1000 of the strength. The returns afford important evidence of the value of isolation in infectious diseases: 34 cases of measles are returned, of which 23 occurred in the training-ships, generally in boys returning from leave, or contracted in the ports where the ships are stationed. "There was nothing in the form of an epidemic, the cases having been at once isolated, and effectual precautions taken against infection." In like manner with scarlet fever, of which 20 cases occurred, "each case appears to have been contracted singly during absence from the ship, and no secondary infection on board took place." There were 29 cases, and 8 deaths of enteric fever recorded; no case "could be ascribed to defective sanitation on board ship; nor was there any spread of the disease on board from secondary infection.....In almost every instance early removal from the ship for treatment in a hospital or sick quarters was resorted to."

The irregular force had very high ratios of sickness and mortality, considerably above the average of preceding years if the deaths from injuries are omitted. The excess of the cases was chiefly due to the prevalence of fever and of dysentery and diarrhœa among the men of the Naval Brigade

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and the Royal Marine Battalion employed in the Soudan, and especially at Suakim. Five cases of enteric fever with two deaths occurred in the Naval Brigade among the men of the Nile expedition, and seventeen cases with nine deaths among the Royal Marines at Suakim. Remittent fever and diarrhœa were also very prevalent there. The deaths from fever amounted to 5·16 per 1000 of the strength, or upwards of one-third of the whole; and those by injuries to 3·61 per 1000, of which 1·20 were received in action. Of 21 deaths from injuries, 7 were caused by wounds received in action, 4 at El Teb and 3 at Tamai.

The strength of the Royal Marines at headquarters in England, not included in the general return, was 5060. The cases of sickness among them amounted to 1029 per 1000, the deaths to 3·35, the discharges by invaliding to 53·55, and the mean sick to 56·25. These are considerably lower than in 1883, but, except the deaths, they are all higher than in the force afloat employed on the home station.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

On the Pollution of the River Ure.—Mr. Sweeting, who for some time past has been acting as a medical inspector to the Local Government Board, has submitted to that Board a very comprehensive report on the relation of the river Ure to the drainage and water-supply of Ripon and other places on its banks. The Ure rises on the northern borders of the North Riding of Yorkshire from the western slope of the great Shunnor Fell, by the influence of numerous streamlets which descend from the millstone grit of this mountainous region. It passes in its course through several sanitary districts, being joined by numerous streamlets of various size, and, passing through Ripon, flows on to Boroughbridge, just below which it is joined by the Swale and becomes the Ouse. The course of the river as it passes each inhabited place, and in so far as it relates to the different sanitary districts concerned, is given in much detail, and at each point where the river receives any sewage matter or other pollution, whether directly or indirectly, the local circumstances are fully entered into. From its source to its termination in the Ouse, it is directly polluted by twelve different places, the more important of the pollutions being at Masham, Ripon, and Boroughbridge. Other places pollute it more or less indirectly, and at one place the stream is made a receptacle for ashes. Ripon is the only populous town on the Ure which takes water directly from the river for drinking purposes, although local wells elsewhere—as, for example, at Boroughbridge—must almost of necessity be at times affected, as by the flooding of the river or its tributaries. Ripon lies below Masham, where a very substantial pollution of sewage is effected, and below three other places more or less implicated in the same way. As yet chemistry has not discovered any definite evidence that the water-supply of the city constitutes a real source of danger, but the relations of Ripon to the Ure must be regarded as serious in this respect. Ripon pours all its sewage into the river, and though the water-supply taken directly from the stream, more than one mile above the sewage outlet, does not appear at present to be suffering in any marked respect, yet the position of the intake is not free from objection; and there is always the danger of the entrance of specific particulate matter from places above Ripon. But this town is not the only place that is implicated in so far as the domestic water-supply is concerned. Richmond sends the sewage of nearly 8000 people into the Ure; Bedale sends its sewage in; and fifteen miles below Boroughbridge, where the river has becomes the Quse, York draws its supply from the latter river. It is not long since we had occasion to comment on an epidemic of enteric fever in York, reports on the prevalence having been prepared by Dr. Airy and Mr. Parkes; and though there appeared good grounds for [illegible] to other more obvious causes their the use of the Ouse water, yet the water-supply is not the less one that can only be regarded with suspicion. By the time the Ouse reaches York it has received not only all the impurities of the Ure, but, in addition, those of the Swale, and the sum total is unquestionably considerable. The contamination is largely due to fæcal matter, and hence numerous opportunities are afforded for the contamination of the water of the city by specific disease-elements. Whatever grounds of comfort the sanitary authorities of Ripon and York may find in the results of chemical analysis of their water-supplies, there remains the great fact that the sources of supply are largely contaminated by human excreta and other filth, and it behoves the sanitary authorities of both cities to consider earnestly how far they can regard such a water-service as a proper one for their inhabitants to consume. Mr. Sweeting's report, taking as it does a comprehensive glance of an important river basin in its bearing on the sanitary circumstances of the populations affected by it, has considerable local interest, and many of the questions he raises are also of wider than mere local concern.

On Diphtheria in the Rural District of Erpingham.—Dr. Gresswell, also one of the occasional inspectors of the Local Government Board, has presented to that Board another of a series of reports on diphtheria, the affected locality being Erpingham, in the north-east of Norfolk. There was a great epidemic of this disease in Erpingham in 1858, and fatal attacks have been off and on present there ever since; but in 1883 and 1884 there was a recrudescence, 28 diphtheria deaths being registered in addition to 4 from "croup," and a few others from allied throat affections. The population is now about 20,250, and the insanitary conditions discovered in the district raise a suspicion that it has undergone but little improvement during the twenty or thirty years since the first pestilential prevalence to the present date, and there seem grounds for believing that the persistence of diphtheria is intimately bound up with, if not directly traceable to, these insanitary conditions. One of the most interesting points discussed by Dr. Gresswell relates to the recurrence of diphtheria in particular individuals; and as to this, it is pointed out that an attack of the disease often appears to leave the tonsils in a condition in which they are, under the influence of cold and damp, particularly likely to put on a condition of activity and reproductiveness; and that the disease, dormant for a long time, is thus reproduced in an infective form. The poisons of syphilis, of ague, of relapsing fever, and perhaps of scarlet and typhoid fevers, are referred to as similarly causing recrudescences, and it is added that analogy furnished in the manifestations of cryptogamic protoplasm is in its favour. The conditions essential to this new life of diphtheria infection lying dormant in the individual are next discussed, and it is pointed out how certain damp, ill-ventilated, and mouldy dwellings may almost be regarded as "abodes" or "cultivating-grounds" for diphtheria. Whether these places supply the whole conditions requisite for maintenance of the material cause of diphtheria, or whether the persons themselves become, by reason of sustained habitation in such dwellings, exceptionally suitable "hosts" for the maintenance of the virus, is a matter on which Dr. Gresswell is not prepared as yet to express an opinion. The report is thoughtfully prepared, and it affords many highly suggestive hints which aim at explaining some of the most obscure points in connexion with the spread and recrudescence of diphtheria.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 6169 births and 3850 deaths were registered during the week ending January 30th. The annual death-rate in these towns, which had been equal to 23·8 and 22·4 per 1000 in the preceding two weeks, further declined last week to 22·1. During the first four weeks of the current quarter the death-rate in these towns averaged 22·7 per 1000, which was 1·9 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 14·4 in Hull, 15·3 in Leicester, 15·9 in Derby, and 17·5 in Brighton. The rates in the other towns ranged upwards to 26·6 in Norwich and Plymouth, 29·6 in Blackburn, and 33·0 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had declined in the preceding four weeks from 497 to 407, further fell last week to 360; they included 168 from whooping-cough, 75 from measles, 31 from diarrhœa, 29 from scarlet fever, 28

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from "fever" (principally enteric), 23 from diphtheria, and 6 from small-pox. No death from any of these zymotic diseases was recorded last week in Wolverhampton, Derby, or Huddersfield; whereas they caused the highest death-rates in Portsmouth, Plymouth, Nottingham, and Blackburn. The greatest mortality from whooping-cough occurred in London, Portsmouth, and Bolton; from measles in Nottingham, Blackburn, and Plymouth; from scarlet fever in Birkenhead; and from "fever" in Newcastle-upon-Tyne and Preston. The 23 deaths from diphtheria in the twenty-eight towns included 13 in London, 3 in Liverpool, and 2 in Portsmouth. Small-pox caused but 1 death among the residents of London and its outer ring, 5 in Liverpool, and 1 in Nottingham. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had declined in the preceding eleven weeks from 70 to 26, had further fallen to 22 on Saturday last; 4 patients were admitted to these hospitals during the week, against 11 and 2 in the previous two weeks. The Highgate Small-pox Hospital contained 3 patients on Saturday last, one case having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 534 and 477 in the preceding two weeks, were 478 last week, and were 77 below the corrected weekly average. The causes of 105, or 2·7 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Nottingham, Portsmouth, Birkenhead, and in three other smaller towns. The largest proportions of uncertified deaths occurred in Cardiff, Bradford, and Newcastle-upon-Tyne.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 23·9 and 23·1 per 1000 in the preceding two weeks, further declined to 22·4 in the week ending January 30th, but was 0·3 above the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 13·1 and 14·0 in Perth and Leith, to 26·5 in Glasgow and 26·9 in Paisley. The 363 deaths in the eight towns showed a further decline of 17 from the numbers in recent weeks, and included 13 which were referred to whooping-cough, 9 to scarlet fever, 7 to diarrhœa, 4 to "fever" (typhus, enteric, or simple), 3 to diphtheria, 1 to small-pox, and not one to measles; in all, 37 deaths resulted from these principal zymotic diseases, against 45, 40, and 36 in the preceding three weeks. These 36 deaths were equal to an annual rate of 1·5 per 1000, which was 0·6 below the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 15, 9, and 6 in the preceding three weeks, rose again last week to 13, and included 10 in Glasgow and 2 in Edinburgh. The 9 deaths from scarlet fever showed an increase upon recent weekly numbers; 6 occurred in Glasgow, and one each in Dundee, Greenock, and Leith. The 7 deaths attributed to diarrhœa corresponded with the number in the previous week, but were considerably below the average. The deaths from "fever" and from diphtheria showed a considerable decline on the numbers in the previous week; 2 from "fever" and 3 from diphtheria were returned in Glasgow, as was also the fatal case of small-pox. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 145 and 160 in the preceding two weeks, were 156 last week, and were 58 below the number in the corresponding week of last year. The causes of 80, or more than 14 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 28·8, 28·3, and 29·6 per 1000 in the preceding three weeks, rose again to 31·9 in the week ending Jan. 30th. During the first four weeks of the current quarter the death-rate in the city averaged 30·9 per 1000; the mean rate during the same period not exceeding 22·6 in London, and 18·6 in Edinburgh. The 216 deaths in Dublin last week showed an increase of 16 upon the number returned in the previous week, and included 15 which were referred to the principal zymotic diseases, against 15, 30, and 24 in the preceding three weeks, 13 resulted from whooping-cough, 1 from "fever" (typhus, enteric, or simple), 1 from scarlet fever, and not one either from small-pox, measles, diphtheria, or diarrhœa. These 15 deaths were equal to an annual rate of 2·2 per 1000, the rate from the same diseases last week being 0·6 in Edinburgh and 2·5 in London. The fatal cases of whooping-cough, which had been 8, 19, and 17 in the preceding three weeks, declined again last week to 13. The deaths from the other zymotic diseases were exceptionally few. Eight inquest cases and 6 deaths from violence were registered; and 84, or considerably more than a third of the deaths, were registered in public institutions. The deaths of infants showed a decline, whereas those of elderly persons were more numerous than in any recent week. The causes of 31, or more than 14 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

ADMIRALTY. — The following appointments have been made: — Staff Surgeon Cecil Drake, to the *Britannia;* Surgeon Henry W. D. Welsh, to the *Defiance;* Surgeon George F. Wales, to the Plymouth Division of the Royal Marines; Surgeon John Hunter, to the *Tyne;* and Mr. John F. Conniham to be Surgeon and Agent at Capper.

RIFLE VOLUNTEERS. — 13th Middlesex (Queen's Westminster): — Acting Surgeon John Gascoigne Webb to be Surgeon; Hugh Webb, Gent., to be Acting Surgeon.

Correspondence.

"Audi alteram partem."

SURGICAL TREATMENT OF EMPYEMA.

To the Editor of THE LANCET.

SIR,—In Mr. Godlee's very interesting and instructive lecture (published in THE LANCET of January 23rd, p. 143), he states that "while after an empyema the dorsal curve is very long and occupies the whole dorsal region, in scoliosis we generally find a compensatory curve beginning at the lower part of the back. ..... The compensatory curves in the lumbar and cervical regions are shorter than those of ordinary lateral curvature, and there is much less rotation of the bodies of the vertebræ." With regard to rotation of the vertebræ, Mr. Godlee's observation of the fact that this condition does exist in curvature from empyema is worthy of note, for hitherto it has been nearly always written that rotation does not take place in curvature from empyema. In the "Surgery of Deformities," p. 166, however, I stated that in the cases of lateral curvature from thoracic disease which I had examined there existed distinct rotation of the vertebræ. This subject must possess importance not only as regards diagnosis from the general form of the parts, but also with respect to changes in the thoracic cavity, and the consequent modifications of the auscultatory and other signs. When there exists severe rotation the bodies of the twisted vertebræ approach more or less the internal surfaces of the ribs, and thus partly or entirely displace the lungs from this region. It is therefore important to recognise the fact of such rotation, and Mr. Godlee has doubtless done good service in recording his observations on this point.

As to the first parts of the above quotation from the lecture, I would remark that curves from other causes than empyema may assume the form described, and that the former vary to a much greater extent than is usually stated. In evidence of this statement I may remark that I once analysed sixty-eight consecutive cases of lateral curvature which I had had under treatment, and the curves were as follows: thirty-nine were sigmoid, twenty-nine were single curves, and in two of the latter there was no deflexion of the spinous processes, but rotation only of the vertebræ. Of the thirty-nine sigmoid, the dorsal curve was to the right in twenty-seven cases, to the left in twelve cases. Of the single curves, the direction was to the right in fifteen, to the left in fourteen cases. Thus, in the sigmoid the proportion of right dorsal curve to left was a little more than two to one, and in the single curves the proportion was nearly equal. Thus, the supposed typical form of lateral curvature certainly does not occur in so large a proportion of cases

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as to warrant the common assertion that the dorsal curve is almost always to the right, and that there is in these cases always a compensatory curve to the left in the lumbar region. Many of the cases I refer to resembled, as regards the curve of spinous processes, the figure C shown in THE LANCET.

In recording my experience on this subject it has been my desire to add, if possible, to the value of Mr. Godlee's practical observations.—Your obedient servant,

Queen Anne-street, Jan. 1886. NOBLE SMITH.

A HINT ON THE TREATMENT OF RINGWORM.

To the Editor of THE LANCET.

SIR,—Last August a lady asked me to examine her nurse-maid's head. I did so, and found a well-marked patch of ringworm about an inch and a half in diameter. The mistress was naturally unwilling to expose to the contagion her children, who presented no sign of the disorder, and almost equally unwilling to part with the girl for a time. After some reflection I told her I thought the difficulty might be got over with only very slight risk to the children, and treated the case in the following way. Having cut the hair close to the scalp, all round the patch, I first painted it with an alcoholic solution of iodide of mercury—an old-fashioned but excellent remedy, obtained by adding calomel to tincture of iodine and using the supernatant colourless fluid. As soon as the slight soreness it produced had passed off, I applied an iodine plaster, obtained from a formula in Beasley's book and attributed to Roderburg, an ounce of the plaster containing half a drachm of solid iodine. This, spread on kid, was carefully applied to the patch, which it overlapped all round. At the end of a fortnight it was removed, and the ringworm appeared practically cured. To make sure, however, it was again painted with the above-mentioned solution and a fresh plaster applied for another fortnight. Upon being taken off, the whole surface of the patch was found covered with short hairs. No other patch has made its appearance upon the head or elsewhere, and not one of the three children, with whom the patient was in daily and hourly contact, took the complaint. Possibly the plaster alone would have been sufficient, but I thought it safer to use the paint in addition, and I feared that if I used a more powerful plaster the irritation might tempt the patient to remove it. I might also have used a plaster containing oleate of mercury, but doubted whether it could be made sufficiently adhesive. The advantages of this mode of treatment are obvious enough, for by its means the risk of the disease being spread by actual contact, by means of caps and by the common use of hair-brushes, is reduced to a minimum. I find no allusion to this method in the ordinary works on the subject, and therefore infer that, if not new, it is not widely known.

I am, Sir, your obedient servant,

Brixton-road, Jan. 1886. RALPH W. LEFTWICH, M.D.

LIPOMA OF THE MESENTERY.

To the Editor of THE LANCET.

SIR,—The rarity of solid or cystic tumours of the mesentery is well known by the fact that Sir Spencer Wells, whose experience in the domain of abdominal surgery is, I suppose, unequalled, had only met with two cases up to last year: one was a solid tumour of about the size of an adult head, which he successfully removed, and the patient made a perfect recovery; the other was cystic, and, though the operation was successful, the patient died about a month after its performance. The difficulty attaching to the diagnosis of these from other abdominal tumours is almost insuperable, and especially is it so at a time when they are of such a size as to be removable with a fair prospect of the ultimate recovery of the patient. The above remarks constitute my apology for bringing under your notice and that of your readers the following observations made before a meeting of the Société de Chirurgie of Paris by M. Terrillon, on the 13th inst.

M. Terrillon operated and successfully removed a large lipoma of the mesentery. The patient was doing well up to the fifteenth day, but after that date persistent diarrhœa set in and death took place on the thirty-second day after the operation.

The observation of this case caused M. Terrillon to institute researches into the history of these lipomas, of which the following is an epitome.

Sex.—They occur, according to published cases, about twice as often in females as in males.

Size.—They are often of considerable size, ranging in weight from 8 lb. to 62 lb.

Growth.—They are of rather quick growth, attaining the above-mentioned weight in about two or three years.

Development.—They start from the front or sides of the lumbar spines and insinuate themselves between the two layers of the mesentery, which becomes thickened and forms an envelope for them. The bulk of the intestines are displaced to the opposite flank, but in some cases the tumour is in intimate contact with a portion of the intestine, and difficulty is experienced in separating it therefrom, so much so that in one case the surgeon was compelled to resect a portion of the bowel in the course of the operation, and in M. Terrillon's case the intestine was injured during the dissection necessary for the removal of the tumour. Sometimes the tumour, whilst insinuating itself under the lateral peritoneum, displaces forwards and contracts adhesions with the ascending or descending colon; in such cases the large intestine would lie in front, as happens in tumours of the kidney, or it may be folded over to the opposite side, as was the case in the patient operated on by M. Terrillon. The occurrence of ascites is not frequent. Compression of the abdominal viscera, by the progressive increase in size of the tumour, causes the emaciation and cachectic appearance, which is followed by the death of the patient after a few years.

Symptoms.—As to the symptoms, they differ in no way from those of other abdominal tumours of slow growth. On palpation, a sense of false fluctuation is given. In females, as the tumour is often situated near the upper part of the pelvis, it appears to have a dubious connexion with the uterus and its appendages, and it has often been mistaken for an ovarian cyst.

Diagnosis.—Up to the present time the diagnosis has not been made in a single case before the operation or the autopsy, excepting approximately. In males various tumours have been suggested. In M. Terrillon's case he had given as his diagnosis "a solid non-malignant tumour of the abdomen, probably myxomatous"; this diagnosis was based on the absence of any substance in the exploring trocar. The soft consistence, simulating fluctuation, has often caused the surgeon to practise puncturing the tumour in the hope of finding contents of a fluid nature, but ordinarily this has shown nothing, or only a little blood.

Pathological appearances.—The pathological nature of the tumour varies within certain limits; sometimes it has been a pure lipoma, but often the microscope has revealed a mixture of myxoma and lipoma. In one case the fat had the appearance of tallow, and it was a question whether it was a steatoma. Finally, in a case observed by M. Péan, the mass had undergone partial calcareous or osseous transformation. Being ordinarily constituted by lobules of fat more or less separated by tracts of fibrous tissue, the lipoma is but slightly vascular in itself, but its connexions with the mesentery are full of large vessels, which render an operation very troublesome; they necessitate the employment of a large number of forci-pressure forceps and numerous cat-gut ligatures.

Removal of these tumours has always been difficult; it cannot be accomplished without separating them from the mesenteric covering which envelopes them, and to do this necessitates the division of numerous lymphatics and blood-vessels belonging to the mesentery, and laying bare the great vessels in front of the spinal column. From this one can form an estimate of the possible disorders which may follow this operation.

The anfractuous cavity left after this removal of the tumour with its flaps of mesentery is enormous, and from its walls there is copious exudation of fluids. In most of the cases it has appeared necessary to diminish the bleeding surface by resecting the more prominent of the flaps, or reducing their bulk by ligature. It has been attempted to drain this cavity, but without success. Almost always the abdominal wound has been closed as after an ovariotomy.

Mortality.—The mortality after operations of this kind is very high. It would seem to be principally due to the destruction of the mesenteric vessels interfering with intestinal absorption. The gravity of the operation may also be due to the unavoidable division of numerous branches of the great sympathetic plexuses. Many patients have died

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soon after the operation from traumatic shock or exhaustion; others from acute peritonitis, both septic and aseptic. Finally, some have survived the operation for periods varying from ten to thirty days, and have then succumbed to various intestinal disorders. Amongst eight operations there has been only one averred success. The results so far are discouraging, but it is to be hoped that in the future, the diagnosis becoming more precise, we shall be able to operate at a more favourable time, when the tumours have not acquired so great a size, and that then the chances of cure will be more favourable.

Those who require to investigate this subject more fully may refer to the article on Lipoma by Cornil in the "Dictionnaire Encyclopédique des Sciences Médicales," to the "Traité de Pathologie Externe," by Follier and Duplay, and the "Traité des Tumeurs Abdominales," by Péan. Both of Sir Spencer Wells's cases are related in his work on the "Diagnosis and Surgical Treatment of Abdominal Tumours," pp. 204 and 205.—I am, Sir, yours obediently,

Jan. 1886. G. R. HAMERTON, M.D.

"A CASE OF TUBAL PREGNANCY."

To the Editor of THE LANCET.

SIR,—In reference to the case of supposed tubal pregnancy recorded by Dr. Hay in THE LANCET of Jan. 16th, whatever may be the true explanation of the condition, the theory propounded will gain nothing from reference to the case referred to as having recently been brought forward at the London Obstetrical Society, which on further examination by a committee of Dr. Herman and Mr. Doran was found to be wanting in any kind of corroborative evidence in favour of its supposed nature. There was no abnormality of the woman's pelvic organs to be discovered, and the specimen presented the usual characters of intra-uterine pregnancy (the decidua of which is quite different from the corresponding structures developed in all cases of extra-uterine gestation); there was, in fact, not one particle of evidence in favour of the strange story related.

The history of Dr. Hay's case, as given in THE LANCET, appears to be conclusive in establishing the fact that the fœtus expelled was intra-uterine at the time of examination, for the introduction of the probe was followed by hæmorrhage, and abortion took place three days after. The probability of the passage of a four-months' tubal pregnancy on two occasions into the uterus under the circumstances described is altogether incredible, the supposed gestation cyst being disconnected with the uterus; a dilatation of its tubal pedicle sufficient for the purpose is impossible. The diagnosis of tubal pregnancy is seldom correctly made; the condition is rarely suspected when it does occur, and when it is suspected it usually turns out to be a mistake, and the woman is fortunate who escapes abdominal section for what proves to be a normal intra-uterine pregnancy. I am, Sir, yours obediently,

Harley-street, Jan. 30th, 1886. WALTER S. A. GRIFFITH.

THE SCARLET FEVER OUTBREAK IN MARYLEBONE.

To the Editor of THE LANCET.

SIR,—I have read your article in THE LANCET of Jan. 23rd regarding an outbreak of scarlet fever in Marylebone, supposed to be caused by milk derived from a farm in this district, and must deprecate the publication by Mr. Wynter Blyth of a number of statements respecting a Hendon farm, the majority of which I have reason to know are based on conversations that Mr. Blyth had with Mr. Power and myself. I need hardly say that these conversations, the primary object of which was to protect London consumers from danger, did not contain all or nearly all the facts that are accumulating respecting the relations of milk and scarlet fever, and submit that the public should wait for Mr. Power's report, which will embody the results of our united investigations here, before arriving at any definite conclusion upon the matter under inquiry. Under the circumstances, I cannot but think that Mr. Blyth would have done well to confine his report to matters which came under his own observation in his own district.

I am, Sir, yours truly,

JAMES CAMERON, M.D.,

January 30th, 1886. Medical Officer of Health, Hendon.

BIRMINGHAM.

(From our own Correspondent.)

PRESCRIBING CHEMISTS.

THE Deputy Coroner, at a recent inquest on the body of a child nine months old, expressed his opinion that the question of prescribing by chemists might properly be taken up by the medical associations. There is no doubt that the custom is an evil one, and that a large business is done by prescribing over the counter. Considerable harm, especially to children, is the result of this practice. A sense of responsibility hardly enters with the recommendation to give certain medicines, which are promptly made up, and charged for accordingly. The poor and ignorant appear to accept the belief that a knowledge of compounding drugs is equal to the knowledge required in prescribing them. Certainly there is a vast amount of credulity among the British public in this respect, which affords an extensive market for this vicious practice. Until the law affecting unqualified practitioners is better defined and easier of application, these cases will still frequently occur, and reflect discredit upon the intelligence of those who are made the dupes, and very often the victims, of this mode of treating disease.

INGLEBY LECTURES.

On the 28th ult., the second of the two Ingleby lectures was given by Dr. Wade, before a large and appreciative audience, the subject being "Nervous Diseases of Women." The main characteristics of the two sexes were pointed out, and the subject of hysteria was carefully dealt with. The many and various symptoms were aptly illustrated from the lecturer's experience, while the known shrewdness and attention he has given to the investigation of this class of disorders allowed him to speak with force and authority. The usual vote of thanks was passed.

HOSPITAL SUNDAY FUND.

A project has been mooted to divide *pro rata* the proceeds of this fund among all the charities of the town. Hitherto the two largest—the General and Queen's Hospitals—have divided equally in respective years, and the fourteen amalgamated charities have taken one share. The manifest injustice to the Queen's Hospital, which is sadly in want of additional funds, allowed the matter, fortunately, to fall through, and thus the institution will be relieved of a great source of anxiety. The meeting of the General Committee of the Hospital Saturday movement was marked by the reports sent in from the representatives appointed to the various charities. These reports were unanimous in their testimony as to the efficiency and economy with which the charities are administered, and afford a practical commentary for the working population of the town. In the face of declining subscription lists in many directions, it is of importance that it should be recognised how the many may help the few; and while the suffering poor in the district come from the working class mainly, this movement exhibits clearly the forcible application of the widest charity being not only possible, but of the greatest service to fellow-workmen.

EDINBURGH.

(From our own Correspondent.)

NEW UNIVERSITY LECTURESHIP.

AT a meeting of the Senatus Academicus of the University of Edinburgh held last week it was decided to found a new lectureship on the Philosophy of Natural History in connexion with the natural history department, and Mr. G. J. Romanes, F.R.S., was appointed lecturer. The appointment is for five years, and it is announced that Mr. Romanes will give his first course of lectures, six in number, during next winter session. The lectureship has been endowed by a munificent bequest by Lord Rosebery, who was Lord Rector of the University from 1880 to 1883, and who has always taken the warmest interest in university affairs. This is the second lectureship which has been recently created in connexion with the natural history department, at the suggestion of Professor Cossar Ewart, the first being a lectureship on Comparative Embryology, on which subject one course

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of lectures has been already delivered by Mr. G. Brook, F.L.S., the present incumbent. The new lectureship will prove a great boon to the University in many ways: by adding a widely-known name to the staff of teachers, by providing instruction on a subject of great importance at the present time, and by further developing the system of intra-mural extension, which can but have the most beneficial effect in widening the range of university interests. Mr. Romanes may feel assured of a hearty welcome in Edinburgh when he comes to deliver his annual quotum of lectures, and the number of those anxious to attend his course of instruction will be by no means a small one.

Edinburgh, Feb. 3rd.

ABERDEEN.

(From our own Correspondent.)

THE CHAIR OF PHYSIOLOGY.

DR. J. W. WILLIAM, Lecturer on Physiology in the London School of Medicine for Women, and Dr. Berry Haycraft, are said to be, as yet, the only candidates for the vacant chair in our University. It will, indeed, prove a difficult task to find a worthy successor to Dr. Stirling, whose removal to Manchester is a serious loss to the Aberdeen Medical School. An enthusiastic physiologist, a brilliant lecturer, a clear and fascinating teacher, he has done much to increase the reputation of the school.

MEDICAL JURISPRUDENCE AND HYGIENE IN NEW ZEALAND.

Dr. Frank Ogston has been appointed Lecturer on Medical Jurisprudence and Hygiene in Dunedin College, Otago, New Zealand. He leaves Aberdeen at an early date to commence his duties in May. Dr. Ogston has, during the last ten years or more, had large experience in medico-legal work, and in his new sphere of labour will, there is no doubt, do credit to his *alma mater* and the name he bears.

PHYSICIAN TO A HOSPITAL FOR FIFTY-FIVE YEARS.

Dr. Ogston, sen., the veteran medical jurist, lately resigned the office of physician to the Boys and Girls' Hospital in Aberdeen, an appointment which he has held for more than fifty-five years. For the vacancy there were five candidates. The final vote lay between Dr. Hall and Dr. MacGregor. Dr. Hall was appointed by the casting vote of the chairman.

Aberdeen, February 2nd.

IRELAND.

(From our own Correspondent)

CARMICHAEL SCHOOL OF MEDICINE.

ON Saturday last a general meeting of the lecturers and students of this School of Medicine was held for the purpose of forming a Medical Society, to be called the Carmichael College Medical Science Association, and for the election of office-bearers for the session. The chairman having briefly explained the objects of the meeting, the rules of the proposed Society were read and adopted. These rules provided that the papers to be read and discussed at the meetings of the Society should be solely on subjects connected with medical science, that the time for reading papers should not exceed fifteen minutes, and that the speeches of those who joined in the discussion should be limited to seven minutes and a half. Dr. Samuel Gordon was elected president, the teachers in the school vice-presidents, and Drs. N. Falkiner and McHugh honorary secretaries.

DUBLIN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

The ninth annual meeting was held last week at the College of Physicians. The report of the Council referred to a resolution adopted at the previous annual meeting in reference to the condition of the Army Medical Department. Copies were sent to the Secretary of State for War and to the Director-General of the Medical Staff, and a communication was received by the chairman of the Parliamentary Bills Committee from the Permanent Under Secretary of State, stating that the only way in which the promotion to administrative grades could be expedited was to apply a more rigid system of selection, and that steps had recently been adopted with this view. The Council regretted this unsatisfactory reply, knowing that the system of selection referred to was ineffectual in relieving the block of promotion which still exists among the seniors of the executive ranks of the department. The Council had their attention drawn to what they consider a substantial grievance of Irish medical practitioners residing in England—viz., that under the regulations of the Local Government Board for England any practitioner desiring to act as public vaccinator in England must produce a certificate of having been instructed in vaccination at one of the educational vaccination stations named in the regulations of the Board, all of which stations are situated in England or Scotland. A letter in reference to this subject was addressed to the Secretary of the Local Government Board of England; but up to the present no communication beyond an official acknowledgment of its receipt has been received. The President-elect (Mr. Bennett) did not give the usual address, in consequence of a recent illness; and the office-bearers being elected for the ensuing year, the proceedings terminated. The usual annual dinner took place in the evening.

CHARITABLE BEQUESTS.

The late Mr. Francis Donagh, of the County Louth, has left £1000 to the Hospital for Incurables, £1000 to the Adelaide Hospital, £500 to the Rotundo Lying-in Hospital, and £500 to the Convalescent Home, Drogheda.

Dr. John Griffin has been appointed to the commission of the peace for the County Clare.

Dublin, Feb. 2nd.

BELFAST.

(From our own Correspondent.)

ULSTER EYE, EAR, AND THROAT HOSPITAL.

FROM the report presented at the last annual meeting we gather that during the year ending Dec. 31st last the number of patients treated at the hospital was 1977, of whom 1857 were new patients; of these 198 were admitted as intern patients; fifty-four of the patients were admitted as free; the rest were pay patients. Of the patients entered on the books of the extern department 1779 contributed to the funds of the hospital £52 4*s.*, and the remainder were free patients. The total receipts of the hospital from all sources was £562 0*s.* 9*d.*, and the expenditure £540 12*s.* 5*d.* During the past year the hospital has been open to students on operation days, and a large number have availed themselves of the privilege to attend.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.

The annual meeting of the supporters of this hospital was held last week. During the past year 486 patients have been under treatment; the payments from those in a position to pay a small sum for medicine amounted to £27 3*s.* 6*d.* Dr. H. S. Purdon, to whom belongs the credit of instituting this hospital, has been elected a member of the consulting staff. While on the subject of consumption, we may state that the Throne Consumption Hospital, which has been largely endowed by the munificent generosity of Mr. Forster Green, is now in full working order, and Dr. James Lindsay has been elected to the post of physician.

THE BELFAST HOSPITAL FOR SICK CHILDREN.

From the report presented at the annual meeting of this the most popular of all the Belfast charities, we learn that during the past year 316 children have been under treatment in the wards, while in the extern department there were the immense number of 8974 new cases. Dr. Nelson has been appointed ophthalmic surgeon, and Mr. Andrew dentist. One of the speakers referred to the paragraph in the report calling attention to the fact that a large number of senior students of Queen's Colleges are receiving practical instruction at this hospital.

BELFAST MAIN DRAINAGE SCHEME.

A great deal of discussion is at present going on here in reference to the drainage scheme which has emanated from the Town Council, and on this subject one of our ablest engineers, Mr. Lanyon, has written with great weight. For several years past, especially during the summer, the inhabitants have been suffering from the foulest smells arising from the Lagan (our principal river), the Blackstaff,

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and the slob lands on both sides of the Lough, these stenches being due to the deposit of sewage on the banks. The problem is how to get rid of this nuisance. By the new scheme it is proposed to discharge the whole of the sewage of Belfast and Ballymacarret at one spot on the slob lands on the county Antrim side of the Lough. Mr. Lanyon says this will cause a present increase of at least three times the nuisance, and thinks it preferable to let the sewage be chemically disinfected and deodorised, and the solid matter deposited and removed and sold as a manure; then a comparatively pure effluent can be discharged with safety into the new cut, where it will become thoroughly diluted and quite innocuous. It is to be hoped that, in the interests of the public health, no plan of drainage will be undertaken which will not thoroughly rid us of the present offensive nuisances, which are disgraceful to a city of such size and importance as Belfast.

NEW YORK.

(From our own Correspondent.)

HYDROPHOBIA.

THE annual hydrophobia scare has broken out in this vicinity with its usual severity. What gives this epidemic peculiar interest is the craze of the community to send all who have been bitten to Paris to be inoculated by M. Pasteur. The opportunity of testing the value of the inoculation or vaccination is peculiarly favourable. Several children in Newark were bitten at the same time by a dog supposed to be suffering from hydrophobia. Four of the children were immediately sent to Paris, where they were duly operated upon by M. Pasteur. The result of the vaccination was pronounced by him to be entirely successful, and the children have returned to their homes. They have been examined by their physician, who declares that they are in good health. The other children, two of whom were severely lacerated by the same dog on the same day, and who remained at home, are also well. It will be possible now to watch these two groups of children, and determine, possibly, the value of the vaccination.

DEATH OF PROFESSOR DRAPER.

The sudden death of Prof. John C. Draper will prove a great loss to the University Medical College, in which he was Professor of Chemistry. Dr. Draper was the eldest son of Prof. John W. Draper, and brother of Dr. Henry Draper, so eminent for his studies in solar and lunar photography. He was a writer of scientific works, the last of which, on Medical Physics, has just been published.

PUBLIC HEALTH.

The American Public Health Association has recently held its twelfth annual meeting at Washington. It was largely attended, and discussed many of the most interesting subjects in sanitary science. A prize had been offered by the Association for the best essay on School Hygiene; although a large number of papers were submitted, the prize was not awarded, none of the essays being deemed worthy.

PERILS OF PRACTICE.

A case of successful prosecution of a physician for an alleged error of diagnosis has excited much interest in this city. The physician is a reputable practitioner, and the patient a tradeswoman. The physician pronounced an eruption to be small-pox, and so reported the case to the health authorities, who had her removed to the small-pox hospital. The resident physician decided that she was suffering from eczema, and discharged her from the hospital. She recovered $500. It was proved on the trial that the defendant had called as counsel his father (a physician) and one of the inspectors of the Board of Health, both of whom corroborated his diagnosis. The profession is subscribing liberally to a fund to carry the case to the highest court.

New York, Jan. 16th, 1886.

IN view of the large consumption of pork and ham at Christmas time, the St. Petersburg Medical Society took the precaution just before the festive season of establishing two additional stations for the microscopical examination of pig meat in different parts of the city.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were admitted Members of the College on the 28th ult.:—

Browne, Oswald Auchinleck, M.B. Camb., George-street.
Limont, James, M.B. Edin, Newcastle-on-Tyne.
Prendergast, J. Moran, M.D. Royal University of Ireland, Victoria, Australia.

On the same day the following were admitted Licentiates of the College:—

Apthorp, East, Gurney-street.
Bartlett, Hedley Coward, Temperance Hospital, Hampstead-road.
Bennett, Frank Albert, St. Paul's-square, Birmingham.
Benson, Matthew, Wigan.
Billups, Percy Christopher Charles, Friern-road.
Bond, Barnabas Mayston, Granville-square.
Burd, Edward Lycett, Gray's-inn-square.
Burnett, Reuben, Onecote, Leek.
Candler, Wallace Harry Charles, Manor-park, Lee.
Cattell, George Trew, Crowhurst-road.
Clarkson, Thomas Harry Frederick, Heathcote-street.
Collingwood, Frederick William, Manor-road, Brockley.
Combes, Reginald Hare, Argyll-square.
Cottell, Reginald James Cope, Cheyne-row.
Counsell, Herbert Edward, Guy's Hospital.
Crisp, John, Kennington-park-gardens.
De Chazal, Edmond Lucien, Albert-street.
Dodd, Henry Work, Royal Free Hospital.
Drew, Arthur John, Gloucester-place, Hyde-park.
Edge, Frederick, Bury New-road, Bolton.
Evans, Oliver Conrad Penrhys, St. Bartholomew's Hospital.
Evill, Frederick Claude, John-street, Gray's-inn.
Ewens, George Francis W., Carey House, West Hammersmith.
Farr, Ernest Augustus, Andover.
Felix, Edward, Shirland-road.
Fountain, Edward Osborne, Hillingdon, Uxbridge.
Francis, Harry Arthur, Priory-road.
Freeland, Freeland John, Kingdon-road.
Freeman, Ernest Carrick, St. George's-square.
Frohwein, Otto Fraser, Portsea.
Gardner, William Thomas, Weddon House, Rosslyn-hill.
Gibson, John Hutchinson, Trinity-square.
Girling, John, St. Peter's-road.
Gostling, John Harry, Granville-square.
Green, Albert, Brickell-terrace.
Greenwood, Edwin Climson, Highgate-road.
Greig, William John, Bernard-street.
Harris, Herbert Elwin, Duncan-terrace.
Hazell, Robert William, Cape Town.
Hill, Alfred William, Vartry-road, Stamford-hill.
Hodge, Sydney Rupert, Fernleigh, Sunnyside-road.
Hope, George, Bramah-road.
Hulke, Frederick Backhouse, Admiralty House, Deal.
Hutton, John Stuart, St. Thomas's Hospital.
Jones, Edward Francis, Hyde Villa, Wrexham.
Jones, Hugh Edward, Trinity-square.
Jones, Thomas Slater, Trinity-square.
Jowers, Reginald Francis, Upper Vernon-street.
Kaka, Sorabji, Manekji, Whitehall-gardens.
King, Edmund Eleazar, Burton-crescent.
Le Quesne, Ferdinand Simeon, Blatchington-road, Brighton.
Liesching, Charles Edward, Elm-park-road.
Maggs, William Adolphus, Hanover-square.
Mandvivala, Fakirji Kavasji, Woburn-place.
Marder, Edward Swan, St. Thomas's-terrace.
Marriott, Henry Tancred, St. George's Hospital.
Martin, Francis George Clifton, Commercial-road.
Meaden, Edward Henry, Westfield-park, Bristol.
Morgan, Frederic James, Westminster Hospital.
Nixon, Edward John, Worcester, Cape of Good Hope.
Okell, John Bathurst, St. Thomas's Hospital.
Otway, Henry Carrol, Kennington-park-road.
Owen, Samuel Walshe, Landeroft-road.
Parsons, Frederick Gymer, Westfield, Lee.
Potter, Edward Furniss, Berners-street.
Reece, Richard James, St. Bartholomew's Hospital.
Reily, Alexander Yates, Charlotte-street.
Rigden, Alan, Brompton-road.
Rigge, John Arthur, Grays.
Roberts, J. Saunders Hughes, Royal Southern Hospital, Liverpool.
Russell, George Herbert, St. Bartholomew's Hospital.
Saunders, Mark Richard, Keppel-street.
Smith, Henry Craven, Fitzroy-street.
Staddon, Walter Joseph, Fentiman-road.
Staveley, William Henry Charles, Akerman-road.
Thomas, John, St. Peter's-street.
Totsuka, Kankai, Lambeth-palace-road.
Turner, Nathaniel Henry, Redcliffe-gardens.
Upham, Charles Hazlitt, De Vere Mansions.
Vincent, John Francis, Church-crescent, South Hackney.
Wacher, Sidney, Guy's Hospital.
Webb, John Bartlett, Leigh-road South, Bristol.
Weir, Frederick William, Dowry-parade, Bristol.
Wheaton, Samuel Walton, Church-terrace, Battersea-park.
Wilkins, Gilbert Hamilton, Brixton-road.
Williams, Thomas Henry, Seymour-place.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of

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the College at a meeting of the Board of Examiners on the 28th ult.:—

Bateman, Robert Watering, L.S.A., Norwich.
Earle, Walter George, Barton-under-Needwood.
Webb, John Bartlett, L.R.C.P. Lond., Clifton, Bristol.

Admitted on the 29th ult.:—

Adams, Charles Edward, M.B. Lond., Buckhurst-hill.
Allen, Norman, M.D. Toronto, Toronto.
De Charzal, Edmond Lucien, L.R.C.P. Lond., Albert-street.
Ware, George Stephen, L.S.A., Berners-street.

Admitted on the 1st inst.:—

Adye, William John Alexander, L.S.A., Bradford-on-Avon.
Bartlett, Hedley Coward, L.R.C.P. Lond., Bishops Stortford.
Daly, Stephen Joseph, L.R.C.P. Lond., Ireland.
Greenwood, Edward Climson, L.R.C.P. Lond., Highgate-road.
Meaden, Edward Henry, L.R.C.P. Lond., Bristol.

COLLEGE LECTURES.—The annual course of lectures will be commenced on Monday, February 8th, at 4 o'clock, by Mr. John Bland Sutton, F.R.C.S., who will deliver three lectures, "On Evolution in Pathology." Professor Charles Stewart, M.R.C.S., will deliver six lectures, "On the Organs of Hearing," commencing on Monday, February 15th. Professor Alex. Hill, M.D., M.R.C.S., will deliver three lectures, "On the Brain Mechanism of Smell and Sight," commencing on Monday, March 1st. Professor Frederick Treves, F.R.C.S., will deliver six lectures "On the Anatomy of the Intestinal Canal and Peritoneum in the Mammalia." Professor Wm. Arthur Braily, M.D., M.R.C.S., will deliver three lectures, "On the Muscles and Fasciæ of the Orbit." The course will be concluded in June next by Mr. Leonard Charles Wooldridge, M.R.C.S., Professor Henry Power, F.R.C.S., and Professor William Cadge, F.R.C.S. The subjects of the several lectures will be hereafter published. The lectures will be delivered in the Theatre of the College on each Monday, Wednesday, and Friday, at 4 o'clock precisely.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGE OF PHYSICIANS OF LONDON AND THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following candidates have passed Part I. of the First Examination, recently held:—

†Augustus Henry Aldridge, Manchester; *Henry Andrew, St. Thomas's; *John Atcherley, Leeds; *Alfred Howell Atkin, Guy's; *Cecil Fowler Beadles, University College; William Edwin Bennett, Birmingham; William Pittillo Birnie, St. Bartholomew's; John William Bowd, St. Bartholomew's; †Charles Stanser Bowker, Middlesex; Arthur Mather Braund, Middlesex; *Charles Butler, St. Bartholomew's; Albert William Caporn, St. Thomas's; George Carolin, University College; Herbert James Carstairs, St. Thomas's; Raymond Theobald Cassal, University College; Isaac Cohen, Charing-cross; Robert Jacob Colmer, London; Charles Edwin Cornwall, St. Bartholomew's; *Willoughby Floud Cotton, St. Bartholomew's; Alfred H. Cresswell, London; James Meadmore Crocker, Leeds; Frederick Wm. Samuel Davies, Guy's; †Cecil Lacy Dawson, St. Bartholomew's; Robert Barsham Debenham, London; Robert Kingdon Ellis, St. Thomas's; Henry Luther Ewens, Bristol; Charles Edward P. Fowler, Bristol; Robert Houle French, London; Thomas William Francis Gann, Middlesex; †George Frederick Glinn, St. Mary's; †Frank Augustus Godfrey, London; Edward Milliken Goldie, University College; Harry Gordon, Manchester; James Gordon, Middlesex; *John Henry Porteous Graham, St. Bartholomew's; James Hake, London; Ernest James Hayford, St. Thomas's; John Grenville Henniker, St. George's; William Higgins, St. George's; Richard Hopkins, London; Gerald Sidney Owen Howes, Guy's; *John Christopher Hughes, Guy's; Walter Evelyn James, University College; *Morgan Jenkins, Guy's; H. Douglas Johns, Charing-cross; Henry Martyn Jordan, Guy's; Arthur Edwin Joscelyne, London; Luigi Walter Keiffenheim, Guy's; *James Keigwin Kempthorne, King's College; Fredk. Wm. Robert John King, Middlesex; Allan Ramsay Lacy, Guy's; George Herbert Lancashire, Manchester; *John Wesley Lloyd, Liverpool; Joseph Johnston MacGregor, St. Bartholomew's; H. Medland Manley, Guy's; Ferdinand Baptist Marin, Westminster; Charles Devereux Marshall, University College; †William Ernest Marshall, University College; Albert E. Martin, London; William Molesworth, Bristol; Percy Thomas Naden, Birmingham; William Roebuck Naylor, Leeds; William Anselm Odling, St. Bartholomew's; Oswald Osborne, London; William Penberthy, London; Herbert Lloyd Penny, London; †Frederick William Pogson, Leeds; George Leslie Howard Revill, Charing-cross; Austin Edward Reynolds, University College; †John Henry Roberts, Guy's; John Maurice Roberts, St. Mary's; Hougel Gough Rosedale, Guy's; *A. Lawrance Roth, Middlesex; Eusebius Rouse Rouse, St. Bartholomew's; Henry Ashton Rudyard, University College; Charles E. Russell-Rendle, St. Bartholomew's; Patrick Joseph Ryan, Private; Edward Rye, Manchester; Edgar Stanley Sanderson, London; James H. Sequeira, London; Edward Wm. Sharman, Guy's; Francis Odell Simpson, Liverpool; William Chearnley Smith, St. George's; Ernest R. W. Spratley, Liverpool; Frederick Chas. Spurgin, Middlesex; †Frank Henry Squire, London; *Percy Stainsby, Leeds; Thomas William Swales, Leeds; John Taylor, Manchester; J. Terry, St. Thomas's; Felix Tinoco, King's College; Herbert Vallance, London; Francis Henry Morgan Vanderpant, Charing-cross; Edward Yates Watson, St. Thomas's; Harry Watts, London; Frank Webb, Manchester; Frederic Hibbert Westmacott, Manchester; †James A. Whistler, St. George's; *Charles Horton White, Middlesex; Sylvester David Willard, St. Bartholomew's; Alfred John Williams, King's College; Robert J. Williams, London; †John Wood, St. Thomas's; Charles Samuel Woodd, St. Bartholomew's; Thomas Sanders Worboys, St. Bartholomew's; Walter Wright, St. Bartholomew's.

†Passed in Materia Medica, Medical Botany, and Pharmacy only.
*Passed in Chemistry and Chemical Physics only.

The following gentlemen have passed Part II. of the First Examination recently held:—

Joseph Brearley, Leeds; Charles Butler, St. Bartholomew's; James Meadmore Crocker, Leeds; Edmund Denison, Leeds; A. H. Venning Duckham, University College; †H. Hargreave Fawcett, University College; Emilien Edward Frossard, King's College; *Alfred Henry Grace, Bristol; Matthew Lewis Hughes, King's College; †Stewart Kirkpatrick, Liverpool; Henry George Lang, St. Bartholomew's; John Wesley Lloyd, Liverpool; Walter Douglas Macdonald, Guy's; William Hugh Macpherson, St. George's; Stephen Luther Martin, London; *Robert Henry Norgate, Bristol; *Carroll O'Sullivan, London; Edward Percy Paton, St. Bartholomew's; *Albert Edward Perry, Cork; Enrique Prada, King's College; †Herbert Fullarton Ransome, Manchester; *John Henry Roberts, Guy's; Harry Romer, St. Thomas's; James William Russell, Birmingham; Cyril Alexander Ryde, London; John S. E. Selby, St. Bartholomew's; Benjamin P. Viret, St. Bartholomew's; Leslie Herbert Walsh, King's College; F. Hibbert Westmacott, Manchester; †Augustus White, Guy's; Charles Williams, King's College; Robert J. Williams, London; John Wood, St. Thomas's; H. E. Worthington.

† Passed in Elementary Physiology only.
* Passed in Elementary Anatomy only.

BRITISH MEDICAL SERVICE.—The following is a list of Surgeons on Probation in the Medical Department of the British Army who were successful at both the London and Netley examinations. The final positions of these gentlemen are determined by the marks gained in London added to those gained at Netley, and the combined numbers are accordingly shown in the list which follows:—

	Combined Marks.		Combined Marks.
*Yarr, M. T.	5911	Kendall, H. W. M.	4408
Mumby, L. P.	5570	Elkington, H. P. G.	4364
Melville, C. H.	5494	Gordon-Dill, R. C.	4324
Mills, B. L.	5356	Buchanan, J. B.	4314
Rayner, H.	5184	Skerrett, F. T.	4307
Genge, R. E.	5018	Adamson, H. M.	4301
Cardew, G. S.	5006	Ramsay, H. M.	4299
Renny, C. A.	4935	Lavie, T. G.	4299
Thiele, H.	4911	Rose, J.	4271
Cocks, H.	4905	Cox, R. H.	4226
Wilson, J. B.	4877	Brown, H. H.	4191
Lee, W. J.	4849	Corkery, T. H.	4150
Black, J. G.	4818	Locker, E. H.	4142
Kearney, J.	4790	Crooke, W. R.	4018
Hennessy, F. W.	4773	Squire, W. P.	3930
Saw, F. A.	4659	Walsh, C. L.	3923
Stokes, W. B.	4489	O'Donnell, J. J.	3922
Hall, F. W. G.	4181	Hayman, S. J. W.	3893
Kennedy, A.	4113	Hayes, J. P. S.	3730
Tate, G. S.	4410		

* Gained the Herbert Prize of £20, with the Montefiore Medal and Prize of 20 guineas, the Martin Memorial Gold Medal, and the Parkes Memorial Bronze Medal.

INDIAN MEDICAL SERVICE.—The following is a list of Surgeons on Probation in Her Majesty's Indian Medical Service who were successful at both the London and Netley examinations. The final positions of these gentlemen are determined by the marks gained in London added to those gained at Netley, and the combined numbers are accordingly shown in the list which follows:—

	Combined Marks.		Combined Marks.
†Woolbert, H. R.	5976	Younan, A. C.	5417
Baker, G. H.	5618	Alcock, A. W.	5362
Grainger, T.	5594	Edwards, A. R.	5107
*Adie, J. R.	5487	Cadell, J. M.	4994

† Gained the Prize in Pathology, presented by Sir Joseph Fayrer.
* Gained the Montefiore Second Prize.

SOCIETY OF APOTHECARIES.—The following gentleman passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received a certificate to practise, on the 28th ult.:—

Duckworth, Alfred, Eaton Bank, Accrington.

The following passed the examination in the Science and Practice of Medicine, and received a certificate to practise:—

Bateman, Robert Watering, Carlton-terrace, Norwich.

THE seventy-third annual meeting of the committee of the Clifton Dispensary was held on the 3rd inst.

AT the Parkes Museum of Hygiene on the 27th ult., Mr. F. B. Jessett, F.R.C.S., delivered a lecture on Preventable Diseases.

THE inaugural meeting of the National Health Society was held on the 29th ult., under the presidency of Sir Andrew Clark, Bart.

M. LEVRAT, agrégé of the Faculty of Medicine, has been appointed chief surgeon to the Hôpital de la Charité in Lyons.

THE annual winter entertainment to the patients of the British Home for Incurables was given on the 3rd inst.

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TRICHINOSIS.—Five members of a family at Tarentum, Pennsylvania, are reported to have died of trichinosis. The lives of three other members of the family suffering from the disease are despaired of.

AT the annual general meeting of subscribers to the Dewsbury and District General Infirmary on the 28th ult., a highly satisfactory report was presented by the Board of Management.

PAPERS to hand from the colony contain lengthy accounts of the scare produced at Brisbane by the arrival at that port during December last of a cholera-infected ship. Energetic steps were at once taken to check the disease.

DURHAM COUNTY HOSPITAL.—A bequest of £10,000 has been added to the funds of this hospital, and new wings are to be erected to the memory of the donor, the late Mr. Eden, of Beamish Park.

Nursing Sisters S. Browne and E. Wright, attached to the Military Hospital at Woolwich, have each been presented with a medal for the Soudan with clasps for Suakim, in recognition of their services in the late Egyptian campaign.

PRIZE OF THE PARIS MEDICAL SOCIETY.—The Société de Médecine de Paris has awarded the Duparc prize, value 1200 francs, to M. Dalché, interne of the Paris hospitals, for his treatise on Ovaritis.

AT a general meeting of the Hospitals' Association, held on the 27th ult., the adjourned discussion on the subject of the "hospitals' out-patient" question was resumed. Several members joined in the debate, which appeared to excite great and general interest.

ROYAL NATIONAL HOSPITAL FOR CONSUMPTION, VENTNOR.—A public dinner in aid of the funds of this hospital will take place on Thursday, May 20th, at the Holborn Restaurant, when the Right Hon. the Earl of Rosebery, President of the hospital, has consented to occupy the chair.

THE first class of the Order of St. Ann has been given to Dr. D. E. von Wahl, Professor of Surgery in Dorpat, also the third class of the Order of St. Vladimir has been conferred on Prof. Lazarevich, the well-known obstetrician of Kharkoff.

MR. H. B. NOBLE has offered a large plot of land for the purpose of the erection of a new hospital for Douglas, Isle of Man, and also the sum of £5000 for the purpose of building it, on condition that the institution be called Noble's Isle of Man Hospital. The offer has been accepted.

THE PECULIAR PEOPLE.—A verdict of manslaughter was returned by a coroner's jury at Royston, on Wednesday, against a farm bailiff, living at Foulmire, near Royston. It was stated that the accused belonged to the Peculiar People, and that he declined to obtain medical aid for a child of his who died from pneumonia.

ON the 3rd inst. a Local Government Board inquiry was held at Harrogate, respecting an application by the urban sanitary authority of that town for permission to borrow money for, amongst other purposes, the construction of reservoirs for mineral waters. This scheme originated with the medical men of the town.

STOCKPORT AND DISTRICT MEDICAL SOCIETY.—The first meeting of this Society was held on Thursday, January 28th, at 6.30 P.M., at the George Hotel, Stockport, when rules were passed and the following officers elected:—President: Dr. John Howe (Marple). Vice-President: Dr. Henry Heginbotham (Stockport). Hon. Sec.: Dr. J. Johnson Bailey (Marple). Hon. Treasurer: Dr. Kenneth Maclean (Stockport). The members, numbering between thirty and forty, afterwards dined together under very gratifying circumstances.

BORDEAUX MEDICAL SOCIETY. — The Bordeaux Medical and Surgical Society has decided to offer its prize of 1000 francs for the present year for a monograph on Jacksonian Epilepsy. The Society wishes that all the information on the subject which at present exists in medical literature scattered in numerous journals, summaries, and papers should be gathered into one comprehensive work. The same Society offers another prize of the value of 500 francs, for a popular treatise on Alcoholism. The essays for both the above must be legibly written in French, and sent, with the names of the writers, in sealed envelopes, to the general secretary of the Society, before August 31st, 1886.

VACCINATION GRANT.—Dr. T. Lamont Macartney of the Worthen district of the Forden Union has been awarded the Government grant for efficient vaccination (second time).

HOSPITAL SATURDAY FUND. — The twelfth annual meeting of the supporters of this fund was held on the 28th ult. According to the report of the Council for 1885 the continued progress of the movement is evidenced by an increase of £500 in the awards to the participating institutions; £9500 had been awarded to 71 hospitals, 40 dispensaries, and 19 convalescent homes and charities. During the past twelve years £74,271 has been contributed to the hospitals through the medium of the fund. The receipts have advanced from £6141 in 1874 and £6150 in 1879 to £11,192 last year.

TEMPERANCE LEGISLATION.—The arrangements for the conference to be held on this subject on the 25th and 26th inst. are now complete. On the first day, after an address from the President, Sir Richard Temple Bart., papers will be read on the question, "What reform, if any, is desirable in the Licensing Laws?" and the remainder of the day will be devoted to a discussion of the question. On the second day papers will be read on the questions, "Should compensation be given on the compulsory extinction of licenses, and, if so, from what source?" and "Is prohibitory legislation desirable, and, if so, in what form?"

MANCHESTER MEDICO-ETHICAL ASSOCIATION.—The annual meeting of this Association was held on January 29th, 1886. The report of the committee showed continued prosperity, with a steady increase of members and funds. The following gentlemen were elected office-bearers and members of committee for the year:—President: Mr. F. H. Walmsley. Vice-Presidents: Drs. H. Ashby, W. H. Barlow, S. Buckley, and F. M. Pierce. Treasurer: Dr. D. L. Roberts. Secretaries: Dr. A. Wahltuch, and Mr. J. Broadbent. Committee: Drs. F. H. Collins, A. Emrys-Jones, S. H. Owen, T. C. Railton, E. Rayner, W. Walter, and S. Woodcock, and Messrs. G. Bowring, J. Foster, R. Dacre-Fox, A. Hodgkinson, and D. de Vere Hunt.

BOROUGH HOSPITAL, BIRKENHEAD.—The annual meeting of the governors of this charity was held on the 25th ult. The report stated that the total number of patients treated during the year ending Dec. 31st, 1885, was 9322, of whom 3842 were children. During the year 535 patients had been treated in the hospital wards, 1799 were casualties seen at all hours, the out-patients numbered 3240, the home-patients 2407, and the dental patients 1341. The total expenses for the year were £2655 4*s.* 7*d.*, and the total ordinary receipts £2258 12*s.* 2*d.*, showing that the receipts had thus fallen short of the expenses by £396 12*s.* 5*d.*, and, inclusive of the adverse balance against the institution brought forward at the beginning of the year of £260 19*s.* 6*d.*, left a balance due to the treasurer of £657 11*s.* 11*d.*

THE GERMAN HOSPITAL.—At the annual general court of governors of this institution, on the 27th ult., it was stated that the number of in-patients admitted to the hospital and to the convalescent home during 1885 was 1076 and the total number of out-patients treated at the institution and the dispensaries connected with it was 22,588. The receipts amounted to £9025 and the expenditure to £9163. Though nominally German, this institution opens its doors to patients of all nationalities, and the great majority of the accident cases, which form a considerable part of the whole number, are English. As will be seen by the above statement of accounts, the present income of the hospital does not cover its expenditure, and further funds are urgently needed.

JERVIS-STREET HOSPITAL, DUBLIN.—On the 27th ult. a ball of a very magnificent kind was held in aid of the funds of this institution, and was most successful, an immense number of tickets having been sold, while the citizens and tradespeople made liberal contributions. One of the new wards—140 feet by 30—was utilised for dancing, while two other main wards were used for the convenience of those present. The decorations were extremely handsome, and the building was illuminated by the electric light. It was in order to obtain the necessary funds for furnishing the new wards recently constructed that the ball was held. On Thursday, the 28th, there was a musical promenade and undress ball, on the following evening a promenade with military bands, and on Saturday a dramatic performance.

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HUNTERIAN SOCIETY.—The annual meeting of the Hunterian Society will be held in the London Institution, Finsbury-circus, on Wednesday, Feb. 10th, when the oration will be delivered by Sir Andrew Clark, Bart., F.R.S., at 8 P.M. The annual dinner of the Society takes place at the Holborn Restaurant on Friday, Feb. 12th. The following is the proposed list of officers for the session 1886-87:—President: Mr. F. M. Corner. Vice-Presidents: Mr. W. Clapton; Dr. Stephen Mackenzie; Dr. W. Talbot King, Mr. T. Rowing Fendick. Treasurer: Dr. Fotherby. Trustees: Dr. Fotherby; Mr. D. de Bert Hovell. Librarian: Dr. Burchell. Orator: Dr. Galabin. Secretaries: Mr. Charters J. Symonds; Dr. Charlewood Turner. Council: Drs. R. E. Carrington, R. Fowler, E. G. Gilbert, G. E. Herman, and P. H. Pye-Smith; Messrs. R. Barlow, C. H. Buncombe, G. B. Hicks, W. Rivington, R. G. Tatham, F. Wallace, and J. B. White.

BOOKS ETC. RECEIVED.

BAILLIÈRE, J. B., ET FILS, Paris.

Le Circulation et le Pouls. Par le Dr. Ch. Ozanam. pp. 1057, avec 4 Portraits et 493 Figures intercalées dans le texte.

BAILLIÈRE, TINDALL, & COX, King William-street, Strand, London.

A Treatise on Gout and Rheumatic Gout. By Austin Meldon, L.K.Q.C.P.I., F.R.C.S.I., &c. Fourth Edition. pp. 206.

The Pocket Pharmacopœia for 1886. By Armand Semple, B.A., M.B.Cantab. pp. 192.

BELL & BRADFUTE, Edinburgh.

Investigations into some Morbid Cardiac Conditions. By William Russell, M.D., M.R.C.P.Ed. pp. 184, with Illustrations.

BLAKISTON, SON, & Co., Philadelphia.

Transactions of the American Surgical Association. Edited by J. E. Mears, M.D. Vol. III. pp. 396, with Illustrations.

The Field and Limitation of the Operative Surgery of the Brain. By J. B. Roberts, M.A., M.D. pp. 80.

Practical Surgery, including Dressings, Bandaging, Fractures, Dislocations, Ligature of Arteries, Amputations, and Excision of Bones and Joints. By J. Ewing Mears, M.D. pp. 794, with 490 Illustrations.

CASSELL & Co., London.

The Year-book of Treatment for 1885. pp. 316.

CHURCHILL, J. & A., New Burlington-street, London.

Hunterian Lectures on some of the Injuries and Diseases of the Neck and Head, the Genito-urinary Organs, and the Rectum. By Edward Lund, F.R.C.S. pp. 116, with 4 Plates.

Year-book of Pharmacy, 1885. pp. 566.

A Code of Medical Ethics. By Jukes De Styrap, M.K.Q.C.P.I. Second Edition. pp. 95.

Sore Throat, its Nature, Varieties, and Treatment. By Prosser James, M.D. Fifth Edition. pp. 363, with Illustrations.

The Refraction of the Eye. By G. Hartridge, F.R.C.S. Second Edition. pp. 223, with 94 Illustrations.

A Guide to the New Pharmacopœia (1885). By Prosser James, M.D. Second Edition. pp. 119.

Handbook of the Diseases of the Nervous System. By James Ross, M.D., LL.D. pp. 723, with 184 Illustrations.

On the Supra-pubic Operation of Opening the Bladder for the Stone or for Tumours. By Sir Henry Thompson, F.R.C.S. pp. 51, Illustrated.

CRIPTON, HENRY, High Holborn, London.

Surgical Handicraft. By Walter Pye, F.R.C.S. Second Edition. pp. 546, with Illustrations.

LEWIS, H. K., Gower-street, London.

An Introduction to Practical Bacteriology. By Edgar M. Crookshank, M.B.Lond. &c. pp. 249, Illustrated with Coloured Plates and Wood Engravings.

Elements of Practical Medicine. By Alfred H. Carter, M.D.Lond. Fourth Edition. pp. 443.

A Guide to the Examination of the Nose. By E. C. Baber, M.B.Lond. pp. 163, with Illustrations.

LONGMANS, GREEN, & Co., Paternoster-row, London.

An Introduction to the Use of the Laryngoscope. By A. E. Garrod, M.A., M.B.Oxon. pp. 54.

The Rotifera or Wheel-animalcules. By C. T. Hudson, LL.D.Cantab., assisted by P. H. Gosse, F.R.S. Part I. pp. 40, with 5 Page-Plates.

LONGLAND, YOUNG J., Edinburgh.

Atlas of Venereal Diseases. By P. H. Maclaren, M.D., F.R.C.S.E. Fasciculus III. 6s.

MAN, F., Paternoster-row, London.

A System of Hygienic Medicine. By T. R. Allinson, L.R.C.P. &c. pp. 88.

MINISTON & Co., Henrietta-street, Covent-garden.

Lieutenant Mary: a Novel. By J. T. Collier, M.D. In 2 vols., pp. 294—308.

NEWMAN, HENRY, Strand, London.

The Voice, its Culture and Preservation. By Henry Knowles, L.R.C.P. &c. pp. 80.

Hernia and its Radical Cure. With a Clinical Lecture on Trusses and their application to Ruptures. By John Wood, F.R.S., F.R.C.S. pp. 124, with Illustrations.

WYMAN & SON, Great Queen-street, London.

The Light of Life, or the Secrets of Animal and Vegetable Development. Edited by J. J. Kain. pp. 181.

English and French Morality from a Frenchman's Point of View; by Yves Guyot.—Report of the Committee on Disinfectants of the American Public Health Association.—Report on Alcohol; by A. B. Palmer, M.D., LL.D., Michigan.—Reactions of the Substances given at the Practical Examination in Chemistry at the 1st M.B.Lond.; by F. J. M. Page, B.Sc. &c. (Lewis.)—Annual Report on the Civil Hospitals and Dispensaries in the Madras Presidency for 1884.—Little Folks, January. (Cassell & Co.)—The Insurance Railway Guide.—Improved Apparatus and Improved Methods for applying Static Electricity; by Dr. H. Tibbits.—Memory, Natural and Artificial; by F. W. E. Green.—Transactions of the American Ophthalmological Society; 21st Annual Meeting. (Boston.)—The International Journal of the Medical Sciences; No. CLXXX. New Series. (Cassell & Co.)—The Insurance Year-book, 1886.—Public Health in Minnesota Reports for 1885.—Transactions of the American Dermatological Association, 1885.—Handbuch der Physiologischen Optik; von H. von Helmholtz: zweite umgearbeitete Auflage, erste Lieferung.—Étude sur la Pathogénie et l'Anatomie Pathologique de l'Erysipèle; par le Dr. Maurice Dennecé.—A new Electric Light, for Diagnosis and Treatment of Diseases of Nose and Throat; by Dr. W. C. Jarvis, New York.—Ueber Lage und Stellung der Frau bei der Geburt; von Dr. R. W. Felkin, aus Edinburg.—Notes on the For Tribe of Central Africa; by R. W. Felkin, M.D.—Some recent Observations on Micro-biology; by F. J. Faraday, F.L.S.—Handbook of Deductive Logic designed for Medical Students; by Rev. Duncan Stewart, D.D. (Livingstone, Edinburgh.)—Catalogue of the Pathological Museum of the Western Infirmary, Glasgow; compiled by Joseph Coats, M.D. (Macdougall, Glasgow.)—Medical Boycotting; by Dr. R. B. Dudgeon.—University College Magazine, Liverpool, January, 1886.—Report of the British National Aid Society.—Index Medicus, Vol. VII., No. 12.—Decisions under Medical Practice Laws. (Illinois State Board of Health.)—Sunday Magazine, Good Words, February.—Leisure Hour, Sunday at Home, Boy's Own Paper, Girl's Own Paper, February.—Christian Theocracy and the Dynamics of Modern Government.—Histoire de la Médecine; par L. Barbillon.—A Young Wife's Perplexities; by Mrs. Warren.—The Reign of Law in Medicine; by Dyce Brown, M.D.—Ague, or Intermittent Fever; by M. D. O'Connell, M.D. &c.—Supra-pubic Lithotomy; by W. S. Tremaine, M.D.

Medical Appointments.

Intimations for this column must be sent DIRECT to the Office of THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ATKINSON, T. R., M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the Madley Division of the Dore Rural Sanitary District.

BARWISE, SIDNEY, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Second District of the Parish of Birmingham.

BENCRAFT, HENRY WILLIAM RUSSELL, M.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer to the Southampton Workhouse, vice Robert Welch, resigned.

DAVIS, HENRY, M.R.C.S., L.S.A.Lond., Second Chloroformist to the Middlesex Hospital, has been appointed Anæsthetist to the National Dental Hospital.

ENGLAND, Mr., L.D.S.Eng., has been appointed Honorary Dental Surgeon to the Home for Female Orphans, St. John's Wood, W.

GIBBONS, ROBERT A., M.D., M.R.C.P., has been appointed Physician for the Diseases of Women and Children to the St. George's and St. James's Dispensary, vice Fancourt Barnes, resigned.

JACKSON, H., M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the Barnstaple Rural Sanitary District.

KANE, JAMES R., M.B., C.M.Glas., has been appointed Medical Officer for the Third District of the Parish of Birmingham.

LUCAS, CHARLES, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Fifth District of the Newmarket Union.

MORRIS, DAVID W., L.K.Q.C.P.I., M.R.C.S., has been appointed Medical Officer for the Fulbourn District of the Chesterton Union.

NIVEN, JAMES, M.B., M.A.Cantab., has been appointed Medical Officer of Health for the Oldham Urban Sanitary District; and Medical Director and Attendant of the Westhulme Infectious Diseases Hospital, vice Hill, deceased.

ORCHARD, ALFRED, M.R.C.S. and L.R.C.P.Lond., has been appointed Medical Officer and Public Vaccinator for the Workhouse and Parish of Ashby-de-la-Zouch.

PAIN, T. D'OYLEY, L.S.A.Lond., has been reappointed Medical Officer of Health for the Kentchurch Division of the Dore Rural Sanitary District.

POCKLINGTON, EVELYN, M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the Wimbledon Urban Sanitary District.

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SHARMAN, JOHN, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer to the Schools at Norwood of the Parish of St. Mary, Lambeth.

SHEA, JOHN, M.D.St. And., M.R.C.S., L.S.A.Lond., has been re-appointed Medical Officer of Health for the Wokingham Urban Sanitary District.

THAIN, LESLIE L., M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the Longtown Division of the Dore Rural Sanitary District.

THOMAS, WILLIAM LANHAM, M.R.C.S., L.S.A.Lond., has been re-appointed Medical Officer of Health for the Horsham Urban Sanitary District.

WARTENBERG, VICTOR A., L.R.C.P.Ed., M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the St. Anne's-on-the-Sea Urban Sanitary District.

Births, Marriages, and Deaths.

BIRTHS.

ADAMS.—On the 1st inst., at 184, Aldersgate-street, E.C., the wife of John Adams, L.R.C.P.Lond., of a son.

ANDERSON.—On the 1st inst., at Spennymoor, Durham, the wife of Robert S. Anderson, M.B., of a daughter.

BENJAFIELD.—On the 6th ult., at Bletchenden, Church-street, Edmonton, the wife of W. B. Benjafield, M.D.Edin., of a son.

BROOKS.—On the 31st ult., at Beaumont-street, Oxford, the wife of W. Tyrrell Brooks, M.B., of a daughter.

CAMPBELL.—On the 29th ult., at Sheffield-gardens, Campden-hill, W., the wife of Brigade-Surgeon A. D. Campbell, M.D., of a son.

COLEMAN.—On the 29th ult., at Hill View, Streatham-common, S.W., the wife of Charles A. Coleman, M.D., of a son.

GABE.—On the 26th ult., at Mecklenburgh-square, W.C., the wife of John R. Gabe, M.D., M.R.C.S., of a son.

HILLIARD.—On the 3rd inst., at Church-street, Aylesbury, the wife of Dr. R. Harvey Hilliard, of a son.

POPE.—On the 26th ult., at Broomsgrove Villa, Goldhawk-road, W., the wife of H. Campbell Pope, M.D.Lond., F.R.C.S., of a daughter.

PORTER.—On the 29th ult., at Bow-road, the wife of J. Francis Porter, M.D., of a daughter.

RAYNER.—On the 1st inst., at Hanwell, the wife of H. Rayner, M.D., of a son.

SNOW.—On the 26th ult., at Norfolk-terrace, Bayswater, the wife of Herbert Snow, M.D.Lond., of a daughter.

WHITTLE.—On the 29th ult., at Oriel House, Prince's-avenue, Liverpool, the wife of Glynn Whittle, M.A., M.D.Cantab., of a son.

YOUNG.—On the 31st ult., at Rose Bank, Merton-road, Bootle, near Liverpool, the wife of T. Frederic Young, M.K.Q.C.P.I. M.R.C.S., of a daughter.

MARRIAGES.

BOTT—LUKE.—On the 27th ult., at Holy Trinity Church, Dartford, Kent, Joseph Bott, M.R.C.S., eldest son of Joseph Fennell Bott, late of Cammas Hall, White Roothing, Essex, to Elizabeth Ann, second daughter of William Luke, of Portsmouth, Hampshire.

COX—OLDREY.—On the 1st inst., at Kingston, Jamaica, J. Leslie C. Cox, L.R.C.P.Ed., L.R.C.S.Ed., to Florence Nugent, eldest daughter of the late Robert Oldrey, Esq., of Harpole Hall, Northamptonshire.

MILLIGAN—RICHARD.—On the 3rd inst., at 20, Grosvenor-crescent, Edinburgh, by the Rev. James MacGregor, D.D., assisted by the Rev. A. Wallace Williamson, M.A., of St. Cuthbert's, David Milligan, M.B., C.M.Edin., youngest son of the late James Milligan, Solicitor before the Supreme Courts, Edinburgh, to Margaret Isabella, second daughter of John Miller Richard, of Clarendon. At home, 7, West Maitland-street, 18th and 19th inst.

RICHMOND—JEFFERSON.—On the 28th ult., at All Saints' Church, Northallerton, Sylvester Richmond, M.D., of Greenhithe, Kent, to Mary, eldest daughter of W. T. Jefferson, Solicitor, of Northallerton.

WILLIAMS—BEVAN.—On the 2nd inst., at Christ Church, Lancaster-gate, by the Rev. C. Spencer Newham, Llewellyn Leonard Bulkeley Williams, M.B.Glas., son of the late David Williams, Esq., M.P., J.P., D.L., of Dendraeth Castle, Merionethshire, to Antonia Rebecca, daughter of the late William Bevan, Esq., of 74, Lancaster-gate, London.

DEATHS.

BALLS-WOOLBY.—On the 1st ult., at Groot River, Cape Colony, drowned whilst bathing in the sea, James Balls-Woolby, M.B.Lond., M.R.C.S., eldest son of R. J. Balls, of Spexhall road, Halesworth, Suffolk.

BUTLER.—On the 15th ult., at Coventry-street, Brighton, George Butler, Surgeon, A.M.D. (retired), aged 66.

HARRIS.—On the 26th ult., at Guilford-street, W.C., David Harris, M.R.C.S., aged 27.

KITCHING.—On the 2nd inst., at his residence, Enfield, Middlesex, George Kitching, M.D., in his 85th year.

RODGERS.—On the 30th ult., Professor Julian Edward Disbrowe Rodgers, M.R.C.S. and L.S.A.Lond., late of the London Hospital Medical School, in his 72nd year.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, February 8.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Mr. J. Bland Sutton: Evolution in Pathology.
SOCIETY OF ARTS.—8 P.M. Prof. H. S. Hele Shaw: Friction (Cantor Lecture).
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Bernard Pitts: Subperitoneal Resection in certain cases of Acute Necrosis.—Dr. D. W. Finlay: On a case of Empyema with Cerebral Abscess.

Tuesday, February 9.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Mr. R. Stuart Poole: Naucratis.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Dr. J. Edward Squire: Enteric Fever at Suakim, with some cases of Malarial, Enteric, or Typho-malarial Fever.—Dr. Cayley: A case of Thoracic Aneurysm treated by the introduction of Iron Wire into the Sac.

Wednesday, February 10.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Mr. J. Bland Sutton: Evolution in Pathology.
HUNTERIAN SOCIETY.—8 P.M. Annual Oration by Sir Andrew Clark, Bart.
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Rev. Dr. Dallinger will give his Presidential Address.
EPIDEMIOLOGICAL SOCIETY OF LONDON.—8 P.M. Dr. D. A. Gresswell: Chronicity and Rejuvenescence of Diphtheria in the Individual, and their Bearings upon Sustained Prevalence of Diphtheria in a Community.
SOCIETY OF ARTS.—8 P.M. Mr. Bennett H. Brough: Mining Industry at the Buda-Pest Exhibition.
BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens will be shown. Adjourned Discussion on Dr. Chalmers' paper on Puerperal Septicæmia.

Thursday, February 11.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. W. Chandler Roberts-Austen: Metals as affected by Small Quantities of Impurity.

Friday, February 12.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Mr. J. Bland Sutton: Evolution in Pathology.
CLINICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Tyson: On three cases of Universal Alopecia.—Mr. Bellamy: An Obscure case of Femoral Hernia, operation, (?) double reduction *en masse*.—Dr. Hale White: Hysterical Pyrexia.—Dr. Goodhart: Cases of Meningitis of Obscure Origin.—Dr. Stephen Mackenzie: Two cases with Unilateral Paralysis of Tongue, Soft Palate, and Vocal Cord, &c. (living specimens).
ROYAL INSTITUTION OF GREAT BRITAIN.—9 P.M. Prof. Osborne Reynolds: Experiments showing Dilatancy, a property of Granular Material, possibly connected with Gravitation.

Saturday, February 13.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
MIDDLESEX HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Mr. Archibald Geikie: The History of Volcanic Action in the British Isles.

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Feb. 4th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain al..	Remarks at 8.30 A.M.
Jan. 29	29·72	S.W.	38	36	...	45	33	...	——
,, 30	29·78	S.W.	37	35	...	46	34	·03	——
,, 31	29·56	S.W.	45	43	...	47	36	·13	——
Feb. 1	29·29	W.	39	38	...	45	37	·19	——
,, 2	29·60	W.	39	37	...	45	36	...	——
,, 3	29·52	W.	36	35	...	41	35	·23	——
,, 4	30·13	N.E.	36	35	...	...	35	·15	——

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

VOLUNTEER MEDICAL STAFF CORPS.

IN answer to inquiries repeatedly made to us, we may state that volunteer surgeons will find all the necessary information and instruction for training stretcher-bearers and bearer companies, the training of orderlies for the Medical Staff Corps, and other cognate matters, in the new Manual for the Medical Staff Corps, 1885, just published by the War Office, price 2s., and which can be had of Messrs. Clowes and Sons, Charing-cross, or any other large bookseller.

Medico.—"Gazzetta degli Ospitali" (two numbers weekly); Vallardi, Milano. "Il Morgagni" (monthly); Vallardi, Napoli.

Mr. G. Steel Scott, M.B.—The point should have been made clear in the original agreement. It cannot be enforced now, except by friendly argument.

PEAT SMOKE AND PHTHISIS.

To the Editor of THE LANCET.

SIR,—I should feel much obliged if you would kindly inform me whether you consider the inhalation of the fumes evolved during the combustion of common peat of any value in the earlier stages of tubercular phthisis. I am, Sir, your obedient servant,

Conservative Club, Feb. 2nd, 1886. J. R. S. TAYLOR.

*** We are not aware that "the inhalation of the fumes evolved during the combustion of common peat" is "of any value in the earlier stages of tubercular phthisis." Several years ago, Dr. Morgan showed that the immunity from phthisis enjoyed by the dwellers in the Hebrides and N.W. Scotland, who use peat fires, must be ascribed to the free ventilation of their huts, rather than to the peat smoke, which could be seen escaping from the door and crevices of the building (*British and Foreign Medical and Chirurgical Review*, 1860). Theoretically, such fumes would be antiseptic; but the solid particles they contain would by their inhalation increase the tendency to lung affection. An ample supply of *pure* air is the great prophylactic.—ED. L.

H. C.—We agree with our correspondent that such a mode of advertising is highly objectionable.

THE GENERAL LYING-IN HOSPITAL, YORK-ROAD.

To the Editor of THE LANCET.

SIR,—In your issue of last week the changes on the staff of the General Lying-in Hospital are incorrectly stated. Dr. Champneys is described as having been appointed physician to the Hospital. The facts are that Dr. Williams and Dr. Champneys have been physicians to the Hospital for the past five years; at the end of this time (Dec. 3rd, 1885) Dr. Williams resigned, and has been appointed consulting physician, and Dr. Herman has been elected to the vacancy thus created.

I am, Sir, your obedient servant,

Feb. 3rd, 1886. ANNIE WHYTE, Secretary.

WE are asked to state that the Secretary to the Royal College of Physicians of Edinburgh will be greatly obliged if the gentleman who kindly sent him a cutting from THE LANCET (posted from London, W., on Feb. 2nd) will do him the favour to communicate with him.

Mr. T. D. Harries, F.R.C.S.—It is left to the discretion of a magistrate whether he grants costs to a medical witness or not. It is usual to allow costs to medical witnesses called at the instance of the Treasury or the police, but not to those retained by the defence. The amount generally paid is half a guinea for each attendance; but recently a case occurred at a metropolitan police-court where the magistrate granted £1 12s. 6d. for five attendances of an expert witness.

R. C. B., M.R.C.S.—We know of no special work on the subject other than that mentioned.

Captain O.—Either of the two first-named places would be suitable.

SANTONIN AS AN EMMENAGOGUE.

To the Editor of THE LANCET.

SIR,—As the administration of santonin as an emmenagogue in chlorosis seems to be on its trial, the following case, though an isolated one, may be of interest.

A young lady presenting the usual symptoms—anæmia, pallor, and waxy hue of complexion, with cessation of menses, constipation, loss of appetite, foul tongue, palpitation and breathlessness on slight exertion, headache and depression of spirits—consulted me on Nov. 5th, and was prescribed a mixture containing ten grains of citrate of iron and ammonia, with three minims each of liquor strychniæ and liquor arsenicalis, and a grain of quinine in each dose, to be taken three times daily at meals in orange wine. I also ordered a pill containing two grains of extract of cascara sagrada (Schieffelin's), to be taken three times a day. This treatment was continued till Dec. 9th, by which time the patient's health was apparently completely restored, except that the menses had not returned. She had a healthy colour, was able to take a long walk, and enjoyed life again, feeling in perfect health. I then prescribed ten grains of santonin, to be taken at bed-time after a hot hip-bath, and on the day when it was reckoned that menstruation should recur. The only effect was that she spent a night of sickness and vomiting, and was extremely miserable all the next day, but was in her usual health the following day, when she described to me her symptoms, and added that she thought at the time that I had poisoned her. I resolved then to avoid emmenagogues, and advised her to continue the tonic mixture until the catamenia should appear. This happened four or five days later, when she was charitable enough to say that the medicine had had the desired effect. She has since continued in excellent health.

I very much doubt whether it is at all wise or rational to administer emmenagogues in chlorosis, and think that we should rely on constitutional treatment, regarding the cessation of menses as a symptom of the debilitated and anæmic condition. If the initial mischief be in the intestinal canal, where the blood is (so to speak) starved by the torpid condition of the digestive tract, or poisoned by the absorption of what should be excreted, the most essential part of the treatment is to restore regular and healthy action of the bowels. Cascara sagrada seems to be very effectual in this way. I have found that not all preparations of cascara sagrada are equally efficient. I prescribed quinine with the iron because I have repeatedly found that patients for whom I had occasion to prescribe quinine were unable to take it on account of the excessive menstrual flow which it caused; so that I regard a tendency to menorrhagia as a contra-indication for quinine, but I am not able to say with any certainty that it induces the flow when absent. The fact that quinine acts as an oxytocic, and that it has been sometimes blamed for causing abortion, seems to indicate that it does act through the nervous centres upon the ovaries and uterus.

I am, Sir, yours faithfully,

Jan. 25th, 1886. THEOBALD A. PALM, M.A., M.D.

To the Editor of THE LANCET.

SIR,—As much attention has lately been drawn to the use of santonin in the treatment of amenorrhœa, a few remarks upon it may not be out of place.

Santonin has apparently been used up to the present with a varying amount of success; but I think this is due to its not being continued for a sufficient length of time. Since the publication of Mr. Whitehead's article, I have used santonin freely in the treatment of amenorrhœa, and certainly have reason to be pleased with the results. In a record of seventeen cases there have only been two failures; in only one patient did the drug cause any unpleasant sensations—viz., dizziness, sickness, and headache; in none was there any disturbance of vision. In addition to the santonin, I usually prescribe mustard hip-baths, and a mixture containing some preparation of iron, combined with tincture of iodine and belladonna. Most cases of amenorrhœa that the practitioner treats are caused by anæmia. As the drug becomes more generally used and persevered in, I think practitioners will be pleased with the results. Whether the drug can be called an ovarian stimulant is, I think, uncertain; but that it produces a flow of blood from the uterus is beyond doubt. I have selected the following three cases as examples.

Margaret L——, aged thirty, married, had not menstruated since the birth of her last child, eighteen months. She had been subject to epileptic fits from girlhood. Within the last year the attacks were more frequent. After continuing santonin for six weeks, with an intermission of a week, menstruation occurred. A month after this, a flow appearing

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two powders of ten grains each were given. Menstruation was restored, and has been regular ever since. The patient was being treated for the epilepsy at the same time, and has been quite free from fits for two months; formerly an attack occurred every fortnight.

Elizabeth B——, aged seventeen, under treatment for pericarditis, had never menstruated. The patient, who was very anæmic, had a leucorrhœal discharge. In this case no flow has been produced as yet; she is still taking the santonin, as well as remedies for the anæmia.

Annie G——, aged nineteen, a chlorotic girl in a very weak condition, had not menstruated for five months. After a fortnight's treatment with santonin and remedies for the chlorosis, menstruation occurred, the flow lasting three days. A fortnight later it returned in increased quantity, and lasted six days; since then menstruation has been quite regular, and the patient is now well.

In giving santonin a fair trial we must not use it alone, but combine its use with other remedies, according to the nature of the individual case; we must continue its use for a longer period before saying it has failed.

I am, Sir, yours faithfully,

Wooburn, Bucks, Jan., 1886. FRED. W. ALLWRIGHT, L.R.C.S.I., &c.,

"THE VENTILATION OF SEWERS."

To the Editor of THE LANCET.

SIR,—In THE LANCET of the 30th ult., under this heading an annotation appeared that left an impression, which may or may not have been intended, but which can scarcely be allowed to pass unquestioned. The possibility of low-level or surface ventilators, as *outlets* for foul gases, becoming disseminators of disease can hardly be gainsaid; and that the judgment of those who are not acquainted with the physical properties of gases and liquids should be fallacious, is not surprising; but are we to accept the judgment of those who are?

"There is only *one* way of effectually ventilating close (*sic*) drains and sewers, and that happily is an easy one." Taken together with some remarks further on the construction to be placed upon this is that sewers should be closed from source to mouth, and then "pipes, which ought to be not less than four inches in diameter, as perpendicular as possible ..... should be carried up from the drain or sewer to a point well above the level of the roofs, ... by means of these pipes the sewers may be properly ventilated." How is this ventilation to take place? Is the air to enter the sewers at Abbey Mills or Barking Creek (or in futurity at Canvey Island), and travel an unknown distance to the thousands of outlets formed by a multiplication of "the two or more ventilating pipes to be constructed by the spirited householder on his own premises"? or, is the physical fact lost sight of that ventilation, aeration, or oxidation (not merely vent to relieve pressure), requires an inlet within measurable distance of the outlet? The latter is the more probable, and confirmed by the enunciation that "the particularly ridiculous notion that pure air can be drawn in at the mouth of a low-level pipe, and foul air ejected at the open mouth of a high-level pipe, is probably one of the most mischievous and obstructive of prevailing misconceptions."

It would not be well to analyse this; but would it not be well to let it go forth from a scientific journal that for the ventilation of tubes—i.e., to maintain a current of air through them—both an inlet and an outlet are necessary, and that given a motive force, such as heat or the suction power of the wind, then a current will take place or not, and its speed be regulated according to the relative levels of inlet and outlet, and the ratio between the length and calibre of the horizontal and the length and calibre of the vertical pipe.

These are matters of calculation and experiment not yet elucidated, and by the medical profession, at least, should be treated in an unbiased spirit of inquiry.

I am, Sir, yours, truly,

JOHN F. J. SYKES.

Camden-road, N.W., Feb. 1st, 1886.

*** There are some undertakings so vast that the only way of achieving success is to grapple with them in detail. The immediate and practical business of the householder is not to ventilate the sewers of the metropolitan district as a whole, but to provide a way of egress for the gases which occur in the special length of drain and sewer with which his particular dwelling is connected—disconnected (?). This may be accomplished, as we have pointed out, by ventilating pipes, *two* or more at proper positions near his house. If short lengths of drain and sewer be thus ventilated, the difficulty of ventilating the sewerage of the metropolis generally would be greatly reduced. We are unable to accept as law the proposition laid down by our correspondent.—ED. L.

RISKS OF ABBREVIATIONS IN PRESCRIPTIONS.

A POLISH physician, wishing a patient to be dry-cupped in eighteen places, wrote the order with the figure "18" followed by the letter "b," to stand for the Polish word for cups. This, again, was followed by the word meaning "dry." The dresser, mistaking the "b" for "6," actually practised 186 dry cuppings on the unfortunate patient. The Russian journal from which we learn this incident, remarks that it is well that it was dry, and not wet, cupping that was ordered.

Mr. Montague W. C. Pulmer.—The man requiring the certificate should pay for it—at least, our correspondent's claim would be against him.

Mr. Treasdy's letter on the Royal College of Surgeons arrived too late for insertion this week.

RUSSIAN REMEDY FOR HYDROPHOBIA.

IN an article in the *Veterinarian* reference is made to a statement recently published by us respecting the alleged value of the alisma, or water plantain, as a remedy for hydrophobia. Our contemporary states that the late Mr. Youatt very early in his professional career gave trial to the alisma as a preventive, and also as a cure of rabies in the dog. A record of his experiments was published in 1829. Experimenting with the English *Alisma plantago*, Mr. Youatt recorded that it griped, purged, and produced some giddiness; but it did not prevent the appearance of the disease, or arrest its progress. He afterwards procured a little of the true alisma, but not in sufficient quantity to try its preventive power. Its curative efficacy was, however, tested. Two drachms of the powdered root, suspended in a little mucilage, were given to a rabid and ferocious dog. The animal became quieter, and after the administration of a second dose, six hours afterwards, its desire to do mischief altogether ceased; the harmless or paralytic stage of the malady supervened, and death occurred in twenty hours after the second dose. Mr. Youatt on other occasions tried the alisma procured from English herbalists, but without any satisfactory result.

Æsculap.—Parkes' Hygiene, Ganot's Physics, Baldwin-Latham's Sanitary Engineering, and the Public Health Acts.

THE USE OF SAYRE'S SWING.

To the Editor of THE LANCET.

SIR,—Allow me to call attention to certain objectionable features in the common method of using Sayre's swing for the application of poroplastic or plaster-of-Paris jackets. It is usual to suspend the patient both by the neck and by slings under the armpits, and the latter are supposed to add to the safety of the proceeding. I venture, however, to submit that the use of these arm-slings is inconvenient, unnecessary, and calculated to add to the danger rather than to diminish it. That it is inconvenient must have been felt by many who are in the habit of applying supports to the back; for the slings, if tight enough to assist in bearing the weight, are liable to cause unsightly elevation of the shoulders, and in the case of plaster-of-Paris jackets interfere with the smooth and even application of the material below the armpits. That it is unnecessary is, I think, sufficiently proved by the fact that I have now used the Sayre's swing hundreds of times without the arm-slings, with no more discomfort than is produced by suspension with them. That it is dangerous will, I think, be obvious from the following considerations:—So long as the patient keeps the arms down, part of the weight of the body is undoubtedly borne by the arm-slings; but directly the suspension becomes irksome, there is an instinctive tendency to throw up the arms, in order to grasp the cross-bar, whereby the arm-slings lose their hold and a sudden jerk is produced, the whole, or nearly the whole, weight being suddenly thrown upon the neck. Now, it is well known that sprains and dislocations most frequently occur from sudden and unexpected tension of particular muscles or groups of muscles; and I see no reason to doubt that what is true of muscles supporting the knee or the wrist is also true of those uniting the head and trunk. In either case a much greater strain can be borne with impunity when applied gradually and deliberately than when applied suddenly. Supposing the tension to be equally distributed at first in a patient weighing 9 st., the additional strain thrown upon the neck may be as much as 84 lb. Were the arm-slings firmly united by bands across the back and chest, the slipping might be partially, though not entirely, prevented; but, as far as I know, this is never done, and it certainly would be inconvenient to the surgeon. If the patient is allowed from the first to grasp the cross-bar, the arm-slings are useless, while the accompanying rotation and consequent prominence of the scapulæ necessarily leads to a misfit. That special cases may occur in which it is advisable to support in part from the armpits I do not deny, although I have not yet seen such. But I am convinced that in most cases it is far less dangerous to trust entirely to the neck muscles than to run the risk of slipping of the arm-slings, while suspension from the neck is a far more efficient means of extending and straightening the spinal column than any method depending upon support from the axillæ. In every case the greatest care should be taken to avoid sudden jerks to the neck, and it is also frequently advisable to accustom the patient to the process by a few preliminary suspensions of increasing duration on successive days.

I am, Sir, yours faithfully,

Moorgate-street, Jan. 12th, 1886. F. RUFENACHT-WALTERS, M.D.

NEW MEDICAL JOURNAL IN SPAIN.

THE appearance of a new Spanish monthly medical periodical dealing with the special departments of eye, ear, and throat practice is announced, entitled *Gaceta de Oftalmologia, Otologia, y Laryngologia*, and edited by Dr. Don Frederico Gomez de la Mata. There are at present some twenty medical journals published in Spain, about seven of which are weekly, the rest being trimonthly, fortnightly, and monthly. We have seen two ophthalmic journals, but have never heard of any specially devoted to ear and throat diseases; so that Dr. Don Gomez de la Mata has to a large extent an untrodden field before him.

E. W. is referred to the reply "Æsculap," *supra*.

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LIP-READING.

A PAPER on Lip-reading, by Mr. William Van Praagh, appears in the first number of the *Quarterly Review of Deaf-Mute Education*. The great importance of lip-reading to our deaf children is felt by all workers for the deaf; yet, until now, lip-reading has not received so much attention as it ought to have had. Indeed, considering the subject of deaf-mute education historically, it is noteworthy how new in this country the subject is. It is not yet a hundred years since the first public institution for its promotion was established. At the beginning of this century that institution was the only one. Now, however, a very different condition of affairs has been arrived at; and we wish Mr. Van Praagh all success in the efforts he is making to ameliorate the condition of our deaf-mutes.

J. N. W.—1. For the post of police-surgeon, application should be made to the Chief Surgeon of the Metropolitan Police. The pay varies in the different divisions, and is regulated by the number of officers and men, each of whom contributes according to rank.—2. To the Home Secretary.

Rusticus.—A great deal of information and of forcible argument is contained in papers read at the International Medical Congress held in London in August, 1881, by Professor Virchow, Mr. Simon, and Dr. Fraser, reports of which will be found in THE LANCET of Aug. 6th and 20th, 1881.

M.R.C.S. had better refer to Pettenkofer's latest publication on the subject—i.e., "Die Cholera," Deutsche Bücherei, No. xxxvi. Breslau, Berlin, von S. Schottlaender.

Mr. R. Davison Pedley.—The matter shall have attention.

A CORRECTION.

To the Editor of THE LANCET.

SIR,—I beg to call your attention to an error which I notice in the account of my experimental yellow fever, given in your issue of Oct. 10th, 1885, p. 680. The pyrexia observed by me after the successful cases of mosquito inoculations has never exceeded seven days' duration. This term should therefore be substituted in place of the limit, "twenty-one days," mentioned in your annotation. The rectification is so far important as the misconception might deter others from repeating my experiments. I am, Sir, yours truly,

Havana, Jan. 16th, 1886. CHARLES FINLAY, M.D.

Locum.—The question is not a medical one. But we do not see that the principal is ever afterwards bound to treat with B through A because he was first introduced to B through A.

Mr. S. W. Hambleton.—We do not quite see the drift of our correspondent's letter.

Octogenarian should consult his medical attendant in reference to the habit in question.

Mr. Annandale (Edinburgh).—Yes.

A Subscriber for Twenty-six Years.—The claim is a good one in a court of law.

Non-de-plume.—Yes, decidedly.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir Henry Thompson, London; Mr. Annandale, Edinburgh; Mr. V. Horsley, London; Dr. Gibson, Edinburgh; Dr. Champneys, London; Dr. C. Finlay, Havana; Dr. Wahltuch, Manchester; Mr. H. E. Clark, Glasgow; Dr. Latham, Cambridge; Surg.-Major Bonstead; Dr. Ashby, Manchester; Professor Longmore, Netley; Mr. Williams, Liverpool; Dr. Stephen Smith, New York; Dr. Küche, Tiel; Mr. G. S. Scott, London; Mr. Palmer, Newbury; Mr. Paulson, Loughborough; Mr. T. Laffan, Cashel; Dr. W. S. A. Griffith, London; Messrs. Atkinson and Philipson, Newcastle-on-Tyne; Mr. W. Moro, London; Dr. Bampton, Plymouth; Mr. Ethelston; Dr. Bridger; Dr. Illingworth, Clayton-le-Moors; Mr. Hawkins-Ambler, Kirkburton; Mr. C. S. Jeaffreson, Newcastle-on-Tyne; Dr. Cameron, London; Dr. Whitelaw, Kirkintilloch; Mr. R. D. Pedley, London; Mr. Berry, Wigan; Dr. Purcell, London; Mr. Symonds, London; Mr. Bowater, London; Mr. Shaw, Ashton; Dr. Marsden, London; Dr. Ardagh, Portlaw; Dr. Lombe, Torquay; Mr. Davis, London; Mr. Lewis, Liverpool; Messrs. Hall and English; Mr. Mills, Glasgow; Messrs. A. and C. Black, Edinburgh; Mr. Glasspool, London; Mr. Hastings, London; Mr. Alester, London; Mr. Hambly, Bristol; Mr. Hayward, Corby; Mr. Robertson, Edinburgh; Mr. Godfrey, Northampton; Mr. Williams, Oswestry; Mr. Banner, Audlem; Dr. Julius Pollock, London; Prof. Buchanan, Glasgow; Mr. Simeon Snell, Sheffield; Dr. Churton, Leeds; Dr. J. J. Bailey, Marple; Dr. A. Duncan, Umballa; Mr. Arnold, London; Dr. S. West, London; Dr. Skerrett, Bristol; Mr. Jalland, York; Dr. J. F. J. Sykes, London; Mr. Lowndes, Liverpool; Messrs. Waltham Bros., Stockport; Mr. Pound, Odiham; Mr. Mansergh, London; Dr. H. V. Carter, Bombay; Dr. Dickinson, London; Mr. Cave; Mr. Maythorn, Biggleswade; Mr. Gurner, London; Mr. Fitzgerald, Alford; Mr. Long, Antwerp; Mr. Harrison, Liverpool; Mr. Collier, Shirley; Mr. Horder, Cardiff; Mr. Keating, Manchester; Dr. Cornillon, Vichy; Dr. Saul, Lancaster; Dr. Goldsmith, Worthing; Mr. Walker; Mr. Robinson, Henley-on-Thames; Messrs. Condy and Co., London; R. V. W.; Beta; G. C. F., Islington; Æsculap; Rusticus; M.D., Maidstone; Forceps; R. C. B.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Bower, Bedford; Mr. Knight, Northampton; Dr. Mackay; Messrs. Horsfall and Co., Wakefield; Mr. Juler, London; Mr. Tanner; Mr. Norman, Colchester; Mr. Cuthbertson, Leeds; Mr. Moore; Dr. McLintock, Church Stretton; Mr. Davies, Cardigan; Mr. Chatelanair, Switzerland; Mr. Godfrey, Northampton; Mr. Worsley, Ryde; Mr. Gurne, Blackpool; Mr. Arrowsmith, Bristol; Mr. Cornish, Manchester; Mr. Blumer, Stratford; Mr. Thwaites, Bristol; Dr. Adye, Bradford-on-Avon; Mr. Eddis, Barmouth; Miss Sidney, Brighton; Dr. Stott, Haslington; Mr. Newton; Mr. Powneeby, London; Messrs. Kilner Bros., Newcastle; Dr. Lomb, Torquay; Messrs. Bullock and Reynolds, London; Mr. Barke, London; Mr. Moulin, London; Miss White, Westgate-on-Sea; Mr. Brockelbank, Islington; Mr. Morgan, Swansea; Mr. Fielding, Walthamstow; Mr. Pullin; Mr. Hodgkins, Oxford; Mr. Stock; Messrs. Burroughs and Co., London; Mr. Kinder, Leicester; Mr. Hislop, Shrewsbury; Mr. Rayner, Hanwell; Mr. Guest, Darlington; Mr. Austin, Faversham; Messrs. Giles and Co., Clifton; Mr. Busfield, Manchester; Mr. Lilly, Leicester; Mr. Cresswell, Mickleton; Mr. Morton; Mr. Beaman, Newton-le-Willows; Dr. Wood, Pontypool; Dr. Seaton, Sunbury; Mr. Storey, Cardigan; Mr. Leaver, Stratford-on-Avon; Treasurer of the Royal College of Physicians; F. H., Tunbridge Wells; W. H. S., Blaina; H. A. R.; Junius, Edinburgh; Medicus, Penge; Medicus, Southsea; Bryn Llwyd; Medicus, Wavertree; Juvenal; Peritus, Exeter; M. J.; Nurse; Medicus, Liverpool; Alpha, Appleby Magna; J. C. T., Windermere; Matron, Sheffield; M.B., Holloway; A.B., Bolton; Medicus, Bristol; B.V.M., Highgate; Nemo; S. S.; Matron, Peterboro'; Chirurgus; Medicus, Oldham; Omega; Medicus, Virginia; M.D., Newtown; Medicus, Liverpool; Cocaine, Liverpool; Medicus, Brighton.

Egyptian Gazette, Times of Egypt, Sanitary Engineering, Manchester Courier, Earlestown Guardian, Stratford Express, Brisbane Telegraph, Brisbane Daily Observer, Kidderminster Times, Brisbane Courier, Greenock Telegraph, Temperance Record, Newcastle Daily Journal, Charity Record, Imperial Federation, The Housewife, The Zoophilist, The Bat, &c., have been received.

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THE

Erasmus Wilson Lectures

ON

EVOLUTION IN PATHOLOGY.

Delivered at the Royal College of Surgeons.

BY J. BLAND SUTTON, F.R.C.S.,

ASSISTANT-SURGEON TO THE MIDDLESEX HOSPITAL, AND LECTURER ON COMPARATIVE ANATOMY.

LECTURE I.

CORRELATION AND ITS EFFECTS.

MR. PRESIDENT AND GENTLEMEN,—Darwin's greatest disciple in this country, Professor Huxley, has enunciated the principles of evolution in the form of three laws. 1. There has been excess of development of some parts in relation to others. 2. Certain parts have undergone complete or partial suppression. 3. Certain parts which were originally distinct have coalesced. Huxley uses the term "law" as a general statement of facts ascertained by observation. A good example for the illustration of these laws is the female generative organs. Many forms—e.g., the Cirrepedia, land mollusca, &c.—are provided with male and female organs constituting hermaphroditism. Ascending the scale of animated beings, we find that although every animal possesses at some period of embryonic life male and female organs in a potential form, yet normally one set, either those peculiar to the male or those peculiar to the female sex, gain the ascendancy. This serves as an illustration of the first law—that is, there has been an excess of development. Associated with this excess we find suppression and more or less complete disappearance of the opposite set of organs. Thus we obtain an excellent illustration of the second law. In the Icthyopsida (fish and batrachians) and the Sauropsida (reptiles and birds) the female generative ducts are for the most part represented by oviducts (Müllerian), quite separate, although in birds one usually disappears. In mammals the representatives of the oviducts fuse in the middle line through a greater or lesser extent, and constitute a median uterus. This illustrates the third law, or coalescence of parts originally distinct.

My object in these lectures is to endeavour to show that the structural aberrations of animal bodies of which pathological anatomy takes cognisance follow the same laws, which, when expressed in the terminology peculiar to that science, may be reduced to two: — 1. Correlation: (*a*) hypertrophy; (*b*) atrophy. 2. Coalescence.

Correlation leads to abrogation of functions and gives rise to rudiments; these rudiments or remnants may serve as the germs of origin of many forms of cysts and neoplasms. To anyone who has devoted serious attention to the matter it must be evident that the term hypertrophy has come to be used by pathologists, physicians, and surgeons in an exceedingly indefinite manner, to include almost any kind of enlargement of the organs, limbs, or bones of the body, without that careful attention necessary to discriminate between simple overgrowth, functional enlargement, or increased size, the result of adventitious elements in the part affected. True hypertrophy may be defined as "the enlargement of an organ beyond its usual limits as the result of increased function, or of some unusual condition of the corresponding or correlated organ." Before proceeding to discuss the question, it will be well to illustrate the definition with an example. Every known vertebrate normally possesses two kidneys, a right and a left one. In the case of the fowl whose left kidney is here shown, the right one had, from some cause or other, entirely disappeared. Nothing but the ureter remained to inform us of the previous existence of the associated kidney. Such a case as this is by no means rare; I have seen it in five instances in man, also in sheep, oxen, horses, and twice in birds. The important fact in these cases is this. In all instances of single kidney the size and weight of the persistent organ far exceeds the normal, and in the majority of instances is double the usual size. The kidney, in consequence of the loss of its fellow, has had to perform twice the amount of work usually required of it, and has doubled its bulk in consequence of this increased functional activity. Similar changes have been described in the lung, in the testicle, and other organs.

Let us now consider some examples of simple overgrowth as compared with true hypertrophy. Dermal organs supply us with many examples. In old bedridden females it is no unusual event to find the nail of the great toe enormously overgrown, and in texture as in appearance resembling a ram's horn. In animals living in confinement it is no unusual thing to find the hoofs three times their usual length, or the claws of birds enormously elongated. The beaks of parrots, peacocks, pheasants, partridges, &c., are extremely liable to this abnormal growth, on account of deficiency of usage. I have seen one of the claws of the two-toed sloth describe a complete circle. The same kind of excessive growth may also be studied in those mammals whose teeth grow from persistent pulps. From accidental displacement of the teeth in their sockets, or loss of antagonism from fracture of a tooth or of the jaw, the unaffected tooth or teeth will grow unduly, in some instances re-entering its own pulp chamber, or even describe two circles and a half. All such cases as these are loosely alluded to as examples of hypertrophy, but as a matter of fact they should be regarded as instances of simple overgrowth. These cases will occupy our attention later.

Bones are exceedingly liable to enlarge, and it is necessary to exhibit extreme caution in determining whether a given specimen is an example of hypertrophy or simple overgrowth, or enlarged as the result of inflammation. Very many cases described as hypertrophy are no more worthy of the designation than the enlarged sural muscles characteristic of that remarkable disease, pseudo-hypertrophic paralysis. The following will serve as a type specimen of what I consider true hypertrophy. An old man fractured his tibia, and, though he lived for ten years afterwards, the fracture never united. When he died the body came under my observation, and on dissection it was found that so far as actual thickness of the shaft was concerned, the fibula opposite the fracture had the best of it, for the tibia in the neighbourhood of the injury had undergone atrophy, but the fibula had hypertrophied, exceeding its normal thickness two and a half times.

In no structures of the body can hypertrophy be studied better than in muscular tissue, whether of the voluntary, involuntary, or cardiac variety. With regard to the heart, illustrative specimens are to be found in every pathological museum of any pretensions. The urinary bladder, when stricture of the urethra or calculus impede the free flow of urine, submits to this salutary process. The same changes may be seen in the gall-bladder; and the various stages of hypertrophy may be traced with great precision in that remarkable mill of many birds, the gizzard.

Corns are interesting examples of hypertrophy resulting from intermittent pressure, and their anatomy is well known. There are one or two varieties of epidermal thickening which occur in animals, well worthy a few moments' notice. In some monkeys, especially the group Cynomorphæ, which includes the baboons and macaque monkeys, there exists over each tuber ischii a naked pad of dense callous skin known as the ischial tuberosities, upon which the body rests when in a sitting posture. Now, a corn upon the hand or foot is a pathological production beyond dispute; ischial callosities are in structure as well as in function, corns. Ischial callosities differ from corns only in the fact that they are inherited; but, as I shall take occasion to show later on, pathological defects may be inherited as well as any other peculiarity, and hence the view is forced upon me that ischial callosities are pathological productions which have been transmitted so as to become race peculiarities. This opinion is materially strengthened by the fact that dogs, cats, and other carnivora possess five corns in the shape of callous pads on each of their paws, and under the influence of spinal cord lesions these callous pads may become the seat of a perforating ulcer.

Up to this point, we have chiefly devoted our time in indicating the points which guide us in distinguishing simple overgrowth from true hypertrophy; we must now consider the relation, often of the most intimate kind, which exists between hypertrophy and atrophy. It is a thoroughly established physiological fact that those organs which are

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in most constant demand are richly supplied with blood; hence function and blood-supply are inseparably united in producing hypertrophy. This was well illustrated in the case of the kidney first considered; the right one having disappeared, the work of purifying the blood has now to be performed by one kidney, which, in consequence of increased work and increased blood-supply, hypertrophies to meet the requirements of the organism. Thus there has been a diversion of the nutrient stream, and this is largely brought about by the extreme plasticity of the arteries. Coincident with the enlargement of an organ, the nutrient arteries undergo commensurate development, and lead still further to a diversion of the nutrient stream, which in many instances is detrimental to some other organ. We all bear in our legs a striking example of the truth of this statement. In man the tibia as compared with the fibula by weight is as four to one; if sections be made of the leg of a fœtus at the third month, it will be seen that the transverse section of the fibula is not very much smaller than a corresponding section of the shaft of the tibia. If we examine the legs of menobranchus, who simply uses its legs as paddles, we find the two bones of equal thickness; but when the water animals began to take to the land, the weight of the body was far more conveniently transmitted to the ground by one bone than two, the increased function led to increased blood-supply, and the tibia grew in size—in fact, hypertrophied. The hypertrophy of the tibia, by causing diversion of the blood-stream, leads to atrophy of the fibula—at least, that is how my study of the question leads me to decipher the matter. Nevertheless, so truly does the fibula obey the great law of "heredity," that in the fœtus it does its best to indicate to thoughtful minds its former eminence. We must also remember that in aquatic mammalia the fibula is often no mean rival of the tibia. The relation which exists between hypertrophy of one organ and the atrophy of some associated organ may be conveniently termed "correlation;" and I shall now adduce evidence in support of an opinion that the division of animals into those that are males and females is a consequence of this remarkable law.

Many anatomists are of opinion that hermaphroditism is the primitive condition of the sexual organs. Hermaphrodites are found in every group of the animal kingdom, but, except in some of the lowest forms, self-fertilisation is wholly exceptional. Concerning this matter Darwin makes the following observation: "Turning for a brief space to animals, various terrestrial species are hermaphrodites, such as land mollusca and earth-worms; but these all pair. As yet I have not found a single terrestrial animal which can fertilise itself." The rule in hermaphrodites appears to be this—the male organs in one animal are used to impregnate the female organs of another, or *vice versâ*. From this arrangement it would easily come to pass that if one animal used the male portions of its reproductive organs more freely than the female parts they would, as a result of increased function, hypertrophy. In the first portion of this lecture I emphasised the fact that any marked degree of hypertrophy in one organ, nearly always leads to dwarfing of the correlated organ or set of organs; hence, in the example considered the female portions of the hermaphroditic organs remain dwarfed or *in statu quo*. This peculiarity would in the natural course of events be transmitted to the offspring, until at last the differentiation attains such a high degree that unless hypertrophy of one set of organs occurs in each individual propagation is impeded. Evidence on this point is afforded by the ontogeny of any mammal. Whilst the two sets of reproductive organs, male and female, up to a certain point maintain the same degree of growth, it is impossible to determine the sex of the embryo. As soon as one set begins to enlarge at a greater rate than the other the sex becomes pronounced. The remaining organs may eventually disappear or exist in such a rudimentary condition as to be discerned only by the most diligent search. In the invertebrate form Myzostomum, which occurs parasitic on the arms of feather-stars, the majority are hermaphrodite. It has recently been discovered by Dr. von Graaf, whilst working over the *Challenger* Myzostomida, that in certain species which occur in pairs in single cysts, one would have the male organs only functional, the other the female, and it is possible to trace every stage from typical hermaphrodites up to forms where the individual may be classed as a male or a female. Somewhat analogous conditions were detected by Darwin in the case of the Barnacles, but the conditions in these animals are even more remarkable than in the Myzostomida, for the males in this case are minute animals attached to the female, and often difficult of detection. In these complemental males the entire organism is modified for sexual function, for, as Darwin describes it, there is no mouth, no stomach, no thorax, no abdomen, no appendages, no limbs of any kind, yet all these parts are represented in the female. It seems to be simply a bag of spermatozoa, furnished with a few muscles, an eye, the pupal antennæ, and a probosci-formed penis, which, when uncoiled, is equal to eight or nine times the length of the animal! Darwin's observations have recently been confirmed by Prof. Hoek's observations on the Cirripeds collected by the *Challenger*.

Among mammals, the most striking examples of the peculiar value of hypertrophy are the curious malformed generative organs which occur in the cattle known as "free-martins." Hunter carefully investigated the condition of the reproductive organs in these cases; and the valuable dissections he made, now in the Hunterian Museum, are striking monuments of his investigations in this matter. Careful comparison of the detailed descriptions of the dissections of these malformations, and similar cases in sheep and goats which have come under my observation, show most conclusively that in these cases we have to deal, not with any one malformation common to all examples of free-martins, but rather with instances in which both sets of organs have attempted to attain a functional condition, with the result that both have failed to reach it. In some cases the Wolffian ducts have advanced many stages towards making a fairly complete set of efferent ducts for the testicles, and the calf approaches somewhat to a bull calf. In other instances the Müllerian ducts have made greatest progress, and a diminutive uterus can be made out, and in this case the calf most resembles a cow calf. Between these extremes there is every gradation and variation. Similar cases occur in fishes, reptiles, amphibians, birds, &c. I have seen many cases, and numberless instances have been recorded out of curiosity. They show most conclusively how impossible it is for both sets of reproductive organs to attain a functional condition in the same individual. Hypertrophy of one set must arise, and establish pre-eminence over the other.

The facts on which the argument rests that hypertrophy is one of the causes of division of sexes may be summarised as follows: — 1. In the lowest forms of animal life hermaphroditism is the prevailing condition. 2. Cross-fertilisation in hermaphrodites is the rule, and may, as in some of the Myzostomida, lead to a division into sexes within the limits of a single group. 3. Sporadic cases of adult hermaphroditism are far more common in the lowest forms of life. 4. If in mammals both sets of organs grow concurrently, the individual is sterile. 5. Both sets of organs grow equally to a definite period in embryonic life. 6. Reproduction in vertebrata, so far as is known, is impossible unless hypertrophy of one set of organs occur.

Among other remarkable examples of the wonderful correlation which exists between hypertrophy and atrophy must be mentioned the disappearance of gills in all forms above the Ichthyopsida (fish and amphibia). Balfour has pointed out that the allantois can be regarded in no other light than that of an enormously hypertrophied urinary bladder, which, having become a vascular sac, assumed the function of respiration in the embryo. Hypertrophy of one organ or set of organs leads invariably to atrophy of some other organ. Before the work of embryonic respiration was performed by the allantois, many and various contrivances existed for the performance of this important function—e.g., by means of external gills, the tail, and vascular adhesions of the yelk sac; but when once a functional allantois appears on the scene, all these methods are rendered obsolete, and gills for ever disappear.

It is to be hoped that the examples of what should be considered as hypertrophy, as compared with simple overgrowth, have been sufficiently convincing to impress upon my audience the importance of the distinction. Viewed in this light, hypertrophy shows itself to be a process of extreme beauty, utility, and interest, especially so when we reflect that the same process which enables one kidney to recompense the organism for the loss of its fellow is only an instance of the method by which the tibia has outgrown the fibula. The disappearance of gills in all forms of vertebrates above Ichthyopsida (fish and batrachians) has been brought about by the allantois. The division of reproductive labour, the institution of sexes, and many other equally important results, are the effects of the

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indisputable correlation which exists between hypertrophy and atrophy.

Let us now proceed to consider certain examples of simple overgrowth, which appear to have been transmitted so as at length to become race characters. In no structure is this so admirably studied as in the teeth of mammals. I have already referred to those instances of teeth which grow from persistent pulp, and from lack of antagonism occasionally exceed their normal dimensions many times, describe circles, re-enter their own pulp chamber, or even penetrate the skull of their owner and bring about death. One of the most remarkable forms of dentition among mammals is that of the babirussa. The extraordinary canines of this animal have afforded plenty of scope to imaginative minds to account for their strange mode of growth. These teeth grow from persistent pulps, and from some cause or other the upper and lower canines failed to antagonise each other, and in consequence became enormously elongated. This abnormality frequently recurring, the peculiarity became transmitted to the offspring, eventually becoming perpetuated as a common feature in the males of this particular species. This isolated case does not carry much weight, but it must be remembered that in all members of the pig family, the common boar, the peccary, the wart hogs, the hippopotamus, as well as the babirussa, the canines have a great tendency to overgrowth and to describe circles. Thus in the wild boar the upper canine is slightly curved; in the wart hog its curve is very extensive, and clears for some distance the upper lip; whilst in the babirussa the curve is so exaggerated as to *pierce* the upper lip. Hence the careful consideration of these facts forces me to the conclusion that these peculiar canines were brought about in the first place as an example of overgrowth due to loss of antagonism, and the defect has been transmitted to the offspring. The remarkable teeth of the mesoplodon, the narwhal, and other of the cetacea are probably examples of the same process. [Lastly, when considering hypertrophy, it was shown that this process led to dwarfing of other organs associated with the enlarging organ, in that it led to diversion of the nutrient fluid.] This is well shown in the teeth; for in all cases the teeth which are immediately adjacent to these overgrown examples are, as a rule, the smallest functional teeth possessed by the animal, and in very many cases they fall out early, and in some instances are suppressed whilst yet embryonic, and never appear above the gums.

Introductory Lecture

TO THE COURSE OF

CLINICAL THERAPEUTICS.

Delivered at King's College Hospital.

BY I. BURNEY YEO, M.D., F.R.C.P.,

PHYSICIAN TO THE HOSPITAL, AND PROFESSOR OF CLINICAL THERAPEUTICS IN KING'S COLLEGE.

(*Concluded from page 238.*)

ANOTHER valuable observation in practical therapeutics derived from the clinical method is the necessity, in many instances, when we desire to produce diuresis, to combine together two or more diuretic remedies: give them singly, and you fail to produce any diuretic effect; combine them together, and free diuresis may be produced. Dr. Long Fox has alluded to this well-known fact in his suggestive paper on the "Action of Diuretics," read at the last meeting of the British Medical Association, and he concludes his paper with these words: "In most cases the union of remedies that cause a flow from the glomeruli with those that excite activity of the renal cells leads to a more complete depuration of the blood; and herein, again, we may give honour to our predecessors, in that they discovered by observation (by the clinical method) what we now are able to explain physiologically."

I might instance numerous other facts of a like nature, but I prefer quoting to you a sentence from Dr. Wilks' address at the last annual meeting of the British Medical Association, because it seems to me to express with complete accuracy the true relations of therapeutics to practical medicine. "It might be worthy to remark," he says, "how treatment accompanies and follows pathological discoveries, *in opposition to the mistaken idea* which many seem to hold, that there is a science of therapeutics gained by simple observation of the action of drugs on the body. It is sometimes said that therapeutics stands still or lags behind other departments of medicine. I think this is not true, and cannot be true; in fact, *I am at a loss to know what pure therapeutics is apart from disease and pathological states.* It seems to me it is the study of external agents on various diseased conditions, and it is not so much new remedies, but a better indication and knowledge of how and when to use them, which is required." It was a source of great satisfaction to me to find so philosophical a physician and thinker as Dr. Wilks expressing with so much point and force the very same views which were in my own mind.

The same thought seems to have been in the mind of Sir Wm. Roberts, of Manchester, although he approaches the subject from rather a different point of view, for in his address on the section of Therapeutics at the same meeting he pointed out the error of attempting to base our investigation of dietetics exclusively on the physiology of digestion and nutrition. He says: "I doubt if this is always, or even generally, the best starting-point. There are problems in human dietetics which appear to be beyond the reach of physiological research." I can illustrate this remark of Sir Wm. Roberts by some observations that I have often had occasion to make, and which could only have been the result of the clinical or practical method.

You will not very infrequently encounter, in treating cases of typhoid fever, especially if you are too much addicted to the use of an exclusively mild diet, that every now and then the patient has attacks of intestinal pain accompanied with large semi-solid motions consisting almost entirely of curd of milk. I have seen this several times in children, and occasionally, but less frequently, in adults. Sir William Jenner called attention some years ago to the same fact. So that in cases of typhoid in some patients milk is by no means the perfect food it has been represented to be. I have long been in the habit of giving to such patients whey, which I usually have rapidly prepared by boiling milk with a little lemon-juice, and flavouring with a little grated lemon-peel and straining. I have several times, also, encountered persons to whom eggs in any form, and however disguised or mixed with other food, were absolutely intolerable, and invariably caused digestive disturbances. Quite recently I have had occasion to observe the excellent effects of a diet composed almost exclusively of butter-milk in some of the most severe and protracted cases of intestinal dyspepsia. The hint first came to me from the practice of Dr. Mezger of Amsterdam, the celebrated advocate of massage for the relief and cure of various chronic maladies. He told a patient of my own that whenever he himself became the subject, as he occasionally did, of severe gastric catarrh, he took no medicine, but simply restricted himself wholly to butter-milk for a fortnight, and he was always cured. My own patient certainly derived the greatest possible advantage from this diet, and was able to accomplish far more work, intellectual and physical, than on any other system of feeding. Another case in which it has proved of great use and efficiency is one of locomotor ataxy, with severe gastric crises. In this case the gastric crises have disappeared with this regimen.

There is another curious observation it has occurred to me to make in connexion with the disturbing influence of tea on digestion. You will find that certain persons can at certain times take tea in moderation without its producing any disturbing effect on their digestive processes, while at other times its use leads to much distress and discomfort, causing annoying palpitation and an uneasy sensation often amounting to actual pain about the upper part of the cardiac region, generally on the left side. Now you will find that this difference in their capability of tolerating tea is often dependent on some emotional disturbances of the nervous system; the instant there is any worry or anxiety or mental uneasiness tea will at once disagree with such persons, and when the emotional wave has passed by and a condition of nervous calm has been re-established, the use of tea can be resumed. It is often important to be able to recognise this disturbing influence of tea and coffee, especially on cardiac innervation, and particularly in the production of that peculiar præcordial pain which I have

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described above, and to which I am not aware that attention has been previously called. A gentleman, a neighbour of mine, the subject of aortic regurgitant mischief, called one morning just after his breakfast, complaining of most distressing palpitation. His pulse was beating 200 to the minute, and his heart was thumping distressingly against the chest wall. Having inquired into the particulars of the attack, I said to him, "You are poisoned by tea or coffee"; and then he told me that, contrary to his usual habit, he had taken a quantity of both strong tea and strong coffee at his breakfast. Once warned, he never did so again, and so avoided a return of the attack.

It has also occurred to me to make another practical observation with regard to the influence of different wines, especially on gouty persons. You will find that with such persons the wine which most rapidly and most freely stimulates the renal secretion is the wine which will agree best with them. With some persons it is champagne, with some it is claret, and with some hock; but with all, the wine that fails to promote diuresis will almost invariably do them harm. I was staying one autumn with a friend at his châlet in Switzerland, when he paid a visit to an old wine grower in the neighbourhood for the purpose of buying some of his wine; the old man, speaking in commendation of some particular vintage, said, as the highest praise he could think of, and in words which sound coarser to us than they do to a French-speaking people: "Vous buvez une bouteille, et vous pissez une bouteille." Thus bringing the testimony of a long experience to the corroboration of the fact I have stated.

I have just mentioned the word "massage," and that suggests an allusion to another undoubtedly great gain to practical therapeutics arising purely from the clinical method of observation. I believe massage is destined in the future to play an important part in the treatment of chronic maladies. To Dr. Weir Mitchell of Philadelphia we are greatly indebted for informing the profession of the extraordinary value of this method of treatment in certain nervous maladies, and especially in cases of so-called neurasthenia. To Dr. Wm. Playfair we are also indebted for adopting and following up Dr. Weir Mitchell's suggestions, and with eminent success. Dr. Mezger of Amsterdam has acquired more than European celebrity by the very remarkable results which, in his hands, have followed this method of treatment. I shall hope in some future lectures to describe to you fully this mode of treating chronic maladies, and to indicate the cases to which it is most appropriate.

And here let me warn you against hastily and ignorantly hurling the word "quackery" at every mode of treatment which you may yourselves be indisposed to carry out, or with the *modus operandi* of which you may be unacquainted. In doing so we put ourselves in an entirely false position with the public, who, you must remember, are, after all, to a certain extent the best judges of what they want, and you lay yourselves open to the retort I once heard a clever lady make. "Why," said she, "am I to be told that everything that does me any good is 'quackery,' and that the only thing that is not 'quackery' is taking nasty medicines, which do me *no* good?" This leads me to say a few words on the *personal* element in therapeutics, which we cannot and should not ignore. The power of adding to the influence of our remedies, the influence of personal sympathy and force of character, should be cultivated to the utmost by everyone who desires and aims at being a successful practitioner of medicine. Those who affect to despise or disregard such influences have mistaken their vocation, and although they may be men of science they are not physicians, for they have left out of their studies the most important of all subjects—the study of the human heart. You will remember, probably, the story that is told of Sydenham, who when asked by a young physician what was the most useful book for him to read, said, "Read 'Don Quixote.'" "And after that?" said the young man. "Read 'Don Quixote' again." "And after that?" "Read 'Don Quixote' a third time," was Sydenham's answer. I should like to mention to you a remarkable instance of the effect of personal influence that happened to myself. I was called, in the middle of the night, to the bedside of a gentleman who was just beginning to convalesce after an attack of typhoid fever, and his wife and his nurse, who were at his bedside, said they had sent for me because he found it impossible to sleep, and he was becoming irritable and distressed at his restless condition. I felt his pulse, and in a somewhat oracular tone directed the nurse to give him a tablespoonful of brandy with one of water; within two minutes, while we were standing by his bedside, his wife amazed me by whispering, "Look, he is asleep!" and he was, indeed, fast asleep! The next morning he greeted me with the words, "You must be a magician." He was amazed himself at what had happened.

For the successful study and profitable pursuit of clinical therapeutics there are three mental qualities which are essentially necessary; they are: (1) absolute openness of mind; (2) what is almost the same thing, absolute freedom from prejudice; and (3) insight. Probably no physician ever reached great eminence in his art without the latter; it is the most precious of all gifts, and one which we should early attempt to cultivate. It is the power of penetrating through phenomena and divining their causes and meaning; the power of at once distinguishing the real from the unreal, the semblance from the reality; the power of distinguishing deceptions of all kinds, conscious or unconscious. I found a short time ago in one of my note-books the following story, the source of which I have, however, forgotten:—"An old Scotch minister was awakened out of his sleep to go to see a great lady in the neighbourhood, who was thought to be dying, whose mind was in dreadful despair, and who wished to see him immediately. The old man, rubbing his eyes and pushing up his night-cap, said, 'And when were her leddyship's bowels opened?' and on finding, after some inquiry, that they were greatly in arrears, he said, 'I thocht sae. Rax me ower that pill-box on the chimney-piece, and gie my compliments to Leddy Margaret, and tell her to tak those twa pills, and I'll be ower by-and-by mysel.' They did as he bade them—they did their duty and the pills did theirs, and 'her leddyship' was relieved." This, gentlemen, was insight; this was clinical therapeutics.

In conclusion, the point I wish to insist upon is this: The clinical method in therapeutics is, from the very nature of the investigations concerned, of necessity the ultimate and final appeal in all therapeutic questions. Whoever cares to think out this subject will see that this proposition is self-evident. To the clinical method all other methods are subservient and tributary. To extol the physiological or pharmacological method of investigation and to speak slightingly of the clinical method is to forget or to overlook the foremost and essential element in every therapeutic problem. The clinical method may be complex, difficult, and in a sense evasive and disappointing. That we cannot help; it is in the nature of therapeutic inquiries that they should be so. But I have instanced many most valuable and encouraging results obtained by this method; and I would ask most seriously and pointedly the following question: When have we, as a profession, seriously, and with something like a definite organisation, attempted to *methodise* the clinical method of investigation in therapeutics. With the establishment of the collective investigation movement in connexion with the British Medical Association the organisation and machinery needed for this purpose would seem to be at last afforded us; but the fascination of the pharmacological method is so great for some minds that it is at present difficult to obtain a hearing for the method which is far more within their means of operation, far more appropriate to the practical ends this movement seeks to accomplish, and far more likely to be productive of immediate and lasting gain to the practice of the healing art. And to you personally I would say, in necessary connexion with this subject, that it is your duty to focus, as it were, all your acquired knowledge upon one object, to concentrate all your acquirements to one end. It should never be your chief object to be a great physiologist or anatomist; or to be well versed in morbid anatomy and histology; or to be brilliant as a manipulator of surgical instruments; or to possess great diagnostic skill. I repeat, neither of these things should be your chief object, nor followed as an end in itself; but if you intend to be *medical* men, you must regard all these as but means to one chief end, and that is "healing the sick." In the zeal and ardour for the attainment of what is called a "scientific reputation" this cardinal truth is occasionally lost sight of, and I rejoiced to see that so wise and so philosophic an observer and thinker as Mr. J. Hutchinson, in his remarkable address on the "Uses of Knowledge," thought it necessary to say: "First, unquestionably, and as a thing which admits of no excuse for its neglect, you are to acquire a matter-of-fact familiarity with the common diseases and accidents to which the human frame is liable, *and their means of remedy*. Your first duty is to advise people for the best when they are ill,

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and from this duty there must be no shrinking whatever." In the multiplicity of subjects which the student of medicine has to study, there is a real danger that his attention may be turned aside and his likings fixed too exclusively on one or other of the scientific subjects of collateral interest and of minor importance so far as his life-long calling is concerned; and there is, at least, an imagined superior dignity about purely scientific acquirements, acquirements that do not directly bear on the vulgar needs of suffering humanity which we must not allow to seduce us from our *real* calling. I invite you, then, to come voluntarily and examine with me the means of alleviation and cure which we possess in the treatment of those diseases which fall under the care of the physician. I do not propose to make any great demand upon your time; an hour once a fortnight through the winter and summer sessions is all, at present, I ask from you, because I wish to enter upon this subject with ample time for deliberation, selection, and preparation. I do not intend to run over hastily each year the whole range of practical therapeutics: that is what it will be my particular care to avoid. It is not my business, in any special way, to prepare you for examining boards, but to help you to prepare for the actual work of your lives. I propose, year by year, to take the treatment of some special maladies, or groups of maladies, and to endeavour to handle each subject fully and completely; and I shall, from time to time, turn aside to examine and discuss special modes of treatment, or the action and uses of special remedies. No one can, I imagine, pretend to doubt that there is a great need that a work of this kind should be undertaken, for your and my life-long work is the treatment of disease and the healing of the sick. Let us bring to that work all the acquirements that the truly marvellous progress of experimental physiology has furnished to us; all the intimate knowledge of disease which recent pathological investigations have disclosed; all the skill in the recognition and diagnosis of morbid states which our new and improved methods of physical examination supply; all the coolness and insight of the well-trained and well-equipped mind; and last, but by no means least, that sympathy with the human soul under suffering which, although it may lack "scientific precision," is dearest of all things to the human heart, upon which it falls like the "gentle rain from Heaven," and soothes, refreshes, strengthens, and heals.

THE AFTER-HISTORY OF A SUCCESSFUL CASE OF OPERATION FOR REMOVING A VESICAL TUMOUR.

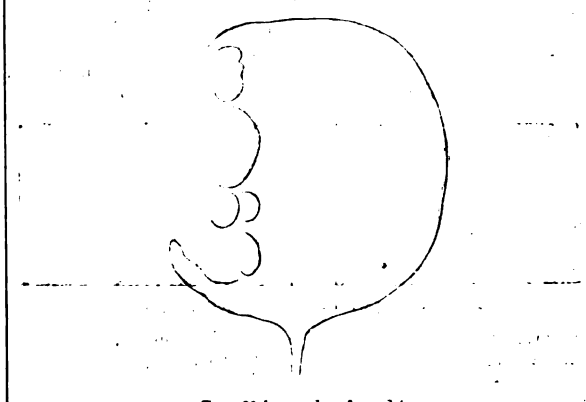
BY SIR HENRY THOMPSON, F.R.C.S.,
SURGEON EXTRAORDINARY TO HIS MAJESTY THE KING OF THE BELGIANS, LATE PROFESSOR OF SURGERY AND PATHOLOGY TO THE ROYAL COLLEGE OF SURGEONS OF ENGLAND, CONSULTING SURGEON TO UNIVERSITY COLLEGE HOSPITAL, EMERITUS PROFESSOR OF CLINICAL SURGERY, ETC.

IT is not always easy to trace the history of cases after operation, especially when successful, and to have the anatomical result verified by unquestionable evidence. I have just been favoured by Mr. J. L. Crisp, of South Shields, with the following account of a case of vesical tumour operated on by me, being Case 20 in my work on Tumours of the Bladder.

It is there recorded that, on May 30th, 1884, R. S. R——, aged sixty-three, had a firm multilobular tumour (examined by Dr. H. Gibbes) removed by me "almost level with the walls of the bladder" (*vide* sketch in the work named on page 111, and reproduced here by way of illustration), in the presence of Dr. Shippen, of New York, and Dr. Charamis, from Paris, by the perineal opening of the urethra. He made a slow recovery.

R. S. R——, wrote to me thirteen months after—viz., June 13th, 1885—"I have not the slightest sign of any return of the bleeding, have got over all effects, and am in as good health as ever I was in my life."

Mr. Crisp now informs me that owing to a bad suppurating bursa over the elbow, and severe cellulitis, the patient's arm was amputated a few weeks ago, and that he died. Mr. Crisp removed the bladder and kidneys and sent them to me, writing "that there was not the slightest sign of any return of the growth, and, in the fresh state, the cicatrix was very distinct." He adds that lately "R. S. R. occasionally passed a little blood; the specific gravity of the urine was



Case 20 in work referred to.

low, with traces of albumen: I suppose to be accounted for by the cirrhotic condition of both kidneys."

This is the first post-mortem examination which has come before me of a successful case, and it appears to be sufficiently interesting to be placed on record. The other successful cases are living and enjoying good health.

Wimpole-street.

ACUTE PARENCHYMATOUS MYOCARDITIS.

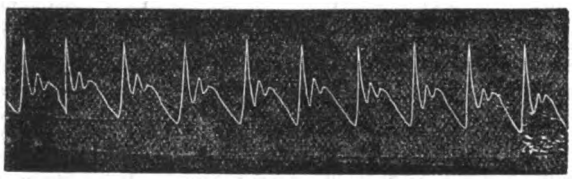
BY SAMUEL WEST, M.D., F.R.C.P.,
PHYSICIAN TO THE CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, VICTORIA-PARK, AND TO THE ROYAL FREE HOSPITAL; MEDICAL TUTOR AND MEDICAL REGISTRAR TO ST. BARTHOLOMEW'S HOSPITAL.

(*Concluded from p. 243.*)

CASE 7. *Myocarditis associated with valvular lesions: recovery.*—James M——, aged thirty, was an in-patient in the Royal Free Hospital. He was attacked on Feb. 15th, 1884, with rheumatic pains in the hands, which lasted till the 21st, when they became worse, and pain commenced in the præcordial region. He had had three previous attacks of rheumatic fever: the first at the age of twenty-one; the second at twenty-four, and the third at twenty-six (four years ago). Since the first attack he had suffered from palpitation, and since the second with dyspnœa. The patient was pale and looked ill, with a hot, dry skin and coated tongue; the fauces were red and congested. Temperature 101·4°; respiration 40; pulse 120, bounding. There was strong visible pulsation in the carotids; cardiac dulness much increased; apex-beat one inch outside the nipple in the fifth space; impulse diffuse, and to be felt and seen as far as an inch inside the nipple in both the fourth and fifth spaces. The area of dulness extended from the apex to the middle of the third space and to the right of the sternum. A blowing systolic murmur was audible over the whole præcordial region, and there was doubtful friction near the base. Both wrists were red, swollen, and painful. There was a trace of albumen in the urine, and the bowels were constipated. A purge was administered, and twenty grains of salicylate of soda every two hours prescribed.—24th: Temperature, morning, 101·6°; evening, 98·2°.—25th: Temperature, morning, 100·2°; evening, 99·8°. Pulse 120; respiration 28. Pain less; perspiration profuse; pulse tremulous and feeble. Cardiac dulness somewhat further increased; sounds tumbling in character and indistinct; no distinct friction, but the systolic murmur was audible at the apex.—26th: Delirium last night, with horrors. Temperature 100·2°; pulse 116. Salicylate stopped.—27th: Wandering continues. Temperature varies between 99° and 101·2° during the day; pulse 108. Patient looks very ill.—28th: Wandering continues; cardiac dulness increased still further, and now reaches the second rib. A distinct friction-rub is now audible at the base of the heart, and a diastolic murmur along the sternum, but very faintly at the apex; the first

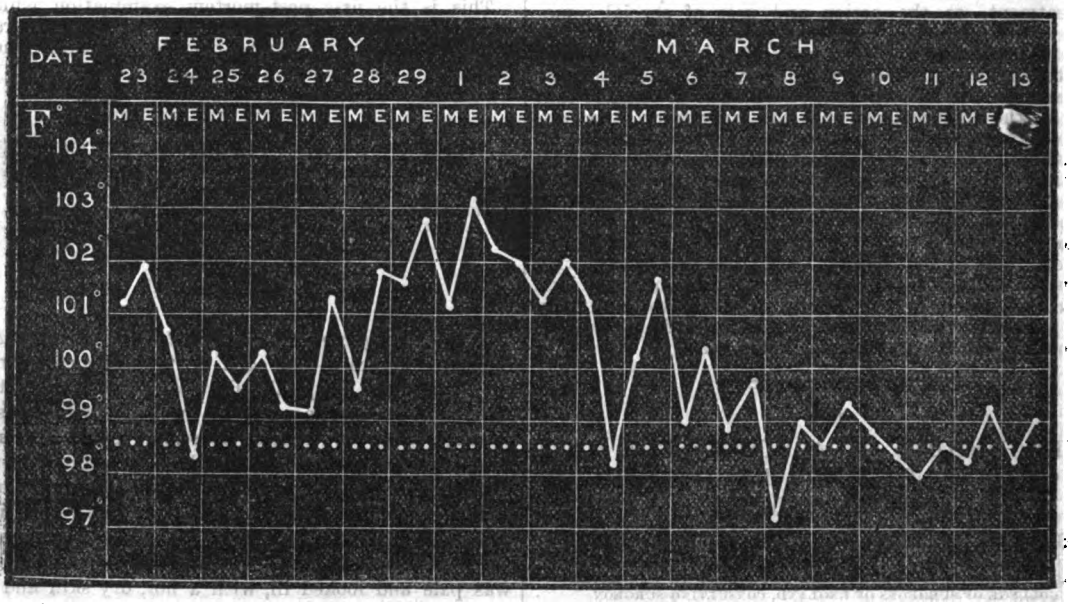
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sound is reduplicated at the apex. Pulse 112, very weak; face very livid; temperature 104·4°. The albumen has been completely absent from the urine since the 26th. Fifteen minims of tincture of digitalis with ten grains of tartrate of iron were prescribed. — 29th: Pulse 128, collapsing; respiration 40. Heart as yesterday, and reduplication of apex. First sound still marked. The lividity is less, and also the wandering. The patient on the whole is better, but extremely feeble. (See Chart.) — March 1st: Patient



Pulse tracing with Dudgeon's sphygmograph.

improving. Temperature 101·6°; respiration 40; pulse 124. Cardiac signs the same.—3rd: During the night the patient became very feeble and his breathing bad, but he rallied with the administration of brandy and ether. Temperature between 103·2° and 101·4°. Blister on præcordium. — 4th: Morning temperature 100·2°, evening 101·6°; pulse 116; respiration 32. — 5th: The patient was very restless and delirious, and was constantly trying to get out of bed. A quarter of a grain of morphia was administered subcutaneously, and a second dose an hour later, after which the patient slept for a few hours. Friction-rub more marked. 6th: Six leeches ordered to præcordium, and ten minims of tincture of opium three times a day. Morning temperature 99·8°; evening, 98·6°.—7th: Patient much better, but complains of slight joint pains in shoulder and elbow. Pulse 96, stronger; respiration 24. Has had from six to eight ounces of brandy in the twenty-four hours for the last few days.—8th: The patient is still better, but extremely feeble. The cardiac dulness now extends above the second rib. The diastolic murmur is distinct, and friction still audible. Morning temperature, 99·8°; evening, 98·2°.—9th: Morning temperature, 98·4°; evening, 98·8°.—10th: Morning temperature, 98·6°; evening, 98·2°. The patient is improving, heart cardiac dulness less. Brandy reduced to four ounces. Maximum cardiac impulse in fourth space just below the nipple. From this time the temperature remained normal except on one occasion, when it rose to 101°, probably due to constipation. The patient grew rapidly improved. On March 17th the cardiac dulness had receded greatly, and now did not rise above the middle of the third space, nor extend beyond the nipple. The systolic murmur was loud and audible in the axilla, and the diastolic murmur heard over the whole præcordium, but most distinctly at the fourth left costal cartilage.—April 2nd: The patient was up for half an hour last night, but to-day the systolic murmur is louder, and it was thought wise to keep him longer in bed.—7th: The patient was up again for an hour, and the heart was beating more forcibly.—9th: Heart quieter. From this date there was rapid and uninterrupted improvement, and the patient was discharged on May 16th, feeling strong and well. The murmurs were still audible, but the diastolic had much diminished in loudness. (See Chart below.)



In the next case, the last of the series, the myocarditis was associated with extensive valvular changes. Both were acute, and the myocarditis more extreme than in any of the previous cases.

CASE 8.—*Rheumatic fever; endocarditis and myocarditis; death; extreme fatty degeneration.*—A lad aged sixteen was admitted into the Chest Hospital, Victoria-park, on April 23rd, 1881. He had been in good health until March 1st, when he was seized with rheumatic fever, and confined to bed for a week. This was his first attack. After this he was an out-patient at the hospital, complaining of præcordial pain, palpitation, and dyspnœa, and, becoming gradually worse, was admitted. He was then extremely anæmic, somewhat dusky, and suffered much from dyspnœa and vomiting, the latter having been very frequent for the last three days. The heart's action was rapid and irregular, the impulse diffused, the dulness increased, the apex being in the left nipple-line, the right border one inch beyond the middle line of the sternum; the upper border was displaced upwards, but could not be accurately marked out. At the apex was a well-marked presystolic thrill; a loud double murmur, thought to be a friction-rub, was audible over the whole præcordium. At the apex were two murmurs, one a low-pitched presystolic, the other higher pitched, rough, and systolic, and heard as well at the angle of the scapula. The liver was two inches below the ribs in the nipple-line, and there was slight œdema of the feet. On April 28th and 29th the patient was sick, and had much epigastric pain. On the 30th he became a little jaundiced. On May 1st the jaundice was deeper, and he brought up a little bright blood. On the 2nd he brought up some more bright blood, and was sick several times; the jaundice became deeper, the legs more œdematous, and in the evening the patient died.

The following is the record of the post-mortem examination:—Slight anasarca; slight jaundice; serous fluid in both pleural cavities (a pint and a half in right and half a pint in left). Slight old consolidation in apex of right lung, the lower lobe being œdematous. Liver and spleen and kidneys congested, but not otherwise abnormal. Heart weighed fourteen ounces; great dilatation of all the cavities, especially of the ventricles. No trace of pericarditis. The tricuspid orifice admitted four fingers easily; the mitral still more dilated. Aortic valves all slightly thickened, with small recent vegetation along semilunar lines, the valve most affected being that behind which there is no coronary artery.

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The mitral valve is in the same condition; the chordæ tendineæ much thickened; several had ruptured, all of them belonging to the septal cusp of the valve, which was most affected. From one of the chordæ tendineæ a fragment nearly an inch long seemed to have disappeared. In the left auricle the endocardium near the appendix showed some recent thickening. The whole muscular substance of the heart was in a condition of extreme fatty degeneration; the speckling was visible both on the exterior and the interior, and on both sides. On section the fat oozed out from the surface and ran off in fine drops. The change seemed most marked in the pericardial half of the section. Under the microscope the usual appearances of advanced fatty degeneration were found. The coronary arteries were healthy.

Although the clinical record of this case is not so complete and full as it should be, it still, in connexion with the necropsy, presents many features of interest. 1. The extreme change in the heart. 2. The history which traces back the illness to the first attack of rheumatic fever. 3. The clinical condition of the patient. 4. The jaundice and epigastric pain. 5. The sickness and hæmatemesis.

The present series of cases stands as follows:—1. A case diagnosed as one of myocarditis, the necropsy demonstrating the presence of that lesion, and that only in the heart; the only other organ in the body found diseased being the liver. 2. A similar case quoted from a paper by Professor Leyden, with these minor differences—first, that in addition to recent change in the myocardium there was also evidence of antecedent disease in the presence of small fibroid patches only visible on microscopical examination; and, secondly, that the liver, which was also cirrhotic, was small instead of large, as in the first case. 3. A case of a first attack of rheumatic fever with sudden death, in which the only lesion in the heart was an acute fatty change of the muscular tissue. 4. A case similar in clinical respects, which was also fatal, but in which no post-mortem examination could be obtained. 5. A case also occurring in a first attack of rheumatic fever, which recovered completely. 6. A case in which, after a desperate struggle, recovery also took place, but a faint systolic murmur persisted. 7. A case of old morbus cordis, in which, after a similar clinical history, recovery occurred, but the evidence of the old lesions of course remained. 8. Lastly, a case of a first attack of rheumatic fever in which similar symptoms gradually developed and ended in death, and the post-mortem disclosed, in addition to acute valvular disease, the most extreme muscular degeneration of the series.

The resemblance between all these cases is too striking to be mistaken, and justifies the reference of them all to the same family group, for which I prefer to retain the usual name of "acute myocarditis." An analysis of them presents us with the following facts:—

Sex.—All the cases occurred in males, except the third. This is remarkable, for the liability to rheumatic fever is about equal in the two sexes, and it seems to indicate that there is no necessary connexion with this disease.

Age.—Male, aged fifteen (Case 5); male, sixteen (Case 8); female, twenty-four (Case 3); male, twenty-seven (Case 1); male, thirty (Case 7); male, thirty-four (Case 2); male, thirty-six (Case 4); male, forty-four (Case 6). All the cases occurred therefore before the middle period of life, and some at quite an early adult age. This serves to mark off distinctly the acute affection of the heart described in them from the gradual failure of the heart due to fatty change in old people—i.e., from the common form of so-called fatty heart.

Cause.—In four cases the attack could be distinctly attributed to rheumatic fever; in three of these there had never been a previous attack, and two of them died. In the fourth there had been three previous attacks, which had left extensive valvular mischief behind. In another case the patient had suffered previously from rheumatism, but not at all during the present illness. In a sixth case there was a doubtful history of rheumatism. In the two remaining, a rheumatic history was absent. Both were heavy drinkers and had been in want recently, and one of them had suffered not long before from syphilis. Both of these died.

Mortality.—This is high. Out of the eight cases recorded here, five died, three quite suddenly. In two cases recovery was, so far as could be judged, complete.

These facts would seem to prove what is commonly stated that myocarditis generally occurs in the course of rheumatic fever, but pains in the limbs are noted in many of the recorded cases, and in some the ordinary signs of rheumatic affection of the joints are distinctly stated to have been absent, so that the mere occurrence of indefinite aches and pains in the limbs is not conclusive proof that the case is one of rheumatic fever; and both Kühle and Köster describe these pains as part of the disease, and as not being necessarily those of rheumatic fever.

Clinical symptoms.—All the patients excepting one, were desperately ill. In this one exception (Case 3) there seemed to be nothing in the patient's condition to cause alarm, until she suddenly turned faint, fell back, and died. The prominent symptoms in all were duskiness, panting dyspnœa, with extreme feebleness of the heart and pulse. The temperature was raised in nearly all. In Case 7 the temperature chart was mislaid, and in Case 8 the temperature was normal. In the others it varied much, but never reached a great height, averaging about 101° or 102°, and that for no prolonged period. As there was a rise in temperature in one of the non-rheumatic cases, the explanation must be looked for, not in the rheumatism, but in some other cause, and we may compare with it the rise which is not uncommon in valvular disease of the heart, especially in cases of aortic regurgitation. Although no anatomical explanation of this is forthcoming—i.e., no inflammation or infarcts are found in many cases,—its grave import is well known, and it may turn out that we shall be justified in referring the rise of temperature to the condition of the heart itself. The rate of respiration was rapid in all the cases. In four there was distinct evidence, in the presence of bronchitic sounds, of congestion of the lungs; but in the other four the cause of the dyspnœa and cyanosis must be looked for elsewhere. The dyspnœa was not of the laboured obstructive kind common in bronchitis, but of that panting character which has sometimes been plainly called cardiac dyspnœa. Jaundice was present to a slight extent in three cases; in two of these there proved to be gross disease of the liver (viz., cirrhosis), but in the third the jaundice was probably due to congestion, for in this, as also in two others in which jaundice was absent, the liver was enlarged at first and gradually diminished in size as the patient's condition improved. Œdema of the feet was absent in four cases and present in four, though to a slight extent only, and without any ascites in three cases and with ascites in the fourth. The urine was usually diminished in quantity. In five cases it contained albumen in slight amounts, varying from day to day and disappearing with recovery. In the other three albuminuria did not occur. There was no relation between the albuminuria and œdema, the former being present sometimes when the latter was absent, and *vice versâ*. Delirium of a low, wandering kind occurred in six out of the eight cases, and appears to be one of the most constant phænomena. The delirium was associated with drowsiness and heaviness in four out of these six cases, and in three of them uræmic-like twitchings of the limbs and body occurred. In Case 1 these twitchings almost amounted in severity to fits, but although in that case there was a slight amount of albumen in the urine, the twitchings occurred in other cases where it was absent, and hence they cannot be attributed rightly to uræmia. They are probably evidence of asphyxia. The first case suffered greatly from attacks of faintness, with cold sweating; but though the faintness occurred in other cases, the cold sweats did not. The pulse was in all cases extremely feeble, fluctuating greatly in force and frequency; the tension in the vessels was low, and the pulse wave small and ill-sustained. The rate in most cases was rapid, the slightest effort or excitement sending the rate up many beats in the minute. The extraordinary effect which digitalis had in reducing the pulse-rate observed in Case 6 was also observed and commented on by Prof. Leyden in his case (Case 2). Præcordial pain was a prominent complaint in five cases, and palpitation was frequent. It was to the heart, as the source of all trouble, that the symptoms seemed to point, and it was in this organ that most clinical evidence of disease was found. The cardiac dulness was increased in seven out of the eight cases. In this one the obesity of the patient prevented the cardiac area being determined accurately. The apex was displaced to the left. The increase of dulness was chiefly to the left and upwards, indicating dilatation of the left side of the heart. In Case 6 the diagrams show an increase also to the right, and the dilatation was therefore general and very considerable. As the patient recovered, the area of cardiac dulness contracted in all directions, and at last did not extend towards the right beyond the left edge of the sternum,

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though it was then somewhat increased towards the left. The sounds were extremely feeble in all the cases. This enfeeblement affected especially the first sound, which in one case could hardly be heard at all. There was no murmur or friction audible at any time in four cases. In another a soft-blowing systolic murmur was audible for a time over the whole præcordial region and subsequently disappeared. In one other a faint systolic murmur at the apex was audible throughout and persisted after recovery. This was in an old rheumatic case. In the remaining two there were the permanent murmurs characteristic of gross valvular disease. The clinical symptoms seemed all to point to the heart as the organ in fault, and in those cases in which death took place and a post-mortem examination was made, it was in the heart that the chief, or in some cases the only, lesion was found; and in three out of the five fatal cases the pathological change was confined to the myocardium, so that the history of the disease is complete.

The present series of cases appeared to me worthy of being put on record together for these reasons: (1) that, although the difficulties are great, the diagnosis of myocarditis can often be quite correctly made; and (2) that myocarditis is, as I believe, not by any means so rare an affection as is commonly stated.

Wimpole-street, W.

FIVE ADDITIONAL CASES OF CHOLECYSTOTOMY.

BY LAWSON TAIT, F.R.C.S.

THE following five cases complete a series of twenty-one cases of cholecystotomy, in all of which recovery has taken place.

CASE 17.—This patient is a male, practising as a physician in London, and aged forty-eight. His first trouble, in February, 1882, was a severe attack of colic occurring after dinner, and lasting some hours. During the spring of that year he had several similar attacks, always commencing about midnight, when asleep in bed. He was free for some months until August, when after a day's hunting an attack commenced about six o'clock in the evening, followed by obstinate vomiting, which left the patient very prostrate. The winter of 1883 he passed in the Riviera, and was free from any attacks. He returned to London in the middle of May and resumed his work, and very soon had a similar attack, quite as severe as any of the former. This was followed by repetitions at about a fortnight's interval, in many of which death appeared imminent; and an endless number of therapeutics were resorted to in vain, relief being obtained only from hypodermic injections of morphia. All who were consulted regarded it as a case of gall-stones, but the patient himself did not concur in this view. The attacks were sometimes, but not always, followed by jaundice, and occasionally an ill-defined tumour in the region of the gall-bladder could be discovered. In his own words, throughout the illness the most obviously exciting cause of the attacks was posture, stooping over a writing-desk; and he ultimately had to do such work either kneeling or at a standing desk, and in lying he had to be on his right side whenever possible. Active physical exercise, such as tricycling, fishing, and hill-climbing, seemed to have considerable effect in warding off the attacks. I saw him on October 2nd, and found that during two years he had gone off from being a man of nearly fifteen stone to very little more than ten. He had a distinctly jaundiced appearance, and on examination I believed I could feel the gall-bladder distended. The palpation under this necessary examination brought on a severe attack of pain, and with it something almost of the nature of a convulsion. His temperature went up to 104°, and the pain was so severe that chloroform had to be administered. It was thought by all of us advisable that cholecystotomy should be performed next morning, and, in the profound belief that I should find a calculus obstructing the cystic duct in a valve-like fashion, I performed the operation next day, but found no stone. I established a biliary fistula, and the patient made a very easy recovery. His temperature never exceeded 37° C., and the highest pulse record was 79. There has been no attack of pain or distress of any kind since, and the patient is rapidly regaining health and strength. We have sent him away on a six months' voyage, with the fistula still open, and with instructions to let it close if it likes, but on the recurrence of any symptoms to have it reopened.

CASE 18.—R. J——, aged forty-eight, resident in Birmingham, was placed under my care by Dr. Rogers, with a well-defined tumour in the region of the gall-bladder, extremely tender on pressure, and with a history of several years' suffering from severe gall-stone colic—her life, in her own words, having been miserable for years on account of incessant discomfort and pain. I found the gall-bladder distended with about two-thirds of a pint of pus, and the neck blocked up by a large solitary calculus firmly impacted in it. I had to break it up to remove it. A few hours after the operation bile flowed freely through the wound, and the patient made an easy and uninterrupted recovery. The fistula has now healed, and the patient is perfectly well.

CASE 19.—E. S——, aged thirty-two, resident in Birmingham, was sent to me by Dr. Hoare with all the symptoms of gall-stones, but I could not discover any indication of distension of the gall-bladder. I therefore diagnosed it as a case of multiple small gall-stones. I operated upon her on November 11th, and found my view correct. I removed eight small stones; but, as her sufferings had existed for many years, the probabilities are that she had passed the great majority of the calculi with which she was troubled. The attacks came on at intervals of two or three months, and lasted for two or three weeks; so that if I had left her alone, nature would probably have cured her in about two or three years; but as we had no guarantee of that, and as the patient was completely exhausted by suffering and desirous of obtaining relief, the operation was performed, and, I think, even for the sake of shortening her sufferings by two or three years, was completely to be justified—at least, that is her opinion.

CASE 20.—M. B——, aged fifty-seven, placed under my care by Drs. Quirke and Wade. The lady had passed a large number of gall-stones, having had severe attacks at short intervals for several years; the gall-stones were all of moderately small size. I opened the gall-bladder on December 12th, 1885, and removed eighty-four stones, which varied not a very great deal in size. She made an easy recovery, and is now completely well, although the fistula is not yet healed.

CASE 21.—On December 21st, 1885, in the clinical wards of the Royal Infirmary of Edinburgh, I performed cholecystotomy on a man at the request of Professor Grainger Stewart. The symptoms were those of suppuration, not very clearly those of gall-stones. After a consultation with Professors Chiene and Annandale, and others of the staff, I opened the abdomen rather with the belief that I should meet with an abscess of the liver than what turned out to be the case—a suppurating gall-bladder full of gall-stones. The patient is still under treatment, and on the whole is progressing very well. The details of the case will be shortly published, with remarks by Professor Grainger Stewart himself.

By far the best of the recent papers upon cholecystotomy is one by Dr. Augustus C. Bernays of St. Louis, which appeared in the *Weekly Medical Review* for Oct. 31st. The title is one which is a little puzzling until the paper is read—"Ideal Cholecystotomy"; and the author discusses three possible operations for the surgical treatment of gall-stones. His "ideal cholecystotomy" is that where he can close the opening into the gall-bladder and drop the cyst back; and for the first time in his hands this operation has been successful. The second operation of which he speaks is what he calls "natural cholecystotomy"—that is to say, the operation I have performed successfully twenty-one times, imitating the process of nature by securing the adhesions of the gall-bladder to the abdominal wall, and the formation of a fistula as part of the treatment. The third operation is "cholecystectomy," which, he says, should be limited to cases of otherwise incurable or malignant disease of the gall-bladder.

One or two points in the paper are worth a little discussion. The last which I have mentioned—the limitation of cholecystectomy—I should extend further than Dr. Bernays has done; because nothing would induce me to remove a cancerous tumour of the gall-bladder, for there could be no reasonable amount of hope that the disease would not return. I cannot imagine any other kind of disease of the gall-bladder which would be incurable; for in some of my cases suppuration has led to almost complete disorganisation

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of the organ, and yet after drainage for some weeks it was completely restored to its functions, whatever they may be. Dr. Bernays says that ideal cholecystotomy is indicated when the bladder is normal in structure, and when the gall-ducts have been cleared of obstructing calculi. But he seems to be perfectly well aware of the validity of the conclusion which I have completely established, that it is absolutely impossible to be sure that the gall-ducts have been so cleared. His own case of successful ideal cholecystotomy was an example of which I have seen a considerable number, where, by the chronic inflammatory change effected by long impaction of gall-stones, the duct was practically obliterated. In such cases the regurgitation of bile after the operation does not take place until the inflammatory effusion has subsided, many days after the operation, sometimes two or three weeks; therefore it was not really a fair chance to test the efficacy of his ideal operation; and supposing that the accident of subsequent suppuration took place, a not unlikely thing after such an operation, nothing could happen but that the suppurating gall-bladder would discharge its contents through the aperture made at the time of the operation. One other point is the consideration of the possibility of a subsequent formation of gall-stones, and is a very strong argument in my own mind against Dr. Bernays' ideal cholecystotomy; for if such a thing should happen the whole operative process must be gone over again. On the other hand, if my proposal, characterised by Dr. Bernays, and very appropriately, as natural cholecystotomy, had been carried out, a single incision into the adherent gall-bladder, guided by a tattoo mark, which can be very easily left to identify the site, would enable complete and effectual relief to be given without any risk at all. This is an argument in favour of the operation I advocate, which I have frequently pointed out, and which I desire again to put into prominence. In all other respects I entirely agree with Dr. Bernays, more particularly in his condemnation of the transcendental cholecystotomy of Dr. Gaston.

Birmingham.

STUNNING AND BURN BY AN ELECTRIC LAMP.[1]

BY GEORGE BUCHANAN,
PROFESSOR OF CLINICAL SURGERY, GLASGOW UNIVERSITY.

INJURIES from electric lamps are becoming not infrequent. In most of the cases related death has been instantaneous. In a case reported on Jan. 22nd as occurring at Liverpool the man was stunned and remained unconscious for a time and on recovering was found to be quite blind. The case here related is very curious as to its causation and its effects.

William C——, aged forty-four, a workman in Clydebank building-yard, was engaged at a crane on Nov. 19th, 1885, At the extremity of the wooden arm of the crane was an iron pulley, over which hung an endless chain for raising weights. The man had occasion to pull at the chain, and while so doing an electric lamp, which was suspended above, by some mischance was lowered till it touched the iron pulley. The lamp was one of the arc kind, worked on the brush system. The instant this occurred the man felt a shock pass through him, became "doubled up," and then lost consciousness; but he did not fall to the ground, being held up by the chain which his hands firmly and involuntarily grasped. Some three or four minutes elapsed before the electric current was cut off at the machine, when the man dropped down on the ground stunned. He was taken to the Western Infirmary about an hour afterwards, by which time he had recovered consciousness and could give a distinct account of what had happened. The injuries received were not very severe. There was a vesication on the palm of his hand where it held the chain; also one on the side of his neck, which rested against the chain during his pulling it down. On the sole of his right foot in front, where the chief weight of his body rested in the act of pulling, was a spot about two inches square, where the tissues were completely charred by the heat of the current passing into the ground. There were no nails in the boots, and there was no perceptible evidence of heat on them, but the sole of the stocking was charred opposite the charred part of the foot. Sir William Thomson, who questioned the man after his recovery, explains that the moist foot of the stocking must have acted as the medium of conduction between the man's body and the ground, and so determined the seat of the burn.

The symptoms complained of were not very severe; they consisted of a slight amount of general shock, a feeling of heat in the abdomen and chest, and dimness of vision, all of which passed off in twenty-four hours. The wounds were treated in the ordinary way. A large slough separated from the sole of the foot, followed by rapid granulation and cicatrisation, and the man was dismissed cured in about six weeks.

Sir Wm. Thomson suggests that if any of the bystanders had taken the man by the clothes and drawn his feet from contact with the ground, or had thrust a bit of dry clothing of any kind under his feet, the contact would have been broken, and the hand relieved from its grasp of the chain. The wonder is that an electric current powerful enough to char the thick integument of the sole of the foot, passing through the man, did not produce any internal mischief.

[1] From notes by John Macdonald, M.B.

LARGE FIBROID TUMOUR OF THE UTERUS.

SPONTANEOUS EXPULSION; CURE.

BY W. H. JALLAND, F.R.C.S.,
SURGEON TO THE YORK COUNTY HOSPITAL.

ALTHOUGH spontaneous expulsion is one of Nature's ways of performing a cure in this condition, still, as it of so comparatively rare occurrence for large fibroids to be got rid of in this way, I think this case worthy of record. I first saw the case in consultation with Mr. Aylward, of York, on Jan. 2nd, 1885, on account of severe hæmorrhage from which the patient was suffering, and which at one time looked as if it might prove fatal. When I first saw her she was in such a feeble and blanched state that very little examination could be made, all our energies being directed to stopping the bleeding. This was fortunately done with the aid of ergot, ice, and opium, together with absolute quiet. I may say the bleeding had almost stopped before I saw her, through the active measures Mr. Aylward had adopted. I saw the patient again with this gentleman on Feb. 7th; the bleeding had then almost ceased, but she was apparently getting into a septicæmic condition, with a temperature of about 102°, tenderness over the abdomen, fetid discharge, and brown tongue. Thinking I should have her more under control in case the hæmorrhage returned, I advised her removal into the York County Hospital, which was accordingly done on Feb. 12th; and the following notes were taken during her stay there by Mr. T. Birt, junior house-surgeon.

Mrs. B——, aged forty-one, married. One sister died from recurrent tumour of arm; other relations healthy. Previous history good. Had three children; one died in infancy. No miscarriages. Two years ago (five or six years after the birth of the last child) she noticed a small lump in the lower part of the abdomen, which never gave her much inconvenience, but gradually increased in size till last Christmas, when she was seized with an attack of severe flooding, and since then has been subject at intervals to similar though slighter attacks. On admission, the patient was emaciated and very blanched, the mucous membrane of the lips being white. She complained of pain in the lower part of the abdomen, which kept her awake at night. She said she had a discharge of blood, which was not so profuse as it was a week ago. The vaginal discharge was very fetid, being noticeable for some distance from her bed. There was present an enlargement, dull on percussion, roundish in outline, and smooth, passing upwards out by the pubes to a point about three fingers' breadth above the umbilicus, and occupying the median line; from the tumour there bulged outwards at its upper part towards the right hypochondrium a smooth swelling about the size of an orange, giving a semi-fluctuating sensation on palpation. The whole mass could be moved slightly from side to side. On examination per vaginam the os was patulous and open, readily admitting the finger; discharge purulent and fetid. The sound passed readily into the cavity of the uterus for 6½ in. Temperature 101·2° at 8 P.M. She was ordered a

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mixture of cinchona and ammonia, an ounce to be taken three times a day; carbolic acid lotion (1 to 60) to be used as an injection every four hours. To have a diet of mutton, strong beef-tea, and milk, and half a point of porter daily.

Feb. 14th: Patient much the same. Discharge very profuse. Complains of much pain. Ordered half a grain of opium pill three times a day. Only one slight occasional hæmorrhage. Temperature ranges between 99·2° and 101·8°.—19th: Same condition. Mixed with the discharge have been a few waluut-sized irregular masses of white fibrinous-looking material (she passed one or two of these before her admission). One of these was examined under the microscope and was found to be identical in appearance to the fibroid tumour, only that no bloodvessels could be detected in it. As she complained of feeling sick, she was ordered a mixture containing bismuth and soda.—23rd: Sickness gone. Still passes flocculent masses about every other day. Size and external outline of uterus remain about the same; discharge still very fetid. Ordered half a drachm of iodoform and glycerine to be used with the injection. Temperature on two mornings below 99°, at night between 100° and 102°.

March 2nd: Irrigated uterus by means of uterine douche, iodoform being used in the injection; douche used for the next two days.—5th: The following was noted to-day: Sound only goes in for about three inches and a half; fundus uteri two fingers' breadth below umbilicus; not half so much discharge, and not so fetid.—8th: Discharge still further lessened in quantity. Ordered some ergot and nux vomica.—11th: Discharge odourless. The uterine douche, which had been used every other day, was now discontinued on account of difficulty of introduction. During the last seven days one or two fibrinous masses have been expelled. Temperature normal in the morning, and only occasionally rising at night.—25th: Got up to-day. Regaining colour. Still a slight inodorous leucorrhœa. Ordered some steel.—29th: Catamenia commenced, ushered in with characteristic and normal prodromata. This discharge was lighter than usual, and continued always very moderate in amount for five days.

April 8th.—Getting fat. Walks in the garden daily. Uterus normal. Ordered some tincture of steel and nux vomica.—12th: Went out to-day well.

July 18th.—Has been seen several times since her discharge. Has had her usual monthly periods with only an average loss. Has gained flesh, looks well, and has regained her natural colour.

A CASE OF

EMPYEMA WITH CEREBRAL ABSCESS.[1]

BY DAVID W. FINLAY, M.D., F.R.C.P.,

PHYSICIAN TO THE MIDDLESEX HOSPITAL, AND TO THE ROYAL HOSPITAL FOR DISEASES OF THE CHEST.

THE subject of the following communication was a young man aged twenty, who came under my care in the Middlesex Hospital on Dec. 17th, 1884. On admission his temperature was 99·6° F.; pulse 80, of good force, and regular; respiration 24; tongue clean and moist. He was described as fairly well nourished, but rather anæmic, with clubbed finger-ends, and complained of a discharge from an opening in the left side. On examination of the chest the left side was markedly retracted, and did not move in respiration; the right front moved more freely than normal. Resonance and breath-sounds over the right front were excessive. As regards the left front, the resonance was marked as far down as the third rib and as far out as an inch and a half beyond the vertical nipple-line. Past these limits resonance was rather abruptly replaced by absolute dulness, which extended right round to the back. Over this dull area the breath-sounds and tactile fremitus were wanting, while both, together with vocal resonance, were rather exaggerated over the resonant area above the nipple. There was a small opening discharging pinkish-coloured pus in the fourth interspace of the left front in the parasternal line. The discharge was small in quantity and not offensive. Turning to the back, there was impaired resonance on the left side from the spine of the scapula downwards, and the breath-sounds were wanting, except towards the spine, where they could be faintly heard. Over the right back the breathing was harsh; there were no adventitious sounds to be heard anywhere. The heart's maximum impulse was apparent in the third interspace immediately to the right of the sternum. The first sound was accompanied by a blowing murmur in this situation, the second sound was clear and sharp. The patient had no cough and no sweating at night. The urine had a specific gravity of 1015, was faintly acid, and contained no albumen or sugar. The family history was quite satisfactory, and he had enjoyed fairly good health up to the present illness, which began in an attack of pleurisy in July, 1883, about eighteen months before his coming under observation. He had been tapped three times at weekly intervals, and after the lapse of a month his side was incised and irrigated daily. Under this treatment the discharge had gradually diminished and he was sent to the seaside as cured; but it had become more profuse again, and had continued so for a year or more, being variable in quantity but showing no tendency to dry up. It should be noted that before being incised the empyema had pointed, and the skin over it was, as he described it, "as thin as paper." There was nothing abnormal in the abdomen.

As it was quite obvious that the only chance of curing the empyema lay in establishing a free exit for the pus and endeavouring to get the side to contract, so as to abolish the abscess cavity, he was taken into the operating theatre five days after admission (Dec. 22nd), and had a free opening in the chest made, at my request, by Mr. Gould, who removed a piece of the fourth and fifth ribs at the seat of the discharging sinus. An abundant escape of rather fetid pus took place; a large drainage-tube was inserted and the usual dressings applied after the pleural cavity had been irrigated with a warm solution of permanganate of potash. This irrigation was continued daily, and he went on perfectly well for a time, the quantity of discharge gradually diminishing. He had a good appetite, slept well, and had no rise of temperature or other untoward symptom. On Dec. 30th, however, eight days after the operation, he was seized at three o'clock in the afternoon with a convulsion of an epileptiform character, which lasted with more or less severity for about fifteen minutes. The fit was repeated six times within the next twenty-four hours. I did not see him in any of the attacks, but the following was the description of them given to me by those who did. The first thing observed was clenching of the teeth and spasm of the muscles of the neck, and this was followed by rigidity of the muscles of the trunk and extremities, the legs being extended and the arms flexed. His head was turned to the right, to which side the eyes also deviated, and there was twitching of the lips and eyebrows; the face became cyanosed, and he bit his tongue. When the spasm passed off, the patient lay in an almost collapsed state, with slow stertorous breathing. During the attack the pupils were contracted, but dilated afterwards, and were inactive to the stimulus of light. The urine was passed incontinently. All the other fits were stated to be similar to the above, only lasting longer. He was very drowsy and stupid between the fits, and after they passed off he complained of headache. When these attacks finally passed away, it was noticed (Jan. 2nd) that the tongue was protruded to the left and the face drawn to the right, and that he complained of shakiness of the left arm, in which there was considerable loss of power, the grasp of the left hand being also very feeble. Otherwise, on this day he was improved; the pupils were equal and active; he had slept well, and taken his food well; there was very little discharge from the wound, which looked healthy. He was brighter as to his mental condition. On ophthalmoscopic examination the optic discs appeared quite normal. I should have stated that the irrigation of the pleura had been discontinued on the first appearance of the convulsive attacks.

I need not take up time by tracing his condition from day to day. It will be sufficient to say that the face remained paralysed, the paralysis of the arm increased (particularly as regards the muscles of the forearm), and was followed in four days by progressively deepening paralysis of the left leg. With all this the pulse was slow, about 60; frontal headache was complained of, and the temperature was rather subnormal. On January 9th he had an attack of vomiting, and he was noted to be becoming duller in intelligence: he could not be made to understand or answer questions. On this day also another ophthalmoscopic

[1] Read at the meeting of the Medical Society of London, Feb. 8th.

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examination was made, but nothing abnormal discovered. From this point onwards his stupor gradually deepened; he had a slight return of the vomiting, became profoundly comatose, and died quietly on January 13th, at 12.45 A.M.

The necropsy was made by Dr. Fowler, sixteen hours after death, and the following was the condition of things:—There was the opening of a sinus in the fourth left interspace in the mammary line, admitting the little finger, and leading to the sac of an empyema, which

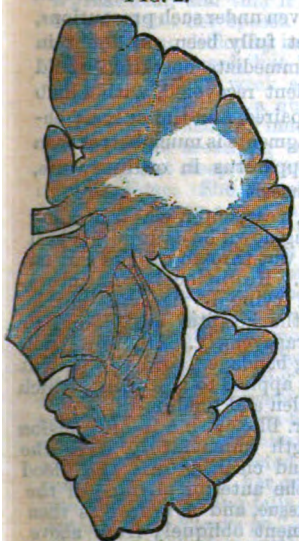
FIG. 1.



Lateral view, showing seat of abscess.

occupied the lateral and posterior aspects of the left side of the chest. The side was much contracted, the lower intercostal spaces being almost obliterated by the coming together of the ribs. The pleural layers were converted into dense fibrous walls nearly half an inch thick, enclosing a space about seven inches and a half in vertical measurement, lined by a soft and highly vascular membrane. This contained scarcely any pus, but on pressure of the chest-wall above the external opening, about half an ounce of pus oozed out. This was found to come from an abscess sac situated over the third interspace. As for the lung itself, both lobes were collapsed posteriorly, but the anterior part of the upper lobe was crepitant. The right lung was crepitant throughout, but presented some adhesions posteriorly, and slight œdema of the base. The heart was found displaced to the right; the pericardium was normal; the heart's valves were also normal in appearance and competent; the muscular substance was rather soft. There was nothing noteworthy found in the abdomen. The right side of the brain on removal of the membranes was seen to be much enlarged, bulging towards the left, with much flattening of the convolutions of the surface. (Fig. 1.) There was no meningitis. After being hardened in spirit, the brain was divided by vertical sections, one of which is shown in diagrammatic form in Fig. 2. The abscess was found to begin at the middle of the anterior border of the ascending frontal convolution immediately beneath the grey matter, extending backwards in the centrum ovale underneath the fissure of Rolando into, but not beyond, the ascending parietal convolution. It was nearest to the surface just in front of the fissure of Rolando, where it encroaches upon the grey matter. The abscess cavity was widest from side to side immediately beneath that fissure, where in the hardened brain it measures two inches, extending inwards to a point just above the lateral ventricle, and about a quarter of an inch from the caudate nucleus. The whole brain measured seven inches and a quarter in length, the length of the abscess being three inches. The abscess had no limiting wall or lining membrane, the cavity presenting a rough and ragged surface.

FIG. 2.



Vertical section from upper part of fissure of Rolando to optic commissure, showing seat of abscess.

Regarding the empyema little need be said, the chief interest of the case centring in the cerebral abscess. Nevertheless, I may briefly refer to one or two points.

Irrigation of the pleural cavity has been followed in a number of cases by attacks of an epileptiform character, and speedy death. I can recall very vividly a case of this kind, which occurred in the Middlesex Hospital ten years ago, and which is recorded by Dr. Cayley in the tenth volume of the Clinical Society's Transactions. In such cases, however, the attacks have come on when the pleura was actually being irrigated or injected, and no lesion has been found in the brain after death. In the present case the fit did not occur till about three hours after the irrigation of the pleura; and although, as a precautionary measure, I ordered the discontinuance of the irrigation, I cannot say that I look upon the relation of the two things to each other in the light of cause and effect. At the same time it is conceivable that they might have such a relation, the manipulations necessary during the irrigation possibly loosening a thrombus, which a subsequent movement or coughing on the part of the patient finally detached. And I think it is quite worth while considering whether the washing out of the pleura, except in special cases—those, for example, in which the pus is very fetid—is worth the risk run. I think that if a free exit is provided for the pus, the washing out in the general run of cases is not necessary, and may be mischievous. Towards securing this free exit, I should say that there are few cases in which the removal of a portion of rib can be advantageously dispensed with; and if this course were followed early in cases of empyema, I believe that the results generally would be more satisfactory.

As to the ultimate cure of the empyema in the present case, had the complication of cerebral abscess not cut short the patient's life, the abscess cavity in the pleura was so large, and the bony case enclosing it on one side so absolutely unyielding from the contact of the ribs and thickening of the pleura, that nothing but a very free removal of ribs, and probably not even that, would have availed to produce obliteration of the sac, for it must be remembered that but little help would have come from the collapsed lung. If, however, more than a year had not been practically lost in the effective treatment of the case, I cannot help thinking that the result might have been widely different.

So much for the empyemal side of the case. As regards the brain when the epileptiform attacks occurred, followed by left hemiplegia, it was not difficult, having regard to the empyema, to read aright the cerebral symptoms—there was little doubt that an abscess had formed in the right side of the brain. On the subject of cerebral abscess little, if anything, has been added to our knowledge since the publication of the article by Gull and Sutton in "Reynolds's System of Medicine;" and the present case is chiefly interesting in that it exemplifies one of the rarer conditions under which the disease occurs. Of seventy-six cases tabulated in the article referred to (and this appears a fair number on which to establish a rule of proportion), three only were consequent upon empyema. As to symptoms in the present case, the chief in diagnostic importance, after the convulsions and consequent hemiplegia, was pain in the head, referred mostly to the frontal region; but it was seldom very marked, giving the impression rather of a dull aching than positive pain. Vomiting was present only to a very trifling extent. There was no rigor, and the temperature was almost always subnormal, exceeding 100° F. on one occasion only. This point, the absence of pyrexia in cerebral abscess, has, I think, been noticed by several recent observers.

Regarding etiology, the abscess must be supposed to have owed its origin to some minute coagulum carrying septic infection from the suppurating focus in the chest, or from the divided rib ends. This, of course, is in general only a matter of reasonable inference; but the missing link has in one case been supplied by Boettcher, who is said to have found lung pigment in the cavity of a cerebral abscess, which followed abscess in the lung. But we do not thus

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get rid of all difficulty; for to infect the brain the septic material must first have been carried to the right side of the heart, sent through the lungs, returned to the heart, and then propelled to the brain.[1] But how did it pass through the lungs without leaving pyæmic abscesses there to attest the route of its progress? We know that in ordinary cases of pyæmia the lungs are prone to be the seat of metastatic abscesses. Why should they escape in such cases as this? Is it because particles not fine enough to escape arrest in the brain are yet able to pass through without lodging in the lungs, or because cerebral tissue is in some cases more apt to take on inflammatory action? If the latter, it may be that the long-continued suppuration of the empyema may induce a more than ordinary liability to suppuration in the brain. But these are matters of speculation.

Finally, as to treatment. I need hardly say that the question of surgical interference was discussed more than once. One thing in its favour was that there was little difficulty in saying where the seat of the abscess would be found. The symptoms noted during life pointed to the neighbourhood of the fissure of Rolando. But there were other points to be taken into consideration. First, the contents of the abscess might not have been so liquid as to have been readily removed when found, resembling, perhaps, more a diffused softening than completely formed pus. Secondly, the progress and extent of the paralytic symptoms led to the belief that a large area of brain was involved, to which probably permanent damage had been done, and even if the dangers of the operation itself had been safely surmounted, the ultimate prospects were not encouraging. Notwithstanding these considerations, however, I regret that the evacuation of the abscess was not attempted, although, perhaps, the result would have been of more advantage to medicine than to the patient himself.

DRY DRESSINGS FOR INTERNAL CAVITIES.[2]

BY CHARLES F. HUTCHINSON, M.D.,
MEDICAL OFFICER TO THE ROYAL NORTHERN SEA-BATHING INFIRMARY, SCARBOROUGH.

DRY dressings being now all the fashion, and to my mind most justly so, I wish to draw the attention of the profession to a very simple method of applying, in the dry state, dressings, styptics, &c., to such cavities as the vagina, uterus, and rectum.

The only apparatus required is a hollow cacao-butter suppository, which suppositories are made in various sizes, the largest of which will just about hold one drachm of any ordinary powder. These hollow suppositories are filled with the powder that may be wished to be used as a dressing; the small lid, after being gently heated, is put on; this when cool remains fixed, and the whole apparatus is then ready to be introduced into the vagina or rectum. The heat of the body soon melts the cacao butter, and the powder is then brought, in as dry a state as possible, into direct contact with the parts. During the last six months I have used these suppositories most freely, and have been more than satisfied with the result. I have tried all sorts of powders, and as the result of my own experience strongly recommend the following, either alone or in various combinations as required.

Firstly, as a styptic I most strongly recommend powdered iron-alum. I generally order one drachm of powdered iron-alum and five grains of iodoform, to be well mixed together, the powder to be inserted into a hollow suppository and used as directed. In the treatment of uterine hæmorrhage I am convinced there is no remedy of more universal application, and none on which I could with greater confidence rely. I have used it in severe hæmorrhage from uterine fibroid, from uterine polypus, from uterine cancer, bad miscarriage, and in several cases of menorrhagia at the change of life, and it has never yet failed me. All that is required is to introduce the suppository as high as possible into the vagina, and there leave it. It is as easily applied by the nurse as by the doctor, and is in every way perfectly safe and harmless.

Secondly, as a dressing iodoform stands pre-eminent; in fact, I now seldom use anything else. This, when combined with from a quarter to half a grain of morphia, forms by far the best dressing for uterine cancer that I have yet tried.

Thirdly, morphia, either alone, or, as I generally now use it, in combination with either or both of the above, is a great aid to the physician and comfort to the patient.

After attention has once been drawn to this simple mode of applying these various applications, the numerous uses to which they might be put in the various vaginal, uterine, and rectal discharges and diseases will occur to all. I have only very briefly ventured to suggest the use of those which in my own hands I have found deserving of confidence. I have no doubt that hundreds of the profession are at present using this mode of dressing; but, on the other hand, I know that there are hundreds who are not, and it is to persuade those who have not yet tried them that I venture to bring this subject forward.

[1] There is always, of course, the alternative previously referred to and preferred by Dr. Broadbent, of thrombus by the direct route of the pulmonary vein; but this would not cover the case of the divided rib-ends.

[2] Read before the Leeds and West Riding Medico-Chirurgical Society.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

CHARING-CROSS HOSPITAL.

TRANSVERSE FRACTURE OF THE LEFT PATELLA; OPERATION; CURE.

(Under the care of Mr. J. ASTLEY BLOXAM.)

THE question as to the best treatment in cases of fracture of the patella is one which still occupies the attention of practical surgeons: whether to treat the fracture by means of splints, strapping, Malgaigne's hooks, or other apparatus, or to operate, as in this case, sewing the fragments together, using strict antiseptic precautions and drainage. Could the element of danger which follows a compound fracture in which the knee-joint is opened, even under such precautions, be eliminated, as it has not yet fully been, no doubt in healthy subjects this cause of immediate operation would be generally accepted. This patient recovered, with a limb the utility of which is hardly impaired, and the success obtained with close union of the fragments is much better than after the employment of the apparatus in ordinary use, excepting in a few isolated instances.

Walter T——, aged twenty-five, a carpenter, was unloading a van on July 19th, and on getting down he caught his heel between two pieces of wood and was thrown off the cart on to an iron grating in the roadway. He distinctly remembers hearing something snap, and on trying to rise was unable to do so. He was brought to the hospital and found to have fractured his left patella transversely. On admission a back splint was applied, the leg bandaged, and the patient put to bed, an ice-bag being kept applied to the joint, which felt hot, and was somewhat swollen and tender.

July 24th.—This afternoon Mr. Bloxam made an incision two inches and a half in length immediately over the patella, opening up the bursa and clearing out the blood and clots. He then separated the anterior surface of the patella from the aponeurotic tissue, and a hole was then drilled through the upper fragment obliquely from above downwards, and a similar one in the lower fragment in the opposite direction. A piece of stout silver wire was then passed through the holes and tightened, and the edges of the fractured patella brought into close apposition. A counter-opening was made to the outer side of the knee-joint, and a drainage-tube inserted. The edges of the incision were then stitched together with silver wire sutures, another drainage-tube being inserted. The whole operation was performed antiseptically, and the limb placed on a long back splint and slung.

25th.—Patient passed a restless night, and was given a one-grain opium pill at 8 P.M. and again at 12. He has no pain in the knee. Temperature 100·8°.

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27th.—Patient is feeling comfortable, and takes his food well. Temperature 99°. Tongue clean.

28th.—Wound was dressed to-day with antiseptic precautions; it looked healthy, and the edges seemed to be healing by first intention. The drainage-tube was shortened by half an inch. Patient slept well last night, and is in no pain. Temperature 98·8°.

31st.—Patient is doing well. The drainage-tubes were removed and the wound syringed, and everything looked healthy.

Aug. 12th.—The wound was dressed again this morning and the sutures taken out. The wound into the joint is quite healed, and the one over the patella is reduced to a point. Zinc ointment was applied to several inflamed patches in the neighbourhood. Antiseptic dressing was reapplied.

24th.—Patient can bend the knee with ease, and everything seems to be going on well.

28th.—The splint was removed to-day and fastened on to a pillow. Patient was allowed to get up this afternoon, but not to use his leg.

Sept. 1st.—Patient left the hospital to-day with good union of the patella. He was instructed to use his leg very carefully for some time to come.

OSTEO-SARCOMA GROWING FROM THE SECOND CERVICAL VERTEBRA AND PRESSING ON THE SPINAL CORD.

The following case of retro-pharyngeal growth is very interesting, the symptoms pointing to pressure on the spinal cord and its membranes, with some irritation of the medulla oblongata. It is to be regretted that the further progress of the disease with the sequence of the symptoms which developed later, and a post-mortem examination, could not be added to the account.

Ann D——, aged forty-eight, a widow, was admitted on July 22nd, under the care of Mr. Bloxam, with the following history. She had been quite well up to the last two years, when she noticed that she was getting very drowsy during the daytime—to such an extent, indeed, that she could not accomplish her household duties. She was, moreover, continually being bruised by tumbling against the furniture in consequence of her falling asleep when standing still for a moment. Three months later she felt a lump in her throat, which did not cause her much pain, but inconvenienced her a great deal, and this it has continued to do since. Nine months later her speech began to be involved, the patient experiencing difficulty in articulating distinctly. Her eyesight also suffered, but her hearing was not sensibly impaired. About a week ago her head began to drop to the right, and she had a numbness or want of feeling in her hands. She had an "indescribable feeling" at her heart, and at times her breathing was very short. Curiously enough, she does not sleep well at night, although so drowsy during the daytime. She says she is a good deal thinner than she was two years ago. Family history *nil*. She had several miscarriages after her first child, but no history of syphilis can be elicited. She has had several living healthy children since. The patient herself has only had typhoid fever and small-pox since childhood.

Condition on admission.—Patient is thin and ill-nourished, and her appetite is poor. Pulse slow, regular, and non-compressible. She suffers from constipation, but passes a good deal of urine. Her tongue is furred, and deviates to the right when protruded. Her head also is tilted towards that side. She appears to have great difficulty in keeping awake. Her speech is thick, and can scarcely be understood. When requested to grasp anything, she can do so momentarily, but her grip is soon relaxed, and any object she may be holding falls without her being conscious of any intention to "leave go." Patient says the lump in her throat does not interfere with her swallowing. The pupils are contracted. She can walk steadily. The soft palate is relaxed and deviated.

July 25th.—The patient's condition is the same as on admission. On opening the mouth widely and depressing the tongue, an elastic but firm tumour is seen situated at the back of the pharynx on the right side and pushing forward the palate, which itself does not appear to be involved. The swelling extends across the median line, and as far outwards as the palatine arches; it reaches upwards as far as the hard palate, and downwards below the level of the soft palate. The growth is firm, fixed, and nodulated. No glandular enlargement can be detected in the cervical region. The patient can blow freely through both nostrils. She declined to allow any operation to be performed, and left the hospital. She died within a month or two after her voluntary discharge.

HOSPITAL FOR CHILDREN, PENDLEBURY.

ULCERATION INTO THE GREAT VESSELS OF THE NECK, LEADING TO HÆMORRHAGE, IN A CASE OF SCARLET FEVER; DEATH TEN DAYS AFTER LIGATURE.

(Under the care of Dr. ASHBY).

EXTERNAL hæmorrhage from the great vessels being in scarlet fever a condition of some rarity, the following record will prove interesting both on account of its clinical and of its pathological features. For the account of the case we are indebted to Mr. Macalister, senior resident medical officer.

The patient was a little boy aged two years, admitted into the fever ward on the fourth day of the disease, presenting the usual symptoms of scarlet fever. There was nothing remarkable about the case except that the neck was much swollen on either side, hard, and painful (cellulitis and enlarged glands), and had become so on the day before admission. It is worthy of note that the throat affection was of a mild character, the tonsils being enlarged and injected, but having no deposit upon them. The temperature gradually fell after the sixth day, and on the eighth day was normal, the child apparently becoming convalescent.

On the tenth day the temperature again began to rise, but nothing could be discovered to account for this, except the condition of the neck. Three days later, fluctuation being suspected on the right side, a careful incision was made over the softer part down to the deep fascia, which in turn was opened, and the wound enlarged with dressing forceps. Plenty of serum, but no pus, escaped at the time, but on entering a director on the following morning a quantity of thin watery-looking pus flowed along its groove, and the wound was drained and continued to discharge freely during the following week. During this period the temperature became better, varying between 97·6° and 101·6° in twenty-four hours, but the child continued very weakly, and showed no tendency to improve, although treated with appropriate remedies.

On the twenty-fourth day of the disease, the nurse, who had left the child but a few minutes previously, discovered him saturated with blood, which was freely escaping from the external wound in the neck. She very promptly arrested this flow by plugging the wound with the finger. When seen almost immediately afterwards, the child was extremely collapsed and blanched, restless, and sighing deeply. No radial pulse was perceptible. Pressure having been applied over the vessels, stimulants were given both by mouth and hypodermically, the pelvis was raised and the extremities bandaged, and in the course of an hour the wound was enlarged and explored. The muscles and glands were found bared and the surrounding tissues softened; the fascial structure had in great measure disappeared. On removing the pressure the bleeding did not of itself recommence, owing to the collapsed state of the boy, but on an attempt being made to plug the wound with strips of carbolised lint, at once a flow of bright arterial blood took place, and in such amount as to render it evident that either the main vessel or a large branch must be the seat of hæmorrhage, and further and deeper exploration failing to discover the bleeding point, it was decided to ligature the common carotid. This was done immediately below the omo-hyoid, which was divided to give more room. The discovery of the vessel was rendered a matter of great difficulty, partly owing to the inflammatory matting together of the tissues and in part to the absence of pulsation, so that there was little to guide one in distinguishing between the vein and the artery. As a result of this the sheath of the vein was at first opened slightly, the blue colour being the first indication of the mistake. A small opening was made in the carotid compartment and a strong catgut ligature applied. No anæsthetic was given, and the patient showed no indication of pain throughout the operation. Judging roughly from the amount of blood on the surroundings about seven ounces (fluid) must have been lost. At 2·30 P.M., an hour after the operation, the patient was still pulseless and unconscious. Ether was injected together with two minims of solution of sulphate of atropine. At 4 P.M. he seemed to be dying, gasping at long intervals, and extremely blanched. Temperature 95·6°, and

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as a *dernier ressort* two ounces (fluid) of a solution of sulphate of soda (two ounces to the pint) at 100°F. was slowly injected into the loose cellular tissue of the axilla, where it formed a large swelling. It was very rapidly absorbed and the child became better, took some peptonised milk, and at 8 P.M. was quite conscious and taking his nourishment well. At midnight he was very restless, but less blanched. Pulse 180, quite perceptible at wrist. The feet and legs were now enclosed in a thick covering of cotton-wool, the bandages reapplied, and one minim of tincture of opium given. Temperature 102°.

Twenty-fifth day.—Passed a restless night, sleeping at intervals. The pulse is full, bounding, and hard, 176. He takes his food well. Temperature 103°. The wound looks rather red; dressed with iodoform. On removing the coverings from the extremities, the toes of the right foot were found to be almost black, and colder than the surrounding parts. Some bullæ had also appeared on the dorsum of the foot and ankle, and there was no sensibility in these parts. Warm cotton-wool was applied.

During the next few days there was continued improvement. The wound kept sweet and looked healthy. The toes recovered in great measure, only about half of the terminal phalanx of each drying up, and a line of demarcation forming between this and the recovered portion.

On the thirtieth day, at 7 A.M., some oozing took place from the wound, which at once stopped on the application of cold, and was at first thought to have occurred from some granulations; but four hours later a sudden gush of dark venous blood took place, and, on exploring, the vein was found in part bared, but the bleeding point could not be determined. The hæmorrhage recurred three times within the next twenty-four hours (plugs being employed to arrest it each time), and at 4 P.M. on the thirty-first day, during a fourth attack, Mr. Wright made a careful examination, and found a small opening in the sheath of the vein from which the blood escaped; this he enlarged, and, two points of hæmorrhage becoming evident, he ligatured the vein above and below these, but immediately afterwards the blood flowed from a perforation still higher up, and he applied a third ligature above this. The tissues of the vein were soft and friable, tearing away in the forceps.

At midnight on the thirty-second day hæmorrhage again occurred, and this time from a part of the vessel lying so high up and deep in the neck as to be inaccessible to ligature. It was at this time noted that the child had complete paralysis of the left upper limb and paresis of the left leg. He could not shut his left eye. Sensibility was also impaired on the left side. The intercostal muscles and diaphragm acted equally, and the pupils were equal and reacted readily. He had remained in a condition of great prostration since the venous hæmorrhage commenced.

Thirty-third day.—Purpuric spots appeared on the right ear and cheek; he now, for the first time, absolutely refused nourishment, and nutrient enemata were given. He gradually became weaker, and died on the thirty-fourth day of the disease.

Necropsy.—There was general bloodlessness of the organs, which appeared otherwise healthy. The blood was pale, and the spleen enlarged (weighed three ounces). The brain was anæmic. No emboli were found. The thoracic viscera and structures on the right side of the neck were removed *en masse*, and on subsequent dissection presented the following characters:—The carotid artery, from the seat of ligature up to the point of bifurcation, had entirely disappeared, and the walls of the remaining upper part were so thinned and soft as to tear like wet tissue paper when seized with the forceps. Below the ligature the vessel was filled with clot. The vein was in a similar softened condition and had four perforations, one of these almost immediately above the highest ligature and beneath a gland. The sheath, which had disappeared both from vein and artery from a little below the point of carotid ligature to the bifurcation, was separated from the vessels above and below these points, and in the anterior mediastinum, immediately over the pericardium, was expanded into a small cavity containing thin purulent fluid.

Remarks.—Although sloughing into the internal carotid from the throat is comparatively common in scarlet fever, there are very few cases recorded where the hæmorrhage has occurred from without. Among others, Dr. Kennedy in his account of the epidemic in Dublin 1834-42 reports three cases, in two of which the vein alone was opened into, and in the third there was no post-mortem. In the latter and one of the other cases the blood escaped from an opening which had been made into an abscess some days previously; in the remaining case a large slough formed, dissecting out glands, muscles, and bloodvessels. Fatal hæmorrhage through the external auditory meatus has occurred several times, as recorded by Graves, Professor Porter, and Dr. P. J. Hynes, and in one such case the child recovered after the carotid had been ligatured by Mr. Bennett May. It would seem that the destructive processes leading to this perforation of the vessels are of two kinds. In the one, the peri-glandular cellulitis and abscess is followed by softening and dissolution of the tissues (colliquative necrosis). In the other, large sloughs form and separate, laying bare many of the deeper structures; but, generally speaking, the vessels, and more particularly the arteries, are the last to be destroyed, and several times complete recovery has ensued where the sheath of the carotid and the internal jugular has been exposed without the occurrence of hæmorrhage.

NEWCASTLE-ON-TYNE INFIRMARY.

LARGE LOOSE CARTILAGE SUCCESSFULLY EXTRACTED FROM THE KNEE-JOINT OF A PATIENT AGED EIGHTY YEARS.

(Under the care of Mr. FREDERICK PAGE.)

M. G——, a woman aged eighty, was admitted into the infirmary on Nov. 5th, 1885, with the following history. For the last five or six years she had suffered from pain in the left knee-joint, and was aware of a loose body in it which she was able to push from one part of the joint to another. On Nov. 1st she fell upon her knee. Considerable pain and swelling of the joint followed, and for this she was admitted into the hospital. The limb was kept at rest on a MacIntyre splint.

Dec. 15th.—All inflammation having subsided, a free incision was made into the joint under carbolic acid spray, and a loose cartilage extracted. The cartilage was peculiar in appearance, not unlike a flat oxalate of lime calculus. In length it measured 2 in., in breadth 1¼ in., and ¾ in. in thickness. It weighed 250 grains. The wound healed kindly.

29th.—The patient was able to move about the ward readily.

The case is interesting from the age of the patient, and from the size and peculiar appearance of the loose body.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Enteric Fever at Suakim.

AN ordinary meeting of this Society was held on Tuesday last, Dr. George Johnson, F.R.S., President, in the chair. Drs. Robert Maguire, Harrington Sainsbury, John McDonagh, and Messrs. C. H. Golding Bird, and B. Wainewright were elected Fellows of the Society.

Dr. J. E. SQUIRE read a paper on Enteric Fever at Suakim, with some cases of Malarial Enteric or Typho-malarial Fever. By the courtesy of the medical officers of the Suakim Field Force, the author was entrusted with the charge of a division of the Base Hospital at Suakim, and was thus enabled to see much of the fever which occurred among the troops. The analysis of nearly eighty cases shows that, though the large majority—about seventy—were of the ordinary enteric fever type, as verified in two cases by necropsies, some were so modified by climatic causes as to merit the designation of malarial enteric. Two or three showed stronger evidence of malaria. One of these, believed to be enteric during life, was found post mortem, after four weeks' illness, to have no specific enteric lesions at all; to this class of cases the term "typho-malaria" might be restricted. In two of the fatal cases hæmorrhagic effusions occurred under the conjunctivæ or in some parts of the skin; these cases were not due to scurvy, the diet of the troops being varied with fresh meat and vegetables. Typhus was unknown in the force. Diarrhœa was a prominent symptom in all the cases. As regards the cases of enteric fever, it would seem that the disease was imported from Cairo, and that the infection was spread by the air; the use of none but condensed water for

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drinking and cooking purposes excluding water as a means of transmission. In opposition to the views of some Indian and army medical authorities, the seasoned troops, represented by the East Surrey Regiment from India, were attacked earlier than those unused to tropical climates, as represented by the Guards who came direct from England, and the mortality was not proportionally greater among the younger soldiers. Cases of enteric fever were admitted into the Base Hospital soon after it was opened, in March; the malarial cases did not occur till some two months later. Seventy-three temperature charts and some cases in full were given in illustration of the points referred to in the paper.—Dr. GEORGE JOHNSON considered that enteric fever could originate from other sources than contaminated water, and mentioned some cases in illustration of its origination from sewer-gas.—Surgeon-Major MEYERS said at the commencement of the campaign he had seen cases of "dysenteric diarrhœa" at the Base Hospital, but this epidemic disappeared when the Guards moved to Tambouk. Whether true enteric fever was the nature of the majority of cases of febrile illness at Suakim he felt himself in doubt, but was inclined to think it was not true enteric, and was rather disposed to regard dysentery as at the bottom of it, which would not be surprising when we bore in mind the sort of emanations from a soil composed of dry fæces and sand, the latter constituent having no deodorising properties. Rose spots during life and typical ulceration after death were, in his experience, rarely met with. The peculiarity of many necropsies was a remarkable form of extensive sloughing round the ileo-cæcal valve, totally different from what he had seen in enteric fever in this or any other country.—Dr. MARSTON dwelt upon the great influence of age and recent arrival in a tropical or subtropical country in increasing the susceptibility to enteric fever, and he illustrated this by some forcible figures showing the percentage liability to die of this fever of men under twenty-five years of age during their first and second years of service in India, as compared with older men of longer service in that country. The amount of enteric fever in a newly-arrived regiment, as compared with a more acclimatised one, showed the same thing. The facts came out year after year with a monotony which left no room for doubt. And it was the same thing in war; in Afghanistan and Egypt, and in the French Army during the campaign in Tunis. As the second case of enteric fever occurred at Suakim in the Shropshire regiment the day after that of the Surrey regiment, it was impossible for the latter to have been the cause of it. It must be remembered that recent experience has proved that the incubationary period could be prolonged to six or even seven weeks. The cases of fever seen in tropical climates were, in his experience, true enteric fever, presenting its clinical features during life and its morbid appearances in fatal cases. As regards typho-malarial fever, there was no evidence of its existence as a new and perfectly distinct disease, although, of course, a malarious subject might be attacked with typhoid fever and exhibit symptoms of both diseases.—Dr. D. DREWITT had seen cases of fever at Palermo and Sicily in which there were definite sets of symptoms; suggesting that we had to deal with a "chemical" union of typhoid and malarial fevers, rather than with a mechanical mixture. In Dr. Whipham's history of the American rebellion there were narratives showing the great variety of types of disease that were constructed of the union of apparently different maladies; any combination of typhoid, dysentery, and ague being liable to be met with.—Dr. SINCLAIR THOMSON believed that the nature of the soil determines the form of typhoid of which he distinguished various types; the abdominal and diphtheritic being two chief ones. When water was the source of the poison the abdominal symptoms prevailed; but when sewer gas, then the throat was more affected and nervous symptoms were prominent.—Dr. DON had had twenty years' experience of typhoid fever, and had written a paper in a Blue-book for 1870 on the subject. Speaking of typhoid fever in subtropical latitudes, he recognised the civil view which interpreted an outbreak of enteric fever as due to some pre-existing case, and the military view which allowed that the disease could originate *de novo* under certain climatic, dietetic, and like causes. He believed that a nutritive intestinal change preceded the appearance of typhoid fever, and considered that it was just a chance whether this precedent intestinal disease should develop into typhoid fever or not. He declared emphatically his opinion that enteric fever could originate *de novo*.—Brigade Surgeon GRIBBON had medical charge of the *Ganges*, and had no doubt whatever that the disease was enteric fever, for he saw characteristic ulcerations in some necropsies. Most of the cases on board were convalescent; some had been sent with the diagnosis of "remittent fever," "heat apoplexy," and the like, but he believed they were really enteric also. Suakim was not, in his opinion, a malarial locality; northerly winds tend to empty the harbour and southerly winds to fill it, but there was no actual tide; stenches arose during the prevalence of northerly winds. The first case on the *Ganges* occurred in one of the orderlies, curiously enough, and only convalescent patients were then abroad; the orderly had been ashore a few times, but his dietetic and hygienic arrangements aboard were sound.—Dr. BROADBENT said the paper was valuable for the discussion that it had raised, and when coördinated with the larger set of observations of Dr. Marston was still more valuable. The fact of the occurrence of enteric fever at certain ages and on recent arrival in a country teaches nothing as to the specific or non-specific nature of the disease. He felt convinced that there was some other fever met with in tropical and sub-tropical climates, and distinct from, though simulating to a certain extent, the course of typhoid fever. The second tropical fever could hardly be enteric fever modified by climatic and other conditions. Experience has shown that we require some distinct name to express this second affection, and "typho-malarial" was perhaps the best one that could be discovered for a fever which was even more protean than enteric fever in its clinical course. Reference was made to a history in which five officers figured, and had been under the same conditions in Malta; of these, three developed an illness soon after—one was said to have subacute rheumatism, another enteric fever, which lasted three months and ran an irregular course; the third case came under Dr. Broadbent's own care, and it had nothing in common with enteric fever, if we except the fact of protracted high fever with some intermissions. He said that Murchison in his Indian experience had remarked on the protracted duration of the high temperatures of these cases, which resembled in nothing the pyrexia of enteric fever. He considered that it was very necessary to differentiate these fevers, which are still confused, for the typho-malarial form departs in the most complete way from enteric fever, being really a distinct fever that simulates typhoid fever only to a very limited extent.—Dr. HARDIE considered that an epidemic limited to a few individuals in the community attacked was evidence of the typhoid nature of the illness; the appearance of the "typhoid tongue" on the third or fourth day he regarded as of considerable diagnostic significance.—Dr. SQUIRE, in reply said he was glad to hear Dr. Broadbent express the opinion that there were two distinct diseases to deal with, for it concurred with his view stated in the paper.

MEDICAL SOCIETY OF LONDON.

Subperiosteal Resection for Acute Necrosis.—Cerebral Abscess and Empyema.

AN ordinary meeting of this Society was held on Monday last, Dr. W. M. Ord, President, in the chair.

Mr. BERNARD PITTS read a paper on Subperiosteal Resection for Acute Necrosis, and exhibited a living specimen of the first case, which was that of a girl aged fifteen, who was admitted to St. Thomas's Hospital on Nov. 25th, 1882, with swelling of the lower end of right tibia. For one week the swelling and pain had been present, and an incision was made above the ankle, a quantity of matter escaping. At the time of admission the girl was in a prostrate condition, with a temperature of 102°. The incision was freely enlarged and the limb placed on a Neville's splint. The patient steadily lost ground, and on Dec. 16th, or thirty-five days from the beginning of the disease, an operation was performed, in which the lower two-thirds of the tibia and ankle-joint were exposed. The lower half of the tibia was found to be necrosed, with separation at the lower epiphysial line; the epiphysis was almost entirely destroyed, a mere shell of bone representing the external malleolus remaining; the upper surface of the astragalus had lost its cartilage, and was granulating. There was a line of separation at the upper end of the necrosis; this fact decided Mr. Pitts to try to save the limb, which it was till then thought required amputation to save life. The tibia was sawn through a little above the line of demarcation, so that three-fifths of

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the tibia (measuring five inches and a half) were removed, the periosteum at the back of the bone being carefully preserved; it was felt to be roughened by the presence of a fine layer of osseous granules; the surface of the astragalus was thoroughly scraped, and the epiphysial remains removed. Recovery proceeded rapidly, and on April 28th the patient left the hospital, the wound being healed, with the exception of two sinuses at the upper part. On June 23rd a small residual sequestrum was removed, and on August 21st a sinus of the foot was scraped. Since then the leg had remained perfectly sound. It is now in a very useful condition, with but slight deformity—shortening of three-quarters of an inch, and a tendency to varus, with increased mobility at the tarsal joint. Four years have elapsed since this case came under Mr. Pitts' care, so that he has had time to observe the ultimate result. The second case, a boy aged seven, had been under Sir William Mac Cormac's care from October 11th, 1881. The disease was situate at the same site as in the previous case. An incision was made over the internal malleolus, which allowed the escape of some exudation. Twenty days after the first onset of symptoms Sir William detected separation at the epiphysis, and two inches and a half of the tibia were excised. Regeneration of the bone rapidly took place, and the patient was up on Dec. 23rd. Some months later Mr. Pitts saw the case, and there was but little shortening or deformity. Mr. Pitts said he divided cases of acute necrosis into five classes and indicated the treatment:—1. Acute necrosis of the entire shaft, with separation at the epiphyses, ought to be treated by removal of the dead shaft. 2. Where one or both joints were implicated also, early interference was more imperatively demanded, but in some cases amputation would be required. 3. For limited necrosis, time for complete separation of sequestrum might usually be given. 4. Acute necrosis of either end of a long bone was illustrated by the second of the cases related. 5. Of acute necrosis with total destruction of the epiphysis and involvement of the joint, the first case was an example, showing that the limb may sometimes be preserved.—Mr. H. H. CLUTTON said Mr. Pitts' case proved that the surgeon need not hesitate to remove living bone with the dead, for a good result could still be obtained.—Mr. J. H. MORGAN mentioned similar cases, and some that came under his own treatment.—Mr. WALTER PYE said the case was precisely like one that he had shown at the Royal Medical and Chirurgical Society. The fibula may act as a direct splint in maintaining the shape of the limb, and in cases of entire necrosis of the diaphysis of the tibia he thought that the fibula was most useful in the further course of a successful case; indeed, he doubted whether a good result could be obtained without it.—Mr. PEARCE GOULD remarked on the adhesion of the new bone to the dead, and questioned how far this might be taken as evidence of the life of the original bone, whether, indeed, the whole of the shaft of the tibia was dead. The difficulty of knowing how deep the necrosis extended was rather against the early removal of sequestra, for much new bone might be removed, and the ultimate issue of some cases showed that the sequestrum was very small compared with what was expected. Cases illustrating these points were narrated. The general condition rather than the state of the local lesion should probably guide the surgical treatment.—Mr. BERNARD PITTS, in reply, said that he ought to have added a further division in his classification—viz., to include entire necrosis with complete destruction of the epiphysis. He did not quite know how to determine the depth of necrosis unless the surgeon adopted the plan of M. Ollier of Lyons; but such an operation was of doubtful value, and a bloodless exploration hardly possible.

Dr. D. W. FINLAY read a paper on Empyema with Cerebral Abscess which appears in full in another column.—Dr. HADDEN narrated a similar case in a man aged twenty-eight, in whom the pyo-pneumothorax was due to a phthisical cavity; abscesses were found in the frontal and occipital region of the brain.—Dr. DE HAVILLAND HALL also related a similar case in a young woman, in whom the cerebral abscess appeared to have existed for some time.—Mr. BERNARD PITTS said that in the case Dr. Hadden referred to he found that the drainage-tube was kinked by new bone, necessitating extensive resection of the ribs.—Dr. J. J. PRINGLE read the notes of a somewhat similar case, which differed, however, in the important particular that it recovered. It is published in the Middlesex Hospital Reports for 1883.—Dr. BROADBENT remarked that the embolism started from the pulmonary circulation: a portion of a thrombus became detached from a thrombosed pulmonary venule, and so rapidly reached the left ventricle. He agreed that frequent washing out of empyemic cavities was to be deprecated.

ACADEMY OF MEDICINE IN IRELAND.

Albuminometry and Esbach's Tubes.—Embolism of the Central Artery of the Retina.

AT the meeting of the Medical Section on Dec. 18th, 1885, Dr. CRUISE read a communication on the Quantitative Determination of Albumen and Urea in Urine. The simple clinical methods which he demonstrated were those of Dr. G. Esbach, and which have recently been described in our columns (THE LANCET, Jan. 23rd, p. 153).—Dr. A. W. FOOT, having used Esbach's test for two or three years, found one source of dissatisfaction with it. Esbach's direction was to read the number of grammes per litre on a graduated scale after allowing the urine and reagent to stand for twenty-four hours; but in twenty-four hours more a very much less degree would be registered. So far as he had read, Esbach had not noticed the fact that the precipitate condensed day after day into smaller bulk.—Dr. TICHBORNE did not think this objection had been proved. The test was an approximation for practical purposes, and Dr. Esbach had graduated his tubes to be read after standing a given time. Of course, precipitates standing would gradually get more dense; but the tubes were graduated on the understanding that they would be read after standing twenty-four hours. When picric acid came out, he tried some experiments as a qualitative test against the old nitric acid test, which, when properly applied, was one of the best. When poured down the side of the test-tube, he found the nitric acid test was slightly more sensitive than picric acid. At the same time, picric acid had the great advantage that, when visiting, it was easily carried in one's pocket. In urine there were occasionally albuminoid bodies that could not be got at by the ordinary methods of coagulation or boiling.—Dr. J. A. SCOTT pointed out, as an objection in connexion with picric acid, that other things besides albumen came down in the cold solution if added to it—for instance, where the patient was taking quinine. In estimating the quantity of urea there was some trouble in calculating according to the tables supplied. Other methods enabled an estimate to be made by percentages, thus dispensing with book-work.—Dr. WALTER G. SMITH had himself twelve years ago, in the Adelaide Hospital, tried picric acid as a qualitative test, and he saw no reason for preferring it to the better-known and more old-fashioned test which had not yet been dispossessed from practice. Experiments made in Christiania showed that the most delicate qualitative test was the old nitric acid test, and accordingly Heller's method of using nitric acid as a test had maintained its pre-eminence for the recognition of small amounts of albumen.—Dr. FALKINER said the test might be clinically correct as regards the state of albumen in the urine, but it was not absolutely correct. The nearest approach to a correct quantitative clinical test was Oliver's method, whose basis was also citric and picric acid, the quantity of albumen being estimated by the disappearing point of a dark line which was placed behind a test-tube of known dimensions. With regard to urea, Professor Emerson Reynolds had some years ago made a complete apparatus for estimating the amount of urea, not by measuring the gas but the quantity of water displaced by the gas evolved, and he gave a table of calculations.—Dr. FINNY said he had tried Esbach's method, and, not considering it useful even in the way of saving time, he had discontinued it. Indeed, it was no safer than the old method of boiling the urine and allowing it to stand. There was one great objection to its use which he had found in testing urines—namely, that where there was a large amount of albumen the test lost much of its readiness as a clinical method, as it had to be so frequently repeated before the urine could be sufficiently diluted to render it an accurate test for albumen. Having tried both picric and nitric acid, he found that in the majority of cases the nitric acid test was the most accurate and trustworthy.—The PRESIDENT, like Dr. Foot, had observed the progressive condensation of the coagulum. According to Esbach's notion, the reading should be made after twenty-four hours. As to the albuminoids, it was true that a certain amount of confusion and difficulty would arise, but the method sufficed for general

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clinical purposes without seeking scientific accuracy. The same difficulty had been raised by Dr. Scott with regard to quinine and peptones, but when it was known the patient had taken quinine allowance could be made. There was no difficulty in reading from the tables the results in the urea test, as where the two numbers crossed it could be seen at a glance. He had been using the hypobromine solution for some months, and it had kept. Whenever he had a doubt as to the efficacy of the solution, he added a little more; thereupon, if it effervesced or fresh decomposition set in, it was clear there had not been sufficient; or if the solution lost any of its olive-oil colour, he added a little bromide. The absolute quantity of the hypobromine solution was unimportant, provided it was rather in excess. He had tried Oliver's test for the quantitative analysis of urine and of sugar, and he found it difficult to determine from the obscurity of the light the exact point. Besides, Oliver gave only a percentage, from which it was necessary to calculate back, and his test of sugar was still more difficult. The great advantage Esbach's instrument possessed was that the analysis could be made in about five minutes, and probably with as much accuracy as any other.

Mr. ARTHUR BENSON read a paper on a case of Partial Embolism of the Inferior Division of the Central Artery of the Retina associated with repeated attacks of Chorea. The patient, a house painter, aged twenty-one, had had rheumatic fever seven years ago Three years ago he had an attack of left hemichorea. Two years ago another attack of more general chorea, and last year a third attack of chorea. On the 14th of last October he suddenly became blind of the right eye; in a few minutes vision began to clear from below upwards, and in fifteen minutes the lower half had quite cleared to the horizontal line, passing through the fixation point. There the improvement abruptly ceased, and has not since proceeded. The ophthalmoscope showed œdema of the lower half of the retina and "a cherry-red spot" at the macula. The vessels (veins and arteries) were all filled with blood, and pulsation could be produced with pressure, showing circulation had been re-established at that time—i.e., fifteen hours after the eye became blind. The vessels of the lower half of the fundus were not quite so plumply filled as those of the upper half. In a few days there were evidences of atrophy of the disc and shrinking of the retinal vessels in its lower half; and as the œdema of the retina diminished, the atrophic changes increased and the vessels shrank markedly. The diagnosis was that an embolus for a time partially blocked the central artery before its bifurcation, and subsequently got shifted into the inferior division and partially blocked it, for the vessels were all carrying blood in the right direction, showing that the obstruction was not complete. The patient had never had any similar attacks. His heart and kidneys were carefully examined, and nothing abnormal discovered. He was in other respects healthy, and there was no evidence to show where the embolus came from. The case was of interest as bearing upon the embolic theory of the pathology of chorea.—Dr. NIXON said there had been no suggestion where the embolism came from. The patient was stated to have had a history of an attack of rheumatic fever, yet the heart was perfectly sound. However, the fact that the patient had had an attack of hemichorea in the left side, and that he had an affection of the right retina, clearly showed that the disease was embolic, and it was difficult to say where it came from, except from the heart. Where there was no peripheral disease with which to connect the embolism, it must be assumed that it came from the heart.—Dr. PURSER observed, as regards Dr. Nixon's assumption that the existence of embolism necessarily proved disease of the heart, that not one out of fifty cases came from the valves of the heart. In a great many cases the deposits on the valves of the heart were too firm to be washed off. It was much more likely to have resulted from thrombi which became broken up and were carried away in the current of the circulation. The examination of the emboli showed that they do not come from the valves of the heart, but from coagula in the bloodvessels.—Dr. POOR said the patient had been under his care, affected with hemichorea on the left side, in his arm, then the leg, and lastly the face. At that time he had no cardiac murmur, but he gave a history of rheumatism, and that he had had a rheumatic ailment about nine months before the attack of hemichorea. It was then the "fad" to treat chorea hypodermically with arsenic, and the patient was injected with it twenty-six times, beginning with five and going up to thirty minims. At fifteen the strength was doubled to minimise the bulk, nor was it stopped until a quarter of a grain of arsenic had been injected under the skin. He believed that camphorated water would have done as well.—Dr. BENSON, in reply, said he had seen but a very small percentage where a distinct heart lesion was discoverable.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

A MEETING of this Society was held on Jan. 15th, Professor Jessop, President, in the chair.

Thrombus.—Dr. CHURTON showed a heart containing a softening thrombus the size of a large walnut in the apex of the left ventricle, and two smaller masses as large as beans. The bases of the latter were not entangled in trabeculæ, but lay upon perfectly even surfaces on the septum and posterior wall. Another heart was shown in which there was a broad patch of endocarditis covered with vegetations, extending from the anterior flap of the mitral valve to the upper limit of the auricle, the rest of the auricular endocardium being quite smooth.

Antiseptics in Operations on the Eye.—Mr. BENDELACK HEWETSON read a paper on this subject, in the course of which he dwelt on the value of the eucalyptus spray, which he suggested some time since as an additional aid towards making cataract and other major operations on the eye completely antiseptic. He has observed in a large series of cataract operations that there has been less irritation and pain following the operations, the wounds have healed more quickly, and mishaps, such as eyes suppurating after the performance of such operations in hospital as well as private cases, have largely decreased. In the case of cataract operations the following precautions were taken:—1. Immediately before operation the eye was washed with carbolic lotion, 1 in 80. 2. Cocaine, if used, was applied in an aseptic solution. 3. All instruments were washed in carbolic lotion, 1 in 60. 4. The operations were performed under the eucalyptus air spray. 5. The eye was subsequently covered by a layer of salicylic silk enclosed in two layers of absorbent wool, and freely exposed to the eucalyptus spray.

Removal of Os Calcis &c. for Strumous Disease.—Dr. ALFRED SWANN, showed a patient aged eight from whom he had three years previously removed the os calcis, astragalus, and the malleoli, on account of strumous disease of eighteen weeks' duration, which had originated without any apparent cause. The child was able to run and walk perfectly, the movements of the ankle-joint appearing normal. Dr. Swann also showed the bones removed, which presented the appearance of strumous ostitis.

Labio-glosso-laryngeal Paralysis, with Atrophic Paralysis of the Hands.—Dr. BARRS read the report of this case. The patient, a man aged twenty-nine, had been continuously under Dr. Barrs' observation since Aug. 25th, 1885, when he presented himself in the out-patient room complaining of nasal voice and some slight difficulty in swallowing. In addition to the marked alteration in the voice, there were noticed a want of movement of the palate when touched and impaired lip movements for all purposes of articulation and other functions. At this time no appreciable impairment of the tongue movements was noted, and beyond passage of food into the nose there was no affection of deglutition. There was no history of syphilis, diphtheria, or lead poisoning. In September the tongue was first noticed to be tremulous and unsteady, but it could be protruded to normal point, and there was marked increase in all other symptoms. In October some loss of power in the left thumb was reported, and in November there was marked wasting of the muscles of both hands, but much more pronounced on the left side. The electrical reactions of both hand and face muscles were normal, and had continued so up to dates though all manifestations had rapidly increased in intensity. At present there is entire loss of all articulation, his attempts at speech being quite unintelligible; phonation is unaltered, and the laryngoscope shows no change in cord movements. The "visage pleurard" is well marked, and the mouth is large from falling of the lips. The tip of the tongue can just be made to advance beyond the line of the teeth; the organ is the seat of marked fibrillous contractions, and is, perhaps, smaller than natural. The atrophic palsy of the hands is well marked, and the left is assuming a slightly clawed attitude. There is well-marked increase of the

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wrist and elbow tendon reflexes. The knee-jerks are also increased, and the patient states that now and again the legs become stiff, but no suggestion of any spastic condition is at present to be noticed. The case is now clearly progressing very rapidly towards its complete development, though of only eight months' duration. Dr. Barrs suggested that the case might ultimately develop into one of amyotrophic lateral sclerosis as described by Charcot.

Dr. JACOB showed by the lime-light some lantern views of patients suffering from Bulbar Palsy, and the histological lesions found in such cases. He also related a case at the time under his care, in which there were symptoms of bulbar paralysis combined with wasting of the arms and greatly increased reflex movements of the legs, with a staggering gait.—Dr. CLIFFORD ALLBUTT referred to the views of Duchenne, the first describer of the disease, and remarked on its identity with progressive muscular atrophy being now established, although this was strenuously denied by its original discoverer.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

A MEETING of this Society was held on December 17th, 1885, Mr. R. J. Pye-Smith, President, in the chair.

Extra-uterine Fœtation.—Mr. EDWARD SKINNER related this case, occurring in a woman aged thirty-four. She had good health previously to marriage. She recovered well after a severe labour in October, 1883; menstruated eight weeks afterwards, and then not again for nine months. At the end of February, 1885, the first bone was passed per rectum; several have been passed since. She suffers little or no pain, except after a hard day's work, and just before passing a bone. In August last one of the bones of the head was removed from the rectum. The vagina and rectum were examined, but no opening could be detected. She menstruates regularly, and is still well and going about her duties. Mr. Skinner exhibited the fœtal bones.

Calculi in Kidney.—Dr. LAW related this case and showed the specimens. The patient, a woman aged thirty-seven, had a good family history. She caught cold in August, which was followed by pains in the legs, cold sweats, and great prostration. Pain suddenly commenced on Aug. 28th, whilst lying down, in the hypochondriac region, and was followed very shortly by jaundice. The post-mortem revealed a large abscess in the under-surface of the right lobe of the liver connected with another in the upper part of the right kidney, which latter was filled with irregularly shaped dark-coloured calculi; one of these also lay loose in the lower abscess. The right pleura contained fetid pus, which had made its way through a perforation in the diaphragm. The kidney was opened, and calculi were found *in situ*. The kidney was enlarged and thickened.

Cases of Lead-poisoning from Drinking-water. — Mr. THOMAS related a few cases, out of a number which had come under his observation during the last three years, of decided lead-poisoning from drinking-water. He had in three instances carefully ascertained that no other cause was present. The water usually drunk had been from a pipe coming direct from the main, and having been allowed to run for five minutes a specimen was taken and analysed, when lead, ·21 gr. per imperial gallon or more, was found by Mr. Allen, the analytical chemist, who took great interest in the subject. An average specimen of urine passed during twenty-four hours contained from ·19 gr. to, in one case, ·28 gr. of lead per imperial gallon. In many of these cases the blue line on the gums was not present, but was substituted by a red line. Dr. Thomas had found this not at all uncommon. The indications of the presence of lead had been griping and colicky pains, with constipation, aches in back and limbs, the blue or red line along the gums, disinclination for mental or bodily exertion, dropped wrist, &c. He considered that the condition of water was owing to the acid which the water from one source contained acting on and making soluble the lead of the pipe reaching from the main to the house, and proposed as a remedy in houses the use of a certain filter which deprived the water of its lead and of its acidity. To the water might with advantage be added some carbonate of lime. As a general remedy for the town he suggested for consideration the advisability of utilising charcoal as a filtering agent, carbonate of lime as an antacid, or of both. The question of having the interior of leaden pipes lined with some material not easily acted upon by acids might be considered, but if the former plan were adopted, the latter would not very likely be required.

Dr. PORTER read notes of six cases of Lead-poisoning due to Contaminated Drinking-water, five of which had occurred within the last six months. Three of his patients were employed in the same workshop, where the water had to pass through 300 yards of leaden service-pipe. In every case the symptoms were characteristic, and the water was found to contain more than one-twentieth of a grain of lead per gallon. Dr. Porter alluded to the so-called protective coating produced by hard waters, which was itself a source of danger, a hot dry summer favouring its decomposition. Sulphate of lead was soluble to the dangerous extent of three grains per gallon, and though the carbonate was less so, it might be influenced by water containing an excess of CO_2. Referring to Dr. Thomas's paper, Dr. Porter said he believed a red line on the gums had no connexion with lead, but was often a symptom of dyspepsia. As to the effects of the use of a tooth-brush on the blue line, he had often remarked it was only partial, due to the removal of the tartar, which facilitated its formation, this tending to prove that the deposit of sulphide of lead was interstitial. He had often seen the blue line around molar teeth, disproving the assertion that light was essential to its formation.

The discussion of this subject was adjourned to the next meeting.

CHESTER MEDICAL SOCIETY.

A MEETING of this Society was held on January 8th.

Mr. JAMES TAYLOR, the President, delivered an address, in which, after reviewing the work of the Society during the past year, and alluding to the first death amongst its members, that of Mr. Allan C. McEwen, he passed on to examine the condition, successes and deficiencies of the medical profession, as painted by Bacon at the beginning of the seventeenth century, and to consider how a study of these might still guide us in our means of learning and applying our knowledge.

Aborted Ovum.—Dr. DOBIE exhibited an ovum aborted about the eighth week. The amniotic sac was filled with coagulated blood by which the embryo was surrounded, and which presumably was the cause of the abortion.

Glioma of Brain.—The SECRETARY read notes of a case of Mr. Taylor's and the report of the Pathological Committee upon the brain of a patient, aged forty-two, who was admitted into the Chester Infirmary on Nov. 10th, 1885. He complained of pain on the crown of his head. He walked in an uncertain manner, spoke in an hesitating way, and could not without help raise himself to a sitting posture in bed. He had often fallen down, and on Nov. 16th he walked across the ward and fell suddenly. After that he could not stand without help. After the 20th he had incontinence of fæces, and spoke little. From the 24th he had attacks of violent spasmodic twitching, which were set up by any stimulus such as changing the bedclothes or the cry of a patient in the ward. He died on Nov. 27th. On examination of the brain, a glioma was found in the right frontal lobe, an inch and a half in diameter, and extending about an inch inwards from the surface. The brain-tissue surrounding it was firm and dense, and at its posterior extremity was a cyst containing two or three drachms of clear fluid. Microscopic sections of the tumour made by Mr. Henry Dobie were shown.—Mr. R. S. ARCHER related a case somewhat similar.

Estimation of Urea in Urine.—Dr. KING gave a demonstration of Dr. Squibb's process for the approximate estimation of the quantity of urea in urine. A solution of hypochlorite is made to decompose the urea and liberate its nitrogen, from the measurement of which the amount of urea is calculated.

PRESENTATIONS.—The Committee of the British Hospital at Buenos Ayres have presented Dr. Hanly with a jewel case and an illuminated address as a mark of their appreciation of his important and zealous services to the institution.—The ladies who have attended the recent ambulance lectures at Greenock have presented Dr. W. A. Wilson with a carriage clock, and Dr. J. R. Black with a pocket aneroid, in token of their appreciation of the valuable services rendered in connexion with the classes by those gentlemen.

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Reviews and Notices of Books.

Nouveau Dictionnaire de Médecine et de Chirurgie Pratiques. Tome 38: Vac-Vei. Par le Dr. JACCOUD. Pp. 886. Paris and London: Baillière et Fils. 1885.

THE more important articles in this volume of the Nouveau Dictionnaire, which is now rapidly approaching completion, are:—1. Vaccine, by D'Espine. 2. Vagina and Vulva, by Levrat. 3. Varicocele, by Paul Second. 4. Variola, by Balzer and Dubreuilh. 5. Vaso-motor Nerves, by Duval. 6. Vegetations, by Mauriac. 7. Veins; by Beurnier, for their Anatomy, Physiology, and Development; and by Schwartz, for their Surgery and Pathology.

It is pleasant to find that the researches and observations of M. D'Espine have not created in his mind the slightest doubt in regard to the utility of vaccination as a safeguard against small-pox. He gives a rapid sketch of its introduction by Jenner, and discusses, first, the animal origin of vaccine lymph, its evolution in man, and the nature of the virus; and, secondly, the process of vaccination. Vaccine is found in the natural state in the cow, constituting cow-pox, and in the horse, forming horse-pox. It is uniform in its characters, and produces an inoculable but not contagious disease, always benign and creating an immunity for either vaccinal or variolous inoculation. M. D'Espine gives a good and very full description of the two forms above mentioned, and shows how two affections have been confounded under the common name of the grease or horse-pox. The laws in regard to vaccination are more stringent in Germany than in any other country, the act being rendered obligatory before the end of the first year, and revaccination in the course of the twelfth year being also compulsory. The most important recent fact in the history of vaccination is undoubtedly the frequency with which, in view of the danger of propagating syphilis, resort is now had to vaccination direct from the animal. This proceeding, practised in Naples from the very commencement of the century, has only been generally adopted in the principal cities of Europe since the year 1866. No success has attended the experiments of Chauveau to induce vaccine from inoculation of either the horse or cow with variolous lymph. Variola continues to produce variola, and vaccinia vaccinia. M. d'Espine adduces many statistics of interest. Thus, in the State of Würtemberg, the experience of thirteen years and of nearly half a million of vaccinations, shows that the failures occur once in 129 vaccinations, or 0·7 per cent. Again, in relation to the duration of immunity from variola after vaccination, the revaccinations in Germany show that at the age of twelve to fourteen the influence of the first vaccination is singularly enfeebled. One patient is known who has been vaccinated five times at intervals of several years with success. It appears that vanity is so strong in some of the gentler sex that they prefer to be vaccinated on the thigh to the arm, on account of the disfigurement occasioned by the scar. M. D'Espine, we know not with what amount of truth, accuses the Americans of this peculiarity. He recommends the vaccinal powder of Reissner of Darmstadt as very serviceable. It is obtained by desiccating the lymph obtained from several pustules, and when employed is mixed with a little glycerine and water. A fragment the size of a pea is sufficient to inoculate fifty persons. The bibliography is classified and complete. The articles on the Vagina and Vulva and on Varicocele seem to be very fully and carefully written, the most recent researches, even those published during the last year, being incorporated in the text. No less praise can be assigned to the article on Variola by MM. F. Balzer and W. Dubreuilh.

The most interesting article in the present volume is, however, the very long one devoted to the Vaso-motor Nerves, by M. Duval, which extends over 160 pages. In this the learned author deals successively with the anatomy and development of the sympathetic nerve, with its general functions and those of the vaso-motor nerves, with the vaso-constrictors and the vaso-dilators, the existence of which he fully admits, giving the demonstration of their existence, the theory of their mode of action, their course, their centres, and their distribution in the bucco-labial region, the liver, the ear, and the limbs. He discusses also vaso-motor reflex actions and the general part played by the vaso-motor acts in local circulation, vascular tonus, and animal heat, as well as in some special functions, such as erection, absorption, exudation, and secretion. He then considers the action of the vaso-motor nerves in pathology. Lastly, he institutes a comparison between the innervation of the vessels and that of the heart. The evidence demonstrating the existence of vaso-dilators is, on the whole, satisfactory. It may be reduced to the following points: First, the experiments of Claude Bernard on the effects of stimulation of the chorda tympani on the secretion of saliva; secondly, the experiments of Cyon on the depressor nerve, showing dilatation of the abdominal vessels; thirdly, those of Vulpian on the glosso-pharyngeal nerve, showing dilatation of the vessels of the posterior part of the tongue; fourthly, those of Eckhard, showing the effects of division and stimulation of the distal extremity of the erector nerves; and, finally, those of Bernard on the auriculo-temporal of the fifth, and of Schiff on the nervus petrosus superficialis minor. The first interpretation given was that of Duchenne, that there were longitudinal and circular fibres in the vessels, the former being under the influence of the vaso-dilator, the latter under that of the vaso-motor nerves. This view was, however, promptly overthrown by the histologists, who showed that there were no longitudinal fibres. The next suggestion was that of Grünhagen, that the dilator fibres caused an active elongation of the muscular fibre cells, but no satisfactory evidence on this point is forthcoming. A third hypothesis has been advanced, to the effect that vaso-dilatation is due to contraction of the venules, but there is strong opposing evidence to this view. Several other explanations have been given, but M. Duval adduces recent evidence to show that the action of the vaso-dilators is not on the muscles of the vessels directly, but on the vaso-constrictors, on which they exert a restraining or inhibitory influence like that of the vagus on the heart.

The last article on the Veins, occupying 270 pages, is quite a treatise in itself, and may be read with advantage by the most experienced surgeon. The pathology of Varices is particularly well given.

A Manual of Animal Vaccination, preceded by Considerations on Vaccination in General. By Dr. E. WARLOMONT. Translated and Edited by ARTHUR J. HARRIES, M.D. London: J. and A. Churchill.

ALL who are desirous of reading Dr. Warlomont's work in the English language will welcome Dr. Harries' translation of the new Manual of Animal Vaccination which Dr. Warlomont states in the preface was written for the English medical world, and from which he has excluded everything that has not directly to do with this special subject. There is little that is new in this edition, and the manual, although interesting, can scarcely lay claim to rank as a scientific work. It is disappointing not to find more exact evidence of the value of different methods of preserving calf lymph. The statement that 500 cases of vaccination with lymph preserved on ivory points met with 499 successes loses much of its value on account of the omission of any reference to the success in each 100 of insertions. But the author credits vaccine emulsion and pomade with possessing an activity nearly approaching that of living vaccine, and maintaining this activity during a mont

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Later he quotes Dr. Allard, of the African Association, who obtained sixteen vesicles for every 100 insertions of stored calf lymph, a result which is far below the success attained with calf lymph produced in this country. A perusal of the work leads to the conclusion we have before expressed, that the use of stored calf lymph does not produce greater success than the use of stored humanised lymph, and that both should give place where possible to direct arm-to-arm or calf-to-arm vaccination. The translator in an appendix has described his own method. We fully endorse his objection to the vaccination lancet being used for other purposes; but we do not agree with the opinion he apparently holds, that the lancet cannot be thoroughly cleansed with the exercise of reasonable care, nor do we think that its unnecessary sharpness is incapable of remedy.

OUR LIBRARY TABLE.

The Asclepiad. No. 9, Vol. 2.—Chilblain circulation is mostly of congenital origin; in many examples it is traceable to premature birth, and in some instances it occurs in those who are of twin birth, but in others the cause of chilblains "runs in families" as if some specific and original taint were at the root of it, like specific disease or struma. This is Dr. Richardson's summary of the pathology of what he aptly calls chilblain circulation. It will be seen that nothing positive is asserted as to the etiology of the affection, which is both difficult to treat and hardly possible of scientific explanation. Many authorities look on the affection as a weakness of the vaso-motor nervous system; others, again, consider that there is an inherent want of vitality in the actual working tissues of the body, and the malady is only met with at those parts farthest from the centre of the circulation because their blood-supply is precarious; but a precarious circulation in distant parts may assuredly be regarded as a predisposing cause of the poor vitality of the tissues. "Temperance and Young Physic" was the address delivered by Dr. Richardson on the occasion of presenting the prize of 100 guineas from the British Medical Temperance Association to Mr. Coryn, student of Charing-cross Hospital; it is an urgent appeal to medical men to prosecute vigorously the war against intemperance. The next chapter is an important physiological one on Pulse-tracings and Cardiac Sounds with the Body Inverted. "As regards the pulse-tracings, the fact that the pulse with the body inverted gives a third or additional wave indicates that the aortic valves, opening back after the arterial recoil has ceased, may allow a column of blood to pass their orifice, under the auricular systole and before the next ventricular systole, with sufficient pressure to cause a second back stroke from arterial tension." There was marked reduplication and accentuation of the second cardiac sound when the body was inverted, and the tracings would seem to show that accentuation and reduplication may be produced by increased vibration of the aortic valves under the influence of augmented pressure. William Cheselden is the subject of the biographical notice, introducing the new era of British surgery, and illustrated by a portrait and an illustration of the house in which his birth took place. Experiments towards the Animal Battery by Compound Synthesis and Micro-electroscopy is a sequel to an essay on an analysis of animal structures by electrical conduction and resistance, in which some particulars were given by Dr. Richardson of an attempt to determine what parts of the animal body are best and worst conductors of electricity. Every organ surrounded by membranes appears to possess condensing powers proportionate to the amount of blood going to the organ; the membranes seem to oppose the dissipation of electrical energy.

The Year-book of Treatment for 1885. A Critical Review for Practitioners of Medicine and Surgery. Cassell and Co. (Limited), London, Paris, New York, and Melbourne.—The second volume of Cassell and Co.'s Year-book of Treatment fully maintains the reputation gained by the first. The list of contributors is almost the same. We miss Dr. Mahomed, Mr. Knowsley Thornton, and Mr. Warrington Haward; but we welcome as new writers for this publication Dr. Sidney P. Phillips and Mr. Walsham. The articles vary in value. Where the writer has freely exercised his own critical faculty the result is more valuable; but the mere reference to a paper or an abstract of it is of little use. As a whole, the book is sure to be popular; it presents a large amount of information in a very compendious form, and as the title of every paper quoted is given in full it forms a very useful book of reference. We have found one or two errors that have escaped the editorial eye. Thus, on p. 127, we read of an incision to be made "in *right median line*, commencing four centimètres below xiphoid cartilage, extending downwards and outwards to three centimètres from cartilage of ninth rib." On p. 138 Mr. Treves is made to state that, in his opinion, "a tight ligature around a damaged nerve would increase rather than diminish its prospects of restoration," when of course the reverse is what he meant. On p. 149 we read of "perpeating" for "perforating." These, however, are errors which appear the more conspicuous from the general excellence of the work. No doubt they will be corrected in later additions.

The Student's Guide to Clinical Medicine and Case-taking. By FRANCIS WARNER, M.D., F.R.C.P. London: J. and A. Churchill. 1885.—We are pleased to see that a second edition of this work has been called for, since its object is the very meritorious one of assisting the clinical clerk to be accurate and ample in his note-taking, and also to arouse his mental faculties and powers of observation. Certain additions have been made in the section upon the nervous system, and a scheme is added for taking notes of children's disease.

Sunshine and Sea. By a COUNTRY DOCTOR. Illustrations by F. T. London: Kegan Paul, Trench, and Co. 1885.—This is an account of a yachting visit to the Channel Islands and the Coast of Brittany, and the Country Doctor, who made up one of the party, brings charm to his story by a style of writing which can only result from a cultured education. He has succeeded in showing that a yachting tour in pleasant company constitutes the best, most healthful, and most enjoyable form of holiday, and we should advise those who have the opportunity to follow the Country Doctor's example and get as much good out of their holiday as he did during his brief one around the neighbouring coast. Before starting, they should read his book, which teems with the bright surroundings of sea, air, and sun, and is attractive by reason of the excellent descriptions of special scenes, and the habits and costumes of the people he met with, and also of the amusing daily incidents attaching to life amongst a merry party on board a yacht. The book itself affords recreation, the more so as it avoids everything that would give it the stamp and monotony of a guide-book.

Whitaker's Almanack. 1886.—We have received the current issue of this really excellent work. It contains an amount of varied information which is not, to our knowledge, to be found in any similar publication, and the editing has this year been, so far as we can judge, done most thoroughly; indeed, we have not been able to detect any inaccuracy in the numerous facts which are briefly summarised in its pages. The most important alteration in the issue for 1886 is the list of members of the new House of Commons. Being the first election under the new Reform Bill it may be regarded as historical, and accordingly the names of all the candidates have been given, with the numbers polled. Under the name of each county is the number of members returned to the unreformed House, and the numbers under

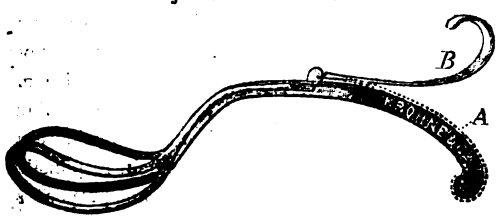
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each of the three Reform Bills. It is stated that the next issue, that for 1887, is to be entirely remodelled. Whitaker's is the best of our almanacks, and the great success which it has achieved is well deserved.

New Inventions.

NEW AXIS-TRACTION FORCEPS FOR HIGH DELIVERY.

THE forceps, of which I enclose electro, have for their object the simplification of the high delivery and a greater control over axial direction. They have the double curve, after the manner of Dr. Aveling's instruments, and their chief peculiarity attaches itself to the small metallic handle which ships over the wooden handle of the upper blade, and is capable of easy circular rotation to the left or right. When in operation this supplementary handle (B), having its fixed ball-and-socket joint half an inch below the lock on

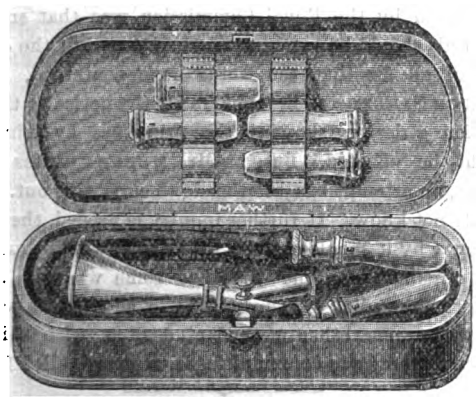


the anterior surface of the handles, acts as a lever of the first kind as well as a tractor, and by its means a greater axial control of the instrument is effected than by any other mechanism with which I am acquainted, whilst the whole additional contrivance is out of the patient's body and in sight, and all increase of bulk or complicity of the internal portions is avoided. Moreover, the perineal pressure of such instruments as Tarnier's is advantageously relieved. The clever details of the mechanism were worked out by Messrs. Krohne and Sesemann, of Duke-street, whose instruments are ready for inspection.

EDMUND HOLLAND,
Physician to the Hospital for Women.

AN IMPROVED FORM OF STETHOSCOPE.

A VERY pretty stethoscope has been produced by Messrs. Maw, Son, and Thompson, on the principle of the one I described in a contemporary of May 10th, 1884, but differing from it in not being intended to answer a number of different purposes. It is simply a binaural stethoscope with two ear-pieces and two tubes similar to



Steam's, and a metal chest-piece with a Y-shaped junction, so that the whole of the sound is directed into the tubes without having to pass through any cavity in the instrument. At the point of juncture there is a small tube or key which can be closed by the finger. When this is left open the sound is heard as with the ordinary stethoscope and when closed the deeper sounds become audible.

The advantages claimed for this instrument are: 1st. The sound, not having to pass through tubes of different calibre or any cavity in the instrument, is conveyed with greater accuracy, and unaltered in character. 2nd. There is no crossbar or elastic band in the middle, as in the ordinary binaural, so that the hum produced in some by the breath from the nose of the auscultator impinging on an elastic band is avoided. 3rd. By means of the key it acts either as a simple or a binaural stethoscope without moving the instrument. 4th. It is the most portable stethoscope I have seen, and can easily be carried in the waistcoat pocket. It is packed in a neat case with three different-sized pairs of ear-pieces, so as to ensure their fitting any-sized external auditory meatus.

AYDON SMITH.

ANTIPLUVIUM PERFECTUM: WATERPROOF HEALTH GARMENTS.

AN ideally perfect waterproof is, we fear, unattainable. An ingenious attempt has, however, been made in the case of the garments submitted to our notice to combine protection from wet with due ventilation. The "shower-proof" cloaks worn by ladies will resist the rain for a considerable period, if not submitted at the same time to pressure, while they permit the escape of moisture from the surface of the body. Acting on this hint, the makers line this shower-proof material with caoutchouc on that part of the cloth which forms the lower portion of the garment, whilst over the region of the lungs only the shower-proof cloth itself is employed. It is therefore reasonably claimed that excellent ventilation, and what is practically complete exclusion of rain, the garments being quite impervious below the line where any pressure is likely to take place, are secured. The specimens submitted to us have the advantage of being very light, and are, we think, likely to prove a comfortable and useful means of protection against wet and chill. They are manufactured by Messrs. Abbott, Anderson, and Abbott, 70, Watling-street, E.C.

CANCER STATISTICS.

To the Editor of THE LANCET.

SIR,—I wish respectfully to direct attention to a fallacy in Mr. Dunn's paper as given in your issue of the 23rd ult. Mr. Dunn says:—"Taking Gross's statistics as an example, we find that out of 712 women with cancer of the breast 88·22 per cent. were or had been married. Of these, 83·91 per cent. had borne children and 16·09 were sterile, while 11·77 were single. What a remarkable statement is this!" There is nothing very remarkable in this, excepting the unfortunately confusing way of calculating the percentages. But the inference that immediately follows is indeed remarkable! "It is almost certain that if every virgin in England at this moment maintained her *status quo ante* in this respect until the end of her natural life, the female mortality from cancer in the future would be infinitesimal in comparison with present records." Now I trust the virgins of England will not think it necessary to postpone any of their social arrangements on account of this desperate logic; and that "politicians, moralists, and surgeons," so far as concerns this question of marriage and cancer, shall be very comfortable. There is no foundation in the statistical facts—which I may assume to be true—for this remarkable inference. What Mr. Dunn has to show, before his statistics are worth anything, is that the ratio of the number of married women suffering from cancer to all married women is greater than the ratio between the number of single women suffering and all single women. I may put it briefly in this way. Let x = all married women, y = all sterile married women, and z = all single women. Mr. Dunn has to show that $\frac{x}{83\cdot91}$ is greater than $\frac{y}{16\cdot09}$ and greater than $\frac{z}{11\cdot77}$. And even when that is done, and such an approximation of truth attained as can be got from statistics, Mr. Dunn will have to reckon with the complex social and individual influences that determine statistics, and which are the ultimate elements of cause. I have not devoted much attention to this study, but I shall be very much surprised if the exact and correct use of and inference from statistics can show the slightest support of Mr. Dunn's conclusions in this respect.—Your obedient servant,

February 8th, 1886. H. CAMERON GILLIES.

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THE LANCET.

LONDON: SATURDAY, FEBRUARY 13, 1886.

IF further proof were needed as to the injurious influence of small-pox hospitals on communities living in their vicinity, it is to be found in the careful report with which Mr. SHIRLEY MURPHY closes his connexion with the vestry of St. Pancras. There is no small-pox hospital actually within the limits of St. Pancras; but the Hampstead and Highgate institutions are sufficiently near to the boundary to enable Mr. MURPHY to form a judgment as to whether any injurious influence, such as has been shown to exist around other small-pox hospitals, had been exerted on the parish for which he formerly acted as medical officer of health. The Hampstead Hospital is fully a quarter of a mile beyond the north-western boundary of St. Pancras, the Highgate Hospital being just outside the north-eastern boundary. As regards the Hampstead Hospital, the circumstances were especially favourable to the investigation made, because the hospital, after having been closed for many years, had again been used for the reception of small-pox patients during 1884.

The results of Mr. MURPHY'S inquiry are shown by means of tables and also by means of a series of excellent diagrams, and in both the practice adopted by Mr. POWER in the case of Fulham, of indicating the amount of disease in quarter-mile rings drawn round the hospitals as centres, has been observed. Taking Hampstead first, it is shown that in the four years 1880, 1881, 1882, and 1883, when that hospital was closed, the houses within the special area of a mile circle round the building were attacked less than those in the rest of the parish, the calculation being based on an examination of the houses invaded per cent. of the total houses; but in 1884, when the hospital again came into use for the reception of small-pox cases, there was "a marked gradation of incidence, the houses in the ring nearest to the hospital suffering more than twice as much as those in the next ring, and more than five times as much as those in the outer ring." Indeed, the houses in the special ring of one mile were attacked at the rate of 2·9 per cent., whereas in the rest of the parish they only suffered to the extent of 0·9 per cent. As regards the Highgate Hospital, the conditions were, subject to certain local influences, very similar, and in 1884 the incidence of the disease on the area within a quarter of a mile of the hospital reached 7·70 houses invaded per cent. of total houses, as opposed to 1·3 per cent. in the remainder of the parish. The diagrams we refer to are extremely valuable. They show how in 1880, a non-epidemic year, the comparatively few houses attacked in St. Pancras were distributed all but uniformly throughout the parish. In 1881 there was an epidemic, Hampstead Hospital being closed, and Highgate being open. During this year small-pox is shown to be generally diffused throughout the parish, with some special aggregation in some of the more densely peopled districts; but whilst there is certainly no special incidence of the disease in the immediate vicinity of Hampstead Hospital, there is quite a mass of red dots, showing how severely the houses in the immediate neighbourhood of the Highgate Hospital were attacked. The years 1882 and 1883—non-epidemic years—resemble 1881 in so far as the distribution of the few cases of small-pox which occurred is concerned, except that in 1883 a slight outbreak occurred near Highgate Hospital. Then comes the crucial year, when both Hampstead and Highgate hospitals were in full working, and it needs but a single glance at the map for that year to enable the most uneducated observer to see how great is the influence for harm which those two institutions exerted upon the houses in their neighbourhood. A great mass of red marks around Hampstead go to show that, in the one-quarter to a half mile circle, 6·7 per cent. of houses were attacked; 3·1 from one-half to three-quarters of a mile; 1·3 from three-quarters to one mile; and only 0·9 in the remainder of the parish. The result would doubtless have been still more striking had Mr. MURPHY'S district included the area within a quarter of a mile radius of the hospital.

So far we have said nothing as to the precise means by which this grave injury has been brought about. Mr. MURPHY'S inquiry did not enable him to decide how far an aerial diffusion of infection could be held responsible for it, and under these circumstances we do not propose again to discuss this question in detail. But the matter is none the ess grave if we abandon all notion of an aerial distribution. Quite the contrary. As Mr. MURPHY points out, the Metropolitan Asylums Board have honestly striven to give effect to nearly all the recommendations of the Royal Commission on Fever and Small-pox Hospitals. The number of acute cases at each hospital is strictly limited; precautions are taken with regard to the staff and visitors such as were never before thought necessary; and the ambulance service, in its strictness as to details, is practically perfect. And yet the mischief goes on just as it always has done, and it probably will continue to do so until the true cause of this diffusion is frankly admitted. Mr. POWER'S observations go to show that the cause is an aerial one; but whilst all sorts of expedients, excellent in themselves, are being resorted to, nothing is being done to check the diffusion by air. An essential recommendation laid down by the Royal Commission was that small-pox hospitals should be so constructed as to permit the destruction of all air that the wards have contained, and Dr. BURDON SANDERSON brought under the notice of the Commission a design showing the principles by which this might be effected. But, as Mr. MURPHY states in his report, no attempt has been made to carry this out. Why? We do not know. If further inquiry is needed, there is no reason why it should not be made forthwith. But under any circumstances the time has come when it is clear that the remedial measures hitherto adopted have failed, and when some other method of dealing with this grave source of danger to communities is urgently called for.

PROFESSOR V. PETTENKOFER is justly regarded as one of the highest authorities upon sanitation and epidemiology. He may, in truth, be said to have been the pioneer in Germany of scientific hygiene, just as one may claim for PARKES a similar position in this country. The medical profession associates Professor V. PETTENKOFER mainly with his

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studies upon cholera and typhoid fever, for he represents the anti-contagionist school, and his subsoil-water theories have long been before the world. Any contribution that he makes to the subject is sure to receive attention; so that the substance of a recent address given by him upon the relationship between Bacteriology and Epidemiology (to be found in the *Münchener Med. Wochensch.*, 1886, Nos. 3 and 4) is worth perusal. It is remarkable in many ways, but especially for the candour and justice with which the newer doctrines are treated. There is much truth in his opening remarks upon the glamour which has been developed by the fascinating pursuit of bacteriology, so that it is not surprising that the assertion has been made that this study has for the first time given epidemiology a scientific basis. It has undoubtedly, he admits, increased the means of diagnosis, but he contends that it has done little to advance the cause of prophylaxis or treatment beyond the position previously attained. What, he asks, has the discovery of the tubercular bacillus done to reduce the mortality from phthisis? or in what respect has the detection of the typhoid bacillus aided in advancing the sanitary measures and lines of treatment which have already effected so notable a reduction in the mortality from typhoid fever? Indeed, many real advances in the treatment of diseases now proved or suspected to be due to the invasion of micro-organisms have been made almost empirically, or, at any rate, without any reference to the existence of specific germs; and once more he reiterates his opinion that the concentration of view upon the single factor of bacterial origin, to the neglect of the other factors of telluric and seasonal conditions, is responsible for much erroneous doctrine. Even as regards disinfection, bacteriology has added little to the principles previously established by epidemiology, or by the practical acumen of a LISTER, whose system was based upon the general doctrine of fermentation and putrefaction through the intervention of living organisms, and not upon a direct demonstration of the effects of certain antiseptics upon special forms of bacteria. It is true that subsequent knowledge had demonstrated more exactly the germicidal properties of antiseptics, but the principles of antiseptic surgery were established without such direct aid from bacteriology; indeed, the pursuit of the latter was doubtless largely impelled by the successes achieved by the former. On the other hand, the discovery of the prophylactic power of inoculation by the attenuated virus, as demonstrated by PASTEUR in the case of anthrax, must be admitted as the outcome of bacteriological research, throwing light upon the *modus operandi* of vaccination; yet the most recent work of PASTEUR upon hydrophobia has been accomplished without any demonstration of the actual morbific agent in rabies. That a knowledge of the specific organism of any infectious disease does not often explain the cause of an epidemic is illustrated in the case of anthrax, which can so readily be transmitted by inoculation; whereas the spontaneous disease may at one time attack only one animal in a herd, at another strike down several almost simultaneously and give rise to a widespread epizootic. The fact of a transmission by inoculation, or, in other words, the experimental test of infectivity, cannot, then, explain satisfactorily the origin and spread of epidemics. This point has been lately further illustrated by the successful inoculations by MARCHIAFAVA, CELLI, and others in the case of malarial fever. These experiments showed conclusively that blood taken from a patient suffering from intermittent fever could, when inoculated, transmit the disease; but no one would pretend that this proved that the malarial virus is habitually transmitted by individual infection. May we not, then, legitimately conclude from this that, although tubercle can be undoubtedly transmitted by direct inoculation, it is not thereby *proved* to be a contagious disease?

Professor v. PETTENKOFER continues his argument by referring to the long-established division of infective diseases into contagious and miasmatic, some diseases occupying an intermediate (because undetermined) position between these two classes. Bacteriology is breaking down these artificial distinctions—which, by the way, Professor v. PETTENKOFER would prefer to style "entogenous" and "ectogenous," according as the virus is transmitted direct from the sick to the healthy, or results from a micro-organism developing apart from but in the vicinity of the infected patient. It is important, therefore, to determine whether an epidemic spreads entogenously or ectogenously. Many think that if a specific fungus is found in the patient, and especially if the disease can by its means be transmitted experimentally to the lower animals, that is a proof of its entogenous character, and that the disease can be spread by the patient or his excretions. This is the point which Professor v. PETTENKOFER criticises, taking as examples the important diseases typhoid fever and cholera. No one would rank cholera among the purely contagious diseases, as syphilis and small-pox; but the general doctrine is that it is contagio-miasmatic. We all know that, as regards cholera, experts are divided into two camps—the contagionists and the anti-contagionists; yet it is noteworthy that at the conference held last year in Rome, where the former were in a majority, there was a unanimous declaration to the effect that the safest prophylaxis against cholera epidemics lay in local sanitary measures, with the proviso, however, in favour of the enforcement of measures directed especially against contagion, such as quarantine, isolation, disinfection, and the like. Professor v. PETTENKOFER is, however, fully convinced that epidemics of cholera are solely ectogenous in their origin, and that the disease is no more contagious than is malarial fever. Not that cholera arises like malaria, for, although endemic in some parts of India, it can be conveyed elswhere; not, indeed, in the way urged by the contagionist school, otherwise Europe, and especially Egypt, would never be free from its invasion, so close is the intercourse between them and the home of cholera. Even in India itself cholera is limited to certain localities, and all epidemiological research goes to prove that there is a great difference in the susceptibility of localities to become infected, and even a varying susceptibility in one place. Again, he shows that the imported cholera germ will remain latent for a time as shown in the recent epidemics, where Egypt was attacked in 1883, infecting Toulon, Marseilles, and Naples, where the disease was not manifested till 1884; Spain was infected from the South of France in 1884, but the great epidemic did not arise till 1885, and even now the coming year may show that other parts of Europe received the infection last year from Spain. No sanitary cordons or quarantine, no isolation of the sick or disinfection, could

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avail to prevent epidemics of a disease which spreads so mysteriously; and experience shows that all such measures are invariably adopted too late. Moreover, PETTENKOFER claims that the few cases advanced by the contagionist school in support of their doctrine are capable of an ectogenous explanation, although such authorities as GRIESINGER and VIRCHOW have been compelled by such facts to admit that occasionally cholera is communicable, an admission which would lay the burden of proof upon the bacteriologist to show how and under what conditions the germs can be at one time transmitted directly from individual to individual. That it cannot, as a rule, infect, is shown by the immunity enjoyed by the attendants on the sick. The fact that cholera appears in a locality after the introduction of a case of the disease, whereas healthy immigrants coming from an infected place do not apparently convey the germs, lends apparent support to the contagionist doctrine; but Professor PETTENKOFER sees no difficulty in believing that a cholera patient must of necessity have been in more intimate contact with the virus, and that he contaminates the locality and not the inhabitants directly. Why is it, if the disease be contagious, that once it is introduced it does not always spread? It is, he thinks, because the conditions of the locality and the seasonal conditions are such as do not permit of the development of the poison. An outbreak of cholera on board ship can almost invariably be traced to importation of the poison from an infected port, but there is no proof that the disease spreads by direct contagion from the individual who introduced the poison. So also with limited outbreaks, house epidemics, &c., the explanation given by the Professor is, he holds, more reasonable than that of the contagionist, who would have to show why so many exceptions occurred under conditions apparently so favourable for the spread of a contagious malady.

Nor does Professor v. PETTENKOFER limit the scope of his criticism to those who assert that such a disease as cholera is directly transmissible from one human being to another. He is equally opposed to those who hold that drinking-water may be contaminated by the choleraic discharge, and the disease spread in this way. His position is that the water would not be a medium for the conveyance of the cholera virus did not the nature of the locality also happen to be favourable for its development. In this respect, he remarks, there is a close analogy between cholera and typhoid fever, which is so universally believed to be propagated through the medium of water. We fail, indeed, to follow Professor v. PETTENKOFER here in the face of accumulated facts pointing to the transference of the typhoid poison from individual to individual by means of this and other articles of food. Nor does he touch upon the subject of milk epidemics, which surely bring a great body of evidence in support of the typhoid virus being so transmissible. He contents himself with disproving that the Wiesbaden epidemic of 1885 had anything to do with contamination of water; and it seemed to be proved to depend on defective drainage. He holds it to be the duty of bacteriologists to extend their field of inquiry; he admits their facts so far as they go, but thinks their conclusions are erroneous from the limited range they permit themselves. Practical measures of hygiene can be framed only when all the circumstances of epidemic disease are taken into account. The discovery of the specific pathogenic organism can do little more than subserve diagnosis and explain the phenomena of the disease; the full etiological explanation, with the resulting hints towards prophylaxis and treatment, requires a research into the whole environment of the micro-organism and the conditions that influence its growth and development. He welcomes the new discoveries made by the bacteriologists; but he cannot admit that they have in any respect undermined the well-established facts of epidemiology; to harmonise these two great sources of inquiry must be the task of the future, if we are to reap the full benefit of all that is being done to advance our knowledge of the nature of disease.

THE regrettable and humiliating occurrences of the last few days in London, which, through the culpable want of foresight and energy of the Home Office or police authorities, has been practically handed over to the mercies of the turbulent classes, may well form a subject of profitable study to those who are professionally concerned with the working of that important *function* which we call mind. The observation of mind working in a mob is an exercise full of interest and instruction. Mob-mind may be defined as the outcome of all the actions and interactions of individual minds upon each other when brought into intellectual contact by the simple fact of concourse. This is something quite different from public opinion. When a number of persons thinking on the same lines in reference to any question are thrown together, they bring with them special forces of construction and are prepared to form bonds of cohesion. Their several purposes are ready to merge in a common purpose. No doubt there is something of this pre-existing affinity at work in the mental constitution of every mob. If the component parts of a crowd were not in some measure qualified to act together they could not voluntarily assemble, or, being thrown together, would not coalesce. Nevertheless, there is a different force, or, more correctly speaking, there are different forces, at work in the constitution of a mob properly so called. The term "mob" implies heterogeneity on the part of its elements, and excludes the idea of organisation or the existence of a common purpose. It is not therefore possible that a mob in its true sense should possess a mind composed, as it were, of the fused elements of a multitude of minds, in respect to the higher forms of cerebration. The mental activities of a mob are limited to passion, impulse, and imitation; in fact, to the lower range of mind-energies. Given a multitude of impressionable persons, it is by no means necessary that they should have formed opinions on any special subject to make them ready to act together either under the influence of passion, impulse, or imitation. It is, on the contrary, possible, and even probable that they will act in direct antagonism to their principles—the principles that govern their several lives — while they are under the influence of passion, impulse, or imitation. It is very curious to observe how this works. There is a subtle but mighty influence exerted by numbers, which stirs the passions, and impels a man to imitate those around him. If one man become excited, others will take the infection, and the spirit of turmoil rises and spreads through the crowd without any

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necessary sympathy between the individuals acting together in respect to a common object. If one man looks in a particular direction, others look, they know not why. If one man runs, the many run without reason; and if one member of a crowd resort to violence, others follow suit though no special purpose animates them. There is an evolution of something which for the time takes the place of a common thought or motive, but which is actually nothing more than a stirring of the lower mental energies, and not in any true sense entitled to the dignity of being described as intellectual, and yet, looking to its capabilities when once evolved, is fairly describable by no less a term than mob-mind. A mob stirred by this influence quickly grows to be a party with all the making of an organised body. In the brief space of a time that can be measured only by its incidents, a crowd of heterogeneous particles of humanity may be so welded together by their deeds that from the instant when this union takes place it shall constitute a coherent mass. This is how revolutionary mobs are made. A crowd assembles; one-half of the persons present probably are conscious of nothing more potent in the nature of motive than curiosity. They do not even hear the speaker addressing the gathering; they are simply impressed by sounds, sights, and the influence of numbers. Presently they are stirred by some impulse arising out of, or appertaining to, passion; they imitate, unconsciously it may well be, the acts of those around them, and, without thinking why, they take part in proceedings they do not even understand. It is even possible that they may take weapons thrust into their hands or missiles placed at their disposal, and use them in the perpetration of deeds of lawless violence, without being aware of the purpose which they are ostensibly striving to carry into effect. Nearly all riots and revolutions begin in this way. In a few hours, however, it becomes necessary to justify to the consciousness the act in which the creature of impulse has been engaged, and reason — the perverted faculty of a mob-mind—comes into play. It follows from this view of the growth of mob-mind, that those are the real offenders against the public peace who permit mobs to assemble and supply them with opportunities of doing deeds which give birth to malignant purposes. When the police are allowed to stand idly by and permit the assembling of large crowds of impressionable persons, when they are instructed not to interfere with "horseplay" which is the prelude to crime, the authorities responsible for this blind policy are assisting at the birth of an organic revolution. We do not hesitate to say that nothing which can now be accomplished will atone for the apathy of the Home Office and of the authorities at Scotland-yard last Monday. A mob has been allowed to constitute itself, and though for the moment its component members may be kept apart, the active germ of a revolution has been ushered into existence. A mob-mind has been constituted, and has not simply formed a purpose, but been permitted to indulge in triumph over its achievements. For more than an hour before the smallest act of violence commenced on Monday, there were unmistakable evidences of an impending riot within a stone's throw of Scotland-yard, the central office of the police. Either no detective had the wit to convey the intelligence to head-quarters or the authorities there were too supine to act. Fifty policemen drawn across the entrance to Pall Mall would have put an end once for all to the riot at its outset. No such precaution was taken. For two hours the West-end was left to the mercy of the mob, and, stranger still, the riot achieved, the rioters were actually allowed to hold a meeting of triumph at the foot of the Achilles statue. No such crime of omission as was committed by the Home Office and the chiefs of the police on Monday has been committed by any public authority since the days of the Gordon riots. We trust that when Parliament meets once more, the urgent questions arising out of these events will be raised, and that they will not be allowed to remain unanswered. A great opportunity for the study of mob-mind has been most needlessly created, and there is only too much reason to fear that it will not be long before the malignant mental organism, to which administrative folly has given birth, will again make its presence felt in our midst, gathering additional weight and influence each moment it is permitted to exist. The prosecutions in progress, though needful in their way, are like measures for locking the stable-door after the steed is stolen. The deed has been done, and the full issue is not yet reached.

DR. PILCHER, in a paper read before the New York Surgical Society, has discussed in an interesting manner what is the right line of practice to pursue when the main vein of a limb is suddenly and permanently occluded, especially whether simultaneous ligature of the companion artery obviates the risk of gangrene. The proposition is twofold. What ill effects are likely to follow the sudden and complete occlusion of a main vein? And then, if ill effects follow, how are they best dealt with? There are few more striking pathological facts than the remarkable way in which the *gradual* occlusion of veins, as by the pressure of morbid growths, is compensated for. Even one or other vena cava may be slowly obliterated with strikingly little interference with the circulation in the parts affected. In such cases anastomosing veins have time to enlarge and to furnish sufficient channels for the returning blood. Far different is it where the obstruction is *sudden*, as from a wound, where the anastomosing veins have not been previously enlarged; and it is therefore not safe to argue from the former case to the latter. BRAUNE and others have attempted to elucidate the problem by experiments on the cadaver. The main vein of a limb has been tied, and the force necessary to return fluid from a distal venule to the heart has been measured, and from this it has been questioned whether the normal forces carrying on the venous circulation are or are not sufficient to overcome the obstacle. Such experiments are interesting, and to a certain extent useful, but the results so obtained must be applied with extreme caution to the living body. The vessels have other than physical properties, and the vital contractions and relaxations of arteries and veins respectively may affect the case very materially. The one special danger to be feared from the sudden obliteration of the main vein of a limb is gangrene from venous stasis, owing to the inability of the vein radicles to empty themselves. Experience has shown that this is by no means sure to result even from closure of the common femoral vein. LANGENBECK has recommended that in any such case the main artery should be ligatured at once, as in that

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way a smaller quantity of blood is carried to the part beyond, and less stress is thrown upon the overcharged veins. Experience, however, does not support this view. The ligature of both vessels has been successful in certain cases, but on the whole the mortality, and the frequency with which gangrene has occurred, have been greatly increased by this practice. In no situation has this been more clearly demonstrated than in the neck, where the ill effects of ligature of the internal jugular vein are considerably exaggerated by simultaneous ligature of the artery. Nor is this result to be wondered at. Ligature of the main artery of a part is attended with two results which are unfavourable to the venous circulation. In the first place, the local anæmia causes a general dilatation of the arterioles, with compression of their attendant venules; and, in the second place, the force of the heart is dissipated in propelling the blood through the many narrow anastomosing arteries. In the life-history of aneurysm two facts are often noticed which throw light upon this matter. The first is the marked effect of the pressure of an aneurysmal tumour upon a neighbouring vein, the direct influence of the venous obstruction being supplemented by the impediment to the arterial circulation caused by the presence of the aneuryam and the diseased state of the arteries beyond it. And it is just in such cases that the danger of gangrene after the Hunterian operation is greatest. When the force with which the blood is propelled into the limb is cut off by ligature of the main artery, the return of blood from the parts beyond becomes impossible from the diminished *vis a tergo*. It is therefore a grave question whether and how far an obstructed venous circulation is aided by such a diminution of the vigour of the circulation as is necessarily caused by the ligature of the main artery of a part. At any rate our present experience is opposed to the line of practice suggested by LANGENBECK.

MR. HUTCHINSON raised a most important question when he proposed to the Council of the College of Surgeons to extend the basis on which the Fellowship is bestowed. We do not profess to know exactly the lines on which he will proceed, but it seems to be no secret that the proposal is that fifty Members of the College are to be raised to the rank of Fellow, either without any, or after a very modified, examination. We confess to a feeling of great disappointment at this announcement. In the first place, the proposal does not come from the Council *proprio motu;* then, it is not a desire to mark special merit or conspicuous success; it is not even to reward those who have done the College good service. On the contrary, it is a sort of olive branch, and too obviously an attempt to pacify a growing determination among the Members of the College to exercise rights and privileges which pertain to membership among all other corporate bodies, without either cavil or question, by offering to a few of their number the bribe of an empty Fellowship. The carrying out of such a proposal will slowly increase the ranks of the Fellows, but it will lower the status of the Fellowship; on the other hand, the Members will lose, not numbers only, but the weight and authority which the seniors among them carry, and in this way the status of the Membership will also be lowered. The result will prove disastrous, and will be a retrogressive step in every sense of the word Moreover, supposing that fifty men could be found worthy of the honour—from a purely negative standpoint we have no sort of doubt that for the first two or three, or even more years, very suitable men *could* be found,—the injustice of excluding about *eleven-twelfths* of the body corporate from all participation in College management will be as glaring as ever. It is one which can never be atoned for by anything short of the full abrogation of the principle, and it were to be wished that the Council could be brought to see this. It is futile on their part to longer pretend to be blind to the extent and purpose of the present outcry among the Members of the College, and individual members of the Council who bring forward proposals to deal partially with the subject only the more prominently mark their own prejudices in matters on which a more liberal and enlightened policy might fairly be expected from them.

We have at various times pleaded for the official recognition by the Council that the Members of the College, as part of a corporate scientific body, are fit to exercise corporate rights—that is, to vote and to take part in its management. Their exclusion is anomalous as well as unjust; it is a marked slur cast upon the Members of the College by those who ought to be the first to claim respect for them. To send these men out into the world as practitioners, and yet to say we will have nothing more to do with you, is derogatory to the dignity both of the College itself and its Members. We have never ceased to urge the desirability of raising the standard of the Membership to the highest reasonable level, the need for wider culture, improvement in the curriculum, and a more thorough and prolonged training; and we gladly acknowledge the progress which has been made in the last few years. It is largely due to these influences that we now see the present reform movement surging through the profession. A feeling that injustice was being done to them has long existed in the minds of the Members; but the want of an organisation as a mouthpiece, not less than the occupation they follow, has hitherto prevented them from expressing their feelings. Increasing numbers of more and more highly educated men, and the steady growth of the principle of direct and responsible representation, are, however, at last making themselves felt. Under such circumstances we doubly regret the present proposal to widen the basis on which the Fellowship is bestowed. The Association of Fellows, which has so unceasingly expounded the political aspects of this present crisis, has placed the Fellows and Members alike under a further obligation by pledging itself to resist any attempt to degrade the academical status of the Fellowship, and we have reason to think that the best of the Members will be hardly less unanimous in declining to accept such borrowed plumes as it is proposed to offer them.

On many grounds, therefore, it is most undesirable to widen the basis of the Fellowship. On the other hand, are there not good reasons why, if any alterations be made, it should be further limited? When justice has been done to the Members, and the examinations for the Membership have become more and more what they should be, the diploma of Membership will be highly prized, and even more sought after than at present. The College of Surgeons should do everything they can to raise their Membership,

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and its possession should carry with it any privileges the College itself has to offer. The Fellowship, on the other hand, should approximate more and more to the nature of an academical honour—a wranglership, in fact; it ought not to carry exclusive privileges at the College, where all Members should be on an equal footing till raised above the ordinary level by the voice of their fellow-Members. In the hospitals and schools of medicine, however, every possible privilege may be given to it, in order to induce as many as possible to more effectually "promote and encourage the study and practice of the art and science of surgery," and in order to bestow compensating advantages on those who give up time to this purpose. We hope the Council will decline to accept Mr. HUTCHINSON'S proposal; and we shall regard such an issue as the harbinger of a policy more in accord with the requirements of the times. It would be humiliating to the Council to apply for and be refused the alterations in the Charters on which they decided upwards of a year ago; and yet, should they be rash enough to apply to the present Government in face of the Members' petition now in course of signature, we cannot for a moment doubt the result. The Council ought seriously to consider their position; they have only two courses open to them—either to resign as no longer having the confidence of their constituents, or to initiate with good grace such changes as will re-secure it.

Annotations.

"Ne quid nimis."

FROM BAGSHOT PARK TO WINDSOR CASTLE.

THE Duchess of Connaught is shortly, it is stated, to transfer her abode from Bagshot Park to Windsor Castle to undergo her confinement. It will be remembered that on a former occasion when Her Royal Highness was confined at Bagshot Park symptoms of a septic nature presented themselves, to the alarm of the medical attendants and anxiety of the Royal Family. At considerable risk the Duchess was removed a few days after her confinement from Bagshot Park to Windsor Castle. The lesser of two evils had to be resorted to. If the Duchess had been permitted to remain in the newly-erected residence in Bagshot Park there would have been a continued exposure to the septic poison, which had already excited very grave symptoms. On the other hand, there was some risk in the removal from Bagshot to Windsor so soon after a confinement. But this was the lesser evil, and was wisely decided upon. It was subsequently found that the drains of the house in Bagshot Park were defective. These, however, have been rectified, so that this source of danger is removed; yet there are still good reasons why the Duchess should be advised not to undergo another confinement in Bagshot Park, and that preference should be given to Windsor. The deaths from childbirth and childbed fever in the registration district comprising Bagshot Park are double the death-rate in the Windsor district, notwithstanding that the former is a thinly populated rural district, while the latter is a more thickly populated urban district. If the registration district comprising Bagshot Park be compared as regards death from childbirth and puerperal fever with that of Stepney, Mile-end, or Poplar, or, indeed, most of the poorer districts of London, it will be found to be in excess of these, and therefore fraught with more danger to a parturient woman. There must, therefore, be something beyond defective house-drains to give rise to this high death-rate from childbirth and puerperal fever in a country district in the midst of moor and heather, and in the very centre of the wide range of sandy soil known as the Bagshot Sands. The district of the Bagshot Sands, as we have on former occasions pointed out, consists on the higher ground of light porous sand, which drains into the valleys of retentive clay, marsh, and bog. These low-lying damp districts are insanitary, and specially favourable to septic diseases affecting parturient women—diphtheria, malaria, and what is popularly known among the poorer inhabitants as aguish rheumatism. Residents on the low-lying marsh-lands of the Bagshot Sands are liable to one and all of these. To drain these marshes would give work to the unemployed and effect a great sanitary improvement. Much of these sandy wastes and marshes belong to the Government, and might fairly be dealt with at the cost of the nation.

WORK FOR THE UNEMPLOYED.

VERY extensive tracts of country belong to the Government, and produce very large returns under the name of "Woods, Forests, and Land Revenues," which are managed by a department of the Government known as the "Woods and Forests" at a cost of somewhere about £22,000 a year. There are several commissioners, who receive £1200 a year; a solicitor, £1500 a year; clerks and other officers, £900 a year. Such salaries should represent service on very large monetary returns, and so it will be found to be. At the end of one financial year there was a cash and stock balance amounting to more than £600,000 at the disposal of this department for permanent improvements. The extensive tract of Government property stretching from Windsor Park to Aldershot admits of very great permanent improvement. The larger portion of it is unreclaimed. To trench some portions and plant with Scotch and larch would bring some return for expenditure. To drain the low-lying marsh districts around Bagshot Park, Wellington College, the Royal Military Colleges, and the Camp at Aldershot would effect a great sanitary improvement, even if confined to those portions of these districts which actually belong to the Government. Here, then, is abundance of work for the unemployed, and £600,000 available in one department of the Government to pay for it, with the prospect of a real permanent improvement to Government property and increased sanitation where it is much needed. A pickaxe and a spade are the only tools needed for the work. Sir Robert Rawlinson could devise a scheme for the Government in less than twenty-four hours, for he has already had a large experience in designing work of this kind. Ten thousand workmen might be well employed at task work—that is, remunerated in proportion to the work they do. They could be divided into sets, according to the lodging accommodation, with one ganger to every hundred men. The improvements in the Royal forests might be carried out on the lines commenced by the late Prince Consort nearly fifty years ago, the good effect of which is palpable enough in Windsor Park and the Royal forest around, and consisted mainly of trenching, draining, and planting, each of which is in the direction of an improved sanitation much needed.

AIR EMBOLISM.

AN experimental and clinical study of air embolism carried out by Dr. N. Senn of Milwaukee, Wisconsin, has led him to the following important results. The presence of adventitious air in the vascular system during life gives rise to air embolism. Each air embolism constitutes a mechanical source of partial or complete obstruction to the flow of blood in the vessel in which it is located. Aspiration during the inspiratory movements of the chest is the

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direct or exciting cause of ingress of air into a wounded vein or sinus. Elevation of the head is the sole predisposing cause of the entrance of air in wounds of the superior longitudinal sinus. In veins the predisposing causes consist in elevation of the part wounded, and in pathological or anatomical conditions which prevent the collapse of the wounded vein. Insufflation of a fatal quantity of air into a vein produces death by mechanical over-distension of the right ventricle of the heart with paralysis in diastole, and by asphyxia from obstruction to the pulmonary circulation consequent upon embolism of the pulmonary artery. Insufflation of the same quantity of air into arteries is less dangerous than when introduced into veins. When death is produced in this manner it results from acute cerebral ischæmia, secondary venous air embolism, or intense collateral engorgement of the vessels of the brain and spinal cord. Air injected into arteries is readily forced through the systemic capillaries into the venous circulation and the right side of the heart by powerful contractions of the left ventricle. Air embolism of the pulmonary artery is relieved in a comparatively short period provided the contractions of the right ventricle continue unimpaired for a sufficient length of time. The prophylactic treatment should consist in proximal double compression or ligation of the vein that is endangered by an operation. The indirect treatment should have for its objects the prevention of admission of air, the administration of cardiac stimulants, and venesection. The direct or operative treatment should be by puncture and aspiration of the right ventricle; catheterisation, and aspiration of the right auricle. These last recommendations no doubt have the aspect of severe measures, but in some cases death is imminent, and desperate means become justifiable. Dr. Senn asserts that the results obtained by experiments on animals warrant the adoption of the operative treatment of air embolism in clinical practice. The chances of increasing the mischief by catheterisation of the right auricle must not, however, be overlooked.

PUBLIC HEALTH IMPROVEMENT IN ENGLAND.

THE death-rate in England and Wales in 1885 again fell to 19·0 per 1000 of the estimated population, and, excepting only the year 1881, when it was 18·9, was lower than in any previous year since civil registration came into operation in 1837. The Registrar-General's Quarterly Return, relating to the last three months of 1885, calls attention to the fact that the death-rate in each of the five years 1881-85 was considerably lower than the rate recorded in any year prior to 1881. The mean rate in the first half of the current decennium (1881-90) did not exceed 19·3 per 1000, showing a further decline from 20·8, the mean rate in the preceding five years 1876-80; whereas, in the preceding forty years of civil registration the mean annual death-rate was 22·3, and the lowest rate in any quinquennium was 21·4 in 1841-45. This marked reduction in the English death-rate has now been maintained for ten years, and has been much greater in the second than in the first half of that period. It cannot, in the interest of further health progress, be too constantly borne in mind that the commencement of this period of reduced death-rate was coincident with the coming into full operation of the Public Health Acts of 1872 and 1875. The effect of this reduced death-rate upon the numbers and longevity of the English people is phenomenal. The Registrar-General points out that the reduction in the death-rate in the last five years implies that "more than 281,000 persons in England and Wales survived that period, whose deaths would have been recorded had the mean rate of mortality been equal to that prevailing in the ten years 1871-80," in the latter half of which period the improvement in the public health had already set in. With regard to the increased longevity of the population, Mr. Noel Humphreys, in a paper read before the Statistical Society in 1883, showed that the effect of a reduction in the mean death-rate from 22·5 in 1838-54 to 20·8 in 1876-80 would be to add two years to the mean duration of life of every male, and three years and a half to that of every female born. The further reduction of the death-rate in the last five years to 19·3 implies a still greater additional lengthening of the mean duration of life in England.

THE METROPOLITAN BOARD OF WORKS ON THE VENTILATION OF SEWERS.

THE competency of the Metropolitan Board of Works to deal with the question of the ventilation of sewers, and the prospect that success will attend the efforts of that body, may be inferred from many singularly instructive passages in the Report of its Special Purposes and Sanitary Committee. For example take the following:—"When the temperature of the air of the sewer is lower than that of the external atmosphere, and no other influence is at work, the colder atmosphere of the sewer, being heavier than the external air, remains in the sewer; but when the outer air becomes colder, and consequently heavier, than the air in the sewer, it presses down through some of the openings to the sewer and drives out the warmer and lighter air through the other openings. This is noticeably the case on cool evenings in the hot dry season, at which time the nuisance from sewer ventilation is probably at the worst. It is therefore necessary to provide in sewer, as in all other ventilation, inlets for the cold air as well as outlets for the warm air." The fallacy of this extraordinary statement must be apparent if only we reflect that sewer gas is drawn into houses even when the temperature of the house is only a little above that of the external atmosphere, and of course much higher than that of the sewer. As a matter of fact, the air in the sewer does not fail to rise whenever and wherever the atmosphere above it is warmer. The assumption of the authors of this report as to the behaviour of sewer gas is based entirely on theory, and has no better foundation than the school aphorism that colder and more condensed gases underlie lighter ones, an aphorism which is perfectly well known by practical men to be untrue in actual working, the interchange and diffusion of gases being determined by other causes besides those of mere temperature. The Committee go on to say: "During the autumn and winter months the average temperature of the air of the sewers is warmer than the external temperature by about seven degrees; in spring the temperature is about equal, and in summer the external day temperature averages over three degrees warmer than that of sewers." So that if the law on which the reporters rely were applicable, sewer gases ought to rise out of the warm sewers into the cold external atmosphere, particularly during the autumn and winter, while in the spring there should be little change of place, and in summer there should be no ascent of sewer gas at all! "At night," says the Committee, "the temperature of the sewers at all times of the year is usually higher than the temperature of the external air," and the general conclusion drawn is "that throughout the greater part of the year the natural law, by which the heavier colder air forces out by its greater weight the warm air of the sewer, is in operation, and if proper facilities are given, that law will ventilate the sewer." The Sanitary Committee, therefore, clearly thinks that it is under conditions in which the temperature of the external air is lower than that of the sewers sewer gas escapes. It is therefore preposterous for anyone to speak of smells from sewer gas in summer. It is impossible that there can be any smell under such conditions, when the temperature of the external air is three degrees higher than that of the

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sewers. No wonder the sanitary inspectors are so curt when in our ignorance of "natural law" we complain of effluvia from the sewers in summer. The Committee is good enough to admit that temperature is not everything in sewer ventilation. Something must be conceded to the effect of throwing "hot water and other liquids" into the sewers. Materfamilias must look to it that her servants do not poison the whole neighbourhood by allowing a little hot water to escape into the house drains and travel thence into the sewer. We should very much like to know how much hot water is cast into the sewers of the metropolis in twenty-four hours, and to what extent it suffices to raise the temperature of their contents, even locally. "The force and direction of the wind" have doubtless some effect on ventilation, and we are glad to find the Sanitary Committee recognise their agency; but they seem to think that in some mysterious way the sewer-gas is induced by the wind to flow to higher levels, like that of Hampstead. The need for this hypothesis of the action of the wind or a back current arises from the "natural law" to which we have already alluded. Firmly convinced that sewer-gas must needs be too heavy to rise unless artificially heated in some way, the Sanitary Committee is unable to understand what everyone else understands—namely, how and why it happens that the gases in low-level sewers and drains rise to those of higher level, and by way of explanation it imports a theory of wind-action. It would be wearisome to follow the schoolboy speculations of this Report further. No real reform can be expected whilst such ignorance in high places is allowed, not only to exist, but to prevail.

DOUBLE BRONCHOCELE SUCCESSFULLY EXTIRPATED.

DR. F. DIONISIO reports (*Gazzetta delle Cliniche*, 1885, No. 10) the case of Signora P. P——, aged thirty, who at sixteen experienced some difficulty of breathing, and shortly afterwards noticed slight enlargement in the median portion of the thyroid body. Stationary at first, the tumour began to grow and extended to the right side. At twenty years of age, when the lady was married, another swelling appeared on the left side of the neck and developed rapidly. Iodine treatment was tried internally and by injection, but the patient suffered severely from iodism without any compensating advantage. In the spring of 1885, the tumours having grown to such an extent that the slightest bend of the neck was impossible and the difficulty in breathing and swallowing had greatly increased, the patient became anxious for a surgical operation at all risks. On examining the neck on April 9th, it was found occupied by two tumours. The largest projected from the middle of the thyroid region to the right, and upwards as far as the mastoid process, raising the sterno-mastoid muscle and extending downwards under the sternum. The fleshy consistence of the tumour and its very limited movements in swallowing or under finger-pressure, which was very ill borne, gave the idea of deep impaction between the sternum and trachea. The second tumour was smaller, softer, and more movable; it was situated between the left side of the trachea and the corresponding sterno-mastoid muscle, and was separated from the right swelling by a skin depression (*solcatura tegumentaria*). Carotid pulsation was felt on the left, not on the right. Large subcutaneous veins were visible over both swellings; over the right they formed a varicose mass which occupied almost the whole clavicular region. The maximum circumference of the neck was forty-four centimetres (seventeen inches and a half). The right tumour was removed on April 19th, the left on July 2nd. Both operations were performed under chloroform, without spray, and by enucleation through two vertical incisions, which were united throughout with interrupted silk sutures, allowing space for a large drainage-tube at each lower angle. A Listerian dressing was applied the first day; subsequently a corrosive sublimate solution (1 to 1000) was injected through the tubes, and the wounds covered with iodoform gauze and antiseptic cotton. The hæmorrhage was inconsiderable. The first operation lasted a little less, the second rather more, than an hour. Convalescence was rapid, the temperature never rose above 38°, and both wounds healed throughout by the first intention. Two months later two linear parallel cicatrices were visible on the front of the neck, which now measured in circumference thirty-four centimetres (thirteen inches and a half). All trace of vascular dilatation had disappeared; respiration, deglutition, and general health were perfectly restored. The tumours weighed 350 centigrammes, and were microscopically examined by Professor Bizzozero. The left tumour was formed of a stroma of connective tissue, more abundant than the stroma of the normal thyroid, of hyaline aspect, and containing numerous anastomosing tubules covered with a single layer of epithelial cells; some of the tubules were dilated, and contained a colloid substance. The right swelling consisted of several zones of rather loose connective tissue, containing a large number of alveoli of various sizes, round or elongated, lined with simple tesselated epithelium and filled with granular masses or colloid substance, recalling the structure of common adenoma of the thyroid. In other parts the alveoli were smaller and more elongated, with the lumen proportionately reduced and obliterated in some points, so that the soft connective tissue, here and there infiltrated with amorphous matter of colloid aspect, appeared traversed by solid cords which frequently anastomosed. This was regarded as the form of adenoma most closely approaching the structure of cancer, and in reality not separated by a defined limit from the class of cancerous tumours.

RIVER POLLUTION IN SPAIN.

THE more closely we investigate the recent cholera epidemic in Spain, the clearer becomes the connexion between the water-courses and the districts affected. Under such circumstances the necessity of a Rivers Pollution Act is very obvious. If arguments were wanting in favour of such legislation, we might point to the town of Granada. Of all the large towns in Spain, none suffered so severely; and yet it is possible that the epidemic might have been avoided if the river that passes through this ancient city had been protected by a law rigorously applied. Some ten miles further up the river, just where the stream called the Aquas Blancas joins the Genil, there are some large paper-mills. A part of the water is used for the paper manufacture, and in the dry summer months all the water passes through the mills. The roughest chemical tests suffice to show the impurities resulting. The water is somewhat clearer before reaching Granada, but it is still utterly unsuited for drinking purposes. In spite of this, there are two intakes of drinking-water below the factory—namely, the canals, or *acequias*, Del Candil and Real. It should further be noted that the first cases of cholera at Granada occurred in the districts supplied by these canals, for there are three other sources of water used in the town. The general insanitary condition of Granada is such as to readily account for the rapid spread of cholera when once introduced; but perhaps we have in the connexion between the paper-mills and the potable water the origin of its first appearance. The rags employed for the manufacture of the paper were imported from the province of Valencia, where the cholera had been raging for some time. The unpacking and sorting of such unwholesome and filthy wares on the banks of an uncovered stream may well have contaminated the water. Indeed, this obvious danger caused considerable agitation

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at the time. The inhabitants of Granada clamoured to have the mills closed. This undoubtedly would have been done had they not belonged to the German consul; and the incident relating to the Caroline Islands had already sufficiently embittered the relations between Spain and Germany. When, however, Granada became itself a source of infection, the inhabitants altogether failed to take any precautions for preventing the further pollution of the river as it passed through their town. Together with the Darfo, the Genil forms the main sewer of Granada, and yet further down on its course there are numerous villages and towns whose inhabitants drink its waters. This river consequently carried the cholera through the province of Granada, and even into the province of Cordova. One after another the villages and towns on either bank were invaded by the dread disease, the town of Loja, with its 12,000 inhabitants, alone enjoying comparative immunity. Here there were only two or three cases a day, the maximum being seven cases; but the people were not in the habit of drinking the waters of the Genil; they had a different and a pure supply. Similar illustrations of the fatal effects resulting from river pollution will be found throughout Spain: and there can be no difficulty whatever of establishing the necessity of stringent legislation on this subject.

LITHÆMIA, OXALURIA, AND PHOSPHATURIA.

ARE there such things as lithæmia, oxaluria, and phosphaturia? If so, are they mere accidents, or are they to be associated with a diathesis? Has each a separate significance and diathesis, or do they run into each other and interchange? Which is the organ or organs most at fault? Is it the nervous system or the digestive system, or that greatest of all sinners, the liver? What are the relations of such states of the urine to nervous symptoms, such as vertigo and palpitation, to hysteria, to flatulence, to rhematism, to gout? Such are the kind of questions which have been discussed in a very interesting paper by Dr. C. L. Dana, at a meeting of the Practitioners' Society of New York, and in an equally interesting and well-sustained discussion which followed, and which has been reported in the New York journals. We can only indicate the principal points in the views of Dr. Dana. He thinks the term "oxaluria" might be dispensed with, and that oxaluria is oftenest only an indication of lithiasis. In about one-fifth of the cases showing exaggerated nerve-irritability he has found evidence of over-acid urine, with excess of urates, and benefit has followed anti-lithic treatment. In some cases, even where the urine was cloudy and feebly acid, he has found on analysis—and he insists on careful analysis of the urine in such cases—that there was in reality a small amount of phosphates and an excess of urates. We certainly do meet in practice now and again a case with flatulence, vertigo, palpitation, perhaps retching, great distress and fear, and probably depression, in which the urine is excessive, alternately loaded with phosphates, and charged with coarse crystals of uric acid. Dr. Dana gives the case of a married woman aged fifty, who complained of great nervousness, confusion of mind, irritability, and depression. She had no organic disease anywhere. Her father died insane; her mother was rheumatic; of seven brothers and sisters nearly all were rheumatic, but had no nervous troubles. She had some muscular pains. Her urine was cloudy with phosphates, neutral. On precipitation with Teissier's solution the phosphates were below normal, the urine, on the first test, acid, sp. gr. 1022, with an excess of phosphates and a slight excess of urates. Under bicarbonate of potash there was slight improvement. In none of his 110 cases, in which urinary and nerve troubles were combined, was he able to get the slightest evidence of developed gout. He finds that in cases of neurasthenia of the gastric type there is often an excess of uric acid or some rheumatic taint, to which treatment should be directed. Phosphaturia, so-called, he seems more doubtful about, and when it does happen regards it as due to either a peculiar diet or insufficient innervation of the digestive organs, to be treated by mineral acids, strychnine, &c. But in the vast majority of cases phosphaturia is only an evidence of indigestion. Not only in Dr. Dana's paper, but in the discussion which followed, the thing which strikes us most is the praise given to a nitrogenous diet and the regulation of the liver—an organ for which Dr. A. A. Smith said his respect was constantly increasing.

A LIQUOR LICENCE FOR THE EAST LONDON PEOPLE'S PALACE.

THE question whether a liquor licence should be added to the other attractions of the People's Palace for East London has not been asked too early. There can be little doubt that the answer to this question will have an important bearing upon the future of the institution. The founder's intention, also, with regard to such a question should not, if we understand aright the object of the Beaumont Trust, be difficult to determine. The idea evidently is that a centre of culture combined with recreation should be formed for the proper benefit of a large body of the public, especially the artisan public, of London. It recognises the fact that the national intelligence requires development in every grade of the social scale, and it aims at extending more widely than heretofore the influences which refine life and which commonly come of well-directed education. The accomplishment of these ends would certainly be rather hindered than helped by the introduction of a bar in the proposed Palace. Experience testifies in favour of abstinence as a guarantee for order. The principle of temperance, moreover, is diffusing itself among all classes, and there is no reason to think that the popularity of this institution would be lessened by its public assertion there. Necessity can hardly be shown for an opposite course. It would certainly be wise to have within easy reach a supply of stimulants to be used in cases of emergency from illness or accident, but any provision for a freer traffic in intoxicants would, in our opinion, be a mistake.

THE ETIOLOGY OF BERI-BERI.

AN interesting contribution to the knowledge of the disease Beri-beri has recently been made by Dr. Lacerda, director of the physiological laboratory in Rio de Janeiro. During a visit to the island of Marajó he investigated with a good deal of care, and with the help of Senor Gustavo Rumbelsperger, an epizootic prevalent there, affecting chiefly horses and pigs, and known by the names "hip pestilence," "quebrabunda," "straddling disease," and came to the conclusion that this was identical with Beri-beri. The first symptom is debility, the animal losing its natural vivacity; it then walks with an uneven gait, its nostrils dilate, and its breath becomes short, and the penis is protruded from the prepuce; it then becomes restless and unwilling to remain in one position, constantly varying the point of support for the hind legs, keeping one of them always at rest. Shortly the characteristic symptom of staggering in the hind legs appears, the horse seeming to have broken his haunches and being unable to control the movements of his hind legs; the abdomen is retracted, the stools voided with difficulty as hard lumps, sometimes covered with mucus; there is also dysuria. Usually there is neither anorexia nor great thirst, and only in rare instances is there any fever. Sometimes paralysis and dropsies appear; ulceration, emaciation, and atrophy are also observed. The disease proves fatal occasionally in a few days, but some horses linger for weeks or months. Twenty-two necropsies were made, the blood being

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dark and viscous, and the viscera dark, swollen, and softened with ecchymoses in the bladder and omentum. The medulla presented sclerosis variously diffused, also a number of cells like the generative organs of ascomycetes and some mycelium. The water of Lake Arary in the island was found to contain a polymorphous microphyte belonging to the group Ascomycetes. This in its original condition, as well as when passed through several cultivations, produced in rabbits, pigs, birds, and monkeys inoculated with it symptoms closely resembling those of the "hip pestilence." The post-mortem appearances and cultivations of the blood in both cases were so similar that Dr. Lacerda was led to believe that the "hip pestilence" is due to drinking the water of the lake. He, moreover, concludes from the symptoms and pathological appearances of Beri-beri that it is also identical with the "hip pestilence" of Marajó. His pamphlet is illustrated by excellent engravings and photographs, and had it been written in some language more read by European medical men than Portuguese, it would probably have attracted some attention.

A SCURVY-STRICKEN CREW.

FOUR of the crew of the *Medusa*, owned by London shipowners, were admitted into the Seamen's Hospital last week suffering severely from scurvy. The ship had been about 150 days on her passage from Cocos Island in the Bay of Bengal, and during the voyage every member of the ship's company had suffered more or less from scurvy, whilst one seaman had died and was buried at sea. It may be suggested that he did not die from scurvy, but as his legs presented the large discolourations characteristic of the disease some two or three days before he died, and as shortness of breath was his most prominent symptom, we may fairly assume that it was probably one of the usual pulmonary complications of severe scurvy that killed him. The crew lived on salt beef and salt pork of variable quality, and bread that towards the end of the voyage was so mouldy and weevilly as to be absolutely uneatable. For some six or seven weeks after sailing eight pounds of preserved meat were served up once a week, and divided among twenty men — i.e., two-fifths of a pound per man once a week. The lime-juice is stated to have been excessively sour. It is quite exceptional for us to record in late years that four men have been admitted into one hospital with this disease from a British ship, and we hope that the Board of Trade will not stop at merely sending a medical inspector to inquire into the circumstances. There cannot be a doubt that great neglect or carelessness must have existed in provisioning the vessel for the homeward voyage, and it is most unjust to the crew that the question of responsibility should be quietly allowed to drop.

ENTERIC FEVER AT SUAKIM.

THE etiology, nature, clinical course, and pathology of enteric fever and its subtropical associates formed the ground for an interesting discussion on Dr. J. E. Squire's paper read before the last meeting of the Royal Medical and Chirurgical Society, which occupied the whole evening. Army medical men were to the front, and some valuable material was contributed, especially by Dr. Marston, as well as some weighty remarks on the nature of the diseases by Dr. Broadbent. The interest chiefly centred about the pathological nature of a disease or diseases avowedly possessing some clinical similitude. It appears to be not improbable that we are really concerned with at least two distinct affections. Notwithstanding that on this point a diversity of opinion prevails, we must give our adhesion rather to the view put forward by Dr. Broadbent, who believes that a typho-malarial fever exists distinct and separate from typhoid fever. The view that the so-called typho-malarial affection is a greatly modified form of enteric fever is a hypothesis worthy of entertainment, though, on Dr. Broadbent's showing, the clinical course of each malady, though having a certain resemblance in the protracted high pyrexia, differs nevertheless in many particulars, while the post-mortem phenomena have a marked contrast in the absence of intestinal ulceration in the one case, and its presence in the other. In his paper Dr. Squire appeared to show that the enteric disease at Suakim chiefly attacked those soldiers who had resided for some time in the district, but Dr. Marston brought forward some weighty facts, lending powerful support to the view that recent arrivals in an infected district were most prone to take the disease, and that age exercised considerable influence in the same direction. We do not appear to have arrived at any further knowledge on the vexed question of the mode of origin and dissemination of typhoid fever, though one speaker emphatically adopted what he called the military as opposed to the civil view, that enteric fever was frequently of spontaneous origin. In this respect he had the support of the authority of the late Dr. Murchison, whose name of "pythogenic fever" still rings in the memory of those who follow the teaching of this master on the subject of continued fevers. Whether the cause of malarial fever and that of enteric fever fuse in a sort of chemical fashion to produce in the human body a new kind of disease is a moot point. In this regard Dr. Broadbent, confining himself to the nature of the diseases, and believing that at least two affections were in question, expressed no positive opinion as to the etiology of the typho-malarial disease.

FOREIGN MEDICAL APPOINTMENTS.

DR. HIS, Professor of Anatomy in Leipsig, and Dr. Gegenbaur, Professor in Heidelberg, have been elected Corresponding Members of the St. Petersburg Academy of Sciences. Dr. Furbringer of Vienna has been selected out of twenty-four candidates as successor to Dr. Riess at the Municipal Hospital in Friedrichshain, near Berlin. Dr. Joh. Janosik has been appointed Professor of Histology and Embryology in the Czechish Medical Faculty of Prague. Dr. Sattler, Professor of Ophthalmic Surgery in Erlangen, has accepted a "ruf" to Prague. Professor von Recklinghausen, of Strasburg, has been elected a Corresponding Member of the Berlin Academy of Sciences.

POLLUTION OF RIVERS.

A DEPUTATION last Friday waited on the Lord Mayor to request the use of the Mansion House for the purpose of holding a public meeting on the subject of rivers pollution. The Lord Mayor, in consenting, stated that the matter was of immense importance, that every day there was emptied into the Thames at Crossness from 80,000,000 to 120,000,000 gallons of sewage matter, and that rivers should be as free from pollution as practicable. He decided that the meeting should be held on Wednesday, March 10th. In the meantime the Lea Conservancy Board have not been idle, but have proceeded in the Hertford County Court against the Ware Board of Guardians, the rural sanitary authority of that district, for allowing sewage to go from Hoddesden Sewage Farm into a ditch or water-course, a tributary of the river Lea. The decision of his Honour Judge Abdy is of much importance as showing that the Conservancy Board have very considerable powers for the prevention of the pollution of that river. The sewage, it was proved in evidence, was conveyed to a farm owned by the sanitary authority but leased to a farmer, and which is bounded by a ditch. The sewage escaped from the ditch into three channels, and

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thus into the Lea, but these channels were not the property of the sanitary authority. It was argued on behalf of the latter board that they were not responsible on this account, and also because the farm was not in their immediate possession, but his Honour, in giving judgment on these and other minor points, decided against them, and made an order requiring them to abstain from committing the nuisance within two months.

RECURRENCE OF TYPHOID FEVER AT KIDDERMINSTER.

A RECENT recurrence of typhoid fever at Kidderminster has been associated with the discovery of conditions affecting the water-supply of the town, which are of serious importance. It will be remembered that when the town was last year visited with the disastrous epidemic on which we commented at some length, it was not found possible to state with certainty what relation the water-supply had had to the outbreak. The town exhibited so many of the conditions with which typhoid fever is habitually identified that suspicion attached to many other things besides water, and it is certain that some of these, such as the state of the sewers, afforded ample means for the dissemination of the infection when once introduced. But all along there were grave grounds for fearing that the lower well might have become polluted by means of circumstances connected with the neighbouring sewage tanks. The lower well was not originally intended to serve as a well; it was indeed a "sump," to take away water from the vicinity of the sewage tanks. But as nothing definite could be discovered concerning it in relation to the epidemic, the well was not abandoned, but it was tubed, and the space outside the tube was filled in with concrete, pending the provision of a supply which should be above all suspicion, and which had been recommended by Dr. Parsons in his report to the Local Government Board. Since then, however, no special steps appear to have been taken to provide such a supply, and the well water being again used, it appears that some fresh excavations have led to the discovery of an old drain, twenty feet below a footpath by the side of the well, and this drain is stated to have contained a quantity of black matter resembling sewage. Once again the supply has been stopped, and Dr. Parsons, as also Mr. A. Taylor, of the Engineering Department of the Local Government Board, have visited Kidderminster with a view of ascertaining what is the true significance of the discovery which has been made. Even now it is by no means certain that the continuance of typhoid fever in Kidderminster is due to the use of this water; indeed, so far we do not gather that the distribution of the cases has any definite relation to the distribution of this special water-supply. It must also be remembered that, in view of the sanitary circumstances of Kidderminster, as revealed by Dr. Parsons, there is nothing striking in the recurrence of cases of typhoid fever after such an epidemic as the town suffered from. Indeed it is most difficult, when hundreds of centres of infection have been scattered about a town, to get rid of the possibility of such recrudescences as have occurred in this case. But one thing appears tolerably certain, and that is that the relation of this lower well to the sewage works and to certain drains is such that no one can say that the water-supply is not subject to the risk of pollution, and under the circumstances it cannot be right to go on supplying such a water to the population. The duty of the Town Council is to supply the inhabitants with a wholesome water, and the mere fact that chemical analysis has proved to [illegible] wholesome is no reason for continuing to receive the supply from this well [illegible] of the dangerous surroundings, and of the conditions already discovered in its immediate neighbourhood. Dr. Parsons from the first urged the Town Council to abandon this suspected well, and to procure a supply which should be free from all risk of pollution. No delay that can be avoided should take place in giving effect to this recommendation.

ATTENDANCE BY UNQUALIFIED ASSISTANTS.

THE Leeds papers contain the report of a decision by the County Court judge in several cases in which a practitioner, Mr. H. A. Allbutt, was the plaintiff, who sought to recover charges for medical attendance which had been chiefly paid through an unqualified assistant, living at a separate house at Hunslet. The name on the house was that of the unqualified assistant, and the house is really his (Mr. W. H. G. Bowell's), and not that of Mr. Allbutt, who lives in Leeds. The bills were made out in the name of Mr. Allbutt, and he was supposed to see serious cases. The judge ruled that the charges by Mr. Allbutt could not be recovered, because it was only a fully qualified man who could recover, and that must be when he practised himself, and did not carry it on by living away from the place. This decision can surprise no medical man after the severe way in which both the Medical Council and the Courts have regarded a system of the kind involved in the above arrangements. The case is in one respect not so bad as some. The assistant's name was boldly placed over the house, so that people had the means of knowing that they might expect to be attended by him and not by Mr. Allbutt. But it is clearly possible that many people might be deceived into thinking that Mr. Bowell was a qualified man. In one of the cases Mr. Allbutt had not seen the patient at all. In others he had seen them several times. But in all the cases the judge gave a verdict for the defendant, and described the practice as illegal.

LEAD-POISONING BY HOUSEHOLD UTENSILS.

THE German Parliament has now under consideration a Bill which is intended to regulate the employment of lead in the manufacture of cooking and other domestic utensils, and so to diminish the risk of poisoning by that metal. The provisions of this measure certainly do not err on the side of leniency. They forbid the use of vessels containing more than 10 per cent. of lead in their composition for the above purposes. No alloy with over 1 per cent. may be used in coating iron articles used in cookery. Solder may consist of lead to one-tenth of its amount, but no more. Enamels into which lead enters are treated with equal stringency. The effect of this Bill, if it be passed, will be to obliterate the legal existence of pewter and of soft solder as at present made, since these alloys contain from one-half to one-fourth of their weight of lead. One fact which it brings into prominence is that lead-poisoning in Germany appears to arise from other causes besides those to which it is commonly attributed in this country. Cases of this kind among ourselves are usually found in the persons of those who are actually engaged in handling lead or its compounds in their daily occupation. Plumbers, painters, glass-blowers, glaziers, potters, and enamel-card makers furnish the majority of those who suffer from plumbism. When this disorder appears in the household, new paint in the walls or the lead work of the water service affords a clue to its detection. It is comparatively rare to find in these days that pewter pots or cooking utensils are at fault. This may be because glass is used on the whole far more frequently than pewter in the liquor trade; while in the kitchen those vessels the contents of which are most likely to become contaminated with lead in the solder—such, for example, as preserving pans—are usually made of brass or copper (which is kept well burnished), and present a relatively trifling soldered surface, or are lined with porcelain. The water

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used in cooking also acts as a protective, since the lime salts contained in it tend to prevent the solution of lead. The proposed German legislation on this subject is very perfect in theory so far as it goes. Possibly it may be called for by the teaching of experience. In this country it would probably be found to be needlessly severe, and would not cover the chief causes of the evil which it is intended to meet. We do not see how it can do this even in Germany, unless measures of equal rigour be adopted to control the use of lead in manufactures and in its other domestic applications. The introduction of these further restrictions might fitly exercise the judgment of our own as well as foreign legislators.

THE SURGICAL TREATMENT OF ACUTE NECROSIS.

THE diseases of bone occurring before the growth of the body is completed, or at least before the bones themselves have attained their ultimate length, appear to possess more interest than similar diseases in the adult, not only on account of their greater physiological bearings, but from their pathological and clinical importance. The discussion on Mr. Bernard Pitts' paper, read before the Medical Society of London, showed the keen interest that surgeons take in these diseases, as well as the impossibility of estimating certain pathological conditions pertaining to the osseous lesion. A knowledge of the depth to which the necrosis extends is far more difficult of attainment than an estimate of the extent or length of bone involved. The first case narrated by Mr. Pitts illustrates the advantage of opportune but conservative surgical interference in cases of limited necrosis when the patient's constitutional powers are flagging, as well as the circumstance that the removal of even a considerable amount of new bone need give rise to but little apprehension as to the ultimate successful regeneration of a large part of the shaft of the tibia. As Mr. Pearce Gould remarked, we needed some simple means for appraising the depth to which necrosis extended; but still, in Mr. Pitts' case, it was a question of local treatment not for local ends but for constitutional welfare, for under expectant treatment the patient was slowly sinking; and so the consideration of a little living bone, more or less, was not a matter of the first magnitude. Whether in some cases of a more chronic sort and with less lowering of general health, the adoption of M. Ollier's method of trephining the diseased bone in attempting to estimate the situation of the line between living and dead bone in the thickness of the diaphysis can be made practically available for surgical purposes appears to admit of some doubt, and there is always the chance that fresh absorptive processes may be set up, with their pyæmic outlook.

THE SANITARY STATE OF MILE-END.

MR. T. HAMER, of the Mansion House Council, challenges the accuracy of certain statistics which the vestry recently submitted at the public inquiry into the sanitary condition of Mile-end Old Town, and from which it appeared that, according to Dr. Corner's last annual report, the death-rate from zymotic diseases was only 1·2 per 1000. Dr. G. B. Longstaff, whose accuracy as a statistician is above all suspicion, has reported to the Mansion House Council that the rate should properly be 3·6 per 1000. The difference appears to be due to several causes. According to Mr. Hamer, Dr. Corner in one of his tables states that there were no deaths from enteric fever, whereas elsewhere he admits that there were 16 from typhoid fever, which everyone nowadays knows is the same disease. Then, again, the deaths which occurred amongst Mile-end residents in the Metropolitan Asylums and hospitals are apparently excluded from the figures on which Dr. Corner's rate was founded. But apart from this, Dr. Longstaff shows that, whereas Dr. Corner's figures only show 140 deaths from the so-called zymotic diseases, the Registrar-General's returns show 350. This difference is largely due to the fact that Dr. Corner has not included diarrhœa as a zymotic disease. This, of course, he is entirely at liberty to do, for there is hardly any more unfortunate term in use than that which lumps together such diseases as diarrhœa, whooping-cough, &c., under one heading, whilst all skilled observers know that in so far as sanitary circumstances are concerned they have nothing in common. Still, where comparisons are made the same diseases must, of course be dealt with.

MYCETOMA AND ACTINOMYCES.

AT the last meeting of the Medical and Physical Society of Bombay, held on Jan. 8th, the President, in exhibiting a patient affected with mycetoma (ochroid form), took occasion to point out the similarity of aspect as regards form, size, differentiation of parts, and general arrangement of the characteristic pale particles of mycetoma, as compared with a representation of the actinomyces body given in the English translation of Ziegler's Pathological Text-book (vol. ii., p. 243), upon the authority of Dr. Sims Woodhead. Several members of the Society, including the past and present teachers of pathology in the Grant Medical College, after scrutinising the specimens and drawing, agreed that such resemblance was indubitable. A note was also handed in briefly summing up the main points of likeness and difference between the two diseases in question, and stating that in the pale mycetoma bodies neither bacilli nor other defined bacterial organisms were visible after staining by the usual methods. Should subsequent inquiry establish the identity between one form at least of actinomyces with a frequent variety of mycetoma, it will be worth recollecting that the fungus disease of India was identified in 1859 (*vide* Dr. V. Carter's essay in the Society's Transactions for 1860), the corresponding parasitic affection of Europe being made known in 1877-79.

THE MEDICAL COUNCIL AND THE ROYAL COLLEGE OF SURGEONS IN IRELAND.

THE Royal College of Surgeons in Ireland have again elected Mr. Rawdon Macnamara to represent the College in the General Medical Council. His election was not without opposition. We do not always agree with Mr. Macnamara, who believes too absolutely in all existing institutions, and especially in his own college, and all its regulations. But such a quality does not explain the opposition to his election, the failure of which, we fancy, most of Mr. Macnamara's colleagues in the Council will not regret, for though always ready to hold his own, he does so with uniform good temper and much ability.

MICROBES OF INFECTIVE OSTEO-MYELITIS.

M. BERTOYE has reinvestigated this subject, and discovered the staphylococcus pyogenes albus, which he has succeeded in cultivating in bouillon and in transforming into coccus aureus. By intravenous inoculation in a rabbit osseous lesions and purulent disseminated foci have resulted. Cultivation of the morbid products of the induced disease led to the development of the orange-coloured micro-organism. He believes that the microbe of osteo-myelitis can be made to give rise in bone and other tissues, and especially the skin, to chronic suppurations without local or general reaction—in other words, to an attenuated form of the disease. The microbe takes on the white form in some cases of the attenuated malady. The staphylococcus albus may be transformed into the staphylococcus aureus by being sown in and passing through different animal media.

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These cultivations have been shown by M. Rodet to increase the vitality and the virulence of the micro-organism, and it seems reasonable to connect this augmentation with the change in colour. The modification in virulence and colour of the staphylococcus albus may possibly be due to a massing together of the microbes. It will be perceived that on M. Bertoye's showing the microbe of osteo-myelitis gives rise to an attenuated form of the disease when it presents itself under the white aspect and, consequently, when the density of its colonies is least marked.

SUBCUTANEOUS INJECTION OF OXIDES OF MERCURY.

SUBCUTANEOUS injections of the black and red oxides of mercury have been recently tried as an anti-syphilitic treatment in the Lazarus Hospital at Warsaw by Dr. von Watraszewski, who has charge of the syphilitic wards. He finds that no inflammation and scarcely any pain is produced, no abscess having occurred after any of the 200 injections he has performed. The therapeutic results were most satisfactory both in recent cases and in those where the disease was of old standing.

THE DARLINGTON HOSPITAL.

A CORRESPONDENT writes:—"The whole of the honorary staff of the Darlington Hospital have sent in their resignations to the committee, owing to the extremely unsatisfactory condition of the nursing department, and the refusal on the part of the committee to take necessary measures to ensure reform. There have been several changes of house-surgeons during the last twelve months on account of the same difficulty."

ANTIPYRIN IN PHTHISIS AT DAVOS.

DR. HOEDMAKER, a Dutch physician, practising at Davos Platz, has made a number of observations on the effect of antipyrin on phthisical patients, from which he has come to the conclusion that patients not treated with antipyrin are more comfortable than those who are taking it, though these latter have less fever. He has found salicylic acid most valuable in phthisis, especially when combined with arsenic.

CHOLERA IN SPAIN.

THERE has for some months past been rumours of the continued prevalence of cholera in different parts of Spain, and now definite intelligence comes from Gibraltar to the effect that several fatal attacks have occurred at Tarifa, the most southern point of the peninsula.

DR. DIPLOCK, coroner for West Middlesex, has just forwarded to the Home Office his annual report of the number of inquests and an analysis of the verdicts for the year 1885. During that period there were 1091 cases reported to him, in 250 of which, after investigation, he did not consider inquests necessary. The number of inquests held was thus 841, and these are classified as follows:—On persons under one year, 250; above one year and under sixteen years, 152; above that age, 439. The amount expended in fees &c. was £1623. The population of the forty-nine parishes and districts comprising the Western Division of Middlesex is about 629,000.

AN epidemic of typhus fever, believed to be largely the result of squalor and destitution, has broken out in a district of Leeds inhabited by the poorest class. The officers of the sanitary department have adopted precautions to check the disease.

A FEW weeks ago we called attention to the sad death of a lady at Sunderland through swallowing a set of false teeth, and cautioned the users of these appliances against such accidents. Another death from the same cause—that of a gentleman at Dublin—has just occurred, and again we urge, on the joint grounds of cleanliness and safety, the removal of such teeth at the time of retiring for the night. It is the duty of medical men, no less than of the dentist who supplies these articles, to point out to the patients the advisability of such procedure, and the dangers attending a neglect of so plain a duty.

A NEW Russian journal devoted to surgery is about to be brought out under the auspices of Professors Sklifosofski and Tauber. The editorship of the journal *Practicheskaya Meditsina* (Practical Medicine), vacant by the decease of Dr. Hirschfeld, has been undertaken by Dr. M. J. Afanasyeff, private lecturer in the St. Petersburg Military Medical Academy.

ON Monday week last, February 1st, at the London Hospital, Mr. Frederick Treves removed from a woman, aged thirty-five, the left kidney, together with both ovaries—the kidney for hydronephrosis, the ovaries for multilocular cystomata. The patient, we understand, is doing remarkably well.

ON the 10th inst., Dr. Angus Macdonald expired at his residence in Edinburgh. The deceased, who was fifty years of age, was four years ago compelled for nearly twelve months to abandon all professional duty and seek repose in the south of France, and since then he has, it is supposed, overworked himself.

PROFESSOR C. G. SANTESSON, one of the most renowned surgeons in Sweden, who was attached to the Carolina Institute in Stockholm, has just died, at the age of seventy-six, from cardiac disease. The deceased professor studied in Stockholm, Upsala, and Copenhagen.

MR. R. MONTGOMERY M.R.C.S., Governor of the Apothecaries Hall, Ireland, has been appointed Secretary of that body, in place of Dr. E. H. Leet, resigned.

DR. LUCHSINGER, Professor of Physiology in Zurich, has died at Meran. It is expected that Dr. Gaule, who has been lecturing for him, will be elected.

MR. THOMAS WARNER, J.P., a well-known and widely respected surgeon, died on the 7th inst. at his residence in Cirencester, at an advanced age.

THE Prussian Order of the Red Eagle, third class, has been conferred on Dr. Bergmann, Professor of Surgery in Berlin.

DR. HORNER, Professor of Ophthalmology in Zurich, has been obliged by ill-health to give up his post.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—The annual meeting of the governors of this institution was held on the 10th inst. The number of new patients during the past twelve months was 6630, and of these 129 received in-door treatment. Since the institution of the charity in 1857, 103,901 patients have been relieved, and, notwithstanding the strictest economy compatible with efficiency, the expenditure during 1885 considerably exceeded the income. The committee earnestly plead for continued and increased funds.

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MR. T. PRIDGIN TEALE ON FIREPLACE CONSTRUCTION.

SIR ROBERT CHRISTISON in his autobiography, which we trust soon to notice, shows us how narrowly the science and art of surgery escaped losing the genius of Syme by his aptitude for practical chemistry. The discourse of Mr. Teale on Friday night, at the Royal Institution, shows how easily the surgical art might have lost him had he given early reins to his mechanical faculties. The subject of firegrates may seem one somewhat alien to the surgical mind, but if the studies of Mr. Teale lead to less poisoning of the atmosphere by the products of coal consumption, and to greater warmth of our houses in inclement weather like this, he will have earned the gratitude of the public and of invalids; and if he reduces the cost of coals by one-fourth, he will deserve the thanks of all who in these hard times have difficulty in making ends meet. The audience, presided over by Lord Bramwell, and including Sir William Bowman and other distinguished persons, was numerous and most attentive. We may take this opportunity of saying that Mr. Teale's fireplace may be seen at Nelson's, 10, Royal Arcade, Old Bond-street. We shall best describe Mr. Teale's views as to the principles of domestic fireplace construction by quoting his rules, which he states with great brevity, and which are as follows:—1. As little iron as possible is to be used. 2. The back and sides of the fireplace should be of brick or firebrick. 3. The firebrick back should lean over the fire, and not lean away from it. 4. The bottom of the fire, or grating, should be deep from before backwards, probably not less than nine inches for a small room, or more than eleven inches for a large one. 5. The sides or coverings of the fireplace should incline to one another, as the sides of an equilateral triangle. 6. The lean-over at the back should be at an angle of 70°. 7. The shape of the grate should be based on a square described within an equilateral triangle, the size to vary in constant proportion to the side of the square. 8. The slits in the grating, or grid, should be narrow, perhaps a quarter of an inch for a sitting-room grate and good coal, and three-eighths of an inch for a kitchen grate and bad coal. When the slits are larger they allow cinders to fall through—in other words, waste. 9. The front bars should be vertical, that ashes may not lodge and look untidy, narrow (perhaps a quarter of an inch in thickness), so as not to obstruct heat, and close together (perhaps three-quarters of an inch apart), so as to prevent coal and cinders from falling on the hearth. 10. There should be a rim an inch or an inch and a half in depth round the lower insertion of the vertical bars. 11. The chamber under the fire should be closed by a shield or economiser. 12. Whenever a fireplace is constructed on these principles, it must be remembered that a greater body of heat is accumulated about the hearth than in ordinary fireplaces, and corresponding care taken by an ashpan against heating wooden beams, &c. This ash-pan should have a double bottom, the space between the two plates being filled with artificial asbestos, slagwood two inches in thickness. 13. A fireplace on this construction must not be put in a party wall where there is no projecting chimney-breast, lest the heated back should endanger woodwork in a room at the other side. The benefits aimed at by Mr. Teale are:—1. Economy of fuel. 2. Reduction of soot. 3. Reduction of dirt refuse. Mr. Teale astonished his audience by showing two small glass bottles containing the small ash residue of the coal burnt in his fireplaces, which consisted not of cinders, but very fine powder. As to the saving of coal, the general manager of the Leeds Infirmary estimates that in that institution it amounts to a sixth, or 100 tons in the year. We have only space left to say that from some observation of Mr. Teale's own fireplaces, and some experience of them, we believe he has got hold of the right principles and in a large measure of the details. He was careful with the true candour of a scientific man, to show how curiously his discoveries were anticipated last century by that remarkable man Count Rumford, who did study medicine, but, unlike Syme and Teale, drifted into other pursuits and was lost to the medical art.

HEALTH OF THE UNITED STATES ARMY.

FROM the Report of the Surgeon-General of the United States Army, we learn that the general health of the troops has been exceptionally good. The respiratory organs were most frequently affected, there being 83 cases of pneumonia amongst 24,035 men, the mortality from this disease being 25 per cent. of the cases. The report tends to show that the native-born American soldier has a greater power of resisting disease and death than the foreign members of the Army. Of these the mortality is greatest amongst the Irish, the Germans coming next, and the English last. The money value of the medical and hospital supplies for the fiscal year, ending June 30th, 1885, was $171,206. In view of the expected approach of the cholera, an appropriation of $250,000 is asked for, for the ensuing year—this increase to provide for emergencies that may arise. During the months of April, May, and June, an Army Medical Board was in session in New York city, and examined nineteen candidates for the position of assistant-surgeon, of which number three were found qualified and sixteen rejected. At present there are no vacancies in the corps. A list is given of the medical officers who have died, at the head of which is Col. and Brev. Brig. Gen. Charles McDougal.

The Surgeon-General recommends the regular organisation of a corps to provide trained cooks, nurses, and attendants for the service of army hospitals. The present system of hospital service by details from the troops garrisoning a post is found to be unsatisfactory and objectionable. He also urges the necessity of providing ice machines for the extremely hot regions of Texas and Arizona, of sufficient capacity to liberally supply the garrison, as a measure not so much of luxury as of necessity for the comfort of the troops and the treatment of the sick. In the matter of hospital stewards, he recommends the enactment of a Bill, providing for two classes—those appointed by the Secretary of War and permanently attached to the Medical Department to constitute the first class, and those appointed by the written order of a commanding officer upon the recommendation of a medical officer to constitute the second class; the monthly pay of the former to be fifty dollars, and the latter twenty-five dollars.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 6239 births and 3872 deaths were registered during the week ending February 6th. The annual death-rate in these towns, which had been equal to 23·8, 22·8, and 22·1 per 1000 in the preceding three weeks, was last week 22·2. During the first five weeks of the current quarter the death-rate in these towns averaged 22·6 per 1000, and was 2·2 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 13·4 per 1000 in Brighton, 16·0 in Halifax, 17·7 in Bristol, and 18·3 in Hull. The rates in the other towns ranged upwards to 25.0 in Derby, 26·8 in Blackburn, 27·1 in Manchester, and 27·9 in Portsmouth. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had declined in the preceding four weeks from 448 to 360, were 376 last week; they included 175 from whooping-cough, 76 from measles, 35 from scarlet fever, 35 from diarrhœa, 30 from "fever" (principally enteric), 23 from diphtheria, and only 2 from small-pox. No death from any of these zymotic diseases was recorded during last week either in Wolverhampton or in Halifax; whereas they caused the highest death-rates in Nottingham, Plymouth, and Bolton. The greatest mortality from whooping-cough occurred in Portsmouth and Bolton; from measles in Nottingham and Plymouth; and from scarlet fever in Preston, Leicester, and Birkenhead. The 23 deaths from diphtheria in the twenty-eight towns included 14 in London, 2 in Liverpool, and 2 in Sheffield. Small-pox caused but 1 death among the residents of London and its outer ring, 1 in Liverpool, and 1 in Birkenhead; while no death from this cause occurred in any of the twenty-five other large towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around

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London, which had declined in the preceding twelve weeks from 90 to 22, had further fallen to 18 on Saturday last, and but 1 new case was admitted to these hospitals during the week. The Highgate Small-pox Hospital contained 3 patients on Saturday last, one case having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 534, 477, and 478 in the preceding three weeks, were 479 last week, and were, in spite of the cold weather, as many as 166 below the corrected weekly average. The causes of 85, or 2·2 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Sunderland, Brighton, Bolton, and in five other smaller towns. The largest proportions of uncertified deaths were registered in Oldham, Bradford, and Leicester.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 23·9, 23·1, and 22·4 per 1000 in the preceding three weeks, further declined to 21·3 in the week ending February 6th, and was 0·9 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 13·3 and 16·5 in Leith and Paisley, to 20·3 in Aberdeen and 26·1 in Glasgow. The 527 deaths in the eight towns showed a further decline of 26 from the numbers in recent weeks, and included 9 which were referred to whooping-cough, 6 to scarlet fever, 6 to diarrhœa, 5 to diphtheria, 3 to "fever" (typhus, enteric, or simple), 3 to measles, and not one to small-pox; in all, 32 deaths resulted from these principal zymotic diseases, against 40, 36, and 37 in the preceding three weeks. These 32 deaths were equal to an annual rate of 1·3 per 1000, which was 0·9 below the mean rate from the same diseases in the twenty-eight English towns. The deaths referred to whooping-cough, which had been 6 and 13 in the previous two weeks, declined again last week to 9, all of which occurred in Glasgow. The 6 fatal cases of scarlet fever were also all returned in Glasgow, and also showed a decline from the number in the previous week. Of the 5 deaths referred to diphtheria, exceeding the number in the previous week by 2, 3 occurred in Glasgow, 1 in Aberbeen, and 1 in Leith. The fatal cases of "fever," measles, and diarrhœa were considerably below the average numbers for the time of year. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 160 and 150 in the preceding two weeks, further declined last week to 135, and were 54 below the number returned in the corresponding week of last year. The causes of 75, or more than 14 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 33·3, 29·6, and 31·9 per 1000 in the preceding three weeks, rose to 33·7 in the week ending Feb. 6th, and exceeded by no less than 11·5 the mean rate during the same week in the twenty-eight English towns. During the first five weeks of the current quarter the death-rate in the city averaged 31·5 per 1000; the mean rate during the same period not exceeding 22·6 in London, and 18·4 in Edinburgh. The 228 deaths in Dublin last week showed a further increase of 12 upon the numbers returned in the previous two weeks, and included 26 which were referred to the principal zymotic diseases, against 30, 24, and 15 in the preceding three weeks; 15 resulted from whooping-cough, 6 from "fever" (typhus, enteric, or simple), 3 from scarlet fever, 2 from diarrhœa, and not one either from small-pox, measles, or diphtheria. These 26 deaths were equal to an annual rate of 3·8 per 1000, the rate from the same diseases last week being but 2·6 in London and 0·2 in Edinburgh. The fatal cases of whooping-cough, which had been 19, 17, and 13 in the preceding three weeks, rose again last week to 15. The deaths referred to "fever" and to scarlet fever also showed an increase upon the numbers in recent weeks. Seven inquest cases and 4 deaths from violence were registered; and 59, or more than a quarter of the deaths, were recorded in public institutions. The deaths of infants and of elderly persons showed an increase upon the numbers in the previous week. The causes of 42, or more than 18 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

Surgeon-General Howe, Chief of the Medical Department in the Southern District, has just concluded an exhaustive examination of the sanitary condition of the forts and barracks of Portsmouth. Many defects are pointed out in respect of the water-supply, drainage, and the state of the buildings, and in many cases exception is taken to the character of the dietary of the troops.

A recent communication from Coquimbo, Pacific station, contains news of the sudden death of Staff Surgeon John W. Davis, of the *Heroine*. A post-mortem revealed that he died from fatty degeneration of the heart.

INDIA OFFICE.—Deputy Surgeon-General W. A. Thomson, of the Army Medical Staff, has been appointed Principal Medical Officer of the Bombay Army.

ADMIRALTY.—The following appointments have been made:—Fleet Surgeon John Horrocks, M.D., to the *Alexandria;* Fleet Surgeon William J. Wordsworth, to the *Devastation;* Surgeons Christopher Pearson, M.D., and Henry L. Crocker, to the *Excellent;* Surgeons Herbert E. Marsh and W. E. Home, to the *Alexandria;* and Surgeon Edward W. Luther, to the *Hyacinth.*

RIFLE VOLUNTEERS.—2nd Wiltshire: Surgeon George Waylen resigns his commission; also is granted the honorary rank of Surgeon-Major, and permitted to continue to wear the uniform of the corps on his retirement.

Correspondence.

"Audi alteram partem."

THE ROYAL COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—Mr. Macnamara's sympathies are so obviously with those who are striving to bring about a readjustment of the relations existing between the Council of the College of Surgeons and the other constituent members of the body corporate and politic, that it is perhaps somewhat ungracious to quarrel with the means which he employs to carry those sympathies into effect. But I cannot help thinking that both the proposal which he made at the last meeting of the Council, and the letter which he has addressed to yourself, are calculated rather to hinder than to help a speedy and satisfactory termination of the present controversy. He would solve a constitutional problem by an appeal to the possible prejudices of a small and privileged class. Two large general meetings of Fellows and Members have recently affirmed, by overwhelming majorities, that it is desirable, first, that Fellows and Members should participate more largely in the management and affairs of the College; and, second, that no alteration should be made in the constitution or in the relations of the College, or in any of its bye-laws, without the consent of the Fellows and Members; and, at the meeting held on Dec. 17th it was suggested, in accordance with a resolution adopted by the Association of Fellows and accepted by the Association of Members, that *Members* of the College should be directly represented in the Council. To the first and second of these resolutions the Council, as is well known, has replied by a loose and inconsequential negative; to the third it has, as yet, returned no official answer.

Meanwhile, apparently with the excellent intention of expediting matters, Mr. Macnamara moved at the meeting of the Council held on the 14th ult., that the opinion of the Fellows should be ascertained as to "the advisability of Members being allowed to vote for the election of Fellows as members of the Council"; but a majority of the Council declined to consider Mr. Macnamara's motion "until after the report of the Committee on the Conditions of Admission to the Fellowship has been received." It would be difficult for an ordinary mind to discover any connexion between these two propositions; but no great harm need come of the delay, especially if it should be found that the Council was only trying to gain time and opportunity to give an effectual *coup de grâce* to the outrageous proposal

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currently ascribed to one of its members to elect fifty Members of the College annually to the Fellowship, and without examination. The collocation of these two events does, however, serve to illustrate the bipartite character of the Fellowship—namely, its academical and its political side. Only the latter is properly concerned in the resolution passed at the general meetings. Viewed from this standpoint, it is certain that, except on the principle "Whatever is, is right," the Fellows have, neither in equity nor in ethics, a greater claim to be consulted than the Members. It is true, the Charter of 1843 gives to the Fellows a presumptive right to consider themselves the sole electoral body; but the abstract justice of this right has always been impugned. This Charter was obtained in violation of every canon of political honour and probity, and when granted provoked almost universal condemnation and disgust, as contemporary records abundantly testify. Nevertheless, the Fellows do at present monopolise the power of electing the Council, and so far as those who have acquired the Fellowship *by examination* are concerned, it cannot be denied that the monopoly has been obtained by fair and honourable means. But the constitutional rights of the Members, dating back to the foundation of the College, have, and must have, precedence over those acquired, long afterwards, by the Fellows. In morals this is so, notwithstanding the fact that the selfish and self-seeking founders of the College did by misrepresentation succeed in excluding the Members (there were no Fellows then) from exercising any control over the management of the College. To believe that the College was established in order "to promote the study and practice of the science and art of surgery" is a pleasant myth, and, like many other pleasant myths, has no solid foundation. The College was established in order to repair the fortunes and restore the discredited prestige of the Court of Assistants of the defunct Corporation of Surgeons. The evils under which we now suffer are the results of the corrupt constitution transmitted to us by the original Court of Assistants. These evils have at length become intolerable, and cannot any longer be silently endured. The most sweeping reform is necessary, and, as a preliminary to this, it is desirable, and, I believe, indispensable, that the Members should be directly represented in the Council. Apart from the reasonableness and justice of this contention, there are many other considerations which tell against the present dispensation. The order of Fellows is a small and diminishing one, while that of Members is a large and increasing one, the present proportion being nearly sixteen Members to every Fellow. And when in the fulness of time the authorities of medical schools, hospitals, and other public institutions come to realise that the Fellowship of the College is no longer the only criterion of high surgical attainments, and when it is decided to select candidates for public offices upon personal and professional grounds alone, one of the chief inducements to take the Fellowship will be withdrawn, and the numbers will still more seriously decline. Nor need this result be deplored if the Council persist in the policy lately pursued with respect to regulations relating to the admission to the Fellowship. But sooner or later the reduction of the number of Fellows will bring us to that point in the vicious circle from which we originally started, and the Council will become again wholly independent and self-propagating. As it is, the Council is a much less representative body than is commonly supposed. It is nominally elected by the Fellows, who number 1100, but the regulations and conditions of voting are so restricted and prohibitive that the election is practically in the hands of less than one-tenth of this number. For example, twenty of the twenty-four present members of the Council were elected by less than a total of 160 votes each, one member being elected by 101 and another by 103 votes. Surely this is tantamount to being elected by personal and private friends. So also is it with the condition of eligibility to be members of Council; these are so exclusive that even under the most liberal provisions of the most liberal Charter barely 100 Fellows can reasonably be said to be eligible. Not only must the candidate be a Fellow, but he must be a Fellow of fourteen years' standing, be in the *bonâ-fide* practice of his profession of a surgeon, *and not be engaged in general practice*. This reduces the area of selection to a few old or middle-aged surgeons connected with the metropolitan hospitals, and one or two rich or enthusiastic provincial surgeons. And yet a body so unrepresentative, and so out of touch with the bulk of the profession, so ignorant of its wants and aspirations or indifferent to them, arrogates to itself the right to speak and act in the name of the Royal College of Surgeons of England, to approach Parliament, and to interpose in matters of State policy. Nor is this the worst. It tyrannises the profession. At the instigation, chiefly, of an interested group of its members, who, contrary to every maxim of public morals and good government, is allowed, as examiners, to absorb a large proportion of the annual revenue of the College, the Council imposes upon the medical teachers and students of this country regulations and conditions which are too often regardless alike of public convenience and of the interests of medical education and public safety. Further, at this moment the Council is engaged in considering and elaborating a scheme by which, in conjunction with the College of Physicians, it may acquire the powers and privileges of a medical university to grant degrees. And, lastly, the Council has been freely and openly referred to by the managers of the Association for promoting a Teaching University for London as a suitable and proper body to form one of the principal factors of a medical faculty. These contingencies only emphasise the urgent and imperative necessity of a reform of the constitution of the College by a large and intelligent extension of the representative principle, without which the Council can neither secure the confidence of the profession nor the right to speak in its name. It was a consideration of these facts, domestic and foreign, that led me to move the following resolution, which was adopted at a general meeting of the Association of Fellows last May (THE LANCET, May 23rd, p. 963)—namely, "That it would conduce to the welfare of the Royal College of Surgeons, and would tend to promote the interests of medical polity and education, if Members of the College were empowered to take part in the election of members of the Council, provided, first, that no Member shall be eligible to vote until he have been such Member for at least ten years; and second, that the number of members of the Council elected by the Members of the College shall not exceed one-third of the whole Council."

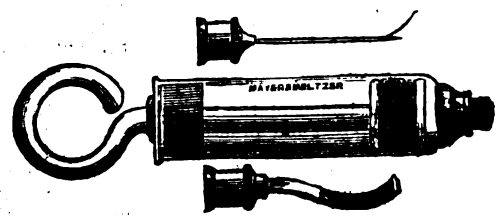
I am, Sir, yours truly,

Harley-street, W., Feb. 1886. J. TWEEDY.

INJECTION OR IRRIGATION IN THE EXTRACTION OF CATARACT; ANTISEPTICS; THE PRESENT POSITION OF THE QUESTION.

To the Editor of THE LANCET.

SIR,—My attention has been drawn by a *confrère* to an article in the number of November, 1885, of the *Klinische Monatsblätter fur Augenheilkunde*, by Dr. B. Wicherkiewiez, entitled "Ueber ein neues Verfahren unreife Staare zu operiren nebst Beitrag zur Augen-antiseptik." The method is practically the same as that introduced by me and advocated in my address on "The Treatment of Immature Cataract" to the Ophthalmological Section of the British Medical Association in Belfast in July, 1884. He removes cortex remaining after expulsion of the nucleus by irrigation with a solution of boracic acid of from 1 to 2 per cent.



strength and of a temperature of 30° C. (86° F.), by means of a bottle with a suitable terminal for introduction within the eye. I used likewise an irrigation bottle with terminal, which I exhibited at the meeting, the fluid I employed being distilled water of about the temperature of the body. He states he has operated on nineteen cases with satisfactory results.

I discarded the irrigation or gravitation bottle, and adopted definitely the method of injection by a scoop-syringe, made for me by Messrs. Mayer and Meltzer, and of which the accompanying woodcut gives a fair representation. This method and its advantages I described in detail at a meeting of the Ophthalmological Society of Great Britain

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and Ireland on October 15th, 1885. (For summary, see THE LANCET, October 24th, 1885.)

Professor Panas of Paris has lately contributed on the subject, as appears by a letter and a communication from your Paris correspondent, both of which appear in your issue of January 16th. The substance of the letter and correspondence is such, however, as to call for remark. Prominence is given to antisepticism, and the injection is only referred to as a means of introducing the antiseptic within the eye. Not a word is said about the object of the injection being to remove cortex. Professor Panas is too able a surgeon to claim for antiseptics all the advantages put forward. It may be good, and it is a distinct addition to our knowledge that we may without risk inject into the eye a solution of 1 part of biniodide of mercury and 20 parts of 90 per cent. alcohol in 20,000 parts of distilled water. The important matter is, however, that by injection within the eye cortex is easily removed, and that cardinal fact must not be put aside by the secondary question of whether pure water or water containing some antiseptic should be used for injection. I hope soon to have the pleasure and advantage of reading Professor Panas' paper, which I have no doubt, judging from the reputation of the author, is a valuable contribution to the subject; but meantime I think it right to put the question in its proper bearing.

I venture to state my conviction, based on a review of my operative experience of the last fifteen years, that the injection, whether of water pure or medicated with suitable antiseptics, to clear out cortex will be found so advantageous as to secure very quickly its general adoption. The advantages are many: a rapid clearing out of the cortex, the removal of cortex, which friction through the lids, pressure, and scoop could not effect; the removal of cortex concealed by the iris; the clearing of the wound and detection of tags of capsule; the diminution of the percentage of loss of vitreous; the shortening of the duration of the operation; less teasing and irritation; less iritis and irido-choroiditis from remnants left in the eye; less regard to maturity, cataracts being mature for the injection operation when immature for others. If the section is large enough for easy expulsion of nucleus, there is no fear about getting out cortex whether the section be large or small, or whether aqueous be freely secreted or not. It is applicable, too, to all sorts of incisions large enough to admit easily the scoop, but I think as a general rule iridectomy should be performed.

With all these advantages we should have less panophthalmitis, suppuration of the cornea, slow healing, iritis, and other accidents after operation. Suppuration and other inflammations in eye surgery depend largely on the amount of traumatism and retention of cortex. We must not ignore, however, the occasional evil influence of septic germs, and I think ophthalmic surgeons are agreed as to the advisability of using antiseptic precautions and antiseptic treatment as far as practicable.

I have used the irrigation method about thirty times and the injection by the scoop-syringe forty-six times. The fluid used—distilled water previously boiled—has not caused panophthalmitis in a single instance. As to whether it may in the long run be better to use an antiseptic solution than pure water I cannot say, but am open to conviction, and after the testimony to the harmlessness of certain antiseptics borne by Dr. Wicherkiewicz and Professor Panas I am ready to try.

The immediate occlusion of the wound by an antiseptic gelatine plaster, proposed and practised by Dr. Galezowski, should be very advantageous. Besides preventing for the time—the most critical time—the introduction of germs from a diseased conjunctiva or lacrymal sac, it restores the anterior chamber, and thus allows the parts involved in the operation to come more quickly into natural relation. With the restoration of the chamber, the capsule is separated from the corneal wound, the capsule, iris, and cornea are no longer in apposition, and internal congestion from the diminution of the contents of the eyeball prevented or lessened. If it be found effectual in promoting early healing of the wound, I anticipate less adhesions of capsule and iris to wound and less internal inflammation.

Whilst ophthalmic surgeons should spare no effort to banish panophthalmitis, it is well to bear in mind that the losses from that inflammation (from 1 to 2 per cent.) are very much less than from iritis and irido-choroiditis, about which we do not write or talk so much.—Yours truly,

Belfast, Jan. 18th, 1886. WILLIAM A. MCKEOWN.

SOUTH AFRICA AS A RESIDENCE FOR CONSUMPTIVES.

To the Editor of THE LANCET.

SIR,—I have just received the following letter from an old friend who left England seven years ago with symptoms of advanced phthisis in both lungs, even to a greater extent than he himself describes; and as it contains some most instructive information for any patients who are suffering from phthisis and wish to go abroad, I have ventured to ask you to publish it *in extenso*, omitting only the personal details. Few doctors or patients appreciate that the up-country districts of South Africa can be so easily reached and have such good accommodation. I might add that Dr. Woolby who was recently drowned while bathing, also derived much benefit from living in a similar climate and following practically a similar plan of life, at Engcobo, in another inland district of South Africa.—Yours faithfully,

JOHN CURNOW, M.D.

George-street, Hanover-square, Feb. 9th, 1886.

The Convalescent Home, West Barkly, Griqualand West, South Africa, Nov. 8th, 1885.

MY DEAR DR. CURNOW,—You will probably be surprised to hear from your old demonstrator and prosector after seven years' of silence. You must think, unless you have come across my name, once or twice mentioned in THE LANCET during the last few years, that I have long ago joined the "great majority." Nevertheless, you will be glad to hear, I know, that I am in the land of the living yet, and, what is more, that I am in the enjoyment of very good—I may say, robust—health. You may remember that when I last had the pleasure of seeing you in London, when I took my final departure for this country, I was particularly ill—a cavity in my right lung, consolidation of the top of the other, combined with profuse and almost daily hæmoptysis, had reduced me to the most miserable condition. I came out here. During the voyage I was more or less ill. No hæmoptysis, but the cough and my general condition were bad. I stayed in Capetown about three weeks; it was cold and wet there, and it did not agree with me. I started to get higher up the country, and arrived in Kimberley, the capital of the diamond fields, 600 miles in the interior. There I commenced practice, and soon made a decent living. Those were good days then: few doctors and big fees. I was there six months, but the dust of the mines in those days, combined with the worry of a general practice in a large town, was not altogether suited to me. I was anything but strong. At the end of six months, my predecessor in Barkly having made what he considered a small "pile," retired and offered his practice to me. I took it and have been here ever since, more or less contented with my lot; more contented than otherwise, for the out-door country life in a splendid climate (for lungs) has made me a different individual with regard to health. I can now stand "knocking about" with most men. I can do fifty and sixty miles, and have done them frequently in a day, in the saddle. I am the Government or district surgeon of the Barkly division, about the size of a small English county, a justice of the peace for the division, and the only private practitioner. There are over twenty medical men in Kimberley, twenty-five miles off, if I should require a consultation. The town of Barkly, containing about 500 inhabitants, white and coloured, is situated on a high bank overlooking the Vaal river. The river, next to the Orange, the largest in South Africa, is a very pretty one, the banks being well lined with trees. It reminds me in some parts of its course of the Wye at home. There is plenty of fishing, bathing, boating, and shooting to be had in and on it. Most of the hills or "Koptjes" adjoining its banks contain diamonds, some of them of the most beautiful water. There is still a considerable number of diggers digging for diamonds on the Vaal, and in it when the water is low. But unless luck attends one, digging-life on the Vaal is a rather precarious existence. The climate is dry, too dry for most things but lungs. November, December, and January are very hot months——96°-98° in the shade while the sun is up; but amends is made even then by the evenings and mornings being fresh and cool. After January it begins to get cooler in the daytime each month. May, June, and July are delightful months; get frost at night; can be out all night and day.

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August, September, and October are warmer but very pleasant months. But whatever the month be, the nights are cool after the hottest day, and permit of sleep. Winter nights are cold enough to make one enjoy a fire, and a big one too. We are 5000 feet above the sea. Both this district and Kimberley abound with people who tell us that they came out for "their lungs," although to look at them you would seldom guess it. They tell pitiable tales of their sufferings at home, and the helpless state in which they arrived here. They tell us that they have been so many years in the country, and that they have quite recovered. I know bankers, merchants, diggers, policemen, and all sorts and conditions of men, now well in health and doing more or less well in their businesses, who came out consumptive. I have often thought of writing to you to try and point out the advantages this part of South Africa offers to consumptives. Up to the present time, however, the difficulty of getting here was great. It was expensive, tedious, and trying to a sick person. Now this is altered. After a passage in a magnificent mail boat to Capetown, the invalid can get into a Pullman car and travel 600 miles into a splendid station in Kimberley in thirty-six hours. A coach and four will bring him down to Barkly in three hours, along a good road, if he wishes. Very different thing to the days when poor Harry Leach wrote of travelling in these parts, in an old wine-case on wheels, called a post-cart. I think the shaking he got during his hasty travels in these parts did much to shorten his days. When I came up from Capetown to Kimberley in 1878 it took me twenty-one days in a mule waggon, and a very rough time it was, in a broiling sun, through the hot sand of the desert Karroo. Now the mail trains from Capetown and Port Elizabeth rush daily into Kimberley. In 1878 the people of Kimberley lived in tin and canvas houses or huts, horribly hot and uncomfortable. Vegetables, fruit, butter, &c., were luxuries we seldom came across. I have known the humble cabbages sell for 10*s.* 6*d.* a-piece on the market, other vegetables in proportion. The late Anthony Trollope, who visited Kimberley in 1878, shook the dust from his feet and departed a sadder if a wiser man. He gave a sad description of us in his next published work. Now all things are altered. A waterworks company pumps an unlimited supply of water from the Vaal River for the use of the Kimberley people; trees and gardens are springing up all round; unlimited fruit and vegetables are brought up daily by train; people have built large and commodious houses; the town is lit by electric light; we boast of a club that costs the members some £25,000—by far the best club in the colony. In short, Kimberley is not such a bad place to live in now, but it is not exactly a good place for an invalid with "lungs"; there is still too much dust from the mines to suit irritable respiratory organs. Barkly, on the other hand, is free from dust; it is within easy distance (twenty-five miles) of the railway station, and is blessed with a fine river, which affords a means of much recreation. Further, it is very healthy in a fever and zymotic disease point of view. My business therein is "nil." Children only trouble me when they come into the world, when they cut their teeth, and when they do little things they ought not to do and suffer the consequences, riding papa's untamed steed, and getting "bucked off" with broken bones for example, or teasing the patient, and getting a dig in the ribs for their pains, &c. In Kimberley, on the other hand, the sanitary arrangements used to be shocking, consequently there was much fever. There was no railway to the sea then. Many of the fever people died down here; now most of the patients go to the sea-coast to "pick up." I live in a by no means uncomfortable house: it is a Government building, built of stone. Cool in summer and warm in winter, with good large lofty rooms, it stands about fifty yards from the river and about a quarter of a mile out of the village of West Barkly. There are eight or ten acres of unoccupied ground all round the place. I keep a sort of cross between a hospital and a convalescent home in it, that is, I have to take in acute cases, accidents, &c., from among the white population of the district, while at the same time I take in as many convalescents as possible. Last year we took in sixty-nine during the year. The Government give a grant towards [illegible] free patients; the rest are paying patients, [illegible] 6*d.* per diem, exclusive of wines and extras. If the patient is not in a hopeless state when he arrives here, he can [illegible] be guaranteed a cure by simple residence, without [illegible] or confinement; simply by fresh dry air [illegible] A patient should stay here at least twelve months, longer if possible. It took me two years to quite get rid of my cough and every vestige of expectoration, but twelve months made me quite a different man. A male patient from twelve to fourteen years of age upwards would have the best chance of getting rapidly well here. I am sure riding and driving are of invaluable assistance in aiding the damaged lungs to recover. We get an English mail and papers every week, and can obtain any amount of books from the Kimberley Public Library. There is shooting for those who can shoot. There is good coursing after buck and hare. I get good fun coursing during the winter. With regard to children, if strong enough it could be arranged for them to go on with their education for a few hours every day. There is an English church and rector (wife and family) here; a civil commissioner and magistrate, and a number of officials. Ladies from England would probably find it rather dull, as there would not be the same facilities for occupying their spare time as there are for men. The ladies here are, however, pretty active at lawn tennis, and manage generally to amuse themselves without much complaint. Patients, as a rule, have not been sent far enough up country by doctors at home. Our old family doctor in England, hearing that I was still alive, some years ago sent four patients out in consumption. They all stayed within 200 miles of the coast, where the climate is given to much rain, and consequently the air is moist, hot, and enervating; they all died. If they had come to this almost rainless part of the world I believe they might all have got better. Saloon fare to Capetown, £35; railway fare to Kimberley, first-class, £6 6*s.* I am afraid I have bored you with this disjointed letter. I commenced it in November last, and came across it again to-day, Jan. 10th, 1886. I will only point out in a condensed form what is hardly yet known to physicians in London—viz.: 1. That consumptive patients can now travel up to the driest part of the Cape Colony in the most comfortable manner. 2. That, having arrived there, they can obtain fairly comfortable and well-appointed quarters to reside in.—Believe me, ever yours sincerely,

Dr. John Curnow, London. W. R. HARRHY, M.R.C.S.

THE TREATMENT OF PERTUSSIS.

To the Editor of THE LANCET.

SIR,—At the time of writing my letter about the treatment of whooping-cough, I was not aware that carbolic acid had ever been given internally for that complaint, although I was cognisant of the fact that it had been frequently used as a remedy by inhalation; but this method, although of some use, I had never considered capable of neutralising or destroying the exciting cause of the disease, which, in my opinion, does not originate and multiply in the respiratory tract, in spite of the symptoms being mainly manifested there, but at some point in the *primæ viæ*. That this is a fact is fully proved by the result of the treatment adopted. I can account for not having seen Mr. Harries' communication of July 13th, 1878, as at that time I was travelling in the Pacific Ocean (quite a misnomer, by the bye), and my opportunities of perusing THE LANCET, I regret to say, were few and far between. I would like to add that the more I see of the effects of different kinds of treatment in disease, the greater I am impressed with the importance of prescribing antiseptics, especially in the zymotic varieties; for instance, without laying any claim to originality, I always prescribe eucalyptus globulus in röthein, chlorine in scarlatina and diphtheria, and carbolic acid in typhoid, with the most satisfactory results. I am, Sir, yours obediently,

Bournemouth, Jan. 23rd, 1886. F. W. CORY.

To the Editor of THE LANCET.

SIR,—In the year 1883 I wrote an essay, as a competitor for the Fothergillian Gold Medal of the Medical Society of London, on the Pathology and Treatment of Whooping-cough, in which I gave the results of my investigations and study of this disease, which I had been pursuing for two years previously. They were, briefly, that it is a specific disease, affecting the blood, but having the bronchial mucous membrane as its chief seat, the specific organism developing there, and infecting the blood from thence. In this view I was supported by Mr. T. Dolan. In

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the paper so prepared by me I held that the only rational treatment could be local antiseptics, and recommended the use of vaporised carbolic acid. I gave in illustration some picked cases, taken from a list of more than one hundred, which had been successfully treated by this means. I do not wish to claim any priority, but simply to state facts, as above.

Yours, &c.,

Crawshawbooth, Manchester. J. L. KERR, M.B., C.M.

ASSOCIATION OF MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—I enclose a copy of a circular and petition which we are issuing to the Members of the College. May we hope for its insertion in your journal? With many thanks for the valuable aid you have hitherto given us,

I am, Sir, your obedient servant,

WM. ASHTON ELLIS, Hon. Sec.

Western Dispensary, Westminster, Feb. 5th, 1886.

The following is the petition referred to:—

To the Queen's Most Excellent Majesty in Council.

The humble petition of the Members of the Royal College of Surgeons of England sheweth: That whereas a petition has been prepared for presentation by the President and Council of the Royal College of Surgeons of England, praying for a supplemental Charter, or alterations in the existing Charters previously granted to the said Royal College, your humble petitioners approach your Most Gracious Majesty respectfully to point out that by the present Charters the Members of the said College (who are in proportion to the Fellows as 14 to 1) have no status of any kind in connexion with the governing body.

Your petitioners most humbly submit that it would be both equitable and politic that the Members should have a voice in the conduct of a corporation of which they are, and always have been, numerically and financially the mainstay. At present the Council, elected by the twelve hundred Fellows only, deals absolutely with the interests, property, and moneys of the College, whilst sixteen thousand Members are wholly unrepresented.

Your petitioners do, therefore, most earnestly pray that before granting any Charter or supplemental Charter to the said Royal College, the present position of your petitioners may receive your Majesty's gracious consideration for such provisions as will create and secure for the Members (who so largely contribute to the prestige and welfare of the said College) the right of representation and other privileges which should belong to the members of a corporate body; further that an inquiry may be instituted into the constitution of the Council, the management of the College, the conduct of examinations, and the expenditure of the College funds.

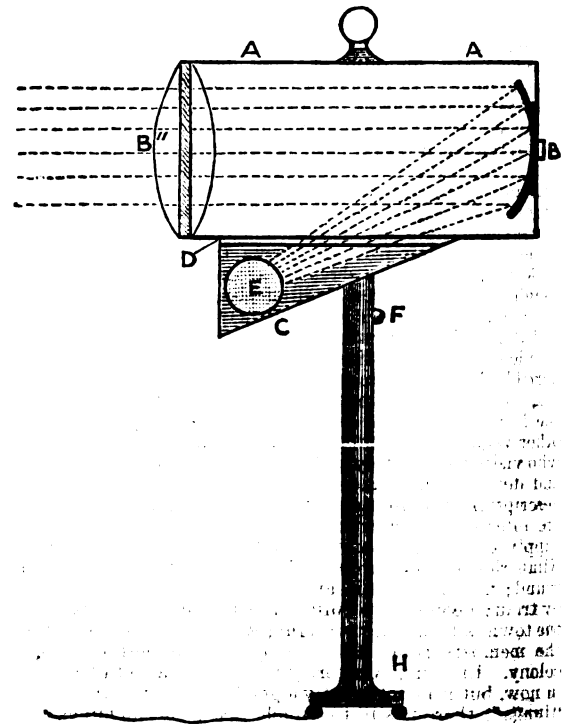
Finally, your petitioners very humbly pray that in the event of no petition for a supplementary Charter or otherwise being presented by the Council of your Royal College, your Majesty may be graciously pleased, in your wisdom, equity, and discretion, to sanction and provide for certain alterations being made in the present existing Charter so that it may contain such provisions as are hereinafter mentioned:—1. That all Members of a certain number of years' standing, to be determined by your Gracious Majesty, may, after having been registered, conjointly with Fellows, exercise the privilege of electing the Council. 2. That a certain proportion of the Council may consist of Members. 3. That the period of office of members of the Council be considerably shortened. 4. That Members and Fellows be permitted to vote by voting papers. 5. That no fees of any kind be paid to any College fund by Fellows or Members on their election to office. 6. That the Council prepare a yearly report, together with an account of income and expenditure of the College funds duly audited by a public accountant, which after its submission for approval to the Fellows and Members (annually summoned for this purpose by the President of the College) shall, on adoption, be required to be published in the medical journals. 7. That enlarged power may be given to the Council to suspend or revoke the licence of any Fellow or Member on proof of discreditable conduct, whether professional or otherwise.

And your petitioners, as in duty bound, will ever pray, &c.

APPLICATION OF THE ELECTRIC LIGHT TO THE OPHTHALMOSCOPE.

To the Editor of THE LANCET.

SIR,—I was much interested in reading a description of Dr. Davidson's application of the electric light to the ophthalmoscope, because I had absolutely in preparation for your columns the description of an instrument which Mr. Robson, an optician of this city, is constructing for me with the same object, and which he has had in his hands for some time. As I think my instrument has some advantages over Dr. Davidson's, I send you a drawing of it, together with a description. It consists of a short tube, blackened in the interior, of telescopic construction, so that it may be elongated and contracted within certain



limits (A A). At one end (B) is a mirror of short focus, movable in its vertical diameter by a small screw. The aperture (B'') at the other extremity of the tube may be closed by tinted glasses or a bull's-eye lens. In a small triangular chamber below the tube is situated the small incandescent lamp (E), the brilliancy of the illumination from which can be moderated by inserting tinted glasses through a slit at D. The mode of action of the instrument is made obvious by the diagram. The wires pass up the handle, and electric contact is made by the button (F) when the instrument is in use. Ophthalmoscopic examinations may be made with this instrument in the daytime, by the direct method, without darkening the room. The lamp can be used for all ordinary purposes by screwing on a stand at H, and inserting a condensing lens at B''. The drawing shows the instrument a little larger than its actual size.

I am, Sir, your obedient servant,

CHRISTOPHER S. JEAFFRESON.

Saville-row, Newcastle-on-Tyne, Feb. 9th, 1886.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

NEWCASTLE LYING-IN HOSPITAL.

THE annual meeting of this useful institution was recently held, Dr. Gibson presiding. The medical officer's report showed a considerable increase in the number of patients admitted over the previous year. Including out-patients, 268 cases had been admitted, and no death had occurred.

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The committee's report showed the hospital, which is a very old building, to be insanitary in many respects. A most interesting discussion took place as to the advisability of endeavouring to raise funds to build a new Maternity Hospital, with all modern improvements. It was finally decided, however, to repair the sanitary defects of the present building, and to further the scheme for erecting a new hospital. The public would no doubt make a hearty response to a call of this nature, for while the poorer population has very much increased, so also has the necessity for aid of this nature to mothers. The present accommodation is miserably deficient.

TYNEMOUTH INFIRMARY.

The scheme for providing an infirmary in the borough of Tynemouth, which includes the important town of North Shields, is making progress. A public meeting has been held, at which it was resolved that, as in June, 1887, Her Majesty will have attained the fiftieth year of her reign, preliminary arrangements be made for laying the foundation-stone of the Borough of Tynemouth Victoria Jubilee Infirmary. It was also agreed to ask the Duke of Northumberland, who is the principal land proprietor, to grant a site for the proposed building.

ELSWICK AMBULANCE CLASSES.

The great ordnance and shipbuilding firm of Sir Wm. Armstrong and Co., at Elswick, in this city, about three years ago instituted some ambulance instruction classes, which have proved to be of a highly useful and practical character, and of great benefit to their workmen. Dr. R. Clark Newton has commenced a course of lectures for the present session, and the examinations passed showed much intelligence on the part of the workmen, and reflected great credit on their instructor. Every ambulance student kept a record of the accidents attended by him during the year, and it was shown that thirty-five accidents had been attended by one man alone. It was stated at the late meeting in furtherance of the ambulance classes that 428 accidents had occurred at the works of sufficient gravity to lay the sufferers on the compensation fund, while a great number of minor accidents had taken place not necessitating help from it.

SMALL-POX IN DURHAM COUNTY.

A rather serious outbreak of small-pox has taken place at the mining and manufacturing village of Birtley, near Chester-le-Street. The cases are reported to be numerous, and some deaths have taken place. An outbreak of small-pox in the winter in a colliery district is always regarded as unfortunate, for the habits of the people favour the spread of the disease, perhaps more than in the warm weather, when thorough disinfection and isolation can be better carried out.

POISONING BY PHOSPHORUS.

Another case of phosphorus-poisoning by lucifer matches has been admitted into the infirmary, the patient this time being a married woman, who has suffered severely from drinking an infusion of lucifer matches; she is, however, likely to recover. This, I believe, makes the eighth or ninth case since this mania or epidemic first manifested itself in the north.

Newcastle-on-Tyne, Feb. 1st, 1886.

EDINBURGH.

(From our own Correspondent.)

THE LORD RECTORSHIP OF EDINBURGH UNIVERSITY.

IN the autumn of the present year the office of Lord Rector of the University will fall vacant, Lord Iddesleigh's three years' term of office having then come to an end. The office is awarded in accordance with the majority of votes given by matriculated students to the various candidates who may become competitors for the honour. In reply to an inquiry addressed to him by the Committee of the Conservative Association of the University, Lord Iddesleigh has intimated his willingness to become a candidate again should this meet the desire of the students. At a meeting of Conservative students to which this communication was made, a formal motion adopting Lord Iddesleigh as the Conservative candidate for the next election was submitted and carried unanimously. No Liberal candidate has at this early date been announced, but it is certain that a suitable name will be forthcoming within the next few months, as the Liberal students have become a much more organised party since their defeat in 1883, and are now prepared to carry on a most active contest with a very fair chance of success.

THE CHAIR OF PHYSIOLOGY IN ABERDEEN.

It is announced that two Edinburgh graduates are likely to become candidates for the Chair of the Institutes of Medicine in the University of Aberdeen, which will shortly become vacant through the translation of Professor Stirling to the corresponding Chair in the Victoria University, Manchester. Mr. H. Ashdown has acted for some years as assistant to the Professor of Physiology, and is Senior Demonstrator of Physiology in the University of Edinburgh, having previously held the post of Demonstrator of Anatomy in the University under Professor Turner. He has been for some time engaged in conducting and directing physiological and histological researches in the physiological laboratories of the University. Dr. D. Noël-Paton is also spoken of as a candidate; he holds a research fellowship from the University, and has contributed some interesting observations upon urea formation to the literature of the chemical metabolism of living tissues; he is also the author of other papers upon medical and physiological topics.

THE QUESTION OF CAP AND GOWN FOR UNDERGRADUATES.

Some months ago the Students' Representative Council, by means of a plebiscite, attempted to ascertain the views of the students generally in regard to the propriety of adopting academic costume. Although a majority of the undergraduates, who voted were in favour of the proposed change, the result was not satisfactory, as only a little over a third of the total number of matriculated students expressed any opinion in the matter. The question was referred to the Senatus Academicus, who have decided that it is not expedient to interfere with the existing usage; a decision specially important for students of the Medical Faculty, to whom the special academic garb would have proved very irksome in many respects, especially during the period of their more advanced studies, of which clinical and dispensary work forms so important a part.

EDINBURGH HEALTH SOCIETY.

Last Saturday a somewhat unique demonstration was given to the public under the auspices of this Society. In the presence of a large audience, presided over by Dr. Byrom Bramwell, a practical demonstration of sick-room cookery was carried out by ladies of the Edinburgh School of Cookery and Domestic Economy. A lecture from the pen of Miss Guthrie Wright was read, in which the principles involved were ably discussed, a number of practical illustrations detailed, and several useful recipes enumerated. During the lecture these illustrations were actually put into practice before the eyes of the audience, and the products submitted to the judgment of a committee. A great element of usefulness in the demonstration was the fact that as far as possible the utmost simplicity was observed not only in the choice of materials but in the methods of preparing them; so that in both respects a lesson was conveyed which would be applicable to the requirements of all classes of the community.

Edinburgh, Feb. 9th.

IRELAND.

(From our own Correspondent.)

IRISH LUNATIC ASYLUMS.

THE annual report of the District, Criminal, and Private Lunatic Asylums in Ireland for 1884 was only issued last week, although the report of the inspectors is dated Aug. 7th, 1885. The cause of this delay requires some explanation from those concerned in the matter, as the report is in consequence rendered almost valueless. Setting down the population of Ireland at 5,000,000, and dealing with recognised statistical facts, the inspectors assume that about 1 individual in every 350 is more or less mentally affected, and that actual lunatics, or those who at one period of life possessed clear reasoning powers, may be approximately set down at 1 in every 450, the difference for the most part being constituted of epileptics, idiots, and congenital imbeciles. In regard to this calculation, however, it should be borne in mind that a normal pro-

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portion of the sane to the insane has been impaired within the past few decades by an emigration of about 1,500,000 of the healthiest of the inhabitants of this country, a fact illustrated by the present residence in poor-houses of no less than 3775 labouring under some form of mental disease, independent of the aged, infirm, and physically prostrate. Contrasting the relative population of England and Wales with that of Ireland, and the proportion of insanity as recognisable from statistics in both countries, their position appears to be analogous. England and Wales, with a population of 27,500,000, had 79,700 lunatics; while Ireland, with a population of 5,000,000, had 14,288 registered insane, or about 1 to 348. Of the 9687 patients in the district asylums, with reference to probable or possible curability, 7399 are recorded as hopeless cases, and 2288 as admitting of amelioration, if not of actual recovery.

HEALTH OF BELFAST DURING 1885.

The general death-rate has been higher than in the two preceding years, as was also the mortality from zymotic and lung affections. It was this latter increase which has so materially added to the general death-rate in this urban sanitary district. The epidemic of measles which prevailed, especially in the second quarter of the year and also in the other quarters, was very severe; and the changeable and severe weather of the spring caused many deaths from diseases of the respiratory organs and phthisis. It is, however, satisfactory to note that there has not been a single death from small-pox in the Belfast district for two years, and that typhus fever has caused fewer deaths than in either 1883 or 1884. Scarlatina has also shown a smaller mortality than in these years; indeed, had it not been for the fatal epidemic of measles the death-rate from all zymotic diseases would have been very low; but measles alone gave a rate of 2·70 out of a total of 5·3.

CITY OF DUBLIN HOSPITAL.

A fancy fair and carnival was held at the Artisans' Exhibition last week, on behalf of the City of Dublin Hospital. The attractions for the public were so many, and so well worth visiting, that enormous crowds attended on the several days the bazaar was held, and a very large sum of money was obtained for a most deserving charity.

Dr. Rawdon Macnamara has been re-elected the representative of the Royal College of Surgeons in Ireland on the General Medical Council for the ensuing year.

Sir Charles Cameron, President of the Royal College of Surgeons, who had been indisposed for some time past, is now, I am glad to state, thoroughly recovered, and is able to resume his official and professional duties.

Dublin, Feb. 9th, 1886.

PARIS.

(From our own Correspondent.)

PTOMAINES AND THE MICROBE THEORY.

THE discovery by M. Gautier of the part played by ptomaines and leucomaines in the pathogeny of disease is a terrible blow to the microbian theory, as in a paper communicated by the author to the Academy of Medicine it has been demonstrated that the non-elimination from the body of dead animal matter is the only source of all human ailments. Professor Peter has always been vehemently opposed to the bacillary theory of the etiology of disease, and looks upon the discovery of ptomaines and leucomaines as a new era in medicine. Although he himself had long ago foreseen the existence of such elements as causes of disease, it was left to M. Gautier, the eminent chemist, to formulate his theories in a more scientific manner. This new theory formed the basis of a very interesting paper read by Professor Peter at the Academy of Medicine last week, in which he makes out that this new theory of auto-infection is quite compatible with clinical observation, whereas the microbian theory is so shrouded in mystery that Koch himself had been induced to considerably alter his opinions respecting the *rôle* of the comma bacillus in the development of cholera, and now declares that the disease is caused by a ptomaine secreted by a bacillus. In concluding his paper Professor Peter made the following remarks: "M. Gautier has shown that in the dead body, and even in the living, ptomaines are formed; these alkaloids, ptomaines or leucomaines, are absolutely toxic; an auto-infection characterised by hyperthermia is the result. This theory rids us, at least for a time, of the tyranny of the microbes. If urea, which is an alkali, is constantly formed in our organism, why should there not also be formed an alkaloid in it? It is only a question of degree. Life is a contingent phenomenon; it is a series of partial deaths. It may therefore be said that we carry in ourselves while living a portion of our own corpse, but we resist the work of auto-infection by two distinct mechanisms: the elimination of the toxic substance and its destruction by oxygen. We should no longer hesitate between the parasitic doctrines, which are shrouded in dark hypotheses, and this new doctrine, which is as luminous as it is precise, which explains the phenomena of normal and abnormal life."

STATUE TO CLAUDE BERNARD.

A statue, erected to the memory of Claude Bernard, the eminent physiologist, was unveiled on Sunday last, in the presence of the Minister of Public Instruction, delegates from the Institute and University of France, amongst whom were also present MM. Paul Bert, Pasteur, Renan, and other scientific and literary men. The statue is of bronze, and considered a very good likeness, representing Claude Bernard in a pensive mood, as he was often seen in his laboratory, while he was meditating over a new problem from which he had not yet formed any positive deductions. The statue is placed at the top of the large staircase leading to the College of France, where he had worked in the laboratory for more than forty years. On one side of the pedestal is inscribed his name, with the statement that the monument was erected by his colleagues, his friends, and his disciples. Over the different emblems on the other parts of the pedestal are to be seen the names of the principal discoveries which will for ever be associated with the name of Claude Bernard: glycogeny, diabetes, vaso-motor nerves, digestive liquids, experimental medicine, general physiology, unity of life, determinism, &c. Many interesting speeches were made on the occasion, the principal of which was that of Paul Bert, one of the most intimate friends and pupils of Claude Bernard, in which, in a few neat phrases, he paid a just tribute to the memory of his former master.

Paris, Feb. 9th, 1886.

ROYAL COLLEGE OF SURGEONS.

AT an ordinary meeting of the Council of the above College, held on Thursday, the 11th inst., the report of the Building Committee of the two Colleges, the Royal College of Surgeons and the Royal College of Physicians, in reference to building on the Savoy Estate, was presented. It was approved and adopted, and authority was given to the Building Committee to make the necessary arrangements for the ceremony of laying the foundation stone. The letter from the Committee of the Association of Fellows, signed by the hon. sec., Mr. Bruce Clarke, in reference to the proposition to elect fifty Fellows yearly without examination, was read. Mr. George Robert Wyatt, of Tulse Hill, was elected a Fellow of the College.

Obituary.

JAMES BALLS WOOLBY, M.B. LOND.

MR. WOOLBY, who was accidentally drowned whilst bathing on January 1st at Groot river, Cape Colony, was a native of Halesworth in Suffolk, and received his medical education at King's College, where he entered in October, 1875. In 1876 he obtained a junior scholarship; in 1877 he passed the Intermediate M.B. Examination at the London University, taking honours in Materia Medica; in 1878 was prizeman at King's College in Forensic Medicine, Obstetrics, and Pathology, and in 1879 was elected an Associate of the College. Just as a brilliant career was opening before him his health began to fail, and an attack of hæmoptysis, accompanied by other signs of chest mischief, alarmed his friends, especially as his family history on the maternal side showed a strong tendency to consumption. He therefore took the L.R.C.P. Lond. in 1879, and after a voyage or two to the Cape, stayed in South Africa for the next two years, with

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great benefit to his health. He returned in 1882 and passed the Second M.B. Examination. He was appointed physician's assistant and afterwards assistant house-surgeon, to the Bristol General Hospital, and became a M.R.C.S.Eng. in January, 1884. He was then elected resident medical officer to Queen Charlotte's Lying-in Hospital, and may be said to have been the first who systematically and thoroughly carried out the principles and practice of antiseptic surgery in that institution, with the remarkable results described by Dr. Priestley recently at the Obstetrical Society. His devotion to the duties of this hospital, the fatigue attendant on night-work, and an attempt at the same time to read for his M.D. degree, again told seriously on his health, and symptoms of rapid phthisis (high temperature, night sweats, slight hæmoptysis, and râles over the upper part of both lungs) presented themselves. He again left for South Africa, taking the medical charge of a mission-station at Engcobo, Tembuland, and had improved greatly in health and was rapidly increasing in weight, so that when he last wrote to his friends in England he spoke in the most reassuring manner as having practically recovered, and as being about to start on a hunting expedition. The news of his accidental death came as a great shock, and the regret at so early and sad a termination to his career can scarcely be expressed. Besides his medical knowledge, Mr. Woolby had much literary culture; and his unassuming manner, gentle disposition, obliging friendliness, and self-sacrificing devotion to duty will be long remembered by all with whom he came in contact.

R. ROBERT MADDEN, F.R.C.S.

ON the 5th inst., at Booterstown, near Dublin, the death occurred of Mr. Richard Robert Madden, formerly Colonial Secretary of Western Australia, and Secretary of the Irish Loan Fund. The deceased, who was the youngest of twenty-one children, was born in Dublin, and was admitted a Member of the Royal College of Surgeons of England in 1829, obtaining the Fellowship of that body in 1855. In 1833 he was appointed a special magistrate in Jamaica, and in this capacity he became a friend of the slaves, earning throughout the island the reputation of being their protector and sympathiser, and an ardent colleague of Clarkson, Wilberforce, and Buxton in the movement for the abolition of slavery. The esteem in which he was held by the black population was recognised in 1836 by his appointment as superintendent of liberated Africans at Havannah under the British Colonial Office, and in this post he rendered valuable services to the cause of the slave. Three years later, in 1839, he was appointed Acting Judge Advocate of the Mixed Commission Court under the Foreign Office. So highly did the Home Government regard his services in this capacity that in 1841 Lord John Russell appointed him a Commissioner of Inquiry on the West Coast of Africa, and it was whilst performing the duties of this office that his vigilance unmasked what became known at the time as the "pawn system," which turned out to be slavery in all respects carried on under the very eyes of the British authorities and of the officials entrusted with the protection of the negroes. In 1847 Mr. Madden was appointed Colonial Secretary of Western Australia, a post which he retained for three years until he became Secretary to the Irish Loan Fund. This position he resigned some years ago, and devoted the remainder of his life to literature. Mr. Madden was the author of the following, amongst other, works: Infirmities of Genius; Lives and Times of the United Irishmen; Connexion of England with Ireland; Phantasmata, or Illusions and Fanaticisms; Galileo and the Inquisition; and the Life and Times of Savonarola. The works published by him relating to Ireland were contributions to the study of the Irish question of the period, and may still be referred to with profit. At the time of his decease Mr. Madden was in his eighty-eighth year.

ROYAL PORTSMOUTH, PORTSEA, AND GOSPORT HOSPITAL.—At the annual meeting of the subscribers to this institution on the 9th inst., it was stated that the excess of income over expenditure for the past year was no less than £1723, whilst in addition to this, legacies and special donations amounting to £644 were received. The number of in-patients was 591, and 2247 out-patients received advice. The satisfactory financial state of the hospital is attributed to a canvass made early in 1884 with the object of obtaining increased support for the institution.

Medical News.

UNIVERSITY OF LONDON.—The following candidates have passed the recent Preliminary Scientific (M.B.) Examination:—

ENTIRE EXAMINATION.

FIRST DIVISION.

Clutterbuck, Medwin Caspar, University College, Bristol.
Krohn, Ronald E. S., Univ. Coll. and School, and private tuition.
Lansdown, Charles Bebank, University College, St. Mary's Hospital, and private tuition.
Mack, Cyril Gordon, St. Mary's Hospital and private tuition.
Macnamara, John Joseph, Univ. Edin. and Univ. Coll., London.
Snell, Sidney Herbert, University College and private tuition.

SECOND DIVISION.

Atwool, William Tillinghast, University College, St. Mary's Hospital, and private study and tuition.
Cole, Robert Henry, St. Mary's Hospital.
Edge, Arthur James, Owens College, St. Bartholomew's Hospital, and private tuition.
Heath, Alan Jasper, Univ. Coll. and private study and tuition.
Murrell, George F., University College, St. Bartholomew's Hospital, and private study.
Paul, John Ernest, University College and private tuition.
Price, Arthur Edward, St. Thomas's Hospital.
Taylor, F. Ryott P., Westminster Hospital and private study.
Thorne, Attwood, St. Mary's Hospital and private tuition.
Worsley, Reginald Carmichael, University College.
Wright, Sydney Faulconer, St. Thomas's Hospital.

At the January Matriculation examination of the University, 104 candidates passed in the Honours division, and 315 and 27 in the first and second divisions respectively. Samuel Arthur King gained the exhibition of £30 per annum for two years; W. T. N. Spivey the exhibition of £20 per annum for two years; and E. G. Hawke the exhibition of £15 per annum for two years.

SOCIETY OF APOTHECARIES.—The following gentleman passed the examination in the Science and Practice of Medicine, and received a certificate to practise, on the 4th inst.:—

Henderson, James Threapland, Wibsey, near Bradford.

On the same day the following passed their Primary Professional Examination:—

Charlesworth, George, Middlesex Hospital.
Mason, Francis John Gorringe, St. Bartholomew's Hospital.

THE annual meeting of the St. Mary's Hospital for the treatment of diseases of women and children, Manchester, was held on the 8th inst.

A MEETING held at Eastbourne on the 5th inst. decided, subject to obtaining the necessary land at a moderate cost, to enlarge the Princess Alice Memorial Hospital.

HER Majesty has forwarded a donation of £100 to the Countess of Dufferin's Fund in support of the National Association for supplying Female Medical Aid to the Women of India.

AT an inquest recently held at Upton on the body of James Hunter KNOX, M.B. Glas., whose death was caused by morphia, the jury returned a verdict of suicide whilst temporarily insane.

THE eighteenth annual dinner in aid of the funds of the French Hospital was held on the 6th inst. During the evening subscriptions amounting to about £2000 were announced.

THE committee of management of the Aberdeen Royal Infirmary on the 27th ult. resolved that the treatment of zymotic diseases—except typhoid fever—be discontinued at the earliest practicable date.

A CONFERENCE on the subject of the management of idiots is to be held in Gratz from the 6th to the 8th of August. A conference on the statistics of idiocy has just been held in Pesth.

MEDICAL MAGISTRATES.—The Lord Chancellor has appointed Dr. Douglas A. Reid and Mr. John Griffith Lock, M.A. Cantab., M.R.C.S., to the Commission of the Peace for the Borough of Tenby.

ROYAL FREE HOSPITAL.—The fifty-eighth annual meeting of the governors of this institution was held on the 4th inst. The report of the committee of management showed that the receipts from all sources during the past year amounted to £7556, and the total expenditure to £11,275. During 1885, 1728 in-patients had been admitted, and the daily average of patients in the wards was 135. The number of out-patients under treatment was 21,853.

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THE fifth annual meeting of the Sanitary Assurance Association was held on the 8th inst., when a highly satisfactory report was presented by the committee.

VACCINATION GRANTS.—The following gentlemen have received the Government grant for efficient vaccination: Mr. B. J. Lee, North Wingfield District, Chesterfield Union (fourth time), and Mr. P. Butler-Stoney of the Millom District, Bootle Union, Cumberland (fifth time).

DR. JOHN BURNESS, late of Montrose, was drowned last week while crossing Lockgoil in a small boat to visit a patient. The deceased, who was between sixty and seventy years of age, was highly esteemed throughout the district in which he resided.

IN the Swiss Universities there are during the present semester 650 medical students—207 in Zurich, 198 in Berne, 124 in Geneva, and 191 in Basle. Of these, 78 are women. In Berne there are 63 foreign students, of whom 41 are women.

A HAMBURG court of justice has sentenced a medical man to a fine of £15 for "careless damage" to a woman who was suffering from hæmorrhage, and on whom he had employed a "doubtful treatment" without examining her or attempting mechanical treatment.

WINDSOR ROYAL INFIRMARY.—At the recent annual meeting of the subscribers to this institution it was reported that the new ward, replacing the Hibbert Ward, had been completed, and that extensive sanitary works had been carried out and additions made to the furniture of the wards, the whole involving a total extra expenditure of about £1500.

ST. MARK'S HOSPITAL.—The fiftieth annual report of the committee of management of this institution was laid before the governors on the 11th inst. The total receipts amounted during 1885 to £3902, a sum which exceeded the expenditure by £429. During the year 310 in-patients passed through the wards of the hospital, a number much in excess of any previous year.

CONVALESCENT HOME.—A convalescent home for hospitals and the better class of mechanics and small tradespeople has recently been established by a benevolent lady from philanthropic motives on the outskirts of Lewes. The home, which is only for the reception of women and girls over nine years of age, contains six beds, and the weekly charge ranges from five to eight shillings.

CHARING-CROSS HOSPITAL.—The annual court of the governors of this hospital was held on the 10th inst., when the sixty-fifth yearly report was read. It stated that during the past year there were admitted 1584 in-patients and 22,615 out-patients. The total receipts for the year, including legacies, were £2154, as against £4231 for 1884; and the expenditure amounted to £12,775, against £12,663 for the preceding year.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST.—At the annual general meeting of the governors of this institution on the 10th inst., it was reported that the number of in-patients admitted during the year had been 1011, as against 900 in 1884, and the number of out-patients was 15,924, being an excess of 413 over the preceding year. The total receipts were £8133, and the excess of expenditure over income was £1420.

EXPLOSION AT A HOSPITAL.—A serious explosion is reported to have occurred on Wednesday night at the Southport Convalescent Hospital. The heating apparatus was undergoing repair, and the stoker had only a few minutes before left the building, after making up the fire, when the boiler exploded, doing considerable damage. Fortunately, at the time all the patients and officials were in another wing of the building and escaped injury.

MANCHESTER CLINICAL HOSPITAL.—From the medical report which was read at the annual meeting in connexion with this institution on the 8th inst., it appears that the number of patients admitted during 1885, including women and children, was 7108, being an increase of 258 on the previous year. The number of consultations in the out-patient department amounted to 27,877, or 1877 more than in 1884. The expenditure of the hospital is about £300 in excess of the ordinary income.

MEDICO-PSYCHOLOGICAL ASSOCIATION.—At the next quarterly meeting, to be held at Bethlem Hospital, St. George's-road, S.E., on Wednesday, 24th inst., at 4 P.M., Dr. Mickle will read a paper on "Some Abnormal Forms of Breathing." The members of the Association will dine together at the Holborn Restaurant, High Holborn, at 7 P.M.

WESTMINSTER OPHTHALMIC HOSPITAL.—Amongst the cases exhibited at this hospital on the clinical evening, Feb. 5th, were—Albuminuric Retinitis, Syphilitic Hyalitis, Optic Neuritis, Retinal Hæmorrhages, Pigmentary Retinitis, Choroiditis, Myopic Changes in Fundus, Embolism of Arteria Centralis, Detachment of Retina, and Chronic Glaucoma with Cupping of Optic Discs.

HOSPITAL SATURDAY FUND.—Mr. Robert Frewer, secretary of the Hospital Saturday Fund, has just received the following from Henry Lane, Canterbury, New Zealand:—"Sir,—Enclosed is a Bank order for £100 towards the funds of the hospitals. We hear in this far away country of the distress and sickness among the poor in the metropolis, and as an old resident in London I beg you to accept this towards the relief of the distressed."

CITY OF LONDON TRUSS SOCIETY.—The annual general meeting of the governors of this Society was held on the 3rd inst. The total income of the past year from all sources amounted to £5062, and the total expenditure to £5594. The number of patients relieved in 1885 was 9000, bringing up the total number treated since the foundation of the charity in 1807 to 413,316. The annual festival dinner is to be held on the 25th inst., and the Lord Mayor has promised to preside.

OLD STUDENTS' FESTIVAL IN ST. PETERSBURG.—The students who qualified at the St. Petersburg Medico-Chirurgical Academy in 1860 have recently celebrated the twenty-fifth anniversary of their entry into professional life. They not merely commemorated the occasion by a dinner, but they have published a book setting forth the scientific professional work and giving to some extent a series of biographies of the former fellow-students. The figures given are instructive. The number of would-be students who attempted to enter the Academy in 1855 was 600, of whom only 350 were accepted. Of these, 142 qualified in 1860, and at the present time only 96 of these are left, all of whom, it is stated, enjoy a good reputation in medical and scientific circles.

SEWER VENTILATION.—A patent has recently been taken out by Mr. Malvin of Harrogate for a method for exhausting gas from sewers, and for consuming or deodorising and dispersing of such gas. The plan provides for the division of a town's sewers into sections by the fixing of automatic doors. The sections are to be isolated, and each furnished at a suitable spot with a chimney or shaft and a furnace, which shall be as nearly as possible smokeless. An upcast shaft from the sewer is to be connected with the ashpit under the furnace, which is in the form of a cloud chamber. After passing through the fire the gas is conducted to a reservoir, where it encounters a spray of water designed to lay any solid particles which may have been produced by the action of the fire, so as to prevent their emission into the atmospheric air. The sewer gas, after passing through the fire, is taken by the current up the chimney and delivered at a considerable altitude above the street.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BARKER, WILLIAM J. T., L.R.C.P.Lond., M.R.C.S., has been appointed **Medical Officer** for the Churchstanton District of the Taunton Union.

BODY, HENRY MARTEN, M.R.C.S., L.S.A.Lond., has been appointed **Medical Officer of Health** for the Crediton Urban Sanitary District, vice Heygate.

BROWNE, OSWALD, M.A., M.B.Cantab., M.R.C.P., has been appointed Honorary Physician to the St. Marylebone General Dispensary, vice P. M. Chapman, M.D., resigned.

BUIST, J. B., M.D., F.R.C.P.Edin., has been appointed by the Local Government Board a Teacher of Vaccination in Edinburgh, vice J. O. Affleck, M.D., F.R.C.P.Edin., appointed a Physician to the Royal Infirmary.

CARTER, R. BRUDENELL, F.R.C.S., has been appointed Ophthalmic Surgeon to the National Hospital for the Paralysed and Epileptic.

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COOPER, JOHN N., M.K.Q.C.P.I., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Fourth District of the Risbridge Union.

GARDNER, HENRY WILLOUGHBY, M.R.C.S., L.R.C.P., has been appointed Junior House-Surgeon to the Liverpool Children's Infirmary, vice R. R. Whishaw, M.B.Cantab.

GUNN, R. MARCUS, F.R.C.S., has been appointed Ophthalmic Surgeon to the National Hospital for the Paralysed and Epileptic.

HORSLEY, VICTOR A. H., M.B., F.R.C.S., has been appointed Surgeon to the National Hospital for the Paralysed and Epileptic.

IRVING, GEORGE B., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Stanmore District of the Hendon Union.

JOHNSON, RAYMOND, M.R.C.S., late House-Physician to University College Hospital, has been appointed Obstetric Assistant to that institution.

LORRAINE, H. J. B., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the High District of the Longtown Union.

LUCY, REGINALD H., M.B., C.M.Edin., has been appointed House-Surgeon to the London Hospital, E.

NAYLOR, JOHN H., L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer for the Fourth District of the North Bierley Union.

NEWCOMBE, FRANK, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Wilsford District of the Sleaford Union.

SALTER, JOHN R., M.B.Lond., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Third District of the Tonbridge Union.

SERJEANT, GEORGE, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer of Health for the Launceston Rural Sanitary District, vice Williams.

SMITH, T. F. HUGH, F.R.C.S., L.S.A.Lond., has been appointed Poor Law Medical Officer and Medical Officer of Health for the Third District of the Dartford Union, vice W. R. Ashurst, M.D., M.R.C.S., resigned.

SUNDERLAND, SEPTIMUS, M.D., L.R.C.P., M.R.C.S., has been appointed Resident Medical Officer to the Chelsea Hospital for Women, Fulham-road, S.W., vice Dr. Simmons, resigned.

WALLIS, A. W., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer to the Temporary School at Harold Court of the St. Leonard (Shoreditch) Parish.

Births, Marriages, and Deaths.

BIRTHS.

BROWN.—On the 26th ult., at Litherland, Penang, the wife of W. Carnegie Brown, M.D., of a daughter (stillborn).

CABLE.—On the 9th inst., at Royal-hill, Greenwich, the wife of G. H. Cable, M.R.C.S., of a son.

CANTLIE.—On the 6th inst., at Suffolk-street, Pall-mall, the wife of James Cantlie, M.A., M.B., F.R.C.S., of a son.

DOBSON.—On the 9th ult., at Bangalore, the wife of Surgeon-Major A. F. Dobson, M.B. (prematurely), of a daughter.

GUINNESS.—On the 3rd inst., at Bampton, North Devon, the wife of T. A. Guinness, M.R.C.S., of a son.

HUME.—On the 20th ult., at Islington, the wife of F. H. Hume, M.R.C.S., of a son.

PENFOLD.—On December 20th, at Sandhurst, Victoria, the wife of Oliver Penfold, M.R.C.S., L.S.A.Lond., of a son.

MARRIAGES.

CAMPBELL—DUMACHIE.—On the 3rd inst., at Glenbolg, Lanarkshire, by the Rev. James Morison, D.D.Glas., S. George Campbell, M.B., M.Ch.Edin., M.R.C.S.Eng., of Victoria, co. Natal, to Margaret Wyllie, daughter of James Dumachie, Esq., of Glenbolg.

HILLS—FLETCHER.—On the 10th inst., at the Parish Church, Deeping St. Nicholas, Augustus Phillips Hills, M.R.C.S., of Carlton House, Battersea-park, S.W., son of the late George Hills, M.D., F.R.C.S., to Lizzie J. Holland, younger daughter of the late John F. Fletcher, M.R.C.S., and Niece of John W. Holland, of The Shrubbery, Deeping St. Nicholas.

TRAILL—ANDERSON.—On the 4th inst., at Glenburn Hall, Jedburgh, by the Rev. Robert Stewart, B.D., Minister of Jedburgh, assisted by the Rev. John Gordon Smith Napier, M.A., Minister of Kelso, Cecil Grahame Traill, M.B., C.M., Edinburgh, to Mary M'Ghie, eldest daughter of Charles Anderson, Solicitor, of Jedburgh.

TROTT—LEE.—On the 4th inst., at St. Luke's, Headless-cross, Warwickshire, by the Rev. F. Lacon, Rector, Dudley C. Trott, B.A., M.B., B.C.Cantab., of Bermuda, to Florence, youngest daughter of the late James Lee, of Greet House, Birmingham.

DEATHS.

BURTON.—On the 10th inst., at Lee Park Lodge, Blackheath, John M. Burton, F.R.C.S., in his 70th year.

CHURCH.—On the 1st inst., at Rodwell Lodge, Weymouth, William John Church, F.R.C.S., formerly of The Circus, Bath, in his 88th year.

CORTIS.—On December 27th, at Carcoar, N.S.W. (suddenly), Herbert Liddell Cortis, M.R.C.S., aged 28.

JONES.—On the 20th ult., at Strefford House, Sutton, Surrey, Robert Jones, M.R.C.S., L.S.A.Lond., of Strefford, Craven Arms, Salop, aged 80.

MADDEN.—On the 5th inst., at Vernon-terrace, Booters-town, Dublin, Richard Robert Madden, F.R.C.S.Eng., formerly Colonial Secretary, Western Australia, and Secretary to the Loan Fund Board, in his 88th year.

MATHEW.—On the 6th inst., at Eastbourne, James Edward Mathew, F.R.C.S., aged 67.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, February 15.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Charles Stewart: On the Organs of Hearing.

SOCIETY OF ARTS.—8 P.M. Prof. F. Guthrie: Science Teaching (Cantor Lecture).

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Clinical Evening. Dr. Maguire: Case of Dystrophy of the Thumb-joints.—Messrs. Francis Mason and Hurry Fenwick: Case of Excision of the Elbow after Operation followed by Tubercular Testis.—Mr. Spencer Watson: New Instruments for the Removal of Nasal Polypi.—Dr. Radcliffe Crocker: Cases of Pityriasis Circinata and Tuberculated Leprosy.—Mr. John H. Morgan: Case of Congenital Constriction by Band producing Perforating Ulcer of the Foot in an Adult. Living Specimens at 8 P.M.

Tuesday, February 16.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Mr. Charles T. Newton: The Unexhibited Portion of the Greek and Roman Sculptures in the British Museum.

STATISTICAL SOCIETY.—7.45 P.M. Dr. William Ogle: Suicides in England and Wales in relation to Age, Sex, Season, and Occupation.

SOCIETY OF ARTS.—8 P.M. Dr. Robert James Mann: The Present State of the Colonial Possessions of Great Britain.

PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Drs. Moxon, Beevor, and George Ogilvie: Cerebral Tumours.—Dr. Hale White: Thinning of Skull from Cerebral Tumour.—Dr. Carrington: Cancer of Body of Stomach.—Mr. J. Hutchinson, jun.: Cylindrical Cancer of Humerus.—Mr. C. J. Symonds: Syphilitic Hepatitis and Pneumonia in an Infant.—Mr. Stephen Paget: Dermoid Cyst of Tongue.—Mr. Clutton: Epithelial Tumour of Skin near the Rectum.—Dr. S. West: (1) Aneurysm of Aorta and Aortic Valves; (2) Abscess of Gall-bladder (card).—Mr. D'Arcy Power: Multiple Intussusception.—Dr. Hadden: (1) Intestine in Lymph-adenoma; (2) Malignant Disease of both Suprarenals (cards).—Dr. Turner: (1) Syphilitic Ulceration of Trachea; (2) Conjoined Kidneys and Unicorn Uterus (card specimens).—Mr. J. Poland: (1) Amputation Stump at Knee-joint; (2) Dislocation of Knee-joint (card specimens).—Mr. E. H. Fenwick: Atresia (? Congenital) of Orifice of Ureter, Cystic Kidney (card).

Wednesday, February 17.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Charles Stewart: On the Organs of Hearing.

SOCIETY OF ARTS.—8 P.M. Prof. George Forbes: Some Points in Electrical Distribution.

Thursday, February 18.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1 30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. W. Chandler Roberts-Austen: Metals as affected by Small Quantities of Impurity.

PARKES MUSEUM OF HYGIENE.—8 P.M. Mr. Victor Horsley: Hydrophobia.

HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Mr. Rayner: Cases of Discoloration of the Skin in Newly-born Children from Absorption of Aniline Dye.—Dr. A. E. Sansom: On some Modern Remedies in Cardiac Diseases.

Friday, February 19.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Charles Stewart: On the Organs of Hearing.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.—7.30 P.M. Mr. S. R. Lovett: On an Important Decision under the Sanitary Act of 1866 as to the Power of a Nuisance Authority to make Regulations for Houses let in Lodgings.—Messrs. Wynter Blyth and Albert Spencer: The Supervision of the Milk supply of the Metropolis in reference to the Propagation of Disease.

SOCIETY OF ARTS.—8 P.M. Mr. F. C. Danvers: Historical and Recent Famines in India.

ROYAL INSTITUTION OF GREAT BRITAIN.—9 P.M. Prof. W. H. Flower: The Wings of Birds.

Saturday, February 20.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Mr. Archibald Geikie: The History of Volcanic Action in the British Isles.

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Stewart's Instruments.)

THE LANCET Office, Feb. 11th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Feb. 5	30·13	N.W.	36	34	...	38	33	...	Overcast
,, 6	30·24	N.E.	32	32	...	39	29	...	Overcast
,, 7	30·14	N.E.	33	...	...	36	30	...	Bright
,, 8	30·72	S.E.	30	...	...	36	29	...	Hazy
,, 9	30·73	N.E.	28	...	...	34	26	...	Foggy
,, 10	30·51	N.E.	28	...	...	38	25	...	Foggy
,, 11	30·23	S.W.	33	34	...	...	27	...	Foggy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

PRESCRIBING BY TELEGRAPH.

ACCORDING to an American contemporary, a great number of the operators in the chief office of the Western Union Telegraph Company, New York, are graduates in medicine or medical students who are thus working their way through college. Occasionally, as in the following instance, they have an opportunity to use their professional knowledge to good advantage. One of them recently had his attention attracted by the terms of a message which was being received in the office in which he was employed. It was to the effect that a certain physician was wanted at a place three miles away, to attend a young person who had just swallowed an ounce of laudanum. The student operator at once asked for all the particulars, and on receiving them a consultation was held at the office. It was decided that it would be hazardous to postpone treatment until the medical man to whom the message was addressed could be found and he had driven three miles to attend a patient in so dangerous a condition. The operators therefore ordered by telegraph that powerful emetics should be administered, suggesting home-made ones, after which the patient was to be rubbed and whipped with switches. The order was carried out, and with successful results. The physician arrived an hour later; but his attendance would have been useless had the interval been wasted.

Mr. Habgood.—We do not see in the Medical Register or Directory the name and address of the person whose testimonial is referred to.

Cosmopolitan.—No.

Mr. Thos. Ellis.—Our correspondent is the best judge of the exact fees he should charge. These should depend upon the means of his patient and his estimate of the value of his own time and skill. The fees he mentions are, in the abstract, too small for such services as those described.

THE COLLEGE OF PHYSICIANS' LIST.

To the Editor of THE LANCET.

SIR,—Placing the College list of this year (1886) along with some of its predecessors, I notice that, of 1836, and turning to its pages observe that of its 462 members (all told) there remain on the present year's list but seventeen—viz., four Fellows who were Fellows in 1836, one Fellow who was then a candidate, five Fellows who were inceptor candidates, two Fellows who were licentiates, three members, and two licentiates since 1833–34. Many considerable names of our time appear not on either list, having come and gone between these two dates. Yet will they and their work be remembered without reverting to the intervening lists. Such were Baly, Bence-Jones, Bird, Parkes, Peacock, Sibson, Tyler Smith, Brinton, Murchison, Fagge, and others. The censors for 1836 were Paris, Chambers, Holland, and Richard Bright—in the sixteenth year of Sir Henry Halford's presidency.

I am, Sir, yours truly,

Feb. 9th, 1886. C. H.

THE MEDICAL ASPECT OF THE PROVIDENT DISPENSARY SYSTEM.

IN a letter in the *Pendleton Times and Reporter* "Justitia" complains of the working of the Provident Dispensary Scheme in Manchester and Pendleton, especially since the wage-limit of membership was abolished, and families are admitted whose united earnings amount to pounds a week. It is clear that such families have no claim on medical attendance for a penny a week and a penny each bottle of medicine, as in the Manchester Scheme, which, according to "Justitia," left the medical man, after payment of expenses, about fourpence per visit and consultation. We have long endeavoured to show that by such a system the profession is injured more than by the occasional gratuitous relief of the humble class of work people at hospitals.

Mr. W. Fraser (Ashburton).—Yes. But we cannot promise insertion of every paper.

"PEAT SMOKE AND PHTHISIS."

To the Editor of THE LANCET.

SIR,—With reference to your correspondent's inquiry on this point in your last issue (p. 236), and to your editorial note in reference to the same, will you allow me to point out, on the authority of Hollinshed as quoted by Lord Lytton ("The Last of the Barons," Routledge's ed., p. 192), that "not one of the houses in England could boast a chimney in 1468; but the smoke from the single fireplace in each, after duly darkening the atmosphere within, sent its surplusage lazily and fitfully through a circular aperture in the roof. The smoke was considered good both for house and owner; the first it was supposed to season, and the last to guard from rheums, catarrh, and poses." Describing a later period of our history—viz., the reign of Elizabeth—Mr. Green says ("A Short History of the English People," p. 615) that "the chimney corner, so closely associated with family life, came into existence with the general introduction of chimneys, a feature rare in ordinary houses at the beginning of this reign." If we may judge from Macaulay's famous third chapter, this "feature" would scarcely appear to have graced all our houses during the whole of the era of the Stuarts, and we know that the plague visited this country more than once during that same era. Every scholar is familiar with Erasmus's famous description of our "filth"—a filth which Hecker calls (p. 214) "truly Scythian"—in the time of Henry; and Hallam expressly tells us that the Spaniards who accompanied Philip to England in 1554 were never tired of saying that "these English have their houses of stick and dirt, but they fare commonly so well as the king." Very similar testimony as to the "filth" of Edinburgh, Glasgow, Paris, &c., might be adduced out of Howell's Familiar Letters, Smollett, a book called "Varia," and especially from Beckman's History of Inventions; but though other diseases are mentioned as prevailing in these places, or during these periods, nothing is said specially about phthisis. Turf (*alias* peat) was when I was a boy almost the only fuel used in the south of Ireland. It is still, I believe, the principal fuel in Connaught, as well as in the Highlands and Hebrides; and I am not aware that the registrars of these countries regard this disease as non-existent in either of them. I believe, in short, that peat smoke is no more antagonistic to phthisis than is cow-dung or other "odour" of that kind; but high altitudes have ever conduced to a supple limb and a vigorous frame, and "an ample supply of *pure* [mountain] air is everywhere the great prophylactic."

I am, Sir, your obedient servant,

Auriol-road, W., Feb. 7th, 1886. WM. CURRAN.

THE SICKNESS AND ACCIDENT ASSURANCE ASSOCIATION, LIMITED.

To the Editor of THE LANCET.

SIR,—My attention has been called to an article which appeared in your columns a few weeks ago regarding a circular issued by this association to one leading medical man in every populous place in England and Scotland. To the remarks made in that article you will perhaps kindly permit me to make a reply. Our circular described the fees as utterly inadequate, mentioned the circumstances under which they were offered, and at the same time asked the opinion of the medical men to whom it was sent regarding them under those circumstances. It may interest your readers to know how the circular was received by the profession. Not taking into account those who from death, removal, or retirement were unable to act, the number who write approving can only be expressed by four figures. The number who disapprove is under twenty, the proportion thus being as ever fifty to one. Upon the circumstances themselves I will not dilate—such as the fact of this not being a life office, as described in your article, and therefore not to be compared with such an institution, the smallness of our quarterly premiums (many of them under ten shillings), the inadequacy of the remuneration of all the officials during the first twelve months, the promised increase in a few months, and the fact that in connexion with claims our appointment will continue to bring work, which in the case of a life office ceases with the examination. Without entering upon these, I may be permitted to say that the good-will thus expressed towards the association by what I think I am fairly entitled to call the entire medical profession has been to the directors gratifying in the extreme. I may also be allowed to express the hope that those who have borne the burden and heat of the day, and have for a few months acted for remuneration so inadequate, will ere long reap the reward by the appointment turning out, with increasing business and increasing fees, all that their and my own best hopes can wish.—Yours faithfully,

Edinburgh, Feb. 6th, 1886. J. B. BLACK, Manager.

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"THE CONNEXION BETWEEN THE PAROTID GLANDS AND THE GENERATIVE ORGANS."

To the Editor of THE LANCET.

SIR,—I had a case a few years ago closely resembling the first of the cases described by Dr. Cribb in your issue of Jan. 30th. The patient, a gentleman aged eighty, had some prostatic enlargement; and as there was a fair amount of "residual" urine after micturition, it was decided, in consultation with Sir Prescott Hewett, that a flexible catheter should be used night and morning. The patient bore the treatment well for a couple of months, when, from a real or fancied inability to pass urine in the afternoon as he had been accustomed to do, he insisted, against my advice, on having the catheter passed three times a day, sometimes oftener. After about a week of this treatment his bladder began to show symptoms of irritability, and I was summoned to him early one morning in consequence of a sharp rigor which he had had about daybreak. I found his temperature 100·4°, and he complained of stiffness about the jaws. About noon on the same day his right parotid began to swell, and was acutely painful to touch. The swelling rapidly increased, and as the patient's frame was already much enfeebled, he sank from pyrexia and consequent exhaustion within forty-eight hours from the initial rigor. This was certainly not a case of "mumps" from contagion; but was it septic or metastatic parotitis? I may add that throughout there was no pus (visible to the naked eye) in the urine.

I am, Sir, your obedient servant,

Piccadilly, Feb. 4th, 1886. T. BROWNE O'CONNOR.

Mr. W. J. Merlin.—Our correspondent will act kindly in paying the visits and being in readiness to give any advice or help he can. He will, of course, make it clear that he is in no way responsible for the use of a secret remedy.

HYDROPHOBIA; A PLAN OF TREATMENT PROPOSED.

To the Editor of THE LANCET.

SIR,—As deaths from this terrible disease are now daily occurring, I shall be obliged if you will, with your usual kindness, allow me to place before your readers a plan of treatment which involves no risk to the patient, and which I devised some time ago, but as yet have had no opportunity of carrying into practice and so testing its value. To put the plan as concisely as possible, I shall merely confine myself to the principles involved. They are: (1) To alleviate the spasms by inhalations of oxygen, administered, if necessary, through a tracheal opening, at the ordinary (or slightly increased) atmospheric pressure; (2) to eliminate the poison of the disease by subcutaneous injections of pilocarpine; (3) to support the patient's strength by peptonised nutrient enemata; (4) if necessary, to supply the loss of the watery constituents of the blood, due to the action of the pilocarpine, by hypodermic injections of warm saline solutions, to which chloral hydrate may be added according to circumstances; (5) to destroy the virus (?) and at the same time ward off any impending attack of asphyxia by hypodermic injections of ozonised ether.

I am, Sir, your obedient servant,

January 11th, 1886. G. C. P.

THE GUARDIANS OF THE SKIPTON UNION.

To the Editor of THE LANCET.

SIR,—About eighteen months since I was elected medical officer to the Grassington district of this union, extending over an area of 22,600 acres, in which there are about twelve thinly-populated and widely-scattered villages (some of them six miles distant), at a salary of £16 a year. Finding that this salary was not nearly sufficient to pay the working expenses, I applied for an increase, which application was not entertained, and I in consequence resigned the appointment. The guardians, being of opinion they could easily obtain some other fully qualified medical practitioner to do the work at that salary, inserted an advertisement in the public journals holding out delusive hopes as an inducement for someone to accept it. Strange to say, there are several applicants from Ireland and Scotland, as usual, one of whom no doubt will be elected to the valuable appointment; but what additional income he expects to make goodness knows, as the district contains only a poor population of about 1400. What is our profession coming to?

I am, Sir, yours truly,

THE PRESENT RESIDENT MEDICAL OFFICER.

Grassington, Yorkshire, Feb. 9th, 1886.

"MORTALITY IN THE MEDICAL PROFESSION."

To the Editor of THE LANCET.

SIR,—In your issue of to-day (p. 201) you give an abstract of an excellent paper by Dr. Ogle on the mortality in the medical profession, and an able leader on the same (p. 211). There is one point that I do not think too much stress can be laid upon. It is the fact that in regard to phthisis and diseases of the respiratory organs the medical profession compares very favourably with other classes. Many medical men hold that phthisis is infectious. If it were so, would it not be much more common in members of the profession who attend upon the sick, as it is in the case of other infectious disorders, such as typhus, scarlatina, &c.? I consider the fact of its not being so of far more value than a few alleged cases of phthisis being communicated from husband to wife, or *vice versâ*. The small number of the latter can easily be explained on the ground of being a mere coincidence, just as one might find cases in which both man and wife suffer from rheumatism, which no one asserts to be infectious.

I am, Sir, yours faithfully,

January 30th, 1886. W. B.

SEA-SICKNESS.

MR. GOSTLING, F.R.I.B.A., writing from Alexandria, states that he has found the following measures useful to those troubled by sea-sickness. Little or nothing should be eaten on going on board, and the sufferer should retire to his cabin and lie head to bow, if possible, before the boat gets into rough water. By the adoption of these precautions, Mr. Gostling states that in the majority of cases sea-sickness will be avoided altogether, while in the few exceptional cases its ill-effects will be greatly modified, and a speedy recovery assured. If the berth is transverse, the occupant should lie with the head towards the centre of the ship.

G. C.'s letter deals with an important matter, but we cannot open a discussion upon it.

Mr. H. M. Gardner.—Bureaux de la Semaine Médicale, 16, Avenue de Lamotte-Piquet, Paris.

Mr. Allison (New York).—We cannot exchange.

THE THREE TOWNS FRIENDLY SOCIETIES MEDICAL INSTITUTION.

To the Editor of THE LANCET.

SIR,—Your article upon the above subject is so full of inaccuracies, that we are compelled to correct some of the statements contained in it. We have never desired to work our medical officers as horses or as any other quadruped; we have always recognised that their position is a very responsible one, and sought to relieve them from any approach to over-pressure when such appeared likely. We sought the advice of our two residential doctors as to the best means of providing additional medical assistance. They advised the engagement of two consulting doctors, one at each dispensary; Dr. Keily advising that the salaries should be £100 per annum each. We considered the matter, and resolved to engage for twelve months one consulting officer only at £150 per year, which amount we increased to £180 after six months' trial. We have tried the experiment for one year, and that experience has taught us that our wisest course is to engage two consulting officers as first advised by our residential doctors. We do not, however, believe that Dr. Keily's estimate is either fair or generous as to the salaries. His position is equal to a private practice of over £400 a year. We therefore decided to give £150 as a salary to each of the consulting doctors. Respecting the cab hire, your statements are simply ridiculous. We have never required any such preposterous explanations from Dr. Keily about his cab hire as you name. If you had read the correspondence in the *Western Daily Mercury* a short time since on the whole subject, you would have learned that we were quite willing to provide any necessary cab hire; our objection was expressed against a lavish expenditure by Dr. Keily, which the working of the Devonport district (where the work has been heaviest) proved to be extravagant beyond excuse. We therefore determined to increase the salaries of the residential doctors, the engagement of the two consulting ones relieving them of the work at the dispensaries, so that they shall in future, except in severe epidemics, pay for their own cab hire. Dr. Keily offered, if we engaged two consulting officers, to provide his own cab hire for £20 per annum. We have engaged the two consulting officers as wished, but have given £50 per annum extra, instead of the £20 which he named. Your knowledge of our local geography appears to be singularly deficient, for the district of Dr. Keily is not twenty miles in circumference, neither is it eight miles, and a considerable portion of that is open space.

You very offensively charge us with shabbiness; in reply, we offer Dr. Keily's own evidence in refutation of the accusation. The following letter was written by him to the committee last June, three months after their resolution respecting his cab hire had been sent to him.

2, Boon's-place, June 5th, 1885.

DEAR SIR,—Will you kindly communicate my best thanks to the committee for their great generosity in refunding the expenses incurred in procuring locum tenens. I am deeply sensible of the kindness of this spontaneous act on their part.—Very truly yours,

M. D. KEILY.

The amount referred to was £20. The rule respecting the settlement of disputes is a portion of the Friendly Societies Act bearing upon this point. Doctors may be fond of litigation, we are not, and consequently prefer to guard against it by availing ourselves of the means which the wisdom of our legislators have provided.

We are, Sir, yours obediently,

W. N. ELLIOTT, Chairman.
W. H. HOOPER, Vice-chairman.
W. COURTES, Secretary.

Stoke, Devonport, February 3rd, 1886.

*** We insert the above letter without being convinced by it of the injustice of our principal criticisms on the action of the authorities of the Three Towns Friendly Societies Medical Institution. The letter, indeed, contains evidence of the contrary, and shows that when the two medical doctors thought two fresh officers necessary, one only was appointed. As to the amount of cab fare *necessary*, we prefer the medical estimate of that to the estimate of the committee. Generally, we regret to say, we adhere to our opinion that the committee are not generous in their views of the value of medical service, or wise in expecting that so much work can be done for so little money and by such few hands.—ED. L.

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SYMPATHETIC IRRITATION OF THE PNEUMOGASTRIC.

To the Editor of THE LANCET.

SIR,—I should be glad if any of your readers would favour me with suggestions for the treatment of the following case.

M. D——, six weeks advanced in her seventh pregnancy, is suffering from sympathetic irritation of the pneumogastric nerve, causing complete prostration, impediment to breathing, and very great distress. In her first four pregnancies she had no unusual symptoms from beginning to end; in the fifth the nerve irritation took the place of the usual morning sickness, and lasted till quickening, notwithstanding treatment at the hands of Dr. Priestley and myself. In the sixth the same train of symptoms occurred till a miscarriage resulted at four months. Now the same troubles exist. I have tried bromides and nerve-tonics of all kinds. My patient lies on a sofa, utterly wretched and depressed. I can find no mention of such cases in any text-book, and when I say that Drs. Priestley, Matthews Duncan, and Playfair have all seen and prescribed for the case without result, my anxiety will be understood. If any professional friend can offer any aid, I shall be very sincerely obliged. I am, Sir, yours faithfully,

Russell-road, Kensington, W., Feb. 4th, 1886. W. TOWERS-SMITH.

A Somerset Surgeon.—Scurf in the head is constituted either by epithelial desquamation occurring in slight or chronic inflammatory diseases—such as eczema or psoriasis, or ringworm—or by an abnormal outpouring and accumulation of sebum, just as scaliness of the general surface may accompany a number of conditions. The treatment will depend on the nature of the affection; but if the scurf alluded to is that characterising the common alopecia furfuracea, our correspondent will probably find effective the slight stimulation and cleansing of the scalp by tar soap, followed by the gentle inunction of weak citrine ointment.

"POISON FOR TWOPENCE."

To the Editor of THE LANCET.

SIR,—May I mention, in corroboration of your remarks (THE LANCET, Jan. 2nd, p. 30) upon a statement made by my predecessor at the inquest on a recent case of oxalic acid poisoning, that another case of poisoning by the same drug was admitted into the hospital last week. In this instance the patient had bought at a neighbouring chemist's the orthodox twopennyworth, of which quantity half had been taken. Fortunately, the symptoms were not of a very serious nature, and the patient soon recovered.—I am, Sir, yours faithfully,

WALTER G. AXFORD.

Jan. 26th, 1886. House Surgeon, Westminster Hospital.

Dr. Weaver.—Negotiations are now, we learn, in progress with respect to the matter.

Dr. H. Blanc (Cannes).—The paper will appear in an early number.

COMMISSIONERS IN LUNACY.

To the Editor of THE LANCET.

SIR,—Adverting to the leading article in your impression of the 6th inst. upon the subject of Lunacy Law Reform, you state that the Commissioners in Lunacy require a plateau of twenty-five acres upon which buildings having a frontage of 600 feet may be erected. Be good enough to inform your readers that the frontage alluded to would extend 600 *yards*. I am, Sir, your obedient servant,

London, Feb. 8th, 1886. G.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Edis; Dr. Braxton Hicks, London; Mr. Lawson Tait, Birmingham; Mr. L. Humphry, Cambridge; Dr. H. V. Sandford, Hereford; Dr. Harries, London; Mr. David; Dr. K. Spender, Bath; Mr. T. B. O'Connor, London; Dr. McKeown, Belfast; Mr. Groves, Woodford; Mr. Towers-Smith, London; Dr. Edwards, Philadelphia; Surgeon-Major Lunn, Lewes; Mr. Habgood, Somerset; Mr. Gostling, Bombay; Mr. W. A. Ellis, London; Mr. Callander, London; Mr. Boyce, London; Dr. D. B. Lees, London; Mr. Malvin, Harrogate; Mr. Petter; Mr. Tunmer, Harrogate; Dr. Jas. Adam, London; Mr. Karkeek, Torquay; Mr. M. Smale, London; Mr. Annandale, Edinburgh; Mr. A. D. Moffat, Glasgow; Mr. H. C. Gillies, Brockley; Mr. E. C. Beale, London; Mr. W. Brown, Carlisle; Dr. Curran, London; Mr. Merlin, Sutton; Mr. J. R. Forest, Suakim; Dr. Jacob, Leeds; Dr. West, London; Mr. Lawrence, Birmingham; Mr. J. L. Kerr, Manchester; Messrs. Griffin and Co., London; Dr. Rolands, Great Crosby; Messrs. Cornish Bros., Birmingham; Mr. Newman, London; Mr. Binks, Clayton; Dr. P. Kidd, London; Mrs. Rahn, Ipswich; Miss Tyler; Mr. Gardner, Victoria-park; Mr. Saddell, Paddington; Messrs. Lee and Nightingale, Liverpool; Messrs. Waltham and Co.; Mr. Bottomley, Ashton-under-Line; Mr. Allison, New York; Mr. Evans, Cardiff; Messrs. Black and Johnstone; Mr. Sheridan, Blaina; Messrs. Johnstone and Co., Edinburgh; Mr. Cockburn, Torquay; Mr. Holmes, Egham; Mr. Hulme, Edinburgh; Mr. Skerrett, Bristol; Mr. Evans, Llanrwst; Dr. Wilson, Huntley; Mr. Mayger, Burton-on-Trent; Messrs. Porrett and Co., Sunderland; Mr. Barron, Manchester; Mr. Bland Sutton; Dr. T. W. Hime, Bradford; Miss Wheeler, Worcester; Dr. Jas. Weaver, Southport; Mr. Groves, Dorchester; Dr. Parkhill, Darfield; Dr. H. Blanc, Paris; Mr. W. S. A. Griffith, London; Mr. Morton; Mr. David Lobo, Venezuela; Mr. Fraser, Ashburton; Dr. Mantle, Stanley; Mr. A. H. Jackson, Manchester; Messrs. Southall, Birmingham; Mr. Le Grand, London; Dr. More Madden, Dublin; Mr. Hastings, London; Mr. H. Kimpton, London; Mr. H. V. Rake, London; Messrs. Cox and Co., Brighton; Mr. Anderson, Stronsay; Mrs. Simpson, Sydenham; Miss Learmonth, London; Mr. Hawkings, London; Mr. Lloyd, Liverpool; Mrs. Skipworth, Calstor; Dr. Rayner, Great Malvern; Mr. F. P. Atkinson, Surbiton; Spero Meliora; Medica; W. M. D.; C. H.; G.; G. P.; Resident Medical Officer, Grassington; A New Member; Theta; G. C.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Latham Cambridge; Mr. Maythorn, Biggleswade; Messrs. Edmondson and Co., Skipton; Mr. Harrison, Liverpool; Messrs. Bewlay and Co., Dublin; Mr. Montford; Mr. Robertson, Henley; Mr. Burgess, Invergordon; Mr. Hogg, London; Mr. Gant, London; Messrs. Bell and Co., Edinburgh; Mr. Woodd, Calstock; Mr. Dickinson, Nottinghill; Mr. Griffiths, Swansea; Mr. Green, Hull; Messrs. King and Co., London; Dr. Eberle, Thirsk; Dr. Colman, Surbiton; Mr. Alder, Clapham; Mr. Savery, Grimsby; Mr. Harkin, Belfast; Mr. Brook, Huddersfield; Mr. Cash, London; Dr. Braye, Whitechapel; Mr. Hine, Ilminster; Mr. Milne, Thetford; Mr. Moullin, London; Mr. Sharpe, Walsall; Messrs. Smith and Son, Birmingham; Mrs. Nicholson, Manchester; Mr. H. Sergeant, London; Mr. Bishop, Darjeeling; Mr. Turner, Market Harbour; Dr. Rowland; Dr. Saul, Lancaster; Mr. White, Wolverhampton; Mr. Pope, South Shields; Messrs. Oliver and Boyd, Edinburgh; Mr. Eccins, Gravesend; Mr. Payne, London; Mr. Neve, Leeds; Mr. Broe, Hull; Mr. Perceval, Kingston; Mr. Dickie, Claremont; Mr. Haywood, Southport; Mr. Inglis; Messrs. Mason and Co., Chelsea; B., Manchester; Dr. S., Burton-on-Trent; N.; Surgeon, Pontypridd; Beta, Liverpool; Sanitas; Bromidia, London; A. H. L., Sheffield; J. G. C., Highbury; W. P., Shepherd's Bush; L.R.C.P., Littlemore; M. G., Littleborough; C. A. G., London; H. C. D., Eastbourne; E. A. T., Clifton; S. H. H., Leicester; The Matron, Gravesend Hospital.

Bristol Mercury, Chester Courant, Presbyterian Messenger, Pendleton Reporter, Hull Daily News, Ballarat Courier, Derbyshire Times, Western Daily Mercury, Liverpool Mercury, Hampshire County Times, The Philanthropist, &c., have been received.

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THE

Erasmus Wilson Lectures

ON

EVOLUTION IN PATHOLOGY.

Delivered at the Royal College of Surgeons.

BY J. BLAND SUTTON, F.R.C.S.,

ASSISTANT-SURGEON TO THE MIDDLESEX HOSPITAL, AND LECTURER ON COMPARATIVE ANATOMY.

LECTURE II.

THE INFLAMMATORY PROCESS.

MR. PRESIDENT AND GENTLEMEN,—Inflammation, when viewed in the broadest possible light, may be defined as *the method by which an organism attempts to render inert noxious elements introduced from without or arising within it.* Noxious elements capable of bringing about the phenomena peculiar to inflammation may be denominated *irritants.* Some of them are very coarse, others are peculiarly subtle, often eluding detection. The objective signs of the inflammatory process are so well known that it is needless to repeat them. The redness and swelling, as Galen knew, are the result of increased afflux of blood and exudation of serum, but the determining cause of the afflux has taxed the ingenuity of pathologists. It remained for the ingenuity of Cohnheim to devise experiments whereby the process could be objectively studied under the microscope. From direct observation carried out on the tongue and web of the foot of a frog, the tail of a tadpole, fins of fish, and mesentery of a mammal, we have been informed of the large part played in the inflammatory process by the white corpuscles of the blood. These experiments teach us that in vertebrata the most important feature in the inflammatory process is the vascular disturbance. The next question which suggests itself is this: What are the causes which originate all this vascular disturbance? For the present let it be simply said it is the result of irritation. If we extend our observations to other animals, especially the invertebrata, in whom many of the phenomena of cell life may be studied with tolerable ease, we shall quickly become impressed with the important functions played by active motile cells.

So far as inflammation is concerned, there are three points to which it is necessary to draw attention. They are: 1. The capacity exhibited by certain cells of effecting a change of place and form. 2. Their power of taking into their interior various substances with which they may come into contact. 3. The property they possess of decomposing organic material when in their interior or in contact with their protoplasm; this is termed intra-cellular digestion.

The first of these, or the inherent property possessed in many instances by protoplasm of moving with a rapidity perceptible with the aid of a microscope, is an acknowledged fact in biology. These movements may be produced by stimuli. The discovery by Wharton Jones in 1846, that the leucocytes of human blood possessed this property was a most important step. The capacity of the leucocytes to change their position forms one of the commonest of demonstrations in the physiological laboratory.

We must now consider the second statement—that of the power of ingestion. In 1862 Haeckel showed that when a tethys, a naked (shell-less) mollusk, is injected with indigo, the granules are taken up by the blood-corpuscles, and he further showed the occurrence of similar phenomena in the blood of various invertebrata. One of the most important results of these observations was the discovery that the cells of the blood of man and other vertebrates possess similar properties, and Cohnheim turned it to advantage in that it enabled him to demonstrate beyond question, that the migratory cells seen in the cornea when inflamed are directly derived from the blood.

Having considered the peculiar property of cells, whereby they ingest foreign bodies, it becomes essential to inquire concerning the fate of the ingested material, for it is of the highest interest in connexion with the process of inflammation. It has long been known that when an amœba takes into its interior a green-coloured plant, and is kept under observation, it is found that the ingested material gradually breaks up, loses its green colour, and finally disappears. The amœba is thus capable of taking food into its interior, and of making it part of itself, a process conveniently called nutrition, and is really the outcome of the process of digestion. When the process is carried on in a cell of this kind it is spoken of as intra-cellular digestion. Our knowledge of this process has been very largely extended by the researches of the eminent Russian biologist, Metschnikoff, who has done more than any other observer in this important and interesting line of inquiry. His investigations were first carried out on the sponges; later, he extended them to the hydroid polyps and hydro-medusæ. By using carmine he was able to watch its inception by the endoderm cells. In one case, that of Mesostomum ehrenbergii, the turbellarian refused to take the carmine; but Metschnikoff fed a nais with carmine, and induced mesostomum to eat the nais; examination showed the presence of carmine in the digestive cells of the turbellarian.

In 1880 Jeffrey Parker communicated to the Royal Society a paper on the Histology of Hydra fusca, which contains valuable evidence in support of intra-cellular digestion, and the paper is especially interesting in that it shows that the activity of the cells of the endoderm have not been sufficiently insisted upon, for in some cases by means of their pseudopodia the endoderm cells can actually obliterate the digestive case. He also shows that the endodermic cells carry on the process of digestion, for he found in their interior the partially disintegrated bodies of entomostraca. Soon afterwards Lankester was able to show that in the case of the fresh-water medusæ, which were discovered in the lily-house of the Botanical Gardens in 1880, intra-cellular digestion could be observed in these transparent forms. Interesting as these observations are, and valuable in that they prove the existence of intra-cellular digestion, yet it is necessary to detail the experiments by which Metschnikoff showed unquestionably that the wandering cells are capable of digesting organic substances. Human blood-corpuscles taken up by the mesoderm cells of bipinnaria become completely absorbed. Milk-globules share the same fate, and when taken up by the wandering cells, break up into small granules and diffuse themselves throughout the cell substance. The following experiment was devised to show that the cells do not ingest everything indiscriminately. On injecting into phyllirhöe living ova of a sea-urchin, it was found that neither young ovarian cells nor ripe ova which had extruded polar globules were eaten by the mesoderm cells; on the contrary, they seemed to live much longer than when placed in sea-water. Whilst in the tissues of phyllirhöe they could be fertilised, segmentation and a normal blastopore being produced. When spermatozoa of the sea-urchin were introduced they were quickly surrounded and eaten by the mesoderm cells. Observations on the necrotic organs of several invertebrates have shown that it is the function of mesoderm cells to devour the dying elements of such organs. If fluids containing bacteria be injected beneath the skin of bipinnaria and others, or if they develop spontaneously in the wounds of such animals, they will soon be found within the substance of many amœboid cells. In many cases the bacteria lose their motility and become so delicate as scarcely to be visible. In botryllus, Metschnikoff has found a spirochœte closely resembling the S. obermeyeri of relapsing fever and a small bacillus like the lepra bacillus. In both cases they were pursued, ingested, and absorbed by the mesoderm cells, some of which perished in the attempt and could be seen with long bacterial filaments projecting from them. The same process may be seen in the blood of vertebrates, where in bacterial affections such as anthrax the bacilli are taken up by the leucocytes.

We must now consider some examples of intra-cellular digestion in other than invertebrates. It has already been mentioned that this property of digestion possessed by cells is not merely used for nutritive purposes, but is also utilised for removing larval organs, and to protect the organism from harmful bodies. Before entering into details, it is necessary to refer to one other curious phenomenon presented by amœboid cells—namely, that of two or more cells fusing together so as to form a larger mass of protoplasm. Protoplasmic masses formed in this way are termed plasmodia. Metschnikoff has watched their formation, and regards them as equivalent to giant cells. In all cases in invertebrates they have arisen around foreign bodies, and

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always by fusion of separate cells. There is abundant good reason to believe that giant cells in the higher vertebrata, when they do occur, arise from the fusion of leucocytes. In 1870 Dr. Caton published in the *Journal of Anatomy and Physiology* a contribution to the theory of cell-migration, and, as he points out, this process may be said to have its probable maximum activity in the tadpole. He further tells us that in the month of April he observed the process to take place to such an extent that he had some doubts that it might not be a possible physiological occurrence. The following observations have an interesting bearing on this point. Metschnikoff has shown that in the early stages of absorption of the tails of larval batrachians a large number of amœboid cells are present, within which are seen remnants of nerve fibres and fragments of muscle. These fragments of the tail are digested and absorbed by the amœboid cells, which are in reality leucocytes engaged in devouring the tail of the tadpole, and have been named in consequence "phagocytes." I have been able to follow the process in considerable detail by means of sections carried through the tail of tadpoles in various stages, and can fully confirm the observations of Metschnikoff with regard to the devouring propensities of the leucocytes. There can be little doubt that not only the tail, but also the gills, are eaten up in this manner. Bacteria are evidently an old source of trouble in the world; they affect animals of all kinds, even water fleas. Metschnikoff tells us of combats he has witnessed in the daphnia, between the white cells of the blood and bacteria, and how when one cell was not sufficient to attack the invading bacterium, two or more would fuse together, surround, digest, and thus rid the daphnia of the intruder. Can these facts be applied to mammals? If the cornea of a rabbit be irritated by nitrate of silver or a fine silk suture, the tissue becomes in a few hours red and hazy, due to escape of leucocytes from the vessels to repel, or if possible to destroy, the offending material. Draw a fine thread across the interior of a vein, leucocytes soon swarm around it. In tubercle, leprosy, perlsucht, or avian tuberculosis, the characteristic lesions swarm with bacilli. These minute organisms are often taken up by cells, and especially by giant cells, which in the two last mentioned affections crowd the affected area in great numbers. The consideration of these facts seems to indicate that in the giant cell we have the counterpart of the fusion of phagocytes, as in the case of the daphnia and other invertebrates, and it is in reality an effort of the blood-corpuscles to rid the tissues of noxious elements. The large multinuclear cells, osteoclasts, seen in bone undergoing absorption, must also be placed in the same category. These observations present the whole process of inflammation in an entirely new aspect, and instead of being a purely pathological process, it will rank as one of normal physiology, which when in excess comes within the domain of pathology.

At the commencement of the lecture it was stated that bodies capable of originating the inflammatory process were recognised under the convenient term of "irritants." Inflammation may be of two kinds according to the nature of the irritant. It may be simple or specific. Simple inflammation is the reaction which follows mechanical, thermal, or chemical stimuli or irritation. A specific inflammation is one which results from the introduction into the organism of a particular poison or irritant, such as variola, glanders, tuberculosis, perlsucht, actinomycosis, and the like. That the effects of inflammation vary with the irritant no one can deny. Dirt on a child's hand produces warts, decaying animal matter will in some cases produce veruca necrogenica; soot, the soot-warts, &c. No class of pathological productions illustrate the reaction of the organism to a specific virus so well as the peculiar group now known as the infective granulomata, which comprises tuberculosis, human, bovine, or avian; leprosy, syphilis, glanders, actinomycosis, &c. The histological characters of the morbid formations in each of these diseases are practically identical; a soft tissue made up almost entirely of round cells, very little intercellular substance, the presence of giant cells, and in most of them a bacillus or a fungus, is a constant feature. This infectiveness is very pronounced, for they may be transferred easily from one organism to another, and the "irritant" may be cultivated in artificial media. My observations, which have extended over the most important groups of the vertebrata, go to show that the mode by which a piece of noxious tissue is encapsuled or cast out of the body, is only an illustration on a large scale of the process by which bacilli, bacteria, micrococci, &c., are in some cases rendered inert by the activity of cells. If, as in the case of the daphnia, the quantity of micro-organisms invading the body is large, and the vitality of the organism enfeebled, the leucocytes are insufficient to cope with the invasion, and disastrous effects result.

If we summarise the story of inflammation as we read it zoologically, it should be likened to a battle. The leucocytes are the defending army; the roads and lines of communication, the bloodvessels. Every composite organism maintains a certain proportion of leucocytes as representing its standing army. When the body is invaded by bacilli, bacteria, or micrococci, chemical or other irritants, information of the aggression is telegraphed by means of the vaso-motor nerves, and leucocytes rush to the attack; reinforcements and recruits are quickly formed to increase the standing army, sometimes twenty, thirty, or more times the normal standard. In the conflict cells die and often are eaten up by their companions; frequently the slaughter is so great that the tissues become burdened by the dead bodies of the soldiers in the form of pus, the activity of the cell being testified by the fact that its protoplasm often contains bacilli &c. in various stages of destruction. These dead cells, like the corpses of soldiers who fall in battle, later become hurtful to the organism they in their life-time were anxious to protect from harm, for they serve as breeding-grounds wherein the bacteria may germinate, and, like a pestilence and scourge, devastate the individual. The analogy may seem to many a little romantic, but it appears to me to be warranted by the facts which I have ventured to place before my audience.

Clinical Lecture

ON

GASTROSTOMY IN THE TREATMENT OF ŒSOPHAGEAL CANCER.

Delivered at the Birmingham General Hospital, November 26th, 1885.

BY T. F. CHAVASSE, M.D., C.M., F.R.C.S. ED.,
SURGEON TO THE HOSPITAL.

GENTLEMEN,—The surgical treatment of cancerous stricture of the œsophagus has of late years received considerable attention. Three proceedings may be said to have proved of service:—I. The gentle passing of a small bougie through the stricture. II. The prolonged retention in the œsophagus of a tube passing beyond the stricture, in calibre equal to a No. 8 or 10 English catheter. III. Gastrostomy.

I. *The passing of a small bougie through the stricture.*—The effects of this proceeding are often most marked for a time, the patient being subsequently able to swallow liquids with comparative ease. The duration of this facility varies, but I have known it remain for several weeks.

A case that recently came under my notice was a private patient of Dr. Littlewood's, of Walsall. I saw him on July 22nd, 1885. The age was stated to be sixty-five; there was a history of gradually increasing, and at the time of consultation most pronounced dysphagia, of emaciation, and of syphilis acquired twenty years before. On examination an obstruction was encountered in the œsophagus, about five inches from the teeth. Eventually a tube the size of a No. 11 gum-elastic catheter was passed through this. The instrument was felt to pass over a roughened surface, and on its withdrawal was found streaked with blood. Immediately afterwards the act of swallowing was much improved, and up to the date of death (Sept. 29th) remained fairly satisfactory, especially if vinegar was taken to aid the downward course of nourishment.

I must, however, warn you not to repeat this procedure at frequent intervals when the diagnosis has been satisfactorily completed, or else a perforation of the walls of the gullet may thwart your efforts at alleviation.

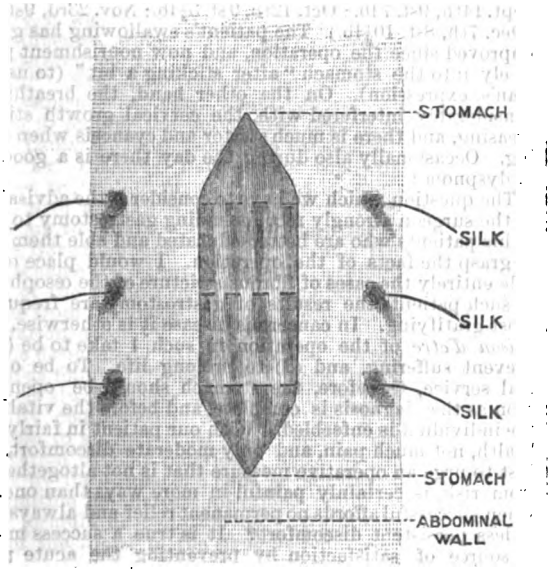
II. *The prolonged retention of a tube in the œsophagus.*—Mr. Durham[1] states that in one case he kept the same tube in unremoved for four weeks, the patient feeding himself

[1] Holmes's System of Surgey, vol. i.

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comfortably and satisfactorily through it. Except as a means of affording very temporary relief I am adverse to this plan of treatment—1. Because any structure the seat of a malignant neoplasm should be kept at rest, and not irritated in any way, if a slow development be wished for. A foreign body passing through an epitheliomatous growth in the œsophagus will certainly tend to increase the ulceration and the probable formation of a fistula connected with the trachea. At several post-mortem examinations of cases of malignant disease of the œsophagus I have noted the enlarged caseating and also suppurative condition of the glands round the upper opening of the stomach, and cannot but think that the pressure of a tube in the gullet for a long period would have a tendency to increase the glandular complication, perhaps more so than the mere passing of liquid food through the stricture. 2. Because in my experience the tube cannot always be tolerated, and when it is, it is very inconvenient and reduces the patient to a very helpless condition. 3. Because if an attempt is to be made to prolong life, gastrostomy will probably have to be resorted to at last, and then the operation is not performed under the most favourable conditions.

III. *Gastrostomy.*—Accepting the plan now universally adopted, of dividing the operation into two stages—that is, waiting for adhesion of the stomach to the abdominal



parietes before opening the viscus,—we will discuss the various methods now employed of obtaining firm adhesion.

1. *The simple suture.*—The stomach, having been exposed, is secured by four or more silk or wire sutures on each side to the edges of the abdominal incision. Mr. Bryant[2] thinks this is sufficient. In some instances it undoubtedly is. 'In a case sutured in this manner by my colleague, Mr. Jolly, a fatal termination occurring at the end of five days from pneumonia, the adhesions found at the post-mortem were enough for practical purposes. At the same time it must be borne in mind that the broader the surface offered for the approximation of the anterior stomach wall and the peritoneal lining of the abdominal wall, the better the chances of obtaining the desired adhesions. The simple suture does not offer a very broad area for adhesive formation, and if severe efforts at vomiting occur after the operation anxiety may arise as to its stability.

2. *A double row of sutures*, as introduced and advocated at one time by Mr. Howse. The outer ones, seven or eight in number, after passing through the anterior stomach wall, are made to pierce the parietes three-quarters of an inch from the margin of the abdominal incision, and secured externally by a piece of bougie or button. The inner ring, three sutures on each side, fasten the stomach wall to the edges of the skin. It must be evident that this plan offers a large surface of the stomach for adhesion, and great security if the organ must of necessity be incised for feeding purposes within twenty-four or forty-eight hours of the completion of the first step of the operation. As in the majority of cases this necessity ought not to present itself, and the application of the double row in actual practice will be found to be rather a tedious performance, Mr. Howse has recently advocated another plan.

3. This consists in clamping the anterior wall of the stomach with forceps sheathed in indiarubber, and which by their weight pull forward the viscus and keep it in position without the aid of stitches. The compression is not severe enough to cause sloughing of the stomach wall, and the forceps are left *in situ* for seven or eight days. This method has been successfully carried out by Mr. Howse.

4. This method may be called "the gather or running stitch." (See diagram.) It is very simple in its application, and in three cases in which I have employed it has proved effectual. It consists of three or four sutures passed transversely through the peritoneal and muscular walls of the stomach and out again three or four times, and piercing the abdominal parietes on each side about two inches beyond the edges of the incision. By tightening the sutures so introduced the edges of the primary incision are brought into apposition, and the anterior wall of the stomach pulled up and maintained in close contact with the parietes, leaving only about half an inch of the viscus exposed, to which the silver wire suture, introduced longitudinally at an early date of the operation and left protruding, is a guide for the subsequent puncture.

5. *Mr. Boyce Barrow's method.*[3]—The stomach having been exposed, a portion of its anterior wall is pinched up by the fingers of the operator. Two good-sized hare-lip pins are made to transfix it, seemingly through its whole thickness, in a direction transverse to the skin wound and about half an inch apart. The projecting ends of the pins are carefully protected by indiarubber. Catgut sutures are then used to bring the deep peritoneal and superficial parts of the wound closely round the pins and protruded portion of the stomach. No sutures are introduced into the viscus itself. The operation in the case in which it was first performed was completed on the tenth day, and the patient lived for three months afterwards. The advantages claimed for this plan are that it is very simple and quickly performed, and the stomach, it is thought, may be opened early if needed, without fear of extravasation. The only objection I can imagine is that the passing of the pins may result in the formation of additional gastric fistulæ, as they must be of a good size and allowed to remain until after the completion of the second part of the operation.

We will now proceed to the details of some cases in which the operation has been undertaken.

Hugo R——, aged fifty-six, labourer, was admitted into the General Hospital on March 14th, 1884. Ten months previously he noticed that the throat felt sore, that swallowing was accomplished with some little difficulty, and that solid food regurgitated. This was followed by an interval in which liquids could be swallowed pretty easily, and then again difficulty occurred. The exact position of the obstruction seemed opposite the top of the sternum. On March 11th the patient's neck began to swell on both sides, and as this was accompanied by complete inability to swallow nourishment he became an inmate of the hospital. On admission the man was emaciated, and efforts at swallowing caused much pain in the throat. No glandular enlargement to be felt in the neck. The passage of an œsophageal bougie was obstructed at a point opposite the top of the sternum, but a No. 11 tube was passed into the stomach. The relief caused by this step was most marked. Swallowing now became comparatively easy, so much so that the patient declined any further operative interference; he therefore left the hospital on March 19th. In June he was again admitted, the obstruction being complete and the wasting more apparent. On the 14th laparotomy was performed by means of a longitudinal incision parallel to the edge of the left rectus muscle. The stomach was secured to the abdominal wall by means of three running sutures. The patient never complained of much pain, and his highest evening temperature was 101°, that in the morning never falling below normal; still there was slight distension of the abdomen, and a more or less persistent pulse of 100, with a thready tendency. Pulmonary irritation was marked from the time of the recovery from the ether. Nourishment was administered by means of pancreatised enemata, not always well borne, and on the

[2] The Practice of Surgery, fourth edition, vol. i.

[3] Paper read before the Medical Society of London, session 1884-5.

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second day in very small quantities by the mouth. All the stitches were removed by the fifth day, and on June 20th the stomach was incised and a tube introduced for feeding purposes. Three days later the outer portion of the lowest stitch-hole sloughed, and a fistulous opening, the size of a large pin's head, communicated with the stomach. This was the result of the suture having been passed too deeply and penetrating the mucous coat. The man died exhausted on July 1st.

Pathologist's report.—Body much wasted; hardly any subcutaneous fat. Heart healthy. Lungs: Old pleuritic adhesions on the left side; hypostatic pneumonia of the right base. Liver congested; universal peri-hepatitis. Kidneys: Right normal; left intensely congested. Intestines: There was found some matting together of the intestinal coils by flakey lymph, especially in the left iliac region where there was reddening, but no ulceration; about half a pint of semi-purulent fluid was present in the peritoneal cavity. Stomach: This was adherent firmly to the abdominal wall, over an area of some two inches in diameter. The organ had been incised close to the pylorus, and had very thin walls, the mucous membrane looking as though considerable atrophy had taken place. The whole cavity appeared somewhat dilated, and at the cardiac end presented much capillary ecchymosis. Œsophagus: Has a large deep ulcer four inches long, reaching to within one inch of the cardiac end of the stomach, and on the average involving three-quarters of the circumference of the tube, except at the upper end, where a small strand one-eighth of an inch wide was all that remained of the mucous membrane. The edges were deeply undermined, especially the upper and lower ones. There were no granulations visible, the ulcer having an entirely necrotic appearance. The wall of the tube was injected and thickened. The lumen was smallest at the upper limit. The neighbouring lymphatic glands were mostly pea-sized, tough, but not caseous or indurated.

The causes of death after gastrostomy may be said to be—(1) shock, (2) peritonitis and exhaustion, and (3) bronchopneumonia. In the last two and a half years gastrostomy has been attempted six times for carcinoma of the œsophagus at the General Hospital; of these, three cases fell to my lot.

First Case.—Man, aged fifty-eight. First stage of operation, May 15th, 1883; stomach secured by a single row of sutures. Died in five days. Stomach unopened. Cause of death, exhaustion, lobar pneumonia.

Second Case.—Man, aged forty-five. First stage of operation, May 29th, 1883; stomach secured by a double row of sutures; incised eleven days later. Died ten weeks after first operation. Cause of death, exhaustion. A large cavity containing nearly a pint of pus was found lying between the lobe of the liver and the stomach wall.

Third Case.—Man, aged fifty-two. First stage of operation, Oct. 30th, 1883; stomach secured by gather stitches; incised ninth day. Died Nov. 26th, 1883. Cause of death, lobar pneumonia. (Weight of patient two days before death, 5 st. 8½ lb.

Fourth Case.—Man, aged fifty-six. First stage of operation, June 14th, 1884; stomach secured by gather stitches; incised fifth day. Died July 1st, 1884. Cause of death, subacute peritonitis, pneumonia, exhaustion.

Fifth Case.—Man, aged fifty-two; operation completed Aug. 30th, 1884; stomach secured by a single row of silver sutures; died Aug. 31st; cause of death probably shock; lobar pneumonia of right base.

In four of these five fatal cases pneumonia was found at the post-mortem examination. Abscess in one, probably due to perihepatitis; subacute peritonitis in one also. In the case where it was found necessary to complete the operation at one sitting in a worn-out patient, the shock necessarily attending the procedure was not recovered from.

The sixth case is now before you, the details of which are as follows:—

Thomas M——, aged fifty-six, a cab-driver, was admitted into the General Hospital on July 18th, 1885. Four months before admission he first felt something sticking in his throat, this being accompanied by a difficulty in swallowing solid food. A few weeks afterwards he perceived a small kernel, the size of a marble, on the left side of the neck, just below the angle of the jaw. This growth increased in size, and immediately before admission the voice became husky and the breathing embarrassed on the slightest exertion. No food of a solid nature had been taken into the stomach for a week, and but very little milk. The patient had steadily lost flesh from the date of his earliest symptoms. The family history tells that one brother died of cancer of the breast, and within the last fortnight his sister from uterine carcinoma. On admission the man was emaciated, had a husky voice, and dyspnœa on exertion. On the left side of the neck a hard infiltrating glandular mass presented. A moderate-sized bougie introduced into the œsophagus was stopped six inches from the teeth, and on withdrawal bore traces of blood and granulation tissue. The pupil of the left eye was contracted to the size of a pin's head, owing to the pressure upon the cervical sympathetic nerve. On July 23th the first stage of gastrostomy was performed. Three gather stitches were introduced. Pancreatised enemata was ordered every third hour. On the 29th ice was sucked to relieve the great thirst. Had slept nearly eight hours the first night, and felt very little pain. The highest temperature recorded took place on the second evening—viz., 101·4°. On the 30th two ounces of milk and soda-water, besides ice, were administered by the mouth. The gather sutures were removed on July 31st, August 1st and 3rd respectively. On August 5th the stomach was opened and food introduced through the fistula. On the 9th the patient sat up. The nourishment taken during twenty-four hours was forty ounces of milk, ten ounces of beef-tea, two ounces of port wine, the meat (minced) from a chicken's breast, and three eggs. Weight: August 30th, 8st. 12lb. (had gained 8lb.); Sept. 14th, 9st. 7 lb.; Oct. 12th, 9 st. 3½ lb.; Nov. 23rd, 9st. ½ lb.; (Dec. 7th, 8st. 10½ lb.) The patient's swallowing has greatly improved since the operation, and now nourishment passes freely into the stomach "after sticking a bit" (to use the man's expression). On the other hand, the breathing is considerably interfered with, the cervical growth still increasing, and there is much stertor and cyanosis when sleeping. Occasionally also during the day there is a good deal of dyspnœa.[4]

The question which we have to consider is the advisability of the surgeon strongly recommending gastrostomy to those of his patients who are better educated and able themselves to grasp the facts of the operation. I would place on one side entirely the cases of fibrous stricture of the œsophagus; in such patients the results of gastrostomy are frequently most gratifying. In cancerous disease it is otherwise. The *raison d'être* of the operation in such I take to be (1) to prevent suffering, and (2) to prolong life. To be of any real service, therefore, the stomach should be opened as soon as the diagnosis is complete, and before the vitality of the individual is enfeebled. With our patient in fairly good health, not much pain, and only moderate discomfort, is it just to urge an operative measure that is not altogether free from risk, is certainly painful in more ways than one, and when successful affords no permanent relief and always more or less persistent discomfort? It is true a success may be a source of satisfaction by preventing the acute pangs of starvation becoming dominant, and the painful results consequent upon the formation of a fistula between the œsophagus and trachea. The prolongation of life itself is, after all, only a matter of a few months, and is such an existence desirable? Possibly it is a matter that an intelligent patient ought to decide for himself, after the ungarnished facts have all been placed before him by the surgeon. He may, if supplied with the luxuries of life, elect to bear, aided by the palliatives of the milder forms of treatment, until the unbearable be reached, and then seek relief by other means than those afforded by surgery. With those in the humbler walks of life it is perhaps better to operate early, and to maintain, and from time to time to utilise, the gastric fistula, retaining the cases under one's personal supervision. It appears more humane to adopt this course rather than expose them to the uncertainties of their own rude fare, the surroundings of their questionably comfortable home, and the want of constant and adequate nursing and professional care.

[4] The man died in hospital on Jan. 23rd, 1886, with double pneumonia. For the three preceding weeks nourishment could only be taken through the fistula. He repeatedly expressed himself "tired of life."

HOSPITAL ACCOMMODATION FOR MERTHYR TYDVIL.—Although the population of this union exceeds 100,000, there is at present no public hospital at Merthyr Tydvil. The Marquis of Bute has intimated his willingness to subscribe £1000 towards the erection of a suitable building to be devoted to such a purpose, provided that at least a sum of £2000 is subscribed by others interested in the parish.

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THE DARWINIAN "WORKING HYPOTHESIS OF EVOLUTION" EXAMINED PHYSIOLOGICALLY.

By T. WHARTON JONES, F.R.C.S., F.R.S.

ACCORDING to the Epicurian doctrine recited by Lucretius in his poem "De Rerum Naturâ," "it was not by design that atoms framed the world; but after many fruitless collisions they chanced to fall into such motions as produced the world and all that is in it. At first monsters of all kinds were formed, which could not grow up nor continue their kind. They all therefore perished off." "The members and organs of the body," further said Lucretius, "were not formed by design, but having been formed, came to be applied to the uses for which they were found adapted." Whilst Epicurus thus taught that organised structure determined function, M. Lamarck, in his "Philosophie Zoologique," published in France about eighty years ago, formulated a scheme of evolution, according to which "it was not the form of the body or of its parts which gave rise to the habits and mode of life of animals, but, on the contrary, it was the habits and mode of life, together with other influences, which have in the course of time—ages and ages—determined the form of the body and parts of animals." Nay, new organs having become necessary in consequence of new wants, efforts were made by animals to acquire the desiderated organs, and so, according to Lamarck, they came into existence! In a similar strain, Dr. Erasmus Darwin, in this country, argued that the acquisition of new organs in the course of the evolution of animals was the result of their own *nisus* or endeavour to obtain what they longed for! The late Mr. Charles Darwin, grandson of Dr. Erasmus Darwin, objected to the scheme traced out by Lamarck, as affording no explanation of the process by which organised bodies have been evolved from the lowest to the highest. The efficient cause in operation, according to Mr. Darwin's own view, has been what he designated "natural selection"—a process described by him as follows: "Amid the struggle for existence which has been always going on among living beings, variations of bodily conformation and structure, if in any degree profitable to an individual of any species, *will* tend to the preservation of that individual, and *will* generally be inherited by its offspring. Thus is 'survival of the fittest' the condition for 'natural selection.'"

This formula of evolution by "natural selection, by survival of the fittest in the struggle for existence," seems, in reality, no more than what Epicurus taught in Athens, and after him Lucretius sang in Rome, and is no explanation, but merely a form of words without any basis in fact. I have, however, seen it somewhere actually stated that Mr. Darwin *discovered* natural selection—an amusing example of confusion of ideas respecting the difference between *discovery* and *invention*. The fundamentally similar construction of the human arm and hand, for example, the forelegs and feet of quadrupeds, wings of bats, flappers of seals, paddles of whales, and wings of birds, is, argued Mr. Darwin, inexplicable on any other supposition than common descent. All this, again, it must be affirmed, is a mere conceit, a conclusion without premisses. Such similarity of plan in the construction of their organs does not logically prove that the different races of animals have been evolved, the highest from the lowest, in the manner alleged. The process of change in the course of ontogenesis or the development of the embryo from the ovum to the state of the grown animal comprises a *differentiation* of structure; but, let it be particularly remembered, this *differentiation* is a *real* and *observable* development, and must not be confounded with the *imaginary* differentiation by transmutation, arbitrarily assumed by evolutionists to be the process of change in what they call *phylogenesis* or evolution of the line. Any variation in the development of an embryo, whether by excess or defect of the normal structure which may take place, is merely a monstrosity. In main features, the early human embryo does not, at first glance, seem to differ much from the correspondingly early embryo of a dog, for example; but notwithstanding this, they differ potentially from each other. By virtue of internal qualities and hidden power, the two somewhat similar aggregations of cells are at last unerringly developed—the one into a man and the other into a dog.

That races of living beings have had their form and structure, and consequently their functional endowments, transmuted by *natural selection* or any other imaginary process of evolution in a long course of ages, and that they have thereby become different from the organisms whence they sprang, are propositions not supported by any legitimate induction from facts. In the metamorphoses of the frog we can observe how the limbs and lungs make their appearance, and how the tail and gills of the tadpole disappear, so that the animal from being virtually a fish comes to be an air-breathing batrachian. These changes of structure and function constitute natural stages in the ontogenesis or process of development of the individual. The hind legs are first formed and assist the tadpole in swimming; but when the fore legs become, in due course, free, and the animal thereby fitted for progression on land, the tail, which was previously the organ of progression in the water, shrinks and disappears, while the gills for respiration in water are superseded by lungs for breathing air. In consequence of the diversion of the circulation of the blood from the tail, it becomes atrophied and reduced to a crust, which eventually falls off; the tail is not detached bodily, as commonly alleged. In a similar manner, the gills disappear by becoming atrophic in consequence of the diversion of the circulation of the blood from them to the swimming bladder now becoming lungs. All this process of metamorphosis, let it be repeated, constitutes an invariable stage in the ontogenesis or natural course of development to the frog state, and is no exhibition of a differentiation by transmution, such as is assumed to take place in what is called phylogenesis or evolution of the line. The transitional resemblances of form, the homologies and analogies of structure observable in the different races of organised beings, cannot, then, be admitted as indicative of any such thing as a proof of progressive evolution whereby plants or animals have by chance, or spontaneously, or by natural selection, whichever you choose to call the conceit, been transmuted from a lower to a higher grade of organisation with corresponding elevation of endowments. Though there is a resemblance among organic forms so far as to indicate a unity in the plan of the whole, a line of demarcation circumscribes, and has circumscribed so far as our cognisance truly extends, each kind or form.

An exposition of the affinities, the homologies and adaptations of structure throughout the organic kingdoms, is a great aim of philosophical anatomy; and the subject has been long ago pretty successfully worked out, even to the discovery of new facts and to the tracing of the transition between invertebrates and vertebrates (a transition, however, not through an ascidian mollusk, as Mr. Darwin fantastically thought he had discovered); but how well made out soever the affinities, homologies, and adaptations of structure may be, and how valuable a key soever to the discovery of new facts the knowledge thereof has proved, their demonstration does not and cannot, from the very nature of the question, help to confirm scientifically the doctrine of evolution; it is a mere sophism to argue otherwise. The question is one beyond the pale of science, and any addition of facts of the kind appealed to will still fail to fill up the proof.

A word about nucleated cells. The nucleated cell is a microscopical corpuscle of albuminous nature in respect to substance, and in respect to structure comprises two distinct parts—viz., protoplasm and nucleus. These two parts are usually enclosed within a membraneous wall—a third element of structure; but this cell-wall, though it has given name to the whole corpuscle, is found not to be a constant or essential part of its structure. A lower phase of living, or at least *viable*, existence than the nucleated cell is found in the *cytode*—a shapeless mass of protoplasm without a nucleus, and which is assumed by evolutionists to have originated by spontaneous generation. Though originally homogeneous in composition, structure, and endowments, cytodes, nucleated cells, and tissues developed from them, have come at last, according to evolutionists, to form, by a process of differentiation, the various kinds of *corpora viva*. In contradiction of this, however, it is important to remember a fundamental principle in the biology of cells, a fundamental principle overlooked or ignored by evolutionists—viz., that cells are of various kinds, each kind possessing its own peculiar vital endowments and its own mode of further development. One kind of cells does not

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give origin to another kind of different endowments. There is no such thing known as *differentiation* in the sense in which evolutionists have come to employ the term—viz., transmutation of endowments as well as of substance and structure—comparable to the transmutation of baser metals into gold, as pretended by the alchemists. Here I may repeat the remark made in my article on the Ova of Man and the Mammifera, that "differentiation" is a word which was imported by Professor von Baer into the vocabulary of development, but which has since come to be illogically usurped by evolutionists, as if, instead of merely indicating steps observable in the development which goes on before our eyes, it represented a *real fact* in proof of the evolution of organised and living beings from the lowest to the highest in all their various species, genera, and classes throughout millions of years—a phylogenesis which they fancy and gratuitously assume to have taken place.

The truth is, all that we know of cells is that they run through the different phases of growth and development proper to them, each kind according to its own fixed destiny. Granting any number of generations through which cells may be supposed to have descended, the evolution argument is not thereby strengthened or confirmed. When, by virtue of their own original intrinsic qualities, differently composed and endowed cells are, under the appropriate conditions, developed into tissues, each kind in its own proper way, the process is truly one of "differentiation" in the sense in which it was first employed in embryology by von Baer, but there is certainly no such process in nature, if by the expression is meant the development by transmutation of different kinds of tissues from one and the same kind of cells by their own desires and efforts with the resulting formation of new organs with correspondingly new endowments. The reality of such an imaginary process is, in fact, the very point to be contested, as the false foundation on which the superstructure of evolution has been in a great measure built.

Though resembling each other in their general characters, organic cells, let it be repeated, are of various kinds, each kind possessing its own peculiar endowments, physical and vital, and its own mode of further development into tissues and organs. One kind of cells cannot give origin to another kind with different endowments, nor be developed by the chance of circumstances into this or that kind of structure. Cells react vitally under varying conditions, but each kind only in its own way. If the conditions be unusual, the cell still reacts after its own manner, according to its inherent potentialities, so far as the unusual conditions permit. Cells may, indeed, become morbid, languish, and die under the influence of unfavourable conditions, but they never react in such a way as to be converted by transmutation of substance or evolutionary *differentiation* into some structure and organ of a fundamentally different nature from that which is normally the product of their development.

The elements in respect to shape composing the various tissues of the organs of a *corpus vivum* are formed out of the substance of cells, their nuclei, and intercellular substance; and though thus similar in the mechanism of their development, organs differ from each other, not only in shape and structure, but also in endowments, physical and vital—a necessary result from their component tissues being developed each from its own kind of cells. In short, the various cells, though they may resemble each other in external aspect and general points of structure, and the endowments thereon depending, are intrinsically different in their potential vital qualities. No transmutation, therefore, can, under any circumstances, take place of one kind of cell into the structure which is the proper product of the development of another kind of cell; nor can one kind of glandular cell elaborate the secretion which is produced from another kind. That the peculiarly endowed brain cells of man could ever have been evolved in the course of any number of generations throughout millions of years from the differently endowed brain cells of lower animals, is the merest fancy, as is, of course, also that any increased mental activity of an ape could have led to the evolution of the human mind.

Admitting that the nature of the physiological factors to which evolution is due is still open to discussion, and thus quietly giving up the form of words excogitated by Mr. Darwin to designate the efficient cause of evolution—viz., natural selection by survival of the fittest—evolutionists now fall back upon the palæontological facts disclosed by geology as decisive historical proof that evolution has actually taken place. For example, the one-toed horse of the present day was preceded on the earth by a three-toed horse, and it is assumed that the former has been evolved from the latter by the suppression of the phalanges of its rudimentary toes and other slight modifications. But supposing, for argument's sake, this descent of a one-toed from a three-toed horse, it would go a very little way in support of the doctrine of evolution by transmutation of structure and endowments, such as the evolution of the human brain from that of apes. Children are sometimes born with six toes, and reproductions of the malformation in the family are not uncommon; but herein we have no example of a new and improved edition of the breed. In regard to the three-toed fossil hipparion, we may indeed recognise in its bones and teeth characters indicating a near relationship to the horse tribe of the present day. We may also recognise, on the other hand, in the embryo of the said tribe indications of a three-toed development; but to say, for that reason, that a horse, a zebra, or an ass has been evolved from the prehistoric hipparion by natural selection, by survival of the fittest, is a logical inconsequence. All that palæontology teaches us is that various organic forms have in succession lived on the earth in the course of long periods of time, and that such forms, in like manner as the various forms of the present day actually do, exhibit in their fossil remains a close resemblance to each other in their transitional homologies. Herein it is obvious that we have no logically scientific proof that the organic forms, of which the fossil remains are first found in the strata of a later geological epoch, had been any one of them (e.g., the horse-tribe of the present day) evolved by transmutation of structure and endowments in fortuitous succession from a different form—e.g., the hipparion, of which the fossil remains are found in strata of an earlier geological period. This fallacious attempt to prove the validity of evolution by an appeal to palæontology is not to be confounded with the perfectly logical endeavour of Cuvier to construct from the study of fossil bones and teeth as data an anatomical and physiological history of the animals, of which the said bones and teeth are the actual remains. If, in the alleged evidence from palæontology, we had really a logical proof that evolution of organic forms in the manner contended for has actually taken place, it would then not be so difficult to understand the nature of the physiological factors in operation, even though the process may have been one requiring millions of years for its accomplishment. We should, however, have to admit that one kind of cells can give origin to other kinds which may be developed by the chance of circumstances into this or that kind of structure with this or that kind of endowments. The process in such a case would be similar to that in the development of the frog, as above described, but taking place fortuitously with the superaddition of differentiation by transmutation of structure and endowments.

In regard to the evolution of mind and language Mr. Darwin gave utterance to the speculation that the continued use of language has led to the evolution of the intellect, notwithstanding that it is self-evident language presupposes already existing intelligence as well as the proper organs of voice and speech. Then, again, it may be asked did the *nisus* to speak lead to the evolution of the organs of voice and speech, or did speech follow the fortuitous evolution of the organs? Leaving such *niaiseries* aside, let Professor Max Müller speak:—"The words in all languages," says he, "are built up from comparatively few roots, so that the whole question of the origin of language narrows itself into the problem of the origin of roots. All living things are built up of small cells, and evolutionists are anxious to picture cells uniform from the beginning. Roots of words are the cells of philological science, but the philologist sees no evidence that their number can be much reduced, or that they can possibly be traced to a single source. Roots are neither interjections nor imitations of the sounds of nature, and it is utterly impossible that they could have been formed till the animal began to generalise from observed facts and began to have the power of counting. The intellect and the language of man began at the same time, so there must have been a definite and distinct line at the outset separating man from the lower animals."

Postscript.—In the *Nineteenth Century* for November there is an eloquent article by Mr. Gladstone on the "Dawn of Creation and Worship," which has called forth a reply in the same magazine for December by Professor Huxley,

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under the title of the "Interpreters of Genesis and the Interpreters of Nature," to which, in the January number, Mr. Gladstone has published a rejoinder under the title of "Prœm to Genesis—a Plea for a Fair Trial."

Mr. Gladstone's aim is to vindicate the inspired authority of Genesis against Dr. Réville's "Prolegomena to the History of Religions." Admitting that the Mosaic account of the sequence of creative acts is not quite borne out by the observed facts of geology and palæontology, but recognising the "days" as geological periods, he contends that the two accounts are in sufficiently substantial agreement. Though not formally impugning the Darwinian doctrine of evolution, he objects to it as not affording any solution of the great *arcanum of creation*, seeing that a merely corporeal evolution would not account for the origin of mind and spirit. Besides this, he protests against the doctrine on account of the atheism involved in it.

Mr. Huxley's reply, in correction of Genesis, and in opposition to Mr. Gladstone's views, comprises a scientific exposition of the observed facts of geology and palæontology relating to the succession in the appearance on the earth of the various kinds of plants and animals. This exposition, however, does not prove the validity of the Darwinian hypothesis of evolution, which, notwithstanding all that has been said for it, still remains unverified and unverifiable. See page 68 of my lectures, entitled "Evolution of the Human Race from Apes and of Apes from Lower Animals—a Doctrine unsanctioned by Science" (1876). From this volume I may here, in conclusion, quote the following passage: "It is commonly assumed by evolutionists, and tacitly granted them, that there are only two fundamental alternatives between which a definite decision has to be made—viz., revelation or evolution. But this I emphatically deny. Unbelief in revelation and a personal Creator is no doubt the alternative of the admission of evolution, but admission of evolution is not the necessary alternative of unbelief. Excluding all belief in revelation and a personal Creator, for argument's sake, I hold that the doctrine of evolution, unsanctioned, as I believe I show it to be, by science, cannot be accepted as the alternative on any consideration, and must therefore be unconditionally and absolutely rejected."

A NOTE ON ABDOMINAL SECTIONS.

By W. F. WADE, F.R.C.P.,

SENIOR PHYSICIAN TO THE GENERAL HOSPITAL, BIRMINGHAM.

THE mention of my name in Mr. Lawson Tait's paper on Cholecystomy reminds me of a purpose which has been for some time in my mind. I wish to address a few words to those who, like myself, are exclusively, and to those who, as general practitioners, are chiefly, engaged in the treatment of medical as distinguished from surgical cases. Before us, acting in this capacity, cases come which no doubt are in their inception properly catalogued as medical, and which a few years ago would have remained so to their termination. Medicine might fail, but surgery had nothing to offer. That is not so now. The Birmingham school of gynæcological surgeons has increased the resources of civilisation, and their fellows elsewhere are, somewhat slowly and reluctantly perhaps, following in their footsteps. But the sick public will not have the full benefit of these new resources till we who practise medicine give our fiat and sanction to them. Ought we to do so? I am not a surgeon, and therefore am not swayed by a desire to operate whenever an operation is possible, as some suppose habile operators to be swayed. On the contrary, I feel always a certain amount of chagrin when compelled to say, "Medicine is powerless, but surgery is not." Yet I feel obliged to admit that in some cases, which, as already pointed out, have up to now been regarded as exclusively medical, our efforts ought to be supplemented or supplanted by those of the surgical operator. Another question now naturally arises: In what class of cases, and to what extent in that class? This is a question which I regard as still *sub judice*. Instead, then, of attempting to give a direct answer, for which the time has not yet come, I will very briefly narrate four cases which have happened to me in the ordinary course of private practice within the last six months, in which I suggested the advisability of abdominal section, and in which, in accordance with that advice, it was performed.

1. The patient mentioned by Mr. Tait. An elderly lady had for more than a year had at intervals symptoms of the passage of gall-stones, severe pain requiring morphia, and jaundice; perfect recovery in the intervals. For some weeks before I saw her the intervals had been so shortened that the jaundice of one attack had not time to disappear before the next occurred. Her appetite and strength were failing, so that her condition was becoming precarious. She was believed to have had about 100 attacks. I told her that she might have a hundred or two more stones to pass, and that before the bladder was emptied she might perish from exhaustion; that I considered she was in greater danger from this than she would be from an anæsthetic and the operation. The latter risks I therefore advised her to accept. I have never seen her since, but heard that she had decided to do so, and had placed herself under Mr. Tait for the operation, the result of which he has given in THE LANCET of the 13th inst.

2. A child six years of age was attacked with abdominal symptoms of a mild character, fairly supposed by the family attendant to be due to gastro-intestinal disorder. After three days he one morning became suddenly much worse. As I happened to be away all day on a country journey I did not see him till late at night. He was then in a condition which must pretty evidently be fatal, and which indicated the existence of peritonitis. I advised that the only chance left for him was to have his abdomen opened. This was done by Dr. Malins, and a good many ounces of most abominably fetid pus escaped. He was more comfortable after the operation, but died in about twenty-four hours, and I do not know that his death was either delayed or hastened by the operation. But I assume that a person is more likely to recover without than with a quantity of fetid pus in his abdominal cavity.

3. A boy of twelve was much reduced by peritonitis of three months' standing, and consequent hectic. On the right side of the abdomen, about the ileo-cæcal region, was evidently a collection of what we presumed to be pus. There was on the corresponding left side (where the inflammation had began) tenderness, but no evident collection. I advised the friends that it would probably be necessary to open the abdomen. But as they were anxious to avoid this if possible, we agreed to have a further trial of medicine, and gave him some syrup of the iodide of iron and some conium. He improved as to general condition, but after a second relapse, the local conditions remaining unaltered, I pressed them to consent to an operation, which they did, and Mr. Tait opened three loculi containing pus, one on the right side, one on the left, and one deeply seated towards the back. There was an immediate return to normal temperature, but there have been two recrudescences of fever, and the case, which it was all along feared might be of a tubercular character, is still in abeyance.

4. A female of about thirty, married, was said to be suffering from peritonitis. This was undoubtedly so, and her aspect, pulse, temperature, and vomiting showed that she was in a very serious condition. She referred her subjective symptoms to the upper part of the abdomen; they had existed severely for several days. But on further inquiry there was a previous history of pain for several days of a slighter character, and in the left ovarian region. Vaginal examination showed a good deal of fulness and extreme tenderness to the left of the uterus. I came to the conclusion that the original seat of disease was the left uterine appendages, and that there was very probably pyo-salpingitis. I advised that if the symptoms did not abate, and still more if they increased, the abdomen should be opened and this region explored. This was done about a fortnight after by Dr. Savage; the appendages were with difficulty removed; the ovary was enlarged and inflamed, and pus was found in the Fallopian tube. The patient did well.

These cases admit of, and indeed suggest, plenty of discussion, comment, and criticism. But into this I do not propose now to enter, my present object being only, as stated at the outset, to show that there are cases hitherto supposed to be purely medical, and as such met with in a purely medical practice, which do admit of, and in my opinion require, surgical interference. These cases were, it will be noticed, treated by gynæcological surgeons; but at least two of them any good general surgeon—one, for example, who would not hesitate to operate for strangulated hernia—ought to be quite prepared to undertake.

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ON THE CAUSE OF HEPATIC ABSCESS.

BY H. BLANC, M.D., F.R.C.P.

SURGEON-GENERAL MOORE, in THE LANCET of Oct. 31st, 1885, correctly refutes the views held by Dr. Harley in his interesting work on Diseases of the Liver regarding the cause of hepatic abscess, which Dr. Harley too exclusively attributes to "gluttony and intemperance." I also concur with Surgeon-General Moore in his statement that natives of India are quite as liable to hepatic abscess as Europeans. On this point I am able to speak from personal knowledge, having, during my ten years' residence in the town of Bombay itself, held appointments in both the native and the European general hospitals. But whilst joining with Dr. Moore in repelling the general charge of "gluttony and intemperance" as the principal cause of hepatic abscess among Europeans residing in India, still it must be confessed that intemperance is frequently noted in the previous medical history of both natives and Europeans who suffer from hepatic abscess, and although overfeeding is much less common, yet we frequently find among these patients the habitual use of hot-spiced food as a diet.

Hepatic abscess is rarely met with in Bombay among the better class of European residents, and although I had many opportunities of seeing such cases, had they existed, I can scarcely remember, during a period of some ten years, more than half a dozen cases among this class of people. On the other hand, hepatic abscess is not unfrequently met with among the inmates of the European General Hospital. As physician in charge of that establishment, a certain number came under my care; and from my notes I find that during the last two years, or thereabout, I actually operated upon sixteen cases; moreover, during the same period, a certain number came also under the care of my able colleague, Dr. Manser. The table herewith appended shows that most of the cases therein recorded (the only ones I have by me) occurred among individuals who by their occupation were subjected to much exposure, and although some are entered as "temperate," their temperance was but relative; the work which many of them had to perform was a "thirsty one," and most of them considered a few bottles of beer and a few glasses of brandy daily, so long as they did not actually get drunk, as quite compatible with temperance.

I do not think that "a chill," as advanced by Surgeon-General Moore as the cause of hepatic abscess, is in reality a frequent cause of that disease—an occasional cause no doubt it is, but nothing more. The climatic condition insisted upon by him—i.e., daily great variations in temperature, is not special to India by any means. If hot days and cold nights were such a powerful cause of hepatic abscess, then that affection would not be limited, or nearly limited, to tropical lands; for instance, in the south of France, where I am now residing, at this season of the year the extremes of temperature between the hot sunny days and the cold, sometimes frosty, nights, are greater and more marked than in Bombay itself during the winter there, and yet hepatic abscess is totally unknown here! A great authority on tropical diseases, Sir Joseph Fayrer,[1] speaking of the causes of hepatic abscess, says: "They appear to be a result of climatic causes, to which some constitutions are more prone than others, and in certain instances aggravated, no doubt, by injudicious eating and drinking, though it may happen in those who have observed the greatest moderation." My own experience leads me to the same conclusion.

Among the climatic causes, those to which malarious fevers are due stand also foremost as the cause of hepatic abscess. We find usually in cases of hepatitis, whether ending in abscess or otherwise, a previous history of malarious fever, and it is quite exceptional to meet with individuals who have never suffered more or less recently from malarious fever, or who have not at least resided for a length of time in highly malarious localities. Among malarious fevers the remittent type is the one most frequently followed by hepatic abscess. During the prevalence of this fever the liver is always somewhat congested, at times very much so; and if the patient is one "more prone than others," congestion passes into inflammation, and in many instances an abscess follows. Among the eighteen cases of hepatic abscess here given, malarious fever existed previous to the appearance of the abscess in no less than fifteen cases. The three exceptions are: (*a*) a man who, according to his own statement, was very intemperate; (*b*) a man also very intemperate, and who had been exposed for days to the dreadful heat of the engine-room during the hottest month in the Red Sea; (*c*) a man who, though he stated that he was temperate, gave physical signs of alcoholism—i.e., a tremulous tongue, sleepless nights, &c.; moreover, he had passed a night exposed to the wind and rain.

Another point of interest in these cases is the season during which they occurred. In Bombay the so-called "cold weather" scarcely ever sets in before the middle of December, lasting only until the first days of March. If cold nights, alternating with hot days, is the cause of

CASES OF ABSCESS OF THE LIVER, WITH REFERENCE TO CAUSE.

No.	Name.	Age.	Sex.	Occupation.	Previously suffered from malarious fever.	Temperate or otherwise	Month when disease occurred.	Where treated.	Remarks.
1	William S.	22	M.	Railway guard	Yes	Very intemp.	August	Europ. Gen. Hosp.	—
2	William A.	50	M.	Railway guard	Yes	Very intemp.	October	" " "	A previous history of dysentery.
3	Herbert E.	28	M.	Army surgeon	Yes	Very temp.	August	Watson's Hotel	Preceded by bilious vomiting and diarrhœa, the stools occasionally tinged with blood.
4	Daniel M.	48	M.	Pensioner (W. O.)	No	Intemperate	October	Europ. Gen. Hosp.	Occurred suddenly, whilst in good health.
5	William C.	37	M.	Railway guard	Yes	Intemperate	October	" " "	—
6	Anne C.	23	F.	Wife of painter	Yes	Temperate	December	" " "	—
7	George M.	38	M.	Engine driver	No	Very intemp.	November	" " "	—
8	John S.	44	M.	Station master	Yes	Intemperate	November	" " "	—
9	Mariam E.	30	F.	Wife of saddler	Yes	Temperate	August	" " "	—
10	James B.	32	M.	Engine driver	Yes	Temperate	June	" " "	A previous history of dysentery. Suffered from severe contusion over hepatic region ten months previously.
11	Rose L.	47	F.	Widow	Yes	Temperate	July	" " "	—
12	George D.	32	M.	Naval engineer	No	Intemperate	October	" " "	Suffered much from intense heat in the Red Sea.
13	Charles M.	42	M.	Naval engineer	No	Temperate	October	" " "	Although he reports himself temperate, the tongue is very tremulous; sleeps badly at night; suffers from a chill.
14	Ralph M.	40	M.	Railway guard	Yes	Temperate	September	" " "	Much exposed to continuous and heavy rain, owing to a break in the railway line.
15	Joseph W.	30	M.	Engine driver	Yes	Temperate	November	" " "	—
16	Alfred S.	50	M.	Engine driver	Yes	Very temp.	February	" " "	Occurred suddenly, after a chill.
17	Charles C.	43	M.	Band master	Yes	Temperate	September	" " "	—
18	Joseph P.	31	M.	Manager of a mill	Yes	Temperate	October	Private house	Lived near a foul-smelling drain.

[1] Tropical Diseases, by Sir Joseph Fayrer, K.C.S.I., &c.

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hepatic abscess in India, we should expect to meet with a greater frequency of these abscesses between the middle of December and the beginning of March; but such is not the case. Even among the eighteen cases here recorded two only pertain to the cold season: all the others occurred between the months of June and November, a period characterised in Bombay by an equably high temperature and by the great prevalence of malarial fevers.

Cannes.

CATARACT EXTRACTION PERFORMED ON AN INSANE PATIENT.

BY T. H. BICKERTON, M.R.C.S.

THE following case of cataract extraction may be of some little interest from the fact that it occurred in the person of an insane individual. The patient in question is an inmate of the Rainhill County Asylum, and I have to thank Dr. Rogers, medical superintendent of that institution, for his permission to perform the operation, and also for his permission to mention the case. The history is as follows:—

John T——, aged seventy-one, was first admitted into the asylum in 1868 as a suicidal patient. Between 1868 and 1872 he was twice discharged, and being in the latter year readmitted for the third time, he has remained an inmate ever since. The first note that there is about his vision is in the asylum book for 1876, where the remark is made that he is "gradually losing sight from cataract." His own statement, however, on the matter was that the sight of the right eye had been lost for twenty years. The vision of the left eye gradually failed, and more than twelve months ago he became totally blind, and since then he had to be led about by another patient. The right cataract was of a China-white variety, and as the pupil acted well, and the vision was fair for light and shade, it was considered that there was every probability of a successful result being arrived at. The patient was anxious to be operated on. The eye (right) being made insensitive by two applications of ten drops each, of an 8 per cent. solution of cocaine, the incision was carried as nearly approaching a Graefe's as possible, the wound being entirely in the sclerotic. On making the iridectomy, the lens was seen to be bulging greatly towards the wound; and on dividing the capsule, a sudden gush of fluid showed the cataract to be a fluid one, and carried up with the rush to behind the posterior lip of the wound was a small, hard-looking, red nucleus. Lying now in the pupillary space was the white capsule, and this after one or two attempts was removed entire by means of a pair of iris forceps, its slight adhesion to the posterior surface of the nucleus giving way to gentle side-to-side movements. To depress the nucleus so as to bring its upper margin in front of instead of behind the posterior edge of the wound, where the rush of fluid had carried it, was a matter of difficulty, but this was at last overcome by introducing a sharp needle into the nucleus and pushing it down. Slight pressure being exerted behind the wound at the same time, the upper margin of the nucleus disengaged itself, and presenting through the wound, quickly came out, and the operation was completed. Every means were now taken to keep the patient quiet; he was allotted a special attendant, and as much as possible the importance of absolute rest was impressed upon him. Owing to the capsule being entirely removed—a most unexpected, rare, and fortunate occurrence in this variety of cataract operation—all fear of inflammation of the iris could be dismissed, and one's anxiety was devoted to promoting a rapid union of the wound. All went well for five days, but on the sixth night, during the temporary absence of the attendant, and in spite of all warnings, he strained greatly to relieve his bowels, with the consequence that the wound, when seen the following morning, was opened up and a bead of vitreous was presenting. Firm pressure was then applied, and bark, port wine, eggs, and stout were given to keep up his strength and to promote union. Matters again did well until the twelfth day, when in consequence of his sitting up in bed to get his tea on the previous evening, the outer third of the wound was seen to have again given way. The powers of union being thus so poor, increased stimulation by port wine, stout, bark, and food was given, and every care taken to prevent any further untoward movements on his part, with the result that on the seventeenth day the wound was again united in its whole length, and from this time onward things went well, but it was not until a month had elapsed from the operation that it was deemed safe to allow him to get up. The final result of the operation is a gratifying one. On testing his vision, four months after the operation, for distance, with a + 10 D lens, it was perfect, he being able to read at a distance of 20 feet every letter of Snellen 20; and his near vision was also perfect, he being with a + 14 D lens able to read Jaeger 1 with fair fluency. In fact, with that eye his vision was normal.

In addition to the operation being performed on a lunatic, there are other points of interest in the case—viz., the fluidity of a cataract occurring in a man aged seventy-one, the entire removal of the capsule, and the difficulty that was experienced in attaining firm union. It was the knowledge of the general impairment of nutrition common to the insane, and almost certain to be met with in any man of seventy-one, that induced me to make the incision entirely in the vascular sclerotic, and as far away as was consistent with safety from the non-vascular cornea, and the after-results showed, I think, that this was a wise precaution. Also, I am inclined to believe that the fluidity of the lens lends truth to the old man's statement that the cataract had existed for twenty years, and the dense condition of the capsule, and the ease with which it came away from its usual attachments, corroborate this. This point may be cleared up when the left cataract is extracted and its consistency known.

Liverpool.

NOTES ON HIP-JOINT ABSCESS.[1]

BY EDMUND OWEN, F.R.C.S.,
SURGEON TO THE HOSPITAL FOR SICK CHILDREN, GREAT ORMOND-STREET.

THERE were in the Louise ward of the Children's Hospital at the time that these remarks were put together five cases of hip-joint abscess, all of which had been subjected to the same ultimate treatment.

The occurrence of abscess in the progress of disease of the hip-joint is common enough, but the question as to what had better be done with such abscess cannot always be answered off-hand. The signs of the formation of abscess may be increasing pain, a rise of a few degrees in the temperature chart, a fulness in the upper part of the wasted thigh, and a decline in the general health of the child. But sometimes pus collects without the surgeon's attention being specially attracted to the part, and the abscess is discovered, almost by chance, as an obscurely fluctuating fulness below or in front of the great trochanter, at the origin of the adductors, or just beneath the middle of Poupart's ligament. In the first and second case the pus had probably escaped through the thin posterior part of the capsular ligament, and thence worked its way round. In the last case, a comparatively rare one, it had made its exit through the perforation in the front of the capsule by which the bursa beneath the psoas communicates with the interior of the joint.

Aspiration.—I confess that my experience with aspiration of hip abscess has not been specially satisfactory. Although the instrument used may have been a slender one, still within a few days of its employment pus has been seen leaking from the site of the puncture. In two of the five cases under consideration a disappointing leakage had thus occurred. Nevertheless, repeated aspiration should always start the treatment of hip abscess, unless the inflammatory condition be acute and the pressure symptoms severe. If the pus be thick and curdy the cannula will not serve, and other means must be employed; so also if the re-accumulation of pus be rapid and repeated puncture fail to make headway. Lastly, if aspiration be followed, as it may be, by acute local inflammation and constitutional disturbance, something more is needed.

Incision.—From one or other of the reasons just enumerated the hip-joint abscess in all five children (their ages varied from three to seven years) had to be freely incised by the house-surgeon, Mr. Lewis. From some of the abscess cavities, after the escape of pus, much curdy matter, granular débris, and shreddy material were squeezed or

[1] From reports taken by Dr. Chaffey.

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scraped. The cavity was then thoroughly washed out with a solution of zinc chloride or mercuric chloride. Provision was made for drainage, and the neighbouring surface was dusted with iodoform and firmly compressed with pads of wood-wool and bandage. From time to time the cavity was again washed out and fresh pads reapplied. The drainage-tube, that useful but much abused accessory, was discarded at the earliest possible moment. These notes cannot be ended, as reports in THE LANCET so generally are, with the remark that each patient after a thorough treatment made a rapid and complete recovery. That, unfortunately, is not the way of hip cases. But this may be said, that after the evacuation of those abscesses which were unamenable to aspiration, the temperature, which had been high before, generally came down, and that which had been tolerably low before showed little or no disturbance; that the health and comfort of the child improved and the local condition greatly changed for the better; that the wound remained quiet, in some cases discharging thin pus, and in some cases dwindling into a narrow fistula; and that in one case at least the abscess wound was healed within a month.

Night screams.—In two of the five cases it was noted that after aspiration the children ceased to scream at night. Doubtless this was on account of the tension being removed from certain filaments of sensory nerves. The opinion is rather widely held, I think, that starting and screaming at night should be taken as evidence of ulceration of articular cartilage having set in. I doubt, however, if there be any direct association between these conditions. Night-startings may occur without ulceration of cartilage; and, on the other hand, extensive ulceration may exist without such startings. Moreover, ulceration of cartilage may be far advanced, and yet the signs of local and general disturbance may be but slight, the temperature-chart showing hardly any variation from the normal line.

NOTE ON INTERMITTENT ALBUMINURIA.

BY W. M. COLLINS, M.D.

I HAVE lately had under my care three cases of so-called intermittent or transitory albuminuria unconnected with organic disease, and as the subject has recently been treated by Dr. Pavy and discussed in THE LANCET, I desire, as a small contribution to such observations, to give a few particulars of these cases, with special reference to one characteristic symptom they had in common, and which, I believe, may in many instances explain the nature and cause of this disorder. I refer to the presence of large quantities of oxalate-of-lime crystals in the urine.

The patients were young persons, aged respectively twenty-five, twenty-two, and eighteen. The general symptoms, which were very analogous in each case, were nervous depression, a feeling of languor, occasional headache, derangement of the digestion, constipation, and susceptibility to cold. The quantity of urine passed was generally below the normal, the specific gravity varying from 1020 to 1030, and of a deep yellow colour. The amount of albumen varied according to the time of day the urine was passed. It was greatest between twelve and six o'clock, and diminished towards bedtime. In the early morning there was generally only a trace, or it was absent altogether. In two of the cases the albumen used to disappear completely for a few days and then reappear. Microscopic examination exhibited large quantities of oxalate-of-lime crystals along with uric acid. There were no casts. The increase or subsidence of the albumen was found to be in direct ratio to the excess or diminution of the oxalates in the urine examined. I have observed that in the cases reported by Dr. Pavy oxalate-of-lime crystals were invariably found in the urine, but no reference was made as to any probable connexion between the existence of these crystals and the albuminuria.

The following are a few brief particulars of two of the cases which came under my care.

J. D——, aged twenty-five, last May complained of derangement of the digestion, sleeplessness, depression of spirits, lassitude, and a constant feeling of chilliness. The tongue was furred, the complexion sallow and anæmic, and the gums and lips pale. The urine, which was high-coloured, depositing urates, and with a specific gravity of 1025 to 1030, was found to contain a large quantity of albumen, and this at first occasioned some alarm, but on testing the urine at different times of the day it was found to be almost free from albumen in the early morning and at bedtime, but in the afternoon there was a considerable quantity. Microscopic examination revealed large quantities of oxalate-of-lime crystals with uric acid, and there being no constitutional evidences of Bright's disease, the case was diagnosed as one of temporary or intermittent albuminuria. The patient was treated with dilute nitro-hydrochloric acid, the diet was regulated—fish and chicken being substituted for butcher's meat, and no wine allowed—and Turkish baths were taken twice a week. In a few weeks the albumen began to lessen, the oxalates diminished, and the general health greatly improved. The patient was subsequently ordered to Contrexéville, and returned home quite restored in health and without a trace of albumen in the urine, which was otherwise perfectly normal; and has since—now three months—remained quite free from any return of the albuminuria.

E. C——, aged twenty-two, came under my care last June. He complained of debility, lassitude, severe headaches, and at times a sense of giddiness and fulness in the head, great nervous depression, derangement of the digestion, and he had lost weight considerably. The urine, on being tested, was found to contain a large quantity of albumen, which varied at different periods of the day, it being always greatest in the afternoon and hardly perceptible in the early morning. Some days it would disappear altogether and then recur. Under the microscope large quantities of oxalate-of-lime crystals were seen, and these were found to be most numerous whenever the albumen was greatest. This patient was treated with small doses of dilute nitro-hydrochloric acid; the diet was regulated, all wine was interdicted, and skimmed milk was given. Subsequently the Contrexéville water was ordered to be taken twice a day. The patient soon began to improve, the albumen gradually diminished, the oxalates disappeared, and his strength increased. He went to Scotland in the autumn, and on his return he had gained 16 lb. in weight; there was not a trace of albumen to be found, and he has since remained quite well.

The third case which came under my observation was similar in all essential particulars to the foregoing.

I consider the albuminuria in these and other such cases to be due to the irritation of the kidney structure by the sharp crystals of oxalate of lime which are deposited in the tubes. Evidence in support of this conclusion is further afforded by the fact that the treatment, which was directed to prevent the formation and favour the removal of these crystals, succeeded in completely curing the albuminuria. Other causes may, doubtless, account for temporary albuminuria, such as vascular weakness and atony of the nerves, or congestion of the kidneys, concurrently with neighbouring organs, from a chill, &c. Numbers of people, too, have oxalates as a temporary occurrence, without albuminuria; but when the habit becomes fixed, I think it will be found that it is frequently the cause of this intermittent albuminuria, and may even be the precursor or predisposing cause of Bright's disease. The significance of such a symptom should therefore not be underrated, and should receive the most watchful care and treatment. In such cases the dilute nitro-hydrochloric acid in small doses, by its action on the liver preventing the formation of and breaking up the crystals of oxalate of lime, and the use of the weak, alkaline earths, such as lithia, and the Contrexéville waters, are singularly curative.

Cadogan-place.

PRESENTATION.—Dr. C. E. Monro, on the occasion of his leaving Newtown to carry on practice in the suburbs of London, has been presented by friends and patients with a handsome silver salver, accompanied with an illuminated address.

MEDICAL OFFICERS OF IRISH PRISONS.—The General Prisons Board, Ireland, have recently issued a circular with reference to the payment of fees of substitutes for medical officers of prisons during their absence. It is to the effect that when a medical officer attends as a witness before a Commission of Inquiry, or as a witness at assizes, and is paid his expenses, he must pay his substitute, as the board decline, they state, in any case, even where an allowance is conceded, any direct responsibility to such substitute.

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A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

UNIVERSITY COLLEGE HOSPITAL.

STAB IN THE ABDOMEN WITH A CARVING-KNIFE; EXAMINATION OF STOMACH, COLON, AND OMENTUM; VISCERA REPLACED; SUTURE; UNINTERRUPTED RECOVERY; REMARKS.

(Under the care of MR. BARKER.)

THE following case of penetrating wound of the abdomen is chiefly interesting from the treatment which was carried out in the case. It was not certain whether there had been a wound of the contents of the abdomen or not, neither was it known to what extent extravasation of blood might have taken place. Wound of the viscera with extravasation of contents, or decomposition of blood-clot, producing peritonitis, constitute the chief danger in these cases. Few surgeons with the power of employing full antiseptic precautions would hesitate to follow the method used here, and remedying as far as possible any such condition, if found. In the surgical records of the Americal civil war thirteen cases of incised or punctured penetrating wound of the abdomen without injury of the viscera are recorded; of these nine recovered.

L. D——, a healthy girl, aged fourteen, was admitted at about 4.30 P.M. on January 14th for a recent wound of the abdomen. She was carrying a dish downstairs at 2.30 P.M., on which was a carving-knife pointing towards herself. At the kitchen door she turned to speak to the cook, and then stumbled, when the handle came in contact with the door-post, and the blade ran into her abdomen, remaining there for some seconds before falling out by its own weight. She did not faint at the time or later. On arriving at the hospital she was examined by Mr. Barker, after careful cleansing of the wound with carbolic solution. The wound was a clean cut one, an inch long, seated two inches to the left and an inch and a half above the level of the umbilicus, close to the margin of the ribs, and consequently over the cardiac end of the stomach. On passing the finger into the slit, it was found to correspond to a deep wound in the rectus muscle, which was almost transverse. A probe was passed into the abdomen from left to right, and was felt to tilt against scybala in the transverse colon. There was but little external bleeding, though a few small clots escaped. The girl was not collapsed, and did not appear to be suffering much pain. The pulse was 130; the temperature in the rectum, 101·2°.

Judging from the extent of the wound and its direction that either the stomach or transverse colon could hardly have escaped, Mr. Barker determined to explore the abdominal cavity thoroughly round the seat of injury before any septic processes should have time to extend. The temperature and pulse at 6 P.M. seemed to indicate the commencement of inflammation. He therefore enlarged the skin wound forwards to the extent of exactly three inches, the inner end of the incision now reaching the middle line about half an inch above the umbilicus. The whole operation was done with the strictest antiseptic precautions. The rectus muscle was then seen to have been divided by the carving-knife almost completely across, only half an inch or so remaining uncut close to the linea alba. The wound gaped widely, and was partly blocked by a mass of omentum. On the latter and between the ends of the divided muscle were some small clots, which were carefully wiped away. When the whole space had been cleared, and a few of the inner fibres of the rectus had been divided to the extent of the wound on its peritoneal aspect, the omentum was drawn out and wiped clean of some remaining clots. It was then replaced, and the stomach was drawn out of the wound to a considerable extent and examined, but was found to be uninjured. Having been carefully wiped with carbolised sponges, it was replaced, and the adjacent part of the colon was pulled through the wound and passed through the fingers from side to side, until all of the transverse portion that might have been injured had been closely inspected. Finding no injury here, Mr. Barker replaced the bowel, and then sponged out the abdomen all round with small carbolised sponges. The peritoneal edges of the wound were then brought firmly into contact by six or seven stout carbolised silk sutures, including the edges of the rectus muscle and its sheath. These were cut short and remained in the wound. The skin wound was then united with seven silk sutures, except at the outer angle, where a drainage-tube was inserted. It was dusted with iodoform, and dressed with salicylic wool firmly secured with a bandage encircling the body.

There was no shock after the operation, and at 8 P.M. the patient was comfortable; pulse 100; respiration 22; temperature in the rectum, 99°. During the night the patient vomited a little, as the result of the chloroform, but was almost free of pain. The next day she was perfectly well, and remained so until she left the hospital. She required no morphia, and was in a few days anxious for abundance of food. The wound was dressed for the first time on the third day, and was found healed, without a trace of discharge. The tube was shortened to half an inch, and the same dressing applied. This was not again disturbed until the twelfth day, when the seven superficial stitches and the last bit of the tube were removed, as the wound was quite dry and healed. The deep sutures were left undisturbed. The girl was quite well from first to last, the pulse, temperature, and appetite remaining normal. As the rectus muscle had been cut across, Mr. Barker thought it better to keep the patient in bed for full three weeks, to avoid overstrain of the deep sutures. She was therefore kept on her back, with the shoulders raised and thighs flexed, until the twenty-second day, when she was allowed to get up. A week later she went home, perfectly well in every respect.

Remarks by MR. BARKER.—That the knife must have passed well into the abdomen was evidenced by the extent of the gash in the peritoneum, and that the viscera should have escaped was extraordinary. The extent of the wound in the rectus and peritoneum could not have been discovered without enlarging the skin wound, and, without examination of the viscera as above, there would have been no certainty as to their fate. The early removal of the clots and thorough cleansing of the serous surfaces probably prevented a dangerous peritonitis, which was almost certain to follow such a wound of the peritoneum made by a knife lately used for carving; and the accurate suture of the peritoneum, the rectus muscle, and its sheath prevented any chance of hernia if the patient survived the risks of the stab.

WEST LONDON HOSPITAL.

POISONING BY OXALIC ACID, FOLLOWED BY PARTIAL SUPPRESSION OF URINE AND ACUTE NEPHRITIS; RECOVERY; REMARKS.

(Under the care of Dr. DONALD W. C. HOOD.)

THE following notes have been supplied by Dr. Bailey, resident house-physician.

D. W——, aged forty-two, labourer, was admitted on June 9th, 1885. Shortly before admission he had taken half an ounce of oxalic acid mixed with hot tea. The patient stated that almost immediately he became unconscious. He was brought to the hospital at 9 A.M., being in a collapsed condition, with sub-normal temperature (97·2°); pulse very feeble (120 to 130), scarcely perceptible at the wrist; no delirium; face livid and cold; extremities cold; pupils normal; mind entirely clear; throat extremely painful; tongue with white coating on dorsum, otherwise not much burnt; almost constant retching, any fluid swallowed being immediately returned; vomit giving characteristic reaction, becoming black after standing. The patient was treated with lime-water and albumen, the tendency to collapse and syncope being kept in check by brandy and sinapisms.—2 P.M.: Quietly dozing; temperature normal; pulse 90, very feeble; retching still obstinate.—10.30 P.M.: General condition improved; pains in the throat less. Now makes complaint of great pain over the region of the bladder and right hypochondrium. Is unable to pass urine; 20 oz. drawn off by the catheter, and found to be normal.

June 10th.—Passed a fair night. Pulse 68; pain in

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bladder, which does not appear to be increased by pressure; still vomits; has passed no urine.

11th.—Voided 3 oz. of urine, which was unfortunately thrown away. Pulse 78; temperature 100°. Pain in the loins. Vomited much.

12th.—Urine 3 oz., thick, straw-coloured; sp. gr. 1012; neutral; nearly solid on boiling; deposit of blood-corpuscles and large granule cells; no casts. Vomiting continues the most troublesome symptom. The abdominal pain is less.

13th.—Urine 3 oz., character same as last. Vomiting more troublesome; everything taken by the mouth is thrown up immediately. On one occasion about a pint of black fluid (altered blood) was ejected. Ordered to take no food by the mouth; to be fed entirely on nutritive enemata.

14th.—Feels very weak; irritability of stomach much better. Retains enemata well. There is marked pain over both renal regions, and slight swelling of legs. Tongue almost denuded of epithelium.

16th.—Since the last note he has passed more urine, as much as 24 oz. during the night; it is still highly albuminous.

18th.—Since the 13th he has been fed entirely by the bowel. To-day he was ordered a little milk, which was swallowed without difficulty or pain, and was retained. Urine normal in quantity.

19th.—Quantity of urine 70 oz. during the night.

20th.—Urine 144 oz. during the twenty-four hours; it is still highly albuminous; examined for urea, it was found that an average of 700 grs. per day are being passed; the deposit consists of granular cells; casts containing granular cells, others simply granular, and others hyaline.

25th.—Since last report the patient has been passing very large quantities of urine, from 150 oz. to 120 oz., in the twenty-four hours; the albumen is gradually decreasing, as are also the deposits. His general health is much improved. He retains all food, and feels stronger and better in every way.

July 3rd.—Discharged well. No trace of albumen has been detected in the urine for the past three or four days. The patient expressed himself as feeling strong and well.

Remarks by Dr. HOOD.—In the cases of poisoning by oxalic acid to which I have referred, I can find no mention of the kidneys being subsequently affected. In the above case the suppression of urine first noticed was more apparent than real. The patient could take no nourishment, and vomiting was constant. But that the kidney received the brunt of the attack was clear by the large amount of albumen which appeared, and which rendered the specimen of urine examined all but solid. Blood-exudation corpuscles, pus, albumen, and casts, pronounced a definite nephritis, which cleared up as rapidly as it commenced, convalescence being marked by extreme diuresis. With regard to the treatment, the fact that for five days the stomach had complete rest, the patient being supported during that time entirely by nutrient enemata, is worthy of note. As in many other cases of poisoning by this salt, the onset of symptoms was very sudden. My patient stated emphatically that he became almost immediately unconscious.

QUEEN'S HOSPITAL, BIRMINGHAM.

CASE OF MALIGNANT DISEASE OF CÆCUM; NECROPSY.

(Under the care of Dr. SUCKLING.)

FOR the following notes we are indebted to Mr. J. Griffiths Whittindale, house-physician.

J. H——, a male, aged fifty-seven, was admitted on Aug. 10th, 1885. Family history good; father died at the age of eighty-four; mother aged eighty-six. Is a shoemaker by trade. Some years ago he used to suffer from cramp and spasms, but had never had any acute illness. About nine months since he fell downstairs and injured his right side, and this was followed by diarrhœa for two months. Seven months ago he noticed pain in the right lumbar and iliac regions; these pains were sharp and of a shooting character. Soon after this he noticed a lump in the right iliac region, and this had slowly increased in size up to the present time. Bowels had been regular, and he had not passed blood.

On admission the man had an anxious and pinched expression, and was evidently emaciated. He complained of constant pain in the right iliac fossa and pain and difficulty in micturition. Said he had been losing flesh rapidly. Cardiac and respiratory systems normal. On examination of the abdomen, a tumour about the size of a cricket-ball was found in the right iliac fossa extending upwards into the right lumbar region. The growth was firm and fixed, not moving with respiration, and was tender on pressure; it caused a visible prominence. The femoral glands on both sides were enlarged. The tumour was slightly irregular on its surface, extending downwards to Poupart's ligament, upwards to the level of the umbilicus, and inwards to the outer edge of the rectus abdominis, with dulness on light percussion and resonance on heavy percussion. Right testicle painful and enlarged. Temperature normal. Weight 8 st. 3 lb.

Aug. 20th.—Growth has not materially increased in size since admission, and the pain is not so severe. Bowels open daily, stools being normal and containing no blood. During the past week there has been a rise in temperature, which now ranges from 100° to 101°. Weight 8 st. 1 lb.

30th.—General condition of patient has improved, but the temperature still varies.

Sept. 8th.—No pain for some time and no increase in size of growth. Patient was discharged to-day at his own request.

Oct. 10th.—Readmitted to-day. He says that for about a week after his discharge he felt very well, but the pain then recurred and has been very severe since, shooting down to the scrotum and through to the back. Three weeks ago diarrhœa came on and has continued, and a fortnight since he passed blood in his motions. Complains of loss of appetite and flatus. The tumour has increased in size. Temperature 100°. Rectal examination revealed nothing abnormal. Weight 7 st. 11 lb.

13th.—Pain has been very acute. Diarrhœa continues. There is increased tenderness on pressure over the tumour.

20th.—Complains of sickness in the mornings. Growth increasing in size in lumbar region. Temperature varies from 99° (morning) to 101·8° (evening).

30th.—Tumour growing rapidly. No pain now. Marked anæmia. Epigastric veins enlarged from pressure on vena cava. Patient has appreciably lost flesh since admission, but weight remains the same, probably from increased size of growth. Slight dulness on percussion, increased vocal fremitus, and some fine râles found at right apex to-day.

Nov. 14th.—For the past two days he has vomited after everything he has taken. The stomach is dilated, and he is much more feeble.

23rd.—There is now œdema of both ankles. A bed-sore has developed over the coccyx. Patient takes very little nourishment, and seems to be sinking.

25th.—No improvement. Temperature still high.

27th.—Much worse. Growth now extends beyond the middle line of the abdomen, and has been growing rapidly for the past few days. Complains of pain in the left side, and on auscultation friction sound was heard and dulness on percussion found.

29th.—Died this evening.

Treatment.—This resolved itself into treating symptoms as they arose. Hypodermic injections of morphia were given to relieve the pain and bismuth to control the vomiting. He was put on a stimulating diet. Small doses of cod-liver oil were tried at one time, but he could not retain it.

Necropsy.—Thorax: The left pleura contained some 6 oz. of clear serum. Left lung normal. There were two small cavities in the apex of the right lung, about the size of a marble. On opening the abdomen two large masses were seen, one occupying the right iliac and lumbar regions, and another lying over the spinal column. The small intestine was traced fairly easily down to about a foot from its termination, where it became involved in a mass lying over the spinal column. On making a section in this part the gut was seen to be much diminished in calibre, its walls enormously thickened, and intimately blended with what appeared to be the mesenteric glands, though such a quantity of seemingly scirrhous material was present that it was impossible to dissect the parts satisfactorily. The ileum could not be traced past this large mass. The ascending colon was next found and traced downwards, and was seen to lead to a cavity large enough to contain the whole hand; this was firmly associated with the mesentery and abdominal wall, and in separating it from the latter a large quantity of fetid liquid fæces escaped through accidentally rupturing the wall. This large intestinal expansion, so to speak, was apparently the cæcum, or rather its anterior wall was formed by the cæcum, and behind it seemed that the wall was formed by the iliacus muscle, as no trace of intestinal wall was found. Throughout the

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abdomen small nodules of malignant growth were found, being especially abundant over the kidneys and diaphragm. The larger growth was also blended with the wall of the bladder. Some nodules were also found attached to the coils of the ileum and around the rectum. No secondary growths were found in the liver or spleen. On removing the right kidney a large quantity of urine was forcibly ejected, and on opening the organ it was found to be hydronephrotic, the pelvis being much dilated, this probably being caused by pressure of the cæcal mass on the ureter. The same condition was found on the left side, apparently from pressure by mesenteric glandular enlargement on the ureter. Microscopical examination of the growth by Dr. Gilbert Barling showed the growth to be a carcinoma.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Intra-cranial Tumours.—Thinning of Skull from Cerebral Tumour.—Cancer of Body of Stomach.—Cylindrical Cancer of Humerus.—Syphilitic Hepatitis and Pneumonia in an Infant.—Dermoid Cyst of Tongue.—Epithelial Tumour of Skin near the Rectum.—Aneurysm of Aorta and Aortic Valves.—Multiple Intussusception.

AN ordinary meeting of this Society took place on Tuesday last, Dr. Bristowe, President, in the chair.

Dr. BEEVOR showed a Tumour of the Upper Surface of the Cerebellum that grew forwards between the optic thalami, flattening the corpora quadrigemina and compressing the right optic thalamus, crus cerebri, and right superior cerebellar peduncle, causing left hemiplegia, fixation of eyes, staggering gait, priapism, fixed pupils, headache, vomiting, and optic neuritis; it was a psammoma. The second case was that of a man aged forty, in whom two tumours were present on either side of the medulla: one the size of a hen's egg on the left side, compressing and absorbing the under surface of the left lobe of the cerebellum, and pressing on the left side of the pons, the left fifth, seventh, eighth, and ninth nerves especially being destroyed; on the right side, in the angle between the medulla, pons, and flocculus, was a tumour the size of a hazel-nut, and pressing on the seventh and eighth nerves. The patient was stone deaf in both ears, and blind in both eyes; no absolute paralysis, but general weakness and double optic neuritis. The third case was that of a boy aged twelve in whom the tumour, a glioma, occupied the right side of the pons and the medulla, causing distension of parts and conjugate deviation of the eyes, with facial paralysis on both sides. The fourth case was a boy aged three months with a tubercular tumour of the right half of the pons and the medulla, causing left hemiplegia, complete right facial palsy, and conjugate deviation of both eyes to the left. Another specimen was shown of a tumour pressing on the left side of the pons and the cerebellum, producing staggering to the left and deafness of the left ear.

Dr. GEORGE OGILVIE exhibited a Tumour of the Right Hemisphere of the Cerebellum taken from a woman aged twenty-one. The case has been fully reported in Part 31 of *Brain*. Blindness, deafness on the right side, vertigo, staggering to the right, vomiting preceded by occipital headache and followed by unconsciousness, very feeble pulse, sensation of cold in the legs, atrophy of both optic discs, but no incoördination, were the chief symptoms. The tumour had a cartilaginous appearance, and was the size of a hen's egg; it had grown from the dura mater of the right side of the posterior fossa, and was a tubercular mass. The second case was that of a large Tumour of the Left Optic Thalamus, and occupied the posterior half of the left lateral ventricle; it came from a married woman aged thirty-nine. The symptoms were persistent severe frontal headache, noises in the ears, blindness, vomiting, giddiness, tendency to fall backwards and to the left, and impaired intelligence. The symptoms began four months after her last confinement. Maniacal attacks with hebetude for six weeks before death were also observed, as well as atrophy of both optic discs and loss of knee-jerks. Death followed an attack of double pneumonia. The tumour involved the posterior two-thirds of the left optic thalamus. The consistence was soft, and hæmorrhages were present in the gliomatous tumour.

Dr. HALE WHITE showed a series of specimens to illustrate the condition of skull met with in certain patients who die of tumour of the brain. The bones were soft and light, very thin, and transparent when held up to the light, which proceeding, owing to their tenuity, shows in the recent condition the vessels as a beautiful arborescent network. The thinness of the frontal, parietal, and occipital bones is in advanced cases about the same as that of cardboard. There is no bone in the skull which may not be altered in this manner; but the change, if it exist, is always found in the bones of the vertex, and in extreme cases in those of the base also; thus in one of the cases shown the petrous bone was affected, and its abnormal thinness gives a cribriform appearance and has laid open the tympanum. The bone, however, always remains hard. There is nothing noteworthy on the external surface, but the internal is roughened like sand-paper. In none of his cases was the tumour itself in actual contact with the skull. There is no doubt that this condition of bone is due to increased intra-cranial pressure. The growth of the tumour and ventricular distension are two causes of the increased pressure. The direction of the pressure is so variously modified that it is impossible to calculate accurately, for some tumours simply replacing brain substance cause no increase of pressure. As a rule the tumour is large, or ventricular distension great, where the thinness of bone obtains. The condition is rare in young children, for increased pressure causes the sutures to separate. There is little or no likelihood of the condition being mistaken for any other affection of the bones. There is never any thinning or absorption of the membranes—just as happens when an aneurysm causes absorption of the vertebræ by pressure, the bone disappears long before the inter-vertebral disc. Pain is such a constant symptom of cerebral tumour that it is impossible to decide whether the pain is particularly increased when the bones are becoming atrophied. Occasionally the pressure seems to set up some inflammatory action in the dura mater, for it may be seen to be covered with fine granulations. In reply to Dr. Bristowe and Dr. Carrington, Dr. White said that the symptoms had existed for some months in the case where the skull was thinnest. The thinning was due to general pressure inside the skull. The skulls referred to were preserved by Dr. Wilks and Dr. Moxon as illustrating the early stage of the thinning.

Dr. CARRINGTON exhibited a specimen of Cancer of the Body of the Stomach taken from a man fifty-seven years of age, in whom nine months before admission a profuse attack of hæmatemesis set in. Other symptoms were pain after food, vomiting, emaciation, debility, and ascites. Paracentesis was performed, and then the liver dulness was found to be diminished. At the necropsy one or two secondary nodules of cancer were found in the puckered great omentum; the œsophageal walls were hypertrophied; the pylorus and cardia were healthy, but the stomach was contracted, its walls thickened, it measured six inches by three, and had the appearance of an indiarubber bottle; there was no ulceration; the liver was very small, soft, and flabby, with wrinkled capsule; on section the lobules were ill marked. There was no obstruction of the vessels or ducts. The stomach was universally infiltrated with small round cells, with a superficial layer of undoubted carcinomatous growth. The hepatic cells were atrophied and fatty. In reply to Dr. Sainsbury, Dr. Carrington said vomiting continued till the last stage of the disease; and to Dr. Bristowe, that the disease lasted ten months.—Mr. BUTLIN referred to a similar case in the Royal College of Surgeons museum, and also to an œsophagus and scirrhous carcinoma of the bladder, in which the shape of the parts was maintained. Where hollow organs were affected he found it as Dr. Carrington described.—Dr. BRISTOWE had also seen a similar stomach (? carcinomatous).

Mr. JONATHAN HUTCHINSON, jun., showed specimens of Cylindrical Cancer of the Humerus. The patient, a Jewish lady aged fifty, was treated by Sir Andrew Clark for "rheumatic pains" about the left shoulder, which had followed a fall. After some little time a swelling developed in the upper third of the arm, and, Sir James Paget agreeing as to the advisability of an operation, Mr. Hutchinson made an exploratory incision to the bone, and found a small tough white growth adherent to the periosteum, near the deltoid insertion; during the manipulation the bone snapped. Amputation at the shoulder-joint was performed. The part healed well, but soon after the patient suffered from attacks of abdominal pain, she became more and more asthenic, and died some six months after the operation. The tumour had

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certainly started in the medulla of the humerus, had crept through some minute canals to the periosteum, and from this had invaded the deltoid insertion and the surrounding fat; it probably had existed some five months; it filled about two inches of the medullary cavity; above this the medulla was very soft and congested, the head of the bone appearing quite healthy. The interest of the case lies in the microscopical structure, which in the central part of the tumour consists of regular cylinders or tubes, lined with one or more layers of cubical or cylindrical cells. The central cavity is formed by the fusion of vacuoles developed in the interior of the masses of cells, finger-like processes of which run in amongst the surrounding tissues. At parts the tubules resemble closely normal renal ones. It is tempting to try to regard the growth as a very unusual primary one of the bone—clinically it appeared to be such; it followed a blow on the part, and its method of spreading would agree with Sattler's illustration of the early stage of cylindroma. Sattler himself is doubtful as to the true nature of this form of tumour, but thinks the cells of epithelial rather than connective-tissue nature; Billroth describes cylindroma both under cancer and sarcoma; Mr. Butlin regards it as a sarcoma. In Mr. Butlin's rare case the tumour was soft and grew from the posterior ligament of the knee-joint. Paget mentions a case occurring in the humerus; most of the others have been found in the orbit or the parotid gland. But the ultimate structure of the present tumour is not that of true cylindroma, and a more natural explanation is that it was a secondary cancer, the primary one being, perhaps, situated in some part of the alimentary tract. There was no family history of tumours; no tumour certainly existed in either breast, nor was there any evidence of intestinal obstruction. It is worth noting that in 1863 Dr. Tyler Smith removed an ovarian tumour from the patient; the long interval (eighteen years) which elapsed, however, almost puts out of the question this being the primary growth. The following case throws some light on the matter. The patient, a man aged fifty-one, was admitted into the London Hospital in March 1885, under Dr. Sutton, suffering from pain in the hepatic region, which he attributed to a severe chill. Jaundice rapidly supervened, he lost flesh, and had diarrhœa alternating with obstinate constipation. In August ascites came on and he was twice tapped, eleven and thirteen pints of fluid being drawn off. At the post-mortem the liver was found to weigh 6¾ lb., and was firm; the gall-bladder was much dilated behind a light band; the capsule was speckled with white spots. Close to the small bile-ducts were found in various parts tubules and small cysts which resembled dilated ducts, but which were probably secondary growths which had been developed by means of the lymphatics from a small primary nodule at the pylorus. The lungs contained many small growths precisely similar to those described already in the first case; the pancreas, spleen, and kidneys presented nothing worthy of note. The perfect resemblance to gland tissue must serve to place this form of tumour amongst the most highly developed cancers.—Mr. BUTLIN referred to his case of cylindrical-celled carcinoma, which began in a rare situation in the ham. Cases of carcinoma of bone had been frequently recorded and it was reasonable to suppose (no primary source of the carcinoma being found) that some of the tumours were primary in the bone.—Mr. R. W. PARKER said that some ovarian tumours he had examined had the same cylindrical-celled characters as Mr. Hutchinson's specimen; he still thought that such osteal tumours were of secondary nature.—Mr. SUTTON considered that an epithelial tumour in the centre of the bone was inexplicable as a primary growth.—In reply, Mr. HUTCHINSON said that an interval of eighteen years had elapsed since the ovariotomy; so he could not agree to Mr. Parker's suggestion that the primary source was the ovarian tumour.

Mr. C. J. SYMONDS showed specimens of Syphilitic Disease of the Liver and Lung taken from a child one month old, in whom the first sign of the congenital mischief was a squamo-tubercular syphilide. The liver was enlarged, firmer than natural, greyish in colour, and uniform in consistence. It was uniformly infiltrated with a fibro-cellular growth; the liver cells seemed to be destroyed by the pressure of the new growth; much resemblance to hypertrophic cirrhosis was noted, but the appearances of a duct formation were absent. In the lung was a lump three-quarters of an inch across, solid, of greyish colour—an example of the white hepatisation of Virchow.—Mr. VICTOR HORSLEY considered that the disease was not rare, and Dr. ANGEL MONEY had made four examinations in which the syphilitic disease existed in the liver and lung.

Mr. STEPHEN PAGET brought forward some dermoid cysts. Mr. Sutton regarded them as not due to involution of epidermis, but to some change taking place in or around a minute duct in the embryo, called the lingual duct, which was the remains of a space that exists in the embryo between and beneath the halves of the tongue; when these halves are joined in the middle line the space is reduced to a minute canal, which runs down from the foramen cæcum, behind the tissues from which the hyoid bone is afterwards developed, and divides at its lower end into two follicles from which the thyroid gland is developed. If the lower part of this duct, the part below the hyoid bone, be not completely obliterated, it may become the starting-point of accessory thyroids, or may persist as a fine canal between the hyoid bone and the front of the thyroid gland; if the upper part of the duct be not completely obliterated, it may, Mr. Sutton says, be the starting-point of a dermoid cyst under the tongue. Mr. A. Barker described these cysts in Vol. 16 of the Clinical Society's Transactions. The cyst wall of Mr. Paget's specimen showed masses of granular black pigment in the rete Malpighii; also warty epithelial growths projected from the cyst wall. The cyst came from a girl aged five; the fluid in the cyst was very fetid.—Mr. SUTTON had advanced the notion that these teratoid and dermoid tumours were prone to develop in the neighbourhood of obsolete canals, and considered that subsequent research confirmed him in this view.—Mr. BUTLIN said the cyst was an abscess for all practical purposes.—Dr. BRISTOWE asked whether the tumour occurred exactly in the middle line.—Mr. PAGET replied in the affirmative.—Mr. HORSLEY said that in Mr. Barker's case the tumour was situate between and beneath the genio-hyoids.—Mr. BUTLIN remarked that the cysts occurred in two sites, between and outside the genio-hyoids.

Mr. CLUTTON exhibited a specimen of Epithelial Tumour which he had removed from a woman aged sixty. She came as an out-patient to St. Thomas's Hospital for some large sebaceous tumour of the scalp, and only incidentally mentioned that she had what she considered to be a similar tumour near the anus. This had been noticed two or three years, and had lately become rather painful. It was thought to be an abscess and was incised. Although fluid which looked like pus was evacuated, the tumour steadily increased in size. The patient was therefore admitted into hospital and the growth removed. It was situated quite close to the anus, but the mucous membrane of the bowel appeared to be free and was not exposed in the operation. The interest of the case chiefly rested on the naked-eye appearance of the cut surface of the tumour and its microscopical characters. The specimen, mounted in a bottle, looked as if there had been a central cystic cavity which had been subsequently filled with new growth. The cut surface, when examined with a hand glass, showed a number of small globular cysts scattered all over the solid parts of the tumour. The microscopical sections which were exhibited proved that the solid masses were epithelial, and that the small globular cysts had resulted from their mucoid degeneration. Some drawings were shown which suggested that the tumour had originated by epithelial in-growths from the skin. Each column was lined externally by a layer of columnar epithelial cells, and contained, internally, spheroidal cells, but no lumen. In the more advanced part of the growth, at some little distance from the skin, these had undergone mucoid degeneration, a condition which might possibly be explained by their proximity to the mucous membrane of the rectum. The bud-like processes from the rete Malpighii were not unlike those seen in the early stage of rodent ulcer.

Dr. SAMUEL WEST exhibited specimens of Aneurysms of the Aortic Valves and Pouches of Valsalva. The first was taken from a man aged thirty-seven, who had had rheumatic fever twice and a sudden attack of dyspnœa. The third specimen was interesting, for the aneurysm was developed from two valves which had previously fused. The fourth specimen was an aneurysm of a pouch of Valsalva and the anterior cusp of the aortic valve; the aneurysm had ruptured into the right ventricle. The case was that of a man aged thirty who had had rheumatism.

Mr. D'ARCY POWER showed a specimen in which the intestines were intussuscepted at two points: the ileo-cæcal valve, where it was two inches in length, and in the transverse colon in the reverse direction. In both cases the intestines

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were glued together by recent lymph, but in the upper only was the intestine gangrenous. The occurrence of intussusception in a reversed direction appeared to be a very rare event.

The Council of the Society nominated the following gentlemen to form a committee to report on the specimens of Intra-cranial Tumour:—Dr. Beevor, Dr. Hadden, Dr. Ormerod, and Mr. Shattock.

The following card specimens were shown:—Dr. Norman Dalton: A Tumour of the Fourth Ventricle, causing Diabetes. Dr. S. West: Abscess of Gall-bladder, with Pus in Portal Veins. Dr. Hadden: (1) Intestine in Lymphadenoma; (2) Malignant Disease of both Supra-renal Bodies. Dr. Turner: (1) Syphilitic Ulceration of Trachea opening into Superior Vena Cava; (2) Conjoined Kidneys and Unicorn Uterus. Mr. J. Poland: (1) Amputation Stump at Knee-joint; (2) Dislocation of Knee-joint. Mr. E. H. Fenwick: Atresia (? congenital) of Orifice of Bladder, with Cystic Kidney. Dr. Haig: (1) Large Intra-pericardial Aneurysm of Aorta; (2) Intussusception from a Child aged four months.

CLINICAL SOCIETY OF LONDON.

Universal Alopecia.—Hysterical Pyrexia.—Meningitis of Obscure Origin.

AN ordinary meeting of this Society was held on the 12th inst., Mr. Thomas Bryant, F.R.C.S., President, in the chair. The papers read were of great interest, and evoked considerable discussion.

Dr. W. T. TYSON read a paper on three cases of Universal Alopecia, with remarks. Case 1 was that of a labourer aged forty. The family and personal history were negative in their character. The cause of his trouble seems to have been a money difficulty; for three months and a half this preyed upon his mind, and at the end of this time the hair on his head began to come out, and was all gone in four days. In a day or so later the rest of his hair began to be shed, and in four days—or in ten days from the commencement of the first shedding—the whole of the hair of the head, face, chest, body, and limbs had entirely disappeared. At the present time there is not a single hair to be seen anywhere. The hair was particularly thick and strong before the calamity; the colour was chestnut. He is a strong and active man. Case 2 was that of a shoemaker aged forty-four. Seven years ago his hair began to come out, and in one fortnight had all completely disappeared. He has never had any hair since. There was no syphilitic history. The cause, he alleges, was that two or three days previous to the loss of his hair he was sleeping at the top of the house, when, while in a sound sleep, he was suddenly awakened in a great fright by a tremendous clap of thunder. Simultaneously with the fall of his hair he lost the nails of the great toes and thumbs. The colour of his hair was light brown. He is a healthy and strong man. Case 3 was that of a billiard-marker aged twenty-one. In April, 1884, the hair began to come out in spots over the head, and in one month he had lost his hair over the whole of the body, except a few downy ones on the top of the scalp. Now there are to be seen a few hairs at the back and side of the head. The colour of the hair was dark brown and very thick. There is no history of syphilis. He is a well-built man. One month before his loss he was thrown violently from his horse upon his head. Since the accident his memory has been defective at times. These cases were brought forward as supporting the neurotic origin of the universal form of alopecia areata, and also to uphold the view that clinically there are two distinct classes of the disease, commonly called alopecia areata. The characteristics of this class of case were:—The affection begins in the scalp, not necessarily in spots, and spreads rapidly until the whole hair of the body is lost. It occurs in adults, but not always in young adults, as has been stated. The prognosis is not good, and it seems to become worse as age advances. The starting-point of the disease can often be traced to a neurotic cause. The above class of alopecia areata contrasts strongly with that ordinarily met with. Here the characteristics are that the disease begins in youth, in scattered bald patches on the scalp, and is confined to this portion of the body. The prognosis is good, the complaint lasting seldom longer than a twelvemonth. No cause is known.—Mr. BRYANT considered it remarkable that a small provincial town should furnish three such cases. He narrated a case in which mental shock appeared to induce the disease. Two young ladies were terrified at the sight of a dead body being dragged from a canal; one, who recovered, developed acute jaundice, and the other universal alopecia, which remained until her death four years later.—Dr. S. MACKENZIE considered that there were all stages between the local and the universal forms of alopecia. The presence of micro-organisms could be accounted for on the hypothesis that a disease of the skin formed a suitable nidus for the development of organisms. The rapidity with which the alopecia occurred in Dr. Tyson's cases negatived the parasitic view for his cases. Recently Dr. Mackenzie had known a case of symmetrical morphœa associated with alopecia, and he had seen several examples of neurotic disease thus associated.—Dr. TYSON could not agree with Dr. Mackenzie that the difference between the universal and local forms of the disease was one of degree: the local forms occurred mostly in children, and tended to recover; whereas the universal variety mostly occurred in adults, and did not recover.

Dr. HALE WHITE read a paper on a case of Hysterical Pyrexia. A girl aged eighteen was admitted into Guy's Hospital on Aug. 10th of last year, suffering from pyrexia, pain in the abdomen, and diarrhœa, the latter symptom being due to the abundant purgatives which had been given. Previous to admission the pain had been referred to the right iliac region; on the above date it was referred to the left. The temperature varied from 105° to 99·2°. She was readmitted on Sept. 9th. Her mother said she had returned to her work, but on the 8th was suddenly seized with pain in the left side. On readmission the face was flushed, the skin hot and dry; frontal headache; no physical signs anywhere; no evidence of zymotic disease. She complained of pain and tenderness on the left side, midway between the ribs and crest of ilium, but she never twice located the pain in the same place. If her attention was engaged she allowed the freest manipulation without wincing. At first she protested that she could not sit up and could not lie on the left side, but in a few minutes, when her attention was distracted, she did both these. There were a few vaginal cells in the urine, and a trace of albumen, but not more than the pyrexia would explain. The abdomen was so retracted that it was impossible there could have been enlargement of any viscus without its having been felt; peritonitis was also out of the question. The temperature varied between 105° and 98·8°. On September 13th the temperature was normal, and so remained till the girl's discharge. The author pointed out that the patient was undoubtedly hysterical, for the whole characteristics of the pain showed it to be subjective. The most careful examination failed to discover any physical cause for the pyrexia, nor was there evidence to show that it was due to a zymotic disease; not even typhoid fever would explain two such short, erratic, but severe attacks. If the temperature were due neither to inflammation nor a zymotic disease, it must have been due to direct affection of the nervous system, but there was no evidence that injury, growth, or inflammatory action affected the nervous system, therefore the affection of it must have been functional. Not only can the diagnosis be arrived at in this exclusive method, but the following features in the case were characteristic of hysteria: the variability of the temperature both diurnally and generally, the other hysterical symptoms, and the age and sex of the patient. It was pointed out that none of the patient's symptoms militated against the view that the pyrexia was hysterical. The cells in the urine were vaginal; the albumen and delirium were pyrexial. Rigors have been described in other cases of hysterical pyrexia. The reason why hysterical pyrexia was not more recognised was because it was not sufficiently realised that functions over which the will has no control may be hysterically affected, and also that the temperature of the body is directly under the control of calorific nerves which proceed from the cortex of the brain to the muscles; these nerves perpetually inhibit the temperature of the body. Bearing these two facts in mind, there was no reason whatever that the thermogenetic actions of the body should not be perverted, nor was it more extraordinary than hysterical ischuria, vaso-motor paralysis, &c. A brief abstract was given of all the cases of hysterical pyrexia hitherto recorded, and from these it was found that the chief symptoms of this disease were—firstly, it always occurs in girls; secondly, they are often otherwise hysterical; thirdly, they are always of an age at which hysteria is common; fourthly, ovarian pain and tenderness are often present; fifthly, rigors may be present; sixthly, other symptoms more or less connected

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with the temperature are often accompaniments of it—viz., delirium, rapid pulse, flushings, a trace of albumen, but any one or all may be absent; seventhly, the characteristics of the temperature are, its erratic behaviour, the temperature also varying in different parts of the body.—Dr. W. H. DAY spoke of the case of a lady, aged fifty-six, who had some unexplained fever which he regarded as of neurotic origin.—Dr. SAVAGE said it was exceptional to get an increased temperature in asylums unless inflammatory visceral disease were about to develop. Cases, however, before admission into asylums, occurring in hysterical women, not unfrequently presented a temperature of 102° or 103°, with irregular course. Some of the cases developed acute delirious mania, and some recovered. He had taken the temperature of the scalp in many instances, and found it not to be above 99° in cases of so-called "brain fever," but a temperature of 104° in the axilla might be observed in the same cases. He suggested that an investigation of the relative temperatures of the head and body might prove of considerable value. Lurking disease of the lungs, such as a patch of pneumonia or tubercle, might, it must not be forgotten, fail to reveal any other symptoms than pyrexia, and so caution was necessary in connexion with the subject of "hysterical" pyrexia.—Dr. GOODHART considered that there was some objection to the term "hysterical," and preferred to speak of "neurotic" pyrexia.—Dr. B. O'CONNOR related a case in which there was dulness of one side of the thorax.—Dr. BRISTOWE briefly related two cases that have been published in full in "Brain." Both occurred in women. The development of ophthalmoplegia externa was followed by hemianæsthesia of all the senses; then hemiplegia and rigidity supervened, and later on epileptiform fits. There was an almost persistent fever, which varied from 97° to 103°. A year or two before there was exophthalmic goitre, which subsided some time before the fatal issue. After death the cerebral and other viscera were found to be healthy. The second case was still living and almost exactly the same, but the fever showed itself first before the onset of the fits, when the temperature rose to 102° or 105°.—Dr. HALE WHITE said the time of life, the sex, and other associations of hysteria warranted the use of the term "hysterical pyrexia." Neurotic pyrexia had a wider significance, and included cases of pyrexia due to cerebral hæmorrhage, &c. As examples of death from functional disease he regarded Dr. Bristowe's cases as of much value.

Dr. GOODHART read notes of cases of Meningitis of Obscure Origin. A young lady aged eighteen, of exceptionally good health, was much affected by an offensive smell in a house which she visited, and from that time became ill. The symptoms ultimately developed into well-marked cerebro-spinal meningitis, with vomiting, paralysis of the recti muscles of the eyeballs, severe headache, stiffness of the neck, tremulousness of the muscles, and death on the nineteenth day. There was no necropsy. Two children, one of four years, the other one year and a half, under the care of Mr. Atkins of Plumstead, had measles, and on convalescing suffered a relapse, on which the temperature rose, the head became retracted, the mental condition apathetic or comatose, and rigid spasm affected the extremities at intervals; in the elder child there was optic neuritis. Both cases recovered, the infant rapidly, the elder child after an illness of five or six weeks, and she remains permanently deaf. The next case is that of an infant four months old, brought to the Evelina Hospital for rapidly recurring convulsions and high temperature; it was admitted, and two ten-grain doses of bromide of potassium administered by enema. The convulsions ceased within twenty-four hours, but the child remained with retracted head, oscillating temperature, double optic neuritis, and momentary left-sided spasm when touched. There was no evidence of any disease of the ear during life, but after death the middle ear contained pus on both sides; there were suppurative meningitis of the right half of the brain and thrombosis of the right lateral sinus. The fifth case was that of a widow lady, aged fifty, under the care of Dr. Herbert Evans, of Hampstead. After a time of much anxiety and fatigue in nursing a relative she began to feel cold and ill; intense headache and pain in the back and paralysis of the external recti of the eyeball supervened, and a moderate amount of optic neuritis. She was treated at first with free nourishment and tonics, but without relief, but she decidedly improved under iodide of potassium and perchloride of mercury, although only slowly; the illness lasted three or four months in all. Each of these cases raises several issues as regards its origin. In the first, although it is impossible, in the absence of a necropsy, to exclude with certainty either tubercle or internal otitis, yet on the whole the facts seem to favour a septic origin. The three children, although two recovered, may all of them have been subjects of internal otitis; but cerebro-spinal fever after measles, the view favoured by Mr. Atkins, is equally possible in the case of the two. The fatal case was advanced particularly to enforce the obscurity that exists during life in many cases of otitis interna, and Dr. Goodhart wished particularly to gain the experience of aural surgeons in this matter. His own experience did not allow him to think that the disease was to be diagnosed during life by the mere alterations in the appearance of the membrana tympani, nor yet that the post-mortem appearance justified the belief that incision of the membrane would be of any real service. It was contended that these cases supported the opinion maintained for the first case—viz., that meningitis, idiopathic in a sense, is probably less grave than modern doctrines seem to teach, inasmuch as there is evidence to show that the risks of ear trouble are chiefly dependent upon superadded external conditions, and that in all probability the chronic ear disease is the open door, rather than the actual weapon by which the meningitis is inflicted. The last case still remained obscure.—Dr. F. L. BENHAM related the case of a child who had several symptoms of meningitis after measles, and was slowly recovering; he regarded the case as one of "functional" disease.—Dr. W. H. DAY said that otitis was the commonest cause of meningitis, and related several cases illustrative of the variety of clinical aspect of tubercular meningitis.—Dr. BRISTOWE considered that in the meningitis of young children recovery might not unfrequently ensue. Suppuration of the middle ear as a precursor and cause of meningitis he confessed himself sceptical about; he would not deny that it occurred, but was inclined to think that meningitis and otitis were the results of the same cause, and it was doubtful whether the ear disease was ever primary. He expressed his belief in the possibility of recovery from tubercle of the brain, and related the case of a girl who had all the signs of tubercular peritonitis; headache, double vision, and paralysis of the external recti supervened, when the abdomen became rather rapidly well. The patient ultimately made a fair recovery, though some loss of memory was still present.—Dr. C. WEST drew a sharp and fast distinction between simple and tubercular meningitis, confessing that the former might own septic causes, and might originate from eruptive fevers, and especially measles. In his belief, simple meningitis might be recovered from not unfrequently, and occasionally cerebral tubercle also. Tubercular meningitis rarely had a pyrexia of more than 101° or 102°, and this fact he regarded as of diagnostic importance. He was disposed to adopt Dr. Bristowe's point of view of the concomitance of otitis and meningitis.—Dr. SIDNEY PHILLIPS had watched a case of purulent cerebro-spinal meningitis following measles, without otitis, and the diagnosis was confirmed by a necropsy.—Mr. R. J. GODLEE had been told by Mr. Barker that the presence of muco-pus in the middle ear was an almost physiological occurrence, and asked Dr. Goodhart what his views were on this point.—Dr. GOODHART, in reply, believed that the presence of muco-pus in the middle ear was a very common condition, but not pure thick pus. Whether there was any causal relation between meningitis and otitis it was difficult to say with certainty. He considered there was abundant evidence to show that actual simple meningitis could be recovered from, and was inclined to think that even the tubercular form might terminate favourably.

The following living specimens were shown:—Dr. Stephen Mackenzie: Two cases of Unilateral Paralysis of the Tongue, Soft Palate, and Vocal Cords; and cases of Alopecia Areata in three members of one family. Mr. T. Cooke: Symmetrical Gangrene of the Fingers (? Raynaud's disease). Mr. Godlee exhibited a pathological specimen showing Calculi impacted in the Urethra.

MEDICAL SOCIETY OF LONDON.

Dystrophy of Thumb-joints.—Excision of Elbow-joint, and Tubercular Testis.—Tubercular Leprosy.—Pityriasis Circinata.—Congenital Constriction of Leg with Perforating Ulcer of Foot.

A CLINICAL meeting of this Society was held on Monday last, Dr. Wm. Ord, President, in the chair.

Dr. R. MAGUIRE showed a case of Dystrophy of the

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Thumb-joints, in which inflammation of the carpo-metacarpal joints of both thumbs came on after the removal of two ovarian tumours in November, 1885. The arthritis has continued unabated, the veins about the joint are swollen, and there is increase of temperature; grating between the arthritic surfaces can be obtained. The thenar eminences are a little wasted, but there is no reaction of degeneration, only generally diminished reactions to both currents. Menstruation had ceased since the ovariotomy. Pain was the first symptom in the left thumb; the right followed later. The reflexes at the wrists were perhaps a little exaggerated. Absence of rheumatism, gout, and the relation in time to ovariotomy and the appearance of the disease when the joints were comparatively quiet, suggested a causal relation between the ovariotomy and the arthritis. It was connected not with congestion, but rather with anæmia of the genital regions. All treatment had proved of little avail.—Mr. WM. ADAMS did not think it could be placed amongst the neurotic alterations in joints. The principle of "rest and sweat" night and day should be employed in treatment.—Mr. B. JESSETT recommended complete rest of the joints.—Dr. WM. ORD believed that the case was one in which reflected "uterine" irritations were at work; the ovaries had been removed, but we did not know what the state of the uterus was.—Dr. MAGUIRE, in reply, said he presented the case simply as a clinical fact.

Mr. FRANCIS MASON exhibited a young man on whom he had performed Excision of the Left Elbow-joint, with good result in a freely movable joint. Since the operation a tubercular testis on the right side had developed, with infiltration in the right side of the prostate and the base of the bladder.—Mr. HURRY FENWICK, who showed this case in conjunction with Mr. Mason, suggested that the testicle became diseased as the result of infection from the joint, possibly about the time of the operation, and in consequence thereof.—Mr. STEPHEN PAGET did not perceive the reason why the testis should not have been produced under the same influences that gave rise to the tumor albus of the elbow-joint.

Dr. RADCLIFFE CROCKER exhibited a boy, aged sixteen, with Tubercular Leprosy, who had lived in Dominique, but was of Scotch parentage. There had been no privation; the boy had eaten fish. The leprosy appeared first in 1882, one year after the boy came to England to go to school. Febrile symptoms preceded the development of tubercles; the progress had been *saltatim;* febrile attacks accompanying each fresh crop of tubercles; the glands in the groin and elsewhere enlarged just before the febrile attacks. There were no definite tracts of anæsthesia; the ulnar nerves were not materially thickened; the mucous membranes of the tongue, epiglottis, and vocal cords were affected with tubercles; the nails had been destroyed in places; sometimes the tubercles ulcerated; and the typical bacilli had been detected. Gurjun oil had been employed with a little benefit.—Mr. SPENCER WATSON related a case.

Dr. RADCLIFFE CROCKER also showed a case of Pityriasis Circinata in a man aged twenty-seven. It began on the abdomen a month ago in oval or round patches, enlarging peripherally and disappearing centrally; at first bright red, becoming brownish and scaly. The disease generally ran its course in from one to two months. Vidal described a fungus microsporon, probably a micrococcus, but no real parasite had been discovered. Calamine lotion and liquor carbonis detergens were used locally.—Dr. STEPHEN MACKENZIE said that the micrococcus was an epiphenomenon, and might be found in any scaly débris from skin disease. The disease was not parasitic. Boracic acid was better than carbolic acid, though the latter relieved itching.—Dr. COLCOTT FOX said the eruption was more scanty in children, and occurred entirely on the trunk. It looked like psoriasis at first sight, but the distribution was different. A micrococcus was always present, but as an epiphenomenon.—Dr. R. CROCKER, in reply, said he considered the disease to be the same in children as in adults, between which there were all links.

Mr. J. H. MORGAN showed a case of Congenital Constriction by a Band producing Perforating Ulcer of the Foot, in a painter aged thirty-eight. On the right hand the fourth digit had no terminal phalanx and only a rudimentary second phalanx; the second and third digits were fused, and had only a proximal phalanx; there were no nails on these digits. The left hand index finger had a rudimentary second phalanx and no nail. The right lower limb showed a firm cicatricial contraction, which surrounded the knee below the patella; the leg was smaller on this side, and had a chronic sclerodermatous-like condition of the skin. There was a perforating ulcer on the under surface of the ball of the great toe, which tended to ameliorate. The knee-jerks were normal; some anæsthesia was present.—Mr. WM. ADAMS suggested that lymph bands in utero might give rise to the cicatricial markings in limbs by causing constriction. It was difficult, however, to understand the cases.—Mr. RITCHIE asked how much the malnutrition was due to vascular and how much to nervous damage.

Mr. SPENCER WATSON showed some New Instruments for use in the removal of Nasal Polypi.

OBSTETRICAL SOCIETY OF LONDON.

Removal of both Ovaries during Pregnancy.

THE annual meeting was held on Wednesday, Feb. 3rd, J. B. Potter, M.D., F.R.C.P., President, in the chair.

Mr. KNOWSLEY THORNTON read a paper on a case of Removal of both Ovaries during Pregnancy. M. W——, married, aged twenty-two, in the third month of pregnancy, was known to be large twelve months before marriage. She is now beyond the size of pregnancy, and has a large fluctuant tumour in the abdomen, which is growing fast. Has suffered from several attacks of pain in the abdomen, with rise of temperature, sickness, and faintness. Diagnosis: ovarian tumour complicated by pregnancy. Ovariotomy advised, and performed Feb. 4th, 1885. Dermoid tumours of both ovaries removed. Rapid and uninterrupted recovery. Premature delivery at eighth month. Labour uncomplicated. Lochia normal. Fine healthy child, and plenty of milk to nurse it. On examination, uterus found atrophic; patient, while nursing, suffering from flushes, chills, &c., just as others do who have an artificial menopause brought on by operation. The author made remarks on the interesting physiological and pathological problems which this unique case suggests.—Dr. JOHN WILLIAMS said that in a note read before the Society in 1884 he described the involution of the puerperal uterus in the absence of the ovaries. In that case the left ovary had been removed some years previously, and the right was removed soon after labour set in. The course of the process of involution might have been affected directly by the interference of the operation in his case; but in Mr. Thornton's it could not have been so, for the operation had been performed some months before labour set in. He would ask Mr. Thornton if any observations had been made on the process of involution in his case.—Dr. ROUTH remarked that the atrophy of the uterus could not impede lactation, and quoted Dr. Livingstone, who stated that the wives of the African kings were not allowed to suckle their own children, as it was thought derogatory. The child was given to the grandmother, generally an old woman, to whose mammæ and pudendum certain plants were applied and the child put to her breasts, with the result that she was able to suckle the child. He also alluded to well-authenticated cases in which men had suckled. He objected to the conclusion that menstruation always depended upon ovulation; this question hé considered undecided, and facts were accumulating to show that menstruation had really very little to do with ovulation. — Dr. MATTHEWS DUNCAN regarded tapping as the best treatment in cases of simple parovarian cyst. It involved less danger than extirpation, and was often successful. The extirpation of small papillomatous ovaries involved many difficulties. He did not believe any operation could cure where malignant disease had extended to several different parts of the peritoneum. He also reminded the Society that Dr. Tyler Smith had supported the view that the commencement of labour was a function of the ovaries. This view was now rendered almost untenable by Mr. Thornton's case. He had no doubt whatever that the ovaries were indissolubly connected with menstruation.

The following specimens were shown:—Dr. W. Griffith: (1) Uterus showing a Dilated Cavity; (2) Sarcoma of Uterus. Mr. Thornton: Papilloma of Ovary.

The Society then preceeded to the business of the annual meeting. The treasurer's report was adopted, on the motion of Dr. Playfair, seconded by Dr. Carter; the report of the hon. librarian, on the motion of Dr. Godson, seconded by Dr. Horrocks; the report of the chairman of the Midwifery Board, with a vote of thanks, on the motion of Dr. Matthews Duncan, seconded by Dr. Malins, and supported by Dr. Graily Hewitt. The scrutineers (Drs. Thomas and Lewers) declared the list of officers and council proposed by the

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Council adopted. The President delivered the annual address, for which a vote of thanks was proposed by Dr. Graily Hewitt, seconded by Dr. West. A vote of thanks to the retiring officers (Dr. Herman and Mr. Thornton) was proposed by Dr. Gervis, seconded by Dr. Watt Black; and one to the retiring Vice-Presidents and other retiring members of Council was proposed by Dr. Routh, seconded by Dr. W. Duncan.

Reviews and Notices of Books.

Reference Handbook of the Medical Sciences. Vol. I. Aac-Cat. By various Writers. Illustrated by Chromo-lithographs and fine Wood Engravings. Edited by ALBERT H. BUCK, M.D. New York: Wm. Wood and Co.

THIS work, of which the first instalment is before us, which is to comprise eight volumes of about eight hundred pages each, will undoubtedly mark an era in the literary history of medicine and the allied sciences. It is quite impossible in the space at our disposal to give an adequate description of the merits of the production, whether we turn to the rare knowledge and skill which the several contributors have brought into requisition, or to the excellent arrangement of the subjects treated of, the type, and, last but not least, the admirable illustrations. Our readers will be able to form some idea of the completeness of the text and its illustration when we inform them that in the article "Applied Anatomy of the Arm" thirteen pages are devoted to the former and twenty-six woodcuts to the latter. How consistently and thoroughly the plan of the editor is carried out may be gleaned from a brief comparison of widely different subjects. Thus, almost immediately succeeding a classical dissertation on "Army Diseases" and "Army Hospitals" is a brief description of "Arnica," which includes the characters of the plant, its chemical and therapeutic properties, and other interesting details, to which is added an excellent chromo-lithograph. The pathological anatomy of disease is given in sufficient detail. Take, for example, the subject "Adenoma," the description of which is graced with four well-executed drawings.

The article "Blood" will earn for the author considerable repute. It contains a well-digested account of the salient features of that "fluid," both in its physiological and morbid conditions. It contains fifty diagrams, of which the greatest interest will attach to those representing the different instruments for estimating the number of corpuscles and the quantity of colouring matter in a given preparation; and the spectroscopical appearances, twenty-four in number, of blood under as many chemico-physical conditions. It remains to be said that each subject is fully up to the present state of knowledge and research. Attention may be called to "the running titles at the upper corners of the pages; these are intended to aid the reader in searching for a particular topic." A full index will be introduced at the end of the work. America is said to be the land of big things, and its title to the claim will not be belied by the Handbook now under review. We look forward with much interest to the production of the remaining seven volumes.

On the Supra-pubic Operation of Opening the Bladder for the Stone and for Tumours. By Sir HENRY THOMPSON, F.R.C.S., Surgeon Extraordinary to His Majesty the King of the Belgians, Consulting Surgeon to University College Hospital, late Professor of Surgery and Pathology to the Royal College of Surgeons of England, &c. London: J. and A. Churchill. 1886.

THE operation of supra-pubic lithotomy is undergoing a revival, as frequent notices in our pages during the last few years have sufficiently shown. It bids fair to supplant perineal lithotomy altogether; it is not without a pang of regret that older surgeons especially will part with an operation which has always possessed a special fascination, and the history of which is connected with many of the brightest names in surgery. The careful dissection through the abdominal wall on to the front of the distended and raised bladder bears but a very slight resemblance to the bold and rapid plunge into the viscus from the perineum, which in the hands of Fergusson and other brilliant lithotomists was the admiration of all spectators. The claim of the supra-pubic operation, however, is very strong, and the publication of Sir Henry Thompson's book will do much to impress its merits upon the minds of British surgeons, who have been slower to recognise them than their continental brethren. Two names will be associated with the revival of this operation—Garson and Petersen. To Dr. Garson of the Hunterian Museum belongs the credit of demonstrating the remarkable influence upon the bladder of full distension of the rectum, which so raises the viscus as to expose a considerable extent of its anterior surface bare of peritoneum above the pubes. To Petersen belongs the credit of availing himself of this anatomical demonstration and of supporting Dr. Garson's argument by clinical experience. All this, and very much more, of the history of the operation is told by Sir Henry Thompson, who gives a lucid description of the details of the procedure and the subsequent management of the patient, and appends notes of the cases in which he has himself practised the supra-pubic method. These cases include six instances of the removal of large stones, and two of the removal of large tumours. Dr. Tremaine of Buffalo has lately recorded three interesting cases in which he has successfully performed what he would have us call epicystotomy. In one case a stone measuring $2\frac{7}{8}$ in. by $1\frac{1}{4}$ in. was removed from a child three and a half years old; in the second case fragments weighing altogether over three ounces were removed from a man aged thirty; and in the third case from a man aged seventy-three a mulberry calculus measuring $1\frac{5}{8}$ in. by 1 in. was removed. In the last case the peritoneum was wounded, and the intestines protruded from the wound after the man was returned to bed. In the second case the wound in the bladder was sutured. In neither case was Petersen's distension of the rectum employed. Dr. Tremaine, like Sir Henry Thompson, found the fingers the most convenient means of extracting the calculi.

Acne: its Etiology, Pathology, and Treatment: a Practical Treatise based on the Study of 1500 Cases of Sebaceous Disease. By L. DUNCAN BULKLEY, A.M., M.D., Physician to the New York Skin and Cancer Hospital, &c. Pp. 280. London: J. and A. Churchill. 1885.

THIS well-got-up volume is in some respects a companion one to that on Eczema which has been favourably noticed in these columns. It is written in a similar practical way, is largely in accordance with views held in this country, and is characterised by careful details as to treatment, by a copious formulary, and a chapter on diet and hygiene. The pathological anatomy of the eruptions is minutely studied, and the beautiful illustrations of Dr. Bulkley's specimens form a striking feature of the work, and are especially valuable. We must also mention the addition of a very extensive bibliography, so that the volume is one which is very acceptable both to the worker at these diseases and to the practitioner. The author uses the term acne in its widest sense, and defines it as a functional or inflammatory disease of the sebaceous glands, exhibiting excessive and abnormal or deficient secretion of sebum; or the inflammatory elements of congestion, papules, pustules, or tubercles, located in and about the sebaceous glands, or in any or all of these features combined. The term therefore includes the diseases known as seborrhœa, comedo, and milium, sebaceous cysts, the ordinary inflammatory acne and rosacea, A. atrophica, and A. cachecticorum, Molluscum.

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contagiosum is removed in accordance with recent pathological work from its time-honoured position as a sebaceous gland disease. In such a considerable volume we think the author might have rendered it still more useful by a more detailed exposition of certain points. For instance, there is only the barest discussion of that very interesting condition called stearrhœa nigricans, nor are there many references in the bibliography, because, we take it, some authors describe it as a sweat gland affection. The work is also far from being an exhaustive one, and in illustration of this we may mention the absence of any description of the peculiar follicular condition described by Cock, or of an explanation of the presence of sebaceous cysts on the palms. On one or two points we are inclined to criticise Dr. Bulkeley's descriptions—e.g., with regard to A. cornea, A. atrophica, and A. cachecticorum. Concerning the latter he follows Neumann, but does not tell us much of his own experience. We know but little of such an affection in this country. He describes A. cornea as a seborrhœa characterised by horny concretions in masses rarely exceeding half an inch in diameter; but this is surely not the disease described by Hardy. We think the description of A. atrophica decidedly poor, and we notice the author makes the old mistake between A. varioliforme or molluscum contagiosum and A. varioliformis. The latter, as we know it in this country, is rare, and is to be distinguished from deeply pitting acne in a scrofulous subject, and from relapsing acneform syphilides of the forehead and face. Its distribution, its remarkable pitting with the sunken scab, and its intractability to the ordinary acne remedies are characteristic.

OUR LIBRARY TABLE.

Report on an Outbreak of Enteric Fever in the Urban Sanitary District of Swansea. By EBENEZER DAVIES, Medical Officer of Health.—This outbreak, which occurred in the later part of last year, and which has since been carefully discussed in a report by the medical officer of health, has points of much interest. As many as 549 cases of enteric fever occurred, or 7·53 per 1000 of the inhabitants; and Mr. Davies was able early in his inquiry to eliminate milk-supply or defective drainage as a possible cause, and to show that the disease was confined to the drinkers of water from two reservoirs situated about eight miles from Swansea, the drinkers of water from local wells escaping illness. The conduits from the two mains are united about a mile from their commencement, and one common main conducts the water from both to Swansea. A detailed account is given of the opportunities for pollution of this water at one reservoir. The condition of one farm situated about 400 yards from the reservoir is mentioned as being one of indescribable filth, which would be easily washed into a tributary of the reservoir. Other surroundings were much of the same character, and the pollution of the town water with excremental filth was practically unavoidable. All that was wanted for the purpose of infection of Swansea was the admixture of enteric excreta with the ordinary filth of the neighbourhood, and this opportunity was abundantly afforded. The chief points of interest are, first, that chemical analysis of the water gave no evidence which would lead to its being regarded with suspicion, although it was analysed at a time when it was undoubtedly giving rise to disease; the second, that it became necessary to supply again to the town water from the infected reservoir after a short interval of time, and after much dilution, without the production of any extension of disease. The outbreak was well investigated; and it may be hoped that the local authorities of the district will adopt the recommendations embodied in the report.

The Journal of Anatomy and Physiology. Vol. 20, Part 1, 1885.—The Editors, Professors Humphry, Turner, and McKendrick, give notice that with this part the journal ceases to be issued by Messrs Macmillan and Co. and will be published by Messrs. Williams and Norgate. The chief articles in this part are: 1. A very good paper by C. B. Lockwood on a subject that might have been supposed to be worked out—viz., the Anatomy of the Muscles, Ligaments, and Fascia of the Orbit, including an account of the Capsule of Tenon, the Check Ligaments of the Recti, and of the Suspensory Ligaments of the Eye. 2. An article by H. St. John Brooks on two cases of Abnormal Coronary Artery of the Heart arising from the Pulmonary Artery, with some remarks upon the effect of this anomaly in producing Cirsoid Dilatation of the Vessels. 3. Mr. Ward Collins describes a Second Bursa connected with the insertion of the Biceps, and discusses some Rare Abnormalities. 4. Mr. Ernest Maylard gives some Abnormalities of the Lobes of the Human Lung. 5. Mr. J. Bland Sutton discusses the Nature of Ligaments. 6. Dr. Woodhead and Dr. Hare describe the Vital Relations of Micro-organisms to Tissue Elements. 7. Dr. J. Lockhart Gibson considers the Blood-forming Organs and Blood-formation. Dr. Noel Paton describes the Relationship of Urea Formation to Bile Secretion. 8. Professor Turner suggests the Index of the Pelvic Brim as a Basis of Classification. Lastly, the same anatomist gives the Anatomy of Sowerby's Whale.

The Quarterly Journal of Microscopical Science. Edited by Professors LANKESTER, DYER, KLEIN, MOSELEY, and SEDGWICK. New Series, No. 100. London: J. and A. Churchill.—From a notice issued with this part, we are glad to draw the conclusion that sound and careful microscopical research is on the increase, for the editors observe that the issue of supplementary numbers being found inconvenient, and an accumulation of valuable material remaining on hand, it has been decided to publish the journal henceforth at such intervals as may seem desirable rather than delay the appearance of the memoirs in question. The present number contains five articles and ten plates. 1. On the Chromatology of the Blood of some Invertebrata, by C. S. McMunn. 2. The Cephalic Appendages of the Gymnosomatous Pteropoda, by Dr. Paul Pelseneer. 3. Evidence in favour of the View that the Coxal Gland of Limulus and of other Arachnids is a Modified Nephridium, by G. Gulland. 4. Notes on the Embryology of Limulus, by J. S. Kingsley. 5. The Anatomy of the Madreporaria, by E. Herbert Fowler.

Jahresbericht über die Fortschritte der Pharmakotherapie. By Dr. KOBERT. Second Volume for 1884. Published by Karl Trübner. 1885.—This is an excellent compilation, and ought to prove of much service to the numerous workers in therapeutics and pharmacology. The information that it contains has been garnered from the most varied sources. There are references and abstracts on no less than 1867 subjects. There are indexes of authors as well as subjects. A glance through the book shows the remarkable character of much of the matter that it contains. We can fearlessly say that many of the names of the remedies herein treated of will sound very curiously to the ears of many medical men. Lippia mexicana is not a familiar remedy, but it appears to have been used with good effect in acute catarrh of the respiratory passages, as in other cases of cough and shortness of breath. It is a South American verbena which, according to Podwyssotski, contains an ethereal oil and a kind of camphor. Its nearest therapeutic ally is turpentine. This is the sort of information with which the volume abounds.

Orient Line Guide: Chapters for Travellers by Sea and by Land. Edited by W. LOFTIE, B.A. Pp. 309. London: Sampson Low and Co. 1885.—This is a second edition of a guide-book drawn up for the managers of the Orient Line of steamers with a view to give correct information as to the facilities

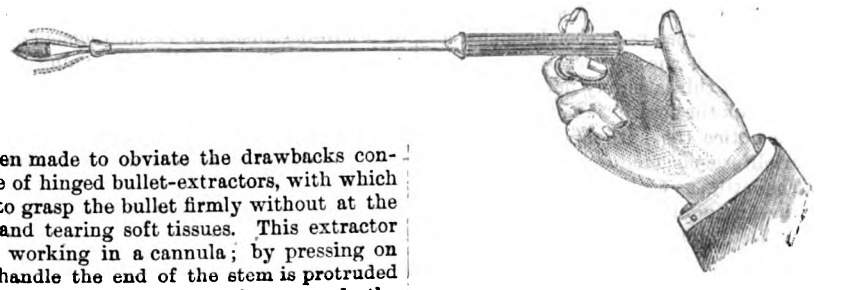
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afforded by the company in the way of communication with our colonies, especially the Cape, Australia, and New Zealand. It contains much information, evidently collated with great care, which cannot fail to prove useful to intending travellers The advice given with regard to occupation, amusement, and attention to health during the voyage is judicious. The volume gives an account not merely of the various places to which the Company's steamers run, but also of those at which they call or which they pass *en route*, and of such places of note as can be easily reached from the different ports of call. It is illustrated with a considerable number of maps and charts, views of places that may be visited, and plans and portraits of the Company's ships. In addition to a copious index, a list is given of standard books on Australia, Egypt, and Italy. The names of the contributors to the volume, including G. Baden-Powell, Norman Lockyer, H. C. Middleton-Wake, and Mrs. H. Fawcett, are sufficient guarantee for the quality of the information afforded.

New Inventions.

A NEW BULLET-EXTRACTOR.

MESSRS. ARNOLD AND SONS, of West Smithfield, have patented a new bullet-extractor, which is here figured.



An attempt has been made to obviate the drawbacks connected with the use of hinged bullet-extractors, with which it may be difficult to grasp the bullet firmly without at the same time seizing and tearing soft tissues. This extractor consists of a stem working in a cannula; by pressing on the button at the handle the end of the stem is protruded and opens, and then, when the pressure is removed, the blades fall together as the stem is withdrawn into the cannula. By this means the bullet, when once grasped, is securely held during extraction, and the surrounding tissues are not liable to be seized or torn. Should the bullet be so firmly embedded in the tissues that the pressure of the soft parts equals the power of the spring to open the blades, the extractor is useless.

CULLEN AND CROFTS HOUSEHOLD DISINFECTOR.

WE have received a specimen of a convenient apparatus for the evaporation in a room of a disinfecting agent, such as thymol. The device consists of a bracket supporting a half-pint bottle, with a metal-covered cork, to which is attached a strip of cloth which lies immersed in the disinfectant, like the wick of a lamp. Means are provided for keeping the cork suspended over the mouth of the bottle as long as may be desired, leaving a portion of the saturated cloth exposed to the atmosphere. The apparatus is simple and inexpensive, and likely to be very useful. It may be obtained at the London Supply Company, 73, Ludgate-hill, E.C.

ON THE TREATMENT OF ANEURYSM WITH IODIDE OF POTASSIUM.

To the Editor of THE LANCET.

SIR,—In the last number of THE LANCET (Feb. 6th), Dr. Burney Yeo, in a paper on Clinical Therapeutics, remarks that "one of the most remarkable gains in the treatment of disease in recent years has been the employment of large doses of iodide of potassium in the treatment of internal aneurysms." With Dr. Yeo's permission, I wish to substitute "sufficient" for "large." Large doses are not necessary, and are sometimes injurious—at least if by large we mean doses over twenty grains. Nowadays, I believe, we have a perfectly trustworthy means of ascertaining when we are administering a dose which is sufficient. As soon as it was found to be probable that the iodide of potassium owed its curative virtues in aneurysm to its power of lowering the blood-tension, it also became evident that failures which were generally accompanied by an unduly quickened cardiac action were most likely dependent on too great a lowering of the blood-pressure; because this would not only account for the excited action of the heart, which had an unfavourable influence on the aneurysm, but would also permit the blood to flow away too rapidly to provide for the due nutrition of the tissues. But the cure of an aneurysm depends upon the hypertrophy of its coats, which cannot be effected without a certain amount of blood-pressure, neither can it occur if the blood-pressure remain at the normal, for all experience teaches us that the effect is then one of gradual though slow dilatation, with pressure corrosion of all the surrounding tissues. Hit the happy mean, and the effect is that the arterial coats behave like a hollow muscle, which hypertrophies when opposed to an obstacle with which it is able successfully to cope. To hit this happy mean and ascertain the proper dose, the patient is put to bed without any other treatment, and his pulse-rate ascertained night and morning for a few days. So soon as his average pulse-rate in recumbency is ascertained, he is put upon ten-grain doses of iodide of potassium every eight hours. If the pulse-rate remains unchanged the dose is increased to fifteen grains every eight hours, and every week an increase of five grains each dose is made till the pulse-rate begins to rise. In this way it has been ascertained that fifteen grains to a dose is seldom able to be exceeded, while it has often happened that ten grains has been found to be the most advantageous quantity. It is quite easy thus to find out what is a sufficient dose, and this has more than one advantage. With too small a dose we can do no good; with too large a one we do harm; we certainly delay the cure, and we may prevent it altogether. With a proper dose three months is generally sufficient to establish a marked improvement, instead of six months, the usual time before accurate dosage was resorted to. Now, also, we may say that the amount of relief obtainable from treatment in aneurysm is largely due to the period when the case comes under observation. If it is diagnosed early before there is much destruction of the arterial coats and surrounding structures, the cure is often practically complete. If the case is not seen till far advanced, then relief is all we can aspire to, but the relief to symptoms is often very great and remarkable, and it increases year by year. This doctrine as to the action of the iodide of potassium in aneurysm was carefully worked out clinically, and first enunciated in the *Edinburgh Medical Journal* for June, 1876, at p. 1142, and in the *British Medical Journal* for April 5th, 1879, at p. 511, forming part of the reported discussion as to the treatment of internal aneurysms at a meeting of the Glasgow Pathological and Clinical Society on March 5th, 1879, and it will also be found *in extenso* at pp. 453-463 of the second edition of my work on Diseases of the Heart, 1882. I mention these facts, as I have noted in various papers and published works an amount of ignorance on the subject not creditable to the research of the authors.

I am, Sir, yours sincerely,

Edinburgh, Feb. 9th, 1886. GEORGE W. BALFOUR.

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THE LANCET.

LONDON: SATURDAY, FEBRUARY 20, 1886.

DR. OGLE'S communication to the Statistical Society of London on the subject of suicide is one of great interest and considerable value. The manner in which he has treated the matter shows the skill and, which is equally essential, the caution of an intelligent expert in statistics. There are statisticians of high attainments in the art of collating returns who are not intelligent. The story which Dr. OGLE had to tell is sufficiently lugubrious. During the twenty-six years 1858–83 no fewer than 42,630 persons appear on the records as having died by suicide in England and Wales. The actual number is doubtless greater than this, as the returns "found dead" are not included. As regards age, during the period named only two children under ten have died by their own hands, but from fifteen to sixty-five years of age suicides increase rapidly. The greatest proportional rise occurs between twenty-five and thirty-five, when the majority of men and women come to face life in its reality, and find how hard and cruel it is. After sixty-five, as we should expect, the rate falls. Sex affects the question. Thus, setting aside age for the moment, the rate per 1,000,000 is 104 for men, while it is only 41 for women. Looking to the age-distribution in the adjustment of proportion in relation to sex, Dr. OGLE gives the suicides among males as against suicides among females as 267 to 100. Men have to bear the brunt and worry of life, and upon them chiefly falls that trouble of mind which is the main cause of self-murder. Occupation plays a part in the issue. Soldiers stand first on the list. Inn and hotel servants come next; then innkeepers, publicans, spirit, wine, and beer dealers. Medical practitioners follow close upon the publicans, the figures being almost identical; and chemists and druggists come a very short way behind. Barristers and solicitors are not greatly less prone to commit suicide. Butchers, fishmongers, poulterers, greengrocers, and fruiterers are about on a level with barristers in regard to the probabilities of death by self-murder. The occupation least predisposing to suicide, if it were permissible to look at the matter in this way, would seem to be that of a miner, perhaps because the risks to life in that calling are sufficiently numerous without importing extraneous modes of death by violence. Shipwrights and shipbuilders are the next contented class. Next above the last stand clergymen, priests, and ministers, though considerably above; thus, while the suicides among miners are only 74 per 1,000,000 living, and those among shipwrights are 96, the clergymen &c. number 139. The enormously high proportion of suicides among soldiers, 1149 per 1,000,000 living, while the proportion for "all males" is only 222 per 1,000,000, is very remarkable. Dr. OGLE has, as we have said, been careful to take age-distribution into account when dealing with the question of occupations, but we are not so sure that he has given full effect to the trade-distribution. He says, "To compare the suicide-rates of such contrasted occupations as these, without any regard to the difference of age-distribution, would clearly be absurd," and he has taken means to avoid the risk of error in this respect; but has he also guarded against the error of ignoring the distribution of occupations? For example, if a particular calling is one which bears a large proportion as regards the number of persons engaged therein to the numbers of persons engaged in other trades respectively, it is manifest that any general rate must be localised in the particular class proportionately; and the rates of the several classes will compare well with each other and with the total of living persons in due relation. We need a table showing the proportions of the total population engaged in different occupations to test the value of the occupation-tables in Dr. OGLE's computations. Doubtless the author had such a table at hand, and probably he used it, but the reader might with advantage have one also. The importance of the point raised may be stated thus: If the persons occupied as soldiers numbered, say, 60,000, and the medical practitioners were 20,000, obviously the same rate as regards the general population would produce three times as many soldiers among the suicides as among the doctors. So with all the other occupations. The proportion of suicides in each occupation must obviously bear a constant relation to the relative number of persons engaged in it, and it is only the *excess* or *deficiency* which would characterise the occupation as a cause or preventive of suicide. We want to know more than Dr. OGLE tells us on this point before we can draw practical deductions. The bearing of the statistics furnished on seasons is very noticeable. The greater number of suicides occur in May and June, slightly more in the latter month. The author states the belief, although he does not endorse it, that the heat of the weather may tend to induce insanity; but surely it is nearly as hot in July as in June, and hotter than in May, and yet the suicides in July fall considerably, while in August they are less again. The truth is that in May and June the worries arising out of the financial disasters of the preceding year culminate in law proceedings, and the embarrassed are brought face to face with the final issue of their difficulties. Then they succumb. In December the number of suicides is scarcely more than half as great as in June. Dr. OGLE remarks: "Possibly the explanation may simply be that as the days grow longer the movement of life, be it for business or for pleasure, becomes more and more active; and that the changes in the amount of suicide correspond to the consequent changes in the amount of mental excitement." November, which used to be popularly considered the month of suicides, is among the least prolific; only December and February are below it. We cannot help thinking that the relation is closer with periods of greatest anxiety with respect to money matters than to weather or other circumstances of existence. As regards methods of suicide, hanging is the most common; drowning and throat-cutting or stabbing come next in order, then poisoning, gunshot, jumping from a height, and last by railway train. Men, as a rule, hang themselves or cut their throats. Women generally commit self-murder by drowning or hanging; in a lower proportion they take poison. If men use poison for the purpose of suicide, it is most frequently prussic acid, oil of almonds, or cyanides, and next laudanum. Women choose laudanum or employ a

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vermin-killer, probably because the latter falls easily in their way. Speaking generally, a man resorts to some means within his reach or suggested by his occupation. Thus, chemists and druggists, medical practitioners, and photographers poison themselves; soldiers use firearms; butchers cut or stab, though they slightly prefer hanging, and so on. Clergymen, lawyers, and independent gentlemen use firearms; but all classes exhibit a tendency to resort to the rope, doubtless because it is considered the easiest mode of death, and because the appliances are always at hand. One curious fact in connexion with the choice of method Dr. OGLE states briefly thus: "If the year be divided into two periods of six months each, the one from October to March, the other from April to September, inclusively, out of 1000 suicides committed in each period there are in London, on an average of twenty years, 205 suicides by drowning in the warmer period, and only 177 in the colder period. This is only another example of the fact which came out more strongly when the choice of poisons was under review—namely, that even when about to commit suicide, persons are not indifferent to considerations of comfort or discomfort. The idea of death in cold water appears repulsive in winter seasons, and that method of self-destruction is avoided."

The paper, as a whole, is replete with materials for a statistical study of the subject of suicide, and will do good service by throwing light on a question of painful but urgently grave interest. "The total chance of dying by suicide," as Dr. OGLE calculates it, "is much more considerable than would probably be supposed by anyone who had not examined the question: few, for instance, would imagine that one out of every 119 young men who reach the age of twenty dies ultimately by his own hand. Yet such is the case." In face of figures so startling as these, it cannot be gainsaid that the subject of suicide is appalling in its magnitude. We must defer the mention of considerations arising out of the psychology of the question which Dr. OGLE rather suggests than undertakes to discuss. The Society before which his paper was read being purely statistical, the author properly restricts his view to that aspect of the topic; but there are others in respect to the study of which his excellent compilation will greatly help us.

IN the minutes of the meeting of the Council of the College of Surgeons, which we published last week, there is no word of allusion to what we may call the differences at present subsisting between the Council and the Fellows and Members at large. On the other hand, the Council seem to be pushing on with their own schemes. Authority was given to the Building Committee to make the necessary arrangements for the ceremony of laying the foundation stone of the new Examination Hall, which it has been decided to build in conjunction with the College of Physicians. Meanwhile, Mr. HUTCHINSON'S motion concerning the Fellowship has not yet been reported upon, although two months have elapsed since the committee for that purpose was appointed. Outside the Council, however, there are evidences of activity that can hardly fail to lead to results. The Association of Members has now in circulation for signature a petition to the Queen in Council, praying that no alterations be granted in the present Charters unless the same provide for the due representation of the Members on the Council of the College, and the exercise of other privileges which pertain to membership of a corporate body. This is reasonable enough. But something more is required of the Association than this. It must show itself to consist of practical politicians, and to this end must definitely draw up and publish a confession of political faith. On what grounds are they ready to treat with the present Council? On what grounds are they ready to join the Association of Fellows? Although for the purposes of the last public meeting some agreement was arrived at by the two Associations, or rather by their delegates, we are not aware that the Association itself has definitely agreed upon the nature of the suffrage they are seeking. Now, it is most important, in order to secure the co-operation of the Fellows and of the best and oldest of the Members, that an authoritative statement should be made to serve as a basis of action. In other words, a complete draft scheme of reform should be drawn up, the assistance of some experienced Fellows of the College, and even legal assistance, being secured in order to make it thoroughly reliable and workable.

Of first importance is the decision of the necessary standing as Member to secure a vote, and for eligibility to sit on the Council. Next, in what proportion to the Fellows *may* Members be chosen. It must be decided whether Members *may* or *shall* sit on the Council, or whether it shall be optional with the constituents to elect councillors irrespective of title. Of hardly less importance will be the method of voting, the formation and maintenance of a register, the amount of fee (if any) to be paid, whether Members resident beyond the United Kingdom shall be eligible for registration, and a variety of other questions of a like kind. A draft scheme of some kind ought certainly to be ready when the proper official, through whom the petition would be taken to the QUEEN, is approached for this purpose. We can hardly doubt that if a scheme of reform could be drafted on liberal yet moderate lines, keeping the academical and the political status quite distinct, and free from any personal element, there would be a large access of support which at present holds aloof on account of the uncertainty of the aims and objects of the present reform movement. Further than this, which, however, is a necessary preliminary step, the Association of Members should seek alliance or amalgamation with the Association of Fellows. Such a union would give a strength and moral weight to each of the Associations which neither can exercise alone. The Members especially would gain, for they have only just awakened to their position; while among the Fellows there are some who have given thought and study to the matter for a good many years past. The Association of Members would do well to endeavour to secure the help and assistance of one or two of the more active members of the Fellows' Association in drafting their reform scheme. There are two gentlemen who are, before all others, conversant with the history and Charters of the College, and it has been largely through their initiative and practical common-sense that so much progress has latterly been made. Nor should the Association lose any time in securing the patronage and help of the medical members of Parliament.

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In his letter, published last week, Mr. TWEEDY suggests several points which the promoters of the new Charters must steer clear of, one of the chief being "exclusiveness." The present Council, he shows, "is a much less representative body than is commonly supposed"; for, though avowedly elected by the voice of the 1100 Fellows, each individual member is really the nominee of some six-score private friends. Mr. TWEEDY further points out that, owing to the restrictions enforced by the Charter, the area of selection is reduced to a few old or middle-aged surgeons connected with the London hospitals. This exclusiveness has probably never struck the majority of our readers in its full sense; it is probable that the members of Council themselves hardly realise how little they represent the Fellows even, and how completely out of touch they are with the great body of the Members of the College.

In urging the Members to join hands and push forward, we must nevertheless counsel moderation. Their strongest argument in favour of obtaining the rights which have so long been denied will be a business-like conduct of their present campaign; and no better proof of fitness to exercise these rights can be given than the moderation they use in winning them.

IN selecting as the subject for his Lettsomian Lectures 'Some Moot Points in the Natural History of Syphilis" Mr. JONATHAN HUTCHINSON made a very wise choice. Syphilis is a disease which is always present amongst us. It comes in some form or another before the notice of every medical practitioner, whether specialist or general. It is also a disease which, though most amenable to treatment when diagnosed at its onset and promptly treated, is the immediate cause of death to a large number of infants, and the primary cause to a very large number of adults every year. Its early diagnosis and prompt treatment are therefore matters of paramount importance, and Mr. HUTCHINSON is to be congratulated not only in his choice of a subject, but also on the able manner in which he has handled it. The literature of syphilography is quite as marvellous as that of any other department of medicine or surgery. Practitioners are living who can remember the days when gonorrhœa was treated with mercury, even to profuse salivation, on the principle that it and syphilis arose from a common poison, for which mercury was the sole cure. To a very large extent syphilis was till a comparatively recent period ostracised from medical societies and medical literature, much in the same way that syphilitic patients of the lower orders are still ostracised from our general hospitals and relegated to a few lock hospitals and wards or to the out-patients' departments. The treatment of venereal diseases was viewed askance by legitimate practitioners, and a reputation for their treatment was rarely sought, this being left to quacks and chemists—a condition of things which still lingers amongst us, though happily to a greatly reduced extent. To these and other causes, but principally the former, is to be attributed the fact that the average general practitioner is more or less imperfectly acquainted with syphilis, and that even among specialists in venereal diseases there should be these "moot points" still remaining to be decided. Hence also arises the circumstance alluded to by Mr. HUTCHINSON: how comparatively young is almost all our knowledge as to the transmission of syphilis from parent to child. The various works published in this country on the subject of syphilis have seldom gone beyond a second edition, while many have not even reached this. In his many writings on this disease, and more especially in his article on Constitutional Syphilis in "Reynolds's System of Medicine," Mr. HUTCHINSON has treated the subject with a vigour and freshness which make it much pleasanter reading than previous writers have succeeded in making it, and the recent Lettsomian lectures are no exception to this rule. All the various questions of unity or duality, phagedæna, recurring chancres, syphilis after vaccination, the relationship of tertiary to secondary symptoms, nerve affections, the position of rupia and psoriasis palmaris, mercurial treatment, recurrence of syphilis after long treatment, and, last and most important of all, the question of hereditary syphilis,—these are all discussed with an ability which must commend them to the attention of all who peruse them.

But while wishing to do ample justice to the ability with which Mr. HUTCHINSON has treated a difficult subject, it must be admitted that some of his conclusions are at variance with those of other writers whose experience and ability cannot be questioned. Mr. HUTCHINSON is not free from the error into which so many writers on syphilis have fallen—namely, that of being too positive. Thus, in his first lecture it is clear that he regards all venereal sores as related to syphilis and not independent. "If a person who has never suffered before contracts a venereal sore of any kind, it is highly probable that it will lead to syphilis." Mr. HUTCHINSON adds, in confirmation of this, the statement of Mr. MORGAN, of Dublin, that of fifty-four patients with first attacks of venereal sores, fifty were proved to have true syphilis. It would be very interesting to have some additional details as to these cases. Was the period of incubation short or long? Was induration present? Were the inguinal glands affected? Are we to assume that because they are termed venereal sores, all these indications were absent? Considering how many men suffer from a chronic excoriation of the inner prepuce, and the filthy state of the vagina in many prostitutes, there seems nothing improbable in the belief that sores may arise which will be long in healing, and may yet be perfectly independent of syphilis. Then as to phagedæna. Mr. HUTCHINSON'S views are not confirmed by the experience of Mr. JAMES LANE, Mr. BERKELEY HILL, and other hospital surgeons; nor is it proved that phagedæna is more prevalent in lock than in surgical wards. In his second lecture, Mr. HUTCHINSON makes a somewhat remarkable contradiction. He says that if a small dose of grey powder be given to a patient with an indurated sore, but in whom as yet no secondary symptoms have appeared, the result will usually be that none will appear; but further on he says that if at the end of a six months' course the remedy be stopped, an outbreak of symptoms will occur within a few weeks of its suspension, and that this usually takes the form of an erythematous or lichenoid eruption. There are many other points to be noted which can scarcely be comprised within the limits of one article. Enough has been said to show that the "moot points" must remain such till more and varied experience

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has been brought to bear upon them. Hence the importance of carefully noting all the varieties of diagnosis, prognosis, and treatment in every case of syphilis which comes to the notice of the general practitioner or specialist.

DR. AUSTIN FLINT may be called the WATSON of the United States. A very admirable specimen of his writing and thinking as a practical physician is a paper read by him before the New York County Medical Association on November 16th, and contained in the *Journal of the American Medical Association* for January 9th, and entitled Elements of Prognosis in Bright's Disease. The general purport of the paper is to encourage a more hopeful, or, at any rate, a less gloomy view of the disease than is commonly entertained either by the public or the profession. His main conclusions may be thus summarised. Acute Bright's disease, as a rule, does not tend to a fatal result. A subacute diffuse nephritis occurs not only after scarlet fever and other infectious maladies, but irrespective of these, and is liable to be mistaken for chronic morbus Brightii. It can only be distinguished by the disappearance of all signs of renal disease after some weeks and the recovery of health. As regards prognosis in chronic Bright's disease, Dr. FLINT considers its frequent latency to be a very important clinical fact—that is, there may be no important symptoms apart from the result of an examination of the urine. For this to be the case three conditions must obtain: first, the kidneys must not be damaged beyond a certain extent; secondly, the important organs of the body other than the kidneys must be fairly healthy and efficient; thirdly, the laws of health relating to alimentation, exercise, exposure to cold, mental excitement, and habits of life must be observed. Given these conditions, he thinks there might be a lesion of the kidneys, diminishing their functional ability to one-half, but not in its nature progressive, which would be compatible with the indefinite continuance of life and health. Dr. FLINT is brought to this conclusion, not only by his experience as a physician, but by the recent demonstrations by surgeons that nature has endowed us with twice as much renal tissue as we absolutely need for purposes of life. Dr. FLINT insists on the importance of a careful examination of the urine, not only as to the presence of albumen and casts, but as to the quantity of urine and its specific gravity. The liability to grave uræmia depends not only on the state of the urine, but on other accessory facts, of which two are important—the chance of vicarious elimination by other organs, and the comparative insensibility of some persons to the toxical effects of uræmia. In cases of uræmic coma or acute œdema of the lungs the prognosis is of course grave, but Dr. FLINT even here is not hopeless, and has seen cases of recovery. His suggestion is that the attacks are due to an intercurrent, acute or subacute, nephritis, which under proper care and treatment passes off. Of one complication, "renal asthma," or dyspnœa without pulmonary affection, on the other hand, Dr. FLINT speaks with no hope. He regards it as probably due to a toxical effect on the respiratory centre in the nervous system. We give prominence to this paper, not only for its own sake, but as a good specimen of the quality of looking for the best side of bad facts, which is one eminently for cultivation by medical men, and which has been rather discouraged since pathological processes engaged so much the study of physicians, apart from the time they have occupied, and the circumstances favouring or retarding them. Dr. FLINT is not alone in this estimate. We once asked Dr. JOHNSON how long he had known a case of albuminuria to extend? He replied thirty years. We may safely conclude that a disease which could be extended over thirty years might with more care extend over forty, and leave life very much uncurtailed. But this implies great care on the part of the patient and physician alike.

LAST Saturday the Metropolitan Asylums Board resolved, on the recommendation of their General Purposes Committee, to erect at Gore Farm a hospital for the accommodation of 600 persons suffering from small-pox. Sir EDMUND HAY CURRIE, in bringing up the report, described the amount of hospital provision which would then be available at the time when small-pox next assumes epidemic prevalence in the metropolis. The Committee estimated that the five London hospitals would provide 40 beds each, or 200, the hospital ships another 300, making, with the proposed hospitals, 1100 beds for cases of small-pox. We fully sympathise with the desire of the Managers not to delay the steps which must be taken to meet the exigencies of the next epidemic, but we see with a feeling akin to dismay the complete absence of any appreciation of the need for a thorough reconsideration of the whole subject of hospital provision for small-pox. The Managers adopted a resolution which contains an expression of satisfaction at the "success which has attended the new departure in the treatment of small-pox cases in accordance with the recommendations of the Royal Commission." There has not been wanting evidence that this departure, as interpreted by the Managers, is attended by serious consequences.

The hospitals at Fulham and Hampstead have been definitely shown to be a fertile cause of disease to the neighbourhood in which they are placed. The evidence against the other hospitals is considerable, yet the word "success" is associated with the system that includes their use. For some time a controversy has been going on between the Local Government Board on the one hand and the Metropolitan Asylums Board on the other as to the continued use of the land hospitals or the ships on the river, and the latter Board, probably influenced by the unfortunate results which have attended the use of the land hospitals, have persistently declined to close the ships. This is a matter upon which the lives of a number of people are dependent, and it might be expected that in view of such serious issues both Boards had exercised all their powers to learn whether the misfortunes which have befallen the residents near to the land hospitals have been shared by those who live in the neighbourhood of the ships. So far as any information is available, there is reason to believe that the Local Government Board have made inquiry as to the influence of one hospital, that at Fulham; while the Metropolitan Asylums Board have taken no step to obtain any knowledge whatever of the results of their procedure, and this is all.

We cannot but regret the decision of the Metropolitan Asylums Board to embark in fresh and large expenditure until the best method of the construction of small-pox

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hospitals has been fully determined. The proposed institution is probably intended for convalescents, and Mr. POWER'S observations have led us to hope that hospitals containing patients in this stage of disease are not capable of disseminating infection to the same extent as those containing persons in the early stages of small-pox. But in practice we anticipate that the Managers will remove from London all persons suffering from small-pox who can bear the journey, and if this course be adopted the institution will in its use be similar to those institutions which have become known to be a source of danger to the neighbourhood in which they are placed. Last week we pointed out that only a portion of the recommendation of the Royal Commission had been adopted, and we recur to this for the reason that any further large expenditure ought only to follow the fullest investigation of the effects of aggregation of severe mild, and convalescent cases of small-pox.

Annotations.

"Ne quid nimis."

THE EXEMPTION OF PUBLIC CHARITIES FROM RATES.

WE have already expressed a strong opinion on the unreasonableness of assessing hospitals and other charities for the payment of poor rates and other local rates. A powerful statement has been drawn up by direction of the executive committee of the "Charities Rating Exemption Society" for the consideration of members of the Legislature, which we commend to every member of Parliament and to all who can influence members of Parliament. According to this statement, it has been a principle of the Common Law in Great Britain for two centuries and a half to exempt public charities from liability to public rates. This principle has been applied to many kinds of institutions, but its most obvious application is to hospitals supported by voluntary contributions, which are so essentially benevolent in function, and which so obviously relieve not only the poor who cannot pay rates, but the ratepayers and taxpayers themselves, who would otherwise have to support these institutions. The Irish Poor Law Act (1838) recognised the principle. Under the 32 and 33 Vict., cap. 40, Sunday and Ragged Schools were exempt from rating. The Town Improvement Act of 1847, consolidating the various Acts for lighting, paving, and improving towns, exempted buildings devoted to public worship, to gratuitous education of the poor, and to public charity. Such buildings were exempted from even the Income Tax, and from that still more stringent tax, the Land Tax of 1797. Many local Acts contain provisions for the exemption of charities. But law is sometimes very accidental and unsatisfactory in its deliverances, and by a most curious and, to laymen, unintelligible accident, a decision of the judges referring to the liability of the trustees of the Mersey Docks and Harbour Board to be rated to the poor was wrested to apply to charities; and now some charities are rated and others are not. Some hospitals are heavily rated. No Parliamentary authority for their being rated exists, but we presume they pay on the view that it is cheaper to pay than to contest their right to exemption. We can only repeat a strong expression of the injustice and impolicy of subjecting to rates hospitals whose very operation is to keep the poor off the rates. It is perhaps too much to hope for the present, when legislation seems reduced to a mere battle of parties, for party purposes, to gain attention to the claims of institutions which transcend all party considerations. But better days may be at hand, and when they come we cannot doubt that our legislators will exempt genuine charities for the future, as they have been exempted in the past centuries. The paper of Mr. Wood at the Hospitals Association, and the discussion which followed, will do much to place this subject well before the public mind and that of Parliament. It is impossible that the question can remain as it is. Some hospitals are rated and others are not. Some are assessed at a very high rate, others at a very low one. Thus, according to a very interesting table drawn up by Mr. Wood, Guy's Hospital pays for rates and taxes £1400, St. Thomas's £2133, the London Hospital £56, and St. Bartholomew's nothing at all! While certain charities are exempted from rating by specific Acts of exemption, the greatest of all pure charities—the hospitals—remain for the random attacks of overseers. Where these officials are tender-hearted, the hospitals go scot free, or are taxed so lightly that their trustees feel half disposed to let things alone; where the officers are astute, hospitals are heavily rated, as if they were a source of profit to their supporters, and not a great means of lightening the burden of the ratepayers.

UNCONSCIOUS IMPREGNATION.

AT the recent Manchester assizes a man named Jackson, a dentist, was sued for damages for the alleged seduction and consequent pregnancy of a young woman aged twenty-five. The facts, as stated in evidence, were so remarkable that it is not surprising the jury were discharged without giving a verdict. The case is interesting from a medico-legal point of view, and shows the danger of administering anæsthetics in the absence of a third person. It appears that the woman went to Jackson for the purpose of having a tooth extracted, and whilst under the influence of gas the defendant, according to the allegation set forth in the statement of claim, ravished her. The plaintiff at the time was engaged to be married, and it does not seem that she made a complaint to her intended husband of the supposed assault—in fact, she even allowed the banns of marriage to be published, though cognisant that she was *enceinte*. Two questions arise in connexion with the case of the highest import. Is it possible for intercourse with a virgin to take place during the short period of insensibility and semi-consciousness following the administration of nitrous oxide gas? We take it that, although possible, it is in the highest degree improbable. But there can be no doubt that, granted the accomplishment of the act, the answer to the query, "Can unconscious impregnation happen under such conditions?" must be in the affirmative. Cases are on record in which women have conceived during sleep and the state of anæsthesia induced by gas is only another form of sleep. If we are correctly informed of the facts, we cannot understand why the plaintiff proceeded against the defendant by civil process and not by criminal indictment, for if the story of the woman is true, surely the man was guilty of felony. Perhaps the fact that the plaintiff did not make immediate complaint of the alleged assault weighed heavily in the balance on the side of the accused. Such a charge as the one above referred to is difficult and may be impossible to refute, and consequently it is only just that the strongest corroborative evidence should be required to justify a conviction or a verdict for damages, or, failing that, there should be a complete investigation of all the collateral circumstances as regards the conduct of both parties *re* the charge, and also a searching inquiry into their general credit. From an impartial survey of the medico-legal and moral bearings of the case as reported in the *Manchester Guardian*, we cannot help expressing the opinion that upon the evidence before them the jury could scarcely have found for the plaintiff.

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VACCINATION ARRANGEMENTS IN PENNSYLVANIA.

THE State Board of Health of Pennsylvania have issued a series of circulars relating to such matters as the precautions to be taken against cholera, the sanitary supervision of travel and traffic, and the precautions to be taken against small-pox. Adverting to the deplorable anti-vaccination agitation in Canada, the latter circular expresses the conviction that the public in the State are generally too well informed and intelligent to take part in any ignorant attempt to thwart the beneficent efforts of the health authorities to check the spread of disease, and they urge the vaccination of all infants within three months of birth, the revaccination of adults, and the adoption by all public School Boards and trustees of a rule requiring that every child entering school shall give satisfactory evidence of having been vaccinated. In this way indirect compulsion would be brought about, but they admit that, in order to give effect to it, the establishment of vaccination stations somewhat on the lines adopted in this country will have to be carried out; and having a desire to give the inhabitants the opportunity of getting lymph direct from the calf, the State Board of Health have decided to encourage the establishment in the immediate vicinity of the cities of Philadelphia and Pittsburg of vaccine farms, under the supervision of skilled physicians, where every provision will be made for ensuring the health of the animals used for the purpose of propagating the lymph, with the most scrupulous cleanliness of their surroundings. From these establishments it is proposed to issue lymph to meet every emergency, and this at the lowest possible price.

THE ARMY CLOTHING DEPOT.

ONCE more an agitation has arisen with respect to the management of the Army Clothing Depôt at Pimlico. It may be remembered that in February, 1878, we published a special report on the contamination of the uniforms provided to the British army. We then proved, firstly, that many persons who attended at the Pimlico factory lived in fever dens, which had not been detected by the authorities and, secondly, that those who were allowed to take their work home sometimes made the uniforms in overcrowded rooms, and by the side of small-pox or scarlet fever cases. The publication of these facts caused so great a sensation that a special inquiry was instituted by Government. Measures were taken to reduce the amount of out-door work, but their principal feature consisted of a reduction of wages. By this means it was argued that the Government factory would be better able to compete with private contractors, who were the greater offenders. But, considering that the ideal wages only equalled an average of 15*s.* or 16*s.* per week, there was not any margin for reduction, if the workers are to be fed and lodged properly. Nevertheless, as time wears on, the policy of management seems still to incline towards lower and lower wages. Great-coats, when made within the Government factory, are paid for at the rate of 2*s.* 2*d.* each for the work expended thereon. When given to workers outside only 1*s.* 10*d.* is allowed, and workers have to find their own material, &c., which is equal to a further reduction of 4*d.* Hence the outside tailoress only nets 1*s.* 6*d.* instead of 2*s.* 2*d.* on each great-coat. This is not the way to promote public health; and how can it be expected that poor women, when thus underpaid, should voluntarily declare the presence of infectious diseases in their midst? Such a declaration would deprive them of their work, and this without compensation. On the other hand, as the work is so badly paid, they cannot be expected to save sufficient to submit willingly to an expensive isolation or quarantine. If it is not our province to discuss the wages question, it is certainly our duty to insist that a liberal allowance should be made to all those who frankly confess that they cannot work because an infectious disease has broken out in their homes. No law at present exists to compel private contractors to make such allowance to their work-people; but the Government may be called upon to set the example, and to give out work only to those employers who follow this initiative. Isolation and disinfection are indispensable, but the one and the other will always be avoided, whenever possible, by those who work on the verge of starvation, unless they are liberally compensated for the loss of employment involved by the enforcement of these sanitary measures.

A READY MEANS OF PRESERVING THE FLUIDITY OF BLOOD.

A STUDENT in Professor Stricker's laboratory, Herr Ernest Freund, has, it seems, suggested a most simple and convenient method of preserving blood in the fluid state. His plan consists in coating the interior of a glass vessel with pure oil. Into this receptable blood freshly drawn is poured, and a layer of oil is then run over the surface exposed to the air. In this way, we are assured, fresh blood may be kept from coagulating for days if necessary. It is difficult to see how so simple an experiment, if once satisfactorily demonstrated, should afterwards be discredited by repetition. We may therefore hope that this apparently trivial application of a physical law will be a real gain to practice as well as research. In particular it should obviously facilitate the operation of transfusion, though it will not entirely replace that still more ready means of treatment, salt solution. It need hardly be said that this mode of preventing coagulation is new rather in its easy and general application than as illustrating a principle for the first time discovered. Professor Ludwig made use of the same idea in estimating the velocity of the blood-current.

PRINCE TORLONIA.

ITALY has lost a great benefactor in Don Alessandro Torlonia. His colossal wealth, amassed in successful banking speculation, was freely spent in the encouragement of art, in the prosecution of public works, in the founding and maintenance of hospitals, and in the relief of the poor. One has only to visit the churches, the basilicas, the palaces, the theatres, and the villas of Rome to see how much of their recent ornamentation is due to his employment of architects, sculptors, and painters, whom his judicious patronage has raised to distinction. The drainage of the Lago di Fucino—an undertaking which had baffled even the Emperors Claudius and Hadrian, with their command of engineering talent and of unlimited slave labour—has restored it to its proper dimensions, reclaimed the arable soil it inundated, and minimised the palustral exhalation that kept the husbandman aloof from its margin. For the completion of this work, which will rank with the Mont Cenis and St. Gothard Tunnels and the Suez Canal as a notable achievement of the century, King Victor Emanuel created its promoter Prince of Fucino, and in honour of the event had a gold medal struck, which the Torlonia family will justly cherish among its title-deeds to nobility. The hospital for the orphan and the superannuated erected and maintained by the Prince at S. Onofrio, the infant asylum and professional school for the upbringing and training of three hundred children of both sexes, and in immediate connexion with this the famous "Ambulatorio chirurgico" organised under the great surgeon Costanzo Mazzoni, are all monuments of the large-hearted and free-handed "Don Alessandro," as the Romans loved to call their unwearied benefactor. Making no pretensions to patrician lineage, the banker-prince represented

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far more effectively than the average Italian noble that paternal care for his inferiors and dependants which was one of the redeeming attributes of the feudal system. Though loyal to the Vatican, he frankly acknowledged Victor Emanuel as King of United Italy, and when Garibaldi came to Rome eleven years ago with his plan for deflecting the Tiber, reclaiming the Campagna, and reviving the port of Fiumicino, Don Alessandro gave him a courteous and kindly reception, and sent him away with the conviction that, had the plan been feasible, the money would be forthcoming till its completion. In these days, when the sharp contrast between rich and poor is driving wilder spirits to the "Tartarus incline" of revolution, such wise and wide benevolence as that of Prince Torlonia will have its restraining effect, and reconcile the toiling masses to a social inequality under which there is always opportunity to rise and to crown a successful career with its happiest privilege—"the sweet task of providing."

CAN A HERNIA DISAPPEAR IN A FEW WEEKS?

A SAD case of vexatious prosecution has just been published in the Belgian medical journals. In June, 1883, Dr. Velleman of Brussels was consulted by a lad of eighteen, who said that while lifting some heavy weight he had experienced a severe pain in the groin. On examination, Dr. Velleman found that, contrary to his expectation, the trouble was not of a specific nature, but that a very small inguinal hernia existed. This was reduced and bandaged, and the patient sent to an instrument-maker (who also felt the hernia distinctly) for a truss. Four days afterwards the mother came to Dr. Velleman and asked for a certificate of her son's complaint, nothing being said as to the use that was to be made of it. This she was given, the fee being two francs. The doctor thought no more of the circumstance till in the following August he received a summons to appear before a juge d'instruction, who showed him his certificate and told him that the lad belonged to the militia, and that he had been examined by the militia surgeons, who had stated that he had no hernia, and that he could not have had one as recently as June, so that the certificate was a false one. Dr. Velleman saw the lad, and examined him, and found that all traces of the hernia had disappeared. On being questioned by the juge d'instruction as to the exact nature of the hernia he had previously detected, he said that it was "une pointe de hernie inguino-interstitielle," by which he intended to convey the meaning of a hernia but slightly visible, pointing not through a natural opening in the abdominal wall, but through an accidental tear in the aponeurotic fibres. The medical jurists to whom the question was referred reported that there was no hernia, and that it could not have been cured in so short a time. The trial did not come on till March, 1884. His accuser stated that the certificate declared that the lad had a disease which he had not, and that when defendant, who gave such certificates at a cheap rate, found that this one was likely to cost him dear, he invented a name of a disease which was unknown, hoping by this "subtlety" to make people believe in its existence. A penalty of from two to five years' imprisonment was demanded. The court, however, without listening to more than the opening of Dr. Velleman's advocate's speech, acquitted him, and he thought his troubles were at an end. Unfortunately the Belgian law permits an appeal on the part of the prosecutor, and several months after the first trial the unfortunate practitioner had again to appear. For the trial in the Appellate Court he had taken the precaution of fortifying himself with letters from two eminent professors. The letter from Dr. Soupart, Professor of Surgery in Ghent, expressed the fullest approval of all he had done, and justified the term "interstitial" which he had employed; the writer also thought it was quite possible for the hernia to have been cured in two or three months. Another letter from Dr. Debaisieux, Professor of Surgical Pathology in Louvain, expressed a decided opinion that a hernia such as this, caused by a sudden strain in a young man and promptly treated, might disappear in a few days or weeks. "The hernia may probably have pointed through an accidental rupture in the transversalis fascia ..... and the application of a truss after the intestine had been replaced would permit this rupture to cicatrise." He also approved of the phrase used by Dr. Velleman as being appropriate, though not one used by medical authorities. The Court of Appeal confirmed the acquittal without even calling on the counsel for the defence. Thus, after nearly two years of anxiety and worry, Dr. Velleman is finally rid of all accusations and suspicions on account of this charge.

DEAD DOGS.

THE inventor of the lethal chamber, in one of his familiar addresses on the Balance of Natural Forces, gave his listeners the sentence, often since quoted, that "Nature, as chief of all the provident societies, provides that out of the very womb of death shall come the most perfect forms of life." It is not likely that he invented the lethal chamber to illustrate this argument, but it seems it does so marvellously well, as a Medical Officer of Health graphically shows in the *Daily News* of Monday last. The dead dogs from the chamber go down, it seems, to a farm near to London and are piled in heaps with straw and manure until they become fit for the land. One such heap was 30 ft. long, 15 ft. wide, and 6 ft. high. It contained several hundred dogs, and will be left undisturbed from four to six months to rot and decay. Then the heap will be turned over, and after the rotten bodies have been broken up will be reformed, to remain some months longer. Finally, it will be turned over again, and, every semblance of dog gone, it will be given to the land for corn and fruit, and it may be—total abstinence notwithstanding—British home-made wine, cider, and beer. In the transition there must be smell. The Medical Officer testifies to that in no measured terms. But he adds, "the men and boys who turn and cart this stuff seem none the worse for it," and as there are no residences within a quarter of a mile he sees no necessity for any interference. He is content to hope that the British public will enjoy the luscious "British queens and delicate early rhubarb which it gets from its transmogrified dogs." In this hope we join; but perhaps it may be better, as they increase, to spread out these wombs of death a little more widely, and to give them as much air room as may be obtainable for their transmogrification into the most perfect forms of life.

PHTHISIS IN FRANCE.

THE mortality from phthisis in Paris has amounted in two months to more than 1000, and it is reported that with the object of checking this excessive death-rate French *savans* are about to try the principle of inoculation, which under M. Pasteur's recent discoveries has been received with such extraordinary favour by French professional men. It is proposed to obtain subscriptions for a series of experiments, to be conducted on a large scale over a considerable area and for a period sufficiently long to make the results trustworthy. The influences of climate will be tested by the establishment of different stations for these tentative researches and operations. One of these stations is to be situated on the northern coast near Boulogne, another in the warmer temperature of the Riviera. Records will be kept of the various experiments, and a journal devoted to chronicling them. The support of several eminent medical men has

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been already promised, and subscriptions in aid of the project have commenced to flow in. Whilst devoting itself chiefly to experiments on live animals by inoculation, the Society will also study to effect the alleviation of phthisis by the destruction of microbes.

THE BRAIN ACCORDING TO SEX AND AGE.

M. PH. REY, according to the *Revue Scientifique* (Jan. 30th, 1886), has communicated to the Société Medico-Psychologique the results of his analysis of the materials left by Broca. The following were the results of 347 observations collected by the learned anthropologist on the weight of the three cerebral regions, frontal lobes, occipital lobes, and parietal regions. Firstly, the relation of those different parts to the brain is:—

In Men.	
Frontal lobes	1 :: 2·33
Occipital lobes	1 :: 10·66
Parieto-temporal regions ...	1 :: 2·12
In Women.	
Frontal lobes	1 :: 2·32
Occipital lobes	1 :: 9·88
Parieto-temporal regions ...	1 :: 2·13

Secondly. In men the left frontal lobe is heavier than the right; but in the occipital lobes and in the temporal regions the excess is on the right side. Thirdly. In old people loss of weight is more perceptible in the parieto-temporal regions than in the frontal and occipital lobes; that is particularly the case in women. Hence it is that if in adult life men have proportionately larger frontal lobes, that ratio is attained in women in old age. Fourthly. In men the frontal lobes only attain their greatest weight at thirty-five years; but the parieto-temporal regions acquire it at twenty-five. The anterior lobes of women present little difference between twenty-five and thirty-five years.

CHOLERA IN BRISBANE.

WE have on several occasions drawn attention to the outbreak of cholera on board the Queensland line steamer, *Dorunda*, and we are now in receipt of communications from Brisbane which confirm the suspicion that the disease was true cholera. The disease manifested itself some days after the vessel touched at Batavia, and when it reached Cooktown certain cases of so-called dysentery were stated to be prevalent. These were doubtless the beginnings of the outbreak which was first reported from Townsville. When the vessel reached Townsville she was inspected by Dr. Ridgley, who reported certain cases and deaths, which, as the result of personal investigation, he regarded as "suspected cholera." Later on it appeared that quite a panic occurred amongst a large body of emigrants on board, and that the captain and the ship's doctor were all but disabled from the overwork occasioned in attending to the sick. Such a panic might have been expected when, instead of dealing with the outbreak at Townsville, it was decided by the Premier that the vessel should go on to Brisbane, the healthy and sick being thus confined together for a still longer period. The whole circumstances are typical of the blundering of the quarantine system. Those who maintain the efficacy of the system should at least be prepared to carry it out in a proper manner; but we read that one reason why the vessel was not allowed to discharge its human freight at Townsville was because it was raining hard, and the people would have required tents. But the action with regard to Dr. Ridgley is the most curious of all, reminding us as it does so forcibly of the useless and vexatious regulations to which the Turk adheres so fondly, and from which he derives a substantial income in the Red Sea. Dr. Ridgley had gone on board to aid the overworked ship's doctor with advice in forming a diagnosis, and it seems that he had gone to the vessel in an unauthorised ship. The result was that when he returned the people clamoured to have him put in quarantine, and the Mayor, in ordering him to confine himself strictly to his residence, added that it must be "together with all the members of your family," until the Colonial Secretary had been communicated with. It is curious to read such an order emanating from an office where it should at least be known that healthy men do not distribute cholera, and where it should be recognised that if danger does attach to an individual his family should be as much protected from it as the remainder of the community. Fortunately some better counsels are also prevailing in the colony, for people are being urged to carry out Mr. Simon's code of sanitary regulations in face of cholera emergencies, and writers to the public papers are pointing out the importance of cleanliness in all its forms. This will be of far more avail than the action which was followed of fumigating letter-bags and locking up doctors with their families because they perform the first duty which is required of them—namely, that of giving medical assistance to the sick. We knew that certain quarantine restrictions existed in the Australian colonies, but hitherto we were not aware that they were of so antiquated and vexatious a character.

THE TEREBENES.

So much attention has of late been directed to the subject of pure terebene as a medicinal agent, that it may be as well to remember that there is a group of substances known chemically as the terebenes. It is, in fact, the generic name for the volatile oils or hydrocarbons, isomeric or polymeric, with oil of turpentine. Nearly all the terebenes are liquid at the ordinary temperatures, and most of them are lighter than water. Natural terebenes treated with acids, especially strong sulphuric acid, generally undergo an alteration of molecular arrangement without change of chemical constitution, the odour being for the most part greatly altered. A terebene often yields several isomeric modifications by treatment with various acids or by repeated distillation with the same acid. The substance called pure terebene is made by the action of concentrated sulphuric acid on oil of turpentine. The process is an old one, and as far back as 1873 M. Riban read a series of papers on the subject before the Pharmaceutical Society of Paris. To prevent any misconception, it may be as well to state that the pure terebene used in the treatment of bronchitis is not a patent medicine; and that, as recently pointed out in the *Pharmaceutical Journal*, it may be made or sold by anybody without the slightest fear of infringing any patent rights.

DUBLIN HOSPITAL SUNDAY FUND.

FROM the report of the Council it appears that the total amount of contributions to the fund for 1885 was £4468 5*s.* 8*d.*, being an increase of £65 11*s.* 1*d.* as compared with 1884, while the working expenses for the year were represented to be £260 12*s.*, being 5·84 per cent. on the total collected. The Committee of Distribution for 1885, having ascertained that a sum of about £4000 was available, determined to distribute £3900 among the participating institutions in consideration of subscriptions received and work done, with an added bonus of 7½ per cent. to those institutions which had provided trained supervision for their nurses. The addition of this bonus absorbed a further sum of £279 2*s.*, making the total sum distributed for 1885 £4179 2*s.* The highest sum was awarded to the City of Dublin Hospital (£780 10*s.* 11*d.*), and the lowest to the Whitworth Hospital (£44 14*s.* 2*d.*). The relative expenditure in management and other expenses in the participating

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hospitals was carefully considered by the committee, who arrived at the conclusion that in only one instance was the expenditure so disproportionate to the work done by the hospital as to call for inquiry. In this case, that of the Coombe Lying-in Hospital, the committee deemed that the expenditure on management was excessive, and the explanation they received they did not consider satisfactory, especially as among the items of management they found a sum of £100 as salary to the medical officer of the out-patient department, while no similar charge was discernible in the accounts of any other of the participating hospitals. In two cases—the Meath Hospital and St. Mark's Ophthalmic Hospital—the expenditure on provisions appeared to be too low—viz., at the rate of 8·742 and 7·197 pence per patient per day respectively; and in consequence of the committee's inquiries the Meath Hospital authorities are considering a revision of their dietary, and the authorities of St. Mark's had promised to bring the matter under the notice of the governors. As regards the Meath Hospital, some of the medical staff have for years past paid out of their own pockets for any extras ordered by them for patients under their charge, which of course effected a considerable saving in a year under the head of provisions.

SYPHILIS AT NISHNI NOVGOROD FAIR.

AT a meeting of the Syphilis Section of the Moscow and St. Petersburg Medical Society, a female practitioner who had been commissioned by the Government to inspect the common women frequenting the great annual fair at Nishni Novgorod last year communicated the results of her experience. There were two inspection stations, which were open from June 16th to Sept. 3rd; 2812 examinations were made of 355 women, of whom 49·3 per cent. were frequenting the fair for the first time and 27·7 per cent. for the second time. Some were professional prostitutes, and some servants and peasant women who only practised prostitution during the time of the fair, at other times living quiet lives in their own villages. It was found to be impossible to get the registered women to come up regularly for examination, even though photographs were taken of them. Of those examined, 6·2 per cent. had urethritis *(sic)*, 1 per cent. soft chancres, 0·2 per cent. hard chancres, 5·1 per cent. syphilitic condylomata, and 0·2 per cent. gummata, so that 5½ per cent. were found to be suffering from constitutional syphilis. The conclusions drawn were tolerably self-evident—viz., that the main cause of the spread of syphilis is public and private prostitution, such as that carried on at the fair; also that the examination regulations must be improved.

A PLEA FOR WEIGHING INFANTS.

DR. D. J. VIURA Y CARRERAS, medical officer of the children's department of a Barcelona hospital, has published some remarks on the importance of periodically weighing infants, by which observations it can be determined whether the mother's or nurse's milk is satisfactory in quantity and quality, and the desirability of a change is easily and early recognised. In the main Dr. Viura agrees with the statements of Bouchut—viz., that an infant loses from 100 to 200 grammes in the first four to six days, regaining its original weight in seven days, from which time to five months it gains 25 grammes daily, being then double its original weight, and this is again doubled at sixteen months. He made a series of observations on his own child, and concurrently with them tested the mother's milk by Donné's lactoscope. The child was born on December 16th, and on the seventh day weighed 3300 grammes. On January 15th it had gained 900 grammes; on February 2nd there was a further rise of 800 grammes; but on March 1st the gain was only 500 grammes, the explanation being that the milk, which up to February 10th had had a density of from 23° to 28°, had in consequence of the appearance of the menses decreased in quality, having a density of from 30° to 35°. It afterwards recovered its former quality, and during March and April the child increased respectively 850 grammes and 800 grammes. It is of course necessary to take into account any pathological condition which may be present, and not to attribute to the nurse what may be due to syphilis or tuberculosis in the child.

DIVIDED GOVERNMENT.

LAST Saturday Mr. Roberts, on behalf of the Metropolitan Board of Works, appeared before Mr. Mansfield at Marlborough-street, to answer a summons issued at the instigation of the St. Giles' Board of Works, to compel them to abate a nuisance at Denmark-street, Soho, which had been acquired by the former board on Jan. 31st for the purposes of demolition, and from which the water-supply had been cut off. The miserable condition into which houses fall which are included in any improvement scheme is known to all persons who have had experience of the action of the Metropolitan Board of Works in dealing with property under the Artisans and Labourers' Dwellings Improvement Acts. It cannot be expected that landlords will expend money upon houses within a few weeks of their passing out of their hands, nor would it be profitable for the Metropolitan Board of Works to repair houses which in a very short period will be demolished; but the continued occupation of these places should be prohibited, and if the action of the St. Giles' Board quicken that of the Metropolitan Board in this respect they will have done London a service.

PROFESSOR VIRCHOW ON PATHOLOGY AND DARWINISM.

IN an article contributed to the current number of his *Archiv* Professor Virchow replies to some views enunciated at the Strasburg Conference of German Naturalists and Physicians by Dr. Weismann upon Darwinism and Pathology. The question gains in interest from the facts adduced by Mr. Sutton in the first of his recent lectures before the College of Surgeons, for Professor Virchow's contention is the same as that of Mr. Sutton—viz., that variations from the animal type are largely brought about by deviations in structure strictly speaking pathological. Dr. Weismann, on the other hand, contended that such variations are the result of the law of adaptation, and it is this position which Virchow contests. He points out that Darwin himself, although not a pathologist, recognised the want of a clear line of distinction between monstrosities and mere variations. Weismann, however, went so far as to deny the inheritance of *acquired* properties; but it is difficult to see how otherwise one is to express the changes induced by adaptation to the environment. The facts of acclimatisation are, as Virchow points out, instances of such adaptation, and colonies could not be founded if it did not happen that the powers so acquired were transmissible to posterity. Weismann, on the other hand, regards acclimatisation rather as the product of selection, such individuals surviving who, by the possession of inherent qualities, are enabled to live under the changed conditions, and not that they acquire new powers. Much, however, turns upon what is meant by an acquired quality. Weismann means by it such as is imparted by some external agency and would limit the influence of external causes to unicellular organisms, whereas variation occurs through sexual reproduction. But, as Virchow points out, external agencies ought not to be limited to those which operate outside the organism. In a multicellular organism variation may occur in some cells through the operation of other cells—i.e.,

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strictly within the body. Indeed, the influence of the sperm-cell upon the germ-cell is an external influence, and therefore, although we commonly speak of inherited qualities as being internal or predisposing, in strictness the qualities transmitted from the male parent are the result of an external agency when contrasted with those derived from the germ-cell. Applying these considerations to pathological processes, he shows that these are the result of external agents, and that they produce a change in the typical organisation, and thus by mere analogy the conclusion is arrived at that many racial—nay, even specific and generic—differences have been brought about by processes which may be deemed pathological. The various factors which determine the persistence of such deviations, and their transmission by inheritance, are not fully known; use and disuse explain some, adaptation accounts for others; but however explained, the fact that acquired qualities are inheritable remains assured.

THE JUBILEE OF THE UNIVERSITY OF LONDON.

IT has been proposed to mark the fiftieth year of the foundation of the University of London by a commemoration, either in the form of a banquet or otherwise. The proposal originated with the Masonic lodge of the University, and was discussed at the last meeting of the University Dining Club, where a committee was formed to consult with the annual Committee of Convocation and the Senate upon the best means of carrying the proposal into effect. It may be remembered that in 1828 what is now University College was founded as the University of London; but it was not until eight years later that the present University received its charter. Members of the Medical Faculty of the University will, we are sure, co-operate in such a celebration, for in no faculty has the University been more distinguished by the number of eminent men who have graduated there. The fact that one of its legal graduates has just received the highest distinction in the realm open to his profession appropriately signalises the jubilee year, and the suggestion that Baron Herschell should preside over the commemoration is one which will be heartily received.

UNLABELLED POISONS.

IT is still far from uncommon to find that accidents occur from the unguarded use of medicinal poisons by inexperienced persons. The case lately investigated by the coroner for Central Middlesex, in which a woman poisoned herself with her husband's liniment, must have been noticed by many of our readers. The mixture used, though exceedingly powerful, since it contained a large quantity of aconite, had been dispensed and forwarded from a distance without a label. In another quite recent case a boy was poisoned with carbolic acid through the unfortunate forgetfulness of his nurse, who had put some of the disinfectant in an empty medicine bottle for convenience' sake, and administered it to him in mistake by the mouth. These very regrettable incidents teach us that a danger which appears to some almost too common and too evident for precaution, is dormant among us, and may at any time effect most serious injury. In view of the facts above mentioned, it may well be doubted whether the poison label and the dark blue bottle, familiar warnings when seen, are not far less usual in practice than approved in theory. Ordinary caution surely requires at least the employment of these distinctive signs. The professional chemist is under obligation to use them, though to a less extent than he might be. The public are not, nor is the dispensing practitioner. The latter, we are inclined to think, would not lose but rather gain, as would also his patients, if he were required to affix to pure poisons or highly poisonous liniments, some mark which should ensure the proper estimation of their power of doing harm when misapplied. It might be less easy to impose any effectual restriction of this kind upon the careless handling of poisons by non-medical persons in general. We may, however, conclude that one great public advantage would arise from such wide extension of precautionary measures—namely, an arrest, at least partial, of the very free circulation now allowed to nostrums of uncertain composition.

WHOLESALE MEDICAL WORK AND ITS REMUNERATION IN THE THREE TOWNS INSTITUTION.

As an act of justice to the executive of this exacting institution we inserted last week a letter from the chief executive officers, who said *inter alia* that their chief medical officer, Dr. Keily, had "a position equal to a private practice of £400 a year." The letter of the executive to us having been published in the *Western Daily Mercury*, Dr. Keily has written a reply to our contemporary. From this reply we extract one paragraph which ought to enlighten any inexperienced and impecunious young man who thinks of taking the post vacated by Dr. Keily; and it ought to enlighten the public and the working classes on the ungenerousness of asking such enormous labour for such inadequate and declining remuneration as is represented in 30,000 cases at the rate of 1¼*d.* per case! The following is the paragraph alluded to:—

"It is stated that my position is worth £400 per annum. This is glaringly false. For services rendered I receive the following:—Residence, free of rent, rates, taxes, say £60 (which is certainly more than the value of the apartments I occupy); salary as medical officer, £180; midwifery (148 cases for 1885), £77 18*s.*; total, £317 18*s.* I have to provide my own furniture and all the instruments required in a general practice. The fees for extra certificates have not amounted to fifty shillings in the three years. As 10*s.* 6*d.* per case is the fee for midwifery, I will deduct the £77 18*s.* from the gross amount, which leaves me £240 as payment for consultations and visits. My salary and allowances are the same now as they were three years ago. In 1883 for 16,883 cases I received 3¼*d.* and a fraction per case; in 1884 for 27,429 I received 2*d.* and a fraction per case; and in 1885 for (in round numbers) 30,000 I received 1½*d.* and a fraction per case; so that, with the gradual wearing down of my physical strength, my income practically was on the decline. This is certainly a small chapter on wages for Leone Levi or some annotator of Mill to examine. In reckoning that 30,000 out of the total for 1885 came to me I have had the consent and assistance of my late colleague, Dr. Rees."

MADRAS CIVIL HOSPITALS AND DISPENSARIES.

IN publishing the report by Surgeon-General Furnell on the civil hospitals and dispensaries of Madras, the Chief Secretary to the Government remarks that "the bulk of the report might be largely diminished. In future not only should the appended extracts.....be omitted, but also the long extracts from the reports of district surgeons, the matter contained in which comes before Government in individual municipal and local fund reports. The extracts referred to do not in any case form the text on which any representation is now made." We feel bound to say that we fully concur in this opinion, for the great mass of the appendix, extending to 244 pages, appears to be of no practical value. The report itself covers only fifteen pages, and gives a summary of the work done. There were throughout the presidency 299 hospitals and dispensaries, with a staff of 299 agents, including all grades. During the year there were 39,826 in-patients and 1,714,072 out-patients treated; of the former, 3100, and of the latter 6907, died. Of the out-patients, 5310 died of cholera, and 425 of the

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in-patients. The returns show a total of 14,588 cases, with 5735 deaths, or one in 2·54 cases. Next to cholera, dysentery and diarrhœa were the most fatal diseases among the in-patients, and fever among the out-patients. We trust that in future reports a judicious summary of events may be given, and the unnecessary printing of the numerous minor returns from dispensaries and uninteresting extracts from the reports of the surgeons, apothecaries, and hospital assistants, be omitted.

THE ETIOLOGY OF RACHITIS.

DR. H. C. HAVEN, of Boston, has noticed that among the children attending the West-end Dispensary for Children in that city, rickets is much more common among the coloured than the white population. His inquiries show that this increased frequency of rickets is not due to difference in the mode of feeding, to overcrowding, to worse hygienic conditions, or to ill-health on the part of the parents. Dr. Haven is inclined to attribute the fact to the natural habitation of the coloured races being much further south than North America, and that they have "an inherited necessity for heat and sun," which the Boston climate does not satisfy. In confirmation of this view he states that of "the white rachitics of a foreign ancestry, the majority are born of parents coming from the south of Europe, where the disease is relatively rare, rather than of parents from England and North Germany, where the disease is rife."

FEROCIOUS DOGS AND THE LAW.

MANY legal decisions give the public a very unsatisfactory estimate of the law. A poor woman at the Marylebone Police-court the other day consulted Mr. Cooke in reference to injuries she and her child sustained by a dog which accompanied a young woman, a servant in a gentleman's family, who came to ask her about some work she required to be done. While speaking to her the dog seized her little boy's face and dragged the flesh away. The dog then bit her, and again seized the boy by the leg as she carried him off. To any mind but the legal one here was proof enough of the most unmitigated ferocity; but Mr. Cooke, said the law, which he allowed was in a disgraceful state, required proof that the dog had injured someone before, and was known to the owner to be ferocious. It is the very essence of these cases that in the estimation of the owners these animals are always of the most amiable temper, and their little peccadilloes are due to a want of tact or address on the part of the persons they bite. It is most aggravating, when you have just escaped—or perhaps have not escaped—a bite or possibly hydrophobia, to have the amiability of the dog insisted on. But this is what happens in nine cases out of ten; and it has Mr. Cooke's support. In all conscience there was proof enough of ferocity in this case; but the gentleman and his dog go free, and the poor woman and her child get torn and bitten without redress.

PTOMAINE IN STALE FISH.

LAST year several cases of poisoning by stale sturgeon occurred at Kharkov; five terminated fatally. Anrep, studying the cause of these accidents, showed that a ptomaine was the efficient cause, and could be extracted from the fish, as well as from the contents of the stomach and intestines, the liver, blood, brain, and urine of the victims (*Revue des Sciences Médicales*, No. 53, p. 66). The alkaloid differs from the ptomaines of Brieger. It is an amorphous, highly alkaline body, forming soluble salts, and extremely toxic. Caustic agents and boiling destroy the toxic power of the alkaloid, which has two chief characters,—viz., its fixity whether in the solid state or in etherial solution, and the slowness of its reducing action on the blood. The hypodermic injection of a quarter of a milligramme in a dog causes vomiting, mydriasis, general prostration, and slowness of the movements of the heart. In the rabbit the action is much more rapid, and the above-mentioned dose causes death in two hours. The march of the symptoms in the poisoned individual is in harmony with the results of physiological research, and indicates, according to Anrep, that the poison first paralyses the spinal cord, then the medulla oblongata, and acts probably also upon plain muscular tissue.

THE VALUE OF QUARANTINE.

DR. J. D. THOLOZAN, who for nearly thirty years has resided in Persia, and who has devoted much of his time to the study of epidemiology, has recently contributed a paper of considerable value to the Académie des Sciences of the Institut de France on the question of quarantine restrictions in their influence on plague and cholera. His whole paper goes to show that, if not absolutely useless, they are practically worthless, and that deductions as to their value which are made elsewhere are not warranted. To cite an instance quoted by him: He points out that the ports in the Persian Gulf are in uninterrupted communication with British India, and especially with Bombay, which is generally regarded as one of the great cholera centres. He gives a description of these ports, showing how, by reason of their soil, moisture, the poverty of the people, and otherwise, they correspond precisely to those places where cholera is said to be locally engendered and maintained; and then he explains that not only has no quarantine ever been put in force there, but Persia has not even the means of carrying out any such precautionary measures. Then it is added that since 1821 cholera has never entered by any of the ports in question. Now, it is not very long since a quarantine system was advocated in the Persian Gulf, with a view of protecting the adjoining countries and Eastern Europe from invasion by cholera in this direction, and Dr. Tholozan very aptly says that if these measures had been put in force, the experience of the Persian Gulf would be uniformly quoted as affording strong evidence of the value of quarantine restrictions. He asks that those who bring forward proof every now and then as to what quarantine has effected in the Red Sea during those years in which cholera has not spread by that route should remember how, in olden days, physicians attributed cures to remedies which we now know to have been so useless and injurious that they have been altogether abandoned.

VACANT PROFESSORIAL CHAIRS ABROAD.

THERE are now no less than four professorships vacant in the Medical Faculties of the Universities of Kieff, Kazan, and Kharkoff: Dr. Mering, Professor of Special Therapeutics in Kieff, having resigned on account of ill health; Dr. Subbotin, Professor of the Therapeutic Clinic in Kazan, having resigned, after twenty-five years' service; and Dr. Vinogradoff, Professor of Clinical Therapeutics in the same University, having recently died; while, lastly, the chair of Special Pathology and Therapeutics in Kharkoff has just been resigned by Professor Kremyanski.

THE PECULIAR PEOPLE AND THEIR CHILDREN.

THE Peculiar People are perhaps more to be pitied than blamed when their peculiar abhorrence of human help in sickness recoils with injury upon themselves. When, again, they exercise in the spirit of their creed the responsibility of parents for their children, they clearly lay themselves open to indictment. The other day, at Grays, in Essex, a child whose parents belonged to this sect died from the effects of pneumonic inflammation, unattended by any

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medical practitioner. Such a condition is obviously well within the effective range of modern medicine, and there was doubtless much reason in the medical opinion delivered at the subsequent inquest that the child's life might have been prolonged or saved by timely measures of treatment. We therefore fully concur in the jury's recommendation to the local Board of Guardians thatthey should take summary means to convince the father that his wilful neglect was a legal offence.

ROUGH PLAY AT FOOTBALL.

IT is satisfactory to note that, after all, efforts are actually sometimes made to keep within bounds the "free fight" element which unhappily characterises the game, or rather we should say both games, of football as at present played. The Birmingham and District Football Association have taken, it is stated, a determined step for the suppression of rough play at matches. At a meeting held on the 10th inst. they suspended two players for brutal behaviour at a recent match, and expelled another. A strong feeling was expressed that such conduct should be put down, as several players have been injured. Although these steps were not taken until after the players had been fined by the magistrates for assault, we say, All honour to Birmingham. No one being likely to accuse the inhabitants of the great midland town of being "sickly sentimentalists," we trust that the more timid authorities in London and the North will rouse themselves and follow this needed example. It seems no sort of use appealing to the great central authorities, the Rugby Union and the Football Association. In the latter game there can be little doubt that the contest for the Cup, for which we believe about one hundred and forty clubs this year entered, has much rough play to answer for. The introduction, too, of professionalism is much to be deprecated. In most games and sports the amateur and professional elements are kept apart. For instance, if an amateur, as was lately exemplified, runs a race against a professional he loses his amateur status. Surely football is the very last game in which paid players should be allowed to compete. We do not believe that the great roughness of the play and the enormous popularity of the game are cause and effect. There is plenty of interest in football apart from the free fighting. The game is in many ways too good a one to "end," but it must be "mended." Will it need one or two verdicts of "manslaughter" to effect this?

GERMAN MEDICAL CONGRESS.

THE fifth German Congress for Internal Medicine will take place, from April 14th to 17th, at Wiesbaden, under the presidency of Professor Leyden. Papers on the Pathology and Treatment of Diabetes Mellitus, the Operative Treatment of Pleural Effusion, and the Treatment of Syphilis will be read; and others have been promised on the following subjects: Antipyresis, Ptomaines, Heredity in some Diseases, and Fluctuations of Blood-pressure in the Cardiac Ventricle during Narcosis from Morphia.

TYPHUS IN ENGLAND.

WE referred last week to a prevalence of typhus at Leeds, and some of the annual and other reports now coming to hand go to show that the infection of this disease has been scattered about in several of the large centres of population during the past year. Thus, Dr. Tatham points out that at Salford fifteen cases were observed in the first quarter of the year, thirteen in the second, and one in each of the third and fourth quarters; the disease having again and again been imported from without into some of the most unhealthy portions of the district; but fortunately it was held in check by means of immediate isolation and thorough disinfection. So also at Carlisle the disease made its appearance, but, in view of the past history of the city as regards typhus, prompt measures were at once taken to check it. Both Salford and Carlisle have sanitary hospitals and disinfection appliances; hence doubtless the satisfactory results they are able to record in stamping out typhus.

INHALATIONS OF BLOOD.

FOR anæmic patients in whom the preparations of iron are ill tolerated, M. Fubini avails himself, with marked benefit to the patients, of pulverisations made of a mixture composed of 80 parts of a solution of chloride of sodium (¾ per cent.), and 20 parts of defibrinated ox blood. An ordinary spray suffices for carrying out the procedure, which may be repeated without danger five or six times a day, each inhalation lasting about fifteen minutes. Each sitting ought to use up about twenty cubic centimetres of defibrinated blood. The patients experience, after having taken several deep inspirations, a slight giddiness, which disappears on assuming the horizontal position or after drinking a glass of wine. Absorption takes place rapidly from the respiratory passages. M. Fubini remarks on the perfect tolerance by patients of the inhalations, and on the certainty with which hæmoglobin is absorbed by the respiratory passages.

A LUNATIC IMPRISONED AGAIN.

WHY do the City Fathers persist in imprisoning Herbert Percy Freund, seeing that he is certainly "a person of unsound mind"? Is it that they deem it less costly to keep him one-third of his time in gaol than to maintain him altogether in an asylum? The question of humanity ought to have some little weight as against the question of economy. Besides which, it may one day happen that this lunatic will no longer be contented with declaiming against St. Paul's Cathedral as "that house of idols over there." He may turn iconoclast on his own account; or, instead of predicting the downfall of the City, he may do something towards the fulfilment of his prophecies. The policy of the City magistrates is neither sound nor safe, and it is certainly anything but benevolent.

A PORTUGUESE METHOD OF TREATING RINGWORM.

RINGWORM of the most obstinate character may, according to Dr. Saerlis, writing in the *Medicina Contemporanea* of Lisbon, be cured in ten days by cutting the hair from the affected spot, pouring turpentine on it, letting it run over the whole head, and rubbing well with the finger. After this has caused a smarting sensation for from three to five minutes, it is washed off with carbolated soap. Hot water is then used for washing the whole head, and the affected spots touched with dilute tincture of iodine or with a 2 per cent. solution of iodine and turpentine. This process is to be repeated once or twice a day.

EASTER VACATION COURSES IN GERMANY.

DURING the Easter vacation special series of short courses of lectures and practical demonstrations are arranged to be delivered at Berlin and Würzburg. Those in Berlin commence on the 22nd of March and continue till about the end of April; those in Würzburg commence on March 15th and last five weeks. Information about the Berlin courses may be obtained by writing to Herr Anders, 57, Dorotheenstrasse, Berlin. Information concerning the courses in Würzburg could probably be obtained from any of the lecturers—e.g., from Dr. Rosenberger (who is to give the course on bandaging, &c.), Hofstrasse, Würzburg, Bavaria.

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MESSRS. CROOKES, ODLING, and TIDY, reporting on the composition and quality of daily samples of the water supplied to London during last mont , state that they analysed 117 samples collected from the mains of the seven water companies taking their supply from the Thames and the Lea, and that the whole were found to be perfectly clear, bright, and well filtered. Despite the flooded state of the rivers, there was not any appreciable increase in the proportion of organic matter present in the water-supply of the month; the mean amount of organic carbon found in the Thames-derived supply being ·183 part in 100,000 parts of water, as against a mean amount of ·170 part in the preceding month. For some time past they have been directing their attention to the examination of the water of the metropolis by so-called "biological methods," from the application of some of which, at any rate, results of importance may ultimately be arrived at; but several months at least, they state, may be expected to elapse before they are in a position to include any results furnished by this manner of examination in their ordinary reports.

ON Thursday, the 11th inst., Mr. Paul Swain amputated at the shoulder-joint for a very large and rapidly-growing cystic sarcoma, in a lad of nineteen. It was thought to involve the scapula, and the preliminary incisions were made with a view to remove that bone with the humerus. On opening the shoulder-joint, however, the disease was found to be confined to the humerus, and amputation at the shoulder-joint was completed. Owing to the size of the tumour the difficulties and dangers of the operation were considerably enhanced; but with the valuable assistance of Mr. Whipple and Mr. W. Square very little blood was lost. The patient has rallied well from the shock of the operation, and bids fair to make a good recovery.

FOR some time past there has existed in America considerable dissatisfaction with the manner in which the Johns Hopkins bequest is handled. Some months ago an effort was made by the minority of the trustees to have the University opened, but they were outvoted. The same trustees, knowing Mr. Hopkins' wishes in the matter, desired the University to be located at Clifton, the country residence that Mr. Hopkins donated for this particular purpose, but this proposal was also rejected. Now, we understand, a Bill has been introduced into the State Legislature asking that a committee be appointed to ascertain whether the wishes of Mr. Hopkins have been carried out or not.

THE question of the fitness of the present buildings of the Melbourne Hospital for the reception of patients is again, after an interval of four years, under discussion. We understand that the honorary medical staff of the institution have laid before the Committee of Management their opinion of the present capabilities of the building, and by pointing out its deficiencies have relieved themselves from the responsibility of tacitly acquiescing in the continued use of an insanitary structure.

MESSRS. CASSELL AND CO. will publish during the current month, in three volumes, a Manual of Surgery, which has been edited by Mr. Treves, and is intended to form a complete, concise, and authoritative treatise on the science and art of modern surgery.

A MEETING of the President and Council of the Royal College of Surgeons in Ireland will be held this week to elect a curator to the museums of the College, in the room of Mr. Abraham. The salary attached to the post is £250 per annum.

WE regret to learn that by a fire which occurred a few days ago a large number of the anatomical preparations belonging to Mr. Thomas Cooke, and which had been accumulating for the last fifteen years, were destroyed, and also a portion of Mr. Cooke's school premises. All the new and more spacious part of the building is, however, uninjured, and we are glad to learn that the work of the various classes has not been interrupted.

THE special committee of the Liverpool dispensaries intend, at the next annual meeting of the subscribers to these institutions to be held on the 25th inst., to recommend the abolition of the office of honorary medical officers, and that the whole of the medical work be in future performed by one head surgeon and two assistant surgeons at each dispensary.

MR. ROBERT DE'ATH, a surgeon residing at Buckingham, died suddenly on the 11th inst. He had just returned from visiting a patient, and fell in the hall of his own house, death, it is supposed, resulting from apoplexy. The deceased held the offices of coroner for the district and medical officer of health for the borough and union.

ON the 16th inst. the Bedminster Board of Guardians passed a resolution expressive of the sympathy they felt for the loss which the family of the late Mr. G. Pizey had sustained by his recent death. Mr. Pizey had acted as medical officer for the Clevedon district of the union for twenty years.

THE Municipal Council of Marseilles has voted a sum of 60,000 francs for the relief of those families who have suffered from the small-pox epidemic now prevailing in that city.

WE are glad to be able to say that we seem to be approaching within a measurable distance of the end of the Bower and Keates case. We trust shortly to make a more definite statement on the subject.

Pharmacology and Therapeutics.

ACETOPHENONE.

MM. MAIRET and COMBEMALE have continued their investigations on acetophenone, healthy and insane individuals being the subject of experiments. On healthy men doses varying from ·10 to ·30 gramme, administered by injection into the stomach, caused no disturbance of any function; in larger doses, ·45 to ·60 gramme, the circulation and micturition were affected. Micturition became more frequent during the first moments after the administration, and the pulse, at first very full without changing its frequency, became, five or six hours after the administration, more compressible and a little less frequent. Experiments were made on various insane individuals, most of whom presented excitement of some kind. The dose varied from ·10 to ·45 gramme every twenty-four hours. Some of the patients took this drug for eleven consecutive days; others only for five or six days. The patients suffered from epigastric sensations of heat, and in other cases a diminution in the amount of hæmoglobin was observed. Although true hypnotism was not noted, still many of the patients were less excited under the influence of the medicine. The authors regard it, however, as of no value for procuring sleep.

COLCHICINE.

A valuable contribution to the study of toxicology has been made by M. Houdé, and may be consulted in the *Répertoire de Pharmacie*, No. 1, 1886. The chemical characteristics of crystallised colchicine and its clear differentiation by the aid of certain reactions have enabled M. Houdé, by

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means of experimental methods, to discover the poison everywhere in the tissues and liquids of the economy. He has thus been able to draw up a scale showing the directions in which the poison is eliminated. In this scale the stomach and intestines amongst the solid tissues hold the first place, and amongst the fluids the diarrhœal stools, the urine, and the saliva (dog). The poison has not been detected by chemical research, in the tissue of the heart, but the experimental symptoms—much more delicate tests—have clearly shown its presence, though in relatively minute quantity. Chemical and physiological investigations of the circulating blood have proved the absence of the poison from this fluid. Finally, the substance of the muscles, notably of those that surround the articulations and the tissues of the joints themselves, including the osseous substance, contain, as proved both chemically and physiologically, a notable proportion of the toxic agent. This last fact possesses an interest altogether apart from questions of a toxicological or forensic nature, having a far more important bearing on the mode of action of colchicine in therapeutics.

CONTRADICTORY OPINIONS ON HOPEINE.

Two very contradictory sets of views have been recently expressed by eminent French observers on the nature and value of the drug hopeine. Dr. Ch. Eloy, of the Hôpital Bichat Laboratory, reports, after thoroughly investigating the substance by giving it to animals himself, and after a number of clinical observations made by M. Henri Huchard, that hopeine "is a hypnotic drug, only slightly poisonous, fairly trustworthy, and indicated in cases where opium cannot be prescribed; useful, also, where the insomnia is not caused by pain." M. Dujardin-Beaumetz, on the other hand, stated at the Académie de Médecine that "the white powder sold at a much higher price than morphia is nothing but morphia scented with hops. It gives precisely the same reactions as the latter alkaloid, so that either hops must contain morphia, or, as I believe, the sale of hopeine is an impudent fraud." Another member remarked that he had just been translating an article on hopeine in which it was declared that it could only be obtained from hops grown in Central America. M. Gautier capped this with a story of what had occurred to himself some time ago, when he obtained at a high price some "cobra poison in glycerine," which, to his dismay, he found to be glycerine pure and simple!

URETHAN.

It will be remembered that urethan or urethane has been recommended as a hypnotic. Schmiedeberg has a most interesting article in the *Archiv für Experimentelle Pathologie und Pharmacologie*, in which he deals with the pharmacological action and therapeutics of some of the ethers of carbamic acid; urethan is the ethyl salt of this acid. Solutions containing 10 to 25 per cent. of this ethyl carbamate produce insensibility, precisely as occurs in the anæsthesia of chloroform; but the respiratory movements appear to be increased in frequency and force, a possible effect of the influence of the amidogen group; the heart appears to be unaffected by urethan. The new hypnotic cannot be used for surgical operations, but may replace the nauseous paraldehyde and chloral, where it is wished to avoid the action of chloral on the heart and respiration.

BENZOATE OF COCAINE.

Señor Alfredo Bignon, in a paper read before the Lima Academy of Medicine, and published in *La Cronica Médica*, strongly recommends the employment of the benzoate of cocaine in preference to the hydrochlorate (the salt most commonly used), and to the salicylate and borate, with which he has also made experiments. He finds that the benzoate is extremely soluble, easily crystallisable, and retains the characteristic odour of coca itself. The antiseptic qualities of benzoic acid also are an additional advantage. Amongst other experiments, the anæsthetic effects of a 20 per cent. solution of the benzoate were compared with those of a similar solution of the hydrochlorate in a case of epithelioma of the tongue, with the result that the effect of the former salt persisted for a much longer time than that of the latter.

TYRONE INFIRMARY.—Dr. Andrew Buchanan has been appointed resident surgeon to this institution. Dr. Buchanan was educated at the Queen's College, Belfast, and obtained a scholarship or exhibition each year during his course in arts and medicine.

STATISTICS OF SUICIDE IN ENGLAND.

AT the Statistical Society, on Tuesday evening last, Dr. William Ogle, of the Registrar-General's office, read a paper on Suicides in England and Wales, in relation to Age, Sex, Season, and Occupation. As regards the basis of facts dealt with and the mode of treatment, Dr. Ogle's statistics exceed in trustworthiness and in interest any previously available figures dealing with this subject. The paper and its accompanying tables deal with the suicides of 42,630 persons, whose deaths were so returned in England and Wales in the twenty-six years 1858-83. It is pointed out that this number of suicides is considerably below the true number, as no reasonable doubt exists that numbers of deaths ascribed to accident, or returned by coroners under the open verdict of "Found dead," are cases of suicide. With reference to this disturbing element in suicide statistics, Dr. Ogle remarks that there appears "no reason to suppose that the under-statement thus caused will be greater in one sex than in the other, or in some age-periods or in some occupations more than in the rest." In relation to age, it appears that during the twenty-six years the deaths of one or two children aged between five and ten years were referred to suicide, but that very few suicides occur under fifteen years of age; after which age the death-rate from this cause increases at each successive age-period, in each sex, until the maximum is reached at the age-period fifty-five to sixty-five, after which it declines again. The age-incidence of suicide corresponds generally with the lunacy-rate, measured by the age of admission to asylums. The maximum lunacy-rate is, however, reached at an earlier age than is the suicide-rate, and its after-decline is less regular.

The variation between the suicide-rate of males and females is very wide. The annual death-rate of males from this cause in England and Wales in the twenty-six years under notice was 104 per 1,000,000 living, while the rate among females was only 41. These figures, however, do not fully represent the different liability of males and of females to suicide. Corrected for the different age distribution of the two sexes, the female suicide-rate is reduced to 39, and it is shown that in equal numbers living, of equal ages, the true proportion of mortality from suicide is 267 among males to 100 among females. An interesting table in the paper shows that the male and female rates from suicide diverge more widely with the advance of age, with two exceptions. At the age of fifteen to twenty the suicide-rate among females actually exceeds that among males, the rate, however, being low at these ages in both sexes. Again, at the age-period forty-five to fifty-five, the excess in the male compared with the female suicide-rate shows an exceptional diminution, and breaks the continuity of the increasing divergence between the male and female rates at successive age-periods. These two exceptions are, with reasonable probability, referred by Dr. Ogle to physiological causes, due respectively to "the conversion of the girl into the woman," and to the effect upon the "female system by the menopause or 'change of life.'" The suicide-rates at the different successive groups of ages show considerable agreement as to increase and decrease with lunacy-rates, measured by the proportions of persons admitted at each age-period into asylums under the observation of the Lunacy Commissioners.

The most original and the most valuable part of Dr. Ogle's paper deals with the suicide-rates in relation to occupation. Not only is the basis of facts from which the conclusions are deduced larger than that which has before been used for a similar purpose, but Dr. Ogle's method of treatment is one which is beyond cavil. The rates from suicide in the different occupations are calculated on the numbers engaged therein, as enumerated at the census in 1881, while the suicides were those registered in England and Wales during the six years 1878-83. Moreover, due correction is made for the varying age distribution of those engaged in the different occupations. The necessity for such correction is conclusively pointed out, and must be evident to anyone who has given this branch of the subject any serious consideration. It is shown in a valuable table that the annual death-rate from suicide among all males in England and Wales, aged twenty-five to sixty-five years, during the six years 1878-83, was equal to 222 per 1,000,000 living. The suicide-rates prevailing,

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however, among those engaged in forty-three occupations or groups of occupations ranged from 74 among miners, 96 among shipwrights and shipbuilders, and 139 amongst clergymen and ministers, to 407 among butchers and fishmongers, 408 among barristers and solicitors, 444 among chemists and druggists, 472 among medical practitioners, 474 among innkeepers and publicans, 650 amongst inn and hotel servants, and 1149 among soldiers. The most marked features presented by these statistics support the general impression that suicide is more prevalent among the educated than among the uneducated classes, and Dr. Ogle points out that during the last quarter of a century the rate from suicide has increased in England concurrently with the increase of education, measured by the ability of persons to sign their names in the Marriage Register. Dr. Ogle urges, however, that "it must not be necessarily concluded that this increased tendency to suicide is the direct consequence of education, and of its effect upon the nervous system." In dealing with suicide in relation to season, the popular error in believing suicides to be most frequent during the fogs and depressing weather of November is once more exposed, and it is shown that the suicide-rate is actually at its minimum in November and December, while it increases with the length of daylight, and reaches its maximum in June. The last section of the paper deals briefly with the methods of suicide, which, as Dr. Ogle admits, "is rather a subject of curiosity than of any higher interest." It is shown, however, that the method of suicide is mainly determined by the comparative freedom of access to the several means or instruments used for the purpose. Soldiers, for instance, preferentially select the gun; while by far the largest proportion of medical men and chemists select poison as the means for effecting suicide; among photographers, moreover, more than 85 per cent. of the recorded suicides were due to cyanide of potassium.

Dr. Ogle admits, in conclusion, that he was much tempted in places to compare the English suicide figures with those of foreign countries, but a careful examination of Morselli's laborious treatise on the subject convinced him that the materials he used for the purpose were too heterogeneous in form and numerically insufficient to afford thoroughly trustworthy conclusions. He trusts, therefore, that foreign statisticians will take up the subject, and treat it with as much care and labour as he has devoted to the English statistics of suicide. International suicide statistics will then afford the means for useful comparison, and throw more light upon an interesting branch of the subject—the influence of race and national temperament upon the tendency to suicide.

MEDICAL HISTORY OF THE SUAKIM EXPEDITIONARY FORCE.

SURGEON J. R. FORREST, of the Army Medical Staff, favours us with the following communication on the above subject:—

"Two circumstances were especially noticeable in the medical history of the Suakim Expeditionary Force—viz., the occurrnce of very high bodily temperatures, and the production and propagation of enteric fever apart from the contamination of water or the food supply. The excessively high bodily temperatures above mentioned were found in cases of sunstroke, and more particularly in cases of "heat apoplexy," or the cardiac variety of the disease, where the patient had been seized when not directly exposed to the sun's rays. I had several cases under my own care, and have seen similar cases under the care of other surgeons, where the temperature in the axilla very rapidly mounted up to 109·6°. The general history of all such cases was as follows:—The patient was admitted a day or two previously with the symptoms of sunstroke (with moderately high temperature, 104° to 106°) or quite as frequently he had come into hospital with some ailment of a totally distinct nature—e.g., whitlow, fractured femur, occurring four weeks before the supervention of the high temperature in question, dyspepsia, &c. The orderly in charge of the ward would bring word that the patient's breathing was becoming rapid, and that general convulsions were developing. On examination, the patient's skin would be found pungently hot; temperature in axilla up to 109°·to 109·6°; the patient at first conscious, but rapidly losing sensibility; breathing rapid and shallow; face perhaps cyanosed; and very soon general convulsions were well marked. I had one such patient, who was originally admitted with whitlow, and who subsequently had three distinct attacks of heat-stroke at intervals of three or four days to one week, and this patient could tell from his own sensations when an attack was approaching. Very many of these cases recovered. One remarkable case of recovery was under the care of Surgeon-Major Bate, medical staff, on the hospital ship *Bulimba*. This occurred in the beginning of June, when the temperature in the 'tween-decks was 92° to 95°. The patient was suddenly seized with the symptoms above described, and his temperature in the axilla reached 108·6°. Surgeon-Major Bate assiduously rubbed the patient's body with ice and administered quinine and brandy in enemata, and the following morning the patient's temperature was normal and he left for England. In the hospital on Quarantine Island it was found that many of the cases of heat stroke occurred between 12 noon and 3 P.M., especially when the air was still or a hot dry wind was blowing; others occurred during the night, from 9 to 12 P.M. Enteric fever, and that of a very severe type, was particularly rife in the early part of the present year at Suakim. Quarantine Island, where so many of the troops were encamped, is built up of partly broken-down coral, many native graves are scattered about, and the foulest odours at all times were exhaled from the mud and decomposing exposed coral on the surrounding foreshore. When it is added that the soil is very unabsorbent, that the ground-water exists at a depth of about two and a half feet from the surface, and that there is no tide, it will be seen that all the conditions are present for the production of putrefaction in any organic matter that may find its way on to or beneath the surface. The temperature of the air in the huts reached, in July, 121° F. The treatment adopted was mostly as follows. The patient was stripped and laid on the canvas bottom of the iron-frame bedstead, with a waterproof sheet beneath him. From twelve to fifteen pounds of ice were placed in a pitcher of water, and a stream of the iced water was poured continuously over his whole person. The length of time during which this cold stream should be applied was determined by the state of the patient's pulse and his temperature. Generally the attainment of a temperature of 101° or 102° was considered satisfactory, and he was then placed in a wet pack for half an hour to an hour, after which he was wrapped in blankets and an ice-bag applied to his head. An enema of iced water was first given, which served the double purpose of clearing the lower bowel and aiding considerably in the reduction of temperature; and then an enema was administered, containing forty grains of quinine, with twenty minims of tincture of digitalis if the heart's action were feeble, and twenty grains of hydrate of chloral if the dyspnœa were marked, together with brandy if considered necessary. The enema was made up to from two to three ounces with iced water. The troops were quartered partly in huts, partly in double-roofed tents, which were further protected by a roofing of matting. The excreta were, where it was possible, conveyed in pails by hand and deposited in the sea; in other cases the usual trenches were dug for latrines. No milk other than condensed was used, and all the water was distilled in ships lying in the harbour. Post mortem all the cases presented the usual pathological changes well known at home. From the above I think it is clear that the enteric fever poison was generated from or in the foul soil under the influence of excessive solar heat, and that it was propagated through the medium of the air."

"Suakim, Jan. 27th, 1886."

WILLS OF MEDICAL MEN.

THE will and codicil of George Charles Julius, M.D., of Claremont House, near Tilford, Surrey, who died on Dec. 1st last, have been proved by Arthur Onslow Julius, the nephew, and Mrs. Katherine Robertson Julius, the executors, the value of the personal estate amounting to over £19,000. The testator bequeaths the silver vase presented to him by his late Majesty King William IV. to his grandson, Herbert Amelius Julius, to be held as a heirloom; various sums of money and his household furniture and effects to his daughter-in-law, Mrs. Katherine Robertson Julius; and one or two other legacies. As to the residue of his real and

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personal estate, he leaves one moiety upon trust for his said daughter-in-law for life, and then for all her children by his late son Reginald as she shall appoint; and the other moiety upon trust for his daughter, Mrs. Ethel Lambart.

The will of William Benjamin Carpenter, M.D., who died on Nov. 10th last, has been proved by Joseph Estlin Carpenter, the son, the acting executor, the value of the personal estate amounting to over £15,000. The testator gives his interest in a house at Bristol to his son, William Lant; £100 and such of his furniture and effects as she may wish to retain to his wife; and the residue of his real and personal estate upon trust for his wife for life, and then for all his children in equal shares.

The will of Mr. John Christopher Armstrong, late of 14, Park-place, Gravesend, Surgeon, who died on November 4th last, has been proved by Mrs. Annie Armstrong, the widow, and Mr. William Henry Warner, the acting executors, the value of the personal estate amounting to over £11,000. The testator leaves £100 and all his household furniture and effects to his wife; and all his real estate and the residue of his personal estate upon trust for his wife for life or widowhood, and then to divide the same equally between all his children.

The will of John Paton Watt, M.D., late of George Town, British Guiana, who died on August 12th last, was proved in London on the 11th ult. by Henry K. Davson, one of the executors, the value of the personal estate in England amounting to over £3400. The testator gives, devises, and bequeaths the whole of his property, movable and immovable, and wheresoever the same may be situate, to his wife.

The will of John Mason Booth, M.D., late of Sydney, New South Wales, was proved in London on the 4th ult. by Edward Sidgwick. The testator leaves legacies to relatives and others, and the residue of his property to be divided between his two sisters, Jane Mason Booth and Anne Mason Booth.

The following legacies have recently been left to hospitals and other medical institutions:—Mr. James Fletcher, of Woolton-hill, near Liverpool, of Rosehaugh, Ross, and Cromarty, and of Fearn, county Forfar, £500 to the Northern Infirmary, Inverness.—Sir William Rose, K.C.B., late of Leiston Old Abbey, Leiston, Suffolk, and of 39, Bruton-street, £50 each to the Westminster Hospital and the East Suffolk Hospital, payable on the death of his wife.—Mrs. Marian Francis Dobson, of Lyde House, Sion-hill, Bath, £220 to the Convalescent Home, Combe Down; £200 to the National Hospital for the Paralysed and Epileptic, Queen's-square, Bloomsbury; £110 to the United Hospital, Bath; and £100 each to the Mineral Water Hospital, Bath, the Hospital for Incurables, Putney, and the Hospital for Sick Children, Great Ormond-street.—Mrs. Elizabeth Blagden, of Long Clawson, Leicestershire, £100 to the General Hospital, Nottingham.—Right Hon. Louisa Lady Rolle, late of Bicton, Devon, £100 each to the Exeter Lying-in Charity, the West of England Eye Infirmary, Exeter, and the Exeter Dispensary.—The Rev. Thomas Garden Carter, Hon. Canon of Canterbury Cathedral, late of Linton, Kent, £100 to the West Kent General Hospital, Maidstone.—Mrs. Adelaide Mildred Livins, late of 32, Hampton-park, Redland, Bristol, £100 to the Bristol Infirmary, and £50 each to the General Hospital, Bristol, the Sick Children's Hospital, and the Redland Dispensary.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Stroud Urban District.—Mr. Thomas Partridge gives the mortality for this district at the rate of 19·6 per 1000 during 1885, a rate which he very properly regards as too high for a district like Stroud, which has considerable natural advantages. Steps are being taken to improve the water-supply, but it is quite evident that the abolition of wells on private premises should also be one of the early pieces of work for the sanitary authority to undertake. The state of the water from some of the wells also points to the fact that the soil from which it is drawn is subject to considerable soakage of filth, and it is also clear that some remedial measures, by way of improved drainage or otherwise, are necessary to prevent this process of soil-pollution from going on. Steady sanitary work is in progress, and the record of it includes a number of instances in which the water-supply has been improved, although no wells have been closed during the year.

Bisley Urban District.—This district is under the same health officer as Stroud, and in 1885 it had a death-rate of 17·1 per 1000. Measles are stated to have been very prevalent, and it is added, that by closing the schools for a fortnight the disease was so materially checked that teaching could be resumed. Improvement of the water-supply has been carried out, the dairies have been carefully inspected, and samples of food and drugs have been submitted for analysis.

West Ham Urban District.—Dr. Drake reports that during 1885 the very heavy infantile mortality which he has before had occasion to record still continues, and this in spite of the existing sanitary administration of the district. Small-pox caused 563 deaths, but of these 69 were cases imported from other parishes, an importation doubtless representing several hundred cases. Although 114 of these deaths occurred amongst persons who at one time or another had been vaccinated, it appears that it has been impossible to find a death in the case of any persons who had been properly revaccinated within a reasonable period. Dr. Drake, in referring to the proposed reopening of the Plaistow Small-pox Hospital, stated that if this were carried out the buildings would have to be enlarged, and, having regard to past experience, he has advised his sanitary authority to make strong representations in opposition to the proposal. The annual death-rate was 21 per 1000 living, this rate being 1 per 1000 in excess of that for the previous year.

Teignmouth Urban District.—Occasion is taken of the completion of a new system of sewerage for this district to embody in a special report a description of the town and neighbourhood with reference to drainage. Complete separation has been effected between the channels for the conveyance of sewage and those for carrying away storm water and surface-water from the streets, the latter waters reaching the Tame brook by means of the former pipe sewers. The new sewers reach a large retaining tank on the shore of the estuary, from which an iron pipe sewer has been constructed to low-water mark, the contents only entering the estuary while the tide is flowing out. The principal sewers are provided with Field's automatic flush tanks, and ventilation is carried out by street gratings and upright shafts. Mr. Lake does not refer to any system of house drainage, but it is to be hoped that the sanitary authority will not allow their excellent work in the matter of sewerage to suffer any discredit by means of the faulty systems of house drainage, and the lack of through-ventilation of every such drain, which are so often left to take care of themselves on the completion of sewerage schemes.

Hereford Combined Districts.—Dr. H. S. Sandford is one of the medical officers for combined sanitary districts who issues his reports at a time when they are really useful—namely, soon after the expiration of the period to which they relate. The information they contain for 1885 is largely statistical and of local value, but we could wish that, in addition to mere records of death and sickness, there were more information as to the general improvements effected year by year as regards the more important circumstances under which the people in each district live. The deaths and the existing diseases are fully dealt with, and in some districts certain advice as to the future is given apart from the prevalence of sickness—for example, as to an improved water-supply at Ledbury; but the non-resident reader would gladly learn more as to sanitary provision which influence health in several portions of the area concerned. Tabulated and other material shows that nuisance removal is cared for, and we learn that in one respect at least—namely, in the important matter of water-supply—the city of Hereford has all that health can need.

Torquay Urban District.—Mr. Karkeek offers a most satisfactory report on Torquay, and he observes that the results attained are mainly due to the incessant care recently taken as to the sanitary state of houses and the isolation of the infectious sick. Torquay has spent £80,000 on its sewerage system, £30,000 on water-supply, £3600 on hospital provision, and, together with other matters, a total sum of £133,000 has been spent in ten years in sanitary works of the first importance. This expenditure will, we believe, soon be found to be remunerative, and we have no hesitation

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in saying that the proportion of interest and capital which must annually be set aside to cover it will be largely provided by those who will seek a health-resort at a spot where health considerations are prominently held in view. In few districts are the residences, the villas, and other houses subjected to such careful inspection as is carried out under Mr. Karkeek's administration of the health office. Deducting deaths of outsiders, the death-rate for 1885 was 13·9 per 1000, and there was only a single death from either of the continued fevers. The sanatorium received thirty-three patients, eleven of them being persons of independent means or belonging to the professional and commercial classes. In short, the value of efficient isolation is becoming more and more appreciated.

Carlisle Urban District.—The death-rate for this city was 20·3 per 1000 in 1885; and the only infectious disease that was fatally prevalent was measles, which caused 22 deaths. Typhus was seen in June, but it was at once stamped out by means of isolation in hospital and efficient disinfection. Typhoid fever and diarrhœa have only been slightly prevalent, and Mr. Brown, referring in some detail to the causes of these diseases, points out that the local system of midden closets which has twice been so strongly condemned by medical inspectors of the Local Government Board, is being gradually abolished or modified so as to be less injurious to health. The water-supply is abundant and good, the model bye-laws as to lodging-houses are being carried out, the slaughterhouses are being carefully looked after, and infectious diseases are promptly dealt with.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 6083 births and 4024 deaths were registered during the week ending February 13th. The annual death-rate in these towns, which had been equal to 22·1 and 22·2 per 1000 in the preceding two weeks, further rose last week to 23·1. During the first six weeks of the current quarter the death-rate in these towns averaged 22·7 per 1000, and was 2·2 below the mean rate in the corresponding periods of the ten years 1876–85. The lowest rates in these towns last week were 14·7 in Huddersfield, 15·3 in Leicester, 15·7 in Bradford, and 18·3 in Hull. The rates in the other towns ranged upwards to 25·5 in Norwich, 29·0 in Cardiff, 29·1 in Manchester, and 30·9 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 360 and 376 in the previous two weeks, further rose last week to 405; they included 188 from whooping-cough, 67 from measles, 46 from diarrhœa, 43 from "fever" (principally enteric), 30 from scarlet fever, 28 from diphtheria, and 3 from small-pox. No death from any of these zymotic diseases was recorded last week in Halifax; whereas they caused the highest death-rates in Plymouth, Portsmouth, and Blackburn. The greatest mortality from whooping-cough occurred in Salford, Brighton, and Portsmouth; from measles in Portsmouth, Nottingham, Plymouth, and Blackburn; from scarlet fever in Birkenhead and Leicester; and from "fever" in Norwich, Plymouth, and Blackburn. The 28 deaths from diphtheria included 18 in London, 2 in Birmingham, and 2 in Huddersfield. Small-pox caused but 1 death among the residents of London and its outer ring, and 3 in Liverpool, but not one in any of the twenty-six other large provincial towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had declined in the preceding thirteen weeks from 90 to 18, had further fallen to 11 on Saturday last, only 1 case having been admitted during the week. The Highgate Small-pox Hospital contained 3 patients on Saturday last, no case having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 477, 478, and 479 in the preceding three weeks, further rose last week to 584, but were 21 below the corrected weekly average, a noteworty fact, having regard to the low temperature that has prevailed in recent weeks. The causes of 94, or 23 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Leicester, Newcastle-upon-Tyne, Leeds, and in four other smaller towns. The largest proportions of uncertified deaths were registered in Hull, Bradford, Oldham, and Leicester.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had declined in the preceding four weeks from 23·9 to 21·3, rose again to 24·5 in the week ending February 13th, and exceeded by 1·4 the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 11·5 in Perth and 13·3 in Leith, to 27·1 in Aberdeen and 29·7 in Glasgow. The 606 deaths in the eight towns showed an increase of 79 upon the number in the preceding week, and exceeded the number in any previous week of this year; they included 17 which were referred to whooping-cough, 16 to diarrhœa, 9 to "fever" (typhus, enteric, or simple), 6 to scarlet fever, 5 to diphtheria, and not one either to small-pox or measles. Thus, 53 deaths resulted from these principal zymotic diseases, against but 37 and 32 in the previous two weeks. These 53 deaths were equal to an annual rate of 2·1 per 1000, which was 0·2 below the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 13 and 9 in the previous two weeks, rose last week to 17, of which 14 occurred in Glasgow and 2 in Paisley. The 16 deaths attributed to diarrhœa showed a considerable increase upon the numbers in recent weeks, and also exceeded the number in the corresponding week of last year. The 9 deaths referred to "fever" also showed an increase upon recent weekly numbers, and included 2 in Glasgow, 2 in Edinburgh, and 2 in Greenock. The 6 fatal cases of scarlet fever and the 5 of diphtheria corresponded with the numbers in the previous week; 4 of the deaths from diphtheria occurred in Glasgow, and the deaths from diphtheria included 2 in Edinburgh. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 156 and 135 in the preceding two weeks, rose again last week to 144, but were 8 below the number in the corresponding week of last year. The causes of 78, or nearly 13 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 29·6, 31·9 and 33·7 per 1000 in the preceding three weeks, further rose to 38·6 in the week ending Feb. 13th. During the first six weeks of the current quarter the death-rate in the city averaged no less than 32·7 per 1000; the mean rate during the same period did not exceed 23·0 in London and 18·5 in Edinburgh. The 261 deaths in Dublin last week showed a further increase of 33 upon recent weekly numbers, and included 26 which were referred to the principal zymotic diseases, corresponding with the number in the preceding week; 14 resulted from "fever" (typhus, enteric, or simple), 10 from whooping-cough, 1 from scarlet fever, 1 from diarrhœa, and not one either from small-pox, measles, or diphtheria. These 26 deaths were equal to an annual rate of 3·8 per 1000, the rate from the same diseases last week did not exceed 2·8 in London and 1·0 in Edinburgh. The fatal cases of whooping-cough, which had ranged from 13 to 19 in the previous four weeks, declined last week to 10. The deaths referred to "fever" rose last week to 14, from 1 and 6 in the previous two weeks, and exceeded the number returned in any week since the end of 1884. Seven inquest cases and 7 deaths from violence were registered; and as many as 97, or more than a third of the deaths, were recorded in public institutions. The deaths both of infants and of elderly persons showed an increase upon recent weekly numbers. The causes of 39, or nearly 15 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

INDIA OFFICE.—The Queen has approved of the following promotions amongst others made by the Governments in India:—Surgeon-Major George Dalziel Riddell, of the Madras Medical Establishment, to be Brigade Surgeon; Surgeon-Major George Yeates Hunter, of the Bombay Medical Establishment, to be Brigade Surgeon.

ADMIRALTY.—The following appointments have been made:—Fleet Surgeon Walter F. C. Bartlett, to the *Castor*: Fleet Surgeon Robert H. More, to the *Impregnable*: and Mr. William Clibborn to be Surgeon and Agent at Bridport.

ARTILLERY VOLUNTEERS.—2nd Lancashire: Surgeon

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Martin G. B. Oxley, M.D., is granted the honorary rank of Surgeon-Major.

RIFLE VOLUNTEERS.—1st Tower Hamlets (the Tower Hamlets Rifle Volunteer Brigade): Surgeon and Honorary Surgeon-Major John Hayball Paul, M.D., resigns his commission; also is permitted to retain his rank, and to continue to wear the uniform of the corps on his retirement. Acting Surgeon Octavius Mark White to be Surgeon.

Correspondence.

"Audi alteram partem."

MORTALITY FROM INFECTIOUS DISEASES IN THE MEDICAL PROFESSION.

To the Editor of THE LANCET.

SIR,—Dr. Ogle's important and valuable statistics on Mortality in the Medical Profession, recently read before the Royal Medical and Chirurgical Society, raise the following interesting question: What degree of immunity is acquired by medical men against the virus of infectious diseases by frequent and in some cases constant exposure? That some immunity is conferred is clearly proved by the statistics now before us; for although by virtue of our occupation we are almost daily exposed to the germs of these diseases in the sick room, in addition to being subjected to the same dangers of infection as the general public, yet the deaths per million in the profession from scarlet fever, diphtheria, and typhus are only increased 3·6, 4·2 and 2·07, respectively, above the average mortality from the same diseases in men taken generally. How can we explain this? The general public offer an explanation by averring that either medicine is taken as a prophylactic or that a special providence protects the doctor. Were this so the mortality from these diseases should be almost *nil*. Bretonneau, in his fifth memoir on Diphtheria,[1] remarks "that habit, which subdues the wild animals, also mitigates the various kinds of morbid poisons. By penetrating into our economy the morbid poisons multiply there, which circumstance, however, does not prevent the amount of each dose of the virus successively absorbed from exercising a weakening influence over its operation, so that at the period of an epidemic the physicians who have a large practice, running from one patient to another and absorbing only fractional portions of virus, succeed in attaining an immunity which is often observed and generally ill-understood." Trousseau, however, thought immunity from acclimatisation and habitual exposure to be more apparent than real, and in support of this mentions the fact that in the Crimea the mortality from typhus was greater amongst the medical officers than the soldiers. Dr. Ogle's statistics show vastly different results when the whole of the profession is considered. It would, however, be interesting to know the mortality of medical officers in our fever and small-pox hospitals. It is highly probable that much depends upon the state of health at the time of coming into contact with the organism. If the body be in a depressed condition, as is often the case in our hospitals, and rich in the pabulum necessary for the organism's existence, and should also this particular organism have not been met with for a considerable time, in all probability nothing short of immunity produced by a previous attack is likely to serve as a protective, and this we know will not always avail. Two infectious diseases appearing at the same time in the same subject usually modify each other. One disease seems to offer protection from another, as in the case of cow-pox and small-pox. Then, may not the frequent inhalation and absorption to some extent by the mucous membrane of the mouth and respiratory passages of various organisms, which probably are more or less generically related, serve to protect us from an actual attack of the disease they respectively produce? The pathological change in the blood and tissues necessary to secure this immunity, whether it be due to the exhaustion of some chemical compound necessary for the existence and multiplication of the organism, or, as Klebs believes, the production of some substance which acts inimically to another immigration of the same organism, is difficult to decide. One thing is certain, however, that, short of an attack of the disease, this change may take place insensibly and without producing any great constitutional disturbance. During epidemics we all have observed abortive cases of the disease under observation bearing ill-defined symptoms and producing but little disturbance of the general health, yet apparently giving an immunity hereafter. Bretonneau mentions the fact of pregnant women attending upon small-pox patients having given birth to children suffering with the disease without having suffered any constitutional symptoms themselves, thus proving that a considerable quantity of poison may be received into the system without causing any appreciable untoward bodily effect.

Dr. Ogle's statistics prove what must be satisfactory to members of the profession, that a considerable degree of immunity is conferred upon us by attendance upon infectious diseases; for were this not so, all things being equal, we should have seen recorded a much higher mortality from these maladies. I am, Sir, yours truly,

Stanley, Durham, Feb. 9th, 1886. ALFRED MANTLE, M.D.

[1] New Sydenham Society, p. 191.

"THE CONNEXION BETWEEN THE PAROTID GLANDS AND THE GENERATIVE ORGANS."

To the Editor of THE LANCET.

SIR,—The correspondence originated by Mr. Paget in THE LANCET of January 9th, on the Relation of the Parotid to the Generative Organs, however important and instructive, has not so far either negatively or affirmatively ripened into a settlement of the question. That desirable result can only be attained by the accumulation of reliable evidence and extended observation, and, as I have some information on the subject to communicate, I may be pardoned for taking part in the discussion. In the first place, the teaching of experience has convinced me of the intimate relationship existing between the parotid and the organs of generation, so often manifested in the mutual derangement of functions and of normal health. The weight of evidence adduced by your correspondents has only added to the strength of my convictions; and I am willing to adopt as my own the dictum of Professor Möricke, as quoted by Mr. Tayler—viz., that from "the well-known relation existing between the testicle and the parotid we may infer that the same exists between the ovary and the parotid." My observations shall be directed towards proving the correctness of the inference, and I shall commence by giving the history of one remarkable case.

Mrs. M——, at present aged forty-three years, consulted me in the month of June, 1874, before the birth of her second child, on account of a troublesome enlargement of the left parotid gland, which destroyed the symmetrical appearance of her face, and was otherwise a cause of discomfort. She was then about six months pregnant. The tumour was as large as a small-sized orange, of oval shape, and about three inches in length by two in breadth. She informed me that it had begun to enlarge soon after the commencement of pregnancy, and had continued to grow week by week up till that time. She had not suffered in this way with her first child, which was born in the country. Regarding the tumour as of idiopathic origin, I prescribed iodide and bromide of potassium and the external application of iodine liniment, but without any effect; the tumour slowly increased till the period of her confinement, when it immediately began to collapse, and almost altogether disappeared within the succeeding month, leaving, however, a sensible permanent enlargement. During the period of growth she had not suffered from pain nor increased salivation; there was no tendency to redness or suppuration, and she was quite free from the morning sickness or reflex vomiting of pregnancy. I had wellnigh forgotten the circumstance until the reappearance of the lady some two years later, when she called to request my attendance at her third confinement; she then had an enlargement of the left parotid similar in every respect to that which accompanied her previous pregnancy. Mrs. M—— informed me that soon after she was conscious of her condition the gland began to enlarge as before, and its increase was concurrent with the advance of gestation. Just as before, the tumour rapidly disappeared after confinement, and in the succeeding pregnancies she has learned to

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recognise this strange phenomenon as one of the first indications of her gravid condition. This incident has now occurred under my observation for the sixth time in succession, the last child born being now nearly twelve months old. The subject of this remark is of spare habit, tall and thin, and sallow. She has no family history of any importance, but of the children born to her there appears to be in several a dyscrasia of the bony structures, as an ordinary fall is liable to produce a fracture of the bones of the arms. I have had to treat one of her boys three times for fracture of the forearm, another twice, and a third for a fracture and a dislocation of the shoulder.

To what causation, then, are we to attribute this unusual manifestation? The explanation is difficult, except on the grounds of a distinct relation between the generative organs and the gland, and that, like the reflex vomiting, the neuralgic toothache, and the disorders of nutrition that so often accompany the gravid condition, it is also due to sympathetic causes and to the discharge upon the parotid of surplus nervous energy, originating in ovarian excitement. In this particular case the gland appeared to act as a diverticulum, as neither morning sickness nor dental suffering was complained of. We cannot explain why it is that in one case the dental branches of the fifth suffer, or in another why the vagus is implicated in the process of utero-gestation, while we admit the causal relation. Neither can it be urged that these developments are due to accident or mere coincidence—the marked antecedence and sequence in each case forbid such a conclusion; nor yet to sepsis, the other explanation offered by Mr. Tayler in the absence of wound or abrasion of any kind.—I am, Sir, yours truly,

Belfast, Feb. 14th, 1886. ALEX. HARKIN, M.D., F.R.C.S.

SOLID TUMOURS OF THE MESENTERY.

To the Editor of THE LANCET.

SIR,—In the interesting letter of Dr. Hamerton, published in your number of Feb. 6th, pp. 278-9, he alludes to a case where I removed a solid mesenteric tumour of the size of an adult head as the only successful one among eight recorded cases. This becomes additionally interesting as I have at last obtained a report of the microscopic examination of the tumour. Mr. Arthur Jackson of Sheffield writes to me: "I had it examined by two competent microscopists, independently of each other, and it was reported to be a rapidly recurring spindle-celled sarcoma." As the operation was done in June, 1882, and the patient has had no abdominal trouble since, but has enjoyed very fair health, we may hope that the fear of recurrence has passed away. When my "Diagnosis and Surgical Treatment of Abdominal Tumours," referred to by Dr. Hamerton, was published, and particulars of the case and operation were given at pp. 201-5, I had not received any report as to the structure of the tumour.

I am, Sir, yours truly,

Feb. 16th, 1886. T. SPENCER WELLS.

"MR. HORSLEY'S CRITICISM OF PROFESSOR SCHIFF."

To the Editor of THE LANCET.

SIR,—In the remarks I made on Mr. Horsley nothing could have been further from my intention than to overstep the limits of fair criticism. Misled by the imperfect abstract of his lectures, I believed, as did also Professor Schiff, that Professor Horsley's criticism rested on the supposed impossibility of the experiment in question (cutting the posterior cords without injuring the motor tract). From Professor Horsley's letter I see that this belief was erroneous, and that my criticism was beside the point.

Having left Geneva, I fear I shall not have an opportunity of returning to the subject. However, I sent Professor Horsley's letter to Schiff; and in his reply are words to the following effect: "Now I understand what Mr. Horsley means by the motor tract. He believes that the posterior part of the lateral columns near the posterior horns of the grey substance is motor. This is a very general opinion, against which I shall publish a series of experiments in a physiological journal. I shall send you my paper when it is printed."

Touching Professor Horsley's explanation of the position of the foot as being due to paralysis, I would simply remark that in the experiments reported by me no evidence of paralysis was discoverable; while a cause capable of accounting for the phenomenon—loss of tactile sensibility—was proved to be present. I am, Sir, your obedient servant,

Davos Platz, Feb. 13th, 1886. WILLIAM R. HUGGARD.

ASSOCIATION OF MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—I tender you my sincere thanks for the interest and able support you are giving towards forwarding the object of the above Association; and I think it the duty of every Member to encourage and assist the promoters in carrying out the purport of the petition. The "sop" which Mr. Hutchinson proposed to the Council is hardly good enough to be swallowed by the majority of the Members, who, after all, are undoubtedly the back-bone, financially, of the College, and ought therefore to insist on their rights being given them, whereby they may exercise a supervision over what is really their own. This "kick-out" into the cold, so soon as our fees have been safely secured in the coffers of the College, is, to say the least of it, ungrateful and mean, and the only wonder is that the thing has been allowed to go on for so long. I would ask every Member to read your able article in the last issue of THE LANCET, and then proclaim aloud their indignation against the individuals who would still rob them, by offering a "mess of pottage" for their "birth-right." I am, Sir, yours faithfully,

Manchester, Feb. 13th, 1886. HENRY CARTMEL, M.R.C.S.

MANCHESTER.

(From our own Correspondent.)

CENTRAL MEDICAL SOCIETY.

AT the time the new Central Medical Society was formed, one of the chief reasons advanced for its establishment was the fact that the reading-room and meeting-rooms of the Medical Society at Owens College were situate too far from the centre of the city. Recently the committee of the College Medical Society have endeavoured to remove this ground of complaint by engaging central rooms at the Literary and Philosophical Society, where the journals and papers can be seen and books obtained from the library by telephone; but during the three months this has been in operation only three members have availed themselves of this means of obtaining books, which looks as though the members generally do not consider the distance too far to go themselves to the library. Further, the committee have endeavoured to obtain the opinion of members as to the desirability of altering the time and place of the meetings; about one-third appeared in favour of afternoon meetings, so an experiment is to be tried by holding a few at 4.30 P.M. at the central room.

THE CHAIR OF PHYSIOLOGY.

The post of Professor of Physiology has at last been filled by the appointment of Professor Stirling, who comes from Aberdeen with very high credentials. It is unfortunate that the greater part of the winter session has passed away without there being a responsible teacher at the head of this important branch of medical studies; but it appears that, in response to the advertisement issued on the resignation of Dr. Gamgee, no candidate of sufficient repute was forthcoming, and overtures were then made to Professor Stirling, with a successful result. The Victoria University Extension lectures are apparently meeting with much success. It was stated at the first, delivered by Professor Marshall at Withington, that over 200 subscribers had been obtained for the course of lectures on Natural History.

THE LOCAL CHARITIES.

The annual meetings have been held of various local hospitals—the Clinical, the Children's, St. Mary's, and the Eye Hospital. From them all comes the same cry—expenditure exceeding income, and an appeal for increased support. The committee of St. Mary's Hospital again bring forward

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the question of obtaining a new hospital. This, the only maternity charity we have, has increased greatly of late years, and the hospital, antiquated in structure, is but ill adapted for the demands made upon it. The meeting of the Eye Hospital was a red-letter day in the annals of the institution, it being also the opening day of the new and handsome building recently completed in Oxford-road. It has been in use for some little time, but the formal ceremony took place on Monday last, when the Mayor of Manchester (Mr Alderman Goldschmidt), in the presence of a large and influential gathering, declared the new building open. Mr. Goldschmidt is chairman of the Board of Management, and it is not too much to say that it is in great measure due to his indefatigable interest and work on behalf of this charity that it finds itself to-day located in one of the best-equipped buildings for its purpose which exist in the country. Accommodation is provided for 100 in-patients and for a daily attendance of 400 out-patients. Sunday last was our Hospital Sunday, but it is too soon to say what the results are compared with last year. It is hoped that this year's Hospital Sunday Fund will show a considerable increase. The hospitals which share in these collections are said to have relieved no less than 125,000 persons during the past year. One is almost tempted to ask if this be in all respects a thing to be proud of, though in fairness it should be stated that this large number are not all supplied by Manchester, for the surrounding towns send a goodly contingent—perhaps more than they ought, seeing that most of these have local hospitals of their own.

MEDICO-LEGAL CASES.

At the last assizes there were one or two cases of some medical interest. In one a charge was brought by a young woman of a criminal assault against a dentist whilst under the influence of nitrous oxide gas administered by him previous to extracting a tooth. The evidence in support of the charge was very weak and the jury were discharged without finding a verdict. The moral is the old one, never to administer anæsthetics to a female patient without the presence of a third person. At the same assize a woman, the widow of a boiler-maker, was awarded £150 damages for the loss of her husband from hydrophobia from the bite of a dog. A stonemason employed upon the new buildings now in progress at Owens College obtained £200 from the tramway company for the loss of his leg, the result of an injury received through being run over by one of their cars.

The outbreak of typhus fever in Gorton, alluded to on a previous occasion, has been the means of causing the death of two nurses at the Withington Hospital, whither some of the patients suffering from that disease had been removed.

Manchester, Feb. 16th.

LIVERPOOL.

(From our own Correspondent.)

THE LOCAL HOSPITALS AND THEIR FINANCES.

THE annual meetings of all the hospitals have now been held, and at all the same story is told: greatly reduced incomes, but no reduction of expenditure,—rather the reverse. The Royal Infirmary is £6000 in debt; both the Northern and Royal Southern Hospitals have each a deficit of £2000; while the other hospitals are all more or less hampered with debt. Great efforts will have to be made to free these most useful charities from embarrassment, as well as to place them in a more stable position by increasing the subscription list and otherwise augmenting the income.

THE LATE RECORDER OF LIVERPOOL

The news of Mr. John Bridge Aspinall's death was received here with much sorrow, the learned gentleman having been extremely popular with all classes. To all medical witnesses who appeared in his courts he was extremely courteous and affable, showing every regard to their convenience so far as he was able.

MEDICAL WITNESSES AT THE ASSIZES.

Whether the Grand Jury should or should not be perpetuated may be questioned; but that there should be proper accomodation for all witnesses, including medical witnesses, while waiting their turn, cannot be doubted. The arrangements at our local assize and sessions courts are abominable. All witnesses waiting to go before the Grand Jury are obliged to stand at the top of a flight of stairs, medical witnesses, solicitors, occasionally ladies, all being mixed up with the very lowest specimens of humanity to be found in this or any other city. One such experience may be instructive, but repetition makes it wearisome, and there can be no justification in perpetuating such a miserable arrangement.

MR. JUSTICE DAY ON CORPORAL PUNISHMENT.

The Criminal Law Amendment Bill has had the effect of bringing to justice many who, under the old law, would have escaped. In consequence of this, the number of charges of indecent outrage has greatly increased at the present assizes. In his charge to the Grand Jury Mr. Justice Day remarked upon the defective state of the law as regards these crimes. While in cases of violent assault and robbery of the smallest coin he could award corporal punishment, for the outrages on females he could only award penal servitude for long periods, which was only demoralising to the prisoners and expensive to the country. He regretted that the opinion of the country and sentiments of the public were so strongly opposed to corporal punishment.

THE CITY HOSPITAL FOR INFECTIOUS DISEASES.

The Hospital Sub-Committee of the Health Committee have passed a resolution that Dr. Hope shall temporarily reside at the Parkhill Hospital whenever in the opinion of the medical officer of health it is desirable that he should do so, and that during any period of such temporary residence he shall receive an allowance at the rate of £2 per week.

Liverpool, Feb. 15th.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

NEWCASTLE INFIRMARY.

THE annual court of governors was held last week, when some interesting facts were given as to the progress and work of this great institution. The infirmary, with its late addition, has now proper accommodation for 270 patients. On the whole, the hospital has been in a healthy condition during the year; but in reference to the outbreak of scarlet fever in July last, it was stated that one of the resident surgical assistants contracted the disease, and two nurses, one laundress, and seven patients became affected with the malady in succession. It is believed that the surgical assistant became infected while attending an out-patient in the casual department. The portion of the house where these cases occurred was at once emptied and thoroughly disinfected, and so the affection was stamped out. The number of in-patients treated during the year had been 2846, being 268 more than in the previous year. The greatest number in the house in one day had been 271. The whole number of out-patients received during the year had been 4932, being an increase of nearly 1000 on the previous year. The number of casuals treated during the year had been very large, amounting in all to 27,811, nearly 5000 more than in the previous year. Many other interesting facts and figures were given, which I must hold over for future consideration.

A CHEMIST'S MISTAKE.

At the South Shields County Court last week William Morris and his wife sued Messrs. Mason and Co., chemists, of South Shields, for damages sustained by them in consequence of injuries to the female plaintiff through the defendants having negligently supplied her with tincture of iron instead of tincture of rhubarb, for which she asked. For the defence it was contended that the plaintiff was supplied with what she had asked for. The judgment, however, was given for the plaintiff for £5 and costs.

APOPLEXY OR DRUNKENNESS?

At a late meeting of the Middlesbrough police magistrates an ex-inspector of police was charged with being found drunk and helpless on a doorstep by two police constables. The defendant tried to make out that it was a mistake of diagnosis on the part of the constables, and stated that he was suffering from apoplexy at the time; and proceeded

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to give the Bench a very elaborate account of the differential symptoms observed in the two affections. The Bench, however, while giving him credti for much special medical acumen, fined him 10s., including costs, or seven days' imprisonment.

NORTHERN CORONERS ON UNQUALIFIED PRACTICE.

The Coroner of Newcastle, at an inquest held last week, made some strong remarks upon the subject of unqualified practitioners in the case of a child that had died suddenly after treatment by an unqualified practitioner, who, it appears, had also given the mother of the child a death certificate. The coroner told her "that it was a pity that she had not sought a properly qualified practitioner, because if she had done so no inquest would have been necessary." Alluding to the so-called "dispensaries," "there were," he said, "too many in the city, which in many instances were conducted by those who were anything but duly qualified. He would forward the certificate, which had been given to the proper authorities to deal with as they thought fit." At a late inquest at Jarrow the matter was also referred to by the coroner of that district; a child had died suddenly after having been attended by an unqualified practitioner. It was shown that the child had died of bronchitis, and might have recovered if proper means had been used at an earlier stage of the disease. The coroner, addressing the unqualified practitioner, said that this practice must be stopped. He thought it was a very hard case, especially in these bad times, that men had to be called away from their business to serve as jurymen, and that all the expense of an inquest might have been saved had the mother called in a registered practitioner. Another serious matter was the fact that the letters "M.D." came after his name on a note which he had given the mother supposed to have been the certificate of death. On the unqualified practitioner promising that it would not occur again, the jury returned a verdict of "Death from natural causes." Our coroners in the north are evidently giving more attention to the injury perpetrated on the public by illegal practitioners, to say nothing of the injustice done to the profession by many of these so-called "dispensaries."

Newcastle-on-Tyne, Feb. 16th.

EDINBURGH.

(From our own Correspondent.)

THE LATE DR ANGUS MACDONALD.

THE Edinburgh Medical School has suffered a severe loss in the early death of Dr. Angus Macdonald. The deceased gentleman was still in the prime of middle life; and it might well have been anticipated that his useful and successful career would have been greatly prolonged. Until the last few days he was in the full exercise of his teaching functions at the Royal College of Surgeons, and closely engaged in the arduous exertions of a very extensive private practice, in addition to his duties as physician to the Royal Infirmary and to the Maternity Hospital. His death has caused a deep and widespread feeling of regret in Edinburgh and throughout Scotland, not only amongst the members of his own profession, very many of whom looked to him for advice and aid in cases of difficulty, but also amongst the public at large, by whom he was well known and greatly respected.

VACCINIA AND VARIOLA.

At the last meeting of the Edinburgh Royal Society, Dr. J. B. Buist, Lecturer on Vaccination for the Local Government Board, presented a monograph upon the "Life History of the Micro-organisms associated with Variola and Vaccinia." In it are detailed the results of a long series of experiments, occupying nearly a year, which he carried out in the surgical laboratory of the University under the charge, of Professor Chiene. Dr. Buist, taking advantage of the most recent bacteriological methods, has succeeded in procuring cultivations of organisms from both diseases, and has made a series of interesting observations with each. He finds that the ape is susceptible to an artificially induced variola and vaccinia identical in all respects with the same conditions in the human subject. His practical observations on the difference between clear and opaque vaccine lymph are of great interest and importance. In the latter he describes an acid reaction, whilst in clear lymph the reaction is alkaline; and he attributes the opacity of lymph to the development in it of a microbe. His paper was stated to be only of a preliminary nature, and the further outcome of his observations, bacteriological and clinical, will be looked for with great interest.

Edinburgh, Feb. 16th.

ABERDEEN.

(From our own Correspondent.)

APPOINTMENT FOR DR. SIMPSON.

DR. SIMPSON has been appointed medical officer of health for Calcutta. This is an important and valuable appointment, and he is to be congratulated on receiving this well-merited recognition of the excellent work he has done in sanitary science during the past five years. Since he came to Aberdeen the death-rate has gradually decreased, and last year it reached the lowest figure ever recorded for the city.

EPIDEMIC OF DIPHTHERIA.

Diphtheria made its appearance in Aberdeen some six or eight weeks ago, and has gradually spread until now it may be said to be epidemic. The proportion of fatal cases is alarmingly large, and unfortunately the sanitary officials have so far failed to trace the cause of the outbreak, which is chiefly confined to the Rosemount and Mile-end districts of the town. It was here also that scarlet fever was so prevalent at the end of last year, and it is possible that the deficient water-supply may have some connexion with the rapid spread of zymotic diseases in this part of the town.

ABERDEEN GENERAL DISPENSARY.

Two vacancies are about to occur in the medical staff of the Aberdeen General Dispensary by the departure of Dr. Frank Ogston for New Zealand and by the resignation of Dr. MacGregor. A keen canvass for the appointments is being carried on. Rumour has it that Dr. Edmond and Dr. Gordon are to be the successful candidates.

(The name of the lecturer in University College who is a candidate for the chair of Physiology is Dr. MacWilliam, not Dr. William, as stated in my last communication.)

Aberdeen, Feb. 16th.

PARIS.

(From our own Correspondent.)

PTOMAINES AND THE MICROBE THEORY.

IN his enthusiasm, Professor Peter, in his discourse at the Academy of Medicine (which was noticed in my letter of last week) on the part played by ptomaines and microbes in the pathogeny of disease, almost left his hearers under the impression that he meant to say that all human ailments resulted from auto-infection by toxic substances generated in the system, thus ignoring, whether he did so intentionally or not, the pathogeny of specific or infectious diseases. Even M. Gautier, for whom Professor Peter stood up as champion, repudiated such an idea in the following terms, at the meeting of the Academy last week:—"I do not think that one can deduce from my researches the consequence of the spontaneity of disease in a great number of cases in which we see it transmitted by contagion, direct or indirect, from an organism in a pathological state to a healthy one in the full performance of normal physiological functions; still less would this spontaneity be admitted in the cases where it is certain that the contagium is one of those cellular ferments which are now so well known, thanks to the admirable works of M. Pasteur, the constitution, organisation, and evolution, ferment by which appears, and without which a specific malady is not produced; for instance, infectious charbon, rouget of the pig, cholera of fowls, leprosy, small-pox, scarlatina, syphilis, &c., in which one must admit the action of a virulent specific agent, and consequently organised, although in these cases the agent has not always been isolated." Moreover, the author added that while a specific affection cannot be produced spontaneously without the influence of some contagium intro-

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duced into the organism from the exterior, there exists a great number of maladies the cause of which is in ourselves. It will therefore be absurd and dangerous, pushing to the extreme the consequences of the great discovery of the organised and living nature of the contagious elements of epidemic maladies, to believe that one must always admit the introduction of microbes in the animal economy when a disease breaks out. M. Pasteur himself never intended that this should be supposed. Gout, arthritism and its numerous manifestations, acute rheumatism and the acid dyscrasias, anæmia with its accidents and varieties, diabetes and the other diseases resulting from incomplete oxidations, famine fever and the other maladies caused by low nutrition, pneumonia and pleurisy, traumatic fever, with contusions without any wound of the skin, finally all the numerous maladies which result from an affection of the nervous system, and which, through its medium, affects the sensibility, mobility, nutrition, and intelligence, are diseases, febrile or not, the primary causes of which are in us. It is in this sense that the subject must be studied. Thus it may be seen that, while approving of Professor Peter's theory, M. Gautier did justice to M. Pasteur.

DEATH OF DR. MAC CARTHY.

Dr. MacCarthy, the oldest British medical practitioner in Paris, died on Wednesday, the 10th inst., in the seventieth year of his age. For some months past the deceased gentleman had been in failing health, and at the beginning of last week he was seized with cerebral hæmorrhage, which resulted in hemiplegia, from which he never rallied. Dr. MacCarthy was an Irishman by birth, and came over to Paris as a lad. He studied medicine in this country, and took his degree at the Faculty of Paris in 1844. Some twenty years ago, with Sir Joseph Olliffe and Dr. Campbell, Dr. MacCarthy had the leading English practice in Paris. He also had a very good French connexion, and was much esteemed by all who knew him.

Paris, Feb. 16th.

BERLIN.

(From our own Correspondent.)

BOARD OF HEALTH IN JAPAN.

IN Japan a Board of Health has been created, formed on the pattern of the board of the same name of the German Imperial Government. The management of the Japan board is in the hands of Dr. Mansanori Ogata, Professor of Hygiene in Tokio, who studied for several years in Munich, Leipsic, and Berlin, and was a frequent attendant at the laboratories of Professors Pettenkofer and Koch. On returning to Japan he applied the German method of bacteriological inquiry to the investigation of the cause of a contagious disease, called "beri-beri," indigenous to Japan. The results of this investigation are found in the *Aerztlichen Intelligenz Blatt*, in Munich.

THE NEW DIRECTOR AT THE TOWN HOSPITAL.

Dr. Riecos has resigned his post, and Professor Fuerbringer is to succeed him, having been summoned to Berlin. He was born in 1850 at Delitsch, in the province of Saxony, and pursued his medical studies from 1870 till 1874 at Jena and Heidelberg. At the latter place he entered into close relations with the Kliniker Friedreich. After his promotion Professor Fuerbringer became clinical assistant, a post he occupied until he obtained a Readership at Jena in 1879, when the office of the management of the Clinic for Children's Diseases and Diseases of the Skin was conferred on him. Since 1881 he has also conducted the district physical office.

MEDICAL SCHOOL SOCIETY.

The secretary of this Society, at a meeting on Jan. 28th, read the annual report; after which the election of managers took place, in which the privy councillor, Dr. Steinthal, and the grammar-school director, Dr. Kübler, were elected as chairman and vice-chairman; as secretaries, Dr. Taselowski and Dr. Brullow; and as treasurer, Dr. Korn. Then Dr. Taselowski reported on the cleaning of school-yards and the heating of class-rooms. Respecting the latter point, reference was made to the requirement that at the beginning of lessons the temperature should not be lower than 44° F. In the discussion several speakers alluded to the vitiated air in class-rooms and the insufficiency of ventilation, and it was recommended that the windows in schools be opened for a few seconds at the end of each hour in order to effect a thorough renewal of the air, care being taken to provide against draughts. School closets, it was unanimously agreed, should always be erected in a detached building, and should be flushed daily.

Berlin.

Obituary.

DR. ANGUS MACDONALD.

THE notice of Dr. Angus Macdonald's death, though partly expected from the serious nature of his illness, has yet come as a great and sudden blow to his many friends. Edinburgh medical circles have been deprived of one of their brightest ornaments; and modern Athens, lay and professional, grieves as it has not done since the untimely death of Warburton Begbie. This regret is not to be wondered at, for Angus Macdonald was not a common man. In his youth his lines lay in no pleasant places. Born in an agricultural parish in the north of Scotland, the *res angusta domi* necessitated his working for his daily livelihood, and he stood between the hilts of the plough until his manhood was nearly reached. But even when thus engaged his ambition soared, and in the evenings, when the day's work was over, he went to the parish schoolmaster and learned Latin. When he was sufficiently conversant with this, he went, a raw country lad, to Aberdeen University, and fortunately secured a bursary, which enabled him, with teaching, while a student, to keep the wolf from the door. He was a distinguished Arts student of the University, taking a foremost place in the classes; and when the Arts course was finished he entered the Divinity Hall, for he thought he would be a minister. His vocation, however, was not to be clerical, and after pursuing the study of divinity for a year he went to Edinburgh and attended the University as a medical student in 1860. The Edinburgh school was then in the zenith of its fame. John Goodsir taught anatomy as he alone could do it. Hughes Bennett, the model clinical teacher of medicine, formed his admiring circle of students in the wards. James Syme stood neat and calm and self-possessed, while he guided with unerring skill and rare dexterity the knife through difficult structures of the frame. James Simpson—"body of Bacchus—head of Jove"—spoke with the brilliancy of exceptional ability, and obtained enthusiastic admiration in his class-room. Robert Christison, the polished physician, the gentleman *sans peur et sans reproche*, told his young audience of men's numerous ailments and their remedies. The ardent nature of Angus Macdonald glowed under such a galaxy of talent, and he worked late and early, always taking a first position in his classes. Many of his fellow-students will remember his peculiar place—right in front of the professor; and his physique—the stooping shoulders, the broad square head, rarely lifted from the note-book, on which he wrote with an almost marvellous celerity. Occasionally, when some happy remark came from the professorial chair, Macdonald raised his face to smile, and one perceived then the keen piercing eye and the pale lineaments of his highly intellectual features. At the end of the session, when the class prize list was read out with Angus Macdonald's name first, students cheered, for they knew the man that deserved it had won the reward, and they felt that he was head and shoulders above his competitors. After obtaining the degree of M.D. of Edinburgh in 1864, he settled in practice in the city of his adoption, and step by step gained the foremost place in the branch to which he specially turned his attention. When Dr. Matthews Duncan went to London, Dr. Macdonald was recognised by the profession as his successor, and he nobly fulfilled the anticipations that had been formed of him. For twenty years he was a constant contributor to medical literature, and his style was terse, pointed, and true. His was also a familiar figure at the various clinical and obstetrical societies of Edinburgh, and until he died he held the appointments of Physician and Clinical Lecturer on Diseases of Women in the Edinburgh Royal Infirmary, Physician to the Royal Maternity Hospital, Edinburgh, and Lecturer on Midwifery and Diseases of Women at the Surgeons' Hall.

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Thus, briefly sketched, was Angus Macdonald's career as a student and physician. It was a distinguished one. As a private gentleman he was singularly beloved, and ever ready with ripe counsel and wise encouragement to guide the young student who came to him for advice. He was a true friend, and the grasp of his hand was firm and manly, revealing the inner nature of his kindly heart. He spoke to all courteously; to those he liked he showed his genuine, open disposition, the pure heart, the charity that envieth not, and all the graces of the Christian character. Dr. Macdonald leaves a widow, two daughters, and five sons to mourn his early death.

E. D. L. GILLOTT, M.R.C.S., L.S.A.LOND.

ON February 6th Sheffield lost one of its oldest medical men, in the person of Mr. E. D. L. Gillott. He took the licence of the Apothecaries' Society in 1829, and became a member of the College of Surgeons in 1830, so that when he passed away he had been a member of the medical profession for considerably over half a century. His early life, his industry, and his devotion to his profession are thus spoken of by one who enjoyed his intimacy for fifty-seven years: "We were fellow-pupils in Dublin in 1829-30, where he distinguished himself by his marked indefatigable minute anatomical research, carried on during his long career in Sheffield, commencing with his becoming Lecturer on Anatomy at the Medical School, from first to last endeavouring to the utmost of his ability to keep pace with the times. Oft, in the hour of need, have I had an opportunity of testing the inestimable professional qualities of my departed friend, ever willing and ready to lend a helping hand in the hour of peril." Commencing as a general practitioner, he, after some years, joined the late Mr. S. Gregory, surgeon to the General Infirmary, at the Eye Dispensary, which the latter had some time previously established in a quiet unostentatious manner. A happy intercourse between these two continued for twenty years, until Mr. Gregory left Sheffield, and soon afterwards died. Mr. Gillott continued working the Eye Dispensary until 1877. On the appointment of his then colleague to the charge of the newly created special department at the General Infirmary the *raison d'être* for such a dispensary had ceased, and he willingly consented to its being closed. For many years, however, he had practised purely as a specialist, and both as an oculist and aurist obtained a wide repute; whilst his keen insight into everything passing in his specialty and his wide knowledge of its literature, British and foreign, were remarkable. He may truly be said to have always been a student. He attended meetings of the International Ophthalmological Congress, and frequently paid visits to Paris, Berlin, and Vienna, and each time took the opportunity of adding to his store of knowledge by visits to the various cliniques in those cities. At the time also when the ophthalmoscope had established its place as an instrument of extreme value, and at an age when most men would be loth to take up with "new-fangled" ideas, he visited a continental city, Vienna it is thought, where the opportunities would be good for mastering the use of an appliance of which he fully appreciated the importance and value. As a student he had attended Moorfields when Tyrrel was a surgeon there. He gradually declined practice, and for some years had retired altogether. His literary taste found him amusement and occupation at the library and at home. He was always ready with a classical or poetic quotation. Until recently he had been active and strong. He succumbed to the combined attacks of Bright's disease, with heart trouble, bronchitis, and asthma, but he bore his sufferings with exemplary patience.

NORTH-WESTERN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—At the monthly meeting of the members of this Association, on the 11th inst., Mr. Vacher read the report of the committee appointed to take action, along with representatives of other associations, to obtain better security of tenure of office for medical officers of health. Very little progress has been made, and it was resolved that the committee should continue to take such action as seemed desirable to secure the object in view. Mr. Vacher also submitted a further report with regard to cholera precautions.

Medical News.

UNIVERSITY OF CAMBRIDGE. — At a congregation on the 11th inst. the degree of M.B. was conferred on

Herbert Charles Walter Jones, Downing.

COLLEGE OF PHYSICIANS IN IRELAND.—At the February examinations the following obtained the licences in Medicine and Midwifery of the College:—

MEDICINE.—Simon Addis, Michael Joseph Boyan, Vesey Henry Wm. Davoren, Louis Demetriadi, William Hartford, William George Keanedy, George Okill, Thomas O'Callaghan, John William Power, Robert Dudley Algeo Stone, George Woods, Charles Augustus Young.

MIDWIFERY.—Simon Addis, Louis Demetriadi, William George Kennedy, John William Power, George Woods.

The undermentioned has been admitted a Member:—

Henry Plunkett Esmonde-White, Surgeon-Major, A.M.D.

SOCIETY OF APOTHECARIES.—The following gentlemen passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on the 11th inst.:—

Castle, Charles Wigram Marshall, The Avenue, Blackheath.
Scatliff, P. Melancthon, M.R.C.S., Macaulay-road, Clapham-common.

The following also passed and received a certificate:—

Brooks, William Harrison, King David-lane, Shadwell.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF EDINBURGH.—In the pass-list published last week the name "Herbert Peek" should have been Herbert Peck.

A FATAL case of poisoning by sewer gas has just occurred at Oldham.

ON the 16th inst. Sir James Crichton Browne delivered to the members of the Leeds Philosophical and Literary Society a lecture on the "Education of the Hand."

MEDICAL MAGISTRATE. — John Constable, M.D., Leuchars, has been appointed a Justice of the Peace for the county of Fife.

VACCINATION GRANT.—Dr. Dalston, of the Brough District of the East Ward Union, has been awarded the Government grant for efficient vaccination.

THE festival dinner in aid of the Extension Fund of St. Mary's Hospital is to be held on April 2nd, under the presidency of the Lord Mayor.

THE St. Petersburg Municipal Sanitary Committee has decided to set apart a portion of the Alexander Hospital for the clinical instruction of female students and to erect lecture-rooms for them.

A CHEMIST at Battersea named Gill has been committed to take his trial for manslaughter, a coroner's jury having found that the death of a young man was caused from the effects of a dose of opium given by him in mistake for a black draught.

THE first meeting of the Carmichael College Medical Science Association was held on Tuesday last, presided over by Dr. Gordon, when the opening address was given by Dr. J. Moore on the Relations of Clinical Teaching to the Work of the Society.

MUNIFICENT BEQUESTS.—Mr. James M'Ewan of the firm of Smith and Sharp, sugar brokers, Glasgow, has left legacies amounting to £22,000 to charitable institutions in Glasgow and the west of Scotland. Of this sum, the Royal Infirmary of Glasgow and the Western Infirmary each receives £5000.

THE HOSPITAL SATURDAY FUND. — The Board of Delegates of this fund met on the 13th inst., when Mr. Samuel Morley was unanimously re-elected President and Mr. H. N. Hamilton-Hoare honorary treasurer for the ensuing year. The Secretary reported that there was a credit balance at the bank of £500 after payment of the awards, amounting to £9500, and all expenses.

THE LATE DR. P. B. CONOLLY.—Two latten brasses have been erected, one at Netley and the other at Charing-cross Medical School, in memory of Dr. P. B. Conolly, who died whilst serving in the Camel Corps during the Gordon relief expedition. He was present at the siege of Plevna and the battles of Zlobani, Kambala, Ulundi, Kassassin, and Teb-el-Kebir, and received two medals with clasps, the Khédive's Star and Gold Cross of Roumania. The memorials are from the works of Mr. Gawthorp of Long-acre.

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VALENTINES FOR HOSPITAL PATIENTS.—Some four hundred scrap albums, contributed by readers of the *Christian Million* newspaper, were distributed on Monday last, to the patients in the following London hospitals as valentines:—St. Thomas's, St. Bartholomew's, University College, Royal Free, Guy's, Shadwell Children's, London, Victoria Hospital for Children, Homœopathic, and Samaritan Free Hospital for Women and Children.

KIDDERMINSTER INFIRMARY.—The annual meeting of the management committee of, and subscribers to, this institution was held on the 5th inst., when a lengthy discussion took place touching the desirability of establishing a children's hospital in connexion with the charity. It was ultimately decided to convert a ward which has been occasionally used for the reception of patients needing isolation into a children's hospital, the cost (about £250) being defrayed by Mr. T. Lea.

LONDON FEVER HOSPITAL.—The annual meeting of the governors of this institution was held on the 11th inst. From the report which was adopted it appeared that during the year the total number of cases admitted to the hospital was 486. The mortality amongst patients amounted to only 4·04 per cent.—a lower percentage than that of any previous year. The annual subscriptions for the year amounted to £2215, being an increase of £210 on the previous year. The expenditure reached £8543, an increase of £1842.

ADULTERATION OF FOOD.—Dr. Redwood, the public analyst for the parish of Clerkenwell, has reported that during the past quarter he analysed 18 samples of milk, 17 of butter, and 2 of coffee. Of the 17 of butter, 12 were adulterated with foreign fat to an extent varying from 75 to 90 per cent., and convictions were obtained in seven cases. Of the 18 samples of milk, 3 were adulterated with 14 per cent. and 2 with 22 per cent. of added water, and convictions were obtained in each case. The 2 samples of coffee were adulterated with chicory to the extent of 20 per cent.

CHEAP FOOD FOR THE PEOPLE.—At a meeting recently held under the presidency of Dr. B. W. Richardson, the following resolution was unanimously carried:—"That in the opinion of this meeting the most practical mode of developing the best system of supplying cheap dinners and other meals for the people ought to include the establishment of public kitchens and depôts, at which the dinners and meals can be partaken, and from which they can be supplied to workshops, factories, and private houses. That such a system, supported by the general and influential public, would be immediately popular, and that the chairman be requested to communicate this view of working men themselves to the leading organs of public opinion." A committee has been formed to carry the above into effect.

VOLUNTEER MEDICAL STAFF CORPS.—The second regimental smoking concert took place on February 10th, at St. Stephen's Restaurant, Westminster, and was, we understand, a greater success even than the first of the series. It is gratifying to see the efforts of the committee meeting with such encouragement, as by means of entertainments of this description the men are brought together during the winter season, and that *esprit de corps* at which all regiments aim, and of which they are justly proud, is properly maintained. The concert under notice was given by members of No. 2 company, which consists of students of St. Mary's, London, and Guy's Hospitals, and they fully kept up the reputation of their respective schools. The chair was taken by Surgeon Norton, who commands the company, supported by Surgeon-Commandant Cantlie, Surgeon Casson, Surgeon Raw, Surgeon-Major Pearce (Artists), Surgeon Lane (18th Middlesex), and other officers who take a keen interest in the welfare of this corps. A most enjoyable evening was spent. The third concert of the series will be given early in March by the members of No. 1 company, which is formed by students from Charing-cross, Middlesex, University, and King's College Hospitals.

PRECAUTIONS AGAINST CHOLERA IN QUEENSLAND.—His Excellency the Governor of Queensland, with the advice of the Executive Council, has been pleased to appoint the following gentlemen to be medical officers of health, for the purposes of the regulations of the Central Board of Health for the treatment of persons affected with cholera, and for preventing the spread of that disease:—M. Mathison, M.D., Aramac; W. S. Webb, M.R.C.S., Blackall; F. H. V. Voss, F.R.C.S.Ed., Bowen; C. J. H. Wray, L.R.C.S., L.R.C.P.Ed., Brisbane; J. E. Usher, L.R.C.P.Lond., Brisbane; T. H. May, M.D., Bundaberg; E. A. Koch, M.D., Cairns; W. B. Kirkaldy, M.B. & C.M.Ed., Charleville; E. E. J. Mohs, M.D., Charters Towers; S. Candiottis, M.D., Clermont; G. A. Von Somerson, M.D., Cloncurry; W. Howlin, L.R.C.S.Ed., Dalby; E. M. Fitzgerald, L.R.C.P., Gayndah; C. E. Sharpe, L.R.C.P., Georgetown; T. L. Bancroft, M.B., Geraldton; H. Girdlestone, M.R.C.S., L.S.A.Lond., Goondiwindi; J. P. Ryan, L.R.C.S., Gympie; W. D. Bowkett, M.R.C.S., Herberton; W. C. C. Macdonald, M.B., Ingham; E. R. Webb, M.R.C.S., Ipswich; A. Cutfield, M.R.C.S., L.S.A.Lond., Mackay; E. K. Overend, M.B., Muttaburra; D. W. O'Connor, L.R.C.P. Ed., Maryborough; T. S. Dyson, M.R.C.S., L.S.A. Lond., Normanton; W. L. Marley, M.R.C.S., Port Douglas; W. T. Cuthbert, L.R.C.S.I., Ravenswood; W. F. Thurston, L.R.C.S. &c., Rockhampton; G. Comyn, B.M., Roma; R. H. Symes, L.R.C.S.I., Springsure; A. Orton, M.R.C.S., L.S.A.Lond., Stanthorpe; A. Nicoll, M.B., Tambo; A. E. Salter, M.B., Ch.B., Thursday Island; E. Roberts, M.R.C.S., Toowoomba; T. Ridgley, M.B., Townsville; F. Margetts, L.S.A. Lond., M.R.C.S., Warwick; H. Finlay, M.D., Winton.

CHAIR OF PHARMACOLOGY IN MELBOURNE.—We understand that in connexion with the University of Melbourne and the Pharmaceutical Society of Australasia new buildings have been opened by the Government, with a grant in aid of their furnishing, and another in aid of the professor's salary. The chair has been offered to, and accepted by, Mr. Alfred H. Jackson, B.Sc., M.P.S., F.C.S., Associate of Owens College, Manchester. This election is the latest addition to the number of professors emanating from Owens College, amongst whom we can recall Atkinson of Sandhurst, Bedson of Newcastle, Carnelly of Dundee, Dougan of Belfast, Napier of Richmond, Poynting of Birmingham, Smithells of Leeds, Sugden of Headingley, Tait of Baroda, Thomson of Cambridge, Thorpe of South Kensington, and Young of Clifton, besides several who hold posts in their *alma mater*, such as Hopkinson, Dreschfeld, Collier, Thorburn, Whitney, Swaniek, Harris, Haslam, and others. Prof. Jackson was also a distinguished student in the Pharmaceutical Society's School at Bloomsbury-square, W.C., where he won the Council's Silver Medal, &c., in 1878. He has published several papers on pharmaceutical subjects, such as "Dialysed Iron," "Tartar Emetic," Essential Oils of Cinnamon and Cassia," &c. His chief training has been in the science and medical departments of Owens College.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ABBOTT, C. B., M.R.C.S., L.K.Q.C.P.I., has been reappointed Medical Officer of Health for the Braintree Rural Sanitary District, for one year.

BROCKATT, A. A., L.R.C.P., M.R.C.S., has been appointed Resident Accoucheur to St. Thomas's Hospital.

CAMPBELL, W. MACFIE, M.D.Ed., M.R.C.S., has been appointed Consulting Surgeon to the Liverpool Northern Hospital.

COOPER, CHARLES B., L.R.C.P.Lond., M.R.C.S., L.S.A.Lond., late Assistant House-Surgeon, has been appointed House-Physician to the Liverpool Northern Hospital, vice T. A. Bradshaw, B.A., M.D. resigned.

CROWDY, F. D., M.B.Oxon., M.R.C.S., L.S.A.Lond., has been re-appointed House-Surgeon to St. Thomas's Hospital.

FISHER, ALFRED, M.R.C.S., L.R.C.P.Ed., late Ambulance Surgeon, has been appointed Assistant House-Surgeon to the Liverpool Northern Hospital, vice Charles B. Cooper, L.R.C.P.Lond., M.R.C.S., promoted.

GODFREY, A. E., L.R.C.P., M.R.C.S., has been appointed Assistant House-Physician to St. Thomas's Hospital.

GOODDY, E. S., M.R.C.S., L.S.A.Lond., has been appointed Assistant House-Surgeon to St. Thomas's Hospital.

HAIG, F. M., M.R.C.S., L.S.A.Lond., has been reappointed Non Resident House-Physician to St. Thomas's Hospital.

HAMILTON, GEORGE, F.R.C.S.Ed., L.R.C.P., has been appointed Honorary Surgeon to the Liverpool Northern Hospital, vice W. Macfie Campbell, M.D., resigned.

HAW, WALTER HERBERT, B.A., M.R.C.S., L.S.A.Lond., has been appointed Resident Surgeon to the Portland Town Dispensary Henry-street, N.W.

HOAD, WILLIAM, M.B., C.M.Edin., has been appointed Government Medical Officer, Health Officer, Public Vaccinator, and Commissioner of Lunacy for the Seychelles Island, vice Lepper, resigned.

HOPKINS, JOHN W., L.R.C.P., L.R.C.S., has been appointed Medical Officer for the Snettisham District of the Dorking Union.

HUGHES, Mr. THOMAS W., has been appointed Medical Officer for the Aberdaran District of the Pwllheli Union.

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HUTTON, J. S., L.R.C.P., M.R.C.S., L.S.A.Lond., has been reappointed Resident House-Physician to St. Thomas's Hospital.

KIDD, CAMERON, L.R.C.P., M.R.C.S., has been appointed House-Surgeon to St. Thomas's Hospital.

MAKINS, GEORGE HENRY, F.R.C.S.Eng., has been appointed Assistant Surgeon to the Evelina Hospital for Children.

NICHOL, F. E., L.R.C.P., M.R.C.S., has been appointed Clinical Assistant in the Skin Department of St. Thomas's Hospital.

ORCHARD, ALFRED, L.R.C.P., M.R.C.S., has been appointed Medical Officer for the First District and the Workhouse of the Ashby-de-la-Zouch Union.

PARSONS, F. G., L.R.C.P., M.R.C.S., has been appointed Clinical Assistant in the Throat Department of St. Thomas's Hospital.

PLOWMAN, S., F.R.C.S., L.R.C.P., has been reappointed Clinical Assistant in the Throat Department of St. Thomas's Hospital.

POUND, Mr. CLEMENT, has been appointed House-Surgeon to the Middlesex Hospital.

RITCHIE, E. D., B.C.Camb., M.R.C.S., L.S.A.Lond., has been re-appointed Resident House-Physician to St. Thomas's Hospital.

STAVELEY, W. H. C., L.R.C.P., M.R.C.S., has been appointed Clinical Assistant in the Ear Department of St. Thomas's Hospital.

WARRILLOW, EDWARD S., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer and Public Vaccinator to the Headcorn and Alcomb District of the Hollingbourn Union, vice Warrillow, deceased.

WEAVER, JOHN J., M.R.C.S., L.S.A.Lond., has been appointed House-Surgeon to the Oldham Infirmary, vice Holton, resigned.

Births, Marriages, and Deaths.

BIRTHS.

ASHWORTH.—On the 17th inst., at Halstead, Essex, the wife of J. Henry Ashworth, M.R.C.P.Ed., of a son.

CARR.—On the 8th inst., at Long-street, Devizes, the wife of Alfred Alexander Carr, M.R.C.S., of a daughter.

CROSS.—On the 11th inst., at Stanhope-terrace, Regent's-park, the wife of John Cross, M.D.Camb., of a daughter.

EVANS.—On the 14th inst., at Denmark Lodge, The Grove, Clapham-common, the wife of Lewis Evans, L.R.C.P.Ed., L.F.P.S.Glas., of a son.

HOFFMAN.—On the 14th inst., at Coombe Lodge, West-hill, Putney-heath, the wife of H. W. Hoffman, M.B., of a daughter.

MILBURN.—On the 14th inst., at 43, Claremont-square, N., the wife of F. L. Milburn, M.R.C.S., &c., of a son.

MOORE.—On the 6th ult., at Langley, St. Andrews, Jamaica, the wife of York T. G. Moore, L.R.C.P.Ed., M.R.C.S., of a daughter.

VLIELAND.—On the 15th inst., at Sydney Lodge, St. Thomas, Devon, the wife of C. J. Vlieland, M.R.C.S., of a daughter.

MARRIAGES.

ALLDEN—KING.—On the 3rd inst., at St. Peter's, Cranley-gardens, by the Rev. Hon. F. E. C. Byng, Vicar, and Chaplain to the Queen, George H. Allden, M.B., of Shirley, Southampton, to Mary Manuela King, widow of D. A. King, M.B., and third daughter of Mrs. Stubbs, of 6, Edinburgh-terrace, Kensington.

BAILLIE—JACKSON.—On the 10th inst., at St. Catherine's Church, Wakefield, Peter Baillie, M.B., of Whitworth, Lancashire, to Violet Hamilton, daughter of John Jackson, of Heathfield Lodge, Wakefield.

CLARK—WHITE.—On the 16th inst., at St. James's, Paddington, Oscar William Clark, M.B., of Gloucester, fourth son of the late Frederick Clark, of Cowick, Yorkshire, to Kathleen Emily, fourth daughter of Robert Faulder White, of Sussex-gardens, Hyde-park, W.

GULLAND—BRADISH. On the 10th inst., at St. Matthew's Church, Cheltenham, Surgeon-General Alexander Gulland, A.M.D., of Berkeley-villas, Cheltenham, to Margaret, second daughter of the late William Bradish, of Southern House, Cheltenham.

PEARSON—SNELLER.—On the 10th inst., at St. George's, Canterbury, Harry Pearson, M.R.C.S., of West Malling, Kent, and younger son of D. Gilbert, of Buckingham Palace-road, London, S.W., to Edith Hill, third daughter of the late James Vidgen Sneller, of Canterbury.

SMITH—CUBITT.—On the 15th inst., at St. Peter's Church, Bournemouth, Protheroe Smith, M.D., of Park-street, Grosvenor-square, London, to Emma, widow of Edward George Cubitt, Esq., late of Honing Hall, Norfolk.

DEATHS.

DE'ATH.—On the 11th inst., at Buckingham (suddenly), Robert De'Ath, M.R.C.S., L.S.A.Lond., aged 57.

HOPE.—On the 10th inst., at Auriol-road, West Kensington, George Carfrae Hope, M.D., F.R.C.S.Edin., in his 75th year.

LANCHESTER.—On the 13th inst., at Bracondale, Norwich, Thomas William Lanchester, M.D., formerly of Yoxford, Suffolk, aged 81.

MORRIS.—On the 12th inst., at St. Mary's House, Chester-le-street, Walter Cameron Morris, M.B., M.R.C.S., aged 35.

PAYNE.—On the 13th inst., at Clifden, Connemara (suddenly), Christopher James Payne, M.D., aged 65.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, February 22.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Charles Stewart: On the Organs of Hearing.

SOCIETY OF ARTS.—8 P.M. Prof. F. Guthrie: Science Teaching (Cantor Lecture).

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. R. Brudenell Carter: On the Combined Action of Cocaine and Nitrate of Silver in certain Superficial Affections of the Eyes.—Dr. A. E. Sansom: Notes on Severe Endocarditis, with special reference to Cause and Effect.—Dr. W. H. White: A case of Aneurysm of the Aorta.

Tuesday, February 23.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Mr. Charles T. Newton: The Unexhibited Portion of the Greek and Roman Sculptures in the British Museum.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Dr. Cayley: A case of Thoracic Aneurysm treated by the Introduction of Steel Wire into the Sac.—Mr. George Pollock: On the Changes which occur in Bone and Soft Tissues after Amputation of a Limb, and from certain other conditions.—Mr. J. Bland Sutton: A case of General Seborrhœa, or "Harlequin" Fœtus.

ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8.30 P.M. Mr. A. W. Howitt: On Australian Medicine Men.—Mr. Adolphus Mann: On the Numerals of the Yoruba Nation.

Wednesday, February 24.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Charles Stewart: On the Organs of Hearing.

HUNTERIAN SOCIETY.—8 P.M. Mr. Corner will take the chair as President.—Dr. Stowers: Rodent Ulcer.

SOCIETY OF ARTS.—8 P.M. Prof. W. C. Unwin: The Employment of Autographic Records in Testing Materials.

BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens will be shown by Drs. Mansell Moullin, Grigg, Fancourt Barnes, and others. Adjourned Discussion on Dr. Chalmers' paper on Puerperal Septicæmia.

Thursday, February 25.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. W. Boyd Dawkins: The Ancient Geography of Britain.

SOCIETY OF ARTS.—8 P.M. Prof. W. N. Hartley: Photography and the Spectroscope in their Applications to Chemical Analysis.

Friday, February 26.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Charles Stewart: On the Organs of Hearing.

CLINICAL SOCIETY OF LONDON.—8.30 P.M. Mr. C. Mansell Moullin: Traumatic Inguinal Aneurysm, Rupture of Sac, Ligature of the Common Femoral and External Iliac Arteries.—Mr. Charters Symonds: A case of Aneurysm occurring in Stump.—Dr. Goodhart: Intussusception of the Upper Part of the Jejunum.—Mr. Barker: Acute Intestinal Obstruction followed by Acute General Peritonitis, Abdominal Section, Release of the Implicated Bowel, Peritoneum thoroughly Sponged out, Rapid Recovery.—Mr. Godlee: Case illustrating the Effects upon the Eye of Injury to the Sympathetic in the Neck (living specimen).

ROYAL INSTITUTION OF GREAT BRITAIN.—9 P.M. Mr. A. A. Common: Photography as an Aid to Astronomy.

Saturday, February 27.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Rev. C. Taylor: The History of Geometry.

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Feb. 18th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radiation in Vacuo.	Max. Temp. Shade.	Min. Temp.	Rain fall.	Remarks at 8.30 A.M.
Feb. 12	30·03	S.W.	41	40	...	44	34	·03	Overcast
,, 13	29·96	S.W.	43	42	...	47	40	·02	Overcast
,, 14	29·81	S.W.	42	40	...	44	39	...	Cloudy
,, 15	30·03	N.E.	40	38	...	42	37	·04	Overcast
,, 16	29·99	E.	36	35	...	37	35	·05	Overcast
,, 17	29·98	N.E.	35	34	...	38	33	...	Overcast
,, 18	30·15	N.E.	36	35	...	39	34	...	Overcast

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

HELEN PRIDEAUX MEMORIAL FUND.

THE following additional contributions to the fund have been received from members of the medical profession.

Mrs. Scharlieb, M.B.Lond.	£5	5	0	Sir Spencer Wells, Bart....	£2	2	0
M. L. S.	5	0	0	W. A. Meredith, Esq. ...	2	2	0
Dr. Hughlings Jackson, F.R.S.	3	3	0	Dr. Blanc	2	2	0
Miss Hitchcock	3	0	0	J. G. Mackinlay, Esq. ...	1	1	0
Watson Cheyne, Esq. ...	2	2	0	Miss Kate Mitchell ...	1	1	0
Dr. W. S. Playfair ...	2	2	0	Mrs. Julia Mitchell ...	1	1	0
Dr. Lauder Brunton, F.R.S.	2	2	0	W. H. Madden, Esq. ...	1	1	0
Dr. Garrod, F.R.S. ...	2	2	0	Miss Agnes McLaren, M.D.	1	1	0
Dr. Broadbent	2	2	0	Professor Marshall, F.R.S.	1	1	0
Miss Ann Clark, M.D. ...	2	2	0	Mrs. Marshall, M.D. ...	1	1	0
				Mrs. Rushbrook	0	10	6

Subscriptions may be sent to the treasurer, the Dowager Lady Stanley of Alderley, 40, Dover-street, W., or to the honorary secretary, Mrs. Garret Anderson, M.D., 4, Upper Berkeley-street, W. A meeting of subscribers and friends will be held at 4 P.M. on Saturday, Feb. 20th, in the Medical Society's Rooms, 11, Chandos-street, Sir W. W. Gull, Bart., M.D., in the chair.

Mr. G. W. Hambleton.—We do not think our correspondent can be bound to publish the results of his researches until he deems such researches complete.

MUMPS.

To the Editor of THE LANCET.

SIR,—There is a rule in force at the principal schools of the town in which I reside that boys and girls of a family are forbidden to attend school if one of their number suffers from mumps, even in its initial stage, although a strict quarantine is observed. I am anxious to know if the profession considers this rule both wise and necessary. I myself am not competent to give an opinion, as I passed thirty-two years in the Indian Medical Service, and had no experience of the above disease. I shall feel much obliged to those who have the experience if they will express their opinion in your journal.

I am, Sir, yours faithfully,

J. A. C. HUTCHINSON, M.D.,
Surg.-Gen. Ret. List.

Feb. 15th, 1886.

"FRACTURE OF THE CLAVICLE."

To the Editor of THE LANCET.

SIR,—In reference to the communication of Dr. E. D. McNicoll in your issue of the 30th ult., allow me to say that I had a case of fracture of the clavicle in a lad of fourteen, the result of a fall on the ice whilst sliding on Jan. 10th last. Still, serious accidents during the ice season, other than immersions, seem to be wonderfully infrequent.

Believe me, Sir, yours faithfully,

G. POUND

Odiham, Feb. 2nd, 1886.

LITERATURE OF SNAKE POISON AND SELF-VINDICATION.

UNDER the above title Dr. Gopaul Chunder Roy writes to us complaining that it does not afford much encouragement to workers for the sake of science to find their researches ignored and shelved into obscurity by brother members of the medical profession. Our correspondent states that he has in India been singularly unfortunate in this respect, and in proof of this assertion he refers to an article written by him, and published in 1876 in the *Indian Medical Gazette*, on the action of snake-poison of the blood, in which, against the accepted theory of Sir Joseph Fayrer and Drs. Brunton, Lewis, Cuningham, and Weir Mitchell, he attempted to prove that snake poison has a decided action on the blood. From Mr. Richard's small book, "The Landmarks of Snake Poison Literature," Dr. Roy gathers that the same view has been endorsed by two prominent contributors on the subject—viz., Dr. Wolfenden, late Professor of Physiology at the Charing-cross Medical School, and Dr. Lacerda. In the paper already alluded to, Dr. Roy also stated that the local effect of cobra poison on the blood was not that of a vital change, a view afterwards endorsed by Dr. Mitchell and Sir Joseph Fayrer, and recommended the administration of chlorate of potash, anticipating Dr. Lacerda's discovery of the antidotal virtue of permanganate of potash. Again, our correspondent states that in 1872 he read a paper on the solvent action of papya juice on the nitrogenous articles of food; and although the first to make a systematic inquiry on the subject, his labours were ignored by M. Wurtz, who in 1880 isolated the ferment, and named it "papyaine." Dr. Roy also alludes to his researches on the nature of malaria, and to a description of the phenomena met with in the blood, which was embodied in his official report for 1881, and is practically identical with the description of Professor Bizzozero's blood particles, given in this journal on Jan. 21st, 1882. While fully aware of the necessary imperfections of his original researches, our correspondent claims amongst his co-workers the humble place of an artist who, though not skilful enough to give the last finishing touch, has yet done his best to add one brick to the building of the superstructure.

M. Dani.—Fear or nervous apprehension can never produce, though it may greatly aggravate the symptoms of, organic disease.

A CURIOUS COMPLICATION IN A MIDWIFERY CASE.

To the Editor of THE LANCET.

SIR,—The following case may be of sufficient interest to be placed before the readers of THE LANCET.

Mrs. F——, aged twenty-seven, was some time ago confined of still-born male twins at the eighth month. When first seen by me, twelve hours before labour commenced, she complained of pain in the right side. On physical examination externally, I found the uterus enormously distended, with a projection to the right of its fundus, which was hard and tender; the fœtal hearts were not audible. At 11 A.M. next day (fifteen hours later) there were distinct labour pains; the os was dilated to the size of a shilling, and the head of the fœtus was believed to be presenting. At 6 P.M. the os was almost fully dilated, but no presentation could be felt. At 7 P.M., as there had been no advance, and the membranes were tense and protruding through the nearly dilated os, I ruptured them, expecting to hasten labour by so doing, when something tough, which was diagnosed to be the breech, descended and impinged on the finger. Having waited some time with the patient, and there having been no advance in the labour, the os remaining immovable, I left. I was, however, again summoned to the patient at 10.30 P.M., when on arrival I found that another sac of membranes had ruptured, and that a stream of liquor amnii, extending one or two yards from the bed, had escaped, literally soaking the bedclothes. Examining per vaginam, I found the os fully dilated; but my finger impinged on a third sac, thin this time, with the vertex of the fœtus above it; having ruptured it, the head descended in the second position. The following morning at 2.30 the first child was born, and immediately afterwards the second, feet foremost, and with it a bag of membranes, which I ruptured, but not till it had protruded from the vulva.

In this case there appears to have been four sacs of membranes to two fœtuses; but on inquiring for the placenta later on, I found that it had unfortunately been destroyed; it might have been interesting to have examined it. The following facts seem to me to be of interest: (1) that there appear to have been four sets of membranes, and (2) that the second sac was mistaken for the breech, which, however, was not finally diagnosed till all other imaginary presentations had been rejected.

I am, Sir, yours faithfully,

Newhaven, Jan. 4th, 1886. ED. TONGUE YEATES, L.R.C.S.I., &c.

A LARGE NEW-BORN INFANT.

To the Editor of THE LANCET.

SIR,—On Feb. 6th I attended Mary B——, aged forty-four, in her twelfth confinement. After a labour of five hours, with very strong pains all the time, the child, a female, was born, weighing directly after birth 13½ lb. The mother also seems to have a large fibroid. She is much exhausted by the labour, but otherwise is doing well.

I am, Sir, yours truly,

Guy's Hospital, Feb. 10th, 1886. HERBERT V. RAKE (extern).

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PLACENTA PRÆVIA; TWINS.

To the Editor of THE LANCET.

SIR,—I forward for insertion particulars of two cases. I have neither seen nor heard of similar ones, and therefore think they are worth bringing before the profession through the medium of THE LANCET.

On Oct. 22nd, 1883, I was called to see Mrs. G——, aged forty-two, the mother of a family, who was then in her seventh month of pregnancy, and had been taken with severe flooding. On questioning her I learned that she had had several attacks of flooding prior to that date. On examination, I found it to be a case of placenta prævia. I plugged the vagina, administered the usual remedies in such cases, and ordered perfect quietness, acquainting the husband with the nature of the case and its probable result. Next day I removed the plug, and found everything quiet; there was no further hæmorrhage. On the 26th I was again sent for, the patient having had another attack of flooding. I told the husband it would be necessary to deliver her, and requested him to obtain assistance. He called on my friend, Dr. Thomas O'Reilly, one of our oldest practitioners, who wrote to me saying he would call on me at 7 A.M. next day, being unable from pressure of business to see me the same evening. Next morning we called to see the patient. Dr. O'Reilly verified my diagnosis, and, having previously informed the husband and everything being in readiness, we proceeded to deliver. Having pushed the placenta aside and ruptured the membranes, I found, to my astonishment, that I had to encounter a regular mass of hands and arms. I remarked that I thought there was more than one fœtus, and finally succeeded in seizing a foot and delivering a child; after a little manipulation, Dr. O'Reilly brought about respiration. As I was positive that I had felt more than two hands, I again explored the uterus and discovered a second child, which, after the membranes had been ruptured, was delivered with little difficulty, its birth having been preceded by the placenta belonging to the first child. The second placenta was then removed. Both children were respiring well, and the mother had not apparently suffered as much from the shock as I had anticipated. I need hardly say my attention was thenceforward directed principally to the mother. That evening her temperature and pulse were rising somewhat. She slept a little during the day and the same evening. Next morning the pulse had risen to 130 and the temperature to 104°. During the two following days (28th and 29th) the pulse and temperature kept at about the same elevation. The flow was extremely scanty. The patient did not complain of much tenderness.—Oct. 30th: Pulse 135; temperature 105°.—31st: Pulse 110; temperature 101·5°.—Nov. 1st: Pulse 95; temperature 100·5°; the patient felt pretty comfortable.—2nd: Pulse 85; temperature 99·5°. Next day I was summoned to see the patient before my usual time of calling, as she had severe hæmorrhage. On my arrival, I found her almost moribund. She died about noon. She had slept well the previous night, and had taken tea and toast for breakfast that morning, as she felt very well. I had noticed when I first examined the patient that her veins, especially about the labia, were in an extremely varicose condition, and this may to a certain extent account for the fatal result when everything looked favourable on the seventh day after delivery. Both children lived and thrived well until the following summer, when they succumbed to cholera infantum.

I look upon this case as a unique one. In an extensive midwifery practice of twenty years it was the first case of placenta prævia I had met with, and I have not seen a similar case recorded. Placenta prævia with a single child is bad enough; but with twins it is so much worse that the nearly successful issue is, I think, worth being recorded.

I am, Sir, yours truly,

CHARLES J. S. DIGGES, M.R.C.S., &c.

St. Louis, Mo., U.S.A., Oct. 29th, 1885.

"PSORIASIS ECZÉMATEUSE."

To the Editor of THE LANCET.

SIR,—I should be very grateful to my professional *confrères* for any suggestions as to treatment in the following case.

A lady, aged about sixty, has suffered for the last eight months from what the French style "psoriasis eczémateuse." It first made its appearance as a red spot on the finger under the wedding ring last summer, from which time it has gradually spread over the entire palmar surfaces of both hands, the exterior surfaces of the digits, and to some extent that of the metacarpus. The hands at first presented the following appearance:—Epidermis generally thickened, and peeling in large, dry flakes, from which, with forceps and scissors, the shape of the fingers might be removed, the cutis underneath being much reddened and hyperæmic. Under treatment, the large flakes gave place to more of a fine branny desquamation. In the flexures of the palms there have been large cracks, running along the whole width of the hand, and rendering extension difficult and painful, and all the time there has been more or less loss of tactile sensation, apparently owing merely to the thickened epidermis. The disease is quite dry, and devoid of moisture or weeping; and although limiting itself to the hands, there is something of a similar nature about the toes and scalp. General health good. No specific history; no rheumatic or gouty diathesis; no albumen or sugar in the urine. The only previous ailment appears to have been an eczématous ulceration of one leg. Mercurials in all forms and combinations, lead, zinc, salicylic acid, borasic acid, and liquor carbonis detergens have been used both in lotions and ointments; but improvement goes no further than the lessening of the thickness of the flakes and of the amount of desquamation. Internally, iodide of potassium, Easton's syrup, and arsenic have been used.—Yours truly,

Jan. 26th, 1886. SANS SUCCÈS.

WARLOMONT'S MANUAL OF ANIMAL VACCINATION.

To the Editor of THE LANCET.

SIR,—The review with which you this week favour my translation of the above work is likely to create some very erroneous impressions, and the hasty conclusions drawn are scarcely worthy of THE LANCET. I must ask you therefore, in common fairness, to be allowed to correct a few of the mistakes made by the reviewer, whom I would remind that ere a man condemns a book for its want of "exact evidence" he should himself take the trouble to make *exact quotations*.

The statement that "500 cases of vaccination met with 499 successes" should have been 479 successes, or a proportion of 96 per cent. Then, Dr. Allard did not obtain "sixteen vesicles out of every hundred;" but *sixteen vesicles out of a total of forty-four insertions*, the stored calf-lymph used having taken "eighty-six days" (from Oct. 6th to Dec. 31st) in transmission to the tropics, and having been subjected to a "temperature rising, even in the cases and trunks, to from 28° to 30°" (Centigrade). The reviewer then says this is "a result far below the success obtained with calf-lymph produced in this country"—hardly a fair statement, considering the conditions (at Vivi, Congo) and the length of time intervening between the collection and insertion of the vaccine. Then, the translator is credited with something which he has never written. I never objected to the vaccination-lancet being "used for other purposes." I object to the use of the lancet *at all*; and I maintain, as a matter of fact, that the majority of practitioners do *not* use that "reasonable care" in cleansing their lancets which could alone justify the use of any instrument in more than a single case of vaccination. Again, I have never stated that its "unnecessary sharpness is incapable of remedy." The unnecessary sharpness is one of the attributes of this careless reviewer, who would do well to take a few lessons in accuracy ere he dares to say that a purely scientific book "can scarcely claim to rank as a scientific work." The reviewer has omitted to note the discussion of certain experiments in connexion with vaccino-syphilis, which have recently been prominently quoted, as proof of the truth of an as yet unproved hypothesis. I have the private admission of the best authority on this matter that the "'proof' may not be absolute." I say *it is not absolute*; nor is it scientific. At present it is merely clinical.

Trusting you will do Dr. Warlomont and myself the justice to insert this letter in your next issue,

I remain, Sir, your obedient servant,

ARTHUR J. HARRIES.

(Translator and Editor of Warlomont's Manual of Animal Vaccination.)

Pall Mall East, S.W., Feb. 13th, 1886.

*** We gladly make the numerical corrections to which Dr. Harries directs attention, but the argument remains the same. Reference to Dr. Allard's experience was made simply because in this instance the insertion success was given. A statement of success which does not include insertion success is of much less value. Dr. Harries appears to be unnecessarily severe in his remarks upon our review. We would desire to call his attention to the following:—

In his letter he states:	In his book, p. 163, we find:
"Then the translator is credited with something he has never written. I never objected to the lancet being used for other purposes."	"Objections to the lancet:—Probably used for operations other than vaccination."
"Again, I never stated that its unnecessary sharpness is incapable of remedy."	"As a rule, a lancet is too sharp for efficient vaccination."

ED. L.

Mr. R. G. Patterson, M.B.—Sédillot's 'Contributions à la Chirurgie,' 1868, vol. ii.

CHRONIC URTICARIA.

To the Editor of THE LANCET.

SIR,—Here is an *opprobrium medicorum*. Will any professional brother assist me? It is a case of chronic urticaria. The patient had an attack of subacute rheumatism in September last, and the rash first made its appearance then. The rheumatism has quite left him for several weeks, but the rash keeps coming and going; or, rather, I should say, it did keep coming and going, but it is now quite permanent, and covers his body in large crescentic patches from the head to the feet. The irritation is very severe at times, utterly destroying sleep, and rendering the patient's life miserable. I have prescribed various alkalies and salines, rhubarb and soda, soda and nux vomica, potass and nux vomica, iodide of potassium, bromide of potassium, acids and nux, quinine and acids, quinine and alkalies, colchicum and alkalies, belladonna and alkalies, serpentaria with soda and carbonate of magnesia, Fowler's solution of arsenic, bismuth, bismuth with soda and hydrocyanic acid, Donovan's solution. Externally: Baths of various kinds, soda baths, bran baths, lotions of acetate of lead and ammonia, acetate of lead and spirit, bichloride of mercury, oxide of zinc, carbolic acid, Condy's fluid, borax, chlorate of potass. Some of these have afforded relief for a time, but the rash always returns. I have consulted two eminent London physicians—one of special repute in such cases—but to no advantage. I may as well add that the patient has been carefully looked after in regard to diet, and that he wears silk underclothing.

Can anyone assist me in the treatment of this case? If so, they will confer a very great favour upon my afflicted patient, and ensure the gratitude of

Yours truly,

Park-road, N.W., Feb. 17th, 1886. J. BRISBANE, M.D.

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NEW MUFF-WARMER.

MR. F. J. HEDGCOCK, surgical instrument maker, of 138, Grosvenor park, Camberwell, S.E., has introduced to the notice of the profession a new muff-warmer. The body is made of block tin, covered first with flannel, and then with plush of various colours, and fitted with a plated screw nozzle. This, when filled with boiling water and carried in the muff, will keep warm for about three hours, and will be found a useful preventive of chilblains for lady patients.

Mr. E. Wright.—In the course of a few days.

"FRIENDLY SOCIETIES' MEDICAL INSTITUTIONS."

To the Editor of THE LANCET.

SIR,—In your issue of the 30th ult. a letter appeared signed "Fairplay," and also some other correspondence, on the above subject. For nearly two years I have acted as medical officer to a very large institution of this kind, and think it but justice to state that all are not to be measured by the same standard. I have always found the committee ready to act in a spirit of kindly co-operation, with a desire to render (whilst they also expect to receive) the courtesy dictated by common sense. They are mostly just and intelligent men; and though I must admit having on rare occasions received incivility from members, most of them show great consideration for the "doctor," in trying to save him as much annoyance as possible. On the part of the committee there has been no want of liberality, but, on the contrary, a strong wish expressed that the remuneration should be sufficient to enable the medical officer to maintain his position as a professional man and at the same time uphold the credit of the institution. With regard to the well-to-do members, they are only admitted on the condition that they belong to some registered society; consequently, they have worked their way up, and is it fair that they should be excluded from the society which they helped to found, and from benefits which their own providence and enterprise have obtained, even though they may at last be independent of them?

I sincerely sympathise with "Fairplay" in his unpleasant experience, and hope that the publicity given to both sides of the matter will induce all these institutions to strive after a much higher standard, as only thus can they command public sympathy and conciliate professional regard. I am, Sir, yours faithfully,

Feb. 16th, 1886. MEDICAL OFFICER (F.S.M.I.).

Mr. P. B. Stubbs.—The name will appear in the next official list.

Mr. W. T. Brooks.—In an early number.

"SYMPATHETIC IRRITATION OF THE PNEUMOGASTRIC."

To the Editor of THE LANCET.

SIR,—Mr. Tower-Smith's letter of to-day's date recalled to mind your annotation (Oct. 3rd, 1885, p. 639) on Dr. Harkin's treatment for cholera. It certainly seems hopeful. I would suggest the trial of a seton in place of a blister, if the latter should fail. If the treatment indicated should be adopted, it would, of course, be extremely interesting to learn the result. I am, Sir, yours truly,

R. J. SHEPHERD, M.D.

St. Olave's Union Infirmary, Rotherhithe, S.E., Feb. 13th, 1886.

I. Burton may refer to the report of the Obstetrical Society in our present number.

SEA-SICKNESS.

To the Editor of THE LANCET.

SIR,—Years ago most passengers by sea spoke of the plan mentioned in your last week's issue (p. 335) as the old and only good thing for sea-sickness. From observation of hundreds of cases, I believe that the benefit arises entirely from the horizontal position, and that lying "head to bow" does not diminish the severity of the illness. After trying most remedies, I found most benefit from chloroform applications to the auditory meatus. I am, Sir, yours truly,

Feb. 16th, 1886. M.B., C.M.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir Spencer Wells, London; Dr. Mo e Madden, Dublin; Dr. Dyce Duckworth, London; Surg.-Gen. Hutchinson; Mr. Sutton, London; Dr. Harkin, Belfast; Mr. Wharton Jones, Ventnor; Mr. Allbutt, Leeds; Dr. S. West, London; Dr. Brisbane, London; Messrs. Welford; Mr. Thomas Cooke, London; Mr. H. S. Wright, Acton; Mr. Woodland, London; M. Dani, London; Dr. Charteris, Duncorval; Dr. Hughes Bennett, London; Mr. W. T. Brooke, Oxford; Mr Auld, Wick; Dr. Slayter, Halifax, N.S.; Dr. Harries, London; Dr. Collier, Lincoln; Dr. Wade, Birmingham; Mr. Haslam, Birmingham; Dr. A. Wilson, Leytonstone; Dr. O. Sturges, London; Mr. J. S. Wood, Tooting; Mr. N. B. Davies, Lincoln; Mr. B. Robinson, Manchester; Dr. R. J. Shepherd, London; Mr. Cartmel, Manchester; Mr. S. Snell, Sheffield; Dr. King, Virginia; Mrs. Sullivan, Burton-on-Trent; Messrs. Richardson and Co., Leicester; Mr. Burke, Hammersmith; Mr. Unsworth, Liverpool; Mr. Grime, Blackburn; Messrs. Haller and Co.; Mr. Turner, Colchester; Mr. Robinson, Pendleton; Mr. Crewes, Truro; Dr. Troy, Maryland, U.S.A.; Dr. Millman, Kingston; Mr. Hunter, Birmingham; Mr. Galvayrez, Ghadechi; Mr. Proud, Hartlepool; Mr. Hogg, London; Mr. Ricketts, Oldham; Mr. Buchan, Plymouth; Mr. Benton, London; Mr. Walsh, New Ross; Dr. Huggard, Davos; Messrs. Nelson and Sons, Leeds; Dr. S. L. Abbot, Massachusetts; Mr. Jos. Williams, Brentford; Dr. Dowding, Bournemouth; Mr. C. E. Abbott, Braintree; Mr. Bonton, London; Mr. Edwards, Harrold; Mr. Chavasse, Birmingham; Mr. E. Harrison Hull; Mr. Glascote; Mr. Bickerton, Liverpool; Mr. Clutton, London; Mr. Craig, Llandudno; Dr. Lycett, Wolverhampton; Messrs. Treherne and Co.; Messrs. Mead and Co., Bristol; Dr. Richmond, Greenock; Mr. Lloyd, London; Mr. Soper, Dartmouth; Dr. Ridge, Enfield; Mr. Poole, Maldon; Dr. Ashworth, Halstead; Mr. Woodland, London; Mr. Allden, Shirley; Mr. Terry, Winchester; Messrs. Bates and Co., London; Mr. St. V. Mercier, London; Mr. Wheatley, London; A Reader of THE LANCET; Y.; A F.S.M.I.; Fiat Justitia; P. E. J.; Ajax.

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THE

Erasmus Wilson Lectures

ON

EVOLUTION IN PATHOLOGY.

Delivered at the Royal College of Surgeons.

BY J. BLAND SUTTON, F.R.C.S.,

ASSISTANT-SURGEON TO THE MIDDLESEX HOSPITAL, AND LECTURER ON COMPARATIVE ANATOMY.

LECTURE III.

THE ETIOLOGY OF NEOPLASMS.

MR. PRESIDENT AND GENTLEMEN,—The term "tumour" has been applied to so many kinds of growth, and used so loosely, especially in clinical work, that it ceases to carry with it any definite significance. It is necessary to adopt some rigorous limitation to the term, or choose a name which shall enable us to discriminate between true tumours and the curious medley with which by the majority of writers they are confounded. A neoplasm may be defined as *a new growth characterised by histological diversity from the matrix in which it grows; it is distinguished from inflammatory new formations by the variety of its forms, mode of origin, and the frequent inherent tendency it has to increase.* This definition excludes hyperplasia of organs, infective granulomata, and the like. With regard to the histological diversity exhibited by a neoplasm, it should be mentioned that it may more or less resemble the matrix tissue, but certain features may always be detected whereby their heteroplastic nature may be demonstrated.

Few subjects have exercised the ingenuity of pathologists more than the etiology of neoplasms. It is unnecessary to recapitulate the various theories which from time to time have found adherents. There is no exclusive theory which will explain the causation and mode of origin of all known neoplasms; indeed, the various groups require separate consideration. The most scientific method of grouping neoplasms is an embryological one, leaving the histological details to determine the varieties. This mode of classification assumes considerable importance when considering the etiology of neoplasms. In this way they may be arranged in three groups: (1) the Mesoblastic group, including the connective-tissue growths; (2) the Epiblast and Hypoblast group, comprising adenomata, carcinomata, and papillomata; and (3) the Teratomata—neoplasms containing tissues derived from the three embryonic layers.

Cohnheim's theory, which ascribes the origin of neoplasms to persistent rudiments, is of all hypotheses that which has most to recommend it, if the term "tumour" be used in its most restricted sense. Throughout this lecture the expression "germinal rudiment" will be used in a more extended sense than that in which Cohnheim employed it. At the outset it will be well to ask the question, Do germinal rudiments, such as Cohnheim's theory demands, exist? and have we any evidence to show that such germs may become tumours? The origin of true cysts from functionless ducts and tubules is a fact which no one can dispute; for example, the cystic dilatation of the tubules comprising the parovarium, paradidymis, and ducts of Gartner in man and animals. If we receive without demur the origin of cystic structures from functionless tubular organs, or cyst-germs, as we may call them, why should the origin of solid neoplasms from rudiments be doubted, especially if such untransformed tracts of tissue can be demonstrated unequivocally to be heteroplastic in their nature? Of course it is far easier to demonstrate the origin of cysts from pre-existing germs than in the case of neoplasms it is ever likely to be. Nevertheless, we are certainly able to show that in the region where particular tumours are more prone to occur, there is embryological testimony to explain why they occur there. An epithelioma on the lip is what would be expected, but a similar growth starting in the midst of a block of cartilage is incomprehensible. In the same way a piece of cartilage in the midst of the shaft of a femur of a boy of five years is cartilage in the wrong place; nevertheless, such islands are to be met with by those who care to expend time and labour in searching for them. Their existence has been known for some years, and, as Virchow was the first to point out, they may in later life become the starting-point of enchondromata. I have seen very many of these cartilage islands, especially in connexion with the epiphyses and diaphyses of long bones, in rickety animals and children. Not only do these examples teach us in the most positive terms that embryonic rudiments of enchondromata exist, but they teach us something of the evolution of neoplasms. In the fact that at an early age our skull is mainly cartilage, we agree with the cartilaginous fishes, sharks, rays, and the like, whose skulls never advance in development higher than cartilage impregnated with salts of lime; and as we advance to osseous fishes and amphibians the overlying bones gradually bring about absorption of the cartilage in different places; but much exists throughout the life-time of the animal, and in the skulls of mammals, even the highest, we find traces, in the oldest, of this important matrix tissue, yet in spite of this some cavil and say embryonic rudiments cannot exist in the adult. Surely they are not in earnest. Frequent spots for the existence of these belated rudiments are the region asterion immediately posterior to the external auditory meatus, the neighbourhood of the nasal fossæ, the septum nasi, the lower jaw, and the vertebræ. The regions just mentioned are favourite situations for enchondromata and osteomata. A true osteoma may be regarded as simply a higher development of an enchondroma. If, then, we find a cartilage island, it would be impossible to say, supposing it to develop into a neoplasm, whether it would become a cartilaginous or an osseous neoplasm.

Moles and nævi may be regarded as tumour germs; many instances are on record where a small nævus untreated in early life later formed an angioma of considerable dimensions, and became a source of danger. All germs or rudiments do not become tumours. Three courses are open to them: (1) they may later in life undergo transformation into normal tissue; (2) they may remain quiescent throughout a long life; (3) irritation may stimulate them into abnormal activity. As to what constitutes irritation in this sense, nothing at present is definitely known. If we admit the origin of enchondromata, osteomata, and angiomata from rudiments, need we doubt the origin of other varieties of mesoblastic tumours from similar sources? There is this important fact in their favour—they are always confined to regions of the body where the elements of which they are composed are to be unequivocally demonstrated.

Before dismissing this question attention must be given to the sarcomata. I have no doubt that many cases of round-celled sarcomata are not genuine neoplasms, but the result of the irritation of micro-organisms. It is very necessary to be particularly cautious in deciding whether a given growth composed of round cells be a sarcoma or the result of a specific irritant, and more so if there be more than one growth present. Observations on animals have made me very sceptical regarding round-celled sarcomata. Mr. Pearce Gould has recently analysed the relation, which appears to exist in very many instances, between an injury and the appearance of a sarcoma, and has collected a goodly list of cases in support of the view in a paper read before the Medical Society in 1885. So far as my observations on animals have extended, it is interesting to note that sarcomata are found with greater frequency in those parts exposed to injury. In fish, the tails and fins are the parts most affected. In frogs, the limbs are the most frequent situations; in birds, it is the neck and prominent parts of the wings. In horses, sarcomata have followed blows on the jaws; I have seen a sarcoma develop on the head of a cat after being struck with a stick; and in the case of an ox which broke its horn, a huge sarcomatous neoplasm subsequently developed from the stump. Careful examination of some of these cases seems to support the notion that after the injury the inflammatory tissue, or tissue of repair, exceeds normal limits, develops erratically, and plays the part of a tumour germ.

We must proceed to consider the second group of neoplasms, whose characteristic features are the following:—In addition to mesoblastic, they contain epithelial elements derived from either the epiblast or the hypoblast, and in their structure they more or less resemble glands. If the

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resemblance is close, the neoplasm is termed an adenoma, and the cells clothe the alveoli in a regular manner; but if the cells are merely tumbled in confusion in the alveoli, it is called a carcinoma. It is necessary to discriminate between hyperplasia of a gland and a glandular neoplasm; the distinction is simple: the latter is impotent to produce the secretion normal to the gland. Another feature connecting carcinomata with the secreting glands is their relation to bloodvessels. The cells of which a gland is composed do not come directly in contact with the bloodvessels, but are separated from them by lymphatic spaces. It is well known that cancers are poorly supplied with blood, but contain an abundance of lymphatics. Further, cancers in their mode of development mimic glands. Glands commence by a down-growth of epithelium from the hypoblast or epiblast, as the case may be, into the deeper layers of the mesoblastic tissues beneath. This may be well seen in a section of a fœtal thumb at the fourth month of intra-uterine life. The sweat glands appear as little flask-shaped diverticula. This may be taken as a type of gland development generally. If, later in life, irritation, local or otherwise, affect the tissue, abnormal epithelial growths may occur, and, rising above the general level, produce a wart, or dipping into the sub-epithelial tissues, as in the early stage of gland development; but failing sufficient formative energy, either from decline of vigour or general constitutional debility, the new tissue never develops functionally, runs riot, and originates tissues of low vitality—carcinomata. Such in-growths may occur in the neighbourhood of any gland, mucous, sebaceous, mammary, and others, as diverticula from the acini; and according to the arrangement and variety of the cells and stroma, so we term them "epithelioma," "scirrhus," "encephaloid," and the like. There is no valid reason why these abnormal down-growths of epithelium should not be considered as tumour germs, in the same sense as the little masses of cartilage lodged in the interior of a long bone. It may be asked why should cancer be more frequent in the old or debilitated than in the young and vigorous? The answer is, young trees bring forth the best fruit because in them vigorous growth is at an acme; when this fades, then that which is inferior is produced. So with glands. Irritation in the young produces papillomata in the old cancer. This is not only true of man, but also of animals. Warts occur in the young, and cancer in the old ones. Cancer is, however, very rarely met with in animals other than man.

We must now consider the third group of neoplasms, which differ from the preceding groups in that their elements are derived from the three germinal layers, epiblastic, hypoblastic, and mesoblastic, or, as they were conveniently styled by Virchow, teratoid tumours. These neoplasms are always congenital, and are remarkable for the variety of elements composing them. They may contain fibrous tissue, bone, cartilage, muscle, skin, hair, nerves, glands, or indeed any tissue. Teratomata are especially liable to occur in those situations where the three blastodermic layers are brought into direct continuity with each other during fœtal life, but the connexion is only temporary. Critically examined, we shall find the positions of these temporary unions are often indicated by a passage which may exist for a longer or shorter period in the embryo. As a matter of fact, we get what I have been in the habit of calling an obsolete canal or passage. By this I mean canals which in the ancestors of mammals were functional, but they reapppear for a time in existing forms in obedience to the great law, heredity. As examples of obsolete canals we may take: (1) the curious recess at the top of the pharynx, which brings the infundibulum of the third ventricle into relation with the buccal involution; (2) the neurenteric passage, which brings the central canal of the cord and the alimentary canal into relation round the caudal end of the notochord; (3) the post-anal gut; (4) the branchial arches; and (5) the developmental history of testis, ovary, and Wolffian duct support the same view. Teratomata occurring in the sacral region are not a simple group, and Braune's observations long ago made us acquainted with the fact that some of the cystic forms are connected with the spinal canal and lie posterior to the coccyx, whilst others lie anterior to that structure. Braune also pointed out that the cystic teratomata connected with the spinal canal are due to dilatations of the spinal meninges—in fact, a spina bifida. Those anterior to the coccyx are, according to Braune, to be regarded as an abnormal growth of Luschka's glands, and other writers adopt this view. It is far more reasonable, however, to believe that these growths originate as abnormal dilatations of the post-anal gut—a section of the alimentary canal which for a certain period of embryonic life exists posterior to the anus in man and very many if not all vertebrata. The minute structure of this variety of teratomata agrees in every particular with the histological details of this section of the gut. With regard to the cystic sacral tumours connected with the meninges, it is not always that after birth the continuity of the cystic interior with the spinal canal can be made out, as in the following case reported by Virchow. A negro child a few days old presented a tumour on the left buttock to one side of the middle line. It was removed by a surgeon, Dr. Ludwig Wolff, in Central Africa, who believed it to be a lipoma. After examining the tumour, Virchow came to the conclusion that, notwithstanding its lateral situation, it was in reality a diverticulum from the spinal meninges. At the opposite end of the notochord we detect similar conditions. There may be a hernia of the spinal meninges through the floor of the sella turcica, or we may get a tumour containing skin, hair, nerves, muscle-fibre, and the like. In the neck, in association with the branchial arches, cysts arise, or in rarer cases tumours composed of complex elements. The same is equally true of the ovary and testis. They arise in connexion with the genital ridge, and at a certain period of their development are in intimate association with the peritoneal epithelium, and for a time are connected with it by a series of curious canals known to embryologists as the peritoneal funnels. In addition to this, the Wolffian duct at its commencement lies closely associated with the epiblast. Viewed in this light, I regard teratomata, not as a group of curiosities, but as a class of neoplasms full of interesting details. I regard them as arising from pre-existing tubules or ducts, which in the normal development should become obliterated, but they may in fœtal life dilate and become mixed with various other tissues in their immediate neighbourhood, and as they lie on the borderland of mesoblastic, epiblastic, and hypoblastic elements, they become incorporated with them, and form in many instances amorphous masses, and constitute one of the most powerful witnesses to Cohnheim's theory of "tumour germs." The relation of the teratoid tumours to obsolete canals is illustrated in a very striking manner in the tongue. Professor His has recently given a full account of the development of the tongue, and describes in detail the formation of a canal which runs from the foramen cæcum on the dorsum of the tongue downwards to the third branchial arch, and finally ends in the vesicle from which the middle portion of the thyroid gland takes origin. Later the canal is divided into two parts, due to the formation of the body of the hyoid bone. The one in connexion with the tongue is known as the lingual duct, and terminates in the hollow of the hyoid bone. It may occasionally be demonstrated in adult life, situated between the genio-hyo-glossi muscles. This situation is the favourite one for dermoid cysts. The lower portion of the duct, known as the thyroid duct, may sometimes be detected in those cases where we find a middle lobe to the thyroid body. It is extremely interesting to note that the structure and mode of development of the thyroid gland closely resemble those congenital coccygeal tumours lying anterior to the coccyx—e.g., (1) their association with the alimentary canal; (2) origin in a functionless tubule; (3) consisting of vesicles lined with cubical epithelium and bound together by cellular tissue.

Although not strictly tumours, yet possessing so much interest from the point of view of evolution, a few words must be said concerning congenital cervical cysts. These formations, as Mr. Thomas Smith has so well pointed out, all lie beneath the deep cervical fascia; they may be unilateral or involve the lateral and anterior regions of the neck, follow the deep fascia, and extend into the axilla, or, in rare cases, for a little distance into the mediastinum. Cases of this nature have been described and figured by Messrs. Birkett, Hutchinson, Smith, and Treves. In that the cyst extends at times into the axilla is of interest, for this circumstance first induced me to attempt the following explanation. In some of the lower animals, especially the chimpanzee and howling monkeys, a very large subfascial air sac connected with the larynx extends from the hyoid bone to the manubrium sterni, and laterally under the posterior triangles even into the axilla. The cysts in the human subject agree in anatomical details with the cervical sacs of the monkeys in such a striking manner that I am of opinion we have in these cysts repetitions of simian characters.

In conclusion, it seems impossible to escape from the

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conviction that anyone ambitious of becoming a scientific pathologist must first be a sound human anatomist; he must also acquire a tolerable knowledge of comparative anatomy and keep well abreast of the teachings of embryology. Having acquired a competent knowledge in these subjects, he will then, in spite of himself, become a firm believer in the fundamental principles of the grand doctrine of "evolution."

Clinical Lecture
ON
CATARACT.

Delivered at the Eye Infirmary, Newcastle-on-Tyne.

BY C. S. JEAFFRESON, F.R.C.S. ED.,
SURGEON TO THE INFIRMARY.

GENTLEMEN,—This evening I purpose discussing the question of "Cataract and the operations for its relief." I need not say that the theme is one which is second to none in importance within the whole range of surgery, whether we look at it from its own intrinsic interest, or whether we consider the brilliant results which operative interference brings about in those who are the subject of this disease. An amputation or the resection of a joint may save or prolong life, but at best it leaves a deformed and mutilated organism, and this result is only attained at great risk to life and after great and prolonged physical suffering. A successful and well-executed cataract operation is practically painless. In a few days the wound is healed and the patient finds himself restored to all the blessings and joys which sight alone can afford him. Indeed, for many sight is only second to life itself, and there are not a few who would not care to live without it. There is something magical in this transition from darkness to light, and if the patient experiences pleasure and gratification which at times he can scarcely find words to express, the surgeon, as the indirect author of his pleasure, shares it equally with him. I know no feeling more gratifying and which inspires one with more legitimate conscious pride than that which occurs to us when, on taking the first peep at a case of cataract, we see a clear cornea and a dark untroubled pupil. The outline of objects first dawns upon the patient, gradually the image becomes more distinct, and when he realises that he sees once more his face illumines and he gives way to his joyful excitement. Equally bitter, on the other hand, is the feeling should disappointment meet us at each step of our examination, and no ray of light penetrates to cheer the hopeful and confiding sufferer; and doubly bitter will those feelings be if our inner consciousness remind us that perhaps the want of more care or more knowledge, or something left undone, has led to the untoward result. In operations, as in all other events in life, nothing tends more to eventual success than early disappointments, and if we take proper lessons from our failures our proportion of successes will steadily increase. If there is one thing more than another which characterises the surgery of the present day and has brought it to its pitch of perfection, it is the amount of personal care and attention the surgeon gives to each individual case, and if it is necessary in general surgery it is doubly so in ophthalmic surgery. A surgeon's success is generally in exact proportion to this element in the treatment, and you will all find—I see here speaking to the younger members present—that it is far more satisfactory, and in the end answers better in every way, to do a moderate amount of work thoroughly well than to do a large amount indifferently. I can only in this lecture attempt to give you a rough sketch of the matter in hand, for its full discussion would take many lectures; but to make matters clear I must refer briefly to the anatomy of the parts concerned.....

Now, gentlemen, as in the physiological state the lens and its capsule are absolutely transparent, so any opacity in one or the other is a pathological condition, and constitutes what we call a cataract—an objectionable name, we must allow, but one sanctioned by time, and which we must be content to adhere to. As there are necessarily many varieties of cataract, so there have sprung up many classifications; none of them are very complete, and some are not very scientific, and it is not till we have enumerated them all that you will appreciate the difficulties in the matter. In the first place, anatomical position has been taken as a basis, and we speak of lenticular and capsular cataract according as the opacity is situated in the lens or its capsule. Lenticular cataracts are cortical or nuclear according as the peripheral or central parts are affected; or, again, lamellar when only an intermediate layer between the nucleus and the cortex is opaque. Capsular cataracts, as we shall see by and bye, have no real existence, and depend upon changes in the layer of cells immediately below the capsule; these changes may take place in the anterior or posterior capsule, although in the posterior they are due to different causes. When close to the poles, they are called anterior and posterior polar cataracts; when the lens and capsule are both affected, we speak of capsulo-lenticular cataracts. When age forms a basis for classification, we speak of infantile, juvenile, and senile cataracts; when consistency, we speak of hard, soft, and cretaceous cataracts. Again, when we classify them in accordance with the conditions which have led to their development, we speak of traumatic, diabetic, senile, and secondary cataracts. By far the majority of cataracts which come under the notice of the surgeon are lenticular, and occur in elderly persons; and there are two ways in which they usually commence: the sclerosis or condensation or opacification which attends and is the essence of the disease commences either in the centre of the lens, when it is called nuclear, or attacks the peripheral parts of the cortex, when it is called cortical; although in the more advanced stages it is not always easy to say to which of these categories the cataract has chiefly belonged. At the commencement there is generally but little difficulty in deciding. The nuclear cataract occurring in the centre of the lens gives rise to ill-defined nebulous opacity, which sometimes produces more disturbance of vision than a superficial examination would lead us to expect. The cortical appear as star-like radii in the periphery; from their situation at the commencement they interfere comparatively little with vision, and even when advanced, in comparison with the nuclear, do not seem to impede the light so much. In my experience nuclear cataract occurs later in life than the cortical variety, which is certainly the more common of the two, and may be found in most of those cases in which the cataract, though undoubtedly senile, occurs at a comparatively early stage. Cortical and nuclear cataracts, gentlemen, form the majority of the cases which occur in old persons, or the so-called senile cataracts, but there are other forms of opacity affecting the lens substance. We have certain forms of cataract which may be called milky cataracts, in which the cortex does not follow the usual form of stellate degeneration, but breaks down somewhat rapidly and equably in all its parts; it may and does not infrequently pass into a fluid state, in which case the nucleus floats free in it, and we have what is termed a Morgagnian cataract. This usually occurs at a less advanced period of life than senile cataract, and is sometimes a monocular affection. Again, we have another form of lenticular cataract which is called the laminar or lamellar, which consists of an opacification of certain layers of the lens, leaving its nucleus and peripheral parts transparent. This is always a congenital form of cataract, though by no means the only one. Capsular cataracts may occur in connexion with cortical or lenticular cataract as a senile change, but it is not usually till a late stage that the intra-capsular cells become affected. Sometimes, however, the opacity commences in this situation, usually in persons of middle age, and who are the subjects of inherited cataracteous tendencies. At the close of the lecture I hope to show you a case of this kind, in which numerous punctated opacities occupy the anterior surface of the lens within the capsule. One of the most common forms of capsular cataract is what is called the pyramidal or anterior polar cataract, because it occurs at the anterior pole of the lens. It is usually the result of purulent ophthalmia in early life, which, having led to a small central ulcer of the cornea and consequent loss of aqueous fluid, has caused the lens to project against and touch the posterior surface of the cornea, where it contracts adhesions blocking up the base of the ulcer. This allows the aqueous humour again to accumulate, leading to a detachment of the lens, which resumes once more its proper position, but leaving at the spot where it was in contact with the cornea a patch of inflammatory

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exudation, which has sometimes a pyramidal form when viewed in profile. Iritis sometimes leads to capsular cataract by depositing inflammatory lymph on the surface of the capsule. Changes somewhat analogous to those which take place in the intra-capsular cells of the anterior portion of the capsule sometimes occur in the posterior pole, and we have then a posterior polar cataract. This is usually the result of inflammatory exudation from the anterior surface of the hyaloid covering of the vitreous. I shall refer later on to these opacities. The capsular opacities which are the common result of operations are really not capsular, but are usually the result of inflammatory exudation coating small portions of lenticular matter which have failed to escape with the rest of the lens at the time of operating.

These, then, gentlemen, are the chief forms of cataract met with in practice, although there are some rarer forms, notably what is called black cataract, the pathology of which is still somewhat obscure, but in which the lens assumes a very dark amber colour, approaching almost to black, and which by some is supposed to be due to the absorption of hæmatine. As you are well aware, certain constitutional conditions predispose to cataract. It frequently occurs in glycosuria, occasionally in albuminuria, and where there is a tendency to atheromatous arterial degeneration. In these cases the lens usually breaks down more rapidly than in ordinary cases of senile cataract. Traumatic cataracts are usually the result of some rupture of the capsule which allows access of the aqueous humour to the lens fibres. The rapidity with which they develop depends chiefly upon the size of the wound, partly upon the age of the patient, and other circumstances. Cataractous opacity may follow blows upon the eye or orbit, without any evidence of rupture of the capsule; in these cases the nutrition of the lens is impaired by the concussion either through some disturbance in the choroid and ciliary processes or nervous reflex influence.

The causes of cataract are still to a great extent wrapped in obscurity. In many senile cases the changes may be looked upon as one of the expressions of tissue degeneration which are common in advanced life. We know how the skin loses its elasticity and wrinkles, and how the hair turns grey and falls off. The lens in embryonic life is developed from the epidermic layer of the blastoderm, and it shares the life history of the original structures from which it grew. Although we are not fully acquainted with the method of its nutrition, we know it must be carried on through the medium of the fluids which surround it, and that anything which impedes the due circulation of these fluids and the blood-supply from which they are derived must react upon the lens. In this way there can be no doubt the secondary cataracts of glaucoma and some inflammatory affections are produced. And it is probably from some change in the density of the media that surrounds the lens that diabetic cataract results. It is perhaps too, in this way, by disturbing the balance of endosmose and exosmose, that those persons are more prone to cataract whose face and eyes are constantly being exposed to high temperatures combined with brilliant illumination—such as bottle-makers, blacksmiths, furnace-men, &c. The former trade has a special tendency to produce cataract, which is well known to the men, and has furnished me with many cases.

Now, gentlemen, I come to the more practical part of the question—What are the symptoms, objective and subjective, of cataract? With what is the diagnosis likely to be confounded? Speaking now of ordinary senile cataract, age is the first point which attracts our attention. Degeneration of the lens-tissue as the result of uncomplicated senile changes is rare before forty-five years of age, although it may occasionally occur earlier, especially if there is, as is not unfrequently the case, an inherited tendency to the disease. I have at present under my care an old lady seventy years of age who suffers from senile cataract; two of her daughters, one thirty-nine the other forty-one, each suffers from incipient but well-marked cataracts. Again, some years ago, an elderly gentleman was under my care who suffered from cataract, his brother was the subject of the same disease, and two of his brother's sons, aged thirty-nine and forty-one, were both similarly afflicted. There can be no doubt, then, that it is a malady which shows strong hereditary tendencies. Well, then, gentlemen, when a patient advanced in years comes to you and complains of failing vision, especially for distant objects, the symptoms being unaccompanied by pain in the eye or head, and there having been no history of any kind of inflammatory affection, your first suspicion will be of cataract. Your suspicions will be materially increased if the patient complains of seeing worse on a bright day, and better towards twilight and dusk. If you give him type to read, he will probably turn his back to the window and try to assist himself by shading his eye with his hand. He may complain of halos round lights or of their looking distorted or drawn out, perhaps even of monocular polyopia. It may seem superfluous to explain the *rationale* of these symptoms, because some of them are obvious. The bright light contracts the pupil, leaving a comparatively small opening in an already hazy lens. In nuclear opacity, therefore, the sight will be much interfered with, as it occupies the part of the lens opposite the pupil; in cortical cataract much less so, as only the peripheral parts are affected; in some cases a contracted pupil may even help sight. The distortion of lights and halos is produced by changes in the refrangibility of the lens, the result of alteration in its density; and the polyopia is the result of transparent passages being left in the cataractous lens, each such passage producing a faint image of its own. Although advanced cataract can generally be diagnosed objectively at once without difficulty, in the earlier stages it is not always so easily detected. Where there is doubt use should be made of oblique illumination, and in still more doubtful cases the pupil should be dilated with atropine. In this way we shall be able to clear up all doubts as to the nature, condition, situation, and probable rate of development of the cataract. This method of examination, together with the use of the ophthalmoscopic mirror, will further enable us to determine if the cataract is complicated with other diseased conditions, a point of much importance when the advisability of an operation is in view. At an early part of this lecture I stated how at first sight the greenish-grey appearance of the lens, which is natural in advanced life and is more marked in some diseased conditions, might be mistaken for cataract. Oblique illumination dispels any doubt in these cases, and the clear red reflex from the fundus when the ophthalmoscopic mirror is used confirms this proof. Patches of opacity in the lens, when viewed by the mirror alone, appear as dark objects with the red reflex of the fundus as a background. This phenomenon, which is clear and unmistakable, is owing to the reflection of light from the fundus being obstructed. It occurs equally with opacities in the vitreous chamber, but these are not, when care is taken and oblique illumination used, very liable to be mistaken for opacities in the lens. Indeed there are few or no maladies which can easily be mistaken for cataract when proper precautions are used; but cataract is so frequently complicated with other conditions, and these may play such an important part in lowering vision and influencing the prospects of an operation as to deserve our greatest attention. Lenticular opacity is liable to occur in glaucoma, in iritis after synechia have taken place, in high degrees of myopia, after detachment of the retina, in the final stages of retinitis pigmentosa, and other conditions. I may perhaps best clear up the difficulties which beset the diagnosis of a case of cataract by stating the symptoms we should expect to be present in an uncomplicated case, and afterwards referring to the inferences which may be drawn from any departure from these lines. In an ordinary case of uncomplicated cataract, the result of senile changes only, we should expect, first, that there should be an absence of any signs of diabetes, albuminuria, or other blood contamination. Locally there should be a well-defined round and active pupil, both to direct and indirect stimulation. The loss of sight should be only in proportion to the visible opacity in the lens. This is a symptom which it is difficult to estimate without considerable experience, as it is liable to much variation. The field of vision should have undergone no diminution of its area. The tension of the eye should be the subject of the most careful examination, and any hyper-tonicity should lead to a minute investigation of the early symptoms and history of the disease. When a case of cataract, gentlemen, presents all these favourable symptoms, we may look hopefully to a successful issue, but any departure from them, however slight, should make us give a guarded prognosis. To some of these points I shall, however, refer again.

(To be continued.)

HOSPITAL SUNDAY in Leeds was held on the 21st inst., when collections were made in the various churches and chapels of the town and district.

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TWO CASES OF

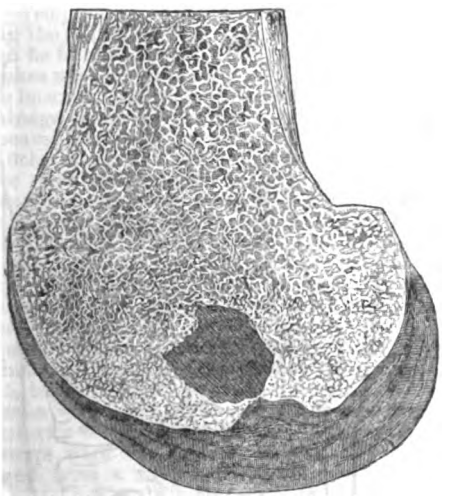
GUNSHOT INJURY IN THE NEIGHBOURHOOD OF THE KNEE-JOINT,

WITH LODGMENT OF THE PROJECTILE IN THE CONDYLES OF THE FEMUR.

BY SIR WILLIAM MAC CORMAC.

THE interesting case reported by Dr. MacGillivray in THE LANCET of December 12th, 1885, where he successfully removed half an Enfield bullet which had remained lodged in the internal condyle of the femur for thirty years, and Professor Longmore's valuable comments thereon in THE LANCET of January 2nd, 1886, induce me to publish notes of two cases recently under my care, in each of which a bullet had remained for some time lodged in the condyles of the femur. Dr. MacGillivray's case illustrates the fact that a bullet lodged in bone is apt to produce mischief sooner or later, and that after even protracted intervals of quiescence inflammation recurs, abscess forms around the bullet, and adjacent structures may become seriously implicated. This happened notably in one instance under my own observation, where a man who had been shot in the

FIG. 1.



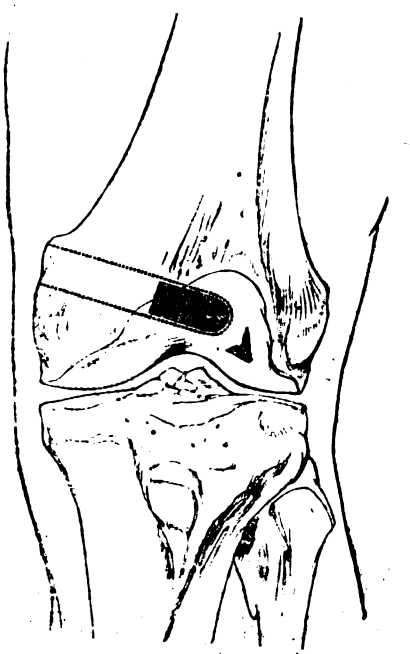
Section of femur, showing a bullet which had lodged in the condyles for fifteen years.

sacrum during the first New Zealand war suffered at intervals great pain and distress from abscess and exfoliation of bone. The bullet could not be felt at the time, and it was not till an interval of thirty years had elapsed that the ball was discovered and extracted, the patient subsequently making an excellent recovery. This course I believe to be the rule in such cases; but the converse may occur, and of this a typical instance is recorded in the third volume of the "Surgical History of the War of the Rebellion," p. 372. Lieutenant Blake, aged twenty-five years, was wounded at Antietam in 1861, while kneeling to stop bleeding from a comrade, by a shot which, after traversing the elbow, entered the outer side of the left knee-joint. On examination the probe is stated to have freely entered the cavity of the joint, but no bullet could be found. He was sent to Boston, where he came under the care of Dr. Mason Warren. Both the knee and elbow-joints did perfectly well, and after two months the patient could get about. He recovered the movement of both joints, and could walk without any sign of lameness, the ball still remaining in the knee. He continued actively engaged in his business, suffering no kind of inconvenience until fifteen years later, when he was attacked with pneumonia, of which he died, the bullet having remained harmlessly in the outer condyle all this time. A necropsy was made, and I saw the specimen thus obtained in the Army Medical Museum at Washington. It is a most curious one. The ball is seen in the section completely fixed in the bone, without a trace of inflammatory disturbance about it. The bone is everywhere in direct contact with the bullet. There is no layer of granulation tissue or cavity. The articular cartilage covering the end of the femur is quite smooth and unchanged, except just over the bullet, where there is a cicatricial depression. At this point the bullet is not more than a line distant from the surface. (Fig. 1.)

The notes of the two cases following were taken by Mr. H. Duncan and Mr. E. Solly, and to the latter I am indebted for the admirable drawings showing the position of the bullet in each case, as well as for the drawings of the bullets themselves.

CASE 1. *Gunshot-wound of the condyles of the left femur.*—Arthur A——, aged thirty, an ex-officer in the French army, was admitted into St. Thomas's Hospital on June 4th, 1885, and discharged on June 26th. On Dec. 23rd, 1884, the patient received a bullet-wound from a Martini-Henry rifle on the inner side of the left thigh, just above the knee. He says it was fired from a distance of about eighty or ninety yards. He was out, he told us, with a French comrade on a hunting expedition in Senegal, on the West Coast of Africa, collecting wild animals to send to Europe for the Zoological Gardens. On one occasion they came unawares upon a lion, and the Frenchman, it seems, fired too soon from excitement, and shot A. A——, instead of the lion. He felt a "dull thud" on the inner side of the knee; blood escaped freely, which he tried to staunch, while his black servants went for help.

FIG. 2.



Lower end of left femur. The length and direction of the bullet track and the position of the bullet are indicated.

A doctor arrived, who, after probing the wound, declared the bullet must have fallen out, and the next day after the accident he was carried to the French military hospital at St. Louis, on the coast, and remained there from Dec. 24th, 1884, to May 4th, 1885. While in the hospital the knee became much swollen, he suffered great pain in it, and had several attacks of fever, the temperature rising, he stated, to 105°. A wire splint was applied. The wound continued to discharge freely. The knee became flexed and fixed, and continued very painful and swollen. From all this the joint would certainly appear to have been implicated. The wound was many times probed, and an exploratory incision was also made, but the bullet could never be detected, the surgeons declaring there was no bullet in the limb. Finally, the man was told that in order to save his life it would be necessary to amputate the limb. Fearing to have it done on the spot, he decided, contrary to the advice of the doctors, to sail for home, and came over to England in May, being admitted into St. Thomas's Hospital on June 4th. During the voyage home he greatly improved in general health.

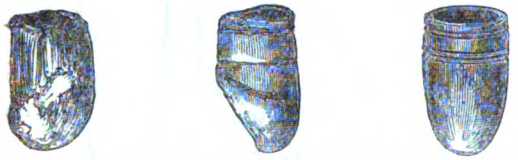
On admission, a sinus was found opening just above the

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internal condyle of the left femur, a probe, passed about two inches downwards and outwards across the condyles, tending towards the cavity of the knee-joint. The knee was quite stiff, and the parts around it swollen. He did not complain of pain, except on movement. In accordance with what he had been told when he left the African coast, he came to the hospital fully prepared to have his thigh amputated. I probed the sinus, and detected a body which I believed to be the bullet. (Fig. 2.) A Nélaton's porcelain probe was then passed in, and on withdrawal was found to be distinctly marked with lead.

June 6th.—Ether was administered, and, an Esmarch bandage having been applied, a director was passed into the sinus and an incision made down to the bone, the opening in which was sufficiently enlarged with the mallet and chisel. After some difficulty the bullet was then seized with a pair of toothed bullet forceps and extracted. A drainage-tube was inserted, and the wound, having been washed out, was dressed antiseptically with iodoform gauze. The dressings were applied before the compression was taken off, and on removal of the Esmarch tourniquet a considerable amount of bleeding took place, which soaked through the dressings and necessitated the opening up of the wound, which was then packed and fresh dressings applied. The limb was put up in a long outside splint, a MacIntyre not having been got ready. The bullet, of which a drawing is given (Fig. 3), weighed 194 gr., was about $\frac{11}{16}$ in. long and $\frac{7}{16}$ in. in diameter. It presents longitudinal striæ, such as might be caused by its passage down a rifle-barrel, but is otherwise comparatively little changed in shape. It is not nearly so large as the ordinary bullet for a Martini-Henry rifle. In Fig. 4 the bullet extracted in the second

FIG. 3. FIG. 4. FIG. 5.



Bullets removed in the cases of A. A—— and R. L——, together with a similar ball from an unexploded cartridge.

case, very much resembling that from the first, is represented; and in Fig. 5 a similar ball from an unused cartridge.

7th.—Patient very comfortable. The long outside splint changed for a MacIntyre. From this date he progressed perfectly favourably till June 24th, when he was discharged with a small sinus, still unclosed, in the track of the bullet. Passive movements had been resorted to and the motion of the joint gradually improved. On his discharge he could flex it nearly to a right angle.

Arthur A—— was again admitted for a short time on Oct. 3rd. The sinus in the track of the bullet persisted. This was opened up, but no dead bone discovered, and the patient was again discharged on Nov. 17th, the sinus being then almost closed. On the 12th of January last I had an opportunity of again seeing my former patient. The movements of the joint were practically perfect, the sinus was closed, he suffered no pain or inconvenience, and could walk long distances without fatigue. He was, in short, perfectly well; he had married since he left the hospital, and intended to sail for Australia the following day.

CASE 2. *Gunshot wound of the condyles of the right femur.*—R. L——, aged twenty-five, a brother of one of my dressers, served as a gentleman trooper in Methuen's Horse during the late Bechuanaland expedition. On the afternoon of Sept. 11th, 1885, while sitting in his tent at dinner, with a mess-tin between his knees, a service revolver was accidentally discharged at a distance of about four or five feet, the bullet, weighing 240 grs., and measuring $\frac{3}{4}$ in. by $\frac{7}{16}$ in., having previously traversed the mess-tin, entered just above the right knee on the inner side, close to the adductor tubercle, and passed almost directly outwards. (See Figs. 6 and 7.) The patient was conveyed four or five miles in a "mealy" waggon to the hospital, keeping his knee flexed in the same position as at the time of the accident. He describes the pain felt at the moment of injury as resembling that which would be caused by a blow on the knee from a mallet. The amount of blood lost at the time or subsequently was but slight. On examination, however, soon after, by a surgeon, no foreign body could be felt, and neither pieces of clothing nor the bullet were discovered. The limb was placed in a splint, and dressed daily with carbolised oil and lint. The temperature was only once taken after the accident, when it was 101°. Two or three days afterwards the knee became swollen and very painful. The discharge was described as at first thin and red, subsequently it became whitish yellow. The patient was after a time conveyed to Cape Town, where he arrived on Oct. 3rd, and the next day he sailed for England, which he reached on Oct. 28th.

He was admitted into St. Thomas's Home on October 31st, and was next day examined by me. There was a sinus over the right internal condyle, discharging a small quantity of thin pus. The probe could be passed almost directly outwards, with a slightly downward direction, for nearly three

FIG. 6.

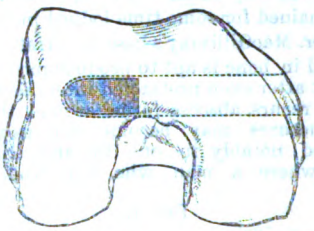
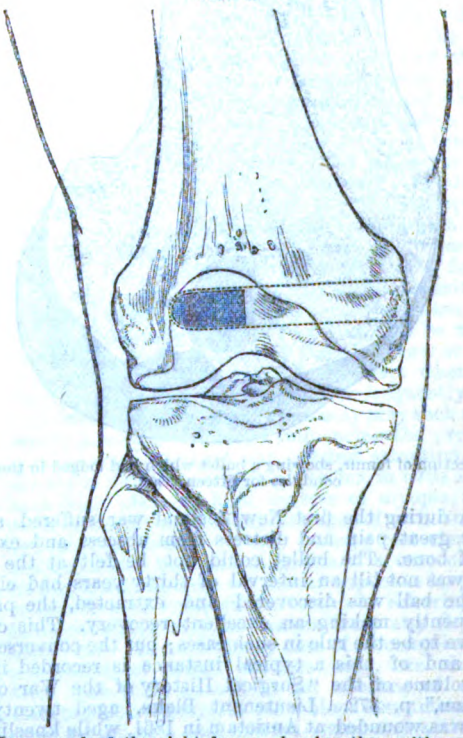


FIG. 7.



Lower end of the right femur, showing the position and direction of the bullet track in Case 2. (Half the natural size.)

inches. At the bottom the dull sensation of striking a bullet could be felt, and on introducing a Nélaton's probe the porcelain came out distinctly marked with the lead stain. There could be no doubt that the projectile was lodged in the external condyle of the femur, very close to its articular surface. The patella was movable, but the knee was painful, could only be very slightly bent, and the soft parts around the joint were infiltrated.

Nov. 2nd.—Ether having been administered and Esmarch's apparatus applied, I again introduced into the sinus a Nélaton's probe, and the porcelain on withdrawal was plainly seen to be streaked with lead. A vertical incision was then made over the posterior and inner aspect of the condyle for about 2½ in., having the wound in its centre, and extending down to the bone. From this the soft parts and periosteum

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were detached for about an inch around the opening made by the ball, which was then enlarged by the chisel and some pieces of bone removed. The projectile was now found firmly fixed in the cancellous tissue. By means of a pair of toothed forceps the bullet was speedily seized and withdrawn. A probe could now be passed into the interior of the bone for a distance of exactly 2½ in. from its surface, and the extremity must have reached nearly to the external aspect of the external condyle, while the bullet track could certainly not have been, at all events in some parts of its course, more than a quarter of an inch distant from the articular surface of the end of the femur. A double drainage-tube having been introduced, the wound was syringed out with carbolic acid solution of a strength of 1 in 40. The edges of the divided tissues were brought together by silk sutures, and the wound dressed with iodoform gauze and salicylic wool. A narrow wooden splint curved to the shape of the limb was applied posteriorly, and strips of Bavarian flannel soaked in plaster-of-Paris were applied anteriorly and laterally, the limb being bandaged to the splint from the foot to about half-way up the thigh.

3rd.—The patient has had a good night. Last evening's temperature was 100·8°, and this morning it is 100·4°. A slight oozing came through last night and a fresh dressing was applied.

4th.—Temperature last night 100·8°; this morning 99·6°. Wound dressed. It is looking healthy. New plaster-of-Paris splints were applied, and the wooden one was removed.

11th.—Temperature last night 100·2°; this morning 99°.

During the next week the patient did not complain of any pain, and he felt quite well. The temperature was normal. The stitches were removed on the 8th, when the wound was found to be united except in the position of the former sinus. The drainage-tube was gradually shortened as the bullet-track became filled with granulations. The patient got up on the 16th. From first to last he had little or no inconvenience. The joint under the influence of passive movements was becoming less swollen and supple, and he left for home on Nov. 28th, able to walk a long distance without the least difficulty. The sinus was quite superficial and on the point of closing. In a letter from Mr. L——, dated Jan. 14th, 1886, he says: "I can do as much walking and riding now as I ever did, and bend my right leg as far as the other." The bullet, of which a drawing is given in Fig. 4, was flattened somewhat at its extremity; it weighed 340 grains. A similar bullet, weighing 245 grains, is shown in Fig. 5, taken from an unexploded cartridge.

Remarks.—The two cases recorded are striking from the similarity of the injury in each. The bullets causing the damage were almost alike in size, although one was discharged from a rifle and the other at close quarters from a pistol. The ball traversed the expanded portion of the condyles transversely in both cases from within outwards, in each instance very near to the articular surface, lodging in the bone in both, and in both remaining undiscovered for a considerable time. In both, too, there were symptoms of inflammation in the knee-joint, some pain, fever, swelling, and subsequent stiffness, which passed off. It is difficult to believe that in either the injury could have been wholly extra-articular. Conical bullets such as these, and capable of penetrating the bone to so considerable a depth, would be very likely to cause fissures which would almost certainly extend to the joint surface, while the continued presence of the foreign body could scarcely fail, one would suppose, to excite articular mischief. Nevertheless, in neither of these two cases has any permanent ill result followed, and the function of the joint is in both perfectly restored. There is a strong presumption, without, I admit, any positive proof, that the knee-joint was implicated to a greater or less degree in each of these cases, yet recovery has ensued with a freely movable articulation, and certainly without in either case any special advantage in regard to treatment. Perhaps, after all, a gunshot injury of the knee may not be always so disastrous as it was at one time assumed to be. Langenbeck told me he had met with at least one hundred cases of penetrating wound of the knee-joint followed by recovery during the Franco-German war. Many cases of recovery after a bullet had traversed the joint and fractured the bones are recorded by the Surgeon-General of the United States army; and then there are the remarkable results published by Bergmann and Reyher obtained after antiseptic occlusion in the Russo-Turkish and other campaigns. During the American war 338 cases of unmistakable fracture involving the bones of the knee-joint made good recoveries after an altogether expectant plan of treatment—that is, both life and limb were preserved. Many of the cases besides the one which I have first quoted, are most remarkable, but for the details I must refer to the Surgeon-General's report. A conservative treatment, whenever it is possible to adopt it, is probably by far the most promising one for gunshot injury of the knee-joint, and it has proved the most successful, especially in recent campaigns. Excision of the knee for gunshot injury in time of war has hitherto been disastrous, while amputation has been very fatal also.

SYMMETRICAL SYNOVITIS OF THE KNEE IN HEREDITARY SYPHILIS.

By H. H. CLUTTON,
ASSISTANT-SURGEON TO ST. THOMAS'S HOSPITAL.

THE fact that the condition of which the title of this paper gives the most prominent feature has been little noticed in our surgical literature tempts me to make a few remarks as to its clinical features. I have myself but little doubt that it is due to hereditary syphilis, for the subjects of this symmetrical synovitis who have come under my observation have always given other evidence, either past or present, of the disease. My own cases, of which the notes have been carefully kept, are seven in number. Mr. Nettleship, who has also taken a great interest in these cases, has kindly given me the notes of three others, which I have myself seen at the time they were under observation in the eye department at St. Thomas's Hospital. Mr. Lawford has also supplied me with another case during the last six months, which brings the total to eleven. I have, I am sure, seen many more of which I can find no accurate record; and I well remember, some years ago, soon after I began to take an interest in this subject, that Dr. Greenfield, who was then my colleague, drew my attention to several cases which had occurred in his practice. It must be remembered that my own cases were all out-patients, one or two only being admitted for a time to test the efficacy of splints and rest. The difficulty of keeping any notes in the out-patient room must be my excuse for this deficiency. The disease is, I am sure, a rare one, so that only a few cases will come under the observation of any one surgeon; for since my attention has been directed to this condition I have been on the look out for such patients, and have only met with quite a small number.

The average age of the patients recorded in the accompanying table was about thirteen, but they were mostly between the ages of eight and fifteen. The predominant features of the disease were the symmetry of the affection, the freedom from pain, the long duration of the symptoms, and the free mobility of the joints on passive movement throughout the course of the disease. Its symmetrical character first led me to look for a constitutional cause, and there was no difficulty in seeing that the patients were the subjects of hereditary syphilis. I do not mean to say that no other constitutional diseases could possibly have produced such a symmetrical condition, but I do think that other joints besides the knees would probably have been at some time and in some of the cases affected in a similar manner if such diseases as rheumatism, gonorrhœa, or gout had been the cause. I have never seen both knee-joints fill with fluid, causing scarcely any pain or discomfort, whilst other joints remain quite free from any signs of inflammation, except in cases where there was distinct evidence, either past or present, of hereditary syphilis. The patient generally complains of stiffness in one knee, which is then found full of fluid, but not tense: on careful examination the other knee is also found to contain fluid, but not to the same extent as the one for which advice is sought. So that it is fair to assume that the knee to which attention has been directed by the patient has been affected some little time before he has felt any inconvenience. In a few instances there has been an interval of some months before the second knee has given the ordinary signs of synovitis; and in one case (No. 5 in table), which was that of the patient aged twenty, there was an interval of two years. All the other joints have been at the same time carefully examined, to make

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sure that such an insidious chronic synovitis has not been overlooked, but no joint affection could at any time be discovered elsewhere; nor was there any history pointing in that direction in any of the cases which are here recorded, except in No. 11 in the table. The swelling in some of the cases was accompanied by considerable thickening of the synovial membrane; and in one instance (No. 8) recorded by Mr. Nettleship, the observation is made that in some places it gave the "impression of loose bodies in the joint." But in the greater number this swollen condition was not so noticeable a feature as in the synovitis which may occur as one of the later manifestations of the acquired disease. The chief part of the swelling in the cases now under consideration seemed to be produced by an increased quantity of synovial fluid. The joints were never tense, but gave a sensation of flaccid fluctuation, as if they were only half full of fluid. The bones in the immediate neighbourhood were not enlarged, and in only a small proportion of the cases was there any articular tenderness. Nodes were occasionally found, but generally some little time after the onset of the swollen joint and at some little distance from the affected articulation. The peculiarly chronic nature of the synovitis is still further shown by the fact that in all the cases referred to in this paper the swelling has remained with scarcely any alteration for from three to six months, and in one instance for twelve months. In one case (No. 10) the symptoms followed a more acute course, but were distinctly attributed to a fall on the knees a week previously to the admission of the patient. Treatment by splints and rest in bed seemed to influence the course of the disease very slightly, for those that were treated in this way were as slow in getting well as those that had no local treatment whatever, for as soon as the splints were removed the effusion returned. The ultimate result in all the cases that came under my observation was the perfect recovery of the joints, the most important part of the treatment appearing to be the exhibition of anti-syphilitic remedies—mercury and iodide of potassium; but these drugs had not the same marked effect that they have in the acquired disease.

The facts as to hereditary syphilis are as follows. Of the eleven cases, active keratitis was present in nine, and in one other the cornea bore traces of a former attack, so that in only one had the cornea escaped. Five had the central incisors marked in the manner characteristic of the disease. Four had nodes on the tibiæ, and two were afflicted with absolute deafness of recent origin. The latter symptom was in each case devoid of any other obvious cause, and must, I think, be attributed to hereditary syphilis. Thus, every one of the cases quoted had two or more of the symptoms which, taken together, may be fairly held to establish the presence of the disease in question. Less reliable symptoms, such as those presented by the features, have not been mentioned; but they existed in most of the children who came to the out-patient room with symmetrical synovitis of the knee. The family history is proverbially difficult to obtain in this department of the hospital, and although in a few instances it tended to confirm the opinion already formed, it may be stated generally to have been of a negative character. I do not think that this disease has any relation to epiphysitis, which is so common in syphilitic infants, for there was no apparent enlargement of the bone, as has been already stated, and the swelling was quite uniform in outline. In epiphysitis the swelling is always more or less unilateral, for although the whole joint may be enlarged by consecutive synovitis, one side will generally be found larger than the other, with increased tenderness on the side affected; whereas in the symmetrical synovitis, to which allusion is here made, the joint is uniformly enlarged, and the synovial membrane appears to be the only part affected.

ELEVEN CASES OF SYMMETRICAL SYNOVITIS OF THE KNEE.

No.	Sex.	Age.	Joints.	Duration of symptoms.	Evidence of hereditary syphilis.	Family history.
1	M.	10	Both knees.	4 months.	Double interstitial keratitis; typical teeth; ostitis of both tibiæ.	No notes.
2	F.	8	Both knees.	6 months.	Double interstitial keratitis; ostitis of one tibia.	No history.
3	M.	11	Both knees.	6 weeks, and then ceased attending.	One typical central incisor; nodes on tibiæ; snuffles and skin eruptions in infancy.	Mother had two stillborn children before patient.
4	F.	9	Both knees.	3 months.	Interstitial keratitis of one eye of two weeks' standing, with no further notes; one typical central incisor.	No history.
5	F.	20	Both knees (two years apart).	6 months each.	Remains of double interstitial keratitis; ostitis of both tibiæ, which are very large.	No history.
6	F.	10	Both knees.	7 months.	Double interstitial keratitis; typical teeth.	Father syphilitic; no evidence in family beyond patient.
7	F.	15	Both knees, and right articular tenderness.	6 months.	Double interstitial keratitis under Mr. Nettleship; incurable deafness of one month's standing.	No history.
8	M.	14	Both knees, articular tenderness.	3 months.	Interstitial keratitis; typical teeth; deaf.	No notes.
9	M.	12	Both knees.	2 months, and probably more.	Interstitial keratitis.	Well-marked history of mother being infected, and then having miscarriages.
10	F.	8	Both knees acute and painful one week after fall on knees. One joint tapped. Recovered with good joints.	4 months.	Double interstitial keratitis.	Doubtful history.
11	M.	21	Both knees. History also of both ankles having been swollen at commencement.	12 months.	Double interstitial keratitis for nine months; still under observation.	Patient is third child; fourth, fifth, sixth, and seventh children died in infancy; eighth under observation for interstitial keratitis.

To recapitulate in a few words the principal features of the condition which was demonstrated by these few cases, one would say that the synovitis was symmetrical, affecting only the knees, that was of a chronic and painless character, and that all the patients were the subjects of hereditary syphilis. I can offer no satisfactory explanation of the facts here recorded, but must content myself with drawing attention to a few clinical symptoms. At the same time I would like to point out that if the condition which is now under consideration be really due to hereditary syphilis, the similarity between interstitial keratitis and this symmetrical synovitis is so marked as scarcely to require any lengthened explanation. Both knees, like the eyes, are, in my experience, sooner or later affected, and often with an interval between the commencement of the symptoms in each joint. Both diseases are exceedingly chronic, and produce little or no destructive changes in the tissues involved, neither suppuration nor adhesions having occurred in any of the cases that came under my observation. They are also both liable to relapses, and not very amenable to treatment. The age of the patients is another and striking point of similarity, for

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seven out of the eleven were between eight and twelve years of age. In two cases the symptoms arose at a much later date, but this also occurs in interstitial keratitis, so that even in its rarer forms it corresponds with that disease in this particular—that of the age of the patient. I am at a loss to explain why the knees should be affected in preference to other joints. It is probable that, with further observation, the knees will not be found to occupy this solitary distinction, and that other joints will be seen to be affected in a similar manner. But up to the present time I have not seen this chronic symmetrical synovitis, which appears to be associated with hereditary syphilis, in any other joints besides the knees. That it should be symmetrical is only what one expects from our knowledge of the similar manifestations of the disease at this period of life.

THE NEUROTIC TREATMENT OF CATARRH.[1]

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ALTHOUGH by some writers the meaning of the word "catarrh" is extended to include various affections which are believed to have similar origin, the term is in itself simply a word-picture of that familiar complaint which the Greeks called "coryza," and which we know as a "cold in the head." Too familiar to most of us is this annoying condition. A severe cold hinders effective work for several days, makes the sufferer miserable while it lasts, depresses his vital energy, and sours his temper; it leaves him with an increased predisposition to take cold again. Nor is this all; it is too often the starting-point of chronic or even of acute disease. A formidable list might be made out of the sequelæ of catarrh; it would include chronic pharyngitis and enlarged tonsils, deafness from Eustachian obstruction and altered conditions of the tympanic membrane, muco-purulent collections in the middle ear, and in infants posterior basic meningitis leading to death or idiocy, chronic laryngitis with hoarseness, chronic bronchitis, and in neurotic subjects asthma, and last, but not least, through the permitted invasion of the tubercle bacillus, phthisis.

The present treatment of catarrh cannot be considered satisfactory. It rarely succeeds in cutting short the malady or in alleviating to any great extent its discomforts. It is essentially a diaphoretic treatment, insisting on confinement in warmed rooms, swallowing of hot liquids, and use of hot-water or vapour baths, or of the Turkish bath. The result aimed at by these various measures is diaphoresis; in plain English, the object is to arrest the flow from the nose by causing a flow from the skin. The reasonableness of this is about on a par with the action of one who should seek to have all the street lamps lighted in order to check the flow of gas into his house from a leak in his pipes; the plan might to some extent be successful, but we should not think highly of its wisdom, and should ask whether the tap had been turned at the meter. Can we in any way directly arrest the flow in catarrh? The answer to this depends upon a clear understanding as to its nature. If we ask the question, "What is catarrh essentially?" we must reply, "Catarrh is a neurosis, in which the vaso-motor system is largely concerned."

Nothing can be regarded as more certain than that the onset of catarrh is due, in a very large number of cases, to an impression of cold on the surface of the body, owing to draughts, insufficient clothing, or the chilling evaporation from damp clothes. An impression is made upon the cutaneous nerves, and is by them transmitted to the nerve centres. The effect is not immediately manifested, but after a few hours a general chilliness of the surface is experienced, clearly due to a general vaso-motor spasm of the cutaneous vessels, and accompanied by flying pains and aches in the limbs, which are probably really central and not peripheral, and due to disturbed vascular conditions of the nerve-centres themselves: at all events, a full dose of bromide very rapidly puts an end to them. At first the vessels of the nose, throat, and air-passages share in the spasm, and for a while the throat feels dry from the diminished secretion. But before long these vessels pass from a condition of spasm into a condition of paralytic dilatation, and then commences the flux of liquid, copious and clear at first, but gradually growing more opaque as cellular elements become mixed with it, and finally diminishing. In catarrh primarily nasal the affected arteries are the terminal branches of the internal maxillary, the nasal or sphenopalatine, which supply the mucous membrane of the nose. Other offshoots of this artery may also be affected, and it is probable that the acute earache which is so common in young children in the early stage of a catarrh, long before any effects of Eustachian obstruction are manifested, is due to a tense hyperæmia of the drum membrane resulting from a paralytic dilatation of the tympanic branch of the internal maxillary. Nor is the congestion limited to this artery and its subdivisions; it may spread to other branches of the external carotid, and the facial may be felt forcibly beating. One consequence of the dilatation of the nasal branches of the internal maxillary is congestion of the highly vascular mucous membrane covering the inferior turbinated bones, the result of which is the production of a condition of extreme hyperæsthesia of this part, expressing itself partly by local sensations of tingling, and partly by the reflex neurosis known as "sneezing." The hyperæsthesia is often so great that a simple draught of cool air will at once excite this reflex process.

There is reason also to believe that an exaggerated sensibility of the mucous membrane covering the turbinated bones may not only be a consequence of catarrh, but may also rank among its causes. It is well known that in some persons the inhalation of air which contains dust of powdered ipecacuanha or pollen of certain grasses excites sneezing, asthmatic symptoms, and catarrh. This asthma is certainly a neurosis excited by the local irritation, and it is probable that the catarrh is of the same nature. Again, in cases of infectious catarrh, under which head may be included influenza, measles, and whooping-cough, it is not unlikely that the process is similar. Many ordinary catarrhs are distinctly contagious, as is known in every household; and the contagium, whatever it be, probably causes at first local irritation and reflexly catarrh. Even in health a catarrhal flow will often be induced in susceptible persons by going out of a warm room into a very cold atmosphere on a wintry day.

The facts just quoted are sufficient to suggest from analogy the possibility of some cases of ordinary catarrh being due to "germs" of some kind. Of this nothing is certainly known. The chief arguments in its favour are the contagiousness of some catarrhs, the benefit which sometimes is obtained from the local use of antiseptic sprays or lotions containing quinine, salicylic acid, iodine, and similar substances, and from inhalations of camphor, and, lastly, certain observations on the results of experimentally inhaling the air escaping from sewer-ventilators, which were thought to point in this direction. These arguments have no doubt a certain value, but to ascribe all catarrh to germs, as has recently been suggested, is surely to fly in the face of universal experience as to the connexion between an external chill and the catarrh which shortly follows it.

If it be true that catarrh is a reflex neurosis, it is clear that a treatment which is essentially diaphoretic must miss the mark. It is to neurotic remedies that we must look for alleviation and cure. The indications for treatment are three: we need to soothe the reflex disturbance of the central nervous system, to quiet the local congestion and hyperæsthesia of the nasal mucous membrane, and to arrest the flux, if it have already commenced.

The first indication may be to some extent met by the administration of opium. It is to the sedative influence of this drug on the nervous system, rather than to any diaphoretic action which may result, that Dover's powder owes its reputation in the treatment of catarrh. Laudanum sometimes is distinctly successful in arresting a cold. But the other effects of opium make it not altogether a desirable remedy. Chloral hydrate is free from these objectionable effects; but both opium and chloral are dangerous drugs, and they cannot be pushed with safety. Bromide of potassium is, however, free from these objections; it is by far the safest nervine sedative which we possess. Professor Wood says: "No case of acute poisoning in man with the bromide of potassium has been reported, and I have never seen a single dose of it produce any obvious effect." A case is recorded in which an epileptic idiot took at a single dose no less than two ounces and a half of this salt. No drowsiness was produced, and

[1] Read before the Harveian Society, Feb. 4th, 1886.

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the only apparent effect was that the fits, which until then had been very frequent, ceased immediately, and had not returned even ten weeks later. The distinctive physiological action of bromide is to depress the reflex activity of the central nervous system—precisely the action required in the treatment of catarrh; and its safety makes it possible to give the drug in such doses as shall produce a distinct physiological effect.

The second indication is to reduce the local congestion and hyperæsthesia of the nasal mucous membrane. Relief may be given in this direction by simply closing the nostrils, or impeding the access of cold air by inserting a plug of cotton-wool. A correspondent of one of the medical journals is enthusiastic over the magical effects of a camomile flower inserted into the nostril! Distinguished authorities in neurology have not disdained to turn their attention to this point. Dr. Ross tells of the relief he has himself experienced, by painting the nasal mucous membrane with simple vaseline, and Dr. Ferrier has suggested the sniffing of a powder by which the locally sedative effects of morphine and bismuth are produced. The former method is simply protective, like the cotton-wool. Ferrier's powder is certainly of some curative value, but its application is extremely unpleasant in the results to clothing, when the moistened powder falls from the nose, a chalky cream. The indication can now be much more satisfactorily and scientifically met by the use of cocaine. This drug both causes local anæsthesia and diminishes local congestion; hence, it affords exactly what we require. I have found that the occasional painting of the mucous membrane, especially over the inferior turbinated bone, with a 4 per cent. solution of hydrochlorate of cocaine by means of a camel's hair brush gives instant relief, and on one occasion, at all events, this measure sufficed completely to arrest a cold without the aid of any other remedy whatever.

The third indication is to arrest the flux if it have already commenced. Here again we are fortunate enough to possess a remedy which exactly fulfils the indication. The first obvious physiological action of belladonna is to produce dryness of the throat, due to suppression of the secretions of the salivary and mucous glands. This is exactly what we require in the treatment of catarrh, and several observers have pointed out the advantage of using this drug, but there does not seem to be a general recognition of the fact. And belladonna is a comparatively safe drug; not that it can be used with the freedom of bromide, but that it gives distinct indications long before the development of poisonous symptoms. The dryness of the throat is almost invariably the first effect, but dimness of near vision, dilatation of pupil, and flushing of the face will be observed before any cerebral excitement will occur; and the poisonous properties of belladonna are much less dangerous than are those of opium, which depresses the respiratory centre.

My plan of treatment for the arrest of catarrh is as follows. I keep a strong solution of bromide (1 in 3) and a bottle of tincture of belladonna (B. P.). When I am conscious of having taken cold, I take two to three drachms of the bromide solution in a small glass of water—that is to say, forty to sixty grains of bromide. I repeat this dose in six hours, and, if necessary, take a third dose at a similar interval. Meanwhile, as soon as a flux commences, I take twenty drops (equivalent to fifteen minims) of the tincture of belladonna in a little water every hour or two until the throat feels somewhat dry. The painting of the nasal mucous membrane with cocaine solution gives great relief, and powerfully contributes to the cure if the catarrh be severe. Since I hit upon this plan I have never failed rapidly to arrest my own catarrhs, nor have I failed in any instance in which I have myself been able to superintend the administration of the remedies.

The following case may serve to illustrate the good which may be effected even when it is not desirable to push the remedies so decidedly. I was telegraphed for by the lady superintendent of the Highgate convalescent branch of the Hospital for Sick Children, of which I have the medical charge, to see a child who was dangerously ill. I found it to be a very rickety girl, aged four, with a highly deformed chest. A stream of catarrhal secretion was flowing from both nostrils, dyspnœa was marked, and the temperature was 101°. On examination of the chest, I found good resonance everywhere, but an abundance of catarrhal râles. I ordered that the chest should be rubbed with turpentine liniment, and that the child should take eight grains of bromide and ten minims of tincture of belladonna every four hours. Forty-six hours later I saw this little girl again, and the note I made was this: "No nasal catarrh; no râles in chest; temperature normal; breathing easy; child seems quite well." Since my previous visit she had been sick once, which had no doubt aided in clearing the bronchial tubes, but the complete arrest of secretion was very remarkable. The great danger of acute bronchitis in rickety children with deformed chests being well known, it is not improbable that in this particular instance a life was really saved by the adoption of a neurotic treatment of catarrh.

NOTES ON DIGESTIVE FERMENTS.

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I.—PEPSIN AS A DIGESTIVE AGENT.

THE test for pepsin adopted in the British Pharmacopœia of 1867 was that two grains in an ounce of distilled water, acidulated with five minims of hydrochloric acid, should dissolve 100 grains of hard-boiled white of egg in thin shavings when digested together for about four hours at a temperature of 98° F. The test instituted by the British Pharmacopœia of 1885 is very different. We are told that two grains in an ounce of distilled water, to which five minims of hydrochloric acid have been added, form a mixture in which at least 100 grains of hard-boiled white of egg passed through wire gauze of thirty-six meshes per linear inch, and made of No. 32 brass or copper wire, will dissolve on their being well mixed, digested, and well stirred together for thirty minutes at a temperature of 130° F. (54·4° C.). It will be seen that in both cases the quantity of pepsin taken is the same, and that the amount of white of egg to be dissolved remains unaltered. There are, however, at least three points in which the tests do not accord. The time allowed by the 1867 test is "about four hours," whilst in 1885 it is limited to thirty minutes. The temperature adopted in 1867 was 98° F., whilst now it has gone up to 130° F. In 1867 we cut our hard-boiled white of egg into thin shavings, but in 1885 we adopt a more elaborate method, and pass it through meshes of a certain size and shape. The necessity for well stirring together the mass is now recognised, whilst formerly it was left to the judgment or taste of the investigator. The difference between the two Pharmacopœias in regard to the tests for pepsin may be summed up shortly. In the new Pharmacopœia the time is decreased to one-eighth, whilst the temperature is raised 32°. This elevation of temperature represents an increase of 16 per cent. in digestive power, so that we lose 87·5 per cent. as regards time, and gain 16 per cent. on the temperature, the net result being that our standard is raised 71·5 per cent., for which too much gratitude cannot be shown.

The standard adopted by most authorities both on the Continent and in America is the quantity of white of egg which one grain will dissolve at the temperature of the body in four hours. In the early part of this year, being on a hospital drug committee, I had occasion to examine in this manner a variety of specimens of pepsin, and as the selection included nearly all the recognised brands the results are not without interest. It may be as well to state in the first place that the specimens were not selected in any way. They were not picked samples obtained from the manufacturers for examination, but were *bonâ fide* specimens bought at an ordinary chemist's shop, care being taken to see that the original wrapper was unbroken, and that they presented no indication of having undergone deterioration by age or exposure to variations in temperature.

The estimation of the comparative value of different preparations of pepsin, although simple in theory, is by no means easy in practice, especially if accuracy is desired. The essential action of pepsin is proteolytic—the conversion of proteids into peptones,—and this is usually taken as the test of the value of the specimen. The first point to decide is whether to use fibrin or egg albumen. Following the example of Dowdeswell and other authorities, and being not unmindful of the requirements of the Pharmacopœia,

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I employed white of egg. The eggs must be quite fresh, and should be boiled in a uniform manner. The best way is to boil the water first, then put the eggs in altogether and let them boil for ten minutes. If a shorter time be allowed, it will be seen that the white will not separate from the yelk nicely and cleanly. It will be found that on an average fifteen eggs yield 7000 grains of coagulated albumen, or perhaps a little less. Much depends on the state of subdivision of the white of egg. An attempt to obtain uniformity was made by pounding up together the whole mass after the removal of the membrane and yelk, and then rubbing it through a No. 30 sieve. This seemed to answer well, for when suspended in water and examined the particles were found to be uniform both in shape and size. The next question was the strength of the acid, and here again, following Dowdeswell, it was determined to use distilled water acidulated with 1 per cent. hydrochloric acid of sp. gr. 1·150. The specific gravity of the acid was ascertained in the ordinary way by a Westphal's balance, the observation being made at 15° C. The necessity for having beakers of the same size and shape was fully recognised, and the mixture was constantly stirred. The observations were made at a temperature of 38° C. (100·4° F.), that being approximately the temperature of the body. The beakers were maintained at a uniform temperature by placing them in a water-bath with a little jet of gas beneath. It was not thought necessary to use a gas regulator, as the themometer was carefully and constantly watched, and never varied more than a degree, or at the most a degree and a half. The test proposed was the quantity of coagulated white of egg digested by one grain of pepsin in four hours in eight ounces of 1 per cent. hydrochloric acid at a temperature of 38° C. It was thought that the activity of each preparation could be ascertained by filtering the liquid left at the expiration of the time selected, and then, after drying, weighing the residue left on the filter. The whole experiment was a failure, for the simple reason that what was left would not filter: the fluid positively declined to be filtered. It was put on the filtering-paper, and there it remained, hardly a drop passing through, even after standing twenty-four hours. It was not hurried in any way; it was allowed to take its own time about it, but the result was always the same. Different kinds of filtering-paper were tried, and an attempt was made to humour it by folding the papers in various fantastic devices, but it was all to no purpose, and it refused to budge a drop. Finally glass-wool was experimented with, but it would not even go through that, and the whole thing had to be abandoned in disgust.

This plan having failed, another, or rather a modification of this former, was adopted. The white of egg, instead of being passed through a sieve, was cut up by hand into long narrow, thin slips or slices. These pieces were not absolutely uniform either in shape or size, but as fifteen eggs were operated on at a time, and the whole mass was mixed up together, the error arising from this source could not have been very great. The weight of albumen taken for each observation was 1000 grains, as usual. The fluid was eight ounces of 1 per cent. hydrochloric acid of sp. gr. 1·150. The temperature was 38° C.; and the quantity of pepsin employed was one grain of each of the solid preparations and ten grains of those which were liquid. The observations in each case lasted for four hours. At the end of that time the liquid was filtered through muslin and carefully washed for thirty minutes with a small jet of distilled water. The muslin was then spread out on porous paper to absorb the excess of moisture, and allowed to remain exposed to the air at a temperature of 60° F. for twenty-four hours. The albumen was scraped off the muslin and carefully weighed. The figure so obtained was subtracted from the weight originally taken, and in this way the quantity of albumen dissolved by one grain of each preparation was ascertained.

Fifteen solid specimens of pepsin were examined, some of English, others of French, German, or American manufacture. They were all active, but in many the proteolytic power was very small. Only four would have come up to the standard of the new British Pharmacopœia. The name is evidently no guarantee of purity, for a specimen made by a well known firm was represented by the figure 871, whilst another sold under an equally well known name, had to be satisfied with an award of 162, a state of affairs which is unsatisfactory. The same pepsin is often sold under different names, according to the amount of impurity added. I have before me a table showing the exact quantity dissolved by one grain of all the best-known pepsins, but I do not think it would serve any useful purpose to publish it. Better by far that every medical man should make his own observations and form his own opinion. It may be doubted if the Pharmacopœial description of pepsin as "a light yellowish-brown powder" is a happy one, for the most active specimen was a preparation in scales. The pepsin usually supplied to hospitals is, I am sorry to say, of poor quality. In addition to the thirteen solid pepsins, I examined six liquid preparations, wines, essences, &c., and although ten grains were taken instead of one, the results were unsatisfactory, and the only conclusion I could arrive at was that they were not very reliable, although none of them were absolutely inactive. Having used the carica papaya largely in the treatment of various forms of dyspepsia, I determined to try it against the best pepsins, but found that under the conditions already indicated it was decidedly inferior in activity. I examined in all six specimens of papaw obtained from trustworthy sources, but only two would have come up to the Pharmacopœia test. The best papain had about half the activity of the best pepsin. I do not say that in alkaline or neutral media the papains are not more active, but simply that, tested against the best pepsins and by the same methods, they do not give equally good results. Even in a neutral solution the best papain was not equal to the best pepsin in an acid solution. A papaw preparation which in a certain time dissolved 420 grains in an acid solution dissolved 476 grains in a ¼ per cent. carbonate of soda solution and 535 grains in a neutral solution.

No one can doubt that pepsin is a valuable therapeutic agent, and that it is of the greatest possible use in the treatment of many forms of atonic dyspepsia, flatulence, and gastralgia; but to obtain anything like good results it must be given in doses very much larger than those recommended in the British Pharmacopœia. To give only from two to five grains at a time is a palpable absurdity. The reason that such good results are obtained with pepsin in the treatment of infantile diarrhœa is that it is given in proportionately larger doses. To obtain good results in the treatment of dyspepsia two things are essential—first to test your pepsin, and then to give plenty of it.

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PERFORATING ULCER OF THE INTESTINE.

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PERFORATING ulcer of the intestine is essentially an acute disease, depending as it does upon a localised softening and disintegration of tissue resulting from a plugging of those vessels which run in and nourish the coats of this viscus. Although from the length of time the symptoms may continue, and because of a proneness of the ulcer for some reason or other to recur, the disease may be worthy of the appellation of "chronic," yet, according to the extent and completeness of the occlusion, so the necrotic change begins to show itself in one or all of the coverings, except the serous, almost immediately they become deprived of their sole source of nutrition. The branches of the mesenteric artery pass round the sides of the intestine under the serous coat, and frequently anastomose with each other towards the free border of the gut. They subdivide and ramify in the muscular coat, supplying it with blood, and finally end in a fine capillary network in the mucous membrane and its underlying areolar tissue. If the blood-supply to any tissue of the body be suddenly withdrawn, as happens when a vessel becomes occluded either by an embolus or a thrombus, and collateral circulation be not readily established, death of the part is inevitable. In the brain and spinal cord localised patches of softening may frequently be detected, the result of plugging of the vessels. By the introduction of emboli into the mesenteric arteries we can produce, artificially, perforations more or less complete, corresponding exactly with those ulcers now under consideration. It is therefore evident that the withdrawal of blood from a part can at least produce destruction of tissue apart from any suppurative or inflammatory change. Here the whole destructive process is truly analogous with that of dry gangrene occasionally seen in

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the extremities of the aged, where the vessels, because of degenerative changes in their coats, become impervious. Collateral circulation, however, is so readily established in the mesenteric vessels, that emboli, unless very complete, can but rarely exert any influence in the production of intestinal ulcer, except as affording a focus for coagulation of blood and the subsequent development of a thrombus. I am inclined to think that deterioration of blood and degenerative changes occurring in the protoplasm of the capillary wall favour the formation of thrombi, and are therefore potent agents in the production of intestinal ulcer. In some cases it is quite possible the cause may be thrombosis, the result of a local phlebitis. Like gastric ulcer, it so far appears to be more common in females than males. Its exciting cause is wholly unknown.

Perforating ulcer is by no means rare. It may occupy any part of the intestinal tract. Most usually it will be found, however, mid-way between the attached and free border of the gut. As a rule, two or three ulcers are to be detected situated close together or at some little distance from each other. They are generally round, but they may be irregular and even somewhat serpiginous in shape. If the perforation be complete, the serous coat usually gives way by rupturing, whilst all the other structures will be found to have necrosed to an equal extent throughout; the muscular coat, however, retracts, and a partial prolapse, so to speak, of the apparently redundant mucous membrane results. One or all of the coats may gradually disappear, the destructive process progressing from within outwards. Recovery may take place at any stage, the loss of tissue being replaced by an exudation and proliferation of cells, which eventually develop new fibrous tissue with a marked proneness to retract, producing a cicatrix of variable shape and size. The affected part of intestine may by a local peritonitis become glued to another part of the bowel or to some other abdominal or pelvic viscus, and the perforation becoming complete, a fistulous communication may in the course of time be established. If the posterior part of the ascending or the descending colon becomes thus completely ulcerated fæcal extravasation will take place into the underlying areolar tissue outside the peritoneal cavity, and with due care the case may be brought to a favourable termination. It is but seldom that a vessel of any importance gives way producing serious hæmorrhage.

The symptoms of ulcer of the intestine are usually very insidious, and the first intimation of the presence of such a grave condition may be the sudden collapse of the patient, the result of rupture of the bowel and escape of the contents into the peritoneal cavity. Pain as a rule is more or less constant, and is a most troublesome symptom. There is general but no localised tenderness of the abdomen on pressure. Usually there is constipation; occasionally diarrhœa. The temperature may reach 103° F.; generally it is but slightly above normal. The pulse is markedly increased in frequency, averaging from 100 to 120. The tongue is usually red and irritable. Sometimes there is retention of urine without apparent cause, which is most probably reflex. There is no pain on voiding urine, unless the bladder has become attached to the gut by inflammatory adhesions.

The treatment is complete rest, with bland, easily digested food. Opiates are very essential; they must, however, be judiciously employed.

Montague-street, Russell-square.

WEST NORFOLK AND LYNN HOSPITAL.—The annual meeting of the governors of this institution was held on the 16th inst., when it was reported that the total number of patients who had received treatment in 1885 was 2437, against 2378 in 1884. Dr. Lowe, who had for some years acted as consulting surgeon to the institution, having left the town, it was unanimously resolved that he be elected a vice-president of the hospital. The financial state of the charity is not satisfactory, the expenditure having during the past year somewhat exceeded the ordinary income.

ASTLEY COOPER PRIZE.—The next triennial prize of £300 will be awarded to the author of the best essay or treatise on the Origin, Anatomy, Results, and Treatment of Tubercular Diseases of Bones and Joints. Essays are to be sent to Guy's Hospital on or before Jan. 1st, 1889, addressed to the physicians and surgeons of that institution.

ON PHIMOSIS IN INFANCY.

BY GEOFFREY HETT M.D.

MY excuse for submitting the following observations on this subject to the consideration of the profession is that my experience leads me to think that phimosis is a morbid condition which is not infrequently overlooked. Its persistence is the cause of much unnecessary suffering among children, and a neurotic habit is often induced which, in some instances, is never shaken off, but continues to exercise a prejudicial effect upon the usefulness and happiness of a considerable number of men during the whole of their lives. It would be advantageous if the following rule were adopted by all those taking charge of midwifery cases: to examine every male child within a few days of birth, and, if the prepuce cannot be retracted by the exertion of a moderate amount of force, to perform circumcision on or about the eighth day of life. The advocacy of such a rule will appear superfluous to many members of the profession, particularly to those who have had special opportunities of observing the diseases of children. That it is, however, not accepted, or, if theoretically accepted, not acted upon by numerous practitioners of midwifery, is sufficiently proved by the frequency with which it is necessary to perform the operation in later life. Complete retraction of the prepuce is necessary in order to prevent the retention under it of the secretion of the numerous sebaceous glands in the mucous membrane of the cervix and glans penis (glandulæ Tysonii). The accumulation of this sebaceous matter, acting as a peripheral irritant through the internal pudic nerves, may, and often does, cause central mischief more or less grave according to the constitution of the child and the amount of local irritation. If the preputial opening be so small as to interfere with the easy passage of urine, the condition will be aggravated by some of this fluid being forced under the prepuce and increasing the congestion of the mucous membrane. The injury resulting from this cause may be productive of nothing more than slight peevishness of temper; but, on the other hand, may give rise to convulsive attacks terminating fatally, and, of course, to any effect intermediate between these extremes. I feel sure that many an unfortunate little boy is credited with bad temper and punished for naughtiness whose irritability is due to neglected phimosis, and consequently entirely beyond his own control. There is also much reason for thinking that the habit of masturbation is frequently led up to by a morbidly excitable condition of the sexual organs due to the same cause. Should no symptoms arise sufficiently severe to call attention to phimosis, and the child grow up to manhood with the defect unremedied, the liability to venereal disease must be largely enhanced by the impossibility of effectual ablution of the penis. The operation of circumcision is, in infancy, almost entirely free from risk if ordinary care be exercised. The only objection to it of which I am aware is the æsthetic one, and this cannot have much force in a clothes-wearing community, especially when the advantages derived from it are fully considered. Circumcision may be performed by seizing the extremity of the prepuce between the finger and thumb of the left hand, drawing it well forwards so that the outline of the glands can be clearly seen through the integument of the penis, and slicing it off diagonally downwards and forwards just in front of the glands with a sharp scalpel. The mucous membrane, which will be found still embracing the glands, should be split along the dorsum *quite up to the cervix*, turned back, and retained in position by a narrow strip of dry lint wrapped firmly three or four times round the penis. No sutures are necessary. The lint becomes saturated with blood, and, when this is dry, remains in position for from two to four days. On its removal the wound will generally be found completely healed, but, if any portion of it be granulating, it only requires the application of a little carbolised oil four or five times a day. I have never seen a case in which the dry lint failed to prevent any excessive hæmorrhage. The eighth day of life is a suitable time for the operation, as the organism of the child has by then become accommodated to its new environment.

Inverness-terrace.

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A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, Lib. iv. Prooemium.

CHARING-CROSS HOSPITAL.

SELF-INFLICTED BULLET-WOUND, LAYING BARE AND TRAVERSING THE BRAIN; BULLET REMOVED FROM THE TEMPORAL FOSSA ON THE OPPOSITE SIDE; RECOVERY.

(Under the care of Mr. J. ASTLEY BLOXAM.)

THE unusual result of such serious injury as is recorded in the account of the following case renders it specially interesting. It is true that the injury was in the anterior part of the brain, where perhaps damage is less serious than in any other part, but the injury was so extensive and the danger of consecutive inflammation so great, from the injury by the bullet or from the presence of foreign bodies carried in by it, that the case will prove important in the literature of injuries to the brain. It was evidently not a case in which anything could be gained by the operation of trephining, and the expectant treatment adopted at first was fully justified by the result. Cases are on record where the bullet in similar injuries has simply struck the side of the skull opposite to the point of entry, and then rebounded, merely leaving an indentation. Under such circumstances operation would be useless. Here the bullet appears to have passed completely through from side to side, partly concealing itself in the temporal muscle.

Tom S——, aged eighteen, was brought to the hospital early on Sunday morning, September 24th, with a gunshot wound of the head. The face and neck were both much swollen, and patient complained of pain in the left temporal fossa and at the back of the cranium. There was a wound three-quarters of an inch above and behind the external angular process of the frontal bone on the right side, involving both tables of the skull and exposing the brain, some of which lay in the wound; the edges of the wound were blackened and swollen. No loss of motion or sensation. Patient slept a good deal, but could be easily roused. Pulse 62. The wound was cleaned and dressed antiseptically.

Sept. 25th.—Patient is semi-conscious. Evening temperature 100°; œdema of *left* lower eyelid. Respiration normal.

27th.—Patient was seen by Mr. Boyd, who felt beneath the skin in the *left* temporal fossa what appeared to him to be the bullet or a spicule of bone. Temperature 100·2°.

28th.—There is some subconjunctival congestion of the right eye.

30th.—An abscess was noticed pointing at the attachment of the temporal muscle on the left side, and poultices with belladonna were ordered.

Oct. 3rd.—The wound is granulating and looks healthy; there is very little discharge. He complains of some tenderness over the temporal region of the opposite side. No loss of smell, speech, or memory. Tongue thickly coated. Patient says he feels very well, but is still drowsy.

6th.—Pulse 68, intermittent. Patient complains of pain and tenderness in the neck and between the shoulders. The wound looks healthy; the temporal fossa on the left side is fuller, and the bullet can be felt more distinctly, with fluctuation in its neighbourhood. He passes his urine and motions unconsciously at times.

8th.—The patient says the tenderness is very great over the neck; he lies mostly on the right side. Pulse 64, feeble. He looks ill.

11th.—There is some wandering at night, and he objects to being moved. He passes his urine and motions unconsciously. Temperature last night 100·6°. The bullet, weighing about 2½ drachms, was removed to-day by Mr. Bloxam from its lodgment in the temporal muscle of the left side, a quantity of pus escaping at the same time. He was afterwards delirious.

13th.—The patient looks better to-day, and has slept pretty well.

14th.—All the motions have been passed unconsciously since the operation. He takes food badly; is only semi-conscious. Slight discharge from both wounds, most from the left. Antiseptic dressings as hitherto. Right wound looks healthy; the left is filled by a blood-clot. Pupils respond properly to light. No strabismus. He is difficult to rouse, but when roused he converses rationally.

19th.—The patient passes his motions unconsciously, but knows when he passes his urine. Ophthalmoscopic examination of eyes (atropinised) showed the discs to be clear; no optic neuritis.

21st.—Pain and tenderness along the course of the lymphatics on the left side of the neck. Breath smells very offensive. He is cheerful, but wanders a good deal. Bowels not having been open for three days, an enema was ordered to be given.

The patient gradually improved, becoming every day more conscious, and the wounds healed over without further complication. He was discharged cured on Nov. 11th.

ROYAL HOSPITAL FOR CHILDREN AND WOMEN.

A CASE OF OSTEO-MALACIA.

(Under the care of Mr. E. OVERMAN DAY.)

WE are indebted for the following notes to Mr. A. Dixon Jollye.

E. S——, aged eighteen. Family history good, consisting of two sisters and one brother, all delicate-looking, but apparently healthy. The patient was born at full time, but had always been very delicate. She walked at the usual time, dentition being normally performed. Had measles and whooping-cough when twelve years old. Menstruation commenced at fourteen; always regular. The present attack dates from the age of fourteen. She never appeared so strong after the measles and whooping-cough. The first symptom (which was noticed by her mother) was her waddling gait, which was attributed to laziness. Complained of no pain, but said her ankles felt weak. Bandaging was resorted to by her mother, and soon after she had some strong boots made. The ankle bones were then supposed to be enlarged. In a short time (exact time not known) she complained of pain and tenderness in the wrists when playing the piano. The wrists were then likewise supposed to be enlarged. Three months from this date the right knee gave way whilst walking, and she became knock-kneed. The left rapidly followed the same course. She now for the first time consulted a medical man, who ordered her iron supports for the legs, and salt-water baths, from which she derived some temporary benefit. In spite of all treatment, however, she rapidly became worse, and was quite unable to walk. In November, 1883, whilst endeavouring to go across the room, she fell upon her knees.

On examination no signs of external injury were seen. There was marked genu valgum of both legs. The internal condyles were apparently considerably longer and projecting laterally; patella displaced inwards. Complete rest in bed and the application of long Liston splints (without perineal band) soon brought the limbs into a straight position, in which they remained for a considerable time after removal. The patient was very pale and delicate-looking, but appeared to be in her usual state of health.

Lateral curvature now commenced in the cervical region, with a compensatory one in the dorsi-lumbar region. This was supposed to be produced by the continual twisting over to the one side (the bed being situated by the side of the wall, she generally turned away from it.) Her father one day lifted her up by the armpits, when she suddenly experienced severe pain in the left shoulder. When seen soon after the accident there was found a green stick fracture of the corresponding clavicle. Last February (1885) the right femur commenced to arch anteriorly at its centre and outwardly in the lower third.

April, 1885.—The patient is very delicate-looking, thin, and anæmic; has a slight cough, with a few moist râles over both lungs. Heart normal; other viscera apparently healthy. Urine normal; bowels very irregular; frequent attacks of diarrhœa; tongue irritable; teeth good, not notched; no signs of struma. Spinal curvature very marked; concavity towards left in cervical region, and the reverse in the dorso-lumbar region. Right clavicle normal. Left: a large

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irregular prominence at junction of inner and middle thirds. Sternum normal; ribs markedly beaded at costal cartilages. Abdomen rather retracted, but nothing striking. Humeri apparently normal. Radial and ulnar epiphyses enlarged and tender. Shafts of above bones normal. Right femur curved forwards and outwards at the lower third; left one normal. Marked genu valgum in both legs, particularly the left. Legs cannot be straightened. Slight enlargement of epiphyses of tibiæ and fibulæ. Right foot extended upon the leg and toes flexed, giving the foot a claw-like appearance.

All these distortions gradually increased, and eventually the whole sternum, which previously appeared unaffected, suddenly collapsed from atmospheric pressure. This caused a constant hacking cough and dyspnœa. The treatment all along had been light nourishing foods of all kinds, with quinine and iron and vegetable tonics, but no check upon the progress of the disease was effected. Bromide of potassium and belladonna slightly relieved the cough.

The post-mortem appearances externally were as follows. (The parents were unwilling to have the body opened). Emaciation extreme. Body, four feet and a half in length. Bones of head normal; teeth sound; gums healthy. Humeri, radii, ulnæ (with the exception of the epiphyses of the two latter), together with bones of hand, were perfect. Left clavicle bent at an acute angle; a grooved needle was passed through the bone with the same ease and absence of resistance as through the skin. Such was the case with all the affected bones. Chest: Sternum perfectly collapsed in its extreme length. Ribs project laterally into more or less sharp points. The ribs and pelvic bones are in close apposition. Sacrum bulges posteriorly. Tibiæ dislocated backwards. Left femur curved slightly backwards; measures fourteen inches. Right measures eleven inches. Patellæ displaced inwards; freely movable.

This case was seen by Mr. Bryant, Dr. Pye-Smith, and Mr. Keetley. Mr. Day stated that for some time he thought it might have been a case of late rickets.

WORCESTER GENERAL INFIRMARY.

POISONING BY CHLOROFORM; RECOVERY AFTER SEVENTEEN HOURS' UNCONSCIOUSNESS.

FOR the following notes we are indebted to Mr. Allman Powell, house-surgeon:—

On the afternoon of Feb. 14th Sarah H——, aged forty-four years, was carried to the infirmary, having swallowed, from suicidal motives, the contents of a liniment bottle belonging to a lodger in her house. The bottle, an ordinary eight-ounce one, and the prescription were also brought. The prescription was—Lin. aconiti, ʒii.; lin. belladonnæ, ʒiv.; lin. chloroformi ad ʒii. But it was subsequently learned that the former drugs were omitted in the dispensing, and that what the bottle really contained was about four ounces of lin. chloroformi (B. P.).

Her condition on admission was as follows:—Surface of body cold; lips congested; pupils fixed and dilated; breathing stertorous; conjunctival reflex absent; pulse feeble, but regular; quite insensible.

The stomach was at once emptied and washed out, the contents smelling strongly of chloroform and camphor. She continued in a state of profound chloroform narcosis until next morning. From time to time the breathing was stimulated by an electric current from the nape to the diaphragm. During the night some rigidity of the arms was noticed, and the temperature rose very rapidly, until at 3 A.M, it attained a maximum of 106·8°. After cold sponging it fell at the rate of a degree an hour. At 4 A.M. some movements of the limbs were noticed; and at 8 A.M., after a severe attack of vomiting, she recovered consciousness, which had been absent seventeen hours. A slight attack of gastritis detained her in hospital two days longer, after which she was discharged quite well.

ROYAL INFIRMARY, EDINBURGH.

APHASIA FROM INJURY; SUBSEQUENT HEMIPLEGIA; TREPHINING; DEATH; NECROPSY.

(Under the care of Professor T. R. FRASER.)

FOR the following account we are indebted to Mr. Hugh R. Bramwell, resident physician.

Peter G——, aged forty-four, publican, was admitted on Sept. 28th, 1885, complaining of slight difficulty in speaking and giddiness when walking. Eight weeks before admission he fell through a trap-door into a cellar, and received a severe blow on the left side of the forehead. He lay stunned for ten minutes, and was then carried home. The left frontal region was much bruised, and there was an incised wound over the left eyebrow. He did not speak, although he was conscious, till the following day, when he was able to give a clear account of the accident, but his speech was indistinct. On the second day after the fall he was able to walk out, but returned home unable to speak a word, and he vomited his dinner. The following day he could speak, and complained of headache and giddiness. During the next seven weeks he suffered frequently from pain in the left side of the forehead, and had many attacks of sudden faintness and giddiness, frequently vomited after meals, and his speech was often indistinct. During this time his memory for words became greatly impaired. He had been strong and healthy up to the time of the accident. There was no history of syphilis. Occasional alcoholic excesses were acknowledged. An acquaintance states that he was very peculiar at times.

State on admission.—The patient is a stout, well-developed man of average intelligence. Walks quite well and shows no signs of any impairment of muscular power. He complains of slight pain in the left frontal region, and pressure at the postero-lateral part of this region elicits distinct tenderness. There is an indistinct linear cicatrix just above and behind the left eyebrow. Temperature on admission 98°. He understands everything said to him and answers sensibly. He can evolve intelligible sentences, but his memory for the names of things is very defective. On being shown various articles, such as knives, pens, chairs, &c., he is quite unable to name them, but recognises the names immediately when they are spoken. He can write, but his spelling is entirely at fault. Thus he calls a knife a "nob," and then writes it "sotpa." When asked to write down "I will come," he wrote "If hayh good," then stopped and shook his head and said it was wrong. The same sentence was then written down and he copied it quite correctly. He cannot read out aloud at all correctly, but can evidently understand written language; thus when shown the word "pen" he immediately points to a pen.

Sept. 30th.—Ordered five grains of iodide of potassium three times a day.

Oct. 4th.—Complains of more pain in the head, and giddiness. Speech getting more confused and indistinct, and he seems stupid and dazed. Tongue very tremulous when protruded.

6th.—Kept his bed to-day. Distinct impairment of power in right arm and leg. Can hardly raise right arm at shoulder-joint. Complains of "pins and needles" in right hand. Temperature 97·4°.

8th.—Much more dazed and confused. Memory for names quite absent. Can hardly speak an intelligible sentence. Right arm and leg more powerless. Right plantar reflex much exaggerated. Patellar reflexes both marked, but no difference. Decided impairment of movements of right side of face; wrinkles less marked on right side. No nystagmus. Patient yawns frequently.

9th.—Speech almost entirely lost. When asked his name, mutters unintelligibly. Hemiplegia almost complete. Marked ankle clonus easily obtained in both legs. Mouth drawn to left. Both optic discs very pale, but no other change in them.

10th.—Is now passing urine involuntarily. Right patellar and plantar reflexes much increased. Well marked-bicipital reflex obtainable in right arm.

11th.—Temperature 97°; pulse 64; respiration 20. More drowsy. Sighs and yawns frequently. Fæces are now passed involuntarily. Pupils unequal; right the larger. Marked contracture of flexors of right elbow. Complete aphasia.—11 P.M.: Lies in a semi-comatose condition, and can hardly be roused.

12th.—At 1.30 A.M. the patient was put under chloroform and trephined by Professor Chiene at a point opposite the left inferior frontal convolution. On the inner table being perforated by the trephine there was free hæmorrhage from the middle meningeal artery, which ceased when the disc of bone was removed. On opening the dura mater nothing abnormal could be seen, no signs of inflammation of the membranes, and no accumulation of pus or other fluid. On the chance of there being deep-seated suppuration a very fine cataract-knife was introduced into the brain substance in three directions, but no pus was found. The wound was

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then closed and dressed. Strict antiseptic precautions were observed throughout. The temperature rose steadily after the operation from 96·2° at 2.30 A.M. to 100·8° at 12 P.M. Patient quite comatose all day.

13th.—Still comatose. Pulse 150; respiration 38; temperature rising steadily. Is fed every two hours with enemata of pancreatised beef-tea. The contracture of right arm and exaggerated reflexes of right leg have quite disappeared since the operation. The wound was opened antiseptically, and a probe introduced, but no collection of blood or pus was found between the membranes. Temperature at 12 P.M., 105°; pulse 167; respiration 54.

14th.—The temperature rose to 107° at 6.15 A.M., and death occurred a quarter of an hour afterwards.

Necropsy.—On opening the cranium the membranes were found to be healthy. The convolutions were much flattened, especially on the left side. The arteries and veins were quite normal. The trephine wound was immediately over the commencement of the Sylvian fissure. Beneath the wound there were several small ecchymoses of recent origin, the surrounding brain tissue being pale and apparently abnormal. On removing the brain, the left hemisphere, but especially the temporo-sphenoidal lobe, was pale and swollen and decidedly larger than the right. The lateral ventricles were dilated, and contained an excess of clear serous fluid. On section immediately through the centre of the trephine wound, the whole of the temporo-sphenoidal lobe was seen to be occupied by a large glioma and surrounding softening; the tumour extended backwards as a uniform infiltration as far as the limit of the posterior horn of the lateral ventricle. It had invaded Broca's convolution and the adjacent parts of the ascending frontal and parietal convolutions. Immediately beneath the superficial ecchymoses in Broca's convolution there was a recent hæmorrhage (apparently the result of incisions made at the time of the operation with a fine knife to explore for pus) about the size of a walnut. A small nodule of tumour, of a similar nature and about the size of a cherry, was situated in the right hemisphere at the middle third of the ascending parietal convolution.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Thoracic Aneurysm treated by the Introduction of Steel Wire into the Sac.—Changes in Bone and Soft Tissues after Amputations.

DR. GEORGE JOHNSON, F.R.S., President, was in the chair at the meeting of this Society held on Tuesday last.

Dr. CAYLEY read a paper on a case of Thoracic Aneurysm treated by the introduction of Steel Wire into the Sac. The patient was a man aged forty-eight, who was admitted into the Middlesex Hospital on June 5th, 1885. He had been suffering from symptoms of a thoracic aneurysm since November, 1884, but it was not till five days before his admission that a pulsating tumour made its appearance at the root of the neck, rising about three inches into the neck behind the right sterno-clavicular articulation. The patient was at first treated according to Tufnell's method and given large doses of iodide of potassium. The tumour continued to increase in size, and it was evident that it must either soon burst externally or extravasate among the tissues of the neck. On June 24th Mr. Hulke introduced into the sac, through a fine cannula, forty feet of steel wire. This caused no constitutional disturbance or local pain, and this portion of the aneurysm became completely consolidated. Towards the middle of August the signs of extension of the intra-thoracic portion of the aneurysm—increasing dyspnœa and severe paroxysmal cough—became more marked, and there was an increase of pulsation behind the sternum and towards the left sterno-clavicular articulation. As it was evident that the aneurysm must soon prove fatal from pressure on the trachea, it was determined to endeavour to consolidate the part of the sac producing this pressure. Accordingly, on Sept. 10th, Mr. Gould, in the absence of Mr. Hulke, introduced a cannula just above the left sterno-clavicular articulation, directing the instrument obliquely towards the middle line, and introduced 34 ft. 9 in. of wire. No constitutional disturbance followed, but no relief was given to the symptoms, and the patient died in a paroxysm of dyspnœa on September 19th. On post-mortem examination a large aneurysm was found springing from the ascending part of the arch and communicating with the vessel by a very large orifice; the whole of the upper portion was completely filled by clot, embedded in which was the wire. The walls of the aneurysmal sac, where it projected into the neck, consisted only of a little condensed connective tissue. The lower portion of the sac, near its origin from the aorta, caused compression and flattening of the trachea just above its bifurcation. The first operation produced the desired result in preventing the imminent rupture of the aneurysm. The size and connexions of the sac rendered the second operation ineffectual.—Dr. GEORGE JOHNSON only knew of one case of thoracic aneurysm that became cured; the man died, aged seventy, thirteen years after the symptoms began. The dangers of introducing wire into an aneurysmal sac were—the causation of intense irritation locally, the liability to the production of embolism, and the tendency to cause ulceration and rupture.—Mr. R. BARWELL agreed that the value of the method of treatment was not yet known. As far as he knew, Dr. Cayley's was the ninth case of aneurysm that had been so treated. He did not think the record was encouraging. The following cases had been placed on record:—1. By Moore, 1864; thoracic aneurysm; twenty-six yards of iron wire introduced. 2. Levis, 1873; subclavian aneurysm; horsehair used. 3. Bryant, 1873; popliteal aneurysm; twenty-six feet of horsehair. 4. Loreta, 1883; abdominal aneurysm; two mètres of fine iron wire; death suddenly ninety-two days later. 5. Rubio of Madrid, 1874; innominate aneurysm; horsehair, two to three mètres. 6. Van der Meulen of Utrecht, 1879; woman, aged thirty-two; aneurysm of brachial artery; catgut. 7 and 8. Baccelli; two cases; 1878. Cases were quoted apparently proving that the manipulation of aneurysms in attempts at operations may prove a powerful cause in the production of consolidation and consequent cure.—Dr. PAUL had operated on a case of aneurysm of the innominate artery occurring in a middle-aged native of India. He had introduced as much as fifteen feet of horsehair through a cannula; there was no bleeding or discomfort. Next day there was slight increase in the size of the aneurysm, but the tumour felt more solid, and pulsation was unabated. The day after the tumour had greatly increased in size; there was much difficulty in breathing; the skin was œdematous over the tumour with a discoloured spot, and the patient was in great distress. Death ensued the third day after the operation. At the necropsy there was considerable coagulation around the horsehair in the aneurysm and signs of inflammation. The case occurred in the General Hospital, Madras.—Mr. BRYANT thought there was more in the method of treatment than appeared on the surface. In cases where neither ligature nor pressure was available, and in which there was not a large opening into the aneurysm, this method might prove of value. He should prefer the use of horsehair, fishing-gut, or catgut, to the employment of iron or other metallic wire. In the case of popliteal aneurysm in which he had adopted the principle of filling the sac with horsehair, there was as much success as possible in the face of ulcerative endocarditis. In cases of thoracic and abdominal aneurysm the method, rightly applied, was likely to be advantageous, and he regarded Loreta's case as favourable so far as it went.—Mr. HOLMES regarded both Mr. Bryant's and Loreta's cases as encouraging; he could not, however, accept Mr. Barwell's view that manipulation was of any value in the causation of consolidation. He believed that Dr. Murray of Newcastle was the originator of the idea of introducing catgut into aneurysmal sacs. The question lay between the introduction of wire and the use of electrolysis; the latter method had proved unsuccessful in his own hands. In Mr. Moore's case the quantity of foreign substance introduced was probably too great, leading to much local disturbance. Mr. Holmes preferred horsehair to iron wire as the material for introduction into aneurysmal sacs.—Mr. HULKE felt strongly that Mr. Moore's method was fraught with danger and risk; the wire used was soft and bent about in all directions. If the opening had been large there was great probability of the main channel of the aorta being entered. The circumscribed hæmatoma that developed in Dr. Cayley's case was possibly due to the employment of a Southey's trocar, in which there were lateral openings through which some blood oozed. He thought there was no risk of scratching the internal surface of the sac. There would be much difficulty

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in regulating the distance to which horsehair would travel inwards. Wire could be more certainly rendered aseptic than other materials, even catgut. With electrolysis he had had positively disastrous results; ergot was valueless.—Dr. CAYLEY considered that the risk of embolism in sacculated aneurysm was not great; in Mr. Moore's case the emboli probably came from vegetations on the valves. It was generally believed that bruits, being due to fluid eddies, developed by blood passing through narrow orifices, and so the existence of bruits would rather favour the view that the communication between artery and aneurysm was narrow; but he had not verified this suggestion.

Mr. GEORGE POLLOCK read a paper on the Changes which occur in Bone and Soft Tissues after Amputation of a Limb, and from certain other conditions. The changes to which the author drew attention included not only such as are met with in the bone of a stump of an amputated limb and in parts affected with paralysis, but also those observed in parts which have extra work thrown upon them in compensation for the loss of other parts with which they were originally associated and had to act. The differences found in the two lower extremities of an old man who had suffered amputation of one thigh many years before death were described. On the amputated side the femur was found wasted, and the neck joined the shaft at a much more open angle than natural; while on the other side the femur was hypertrophied, and the neck joined the shaft at a right angle. The causes and results of these changes and of the corresponding changes in the two sides of the pelvis were described. The conditions observed in a man whose thigh had been amputated in infancy was related; and reference was made to observations by Mr. Hilton on the changes that follow amputations. The bones of the right extremity from a case of paralysis were also exhibited; they were greatly atrophied and had undergone fracture; while the excessive hypertrophy which occurs in one limb after amputation of the other was illustrated by a well-marked case. The views of various writers as to the causes of the changes in these cases were given, and the author remarked that the alterations in both muscle and bone are often more rapidly effected, and also more extensive, than is generally supposed. He drew attention to the fact that in the cases related two distinct and different processes—the one atrophy and the other hypertrophy—go on side by side, and asked whether this fact may not admit of practical application; whether in appropriate cases, by a careful combination of exercise, position, and rest, together with the use of mechanical appliances, we might not do something to accelerate improvement. A table of specimens was added to the paper.—Professor HUMPHRY showed a specimen of a skeleton in which the right lower limb had been amputated very early in life. The ala of the ilium was remarkably atrophied and incurved; the descending processes were much atrophied; the circle of bone that entered into the formations of the brim of the pelvis was not atrophied, so that neither upper nor lower openings of the pelvis were lessened in size. The femur was very short; the acetabulum diminished in size. At birth the angle of the femur was 140°. The gradual diminution in the size of the angle was possibly due to pressure; but it should be remembered that growth takes place directly in opposition to pressure. The angle varied, but was about 130° in adults; it was in inverse proportion to the development of the pelvis and the stature. It attained its maximum in tall men and was reduced to a minimum in short women. That the angle diminishes in old age was a proposition founded on insufficient evidence. Meckel also doubted whether the angle progressively diminished in size as age advanced. In a case of hydrocephalus, the patient dying at the age of four years, the skeleton was most remarkably attenuated, and the angle of the femur measured 160°; there was no sufficient explanation to account for this occurrence, nor for the fact that after amputations of the thigh the angle was increased in size. Growth of the whole body was associated with the growth at the epiphysial lines; arrest of growth in these lines prevented growth of soft parts of the limbs.—Mr. J. H. MORGAN showed the femora of a man, aged fifty at death, who at the age of twenty-five suffered amputation of one thigh. There was a difference of 3 oz. 5 drs. in the weight of the bones; there was a slight difference in the size of the angles of the femur.—Mr. T. SMITH said the obliquity of the neck of the thigh-bone varied inversely with the length of the stump. He had taught (perhaps erroneously) at St. Bartholomew's Hospital that the angle diminished as age advanced, and this was due to pressure. — Mr. HOWARD MARSH had observed that in some cases of conical stump the fault appeared to be due to a continuance of growth at the upper end of the long bone, as the humerus. Curving in bones meant strength; atrophy generally led to straightness, which was possibly a reversion to the fœtal type, where the long bones have no curves.—Professor HUMPHRY did not consider that a conical stump could develop in a few months as the result of continued growth of bone. He still maintained that it was not a normal law for the femoral angle to diminish with age.

The following is the list of officers and other members of Council nominated for 1886-87:—President: *Mr. G. D. Pollock. Vice-Presidents: *Dr. J. W. Ogle, Dr. Hermann Weber, Mr. Thomas Bryant, and Mr. Matthew Berkeley Hill. Treasurers: Dr. C. B. Radcliffe and Mr. Timothy Holmes. Secretaries: *Dr. W. B. Cheadle and Mr. Howard Marsh. Librarians: Dr. Wilson Fox, F.R.S., and Mr. J. W. Hulke, F.R.S. Other members of Council: Drs. T. Buzzard, W. S. Church, *T. H. Green, *J. W. Legg, *W. Moxon, *H. C. Rose, Messrs. *Marcus Beck, *E. Bellamy, *J. McCarthy, and W. Rivington. Those gentlemen to whose names an asterisk is prefixed were not on the Council, or did not fill the same office last year.

MEDICAL SOCIETY OF LONDON.

Combined Action of Cocaine and Nitrate of Silver in Superficial Affections of the Eye.—Severe Endocarditis.

AN ordinary meeting of this Society was held on Monday last, Dr. Douglas Powell, Vice-President, in the chair.

Mr. BRUDENELL CARTER read a brief paper on the Combined Action of Cocaine and Nitrate of Silver in Superficial Affections of the Eye. He began by recalling how nitrate of silver had fallen out of use, owing to the pain it caused and the difficulty there was in limiting its action to the desired part. Cocaine overcomes the latter difficulty and prevents lacrymation. After making the surface of the eye insensitive by cocaine, the diseased parts can be accurately and definitely attacked by nitrate of silver. In cases of simple chronic congestion, or associated with phylctenula, the results have proved most beneficial. Vascular keratitis was also a possible field for the use of this method. He said improvements in minor points of therapeutics were often of much practical value, and hence he had ventured to bring these facts before the Society. In chronic congestion around an old cicatrix of an operation wound, as well as in the more general superficial congestion left behind in the declining stages of interstitial and other forms of corneal inflammation, the method had also been employed.—Mr. H. E. JULER dilated on the value of cocaine in numerous superficial affections, including tumours of the skin, when a hypodermic injection, carefully administered, was most useful.—Mr. W. H. JESSOP had employed the combination of cocaine and nitrate of silver in cases of corneal ulcer and chronic congestion; cocaine acts on the terminations of the sensory nerves and constricts the blood-vessels.—Mr. B. CARTER had observed denudation of the corneal epithelium as the effect of the use of cocaine.

Dr. A. E. SANSOM read a paper on Severe Cases of Endocarditis; its Causes and Treatment. He objected to the term "malignant," and alleged that in all cases there was loss of tissue—necrosis or ulceration. The first case narrated occurred in a married woman aged thirty, in whom the disease began six weeks after parturition. Embolism of the left radial artery and of the renal artery, albuminuria, hæmaturia, and casts, mitral regurgitation, and high fever were the chief events. The second case was that of a single woman, aged twenty-six, in whom there was mitral stenosis and regurgitation, pneumonia, and (?) phlebitis of right arm and left leg. In both cases there were evidences of septicæmia. What relation existed between the infective foci and the valvular lesions? There was evidence of pre-existing disease of the valves in one of the cases, and this illustrated a general law that obtained in cases of mycosis endocardii; Osler's researches had set this law on a firm basis. When Ort injected fluid containing microbes into a rabbit's vein, having previously caused a traumatic lesion of the valves, a series of phenomena ensued, terminating in death in a few days, with lesions practically similar to those found in the disease in man. It seemed from these experi-

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ments that varying septic organisms could give rise to the disease, but varying features were met with; the lesions from the use of streptococcus were more severe than those resulting from staphylococcus. It would appear that the cause of osteomyelitis may also give rise to abscesses elsewhere; staphylococcus pyogenes aureus was the infective agent and cause, as artificial cultivations proved. As to treatment, the adoption of preventive hygienic measures was the main line. Parturient women must be protected from septic influences, and especially if there be pre-existent valvular lesions of the heart. A young woman with symptoms pointing to severe endocarditis, under Dr. Sansom's care, improved and recovered after the prolonged administration of thirty-grain doses of sulphocarbolate of soda; in this case there was a very curious mental condition and evidence of extremely low arterial tension. The following propositions were presented for consideration: (1) severe endocarditis is due to the influence of septic micro-organisms; (2) treatment based upon this view gives great prospect of success.—Dr. DOUGLAS POWELL thought the term "severe," even when qualified by non-rheumatic, liable to misconception.—Dr. S. MACKENZIE suggested that the word "essential" would meet all the clinical requirements of the case, the term being used in the same sense as "essential" anæmia; it implied nothing as to pathology. In a severe case he had employed benzoate of soda in twenty- to thirty-grain doses; the patient recovered. But it should be remembered that some severe cases recovered without special treatment.—Dr. S. PHILLIPS considered that neither the term "severe" nor "essential" met the exigencies of the case. Reference was made to cases in which the symptoms were almost "latent." He thought it was open to question whether some of the cases were not due to rheumatic poison.—Dr. GILBART SMITH related some cases illustrating two varieties of the disease.—Dr. SANSOM, in reply, could not agree to the term "essential."

Dr. W. H. WHITE showed a pathological specimen of an Aneurysm of the descending part of the Arch of the Aorta.

The following are the names of Fellows of the Society nominated for office by the Council for the ensuing year:—President: R. Brudenell Carter. Vice-Presidents: J. L. Down, M.D.; S. Cartwright; T. L. Brunton, M.D., F.R.S.; Sir W. MacCormac. Treasurer: A. E. Durham. Librarian: W. H. Allchin, M.B., F.R.S.E.; Honorary Secretaries: J. H. Morgan, M.A.; S. West, M.A., M.D. Secretary for Foreign Correspondence: Felix Semon, M.D. Council: J. N. C. Davies-Colley; S. H. Davson, M.D.; D. W. Finlay, M.D.; J. Fowler, M.A., M.D.; A. Pearce Gould, M.S.; F. De Havilland Hall, M.D.; G. M. Humphry, M.D., F.R.S.; J. Hutchinson, F.R.S.; J. S. Keser, M.D.; S. Mackenzie, M.D.; W. M. Ord, M.D.; Isambard Owen, M.A., M.D.; Bernard Pitts; Walter Pye; J. P. Richards; J. Knowsley Thornton; Frederick Treves; T. T. Whipham, M.A., M.B.; W. H. White, M.D.; C. T. Williams, M.A., M.D.

HARVEIAN SOCIETY.

Neurotic Treatment of Catarrh.—Animal Vaccination.—Cyanosis in Newly-born Children.

A MEETING of this Society was held on Thursday, Feb. 4th, J. Hughlings Jackson, M.D., F.R.S., President, in the chair.

Dr. D. B. LEES read a paper on the Neurotic Treatment of Catarrh, which will be found *in extenso* in our columns.—Dr. CLEVELAND took exception to the view that it was desirable to stop the flux in a common nasal catarrh, and instanced the very common belief that by so doing the catarrh was rendered more liable to attack the lower air-passages. He believed in the value of diaphoretics as proved by the test of experience, and thought that our knowledge of the neurotic origin of colds was not yet sufficiently advanced to warrant such very free use of neurotic remedies.—Dr. STEPHEN MACKENZIE doubted whether there was really any scientific foundation for the popular notions with respect to the infectiousness of catarrh, although many positive statements had been made to that effect. He agreed in the view that catarrh was essentially reflex in its origin, but in the same time diaphoretic treatment was important when applied at the right period. With the onset of a cold the surface was chilled and the interior of the body felt overheated; sweating under such circumstances always gave relief.—Dr. T. NORTON expressed full belief in the contagiousness of colds. He thought that influenza was the most marked instance of it, and bore the same relation to ordinary catarrh as did cholera to ordinary diarrhœa. It was probable that many patients would be unwilling to submit to the active medicinal treatment proposed by Dr. Lees.—Dr. EWART pointed out that the proposed neurotic treatment applied mainly to catarrh of the upper respiratory passages. Local and general catarrhs differed considerably, and the latter were frequently to be seen affecting the whole alimentary tract, especially in children. The treatment in such cases was to encourage the flux and assist its escape as far as possible. Catarrhal inflammation was apt to spread by continuity on mucous surfaces, by means of the sero-mucous secretions.—Mr. J. W. MASON advocated the diaphoretic treatment as being most in accord with the natural process of cure.—Dr. LEES replied.

Mr. SHIRLEY MURPHY read a paper on Animal Vaccination, in which he discussed the advantages and disadvantages attendant upon the use of animal lymph. He argued that the evidence which was afforded by publications within the first ten years after the introduction of vaccination tended to show that humanised lymph now in use in this country was as protective as that of the earlier period. Jenner's experiments of inoculation with small-pox of persons previously vaccinated were performed mostly upon adults, whereas it was noteworthy that those persons who contracted small-pox after vaccination were mostly vaccinated in infancy, and this was true for those of Jenner's time as well as at the present. Animal vaccination was a convenient method of producing large supplies of lymph which in its clinical effects was practically identical with humanised lymph, but its employment had the advantage of avoiding certain dangers associated with the use of humanised lymph, and which deserved to be taken into account, although with care and knowledge they might be reduced to an infinitesimal amount. Much stress was laid upon the superiority of direct vaccination, whether arm to arm or calf to arm, over that which necessitated the employment of stored lymph; and the hope was expressed that vaccination with stored animal lymph would not be allowed to replace arm-to-arm vaccination, and it was pointed out that the best way of utilising the calf would be to modify the virus of small-pox and render it available for the purposes of vaccination.—Mr. WATERHOUSE recounted a series of five cases in which inoculation had produced abnormal results. The lymph in each instance had been taken direct from the calf, was of undoubted purity, and was introduced by scratches in the ordinary way. The first irritation of the inoculation passed off rapidly, but about the end of the first week a pimple appeared, which in the course of three weeks developed into a small tumour bearing an almost exact resemblance to a red currant raised above the surface, intensely irritable and with no areola. He had had many good results from the use of calf lymph, especially in revaccination, where, even in the presence of good scars of primary inoculation, the vesicles were as large and well developed as if no marks at all were to be seen.—Dr. RENNER could only describe the results obtained in Mr. Waterhouse's cases as spurious vaccinia. No harm appeared to have been done. He doubted the exact relation between vaccinia and small-pox. They seemed to belong to the same class of cases, but to be differentiated by their seat. Cow-pox was local and variola general, but both were more virulent in their natural than in their cultivated state. The systemic reaction on the eighth day was due to the irritation of the skin, and was in direct proportion with its severity. The notion that calf lymph was unsafe could only be explained by ignorance or carelessness in its use. Only very few cases of true skin disease had ever been reported as resulting from it. The results obtained from stored lymph of any kind could not be properly compared with those of fresh calf lymph. The risks of inoculation of tubercle had been conclusively proved to be infinitesimal.

At the meeting on Feb. 18th, J. Hughlings Jackson, M.D., F.R.S., President, in the chair,

Dr. SIDNEY PHILLIPS showed recent specimens of the Intestines and Spleen of an Infant the subject of typhoid fever, exhibiting the characteristic lesions in all stages.

Mr. G. EVERITT NORTON read a paper by Mr. Rayner illustrating a peculiar form of Cyanosis affecting a number of newly-born children under his observation. Several children had been affected at the same time, and, although deeply cyanosed, did not exhibit any other signs of ill-

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health. Careful investigation failed to trace any cause for it until the napkins worn by the infants came to be examined. It was then found that these had all been recently marked with a large stamp in a coloured ink containing chloride of anilin. Further experiments with these napkins upon perfectly healthy children proved that the absorption took place in about twenty-four hours, and the cyanosis continued for about five days, the health of the children not being in the least disturbed.—The PRESIDENT and Dr. SEDGWICK referred to the possible dangers of staining by the internal administration of anilin and to the lowering of temperature which sometimes accompanied it.—Dr. MAGUIRE pointed out that the dye might cause cyanosis either by direct staining or by destruction of the red blood-corpuscles, as in poisoning by chlorate of potash; or, by combining with the hæmoglobin, the anilin might prevent the chemical process of oxidation; either of the latter processes might cause lowering of temperature. One of the cyanosed infants was exhibited to the Society.

Dr. SANSOM read a paper on Modern Remedies in Cardiac Disease, which will shortly be published in full.

ACADEMY OF MEDICINE IN IRELAND.

Ovarian Displacements.

AT a meeting of the Obstetrical Section, on Jan. 8th, the PRESIDENT (Dr. More Madden) read a paper upon Ovarian Displacements, which, he said, apart from those caused by disease, were long completely ignored by gynæcologists, and even yet receive less consideration than they demand. From clinical experience he was convinced that ovarian hernia and prolapse were both much more common than they are generally supposed to be. In every-day gynæcological practice a certain proportion of patients complain, *inter alia*, of dull, sickening, left-side pain, usually referred to the left inguinal region. And in many instances, if further investigation and physical examination were made, this may be found traceable to some ovarian displacement. Ovarian hernia may be inguinal or femoral, though more frequently the former, appearing either as a direct hernia in the inguinal or femoral regions, or in the more usual oblique form, making its way through the canal into the labium. Still more common, however, than either of these herniæ is the prolapsus of the ovary, and more especially that of the left ovary, into Douglas's space, where it may be discovered on examination as a small, oblong, dense, and highly sensitive tumour in the post-cervical recto-vaginal fossa. Ovarian herniæ, although in some instances congenital and occasioned by similar causes to other forms of hernia, are much more usually the result of the violent muscular efforts of the second stage in cases of difficult labour, and most frequently are observed in multipara whose abdominal parietes have been relaxed and viscera compressed by their repeated gestations. But in the most common form of ovarian displacement—viz., that downwards into Douglas's space—the causes are more generally gynæcological than obstetrical, the ovary being either extended from its normal position by the *vis a tergo* of abdominal, uterine, or peri-uterine tumours or enlargements, or else dragged down by the tension of uterine displacements on the ligaments. The symptoms of ovarian displacement are the sudden occurrence in either the inguinal or femoral regions, the labia, or in the recto-vaginal fossa of an ovoid tumour, which in its ordinary condition is usually about the size of a small walnut, increasing, just before the menstrual period, to the size of a Tangerine orange. This gives rise to a dull aching pain, which in the interspace gradually subsides until the functional activity of the displaced gland is again stimulated by the approach of the next catamenial epoch. In some instances, however, the dull, sickening pain and discomfort thus occasioned never subside, but increase to an unbearable extent until relieved by appropriate treatment. From enterocele an ovarian hernia may be distinguished by not being smooth and globular, nor giving rise to gurgling on compression, or resonance on percussion; whilst from epiplocele it may be differentiated by the absence of the peculiar soft doughy feeling, and irregular, ill-defined outline of the latter. From enlarged inguinal glands a displaced ovary may be diagnosed by the smaller size and simultaneous appearance of several glands in the same situation in the former case. From pelvic, psoas, and other abscesses in the groin, ovarian herniæ may be recognised by the history of the case and the physical character of the firm, ovoid, well-defined tumour if ovarian. A prolapsed ovary in Douglas's space may be distinguished from a posterior uterine displacement, or tumour, by recto-vaginal examination and the use of the sound; whilst in the differentiation of this condition from a tumefaction caused by cellulitis, rectocele, a small parovarian cyst, or a pedunculated fibroma, the same methods of examination will serve to determine not only the presence of any uterine malformation, but also the character of the tumour and the existence of any fluctuation. If the uterus be found normal in size and position, and if there be no fluctuation, in the case of any small, well-defined, firm ovoid tumour in this situation, which, on being touched, gives rise to a peculiar dull, sickening pain, we may confidently conclude that we have to deal with a prolapsed ovary. The treatment of ovarian protrusions must obviously be dependent on the situation of the displacement—i.e., whether it be at either of the abdominal rings, or downwards into the labium, or into the recto-vaginal fossa. In the first form, whether the ovarian hernia be above or beneath Poupart's ligament, an effort should primarily be made to reduce it, if possible. In the majority of cases, however, these herniæ are not reducible when seen by the gynæcologist, and even in those which are reducible the pressure of a truss is neither endurable nor effectual. And in the majority of cases we must be content to protect the hernia from any further protrusion or external injury by a well-fitting hollow truss. Before the application of this an attempt should be made to lessen the local hyperæsthesia by topical sedatives, poultices, &c., or, if necessary, by leeching. At the same time this constitutional irritation, always present in all ovarian displacements, should be allayed by free doses of bromide of potassium, which may generally be combined with tonics in these cases. When, however, such measures prove ineffectual to relieve the intolerable, constant, dull, aching pain, aggravated into acute suffering at each monthly recurrence of the menstrual period, when the patient complains of marked gastric irritation, and repugnance to all food is increased to positive sickness of stomach whenever the tumour is touched, and when her health is thus broken down, and her life imperilled by the consequence of this apparently trivial and too often neglected displacement, then we should urge the extirpation of the dislocated and probably diseased gland, in whatever situation it may be extended.—Dr. DOYLE looked upon over-fulness of the intestines as a not uncommon cause of ovarian prolapse. The pressure of the sigmoid flexure upon the left side accounted for the more frequent prolapse on that than upon the right side. Many cases could be cured or relieved by keeping the colon emptied with mercury.—Dr. ATTHILL had very seldom found mechanical treatment of any service in cases of prolapsed ovary.—Dr. W. J. SMYLY showed a fibro-myomatous tumour which he had enucleated from the cervix of a patient in the City of Dublin Hospital. These tumours occurring in this situation are interesting on account of their rarity, and the obstruction which they are liable to cause during delivery. The operation was simple, and the patient made a good recovery. He also exhibited both ovaries and the right Fallopian tube which he had removed from a patient suffering from uterine fibroids, and whose life was seriously endangered by violent hæmorrhages.—Dr. MACAN entirely agreed as to the rarity of cervical tumours and the dangers that might arise from their presence during labour. They might necessitate the destruction of the child, and might subsequently undergo disintegrative changes with accompanying septicæmia. As regards labour, uterine tumours were dangerous in proportion to their nearness to the cervix. In reference to Dr. Smyly's second case, he regarded the removal of the ovaries for bleeding fibroids as one of the greatest improvements in modern gynæcological surgery.—Dr. ATTHILL had formerly relied in cases of bleeding fibroids upon scraping out the uterus and applying nitric acid after the necessary dilatation. Finding, however, that the relief never was permanent, he had abandoned this treatment. As a temporising measure he had experienced better results from the occasional injection of iodised phenol. This might be done once a month where more decisive measures did not seem necessary. Under such treatment he had found the hæmorrhages lessen in amount, and the intervals between them lengthen. Only in a limited number of cases was the pain and hæmorrhage such as to necessitate surgical inter-

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ference. Enucleation of large tumours was much the most dangerous mode of surgical treatment. When he had formerly tried it he lost patients, and succeeded in removing the tumour only in a few cases. Now he would give the preference to removal of the ovaries, being prepared, in cases where the tumour was large and the ovaries might not be found, to remove the entire uterus. He did not question that palliative measures had formerly been too exclusively relied on.

Reviews and Notices of Books.

Surgical Diseases of the Kidney. By HENRY MORRIS, M.A., M.B., F.R.C.S., Surgeon to and Lecturer on Surgery at Middlesex Hospital, Member of the Conjoint Board of Examiners of the Royal Colleges of Physicians and Surgeons of England. With 40 Engravings and 6 Chromo-lithographs. Cassell and Co., London, Paris, New York, and Melbourne. 1885.

MR. MORRIS'S volume is one of Messrs. Cassell's series of clinical manuals, and it is destined to take a very high rank in this series. The surgery of the kidney has become of late years a very important branch of practice; and the extension of surgery to an organ which has been generally considered to be quite beyond the reach of the knife has necessitated a much more careful study of many of the points in the anatomy and pathology of this organ than was essential so long as it was relegated to the care of physicians only. This is rendered abundantly evident in the work before us. In the opening chapter we have a short account of the regional anatomy of the kidney. This is followed by several chapters on the various misplacements, malformations, and irregularities met with in the kidney; for so soon as surgery approaches an organ, such facts assume the highest importance. Then follow descriptions of injuries of the kidney and their sequelæ and complications. From this the reader is taken to consider the renal affections secondary to diseases of, or operations upon, the lower urinary organs. In the concluding chapters renal calculus, scrofulous kidney, tumours of the kidney, and operations upon the kidney are described.

An enumeration of the ground covered by Mr. Morris clearly shows that a new line has been struck out, and that in this manual we have a distinct addition to surgical literature, which gives information not elsewhere to be met with in a single work. Such a book was distinctly required, and Mr. Morris has very diligently and ably performed the task he took in hand. Everywhere the chapters show abundant evidence that neither time nor pains have been spared to collect material from all accessible sources, and it is a full and trustworthy book of reference both for students and for practitioners in search of guidance. If we were to make any exception to this comment on the work, it would be directed to the chapter on tumours of the kidney, in which we think that sufficient pains have not been taken to distinguish between sarcoma and carcinoma. The term "cancer" is sometimes employed, and if it is used as referring exclusively to carcinomatous growths, the information is misleading as to the relative frequency of this form of malignant tumour, for primary sarcoma is much more frequent than primary carcinoma. This error has probably arisen from including under the latter cases which are described as "cancer," that term being used to signify a malignant tumour only, and not a special anatomical structure. The illustrations in the text and the chromo-lithographs are beautifully executed. The work altogether will considerably add to Mr. Morris's reputation as an author.

A Complete Pronouncing Medical Dictionary, embracing the Terminology of Medicine and the kindred Sciences, with their Signification, Etymology, and Pronunciation. By JOSEPH THOMAS, M.D., LL.D. Pp. 844. Philadelphia: J. B. Lippincott. 1886.

THIS work is a creditable attempt to supply the student with a dictionary of convenient size, to which he may refer when he meets with an unfamiliar word in the course of his reading. The words to which significations are supplied are printed in clear type. The etymology is then given from the Latin and Greek where this is known, and occasionally a French synonym is added. The explanations are generally short and to the purpose. The pronunciations are, as all such efforts must be, very unsatisfactory and curious. "Koo-deh-von," however the vowels may be accentuated and marked to pattern, scarcely represents the sound a Frenchman makes when he employs the expression "coup de vent."

It is natural and reasonable to contrast Mr. Thomas's work with the well-known works of Dunglison, Littré, Lanzilotti-Buonsanti and Pini, and with the lexicon now in course of publication by the New Sydenham Society by Messrs. Power and Sedgwick. We venture to take "Blood," the first word that presents itself to our minds, and compare the treatment it receives in these five works.

In Dunglison we find it derived from the Saxon "blod." The synonyms given are "sanguis cruor," "lapis animalis," "hæma," "blede" (old English), and "sang" (French). A tolerably good account of blood is then given, in which, however, the morphological elements of the blood are only incidentally mentioned, whilst the unsatisfactory chemistry has nearly a quarter of a column devoted to it, and the same space is wasted in giving the estimates of nineteen different authors in regard to its quantity, the list concluding with the absurd estimate of Keill, who put it at 100 lb. A short statement of its variation in disease follows, succeeded by a brief description of words compounded with blood, as blood-casts, blood-disease, blood-letting, blood-pictures, and the like. Blood-corpuscle is remarkable for its absence.

The account of blood in Buonsanti and Pini is very short and poor, but it is near the close of the second volume, which has been unaccountably curtailed, probably from impatient subscribers complaining of its tardy issue, little knowing the labour it requires.

The article "Sang" in Littré's "Dictionnaire de Médecine" occupies nearly five columns closely printed, and not far short of those of this journal in length. One column is devoted to chemistry, a little more than one to a description of the blood, and the remainder to its alterations and comparative physiology. There are numerous cross references; altogether it is a very good description.

The article "Blood" in the Sydenham Society's Lexicon occupies nearly three columns, and with the compounds nearly six. The synonyms in six languages are given. The general characters of the blood as a whole are shortly but clearly described, then those of the red and white corpuscles of the serum and of the crassamentum, and finally there is an account of their development.

In Dr. Thomas's Dictionary the account of blood is meagre. The Latin, Greek, and French synonyms are given, the pronunciation of the French *sang* being given as "son," which is hardly correct. It is explained as being "the red fluid which circulates through the cavities of the heart, the arteries, and the veins." Why are the capillaries omitted? It is stated to be "red, and usually warm in vertebrated animals"; but surely the amphibia, reptiles, and fishes would outnumber birds and mammals. In regard to the chemistry, which is next described, it errs as far in brevity as Dunglison and Littré do in prolixity, or it is merely said that it "contains albumen in three states of modification—viz., albumen properly so called, fibrin, and red particles"—a description

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which we fear would be marked with a "0" in an examination paper. Serum and clot are then briefly described, and ten lines more are devoted to arterial and venous blood. We think "blood" required a more extended notice than this.

In regard to materia medica and therapeutics, the author has not thought it expedient, perhaps from considerations of space, to give the officinal preparations of any other country than the United States. There are many words absent that we should have expected to find: thus cestode and trematode worms receive no mention; the forms of cells such as prickle, ribbed, adelomorphous, and the like, are omitted; none of the varieties of cataract are given; and the mineral springs of Europe and of America are not alluded to.

Still, though there are a good many shortcomings, the work on the whole is a valuable one. The author must be a man of considerable erudition, and the student will find it a serviceable addition to his library.

The International Journal of the Medical Sciences. Edited by J. MINIS HAYS, A.M., M.D., Philadelphia; and MALCOLM MORRIS, F.R.C.S., London. New Series, Vol. 91. London: Cassell and Co. 1886.

THE first number of this journal does great credit to the editorial staff, and will do much to secure a large circulation for the new periodical. The American Journal has long held a very high place in medical periodical literature, and the change it has now undergone has only strengthened it in all its good points. We can only hope that the editors will be able to publish as good a volume as each quarter comes round; if they do they will confer a great benefit upon the whole profession. It is impossible to refer, however briefly, to every article in the volume before us. It opens with a scholarly essay on Modern Medicine of the English-speaking Race, from the pen of Sir Henry Acland, in which is furnished a justification of the new undertaking. Then follows a discussion on the Mitral Cardiac Murmurs by Dr. Austin Flint, in which the reader will find abundant evidence of careful study and patient, exact, clinical observation. Dr. Flint considers that there are four mitral murmurs—the systolic regurgitant, the systolic non-regurgitant, the presystolic, and the diastolic. Sir James Paget contributes a short article on Imperfect Symmetry, in which he points out the departures from perfect symmetry, even in parts most alike—as the two sides of the same body; and he submits that these need more extended study, and that asymmetrical disease is as important as symmetrical disease, to which he and Dr. William Budd drew attention many years ago. Dr. Noland Mackenzie relates a case of "rose cold" in which a severe paroxysm was excited by the presence of an artificial rose free from odour or powder, from which he infers that psychical influences play an important part in this strange affection. Mitral Stenosis is discussed by Dr. Broadbent at some length, and mainly with a view of attaching diagnostic and prognostic meaning to some of the combinations of modified sounds and murmurs met with in this disease. Dr. Swan Burnett writes to show that in mumps the conjunctiva and optic nerve may be affected. Dr. S. E. Post contributes a paper on Kolpohysterectomy, with a very carefully prepared and full table of cases. Many isolated cases of interest are reported, and Mr. Hutchinson furnishes the first part of a valuable article on a Clinical Classification of Tumours. It is much to be regretted that it was not possible to publish the whole of this suggestive article in one number, for in these days, in which there is so much to read, it is a pity that even the most trifling difficulty should attend the perusal of matter of exceptional interest. The reviews are carefully done, as are also the summaries of the progress of the various departments of medical science. The entire volume is one that can only give great satisfaction to a careful reader.

The Science and Art of Midwifery. By W. T. LUSK, A.M., M.D. London: H. King Lewis.

THIS work, first published three years ago, has now reached a third edition. We reviewed the first edition fully in our columns, and the present edition consequently does not require an elaborate notice. At the same time we must repeat our high opinion of its great excellence, and also point out some of the many additions made in the present edition. The treatment of the vomiting of pregnancy, Bandl's ring, relaxation of the symphyses, the care of the new-born, the use of the incubator, the management and treatment of pelvic presentations, shortness of the cord, spontaneous version, expulsion, and evolution are more fully treated, and much new material has been introduced under each head. The chapter on puerperal fever has been in great part rewritten, and forms the best exposition of the subject to be found in any English text-book. As a full exposition of the subject of which it treats, we know of no work of greater scientific merit, or a safer guide in the practice of midwifery.

An Introduction to the Use of the Laryngoscope. By ARCHIBALD E. GARROD, M.A., M.B. Oxon., M.R.C.P. London: Longmans, Green, and Co. 1886.

THIS is, in the words of the author, "a handy guide to practitioners who may wish to acquaint themselves with the use of the laryngoscope." It is a small book of fifty-four pages, and it is not pretended that it is anything but a manual to teach the use of the laryngoscope. It can be useful only as an introduction to a larger treatise on diseases of the larynx, for a classified synopsis of their appearances in Chapter IX. is all the information afforded with regard to them. For beginners who wish to know something about the history of the laryngoscope, the method of using it, and the chief points in the anatomy and physiology of the larynx, we cannot point to a simpler or clearer epitome.

SEQUEL TO A CASE OF LYMPHADENOMA.

To the Editor of THE LANCET.

SIR,—In the hospital reports of THE LANCET for the latter part of 1883 a remarkable case of Multiple Lymphadenoma which came under my care, and was cured by arsenic, was reported. There were large bunches of enlarged glands in the neck on both sides, in both axillæ, in both bends of the arm, in the groins, in the abdomen and the bronchial glands. The man was perfectly cured by arsenic given in five-minim doses. After his discharge I met him in a state of intoxication, and strongly cautioned him about drink. A few weeks afterwards he came to me, having suffered a slight relapse. The cervical glands had begun to enlarge again. I gave him a prescription for the arsenic, and again cautioned him about drink. A short use of the arsenic sufficed to remove all swelling of the cervical glands. From this time I saw nothing of him until I was called in to attend him for acute congestion of both lungs—a very common affection here in hard drinkers. He died after a few days' illness. The glands showed no signs of disease.

I am, Sir, yours, &c.,

R. H. BAKEWELL, M.D.,
Visiting Physician to the Christchurch Hospital.

Dec. 1885. New Zealand.

UNIVERSITY COLLEGE, LONDON.—The Rev. Charles Beard, Professor Sidney Colvin, Alex. John Ellis, Professor Alfred Goodwin, Professor Christopher Heath, Professor Alex. B. W. Kennedy, Professor E. Ray Lankester, William Blake Odgers, the Right Hon. the Earl of Rosebery, and the Rev. Edward White, have been admitted as life governors of the College. The Fellows admitted are—Messrs. T. W. Allen, Arthur Bersy, A. G. Bourne, L. H. Edmunds, W. A. Gostling, G. B. Mathews, F. W. Oliver, and Charles Platts.

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THE LANCET.

LONDON: SATURDAY, FEBRUARY 27, 1886.

THE subject taken by Mr. BLAND SUTTON in his recent lectures at the College of Surgeons was well chosen and ably treated. That pathological processes play a part in the differentiation of species, and that such processes are themselves subject to the laws of evolution which dominate all creation, are ideas which require for their full treatment a wide and extensive knowledge of animal life in its aberrant forms and in its morbid states. Mr. SUTTON'S contributions to morphology and comparative pathology have already proved his capacity for dealing with the more extensive subject which formed the theme of his lectures, and he has succeeded in throwing a new light upon some of the most intricate problems of pathology. In his first lecture he endeavoured to show that "correlation," or the processes of hypertrophy and atrophy, which are often intimately connected, can account for the production of racial and sexual distinctions. We do not believe that any pathologist will take exception to his definition of hypertrophy. It is true that the phrase, like that of "tumour," has come to be used very loosely, but we imagine that the laxity of language must be ascribed rather to the clinician than to the pathologist. Nevertheless, it was well to remind us that "overgrowth" and "hypertrophy" are not synonymous terms—that the excessive growth of a toe-nail or of the incisor tooth of a rodent is not comparable with the hypertrophy of a fibula in consequence of its being called to take the place of a tibia disabled by a united fracture. The demonstration that the ischial callosities of the cynomorphous monkeys are allied in nature and origin to the acquired epidermic hypertrophies known as "corns" was complete, and justified the assertion that a pathological production can be transmitted hereditarily and may assume the importance of a racial peculiarity. Correlation, however, implies the predominance of one part or organ;—in excess side by side with a dwindling even to entire disappearance of an originally associated organ—as illustrated in the hypertrophy of one kidney with concomitant atrophy of its fellow, and in the normal development of the tibia, which outstrips the fibula owing to the greater blood-supply it receives from being called on to perform the more important function. The application of these principles to the differentiation of the sexual organs formed one of the most interesting and original portions of this lecture. Hermaphroditism, which is the prevailing condition in the lowest animals, and which obtains to a certain stage of existence in the most highly organised, gives place to sexual diversity by a process of correlation. If the process be incomplete or arrested at any stage, sexual reproduction is impossible. Another example of the same kind was given in the replacement of gills by the allantois, which takes on the function of respiration. It may indeed be a question how far it is legitimate to apply the pathological term "hypertrophy" to such conditions; but we confess that, having regard to the essential changes that underlie hypertrophy, it is not possible to draw any line of distinction between the normal evolutional changes in the formation of the individual and the so-called morbid changes. We seem here to stand on the border line between the normal and the abnormal, which, after all, are but ill-defined terms in themselves.

From this wide generalisation Mr. SUTTON passed in his second lecture to explain, on the doctrine of the struggle for existence, the much-debated question of inflammation. Here the whole array of facts was presented to explain the *rôle* of the leucocytes, and the reason for their migration from the vessels in inflammation. The manner in which these problems were attacked was ingenious, and some of the statements put forward were remarkable in overturning fixed notions concerning the powers of cell life. The lecturer's view ranged over the whole of the animal kingdom, to prove that cells possess the power of ingesting and digesting foreign matters. The observations of METSCHNIKOFF, which were largely quoted, went even further, for they seemed to indicate that cells could perform the active function of surrounding and attacking, as well as consuming and assimilating, such foreign material and, moreover, that the cells could select as well as attack. What a valuable contribution to the philosophy of the Unconscious one has in these facts, if facts they be! and what a fresh impetus they give to the cell theory, which of late has been too much put into the background! But the part played by the living motile cells of the organism includes, we are told, the removal of useless organs, and the sketch given of the way in which the phagocytes consume, portion by portion the no longer required tail of the tadpole was startling to the mind content to believe that disappearance of such organs was due to loss of function and diminished blood-supply. However, assuming the premisses, the conclusion arrived at was a natural one—viz., that the presence of any irritant in the tissues will excite, according to the nature of the irritant, the greater or less accumulation of cells (leucocytes) to that part to attack the foreign intruder, and, if possible, to destroy it and render it inert. It is a bold generalisation, but it must not for that reason be set aside as too intangible; it should be capable of proof, or, at any rate, the facts upon which it is based ought to be easily confirmed or set aside. Mr. SUTTON has done good service in bringing this aspect of the subject of inflammation before the notice of pathologists who will, we trust, not be slow in testing its accuracy.

The etiology of neoplasms, which formed the subject of Mr. SUTTON'S third lecture, is a problem which has long engaged the attention of pathologists, and it was the latest explanation—that advanced by COHNHEIM of the origin of tumours from "germinal rudiments"—that Mr. SUTTON strongly put forward as the most reasonable. Of course, in the case of some tumours, as sarcomata, it is not possible to demonstrate the existence of such rudiments, but Mr. SUTTON showed that they could be found for enchondromata and osteomata, and suggested the high probability of the carcinomata arising from abnormal down-growths of epithelium. A great feature of this lecture was the attention directed to the teratomata, including congenital cystic tumours, and the suggestive inferences as to the origin of these latter from disused ducts or tubes. We need not dwell upon these questions here—the lecture speaks for itself,—

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except to state that it would be difficult to disprove statements which have so firm a foundation in embryological facts. We are grateful to Mr. SUTTON for having impressed upon us the great doctrine that pathological processes are subject to the same laws as physiological; that pathology affords scope for a far wider range of inquiry than has yet been bestowed upon it; and that many of the problems which surround pathogenesis may find a solution in the observation of the lower animals and in the facts of embryology.

THERE are many aspects of suicide; for example, the social, the personal, and the moral. Our present and more special concern as medical men is with what may be designated the psychological. What is the state of mind that favours or incites to suicide? We may at once set aside those cases of self-destruction which are, as it were, symptomatic incidents or the direct issues of disease, such as the suicide of a person who suffers from suicidal mania existing before the catastrophe. We may also omit from consideration the very large class of cases which, if they be related to insanity in any real sense, have wilful suicide for their cause and madness for the outcome; we allude to those many instances in which a man, driven to his wit's end by trouble or remorse or shame, kills himself, but does the act in so bungling a manner that he lives for hours or even days after he has shot himself or cut his throat, or taken an irritant poison, and during the interval between the injury and the death exhibits symptoms of an insanity which is really the effect and not the cause of the act of self-murder. A legal fiction covers these cases, and with them most others, with the figment of "temporary insanity." We very much doubt whether there can be such a malady as that which it is sought to hypothecate for the convenient explanation of these cases. An epileptic may be suddenly seized with an impulse for which his will cannot be held responsible, or a maniac may have paroxysms of mental disease, and in either of these transient states the subject of the malady may kill himself though he is more likely to assail the life of someone else; but in such cases there is evidence of disease of the brain—we do not mean coarse lesion, but such pathological conditions as are commonly indicated by mental derangement,—and this evidence has either been forthcoming on previous occasions or will be forthcoming afterwards, if the patient should recover from the injury by which he has sought to put an end to his life; and the morbid state is, as a matter of fact, chronic or recurrent. In the absence of evidence of the sort to which we are now pointing, it must, we think, be held to be in a scientific sense unjustifiable to assume the existence of insanity in any form. Allowance will, of course, be made for a class of cases—not a very numerous one—in which the act of suicide is either the earlier or a very early symptom of insanity, and in which death occurs too quickly for the development of any other symptom, so that a precise diagnosis is impossible. This class of case is plausibly made an excuse for considering all deaths by self-murder instances of insanity. It is assumed that if the person who committed suicide had not died immediately there would have been evidence of his insanity. We concede this is a plausible, as well as a convenient, hypothesis; but it is manifestly a pure assumption almost involving a paradox, to designate this state of matter as "temporary insanity." If insanity existed, it might very well have been persistent. It is only temporary in the sense in which all things happening in time are temporary. If instead of dying the person had lived, there would have been insanity which may have been permanent. It would be far more reasonable to describe the cause of suicide as sudden or commencing insanity. To call it "temporary insanity" is altogether absurd.

Wholly apart from the theory of insanity, suicide has its psychological aspect, and it is to this we would direct attention. Distress of mind may be so great as to impel a perfectly sane mind to seek an end to its miseries in death. The sooner this truth is perceived the better will it be for all concerned, both the distressed and those around them. The notion that no one would commit suicide unless he were insane is by no means reasonable or well founded. There are states of mental agony in which the mind is in no danger of losing control of itself, and yet it is often in very great peril of being driven into a corner without seeing a way of escape, and of assuming that death is preferable to life. It is vain to try to make ourselves believe, or to persuade the experienced and observant, that anyone and everyone in his senses must needs choose to bear the ills that are rather than fly to others he knows not of. When extremities of mental misery are reached, the sane and sound consciousness is quite capable of forming a rational judgment that nothing in the future can be more terrible than the present horror. There is in all minds a tendency to think better of the unknown than of the known. The sincerely religious man, who has no doubt about the reality of his spiritual impressions and conceptions, looking at the matter from his point of view, naturally and reasonably enough imagines that it is impossible for a man to dare death and the future rather than endure any form of trouble in this life. The non-religious, or merely formal believer, does not, however, in his inner conscience feel the same, whatever may be his glib professions on the subject. It is quite conceivable to him that there are chances in favour of bettering his condition by death, even though it be by putting himself out of existence altogether. We all know how often the irreligious long to die when in pain or weariness. In plain truth, no inconsiderable proportion of mankind, we might even say the majority of mortals, are not so impressed with the future but that they would prefer to incur its risks rather than prolong the endurance of some agonies, mental and physical, here; and though we may think such persons very much in the wrong and self-deceived, we have no right to describe them as *insane*. They are as sane as those who take a different view. Why, then, should we so earnestly strive to find an explanation for self-murder by supposing temporary or any other form of insanity as its excuse? Psychologically, there is nothing whatever to necessitate or call for the idea of mental unsoundness in explanation of suicide.

The point for us, as the friends and counsellors of the sick, to consider is, whether it is not desirable to recognise, with a view to help and influence certain states of mind which are in no sense morbid, but which favour the commission of suicide. The position of the practitioner of medicine in relation to these perilous states would be analogous to that

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which, in another department of his work, the practitioner holds towards the errors of diet, the bad habits, and the insanitary life and surroundings of his patient, which are likely to play parts in the causation of disease. If we would warn a man whom we saw drinking himself into disease or living over a cesspool that he must make certain changes if he would preserve his health, equally ought we to be in a position to warn the man who is in a bad mental state that he is making trouble for himself in the future, and advise him how to mend his intellectual ways. This surely is well within the province of the practitioner, if it be true—as we all know it is—that mind is brain-function. In a certain and very real sense the physician must be a minister not only to minds diseased but to the "distressed in mind," if he would discharge his whole duty; we will go further and say, if he would discharge his immediate duty as a practitioner of the art of healing adequately and faithfully. What general physiology is to pathology, psychology is, not only to the pathology of mind, but to the pathology of those disorders and diseases which are the results of errors in the management of the mental system. From the dawn of consciousness in the child to the ending or consummation, whichever it be, of the human consciousness in death, the medical adviser ought to be the sympathetic and trusted counsellor. "Who is sufficient for these things?" We reply no one perfectly, but all may help, and if all did help there would be incomparably less of the misery and vice that leads to suicide, with or without insanity, and to a multitude of the most intractable diseases that we have now to deplore.

The psychology of suicide is not a subject to be discussed to any useful purpose in the compass of a single article. Let what has now been said suffice to enforce the need of attention to this momentous matter. Hereafter we will try to set forth the leading facts, challenging the consideration of the profession in relation to suicide from fear, suicide from remorse, and suicide from exhaustion.

As already observed in a previous issue, Mr. HUTCHINSON'S recent Lettsomian Lectures contain many points of much practical importance to all who are engaged in the treatment of venereal diseases. Having noticed his views on dualism, phagedæna, and mercurial treatment, we now pass on to his remarks on bubo. He regards scars in the groin as presumptive evidence of syphilis, and believes that it is very exceptional for the typical chancroid to cause no enlargement of the glands at all. These views will not be generally accepted. It is true, as Mr. HUTCHINSON remarks, that our rules of diagnosis have been far too definitely laid down in these matters. But it would be unwise, in the words of the late Dr. LATHAM, "to rebuke the experience of all past times and dictate to the experience of all future," for the past and present history of syphilis shows the revival of many so-called exploded views. That one or more indolent, painless, indurated inguinal glands may occasionally become inflamed and suppurate is a fact of frequent experience, but that it is the exception rather than the rule is equally the experience of most authorities who have had the advantage of large practical observation. On the other hand, the tendency of the typical chancroid is to be the cause of enlargement of the glands as of acute inflammation terminating in suppurating bubo. In dealing with the important question as to whether a patient who had once had syphilis was liable to a second attack, Mr. HUTCHINSON considers that RICORD'S law (which held that he was not liable) holds good in reference to a large majority of cases. But he also contends that exceptional cases do occur, and considers them not more frequent than in the case of variola and measles. Passing on to the very important practical point of incubation periods, Mr. HUTCHINSON remarks how strange it is that its length should still remain a moot point. It is less strange when it is borne in mind how difficult it is to obtain accurate data concerning it. By many practitioners it is regarded as a dry theoretical point of little or no practical importance, while the information obtained from patients can only in a small proportion of cases be absolutely trustworthy. Of how great importance this "moot point" may be we have a very happy illustration in the case which the lecturer has given, where his patient, a young gentleman, was so unfortunate as to contract both gonorrhœa and syphilis, as the result of being once led astray. The gonorrhœa was soon cured, but a chancre made its appearance. The surgeon who treated it, ignoring the possibility of a long period of incubation, misled the patient's uncle, and virtually accused the patient of untruthfulness, because the chancre did not appear till five weeks after the advent of the gonorrhœa. Fortunately Mr. HUTCHINSON was enabled to do the lad an act of justice and to afford real gratification to his uncle and guardian. There can be little doubt that the average period of incubation is, as Mr. HUTCHINSON contends, much longer than is generally supposed, being as much as five or even six weeks, reckoning it as the interval between contagion and the production of an induration which can be diagnosed. It is a fact of great importance in medico-legal cases, as it may go far to prove or disprove a charge of rape or other criminal assault. It is of even greater importance as regards the interval which should elapse between an exposure to contagion and marriage, since every practitioner of experience knows how reckless many men are on this point, and how impossible it appears for them to control their sexual desires even for a few weeks. Moreover, in every case where a patient consults a practitioner for a supposed venereal ailment, the result of impure connexion, the latter will do well to bear in mind this very important diagnostic point, recollecting that, however slight the case may at first appear, it may, after all, turn out to be a case of syphilis.

The subject of recurrent chancres is of great interest, and Mr. HUTCHINSON has given a very lucid description of them, which is well worth reproducing. "Briefly," he says, "it is quite possible and not a very rare occurrence for induration to develop in the retro-coronal fold of the prepuce, which assumes the most exact resemblance to hard chancres, but which are not consequent on any fresh contagion. They occur to those who have had syphilis, and usually but not invariably on the site of former chancres." He would appear to place little value on the presence or absence of induration as a diagnostic point. He regards its presence as proof that there has been no previous attack of syphilis and no application of caustic, but it must be remembered that some of the worst cases of induration are those

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in which there has been gross neglect and an absence of all proper treatment. These are the cases which, in Mr. HUTCHINSON'S own words, "in size and duration simulate a new growth," going far to show how important a symptom of true syphilis induration is when well marked. As for the condition to which the lecturer has given the term "gonorrhœa-syphilis," it conveys an additional warning of how carefully every case of supposed gonorrhœa should be watched. That the gonorrhœal discharge of a syphilised female should infect a man with syphilis is possible. But that a urethral chancre is often most difficult to distinguish from gonorrhœa is well known, and such being the case it is much more probable that the chancre should escape observation than that there should be no chancre at all.

Of all points noticed by Mr. HUTCHINSON in these recent lectures, none perhaps was more interesting and important than the question as to whether syphilis can be conveyed in vaccination with clear lymph. He evidently considers that this has been conclusively answered in the affirmative by the experiment to which a surgeon recently submitted himself. It has been objected that the lymph might have contained corpuscles, invisible to the naked eye, but visible through the microscope. But whatever may be the true explanation, it is plainly the duty of all vaccinators to ascertain beyond all reasonable doubt that their vaccinifers are not the subjects of syphilis.

In concluding this imperfect notice of these lectures, it is greatly to be desired that all who have the opportunity will furnish the certain classes of facts which Mr. HUTCHINSON regards as still wanting. These are: "Cases in which twins, one or both, suffer from inherited syphilis; they should be followed up through as long a period as possible. Cases in which women acquire syphilis during pregnancy, with especial attention to the question of the freedom of both parents from any former taint; in these cases it is desired to ascertain the effect upon the previously healthy fœtus of syphilis acquired by the mother at different periods of pregnancy. All exceptions, or apparent exceptions, to COLLES' law (that a sucking child cannot infect the nipple of its own mother). All instances of children born alive with indications of syphilis upon them. All cases of pemphigus infantum or of other syphilitic eruptions making their appearance during the first week of life." These, as Mr. HUTCHINSON observes, can only be obtained from those practitioners who are engaged in family practice, who should be rejoiced to aid in so excellent a work as the clearing up of all doubtful points in the diagnosis of such a disease as syphilis. The writings of ACTON, RICORD, DIDAY, BASSEREAU, HENRY LEE, BERKELEY HILL, BUMSTEAD, TAYLOR, and last, but not least, JONATHAN HUTCHINSON, clearly show that, instead of being ostracised from the study and practice of members of the profession, as formerly, the diagnosis, prognosis, and treatment of syphilitic and other venereal diseases form as learned, honourable, and scientific a specialty as any department of medicine or surgery.

THIS is the season of the year when medical men have to face the commercial aspect of their calling, whether they like it or not. During the greater part of the year they follow their arduous pursuits without much reference to being recompensed. The ring of the night-bell rudely disturbs their sleep; the perverseness of disease disarranges their holidays; the tension of individual cases disorders their digestion, possibly their very nerve centres; yet they go on with the satisfaction of men at their post, doing their duty, abating pain and suffering, and in not a few cases adding sensibly to the duration of life and the prosperity and happiness of families. Sometimes the object of their solicitude is the breadwinner of the family, on whom its very subsistence depends; at other times it may be a mere infant of days; but in either case life is at stake, with all its possibilities and relations; and medicine is daily felt to be no holiday calling, but a militant pursuit, a veritable battle with disease from January to December without long vacations, and which, even on Christmas and Midsummer Days admits of very partial suspension. The calling is so absorbing, the objects are so lofty, that medical men are apt to forget that they have to live. The success of their curative efforts is very apt to produce a similar forgetfulness in their patients. The gratitude of patients is often great on their restoration to health, but it is also often evanescent, and health once restored the sensations of recovery and relief are apt to be soon forgotten. Health is regarded as a sort of right, and the agent and instrument by whom it was recovered is allowed to drop out of mind. We will not try to fix the exact number of grateful patients. Once there were ten healed, and only one was found grateful. To do human nature justice, we are disposed to think there would not be nine defaulters now out of ten. But about Christmas-time, for one reason or another, medical men have to prefer their charges and to make pecuniary claims on those whom they have attended. The duty cannot be shirked. They have, as we have said, to live, and the divine character of their profession in no way exempts them from the demands of those whose callings are more prosaic, and who minister to them and to their children. We do not often allude to the commercial aspects of medicine. Perhaps we should do so more frequently were it only to prevent disappointment in many who seem to think it a profession in which failure is almost impossible and living easy. Our object now is rather to remind patients of the nature of the service which they are asked in the medical man's bill to recompense, and which, to do them justice, a large number discharge with grace and generosity. The more intelligent the conception of the nature of medical service, the more cheerfully and the more promptly will the bill be discharged. The days are gone by when intelligent men think of the medical man as the mere master of so many huge bottles, each good for a given symptom or complaint, and to be dispensed by rule of thumb. But even now all men are not quick to perceive in what true medical service consists. In the hope of helping both them and medical men themselves to a true estimate of the value of medical service, we seek here now to magnify it. It may involve no giving of medicine at all. A mere hint to a wise man about the direction in which his health lies, or from which the subtle risk of a breakdown in his health or that of one of his family may be looked for, may be worth all the money that his doctor's bill comes to for all the years of his life. The best medical service is that which averts disease,

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or puts the patient in the way of avoiding it for the future. Add to such deep service as this the relief of actual suffering, the limitation of infections, the tiding over of grave crises, the timely and wise selection of appropriate remedies, the performance of surgical operations more or less serious, and medical service becomes precious, and the cheerfulness and generosity with which it is paid for will be limited only by either the intelligence or the means of the patient. It is with such views that medical accounts should be made out, and with such views that they should be discharged. Our opinion is often asked as to the scale and sum of charges proper to be made in certain cases. It is of far more moment to make clear to the public the profound and far-reaching nature of medical service and the arduous character of the medical calling. The medical profession has never been wanting in mercy, in readiness to help those who "cannot recompense" it; but this very quality of mercy has been abused, and the profession and the public will only gain by a stern determination to raise the public estimate of the value of medical service.

No better subject for discussion at a Clinical Society could be chosen than that of Meningitis. The ignorance that still prevails about it, the variety of its clinical course, the difficulties of diagnosis and prognosis, the questions of its etiology and natural history, all combine to render the subject as fascinating to the clinical physician as it is monotonous to the morbid anatomist. Its modes of onset are multiform, and its further course and ultimate issue are as uncertain as any process can possibly be. Mere languor and lassitude, unexplained pyrexia or constipation, vomiting without other symptoms, fits of all kinds, hemiplegia, disturbance of pulse or breathing, and vaso-motor disorders may mark the onset in different cases. At the discussion on Dr. GOODHART'S able and suggestive paper at the last meeting of the Clinical Society many most interesting points were raised. Is otitis interna or media a cause, consequence, or mere concomitant of meningitis? Who can tell? Dr. BRISTOWE stated his belief, in which we concur, that in the majority of cases the aural disease should be regarded as a mere companion of the meningeal inflammation. With regard to tubercular meningitis, this opinion is probably most true; it may be less true of the simple form of meningitis. And this leads up to the first great distinction to be drawn in discussing this disease. It is of the first importance, as Drs. WEST and BRISTOWE insisted, to distinguish between the tubercular and the simple forms of meningitis. Then, bearing this in mind, we ought to consider the difficulties in diagnosis of the two diseases. On the whole, we are disposed to think that tubercular meningitis is far more difficult of diagnosis than the simple variety. A still further distinction is necessary between the diagnosis of tubercular meningitis in the very young and the same disease occurring a little later, before and after the second dentition. Tubercular meningitis may occur at all ages, and cases are on record of its appearance before the first tooth has been "cut." At these very early periods of life the diagnosis is of the most difficult nature, and fatal cases of obscure disease exhibiting most if not all the symptoms of meningitis, have been found post mortem to be destitute of the slightest sign of meningeal affection. To put the case more explicitly:—retraction of the head, convulsions, pyrexia, irregular and rapid pulse, disordered breathing, vaso-motor disturbances, and even squint, have been observed as chief symptoms, when the necropsy has failed to reveal any disease in the cephalic cavity. We should place a mark against optic neuritis, and regard its certain presence or that of choroidal tubercle as the most infallible proof—taken with the other symptoms and clinical course—of the existence of meningitis—of course tubercular if the choroidal sign be present.

On other points raised in the discussion we think there should be more unanimity of opinion than now appears to exist. That simple meningitis may recover seems to us to rest on evidence of the most irrefutable character. That tubercular meningitis may cease to give rise to symptoms must, we opine, be also regarded as beyond doubt. At least it is difficult to explain what happens in several cases unless we accept this doctrine. Cases have occurred in which competent observers have watched the progress of symptoms affording the strongest presumption of the presence of tubercular meningitis, which have progressed favourably for a long time, and then the illness has reappeared with its usual aspect and fatal termination. In one such case that has come under our observation a slowly recovering hemiplegia remained with a child for several months before the appearance of the final fatal illness. A necropsy revealed the signs of an old cerebral softening in the neighbourhood of the opposite internal capsule, together with a mixture of tough and soft inflammatory tubercular products, the respective results of the old and recent morbid processes—a geological kind of evidence that seems to be of a conclusive nature.

A further point is the mode of origin of some cases of simple meningitis. Dr. SYDNEY PHILLIPS spoke of a case of purulent cerebro-spinal meningitis supervening on measles, in which a necropsy proved the accuracy of the diagnosis, and failed to detect any otitis. Dr. WEST stated as within his own experience that other eruptive fevers than measles may be the starting-point of meningitis of a simple kind. One of the most interesting cases that Dr. GOODHART related seemed to show that septic poisoning may also be a cause of simple meningitis, and it is to be regretted that a necropsy was not obtained in his case, which otherwise had every appearance of supporting his opinion; on this etiological point, also, Dr. WEST seemed to entertain no doubt. There was one statement that Dr. WEST ventured to make, on which, if we understood him aright, we should like to join issue. It was to the effect that when tubercular meningitis was in action the temperature never rose above 101° or 102°. As to this we have not the slightest doubt, founded on clinical with subsequent post-mortem evidence, that tubercular meningitis may be accompanied by as high a temperature as any other disease, cerebral, thoracic, or abdominal.

MR. VICTOR HORSLEY will read a paper on Brain Surgery in the Stone Age at a meeting of the Medical Society of University College, to be held on Wednesday, March 3rd, at 8 P.M. The meeting will be held in the Botanical Theatre of the College. Any member of the profession will be admitted on showing his visiting card.

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Annotations.

"Ne quid nimis."

MEDICAL MEN AND INFECTIOUS DISEASES.

IT would be very pleasant to believe with Dr. Mantle that some immunity from infectious disease is conferred upon medical men by the very fact of their being constantly exposed to the different infections, and that Dr. Ogle's statistics confirm this view. We are sorry to say that we cannot take this view of Dr. Ogle's statistics, or of the facts known too well to medical men before they were published. Dr. Ogle shows, we may remind our readers, that the death-rate of medical men aged over twenty years from scarlet fever is nearly four times the average rate of other men of the same age, from typhus more than twice, and from diphtheria nearly four times. But the liability of medical men to infection is no new discovery. If anyone doubts this, let him look into the facts concerning typhus and relapsing fever, two intensely infectious diseases, contained in Murchison's book on Fevers, and he will be soon disabused. We can only quote one or two o these facts. Dr. Tweedie, writing in 1833 of typhus, said: "Every physician, with one exception (the late Dr. Bateman), who has been connected with the London Fever Hospital has been attacked with fever during his attendance, and three out of eight physicians have died. The resident medical officers, matrons, porters, and nurses, have, one and all, invariably been the subjects of fever." In 1837 Dr. Cowan thus wrote concerning the typhus then prevailing in Glasgow: "All the gentlemen who have acted as clerks in the Fever Hospital for many years past have been attacked with fever, unless they had it previously to their election." Dr. Murchison had two attacks of typhus at an interval of ten years. We must not encourage the idea that we have any charm against infections; but we must do all we can to preserve the purity of the atmosphere of sick rooms by cleanliness, ventilation, and disinfection.

DIPHTHERIA AT AYLESBURY.

THE vale of Aylesbury, in Buckinghamshire, is a rich grazing district, producing large quantities of milk for human consumption. As it is now an established fact that zymotic disease may be spread by milk which has become contaminated with the poison, it is a matter of great moment when a town, situated as Aylesbury is in a grazing vale, becomes the centre of an outbreak of diphtheria. There is to be a Government inquiry into the cause of this outbreak, the result of which will be of more than usual interest. The sanitary authorities of Aylesbury have given great consideration to the drainage of the town, and with a view of perfecting their system have adopted a modern process of dealing with their sewage at the outfall. It must therefore be disappointing and somewhat disheartening that the town should now be visited by such an outbreak of diphtheria as to necessitate a Government inquiry into the cause. The registration district of Aylesbury has the highest death-rate of any registration district of the county of Buckinghamshire. It has not, however, in the past had a high death-rate from diphtheria; in fact, the death-rate from this disease would compare favourably with that of other registration districts in the same county. It becomes, then, a subject of great interest as to what can be the cause of this development of diphtheria in a locality which has undergone great sanitary improvements. We have frequently pointed out that diphtheria appears to arise independently of sewerage defects, though it is always much aggravated by emanations from sewage. The town of Aylesbury is situated on an eminence above the rich valley which stretches for miles below it, and the soil of which consists of rich black mould, long noted for its fertility. There is more or less of an impervious subsoil which favours the retention of moisture and vegetable decomposition, both of which are conducive to the development of diphtheria.

THE MEDICAL OFFICER OF HEALTH FOR BRISTOL.

MR. DAVID DAVIES, the well-known medical officer of health for Bristol, has been "interviewed," and if impending retirement from the arduous duties of a prominent and honoured career, in which the interests of others have always taken the first place, can justify the process, we cannot complain that he should have been subjected to it. One of the first officers of health appointed in England, Mr. Davies commenced his duties by facing epidemics of typhus and of cholera, the mortality from which was such that the task could only be undertaken with an exceptional amount of personal risk; and though at first the appointment was temporary and provisional, yet it soon became evident that services such as had been rendered to Bristol during the period for which he had been in office could not be dispensed with under the circumstances in which the city found itself. Mr. Davies' student career had been a distinguished one; he had received from the hands of Prince Albert the Cheselden Medal; and he brought to bear upon the official duties which were cast upon him, at the age of twenty-eight, all the energy which he had displayed during his early studies. To tell the record of his services would occupy a volume, for all the great improvements in the sanitary and social circumstances of Bristol which have been going on since 1849 are more or less identified with his name; and when he looks back at the conditions under which the inhabitants of that city were living, as regards such important matters as dwelling-accommodation, water-supply, sewerage and drainage, and prevalence of uncontrolled infection, at the commencement of his career, and compares them with what they now are, he may well, for the moment, ignore the further improvements which he would wish to advocate and press forward, and find satisfaction in the fact that he has more than performed his duty to himself and to his constituency. We are glad to learn that Mr. Davies' retirement takes place at a time when he may expect to spend many years in the enjoyment of well-earned rest and recreation, and we are certain that he will take with him the best wishes of the inhabitants of Bristol and of the many members of the profession who know him either personally or by repute.

THE RECENT CASES OF ACCIDENTAL POISONING.

LAST week we commented on the danger which recent events have too abundantly proved to arise from the want of a distinguishing mark on poisons or mixtures containing poison. The case in which a lad died from the effects of carbolic acid, administered to him in mistake for medicine, was then mentioned. The nurse's error in this case was very deplorable, and it was due without doubt to her using an ordinary bottle for containing the disinfectant. In the face of this fact it is somewhat remarkable that carbolic acid is not one of those substances to which the law requires that the sign of caution should be affixed. Chemists almost invariably mark it as a poison, as also do chemical manufacturers, but such care is optional. The crude stuff is sold by oilmen to any buyer without precaution, and but for its odour might pass for beer, especially when kept in a jug or pint bottle. At a late meeting of the Pharmaceutical Society it was proposed to advise the Privy Council that certain drugs—amongst them carbolic acid—should be added to the list of legally recognised poisons. It appeared, however, that this

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substance had been purposely excluded from the former list because of its common use in outlying rural districts. Convenience, possibly, may still maintain this exemption; but if so, we may at least hope that some sign of danger may be affixed to a commodity which has not in a few cases been a means of suicide or accidental death. A more serious misfortune of closely similar causation was the poisoning of two persons a fortnight ago with strychnine, near the Old Kent-road. Here also the appropriate label was wanting. Not only so, but the strychnia solution had been placed in a bottle supposed to contain a harmless flavouring agent. It is worthy of note that the medical man who has been the unhappy cause of this double calamity has behaved with commendable frankness in the matter, by taking the whole responsibility upon himself and exonerating from all blame the practitioner associated with him. No doubt his explanation, that the strychnine had been placed for temporary convenience in an empty bottle labeled otherwise and forgotten, is the true one. The verdict of the coroner's jury, implying a censure of extreme carelessness, is not unduly severe in the circumstances. The alleged intention of taking legal action against the defaulting practitioner, however natural to one of the bereaved husbands, is, to our mind, a useless and painful addition to a sufficiently painful case. These various accidents occurring so simply cannot fail to remind all concerned that care as much as skill is essential to treatment. The latter of them also recalls a trusty method in pharmacy which allows the storage of poisons in small quantities only, and in a cabinet devoted to themselves.

THE JURYMEN WOULD HAVE THEIR WAY.

ON Feb. 15th Mr. William Carter, coroner for the Lambeth division of Surrey, held an inquest at the Crown Tavern, Lambeth-walk, Albert Embankment, touching the death of a newly-born male child, who was found dead under an arch in William-street, Lambeth. According to the evidence of the police, the police surgeon asserted that the death had occurred quite recently. There was no evidence as to identity. Under these circumstances the coroner advised the jury to return a verdict of "Found dead," and not to go further into the investigation as to the cause of death. Upon this, a juryman, who appears to have held strong convictions as to the frequency and heinousness of child murder and, what is more, to have had the courage to act upon them, plainly intimated to the coroner that he would not subscribe the inquiry form unless the doctor was called to assist them in arriving at some sort of decision as to how the death had been brought about. The coroner, put upon his mettle, at once threatened the recalcitrant juryman with imprisonment for contempt of court; the threat, however, was not carried out. Had it been, one of Her Majesty's prisons would undoubtedly have had its resources somewhat taxed, for the foreman of the jury and several other of his coadjutors were not slow to inform the coroner of their determination to exercise their prerogative of refusing to find a verdict upon what might seem to them insufficient testimony. Ultimately the inquiry was adjourned in order that a post-mortem examination might be held. We yield to no one in insisting upon the necessity of the majesty of the law being upheld. When jurymen are legally in the wrong they deserve whatever punishment their offence entails. In this case, however, we maintain that the real right was on their side. The very purpose of an inquest is to determine "how, when, and by what means" the deceased came by his or her death. No doubt the coroner was correct in saying that the superior courts had decided "that unless independent legal proof of identity and of a child having had a separate existence was forthcoming, no criminal charge could be sustained." Proof of live birth, however, is presumptive evidence of a separate existence, and, if only for negative reasons, it is obviously desirable that the former fact should be settled definitely. Furthermore, we cannot imagine that the coroner was so purblind as to believe that proof of live birth might not form an important and necessary link in the chain of circumstantial evidence which it was the duty of someone to forge. If, as has been reported, the chief argument against the demand for a post-mortem examination was that the magistrates objected to "unnecessary expense" being incurred, we can only hope that other jurymen will stand upon their rights, as Mr. Jordan did, and decline to "act as dummies" when the law enjoins upon them the specific performance of a highly responsible duty. Where there is any reasonable doubt as to the cause of death, it is of paramount importance that a medical man should be consulted and examined on oath. The *ipse dixit* of a third person is not worth the paper on which it is recorded.

OVER-PRESSURE AT WORKHOUSES.

THE death which occurred last week at the St. George's Workhouse, Borough, demonstrates clearly one of the weak points of our Poor-law administration—viz., the very inadequate provision made for the medical attendance on the sick poor. Not only are the medical officers at our workhouses and sick asylums tasked to their utmost with the care of an overwhelming multitude of sick persons, but they have also to decide, in the case of every admission to the workhouse, as to the actual state of the applicant, and whether the case is to be retained in the workhouse or sent on to the infirmary. Among the cases daily seeking relief there are always a number that stand on the borderland of acute and chronic disease—patients suffering, say, from long-standing disease of the nervous system, heart disease, chronic bronchitis, &c., aggravated by want and exposure, but who only require rest, warmth, and food, to be able to struggle on again; and the more acute cases that demand prompt medical assistance and skilful nursing. Now, to decide at once upon the exact requirements of a case is, even in ordinary times, often a matter of some difficulty, but still more so is it in a season like the present, when the tide of sickness and distress is setting full in the direction of the workhouse and infirmary; whilst, no doubt, a desire exists, now that the wards of the infirmaries are overflowing, to deal with as many as possible of the less urgent cases at the workhouse, instead of forwarding them to the already overcrowded sick asylums. Another difficulty is that the relieving officer, when the pressure is great, may happen to send a sick person direct into the workhouse without bringing the case first under the notice of the medical officer, when it may escape his observation for a day or so, unless specially reported to him. In the present instance there seems to be some doubt whether the patient was seen by the doctor on admission, or whether he was passed into the house without the doctor's cognizance; but there can be no question that the case was one which ought to have been sent at once to the sick infirmary. The blame, however, does not rest, we think, with the officials, but with the system. At the time when the new regulations for the medical attendance of the sick poor at the infirmaries and workhouses were introduced, we pointed out how inadequate, as regards numbers, was the staff allotted to perform the very onerous and responsible duties required, and we then predicted that mishaps would be likely to occur. That they have not done so to a greater extent has hitherto been due to the self-devotion and energy with which the medical staff of these institutions have performed their duties, and to the fact that till recently the pressure, though great, has not been overwhelming. Now

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that, with the severe and prolonged cold and the prevailing distress, sickness and suffering have risen to almost unmanageable heights, we must regard the present lamentable incident, not as a subject for the censure of individuals, but as showing the necessity for adequately enlarging the staff at these institutions. This could be most readily done by the appointment of clinical assistants, selected from the senior students of the metropolitan hospitals; it would be useful work for them, a boon to the poor, and a sensible relief to our overworked Poor-law medical officers.

BLINDNESS IN RUSSIA.

AT the first Congress of Russian Doctors, which was held immediately after Christmas (our Jan. 6th), many important papers were read, followed by discussions of considerable interest, some of the most eminent members of the profession from the different provinces and universities of the empire taking part in them. A very striking contribution to the study of social and sanitary questions was afforded by a paper by Dr. A. T. Skrebitski on the "Distribution and Statistics of Blindness in Russia." The data employed were chiefly those collected by the military authorities who have to examine young men as they become liable to service in the army. Taking the total for the five years 1879 to 1883, the number examined was 1,388,761, of whom 13,686, or almost 1 per cent., were blind of one or both eyes. In certain districts the proportion was much higher than the average, and some of the largest, or rather most populous, provinces seem to have presented the greater proportion of blind; thus in that of Kieff, which sent up almost the largest number of recruits—namely, 43,118,—no less than 660, or 1 in every 65, were found to be blind of one or both eyes. The smallest proportion of blind was found in Archangel, where it was 1 in 390; but even this is far above the proportion in other European countries. To make the comparison with the statistics of other countries it is necessary to subtract the number of those blind in one eye, which in Russia is found to be only a fifth of the total blind; thus, we may consider that four-fifths of the 13,686 recruits returned as blind were blind in both eyes, so that the ratio of totally blind is about 1 to 125. The ratio in England and Ireland is 1 to 1015, and that in several other European countries is still lower, being 1 to 1406 in Saxony, and 1 to 1429 in Denmark. Dr. Skrebitski's paper has attracted a considerable amount of attention from the lay press, the *Novosti* remarking, "We have surpassed Europe not only in mental but in physical blindness." To any foreigner, however, who reads the Russian medical journals, the valuable original communications with which they literally teem would appear to indicate the reverse of "blindness," in the Russian scientific world at all events.

VESTRY VITAL STATISTICS.

THERE are in this country two systems of official death-rates, that of the central government and that of the local government, for which the Registrar-General and medical officers of health respectively are responsible. There are both advantages and disadvantages in this state of things. The statistics of the Registrar-General have the advantage of impartiality and uniformity, and, as a rule, should be used for comparisons. The medical officer of health, on the other hand, has the opportunities of correcting errors in registration, and such as arise from immigrants dying of infectious diseases immediately after arrival in the district. Hence, an energetic and accomplished medical officer provides statistics which correspond more closely with the real facts than do those that are issued from Somerset House. Although, however, there are many medical officers to whom the public is more indebted than it is commonly willing to admit, and the number of such is fast increasing, there are, here and there, to be found men who entered the public health service as it were by accident, and who, owing to lack of energy and interest or to arithmetical weakness, do not improve the statistics that they take in hand, and who too readily yield to the temptation to make the health of their district appear better than it is, by sedulously rejecting all deaths of non-parishoners in institutions, without taking any account of the deaths of parishioners in hospitals &c. outside the area. The Registrar-General furnishes four times a year corrected returns for London, in which all the deaths in public institutions are assigned to the sanitary areas to which they properly belong. It would be a good thing if London medical officers could be instructed by the central authority to give these official figures in their reports, and, where in any case they thought fit to vary the figures, to give such figures separately, together with the reasons for such variations. If this were the rule, it would be impossible for such a misleading report to be issued as that for Mile-end Old Town, 1884-85. The figures given in this report are not only most meagre, but are hopelessly at variance with those of the Registrar-General. Thus, the medical officer of health gives the deaths from the "seven principal infectious diseases" as follows: small-pox 20, measles 9, scarlet fever 56, diphtheria 12, whooping-cough 40, enteric fever 0, cholera 3—total 140. From this he deduces a zymotic death-rate of 1·2 per 1000, as against 3·2 for London. An examination of the Registrar-General's returns for the same period shows quite different figures—viz.: small-pox 27, measles 22, scarlet fever 88, diphtheria 12, whooping-cough 40, enteric fever 24, diarrhœa 117—total 350, which gives a zymotic rate of 3·2, or the same as that for London. But if correction be made for institution deaths, no fewer than 51 zymotic deaths have to be added, which bring the rate up to 3·6, or exactly three times the low rate given in the report of the medical officer to the vestry.

ACCURACY IN DISPENSING MEDICINES.

IT is not very satisfactory to learn that errors in quantity are not uncommon in dispensing medical prescriptions. Such, nevertheless, is the conclusion arrived at in a report on this subject which we have recently examined. This report, it is true, does not treat of an extensive field of research, but its data have been carefully and impartially studied within their limited area. Most of the prescriptions with which this paper deals were of a comparatively harmless nature, while in the case of those containing poisons the error in dispensing was more often on the side of safety than otherwise and was never a dangerous one. Occasionally, however, the amount of the active ingredient was, from a medical point of view, somewhat seriously in excess of the quantity prescribed. So far as the evidence goes, the work of chemists proper, though subjected to fuller investigation than that of other practising pharmacists represented by co-operative stores and drug companies, has clearly the advantage over the latter. Open surgeries have not received such close attention, but in one of these there occurred a very gross error of deficiency with respect to a drug in common use and not ordinarily poisonous. Such inexactitude, when it erred by falling short of the due total, may not have been quite unintentional. We have known cautious dispensers who, in dealing with strong poisons, acted on the principle of the Roman lictors, and perhaps wisely abated a trifle of the full amount. The deficits above stated were, however, in some cases greater than caution required. No fault could be found in the drugs analysed. The quantities alone were at fault. Yet it is improbable that among the chemists or store-salesmen this was due to any grave defect in weights or measures which had escaped the customary inspection. Nor do we see

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how monetary considerations, the drugs being cheap, could account for the variations in dose. The errors in quantity were probably due to some extent to the fact that the eye, unaided by a fixed scale, had been too confidently relied upon. We do not believe that chemists or others are, as a rule, given to measure thus roughly even simple ingredients, far less poisons; but it is manifest that rule must be carefully observed in matters like these, where even slight inaccuracies, though perhaps not very hurtful, are in all ways unadvisable. The want of poison labels and appropriate poison bottles is mentioned in connexion with these quantitative faults. For this offence the Poisons Act itself is, by its laxity, largely accountable, and the remedy therefore can only come by fresh legislation. For the inaccuracy law might perhaps do something; but there is a danger that, if too rigorously applied, it might only forge a useless and irritating fetter for a trade not usually careless of its responsibilities.

SLIPPERY ROADS.

"A LARGE amount of equine suffering is annually saved by the sprinkling of sand and gravel in the streets of London. The Commission of Sewers expend about £10,000 a year for this purpose." This paragraph, which appeared in a contemporary last week, is, we fear, likely to create the false impression that all our local authorities are doing their best to minimise "equine suffering." We are sorry to have to bear witness that this is not the case throughout the metropolis. From the allusion to the Commission of Sewers it is probable that the words "the City" should have been substituted for "London." The city authorities deserve credit for the efforts they make to save horses from suffering. Would that we could say as much for the West-end. One of our main thoroughfares the other evening presented a spectacle calculated to cause much distress to anyone who regards a horse as something more than a mere living locomotive. A slight frost had made the surface of the wood-paving slippery as ice, but nothing had been done to give the horses a foothold. True that now and then in the centre of the road might be seen a tantalising mound of sand obviously intended for this purpose, but most certainly not so employed. The life of a London cab-horse is by no means an enviable one. Surely the animal might be spared utterly unnecessary suffering. Such a remark from a cabman as "Would you mind getting out here, Sir? My mare is a capital good one, but she can't face this," does not seem to warrant the self-congratulatory nature of the paragraph we have quoted.

MEXICAN MEDICAL SCHOOLS.

THE not very famous medical school of Puebla in Mexico has ceased to exist, because its professors found that without government assistance, which was denied them, they could not continue to carry on the medical education of their students "with dignity," many essentials for such education requiring funds to an extent which was not at their disposal. So far so good; all right-minded persons will agree that the Puebla professors were right in their determination not to carry on a school when they could not do so in a manner worthy of the noble calling of medicine. It seems, however, according to the editor of a Mexican contemporary, *La Voz de Hippocrates*, that there still exist a number of so-called medical schools in the republic, as those of Celaya, Toluca, Tlaxcala, Orizaba, Jalapa, and Vera Cruz, where the whole staff is represented by a single individual, who unites in himself the appointments of director, examiner, chief of clinic and tutor, and where diplomas are dispensed with so unsparing a hand that quacks with the title of Doctor are disseminated over the country, infesting "even the capital, where they practise a profession of which they are absolutely ignorant." These medical schools, as represented by their respective functionaries, have probably but little sense of dignity, except possibly that which may attach to the possession of the almighty dollar, so that it is hopeless to look forward to their voluntarily following the example of the staff at Puebla. Surely, however, the government of the republic might see its way to giving them a broad hint, or something stronger if necessary, about the propriety of their systems of medical *education* (?)

LECTURES TO HOSPITAL NURSES.

ALTHOUGH we hold, and have expressed the opinion, that it is undesirable for those whose profession it is to nurse the sick and needy to acquire a mere smattering of medical and surgical knowledge for the purpose of applying it without proper direction, we are quite ready to admit that seeking good sound instruction at the hands of hospital physicians and surgeons is worthy of encouragement. It is not so much perhaps what a nurse should do as what she should not do in the exercise of her vocation which requires to be instilled into her mind. Quick at perception, though hasty in judgment—which, however, is often intuitively correct,—and possessed of that gentleness of manner which has always been the admiration of both doctor and patient, it behoves a woman to acquire the broad principles which underlie the perfection of nursing in practice. Let us take, for example, the case of a patient insensible from an attack of apoplexy, or faint unto death from loss of blood owing to a ruptured varicosed vein. A nurse may possibly, in the absence of a medical man, be the first to be called upon to use discretion as to what is best to be done in the face of impending death; and that being so, we imagine no one will gainsay the advantage of such persons being possessed of so much anatomical and physiological knowledge as will not only suggest the proper course to be pursued, but will supply the *rationale* of the act. If a nurse has learned that the valves of dilated veins may be rendered functionless, so that the blood can under certain conditions—rupture for example—flow in either direction, she will be something more than a mere machine: she will have interest in her work, and interest begets efficiency. So, too, if she understands that any mental or physical excitement increases the frequency, and usually also the force, of the heart's beat, and that such increased action tends to expel more blood from a ruptured cerebral vessel, she will be doubly careful to avoid needless moving of the patient. For these reasons we hail with pleasure the information that in several of our London hospitals it has become an established usage for the authorities to organise, and the staff to carry out, a course of professional lectures to the female nursing staff. The undertaking has our hearty sympathy. At the same time we would express our opinion that it be an instruction to the audience that the scientific facts communicated to them are not to enable them to supplant the medical attendant, but to show them how they can be best subservient to him, and so most helpful to the patient.

THE VACANT CORONERSHIP IN BUCKS.

THE sudden death of Mr. Robert De'Ath, as announced in our last week's issue, has rendered vacant the office of Coroner for the Winslow Division of the County of Bucks. His son, Mr. George H. De'Ath, L.R.C.P.Lond., M.R.C.S.Eng., is a candidate for the post, and is to be opposed by a local solicitor. It is hoped and believed that the personal merits and professional attainments of Mr. De'Ath will secure his succession to the important office of coroner, for which his medical education and training eminently qualify him. The election rests with the freeholders of the county.

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THE COMPLAINT AGAINST A HOSPITAL.

AT an inquest held at St. Thomas's Hospital last week, the jury appended to their verdict of accidental death the following rider:—"We are of opinion that there was great want of attention on the part of some of the officials at the hospital in not admitting the deceased on the Monday, and in keeping him six hours on the following day before attending to him." At first sight this appears a serious accusation against the staff of the hospital, but on inquiry we find that there is no reason for the censure. The patient first applied for relief two days after a fall in the street whilst drunk. He complained of headache; there was a small superficial scalp wound on the back of the head; no inequality of the pupils, no elevation of temperature, or other sign of serious injury to the head. An aperient draught was administered, and he was told to apply for admission next day if unrelieved. He applied with other patients next morning, and was admitted by the resident assistant-surgeon before twelve o'clock. He was then quite sensible, and in fact continued so for two or three days afterwards. As there was doubt as to the nature of the case, and no indications for immediate treatment existed, he was left until the surgeon visited the ward in the afternoon. The house-surgeon, who gave evidence at the inquest, was dismissed by the coroner, and no complaint against the hospital was brought under his notice. The inquest was held in a room in the hospital (by the kindness of the authorities), and no one was asked to reply to the charges made, the first intimation of which obtained by the hospital authorities being the publication of the proceedings in the daily papers. This is not the usual course adopted by juries, and it is not right that the staff of a hospital should be subjected to censure without being permitted to reply, or to protest, until the chance of effectual protest has passed.

POLLUTION OF THE LEA.

A FURTHER public meeting on this subject was held at the Hackney Town Hall on Monday last, when, on the motion of the Attorney-General, a resolution was unanimously passed expressing approval of the action of the Hackney District Board of Works in promoting the River Lea Purification Bill. Mr. Russell stated that after consultation with Mr. Gladstone and the President of the Local Government Board he should move for a committee to inquire into the question of the pollution of the Lea, without going into the larger question of river pollution generally. He believed that the easiest remedy would be for the Tottenham sewage effluent to be received into the sewer at Springhill, and thence into the sewer at Old Ford. But the latter is the property of the Metropolitan Board of Works, and it is evident that if this course be forced upon this Board by Parliament it will have to consider similar claims from other extra metropolitan districts. It is, however, so obviously the solution of the difficulty that we cannot but wish the Bill success.

THE REACTION OF LIVING NERVE TISSUE.

THE reasons why some drugs act upon one part of the nervous system more than on another have never been satisfactorily explained. Ehrlich has endeavoured to ascertain why it is that some staining reagents colour nerve fibres and others do not. He thinks the variation in alkalinity of different parts of nervous tissues and modifications in the state of impregnation with oxygen are two factors that regulate the absorption of foreign substances by nervous tissues. The degree of alkalinity and the quantity of stored intra-molecular oxygen depend no doubt upon the amount of work that the nervous tissue has just previously performed; probably the nervous structures are most alkaline, and contain the largest store of oxygen after a period of repose. Ehrlich suggests that such considerations may have a great importance in the study of the diverse actions of alkaloids.

ANOTHER FATAL FOOTBALL ACCIDENT.

WE regret to have to record yet another death from football. Thomas Radford, aged twenty-five, collier, of Skegby, Notts, died on Tuesday last from the effects of injuries received while playing at football. The deceased, who was a well-known player, was engaged as substitute with a Sutton team in a match against the Nottingham Castle Rovers. During the game it is stated that he was kicked in the abdomen by another player, and although at once attended to by a medical man, his injuries terminated fatally on Tuesday. This is the seventh fatal accident at football we have recorded this season.

CRYPTOMAINES.

EDIBLE mushrooms may under certain circumstances develop highly poisonous principles. On this supposition may be explained the occurrence of accidents from ingestion of the ordinary salutary fungi. These principles have varying degrees of poisonousness. Those cryptomaines that are extracted by chloroform appear to possess the greatest toxic power; the ethereal extracts come next; then follow the resinous parts and the amylic alcohol alkaloids. The chloroform cryptomaine and the resinous parts alone possess convulsant properties. Such are the conclusions of M. Houdé.

THE NEW BUILDING OF THE LONDON COLLEGES OF PHYSICIANS AND SURGEONS.

HER MAJESTY the QUEEN has graciously consented to lay, on March 24th, the foundation stone of the building to be erected conjointly by the Colleges of Physicians and Surgeons on the Thames Embankment. We congratulate the Royal Colleges on the signal honour thus conferred on them, and, through them, on "the republic of medicine," by Her Most Gracious Majesty.

HESLOP MEMORIAL.

A MARBLE bust of the late Dr. Heslop has just been placed in the library of Mason College, Birmingham, by the professors and students, in testimony of their gratitude for his truly princely and enlightened liberality to their *alma mater*. The sculptor, Mr. W. J. Williamson, of Esher, is to be congratulated. An admirable work of art, the bust is, if possible, still more remarkable and satisfactory as a perfect likeness of a typically fine head.

FIVE CHILDREN AT A BIRTH.

DR. V. TEYXEIRA reports in the *Gazzetta degli Ospitali* (21st inst.) that a woman in the seventh month of pregnancy was delivered of five living children—two females and three males. Three had died, and two seemed in a hopeless state at the date of report. The mother was progressing fairly.

THE second session of the French Surgical Congress will be held in Paris from the 18th to the 24th of October in the present year. The opening meeting will take place in the large theatre of the École de Médecine. The success which attended the first congress encourages the committee to expect from this second reunion of French surgeons results most favourable to the advance of surgery in that country.

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FROM the report of the examination made by Colonel Sir Francis Bolton of the water supplied by the several metropolitan water companies during January, it appears that the Thames water sent out by the Chelsea, West Middlesex, Southwark, and Lambeth Companies contained somewhat less organic matter than in the previous month; whilst the Grand Junction Company's water exhibited a slight increase in this respect, the proportion of organic matter present in all the samples being about the average of what is generally met with in river waters at this season of the year. The water drawn from the Lea and distributed by the New River and East London Companies exhibited a marked improvement as regards organic matter upon the previous month's samples. All the waters were delivered in a clear and bright condition.

ONE of the chief answers to Sir Crichton Browne's charges against the Education Code of this country was that in Germany, where the children were put to a more severe test than here, over-pressure was a thing never thought of. Dr. Roth, however, has now published some statistics which completely refute this argument. According to these figures, 64 per cent. of the scholars "who should work up to graduation are much below the normal standard of health." In Denmark, where a still higher standard of education is insisted on, a Government investigation brings to light the fact that 29 per cent. of the boys and 41 per cent. of the girls suffer from over-pressure.

THE movement which we inaugurated in London two or three years ago on behalf of the female shop assistants has been at length taken up by the Parisians. A committee of ladies in Paris are endeavouring to induce the proprietors of some of the large drapery and mercery establishments to allow seats for their female assistants. Females of mature age and young girls, indifferently, at some of the large shops in that city, have to attend from eight o'clock in the morning to the same hour at night with absolute orders that they are not to sit down whilst at their counters.

THE Port of London Sanitary Committee of the Corporation of London, which has the control of the sanitary and quarantine arrangements of the Thames, from Teddington Lock to the Nore, have, it appears, just made an urgent appeal to the Home Secretary upon the subject of the sewage of London, asking him to use his influence with the Metropolitan Board of Works to induce them to take prompt action in regard to providing a permanent remedy for the existing condition of the river through the outfalls at Barking and Crossness.

THE work of the French medical schools appears to be steadily decreasing. The whole number of diplomas given by six medical faculties in France was 662 for the year 1882-83, 590 for the year 1883-84, and 575 for the year 1884-85. The falling-off is mainly in those granted by the Paris faculty, while the schools at Lyons, Montpellier, and Nancy have shown a slight increase.

"The Human Brain; its Anatomy, Physiology, and Pathology," is to be the subject of three free lectures at Queen's College, Birmingham, on the 17th, 24th, and 31st March, by Professors Bertram Windle and Berry Haycraft, and Mr. E. B. Whitcombe.

A SCIENTIFIC society at Haarlem has offered a gold medal and 400 florins for the best treatise on the researches of M. Pasteur. The works, which may be in English, are to be sent in before April, 1887.

DR. GEORGE JOHNSON, F.R.S., has expressed his desire to be relieved, at the end of the present session, of the active duties of his offices as Professor of Clinical Medicine in King's College and Physician to the Hospital, and the Council of King's College has appointed him Emeritus Professor in the College and Consulting Physician to the Hospital.

AT the meeting of the Academia Médico-Quirúrgica Española on Jan. 12th, Señor Ustariz described a successful case of ligature of the subclavian artery with a catgut ligature prepared with corrosive sublimate for an axillary aneurysm of the size of an orange. The patient left the hospital cured fifteen days after the operation.

IT is reported that proceedings are about to be instituted in Germany against a number of persons styling themselves "Doctor" on the strength of diplomas purchased from America *in absentiâ*. In Berlin alone there are said to be 3400 of these "doctors," either of medicine, philosophy, or law.

WE understand that the annual course of lectures on Medical, Surgical, and Obstetric Nursing has just commenced at St. Mary's Hospital. A lecture is to be given every Tuesday, at 5 P.M. The course is not confined to the nurses of the institution, but is open to ladies generally.

HERR v. GOSSLER, medicinalrath, has announced that from next summer students in Prussian universities must undergo instruction in vaccination, and that especial attention is to be paid to vaccination with animal lymph.

WE regret to have to have to record the death of Mr. J. C. Wordsworth, F.R.C.S., on the 22nd inst., at the age of sixty-three. We hope next week to publish a brief account of the principal events of his professional career.

A FUND has been started in Paris with the object of promoting experimental researches for the cure of tuberculosis. More than 4000 francs have been subscribed. Subscriptions may be sent to M. Masson.

NEWS has been received at Portsmouth of a further outbreak of yellow fever on board H.M.S. *Urgent* at Jamaica, resulting in all in seven deaths, one of the victims being the ship's surgeon.

THE resignation is announced, after twenty-five years' service, of Dr. Baranowski, Professor of Therapeutics and Medical Diagnosis in the University of Warsaw.

DR. DON SALUSTIANO FERNANDEZ DE LA VEGA, Professor of Anatomy, has been appointed Dean of the Medical Faculty of the University of Zaragoza.

INTELLIGENCE has been received of the death of Dr. James Archibald Sidey, surgeon of H.M. Prison, Edinburgh, at the age of sixty-one.

THE fifteenth Congress of the German Surgical Society is to be held in Berlin from the 7th to the 10th of April.

HAMPSTEAD HOME HOSPITAL.—At the fourth annual meeting in connexion with this institution, on the 20th inst., it was stated that the number of patients during the past year was 71. The income amounted to £1093, and the expenditure to £1068. The patients' payments amounted to £592.

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VAGINAL HYSTERECTOMY FOR CANCER.

THE October number of the *Bulletins et Mémoires de la Société de Chirurgie de Paris* contains an important communication by Professor Trélat, based upon a case in which he successfully removed the uterus through the vagina of a patient aged thirty-eight, referred to him by Professor Tarnier. Madame B——was the mother of six children, of whom the youngest was four years old. Uterine trouble had existed for some time, when both consultants, at the beginning of June, diagnosed epithelioma in its early stage, involving the whole surface of the neck of the womb, but not deeply. The vaginal mucous membrane was perfectly healthy, and careful examination failed to detect any glandular enlargement. The uterus was mobile, but considerably enlarged; the hysterometer introduced into its cavity reached 9 centim.

M. Trélat considered the case in every respect favourable for operative intervention. The lesions were limited and recent, the uterus very movable, and the operation was desired by the patient and relatives. In weighing the question of supra-vaginal amputation of the cervix and total removal of the organ, the following considerations presented themselves. Amputation of the cervix is, as a rule, considered less serious, but it is a blind operation. When it is performed, it is impossible to say if the pathological limits have been passed, and, if so, how far. It is, on the other hand, certain that the mortality from vaginal hysterectomy has been lately much reduced, and that it is reasonable to assume that the risk of recurrence will be less after total than after partial removal. In this case the operation was performed on July 2nd. For several days the vagina and uterus were washed out with bichloride of mercury solution, and the rectum and bladder were evacuated before the patient was anæsthetised. Sims' speculum having been introduced posteriorly, the cervix was brought down by seizing with forceps the anterior and posterior lips. A semicircular incision having been made anteriorly into the vaginal mucous membrane, the bladder was detached quickly and easily. The finger introduced into the wound separated the peritoneum without penetrating into the peritoneal cavity. Drawing the uterus backwards and the fundus of the bladder forwards, the peritoneum could be seen as a bluish membrane, which was seized with forceps, incised with scissors, and with the fingers freely separated as far as the sides of the uterus. The cervix having then been drawn forwards, the same manœuvre was repeated on its posterior aspect—incision of the mucous membrane, detachment, section, and laceration of the peritoneum as far as the broad ligaments. The speculum having been withdrawn, the uterus was again brought down by continuous and energetic traction. Two fingers introduced posteriorly failed to reach the fundus in consequence of the height of the womb. After considerable difficulty, the right broad ligament was brought into view, tied, and divided. The ligature having slipped, the Fallopian tube and the different vessels were tied separately. A similar procedure was practised on the left side, but proved very tedious. Bleeding had then been arrested, and at the bottom of the wound could be seen the left ovary, an omental fringe, and a coil of small intestine; but nothing protruded through the vagina. This and the bottom of the wound were carefully cleansed, and the lips of the vaginal wound were united by a single suture. In each angle of the wound was placed a drainage-tube as thick as a good-sized writing-quill, penetrating from 2 to 3 centim. into the peritoneal cavity, and projecting beyond the vulva. Around the tubes the vagina was plugged with iodoform gauze, the extremities of the tubes were abundantly surrounded with the same kind of gauze, and the whole covered with a thick layer of cotton-wool as far as the flannel body bandage, also lined with cotton-wool. The patient, still sleeping, was then taken back to bed.

The extirpated uterus was so large as to seem gravid. It weighed 197 grms., was 11 centim. in length, 64 mm. in its greatest breadth, and 45 mm. thick. Each wall was 17 mm. thick. To the naked eye the cervix was manifestly the seat of epithelioma. Section of the uterus on a level with each broad ligament appeared absolutely healthy, and proved so under the microscope. The histological examination was simultaneously conducted in the laboratories of La Charité and of the Collége de France, with identical results. The cervix was occupied throughout its whole extent with a superficial, tesselated, lobular epithelioma. A section through the whole height of the cervix proved that only the lower third of the section was involved. The upper part was absolutely healthy. The great size of the body of the organ was due to simple hypertrophy of the uterine tissue. The broad ligaments were quite healthy.

The patient's progress was most satisfactory through an uneventful and rapid convalescence. In the evening of the day after the operation, the external dressing, soiled with sanguineous discharge through the drainage-tubes, was changed; only the odour of iodoform was perceptible. Urine passed with increasing freedom. Temperature 38·4°; pulse 120. After a good night the patient enjoyed some iced consommé and champagne, and passed gas per anum. The outer dressings were again changed, and the external organs washed with sublimate solution. Temperature 37·8°; pulse 94. The third day after the operation one drainage-tube and the vaginal dressing were removed, the latter being renewed after washing with bichloride solution. The second tube was withdrawn and the same dressing renewed on the fifth day. The day following the bowels responded freely to two castor-oil capsules, and they acted naturally on July 9th (seventh day). The patient was now allowed beefsteak, Bordeaux, and port wine, and all dressing was removed. A little pus was seen on the vaginal tampon of iodoform gauze. The vagina was injected with sublimate solution; as this caused some irritation, it was resolved to use chlorinated water in subsequent injections. The vaginal sutures passed away with the injection on the eighteenth day, and on examining the passage carefully with the speculum on the twenty-first day the cicatrix was visible as a transverse solid line. The patient left her bed comfortably on the twenty-third day, and continued to progress favourably.

In the discussion which followed, Dr. Terrier, after recalling a case, previously communicated to the Society of Surgery, in which he had successfully removed the uterus through the vagina for cancer of the cervix, referred to a second case of similar operation, which proved fatal on the sixth day in consequence of intra-peritoneal hæmorrhage.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Braintree Rural District.—The birth- and death-rates for this district during the past year were 26·2 and 17·8 per 1000 respectively, the so-called zymotic rate being 0·97. Mr. Abbott presses upon his authority the need for means of isolating first attacks of infectious diseases, and refers to experience in connexion with the Doecker huts. A small permanent hospital is, however, far better, for it is not always easy on the spur of the moment to get an available site, and the most valuable moments have often been lost where these temporary structures have been relied upon. If this rural district had expended all that it has paid for temporary hospital work at such places as Terling and Coggeshall on a small brick building, it would be far better off than it is now in this respect. The experience cited below as to the Brentford urban district illustrates our meaning opportunely, and we should advise Mr. Abbott and his authority to consult the plans of small permanent hospitals issued by the Local Government Board last year as a way out of the difficulty. Some defaults of drainage and of water-supply are still in need of a remedy, and in certain localities rain-water storage seems to be the only feasible plan to adopt. With slate-roofs and the rain-water separators which were shown in the International Health Exhibition, and by which the dirt from the first washings of the roof is prevented from passing into the storage tank, rain-water can be often resorted to without the risk of an objectionable deposit at the bottom of the tank which necessitates such frequent cleansings. Much is being done to improve the water-supply where springs are available, and at Bradwell considerable benefit has already resulted.

Brentford Urban District.—The work of connecting the

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houses with the new system of sewers, and of abolishing cesspools by filling them up, is steadily continuing in this district, and it has already been effected as regards 2230 out of a total of about 2500 dwellings. In view of complaints as to offensive emanations from the sewer ventilators, the plan of carrying additional shafts to a height above the houses and of securing systematic and frequent flushing has been resorted to, and so far with the prospect of success. During the past year a number of closets have been supplied with cisterns separate from those from which the domestic supply is drawn. This is a most important point, and since it is so easily effected, as by the fitting up of a waste-preventing and automatic flush cistern just above the closet, it is to be regretted that the improvement is not more generally adopted in all districts. Adverting to what we have so often said as to the drawbacks attaching to temporary infectious hospitals, we would quote what Mr. Williams writes: "No site has yet been found upon which our portable hospital can be erected ..... Should an epidemic arise we should be in a difficulty." We commend our remarks made upon the Braintree rural district to Mr. Williams. Inspection of dwellings and nuisance abatement form important features of the year's work, and the summary given is a satisfactory one. The birth-rate for 1885 was 38·5 per 1000, and the death-rate 16·6 per 1000. The latter compares well with many surrounding districts.

Montrose Sanitary District.—The corrected death-rate for this district during 1885 was 19·2 per 1000, and it was satisfactory in so far as it exhibited a decrease on the previous year, and because it was but little made up of diseases belonging to the infectious group. Uncertified deaths lead to uncertainty in the vital statistics, and with Dr. Laurence we wish some further control could be properly exercised in this matter. The report gives hardly any information as to the conditions under which the people live, as to the remedies necessary to be taken to improve the sanitary circumstances, or as to action taken in this direction during the year. It is rather a statistical than a "health" report.

Watford Urban District.—Diphtheria continues to cling to this otherwise attractive residential town. From 1850 to 1877 it was, according to Dr. Brett, a rare disease in Watford; but since then, although there has been no extensive prevalence of the disease till last year, it has off and on recurred. In 1883 it caused 6 deaths, 5 deaths in 1884, and 29 deaths in 1885; the largest mortality in the latter year taking place in the colder months. All the elementary schools suffered, but, so far as is known, none of the private ones were affected, and no case occurred in the neighbouring London Orphan Asylum, a circumstance worth noticing, because, though not in Watford district, yet this institution is connected with the town system of sewers. Recently Mr. Sweeting made an inspection of this district in connexion with the diphtheria prevalence, and his report to the Local Government Board is awaited in the locality. The system of sewer-ventilation has been credited with much of the mischief, but Dr. Brett is inclined to think that this view is erroneous. There are 169 ventilators mostly opening on to the crown of the road, and many have been found to be useless because they were blocked with road detritus, a result which is clearly due to inadequate inspection on the part of the local authority. Improvements are needed in Watford at the market-place, and by substituting a constant for the intermittent service of a water which is excellent in point of quality. A systematic effort is also needed to improve the courts and alleys in the older part of the town. The deaths for the year were at the rate of 17·3 per 1000. Apart from diphtheria, there was but little sickness and few deaths from any of the infectious fevers.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 6061 births and 4265 deaths were registered during the week ending February 20th. The annual death-rate in these towns, which had been equal to 22·1, 22·2, and 23·1 per 1000 in the preceding three weeks, further rose last week to 24·4. During the first seven months of the current quarter the death-rate in these towns averaged 22·9 per 1000, and was 1·9 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 15·8 in Birkenhead, 16·4 in Leicester, 17·6 in Derby, and 18·1 in Sheffield. The rates in the other towns ranged upwards to 30·0 in Plymouth, 30·7 in Sunderland, 32·7 in Halifax, and 39·1 in Blackburn. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 360, 376, and 405 in the preceding three weeks, further rose last week to 425; they included 197 from whooping-cough, 70 from measles, 43 from diarrhœa, 39 from diphtheria, 33 from "fever" (principally enteric), 31 from scarlet fever, and 3 from small-pox. These zymotic diseases caused the lowest death-rates last week in Preston and Norwich, and the highest rates in Portsmouth, Bolton, and Blackburn. Whooping-cough caused the greatest mortality in Portsmouth, London, Bolton, and Cardiff; measles in Portsmouth, Plymouth, and Blackburn; scarlet fever in Leeds; and "fever" in Birkenhead. The 39 deaths from diphtheria in the twenty-eight towns included 19 in London, 3 in Birmingham, 3 in Liverpool, 2 in Bristol, 2 in Birkenhead, and 2 in Oldham. Small-pox caused but 1 death among the residents of London and its outer ring, 3 in Liverpool, and not one in any of the twenty-six other large provincial towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had declined in the preceding fourteen weeks from 90 to 11, were 10 on Saturday last; 2 new cases were admitted to these hospitals last week, against but 1 in each of the previous two weeks. The Highgate Small-pox Hospital contained 4 patients on Saturday last, one case having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 479 and 584 in the preceding two weeks, further rose last week to 639, and exceeded the corrected weekly average by 98. The causes of 94, or 2·1 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Preston, Birkenhead, Cardiff, and in three other smaller towns. The largest proportions of uncertified deaths were registered in Halifax, Oldham, Brighton, and Newcastle-upon-Tyne.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 21·3 and 24·5 per 1000 in the preceding two weeks, declined again to 22·3 in the week ending February 20th, and was 1·1 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 17·4 and 19·2 in Edinburgh and Leith, to 24·3 in Paisley, 24·6 in Perth, and 24·8 in Glasgow. The 551 deaths in the eight towns showed a decline of 55 from the number in the previous week, and included 16 which were referred to diarrhœa, 13 to whooping-cough, 8 to scarlet fever, 4 to measles, 3 to diphtheria, 2 to "fever," and not one to small-pox; in all, 46 deaths resulted from these principal zymotic diseases, against 32 and 53 in the preceding two weeks. These 46 deaths were equal to an annual rate of 1·9 per 1000, which was 0·5 below the mean rate from the same diseases in the twenty-eight English towns. The 16 deaths attributed to diarrhœa corresponded with the number in the previous week, and included 7 in Glasgow, 5 in Aberdeen, and 3 in Leith. The fatal cases of whooping-cough, which had been 9 and 17 in the preceding two weeks, declined again last week to 13, of which 10 occurred in Glasgow. The deaths referred to diphtheria and "fever" showed a decline from recent weekly numbers; 2 from diphtheria were returned in Aberdeen. Six of the 8 fatal cases of scarlet fever occurred in Glasgow, and all the 4 of measles in Edinburgh. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 135 and 144 in the previous two weeks, further rose last week to 153, and exceeded by 14 the number returned in the corresponding week of last year. The causes of 66, or nearly 12 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had steadily increased in the preceding four weeks from 29·6 to 38·6, declined again to 31·8 in the week ending Feb. 20th. During the first seven weeks of the current quarter the death-rate in the city averaged 32·5 per 1000; the mean rate during the same period did not exceed 23·3 in London, and 18·3 in Edinburgh. The 215 deaths in Dublin last week showed a decline of 46 from the number returned in the previous

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week, and included 20 which were referred to the principal zymotic diseases, against 26 in each of the previous two weeks; 16 resulted from whooping-cough, two from "fever" (typhus, enteric, or simple), 1 from measles, 1 from scarlet fever, and not one either from small-pox, diphtheria, or diarrhœa. These 20 deaths were equal to an annual rate of 3·0 per 1000; the rate from the same diseases last week did not exceed 2·7 in London and 1·2 in Edinburgh. The fatal cases of whooping-cough, which had declined in the preceding five weeks from 19 to 10, rose again last week to 16. The deaths from "fever," on the other hand, declined to 2 last week from 6 and 14 in the previous two weeks. Two inquest cases and 3 deaths from violence were registered; and 50, or nearly a quarter of the deaths, were recorded in public institutions. The deaths both of infants and of elderly persons showed a considerable decline from the numbers in the previous week. The causes of 37, or more than 17 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

WAR OFFICE.—Army Medical Staff: Brigade Surgeon Charles Hamilton Harvey, M.D., is granted retired pay, with the honorary rank of Deputy Surgeon-General. The undermentioned Surgeons on probation to be Surgeons:—Michael Thomas Yarr, Langton Philip Mumby, M.B., Charles Henderson Melville, M.B., Bernard Langley Mills, M.B., Hugh Rayner, M.B., Richard Edward Genge, George Schuyler Cardew, M.B., Charles Alan Renny, M.B., Herman Thiele, M.B., Horace Cocks, M.B., James Barnett Wilson, M.D., William John Lee, John Greer Black, M.D., John Kearney, M.D., Frank William Hennessy, M.B., Francis Albert Saw, M.B., Whitley Bland Stokes, M.B., Frederick William George Hall, M.B., Arthur Kennedy, George Scott Tate, M.D., Henry William Martindale Kendall, Henry Percival George Elkington, Robert Charles Gordon Dill, John Blacker Whitla Buchanan, M.B., Frederick Thomas Skerrett, Henry Mackenzie Adamson, M.B., Herbert Murray Ramsay, Tudor Germain Lavie, James Rose, Robert Hippisley Cox, Harry Herbert Brown, M.B., Thomas Herbert Corkery, Edward Hawke Locker, Warren Rolond Davies Crooke, M.D., Walter Perfect Squire, Charles Lawrence Walsh, James J. O'Donnell, M.B., Stanley John Wallace Hayman, and Julian Philip Swindell Hayes.

INDIA OFFICE.—The Queen has approved of the retirement from H.M. Indian Forces of the following officers:—Brigade-Surgeon G. Alder Watson, Bengal Medical Establishment; Brigade-Surgeon C. Robertson, M.D., Madras Medical Establishment; Surgeon-Major Henry Atkins, Bombay Medical Establishment.

The following officers are granted a step of honorary rank on retirement: Brigade-Surgeon Thomas Beaumont, M.D., and Brigade-Surgeon Charles Robertson, M.D., both of the Madras Medical Establishment, to be Deputy Surgeons-General. Surgeon-Major Malcolm Munro Mackenzie and Surgeon-Major Henry Atkins, both of the Bombay Medical Establishment, to be Brigade Surgeons.

ADMIRALTY.—The following appointments have been made:—Staff Surgeon Henry Madders, M.D., to the *Emerald;* Staff Surgeon John K. Conway, M.D., to the *Liffey:* Staff Surgeon William B. Drew, to the *Himalaya;* Surgeon J. C. Dow, to the *Himalaya:* and Surgeons F. W. Stericker, J. F. Bate, W. F. Pryn, G. E. Kennedy, J. Barry, A. J. Pickthorne, E. A. Spiller, J. Andrews, E. Apthorp, H. J. Hadden, J. J. M'Donnell, J. G. Webb, V. G. Thorpe, M. H. Atock, G. W. Meaden, J. H. Dawe, to the *Duke of Wellington*, for service at Haslar Hospital.

Amongst the officers who left Portsmouth in the *Malabar* for India on the 24th inst. were Surgeon Thompson, Bombay Medical Staff; and Surgeons Munders, Butterworth, and Baylor, Medical Staff.

MILITIA MEDICAL STAFF.—9th Battalion, the Rifle Brigade (the Prince Consort's Own): Surgeon Robert Vandeleur Kelly to be Surgeon-Major.

RIFLE VOLUNTEERS.—2nd Volunteer Battalion, the Royal Welsh Fusiliers: Thomas Evans Jones, Gent., to be Acting Surgeon.—3rd Durham (the Sunderland): Acting Surgeon Charles Henry Welford, M.D., resigns his appointment.—2nd Volunteer Battalion, the Prince Albert's (Somersetshire Light Infantry): Acting Surgeon Rowland Hill West resigns his appointment.

Correspondence.

"Audi alteram partem."

RINGWORM OF THE HEAD AND ITS TREATMENT.

To the Editor of THE LANCET.

SIR,—In your issue of Feb. 20th a "Portuguese" (?) treatment of ringworm is mentioned, and it is suggested that ringworm of the most obstinate character may be cured in ten days by using turpentine and iodine. As this notice may lead some to think this is a new way of treating this most troublesome complaint, I may remind such that it is an old treatment, and has been fully described.

So many treatments have been suggested—almost as specifics—for this disease within the last few years, that one is tempted to inquire whether their authors really know when this complaint is absolutely cured. From my own personal knowledge I know that many medical men both consider and certify ringworm to be cured when it is in a contagious state, and that we are fully justified in doubting whether many of the so-called "cured" cases are not in the condition I have so often called attention to before—viz., cases which have been treated until perhaps some new hair has made its appearance, but in which diseased, broken-off hairs are easily to be detected with a lens. I do not speak at random, but with the fullest experience and knowledge of the facts which warrant such a statement, when I say that there is not the least doubt that children are constantly sent back to school, even with a medical certificate stating the ringworm is cured, when the disease is in a most chronic, and certainly in a highly contagious, state. Many will hardly credit the number of children that are brought under my notice for admission into Christ's Hospital and into other schools, both public and private, who have had certificates given to them by medical men—often of the highest professional standing—that they are free from contagion, and who still have ordinary ringworm in its most common and chronic form. Even this year I have seen at least twenty such certified cases, and know that the principals of some schools have grievously suffered from these errors.

It is a very easy matter to decide whether a case of ringworm be cured or not (if sufficient time be given to the examination of the head), by the presence or absence of short, fragile, broken-off hairs, called stumps; and I cannot do better than quote the definition now adopted by the Medical Officers of Schools Association, and published by them in their "Code," in reference to this matter: "When may a pupil who has had ringworm rejoin a school?—When, the whole scalp having been examined in a good light, and any suspicious spot scrutinised with a lens, no broken-off stumpy hairs (which give evidence of the ringworm fungus when carefully examined under the microscope) are to be detected. It is sometimes considered that ringworm is cured when the hair commences to grow on the diseased places, but this is a mistake, for it frequently happens that diseased broken-off hairs remain, and the disease may thus exist for months or years. It is often very difficult to detect the short stumps which protude only a sixteenth or an eighth of an inch, and it is quite useless to examine short cut-off healthy hairs from a suspicious spot under the microscope for the ringworm fungus."

What I wish the profession to realise is that when remedies are said to cure obstinate ringworm in a week or two there must be a mistake somewhere; either the case was not one of tinea tonsurans at all, or else the disease cannot have been cured in such a short space of time, except by the application of strong caustics, which would cause scars, or by the production of kerion by croton oil or other means. It is impossible for the diseased stumps to be got out of the follicles and for new hair to grow from them in less than from six to twelve weeks. As a rule, lotions or ointments have to be assiduously applied for months before the case is quite well; and unless kerion has been set up it is not justifiable to certify a patch of ringworm to be cured until new hair has replaced the diseased stumps, for it is easy for these to be rubbed down on a level with the skin, and for the place to appear well to an unpractised eye. Diseased stumps do not suddenly grow up into healthy hairs, but they come out and are replaced by fine new downy

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hairs; and even when these appear, it by no means proves the case to be cured, as there are generally a few diseased stumps left, which can easily be seen with a lens, their removal being most difficult, and sometimes impossible for months. Therefore, although most of the hair may be growing firmly and freely over a patch of ringworm, this alone does not prove the case to be cured.

With regard to the treatment by turpentine and iodine, though certainly a good one, yet I believe it will fail in the majority of obstinate cases. The plain truth is that there is no known remedy that is sure to eradicate any given case of ringworm, even after months of treatment; and sometimes children will have this complaint for years, though every means be taken to remove it. Oleate of copper and mercury, and all other remedies, often fail, in spite of what has been written to the contrary.

I am, Sir, yours obediently,

ALDER SMITH, M.B., F.R.C.S.,
Feb. 24th, 1886. Medical Officer to Christ's Hospital.

HOME *v.* HOSPITAL TREATMENT OF INFECTIOUS DISEASES.

To the Editor of THE LANCET.

SIR,—On January 23rd you drew attention in an annotation to the section of my Report on the Sanitary Condition of Bradford dealing with the above important subject. For reasons which will appear pretty obvious, I have given in my reports to the Town Council the rates, and not the actual numbers, upon which I founded my opinion that in Bradford the proportion of recoveries among those treated in hospital for certain infectious diseases is very much greater than among those treated at home. As you expressed a desire to have fuller information on the subject, I have much pleasure in laying the details before your readers.

TABLE SHOWING THE MORTALITY PER 100 CASES FROM SCARLET FEVER AND TYPHOID FEVER IN BRADFORD, WHEN TREATED IN THE HOSPITAL AND WHEN TREATED AT HOME.

Year.	Death-rate per 100 Cases.					
	Scarlet Fever.			Typhoid Fever.		
	Treated at home.	Treated in hospital.	All cases.	Treated at home.	Treated in hospital.	All cases.
1882	18·4	14·5	13·9	13·0	17·3	15·2
1883	15·8	7·3	10·3	32·6	14·2	22·1
1884	9·1	4·2	6·7	29·6	18·5	24·5
1885	8·3	3·9	5·9	42·1	6·3	19·80
Mean 4 years	11·7	6·82	8·95	27·7	14·1	20·44

As the compulsory notification of infectious disease has been in operation here over four years, already a considerable number of cases have been recorded on which to form an opinion. During 1882, 1883, 1884, and 1885 there have been 758 cases of typhoid fever and 2032 cases of scarlet fever. (I deal with these two as by far the most important diseases, the case of other diseases notified having been much too few to be of value for drawing any reliable conclusion from.) Of the cases of typhoid fever, 404 were treated in the hospital and 354 at home; the deaths among the former numbered 57, and among the latter 98, giving a death-rate of 14·10 per cent. for the cases treated in hospital, and of 27·68 for those treated at home. Of the 2032 cases of scarlet fever, 1143 were treated in the hospital (during the same period), and 889 at home; of the former, 78 died, and of the latter 104, giving respective rates of 6·82 per cent. deaths for the cases of scarlet fever treated in hospital, and of 11·69 for those treated at home; the number of cases of these two diseases dealt with is considerable, indeed very much larger than that frequently regarded as sufficient for using as the grounds for an opinion as to success in therapeutics, whether medical or surgical, and the numbers compared treated in hospital and at home are not markedly different. The period embraced—four years—is also one of considerable duration. In the case of scarlet fever the lower rate prevailed every year in the hospital; the rate for typhoid was a little higher in the hospital for the first year (1882), but during each succeeding year the advantage has been very much on the side of the hospital. These particulars will be seen at a glance in the table given below.

The explanation which you suggest of these facts—viz., that the home-rate is increased by the suppression of notification of mild cases—is, I think, not warranted. So far as concerns notifications sent by medical men I am perfectly satisfied it is erroneous. I have every reason to believe that every member of the profession continues loyally to carry out the anxious and troublesome duties cast on him by the Act requiring notification. It would be expecting greater certainty than prevails in any human affairs to expect that no case unattended by a medical man ever escaped notification. There may be some few which do, I think there are not many. But even allowing for such cases, the difference between the hospital rate and the home rate is so great that it cannot reasonably be thus accounted for. The latter is pretty nearly double the hospital rate for both scarlet fever and typhoid. With regard to the character of the cases sent into the hospital, some are sent in because they are very severe, others are kept at home for the same reason—viz., that they are too ill to be moved. Again, some cases may be sent into hospital which are exceedingly mild and only need isolation; but for the same reason many mild cases are treated at home because of the slight character of the symptoms. I am informed by Dr. S. Evans, the resident physician at the Fever Hospital, that if the severe cases sent to the hospital which die within twenty-four or forty-eight hours of being received there were deducted from the hospital figures the result would be to show a very great reduction in the hospital rate. Such cases can hardly be said to have undergone treatment at the hospital at all, although they increase the death-rate recorded in the institution, and lower the proportion of deaths at home, I think, indeed, the explanation of the more favourable returns from the hospital is not far to seek. Perhaps 97 per cent. of the cases occur among the poorer class, fully 96 are distinctly of this class, and of these a large proportion are of the poorest class. There is no doubt excellent professional skill available for their treatment at home; but of what use can this be in small crowded rooms, where fresh air, were it available, is not admitted, situated as workmen's houses usually are, and without the skilled nursing, constant care and supervision, and abundant and suitable dietary which the hospital can provide? If the acute stage of the fever be tided over, there remain the difficulties attending convalescence, which are not small in the case of the two diseases I refer to. But these are only matters of opinion. I have given the facts as fully as possible, so that your readers may judge whether my strong advocacy of hospital treatment in this town is well founded or not.

I am, Sir, your obedient servant,

Town Hall, Bradford, Feb. 8th, 1886. T. WHITESIDE HIME.

ENTERIC FEVER.

To the Editor of THE LANCET.

SIR,—After reading the interesting discussion at the Royal Medical and Chirurgical Society on Enteric Fever at Suakim (THE LANCET, Feb. 13th), I thought that a few notes gained from my experience in South African warfare might not be unacceptable; the subject can be read more in detail at page

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513 of the Transactions of the International Medical Congress of 1881. In the Kafir war of 1877 I was principal medical officer of the Naval Brigade, and in 1879 I was principal medical officer of the Column of Invasion commanded by Brigadier-General Sir C. Pearson, K.C.M.G., C.B., during the Zulu war, and I thus had ample opportunities of seeing a very large number of cases of both enteric and the so-called typho-malarial fever. I must say that I entirely agree with those authorities who are of opinion that the disease frequently arises *de novo*. During our investment by the Zulus in Fort Ekowe, from Jan. 23rd to April 4th, 1879, we were entirely cut off from all communication with the outer world, except that very rarely a solitary Kafir runner managed to creep through the investing Zulu army from our base of operations some forty miles away on the Natal frontier. Before the march of our column from this base of operations no case of enteric fever had been heard of there; neither was the disease known at the mission station of Ekowe before our arrival there, as I ascertained from a medical missionary who was an old resident. The earliest case of enteric fever occurred among the garrison of Ekowe about the end of the first week in March, and no runner came there from the base in Natal after the 12th of February; it was, moreover, a considerable time subsequent to that date that any case of enteric fever was heard of at the base in question. There were many cases of enteric and typho-malarial fever at Ekowe, including several deaths. Thus it will be seen that it is as nearly proved as anything of the kind can possibly be that the affection must have arisen *de novo*, unless the very dubious hypothesis is advanced that the provisions with which we were supplied contained the germs.

I believe that the cause, in these countries at least, is generally to be sought in the prolonged occupation of a camping-ground, and that the term "pythogenic" is a very happy one. I am of opinion that flies are great factors in its production; they swarm in latrines and cesspits, where the heat favours decomposition, and arise from them often with their fine hairs coated with putrescent matter, shortly to be deposited on articles of diet, or in potable fluids, in which they are often found drowned. The fine surface impurities of these camps are also wafted by the winds into the tents, covering the food and potable water, or being inhaled or swallowed with the saliva. I do not remember ever seeing a case of enteric fever which occurred in an active flying column, which is of course constantly changing its camping-grounds or perhaps merely bivouacking at night, or for some considerable time after such a column had become stationary; but whenever the disease appeared it was invariably in a camp of some permanency, where decomposition of animal matter and frequently malaria coexisted in a subtropical heat.

The colonial surgeon of the Lower Tugela Division of Natal, in which our base of operations was situated, informed me that he had never seen a case of enteric fever in his district until the advent of our troops in 1879; and he told me, a year and a quarter after the troops were withdrawn, that since their departure not a single case had been brought under his notice.

I witnessed several necropsies of cases of so-called typho-malarial fever, and, so far as the morbid appearances were concerned, they were strictly identical with those of ordinary enteric.

I am Sir, yours truly,

HENRY F. NORBURY, C.B.,
Fleet Surgeon R.N.

Plymouth, Feb. 18th, 1886.

INVERSION OF THE UTERUS.

To the Editor of THE LANCET.

SIR,—In THE LANCET for Dec. 26th, 1885, is a very interesting case by Dr. Arbuckle of the reduction of chronic inversion of the uterus by the combined method of incision of the cervix and sustained elastic pressure. Dr. Arbuckle does me the honour to cite me as the author of the treatment by incision. Dr. Neale in a subsequent number quotes his valuable "Digest" to show that "Dr. Pratt of Fife contributed a paper to the *Medical Times and Gazette* in 1868, in which he asserts that Dr. Wasseige of Liege is the sole originator of this most effectual plan." As I should be sorry to let it appear that I could in any way wish to appropriate merit due to others, I must beg of you to give me the opportunity of presenting the following explanation. I have not been able to find the memoir of Dr. Wasseige referred to by Dr. Pratt, nor do I find "Dr. Pratt of Fife" now on the Register; so that I have no means of verifying the terms or the date of Dr. Wasseige's communication. Perhaps some of your readers may help me. But, in truth, the question of originality is not to be determined by reference to Dr. Wasseige or to Dr. Neale's "Digest." This work is almost limited to noting contributions to three medical journals, and cannot be accepted as an authority upon this or similar questions. If Dr. Neale had extended his researches beyond this range, he might have seen that I have not claimed priority in the idea of incising the cervix for the reduction of inversion. In my memoir in the Medico-Chirurgical Transactions (1869), after discussing the various methods in use, is the following passage:—"Another proceeding stands before amputation. For twenty years I have taught in my lectures that the unyielding cervix may be divided by incisions carried into its substance from above downwards at different points of its circumference. Pressure thus applied will cause it to yield more easily. Huguier, Professor Simpson, and Dr. Marion Sims have suggested the same plan. I am not aware that it had ever been carried into execution before 1868, when I treated a case in this manner with complete success." The case is narrated in the memoir. I published another successful case in the *Obstetrical Journal* (1873), and I have had since at least one more in St. George's Hospital. Other cases are recorded.

Aran's "Maladies de l'Utérus" (1858-60) has the following passage: "Reste à savoir, cependant s'il ne peut pas se trouver des cas dans lesquels la rigidité du col serait à son tour un obstacle à la réduction; je préfèrerais alors, je l'avoue, le débridement du col pratiqué avec prudence, à l'aide d'un bistouri boutonné, sur la commissure de l'orifice, voire même le débridement multiple." It is to be noted that Aran does not say he has done it, nor does he describe a case.

Thus, so far as my actual information goes, the case stands as I put it in 1869. Although I did not claim priority of publication of the plan of incising the cervix to facilitate reduction of inversion of the uterus, I did claim to have been, as I know, the first who had successfully practised it as an aid to reduction by sustained elastic pressure.

The most memorable discovery in the history of inversion of the uterus is that of Tyler Smith, who first (Medico-Chirurgical Transactions, 1858) successfully demonstrated the method of reduction by sustained elastic pressure, and who thus removed what had hitherto been an *opprobrium chirurgicorum*.

I am, Sir, yours truly,

ROBERT BARNES.

Harley-street, Feb. 1886.

THE TREATMENT OF DOG BITES.

To the Editor of THE LANCET.

SIR,—It has always seemed to me that it was beginning at the wrong end to pay so much attention to hydrophobia and entirely to overlook the treatment of dog bites. It is unnecessary now to plead the cause of the germ theory. Pasteur has shown that this disease is caused by germs, and that poisonous germs exist even in human saliva. The hydrophobia germs are inoculated by the teeth of the dog; why not, therefore, destroy the germs in the wound by some antiseptic? I do not speak against the method of counter-inoculation, or the wonderful skill and vast knowledge of the founder of the germ theory, but I advocate prevention instead of cure. The ordinary treatment of dog bites is unscientific. There is, first, the do-nothing treatment, based on the erroneous idea that free bleeding purifies the wound. Neither blood nor any other fluid could mechanically cleanse an inoculated ragged wound. I have noticed two cases treated in this way followed by hydrophobia. Secondly, applying mild caustics, as nitrate of silver. Though very fatal to the mould plant, it is not an antiseptic; moreover, as soon as it is applied to a wound there is a precipitation of the chloride, which is white, and silver, which is black, both of these being insoluble and inert. Thus, the only effect is to seal the germs in the deep part of the wound with a slight caustic action on the surface. This treatment is commonly followed by hydrophobia. Thirdly, immediate excision or application of some strong caustic, as fuming nitric acid. These being severe methods are not often resorted to.

The most rational treatment of a dog bite is to apply some germicide or antiseptic which will penetrate the tissues without coagulating them. The theory is perfect; therefore failure would only be due either to delay or insufficient

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application. The antiseptic used is a matter of detail and sometimes of circumstance. I usually employ a solution of one part of carbolic acid to four or five parts of glycerine, for the following reasons: It is a reliable germicide; it is not a caustic; it penetrates the tissues, the glycerine having an attraction for water, and thereby carrying the antiseptic to the deeper parts of the wound. Probably it passes into the lymphatics, as it is sometimes followed by glandular pain; if so, it is doubly valuable as a germicide. I paint the wound every day till it is healed. By this method the wounds heal without inflammation, leaving a pale, contracted, healthy cicatrix. In 1878 I treated three children that had been bitten by a rabid dog; they were all bitten in the back of the leg; as they walked to school the dog ran in the same direction. They all did well. I inserted pellets of wool soaked in glycerine carbolic into the holes made by the canine teeth. I have noticed some dog-bite scars which have never been treated. They have been purple and bulging; as that is an unhealthy appearance, I excised with antiseptics, obtaining pale, contracted cicatrices. I saw a case of hydrophobia last year. The wound, which had been treated with nitrate of silver, had left a purple and raised scar. The dog was supposed not to be rabid. This opens up a very wide question as to whether hydrophobia can be caused by a non-rabid dog. It is interesting to observe that, in whatever part of the body the germs are inoculated, they find no resting-place till they reach the salivary glands, which form their natural soil. As no single method of treatment has ever cured hydrophobia, rational experiments are legitimate. The snake poison lately proposed seems rational. I would suggest also a rational experiment: rapid and profuse salivation by pilocarpine or jaborandi, followed up by small doses of corrosive sublimate, which latter, as well as salivating, would act as an antiseptic in the blood. If the subject of hydrophobia were ventilated in THE LANCET before the hot season begins, it might be productive of much help to those who in the coming summer may be called to treat cases.—I am, Sir, yours, truly,

Leytonstone. ALBERT WILSON, M.D.

THE TREATMENT OF PERTUSSIS.

To the Editor of THE LANCET.

SIR,—I have read the letters of Messrs. Cory and Kerr in THE LANCET with much interest, and I congratulate them upon their success in the treatment of whooping-cough by carbolic acid. Allow me, however, to point out that carbolic acid is recommended internally and by inhalation to lessen the spasm by Dr. Wm. Squire in his article upon Whooping-cough in "Quain's Dictionary of Medicine." It is difficult for one to believe that carbolic acid given in the usual medicinal doses can have any power in stopping the progress of the disease, for I believe it is now generally held that whooping-cough is caused by specific pathogenic organisms, and Koch has clearly shown by experiment that it requires from ·25 to ·5 per cent. of carbolic acid of the whole volume of blood in the body to kill bacilli and ·5 per cent. to destroy the spores. Of course this quantity present at one time in the blood would poison the patient, so that it appears carbolic acid cannot be depended on as a universal antiseptic; and until an antiseptic shall be discovered which can safely be prescribed in a sufficient quantity to act as a germicide, I fear that whooping-cough and other diseases due to bacteria will admit of the alleviation of symptoms only. I should like to add that in 1882 I took as the subject of my graduation thesis for the Dublin M.D. degree, "Whooping-cough and its Treatment by Alum," based upon a record of 200 cases which occurred in my practice in London. I showed that by the local application of alum in glycerine to the pharynx and upper part of the larynx the expiratory spasms were lessened in frequency and violence in a large percentage of recent cases. No doubt alum acts by coagulating the albumen of the mucus of the tissues, and thus shielding the parts, which are in a state of intense hyperæsthesia from irritation and consequent reflex action; also by its astringent action limiting the blood-supply, and so relieving the hyperæmia often present. The alum and glycerine is not unpleasant to take, and a little is placed on the child's tongue several times during the day and night, and if this does not seem sufficient the back of the pharynx and upper part of the larynx are carefully brushed over night and morning with the same application. This proceeding does not interfere with the treatment of complications which are generally present in cases of any duration. Everyone is aware how important it is, in rickety children especially, to stop the spasms if possible, or how quickly such patients will die of convulsions. It has occurred to me that the local application of cocaine would prove even more effectual than alum in these cases, and would not require to be so frequently applied. I should be glad to hear if this alkaloid has been tried.

I am, Sir, yours truly,

Bournemouth, Feb. 1886. A. WOODMAN-DOWDING, M.D. &c.

PROFESSORS GAUTIER AND PETERS ON ANIMAL ALKALOIDS.

(From a Correspondent.)

AT a recent *séance* of the Academy of Medicine at Paris, Professor Gautier, already well known for his researches on the subject, read a paper which bore for title "On the Alkaloids derived from the Bacterial or Physiological Destruction of Animal Tissues." This is the result of the stimulus which animal chemistry received from the discovery of ptomaines, or cadaveric alkaloids, and the subject cannot fail to be of general interest, if only from the wideness of the field of knowledge, a glimpse of which is thus afforded us in connexion with disease and morbid processes of the body. During the present reign of bacteriomania we hear a great deal of the presence of these micro-organisms in connexion with health and disease, but the subject here opened up pushes our views and reasonings still further, so that we may in the future be able to have distinct ideas as to the physiology and effect of these organisms on the tissues or pabulum where they have elected to settle; and, further, it opens up a field of research for the physiologist concerning the nutritive metabolism of each living cell.

The first part of the paper treats of the alkaloids derived from putrefaction or ptomaines, which owe their origin to the putrefactive micro-organisms, and commences with a *résumé* of the history of the subject, embodying the results obtained by Selmi and others, and then passes on to the method in which these bodies are obtained, of interest only to the chemist. The Professor concludes that these bodies are always produced in the putrefaction of animal tissues; that they are poisonous when administered to animals, and produce effects comparable to those seen when vegetable alkaloids are employed; that they are free from oxygen, and volatile or oxygenated; that they vary according to the nature of the material in which they are formed, and possibly according to the date of the putrefactive change; but one alkaloid in particular (hydrocollidine) is always found, whatever be the material used, which would seem to imply that this was the product of the bacterium possessing the most vitality in comparison with the others—the victor in the struggle for life.

The second portion of the paper deals with the leucomaines, which are alkaloids produced during the existence of the body, and which appear to be products of its ordinary metabolism. For example, five alkaloids, perfectly definite and crystallisable, have been extracted from the muscles of the higher vertebrates, having an action on the nervous centres, producing somnolence and fatigue, and some of them vomiting and purgation, but acting with less energy than the cadaveric alkaloids. These rejoice in the names of creatinine, xanthocreatinine, crusocreatinine, amphicreatine, pseudoxanthine, their names showing their similarity with the nitrogenous metabolites already known. Their existence determined, the questions arise—How are they produced? and how do we escape the evils arising from their continual reproduction and presence in the blood? The latter question is answered by saying that they are eliminated by the natural emunctories of the body, by the alimentary canal, by the kidneys, and by the skin, provided that these organs are in a condition to perform their function; but in diseases where these organs are affected the elimination of the leucomaines is incomplete, and they accumulate in the blood and tissues and give rise probably to many of the phenomena of the particular disease in question. The application of this doctrine to uræmia is so obvious that I need but to mention it, and yet its applica-

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tion to many slighter ailments must quickly suggest themselves even to such a common case as that of a cold; and supposing that the doctrine be a true one we are at the same time furnished with a scientific indication for treatment—viz., to open up the emunctories and get rid of the peccant matter, which is a curious return to the doctrines of the past. The first question, Where are the leucomaines formed? the Professor answers by the remarkable statement that the higher animals are to a very large extent anaerobic—that is to say, that a portion of their tissues undergo their metabolism independently of the circumambient oxygen, and may produce this gas by the splitting up of the proteid molecule; and he quotes, in support of this statement the experiment of Pettenkofer and Voit on the respiratory changes in a dog in which there are 110 grammes of expired oxygen unaccounted for, which, according to his theory, is derived from the autonomous combustion of aliments and tissues. This is an interesting question, but rather concerns the physiologist than the practical medical man. What it behoves the latter to remember is the existence of these bodies and their method of elimination or oxidation. The former I have just mentioned, but the latter is as important. These bodies are very easily oxidised, while the supply of hæmoglobin is sufficient and good; but if from any cause this is deficient, the quantity of leucomaines and similar bodies augments, which possibly explains the nervous troubles of chlorosis, anæmia, and gestation.

The important results obtained by Prof. Gautier have been hailed with joy by the opponents of the bacterial schools of pathogeny, and already the Academy of Medicine has heard from Professor Peter the application of the discoveries of Gautier to medicine, and particularly to the views which he has for a long time taught in the amphitheatre of the Paris Faculty. In France Professor Peter is the chief antagonist of the microbian theories of disease, and he never fails to controvert and criticise their teachings. His most recent utterance was the *séance* of the Academy of Feb. 2nd, when he commenced his address with the statement that he was going to bring the support of the medicine of tradition to the medicine of the future. Briefly touching on Professor Gautier's results, which, summed up, are that the animal produces alkaloids (leucomaines) and extractive matters in the process of its nutritive changes which are endowed with toxic properties, he goes on to show how that life is but a series of deaths, how each carries with him and in him his own corpse, and by this series of deaths life is produced. Life is nothing but a partial and prolonged suicide. This being so, on what a slender thread depends the state we call health. If through defect of the emunctories or excessive production of alkaloids an accumulation takes place, the body is saturated with toxic matter, to which condition the Professor applies the term "auto-typhisation," and quotes as an example the cases where typhus arises in armies through privation and want; but when once the poison is generated in the system it can be conveyed to others, and constitutes hetero-typhisation. If this be true of typhus it is also true of typhoid, and the exact nature of the disease will vary according to the toxic material accumulated in the blood. Thus we may have true typhus, uræmic typhus (uræmia), cholæmic typhus (icterus gravis), and atheromatous typhus (ulcerative endocarditis); but the fact common to all typhic affections is the presence in the organism of an animal poison so deleterious to life that it disturbs the processes of living matter. It is infection, and the symptom common to all is τῦφος, or stupor. When the emunctories are at fault we have the accumulation of disassimilative products in the blood, which may be of the nature of alkaloids or extractive matter. The former are less toxic, and determine a hypothermia; the latter are more toxic, and produce a hyperthermia; and according to the presence of one or other of these agents the state of the temperature in uræmia can be explained, which temperature is notably subject to unaccountable variations. The Professor then briefly touched on the subject of cadaveric alkaloids, and showed how their presence may be the cause of many of the cases of poisoning by meat in a certain state of putrefaction, which conditions are accompanied by hypothermia, as in arsenic or other poisonings.

However much we may differ from Professor Gautier's views, there is no doubt that his discoveries have opened up a field of inquiry the extent of which is vast, and the application of which to processes of disease is of the easiest kind. Perhaps at present it is premature to talk of the medicine of the future; but these discoveries will doubtless have the effect of directing research to the minute details of nutritive change in connexion with this subject, and claiming some of the attention which has been directed to the research for microbes. That the microbian theory has received a severe blow is not true, as it is too well grounded in particular instances to be ever upset; but in many cases where it has failed the medical man may fall back upon the existence of leucomaines to clear his views and frame his working hypothesis, if for no other reason than his own personal satisfaction.

EDINBURGH.

(From our own Correspondent.)

SCOTTISH MEDICAL SOCIETIES.

LAST week the annual dinner of the members of the Royal Medical Society was held in Edinburgh. Dr. H. A. Thomson, the senior President, occupied the chair. Amongst the guests were the Lord Provost of Edinburgh, several of the Professors of the University, Professor Gairdner of Glasgow, and Mr. Lawson Tait of Birmingham. The chairman, in proposing the toast of the evening, "The Health of the Royal Medical Society," referred to its antiquity, this being the 150th year of its existence, and drew attention to some of the honourable names upon its roll. He specially mentioned the loss which the Society had sustained in the recent lamented death of Dr. W. B. Carpenter, F.R.S., who was senior President of the Society, and occupied the chair at its annual dinner in the centenary year of its existence, exactly fifty years ago. The Society is in a more flourishing condition than ever, its membership has steadily increased, its buildings are commodious and well arranged, and its library of 35,000 volumes is a great boon to its members. It forms an important factor in the medical training of those who are wise enough to join it in their early student days, for in its debates a facility in the public discussion and criticism of medical topics is acquired, and a familiarity with the conducting of public business is obtained—facts of great importance in the after-life of many students, as the sequel in the career of many an old member has proved. The dinner was of the usual character, enlivened with several good songs, which did credit to the musical talent of the profession, and which has always been one of its strong points in Edinburgh. It was attended by a representative gathering of present and old members, which showed that a warm interest in the Society's welfare is still maintained.

An extraordinary meeting of the Medico-Chirurgical Society was held on the 17th inst. in the hall of the Royal College of Physicians, which was specially lent for the occasion, and to which many visitors were admitted, in addition to the members of the Society. Professor T. Grainger Stewart of the chair of Practice of Physic, President of the Society, occupied the chair, and an exhaustive discussion on the subject of Abdominal Surgery occupied the whole evening. The discussion was opened by Mr. Lawson Tait, who travelled from Birmingham specially to be present on the occasion. Amongst the numerous speakers who took part in the proceedings were Professors Simpson and Annandale, Dr. John Duncan, Dr. Croom, and Dr. Byrom Bramwell.

IRELAND.

(From our own Correspondent.)

VICE-REGAL MEDICAL STAFF.

HIS Excellency the Lord-Lieutenant of Ireland has made the following appointments:—Physician-in-Ordinary: G.W. Hatchell, M.D. Surgeons-in-Ordinary: P. C. Smyly, Esq.; E. D. Mapother, Esq. Surgeon to the Household: T. Nedley, M.D. Surgeon-Oculist: A. H. Jacob, M.D. Surgeon-Dentist: D. Corbett, M.R.C.S.

ENLARGED THYROID.

At a meeting of the Surgical Section of the Academy of Medicine in Ireland, held last week, Professor Stokes exhibited an enlarged lobe of the thyroid gland, which weighed

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twenty ounces. The other lobe had been removed by the same gentleman about three months since. The hæmorrhage, as is usual in these cases, was very considerable. The disease was of about two years' duration.

LUNATICS IN WORKHOUSES.

It appears from official records that on Jan. 1st, 1885, there were 3775 persons labouring under some form or other of mental disease in the various union workhouses throughout Ireland. The greater portion of these were epileptics or imbecile from birth, while aged and demented lunatics formed the remainder. As a rule, the classes thus adverted to are, as it were, indigenous to poor-houses, having been located in them in early life by the relieving officers of unions when abandoned and in a destitute state, very few of them, comparatively speaking, being transferred from district asylums. In fact, boards of guardians are for the most part strongly opposed to the detention of insane patients in workhouses, although aware that if suitable provision were made for their treatment in them, the benefits derivable from district asylums would be largely increased, their overcrowding by hopeless cases obviated, and the admission of acute and curable ones facilitated at the proper time.

SOUTH DUBLIN UNION.

The recent half-yearly report of Mr. Robinson, Local Government Board Inspector, as to the condition of this workhouse is generally of a favourable character, except as to the inadequate arrangements for the supervision of the lunatics and idiots and the insufficient accommodation provided for them. It seems that since last inspection the number of lunatics has not diminished, and both on the male and female side of the workhouse this department is so much overcrowded that many who properly belong to the insane class have to be distributed through other wards. It is expected that when the children are sent to the new schools sufficient accommodation will be found for the lunatics located in the house.

DUBLIN NATURALISTS' FIELD CLUB.

At the opening meeting of this Club, held last week, the President (Dr. E. P. Wright) stated the objects were the practical study of natural history, botany, and geology, chiefly of the province of Leinster. He reminded the members of the well-known Natural History of Birds in Ireland by Thompson, and he hoped that in time they would be able to give an equally valuable history of fishes and of the other groups of animal life. There was an equally wide field when they passed from the animal kingdom to plants, as there were whole groups of plants which were literally waiting to be collected and described. Thanks to the geological survey, the geology of the district might be said to be known, yet there was a great deal even in this branch to be done by the Club in collecting specimens of fossils, both of animals and plants, a work which did not strictly belong to the survey. Various excursions have been arranged from May to October.

HEALTH OF DUBLIN IN 1885.

The births in the Dublin registration district during last year numbered 10,144, being equal to 29 per 1000; and the deaths 10,022, or 28·4, against an average death-rate of 29·4 for the preceding ten years. A great improvement in registration was effected in 1879 by means of the burial returns then introduced in compliance with the provisions of the Public Health Act, 1878. The mortality in the Dublin district during last year was, therefore, considerably below the actual annual average for the ten years 1875-84.

By a clerical error in last week's issue it was stated that the election of a curator to the museums of the Royal College of Surgeons would take place last week. It should have been next month—viz., the 18th prox.

Dublin, Feb. 23rd.

PARIS.

(*From our own Correspondent.*)

DEATH OF DR. WILLIAM B. JOHNSTON.

THIS well-known American physician died at his residence in Paris on the 14th inst. of a chronic affection of the stomach, in the sixty-second year of his age. Dr. Johnston was a native of South America, and it was after the civil war that he came over to Europe and started as a newspaper correspondent, in which capacity he greatly distinguished himself. With his American degree he obtained permission in 1866 from the French Government to practise medicine in Paris, where he acquired great popularity and fame, not only among his countrymen, but also among the French and foreign residents of this city. He was of a handsome physique, and it is said that he bore a striking resemblance to Albert Sidney Johnston, the celebrated Southern general, who was a cousin of Dr. Johnston's father. He was officially attached to the American Legation in Paris, and always proved himself a wise counsellor on all matters coming within the scope of his profession. He rendered great service to the sick and wounded during the siege of Paris, when he was attached to an ambulance, and continued therewith to the end of the Commune, which followed the siege. In recognition of his services he was created Chevalier of the Legion of Honour, and in 1876, for further services, he was raised to the rank of Officer of the same order. He was also Officer of the Crown of Prussia. The funeral service took place at the American Church, in the midst of a large concourse of friends, the American Legation being officially represented. The remains of the lamented physician were afterwards deposited in a vaulted chamber in the church, to await removal to the United States.

PTOMAINES AND THE MICROBE THEORY.

The debate opened at the Academy of Medicine by MM. Gautier and Peter on the part played by ptomaines of disease promises to be a long one, as many members have inscribed their names to take part in it. Till now Professor Peter stands alone in his theory of auto-infection, though he cannot help conceding that some diseases are generated by microbes. The difference, however, between Professor Peter and his adversaries is that, whilst he cannot but admit the presence of microbes in certain diseases, it is yet a moot point as to whether they are the cause or the products of the disease. In any case the knowledge of bacteriology, as it is pompously termed, has thrown no light whatever on the true nature of the disease, nor has it enabled us to invalidate the teachings of the old school. The speakers who have as yet taken part in the debate seem to have forgotten all about the ptomaines, as their discussions have been confined to microbes. In an able speech, Professor Cornil endeavoured to show that the microbian theories are not really contradictory to that which is taught us by traditional medicine, but that they serve, on the contrary, to clear up many points which have till now been enveloped in obscurity. Further on, he made a sort of compromise between the old and the new doctrines by stating that the presence of micro-organisms in infectious maladies suffices to show their *rôle* in the development of disease; and without denying the influence of the soil or constitution of the individual, on which is founded the theory of the old anatomico-pathological school, it must be admitted that the modern school furnishes us with a better explanation of the specificity of different morbid states. The debate is still open, and I am afraid will remain so for some time to come, between the microbists and the non-microbists without much light being thrown upon the matter by either party, although the speakers are men of note.

THE PRIX LABORIE.

The Société de Chirurgie de Paris has awarded the Prix Laborie to Professor Lagrange, of the Faculty of Bordeaux, for his memoir on the Therapeutic Value of the Elongation of the Nerves.

ROME.

(*From our own Correspondent.*)

Solvitur acris hiems. The year has turned, and the Italian spring—or *primavera*, beautiful as its name!—has left its first imprint on meadow and mountain side. Wherever the gay world congregates, at the meet on the Campagna, on the picnic excursion to sylvan Tusculum, to the still Alban Lakes, to the headlong Anio, or with the archæological party at lonely Ostia or deserted Veii, the charm of holiday is enhanced by the exhilaration of the cloudless azure overhead, the fragrance of the wild violets under-foot, and the

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gold-green haze of the woods around. Rome is looking her best, save where the city architect is trying to "improve" her! and, responsive to her attractions, visitors are trooping in with every train, till the resources of hotel and *pension* are strained to bursting, and landlord and landlady are threatened with eviction from their own rooms—not, however, without ample "compensation for disturbance." The health of the English-speaking public is good, and may till the end of the season continue so, if only they are prudent and will not cinchonise themselves, by way of precaution, into worse ailments than they would avoid.

Dr. Tommasi-Crudeli delivered before a select audience the other day a very instructive lecture on the reclamation of the Roman Campagna. Malaria, he showed, does not come from the marshes on the littoral or by the so-called winds of Africa, but is a special earth-poison, favoured in its development by the permanent humidity of the subsoil. Were the winds the importers of malaria, the breeze which prevails in Rome all summer would be pestilential, instead of which it is as health-giving as it is refreshing. That part of the city which has lately been built over or paved is thus protected from the exhaling earth-poison, and were the thorough system of drainage practised under the Antonines in the Campagna restored, that region would be as free from malaria as it was in the second century of Christ. It is no use attempting to dry up the marshes, which are of limited extent and influence; but the subsoil must be drained, saturated as it is by the percolation of water from the volcanic lakes inurned in the hills high above the sea-level. A very interesting account of the way in which the Roman engineers of the second century got rid of this subsoil water was then given, mainly from the researches of Signor Tucci, who showed that the water was collected on the hill slopes by a descending series of galleries, till in the valleys it was stored in reservoirs for legitimate uses. With the liberation of the soil from the excessive humidity one essential factor in the maturing and propagation of the malarial poison is removed.

Following up his attack on the received doctrine as to malaria, Dr. Tommasi-Crudeli has just issued a paper on the woods and their relation to that form of fever. Lancisi's theory that the low-lying belts of forest-growth between the Pomptine marshes and the Latian hills exerted a useful function in detaining and depurating the malarial poison was shown to be purely imaginary, ingeniously evolved to suit a special interest in the retention of the Cisterna thicket. Lancisi's authority was in other fields of medicine so great, so deservedly great, that his ruling in the matter has prevailed down to these days, in spite of a special commission which succeeded in showing its fallacy three years ago. The truth is that malaria resides in the soil between these forests and the city, and must be stamped out of it by removing that humidity which, when accompanied by excessive solar heat, is the main factor in its production. The thicket that Lancisi preserved has since been cut down, to the great advantage in point of health of the population in its vicinity; while had the woods high up on the mountain sides been spared (which Lancisi thought they need not be), the moisture that descends to the plain would have been reduced in quantity, and the subsoil saturation of the Campagna minimised. It is, in fact, the denuding of the Latian hills—hills, mark you, not plains—of so much of their forest-growth that makes it so difficult to revive what the engineers of the second century succeeded in doing.

"One fundamental error," says Dr. Tommasi-Crudeli, "begets an infinite series of derivatives. This idea, that trees act as a filter on the malaria, has spoiled the finest street in modern Rome. When the Via Nazionale was begun, it was planted with trees as far as the Via Quattro Fontane. But by that time a new assessor of public works appeared and argued thus: 'Foliage detains the malaria carried by the winds; in Rome malaria comes only by those winds; hence it is madness to plant those trees, which would simply act as so many condensers of malaria.' And he was as good as his word. Moreover, to prevent anyone after him from continuing the planting he had stopped at the Via Quattro Fontane, he constructed the drains of both sides of the street on the line of the plantings already begun. So all but the first few yards of the Via Nazionale is a boulevard without trees, to the increased comfort of those who have to pace it in summer, lying as it does from east to west in the greater part of its course, and therefore enfiladed by the sun, nearly all day! ..... The history of the discovery of the circulation of the blood is another striking instance in point. From Galen, who affirmed that the blood passed from the one ventricle of the heart to the other by means of foramina existing in the septum which divides the two ventricles, up to Realdo Colombo, who experimentally demonstrated that that septum was impervious, and that the blood passed from the right heart to the left heart by means of the pulmonary circulation, thirteen centuries have passed. During all these ages anatomists sought in the intra-ventricular septum for the foramina described by Galen; but they did not find them, and often confessed that they had never succeeded in seeing them—adding, however: 'They must be there, because Galen has said so.' Even the great Vesalius argued in this way up to the discovery made by Realdo Colombo. Nor, after the evident demonstrations given by Colombo, did the Galenic prejudice cease. Cesalpino himself, who passes in Italy for the discoverer of the great circulation, persisted in admitting the foramina described by Galen, when Colombo many years before had proved that no such things existed. The Lancisian prejudice will last yet awhile, but not so long as its Galenical fellow; for now the scientific world moves faster than ever, and draws along with it in its advance the lay public with more effect than formerly. Perhaps in ten or twenty years it will appear strange and unaccountable that in the year of grace 1886 I have spent so many words in combating an arbitrary assertion made in 1714, based on a physical error such as no student in our Liceo or Istituto Technico would dare to pronounce."

Dr. J. G. Van Marter is prosecuting his interesting researches in early Etruscan and Roman dentistry, and in a tomb lately disinterred near the Lago di Bolsena, belonging to the sixth century B.C., he has found a still more primitive mode of banding the teeth than in the well-known Corneto specimen, marking a distinctly earlier stage of pre-Roman dentistry. "This specimen," he says, "of early Etruscan dental work is of interest to us as the oldest yet found in Italy, and as supplying one of the missing links of the dental chain we are endeavouring to trace back to the beginning of our profession."

Rome Feb. 20th.

MEDICAL NOTES IN PARLIAMENT.

The Lunacy Laws.

IN the House of Lords, on the 19th inst., the Lord Chancellor presented two Bills for the amendment and consolidation of the Lunacy Laws. The Bills were read a first time.

The Sale of Poisons.

On the 23rd inst., the Earl of Milltown gave notice of his intention at an early date to ask Her Majesty's Government whether, considering that a Bill on the subject was read a second time in that House and referred to a Select Committee last session, it was their intention to introduce this session a Bill for regulating the sale of poisons.

The Rating of Hospitals.

In the House of Commons, on the 22nd inst., Mr. Baggallay gave notice of his intention on an early day to call attention to the unsatisfactory state of the law with regard to the rating of hospitals and other public charities in the metropolis.

The Purification of Rivers.

Leave was given to Mr. Hastings to bring in a Bill for the purification of rivers, which Bill was afterwards read a first time.

The Public Health Act.

On the 23rd inst., Mr. Chamberlain, in reply to Mr. J. E. Johnson-Ferguson, stated that his attention had been called to a prosecution by the Atherton Local Board before the Leigh (Lancashire) bench of magistrates under the Public Health Act, 1875, for the removal in a public conveyance of the dead body of a child who had died from an infectious disorder without previously notifying to the owner or driver that it had died from such a disorder; and he had no doubt whatever that the decision of the magistrates was right, and that the word "person" in the Act did not include a dead body, and that a dead body was not a thing *ejusdem generis* with bedding, clothing, or rags. Under these circumstances it was evident that there had been an omission in the Act, and if the Act came up for amendment that point would be noticed.

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Obituary.

GAVIN MILROY, M.D., F.R.C.P.

DR. GAVIN MILROY was born in Edinburgh, where his father was a silversmith. He received his general education in the High School, and studied medicine in the University of his native city. A fellow-student who survives him states that he was distinguished by his indefatigable industry and intelligence, as well as by the urbanity of his manners, and that he was also known among his fellow-students as "little Milroy," a term of endearment used by them. It may be said that those characteristics of his youth lasted throughout his long career. He graduated M.D. in 1828. On the completion of his student course, he became one of the founders and active members of the Hunterian Society of Edinburgh, and in his maturity he was similarly related to the Epidemiological Society of London, founded under the late Dr. Babington in 1850. He was secretary of that Society from 1862 to 1864, and its president from 1864 to 1866. Its Transactions contain several valuable contributions by him. He was elected F.R.C.P. in 1853. It appears that he never practised medicine on his own account, but from his early manhood made choice of its literary path. Previously to doing so he availed himself of an appointment as medical officer in the Government Packet Service to the West Indies and the Mediterranean, and it is presumable that in the latter, on returning from the Ionian Islands to Malta, he must have undergone quarantine at the latter place, where the practice was rigidly enforced on all arrivals from the Levant. Although his stay in that service may not have been of long duration, he retained a predilection for the navy, which led him at a later period to contribute a paper entitled "The Health of the Navy considered." Being a young physician of medical erudition, he was retained, together with Mr. Chatto (now the esteemed librarian of the Royal College of Surgeons), on the staff of the then influential periodical, the *Medico-Chirurgical Review*, and after the death of Dr. Johnson, its proprietor, they, conjointly with the late Mr. Grainger, undertook the management of it until fused with the *British and Foreign Medico-Chirurgical Review*. In that position he made his first mark as a public writer suitable to the occasion, and competent to deal with the great medical question of special interest to Englishmen, as the chief merchant-adventurers and ocean-carriers in the world. It fell to him to review, in 1846, a report by Dr. Prus on "Plague and Quarantine" to the Academy of Medicine of Paris, the argument of which was against quarantine. He subsequently translated this report in order to place the facts and reasonings it contained within the reach of the English reader in a cheap and accessible form. His translation is entitled "Quarantine and the Plague, being a Summary of the Report on these subjects recently addressed to the Royal Academy of Medicine in Paris, with Introductory Observations, Extracts from Parliamentary Correspondence, and Notes." Dr. Milroy then came prominently into view as a publicist through the credit gained by him in performing this task, which was done with so much ability that he stood forth as an authority on all questions of epidemiology, at that time rising in public as well as in professional estimation as an important branch of medical and social science. His views were deemed the best adapted to enlarge commercial enterprise by abolition, or by great mitigation, of its chief restraint, quarantine, as well as to benefit the public health of the nation by trusting to sanitary measures alone to guard against the ravages of cholera and other foreign pestilences. Having gained the good opinion of statesmen, he obtained employment in the public service as a superintendent medical inspector of the General Board of Health, in 1849-50 and 1853-55; and when, in 1850, cholera first showed itself in our West Indies, he was sent by the Colonial Office to Jamaica to "inspect and report on the sanitary conditions of that island," which he did with promptitude to the satisfaction of the Government. He afterwards presented to the authorities the details of the origin and track of its great cholera epidemic, and of the social conditions of the natives, with recommendations of sanitary measures. In the spring of 1855 the War Office sent to the Crimea a Sanitary Commission, "with powers of entry into every hospital, infirmary, or receptacle of whatever kind for the sick and wounded, whether ashore or afloat," reporting the results of their inspection to the superior officers of the service concerned, and further "to see to the keeping of the harbour of Balaclava in a clean condition." A vacancy occurring in that Commission, Dr. Milroy was sent out to fill it, and he joined it in July. He proved himself an able coadjutor with Dr. Sutherland in the inspection of camps, hospitals ashore and afloat, of wharves and roads, wherever operations were being actively carried on from Scutari to Kertch. The recommendations of the Commission were in the right direction, and were such as would have been carried out by the Army Medical Department if it had been possessed of similar powers. There can be no doubt that their adoption contributed to the subsequent healthiness of the army, but in estimating their influence in this respect, it must be borne in mind that very marked improvement in the health of the army had manifested itself with the first advent of spring, before the presence of the Commission on the scene could have operated. The excessive strain imposed on the troops by the military exigencies and the want of adequate food and clothing during the winter had been relieved by a full supply of both, and the spirit of the troops had been aroused by the prospect of an early reopening of the batteries. When that took place the whole aspect of affairs was changed, and a good state of health was established in an army that had landed with epidemic cholera in its train, had fought and conquered with that dire foe in its ranks, and then had passed a hard-worked and half-starved winter in the trenches outside a beleagured city. After the capture another winter was passed in comfort and health; and when, in the following summer, the terms of peace were on the point of being settled, the Sanitary Commission was recalled. The report of its transactions was drawn up by Dr. Sutherland and Dr. Milroy. In 1858 the National Association for the Promotion of Social Science appointed a committee to inquire into the practice and results of quarantine in all parts of the world. The late Earl of Shaftesbury was president, and Dr. Milroy was honorary secretary of that committee. In April, 1859, a series of queries prepared by it was forwarded to the Foreign and Colonial Secretaries of State by Lord Shaftesbury for circulation among the consuls and colonial authorities. The replies were placed at the disposal of the committee, and the laborious task of examining, arranging, and digesting the information contained in them devolved on Dr. Milroy as secretary, and the results were communicated to the Board of Trade. These were published in Parliamentary Papers. The first, ordered to be printed Aug. 25th, 1860 (No. 568), was an "Abstract of Regulations in Force in Foreign Countries respecting Quarantine"; the second, ordered to be printed Aug. 21st, 1860 (No. 568-1), "Abstracts of Information Concerning the Laws of Quarantine"; and the third, ordered to be printed Aug. 6th, 1861 (No. 544), "Papers relating to Quarantine." These papers contain information not only regarding the laws and practice of quarantine, but also on the appearance and prevalence of the diseases for which it is imposed in various parts of the world. It is unnecessary to state that in them the views of the Epidemiological Society of London are fully displayed. He was a much-prized contributor to the columns of THE LANCET.

Eventually a life pension of £100 a year was granted to Dr. Milroy in recognition of his various services. From this period he devoted himself in retirement to his favourite studies, and to literature. By his influence with the Royal College of Physicians a committee was appointed to investigate the nature and imputed contagiousness of leprosy and yaws; and he was the author of the report of that committee presented to Parliament in 1873. Always abstemious and economical, he found himself in a position to present to the College of Physicians the sum of £2000 for the endowment of a Lectureship on Public Health and on Sanitation. Dr. Milroy lived to the age of eighty-one, retaining to the last his mental faculties, as well as an active interest in social matters of a beneficial tendency. He died at Richmond, in Surrey, on Jan. 11th, and was interred on the 15th in Kensal-green Cemetery, beside the remains of his beloved wife, whom he had survived about three years. He was a successful public benefactor, remarkable for his unostentatious and deferential characteristics, by which he secured the confidence and esteem of those associated with him. W. R. E. S.

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PROFESSOR M. R. LEVI.

THE republic of medicine has lost an able and energetic citizen in Dr. M. R. Levi, clinical consultant in the Children's Hospital of Florence. He was but forty-five years of age, and fell a victim to one of these rapid pneumonias which, far more than fever, contribute to swell the mortality in Italy. Up to the 8th inst. he was at his post, lecturing with characteristic clearness and effect, and within a week he was "gathered to the majority."

His professional studies were commenced and carried on in the Medical School of Venice, where he had for his teacher the distinguished Professor Nahmias, whose researches in cholera have served so signally to enlighten Italian physicians and municipal bodies as to its origin and prevention. After graduation he was appointed Clinical Lecturer on the Diseases of Children in the University of Padua, in which capacity he acquired a reputation throughout the peninsula as an acute and successful consultant in that class of disorders. Having settled in practice at Venice, he did admirable work in the Hospital for Rachitic Children on the Lido; and at the International Medical Congress held in Florence in 1866 he was specially applauded for his exertions in behalf of the poor population of the lagunes, which culminated in the institution of the Ospizi Marini. He was an indefatigable coadjutor on the *Sperimentale*, the well-known organ of the Florentine Medical School, and his valuable contributions to its pages secured him in 1882 the appointment to the Clinical Professorship of the Diseases of Children in Florence, a subject he had made peculiarly his own. Year by year his clinic gained in professional repute, his success in tracheotomy, in croup especially, being attested by the statistics he published in his reports. For the last eighteen months his activity was certainly too intense, as manifested not only in his clinical and general practice, but in his scientific papers read before the various societies of Florence. At the Medical Congress held last autumn in Perugia he took a prominent part, and his friends thought they discerned in him the first foreshadowings of that physical waste that accelerated his demise. Their prevision, conveyed to him in kindly warning and remonstrance, had but little effect, for his participation in the transactions of the Florentine Medico-Physical Society and the Institute of Hygiene was more eager and extended than ever, until the fatal illness that carried him to the rear.

His loss will be keenly felt, not only by his colleagues and compatriots, but by the numerous English physicians who, first in Venice and latterly in Florence, have profited by his sound science and courteous hospitality.

ALFRED C. POST, M.D., LL.D.

DR. ALFRED POST of New York, whose death has recently occurred, was born in 1805, and, after receiving professional instruction at the New York College of Physicians and Surgeons, graduated in 1827. He afterwards studied at Paris, Berlin, and Edinburgh. In 1829 he commenced the active practice of his profession, and continued it until the week before his death. As early as 1836 Dr. Post was appointed one of the attending surgeons of the New York Hospital, and more recently was connected with the medical staffs of St. Luke's and the Presbyterian Hospitals. He was one of the founders of the medical department of the University of the city of New York, taking the chair of Surgery and Pathological Anatomy, and at the time of his death was President of the Medical Faculty and Emeritus Professor of Clinical Surgery in that institution. He was a member of the New York Academy of Medicine, serving it as vice-president; of the Pathological Society, once its president; and of many other American and foreign societies. Dr. Post was an impressive, terse, and explicit lecturer; a bold, steady, and self-reliant operator; and a lucid, logical, and classical writer. In actual practice for fifty-seven years, New York has by his death lost her oldest and one of her best known medical men.

FREDERICK ROW, M.D.

WE regret to announce the death of Dr. F. Row of Devonport, which occurred on the 20th inst. The deceased, who was born in 1811, received his early education at Devonport Grammar School, and studied for the medical profession in London, Paris, Edinburgh, and Dublin. In 1834 he became a Licentiate of the Royal College of Surgeons of Edinburgh and of the Apothecaries' Society of London, and in 1835 obtained the degree of M.D. at the Edinburgh University, afterwards commencing practice at Torpoint. Dr. Row formerly held a commission as surgeon to the 2nd Devon Rifle Volunteers, which post he resigned on being appointed a Justice of the Peace for the borough of Devonport. For many years he was a senior surgeon to the Royal Albert Hospital, and on resigning this position he was appointed consulting physician to the institution, an office which he held until his death. He took a great interest in everthing that concerned the welfare of the town in which he resided, and it was mainly due to his energy that the Devonport Free Library was first brought into existence. In 1870, at a meeting of the Social Science Congress, Dr. Row read a paper, which was afterwards published, on Prison Discipline. He was a man of genial temper, and his decease will be long regretted by a large circle of friends.

SIGISMUND SUTRO, M.D., F.R.C.P.

BY the death on the 19th inst., from apoplexy, of Dr. Sutro the German community of London have lost one of their best known and most highly esteemed medical advisers. The deceased, who was a native of Bavaria, was born in 1815, and studied at Munich and Heidelberg, taking the degree of Doctor of Medicine at the former university in 1840. In 1859 he became a Member of the Royal College of Physicians of London, and in 1873 a Fellow of that body. For many years Dr. Sutro acted as senior physician to the German Hospital, and upon resigning that office he was appointed consulting physician. He was a member of several of the Medical Societies, and the author of several works, the majority of which relate to the German mineral waters and spas and to the progress of German medical science.

Medical News.

BRITISH MEDICAL SERVICE.—The following is the list of candidates who were successful for appointments as Surgeons in the Medical Staff of H.M. Army at the competitive examination in London on Feb. 8th and following days:

	Marks.		Marks.
Fayrer, J.	3685	Garner, C.	2325
Davidson, J. S.	3030	Marks, G. F. H.	2310
Will, J.	3025	Scott, G.	2310
Fallon, J.	2980	Greig, D. M.	2300
Moir, J.	2965	Donaldson, J.	2295
Salvage, J. V.	2840	Holyoake, R.	2275
Bostock, R. A.	2835	Edye, J. S.	2270
Aldridge, A. R.	2830	Russell, J. J.	2260
Walker, C. P.	2770	Bate, L. A. F.	2230
Fowler, J. F. S.	2725	Allport, C. W.	2215
Macdonald, C. J.	2695	Barefoot, G. H.	2205
Burrows, J. R.	2650	O'Callaghan, D. M.	2180
Tatham, C. J. W.	2630	Windle, R. J.	2175
Austin, H. W.	2620	Wright, R. W.	2150
Clarkson, T. H. F.	2610	Knaggs, H. T.	2140
Kelly, R. E.	2600	Newland, T. R.	2125
Hone, H. St. G. S.	2580	Foott, R. E.	2110
Donegan, J. F.	2550	Traver-Smith, V. E.	2100
Keatly, J.	2550	Mathias, H. B.	2095
Saunders, D. M.	2550	Hosie, A.	2080
Cattell, R. J. C.	2520	Buist, R. A.	2060
Beat, G.	2490	Watson, J. J. C.	2060
Cumming, H. A.	2450	Whaite, F. D.	2060
Deacon, J. G.	2450	Smyth, N.	2040
Marder, E. S.	2400	Trotter, W. J.	2030
Hennessy, D.	2395	Dowman, W.	2020
Whilty, M. J.	2390	Kiddle, W.	2020
Eckersley, E.	2380	Browning, T.	2000
Bailey, W. F.	2360	Cronin, C. S.	1980
Hall, R. J. D.	2330	Le Quesne, F. S.	1940

INDIAN MEDICAL SERVICE.—The following candidates for this Service were successful at the competitive examination held at Burlington House on Feb. 8th:—

	Marks.		Marks.
Pisani, L. J.	3265	Dawson, A. W.	2870
Thorold, W. G.	3260	Hudson, E.	2830
Hehir, P.	3200	Fooks, H.	2810
Basu, B. K.	3105	Robinson, W. H. B.	2800
Edwards, W. R.	3015	Sheppard, H. A.	2800
Daly, J. T.	2955	Deare, A. C.	2790
Bell, G. J. H.	2950	Evans, J. F.	2745
Sinhar, N. P.	2920	Macteggart, C.	2710

Thirty-seven candidates competed for sixteen appointments; all were reported qualified.

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NAVAL MEDICAL SERVICE.—At the competition for commissions in the Medical Service of the Royal Navy, held on Feb. 8th and following days in the Hall of the University of London, Burlington-gardens, the undermentioned gentlemen were the successful candidates:—

	Marks.		Marks.
Stericker, F. W.	3050	Apthorp, E.	2455
Bate, J. F....	2995	Hadden, H. J.	2380
Pryn, W. W.	2760	McDonnell, J. J.	2360
Kennedy, G. E.	2670	Webb, J. E.	2360
Barry, J.	2600	Thorpe, V. G.	2350
Pickthorn, A. J.	2535	Atock, M. H.	2345
Spiller, E. A.	2490	Meaden, E. H.	2320
Andrews, J.	2465	Dawe, J. H.	2310

ROYAL COLLEGE OF SURGEONS IN IRELAND.—The following gentlemen have recently been admitted Licentiates of the College:—

Pierce J. J. O'Connor, Joseph A. Scully, Patrick J. Sheridan, James G. Westlake, and Mándvivala Fakirji Kabasji.

The following has been admitted a Fellow:—

James McCloghry, Surgeon, A.M.D.

THE annual general meeting of the National Health Society was held on the 23rd inst.

DIALECTICAL SOCIETY.—At Anderton's Hotel on Wednesday next, commencing at 8 P.M., there will be a debate on the Contagious Diseases Act.

BEQUESTS.—Sir William Kellett, Bart., has left £50 to the City of Dublin Hospital, and a similar amount to the Hospital for Incurables, Donnybrook.

THE Secretary of State for War has appointed Mr. W. L. Chubb to be Visiting Surgeon for Shorncliffe, under the Contagious Diseases Acts, 1866 to 1869.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.—At a meeting of this Society on the 19th inst., a conjoint paper on the Protection of Milk from Contamination was read by Mr. A. Wynter Blyth and Mr. Alfred Spencer.

MEDICAL MAGISTRATE.—The Lord Chancellor has appointed Augustus Rowland Ticehurst, M.R.C.S. &c., of Silchester House, St. Leonards-on-Sea, a magistrate for the borough of Hastings.

THE St. Petersburg financiers have decided to erect a hospital of fifty beds as a memorial of the late Emperor Alexander II. The Town Council has presented a piece of ground in the Ekaterinhoff Park for the purpose.

AT the inauguration of the South-Western Sanitary Inspection Association, which took place at Putney on the 20th inst., Mr. Edwin Chadwick, C.B., delivered an address on the "Sanitation of London and the Suburbs."

YOUNG MEN'S CHRISTIAN ASSOCIATION.—Sir Joseph Fayrer, K.C.S.I., will deliver a lecture at Exeter Hall on Tuesday, March 2nd, on the subject of the "Natural History, Habits, and Diffusion of Cholera, and what may be done to prevent or mitigate it."

THE annual general meeting of the subscribers and friends of the East London Nursing Society was held on the 23rd inst. The object of this Society is to nurse the sick poor in their own homes by means of trained nurses.

ST. PANCRAS WORKHOUSE.—The guardians of the poor of the parish of St. Pancras have unanimously resolved to appoint an assistant to Dr. Dunlop, the medical officer of the workhouse of the parish. This workhouse now contains over 2000 inmates, over 1200 of whom are under medical care.

VACCINATION GRANTS.—The following gentlemen have received the Government grant for efficient vaccination: Mr. Charles Sage Ticehurst, of the No. 2 District of the Petersfield Union (second time); Mr. F. G. Stewart, of the No. 2 District of the Bodmin Union; and Dr. Gervis, Ashburton district (third time).

COUNTESS OF DUFFERIN'S FUND.—Her Majesty having signified to the Countess of Dufferin her intention of presenting medals to the most distinguished female licentiates in the medical schools of India, the central committee purpose awarding them in the following manner:—A gold medal will be offered for annual competition in each of the four Indian Universities—Bengal, Bombay, Madras and Lahore; students at the Agra medical school being allowed to compete at Lahore. The Viceroy has also placed five silver medals at the disposal of the National Association.

AT the annual meeting of the governors of the Newcastle-on-Tyne Sick Children's Hospital, on the 24th inst., Mr. Fleming intimated that, as the hospital was not in a suitable locality and was too small, he had decided to build a new one, with over double the accommodation and in a more salubrious locality, and to furnish it throughout.

WIGAN MEDICAL SOCIETY.—The annual meeting of this Society was held on Feb. 18th, 1886, and the following office-bearers and committee were elected for the ensuing year:—President: W. Berry, Esq., J.P., M.R.C.S. Vice-President: J. B. Stuart, Esq., F.R.C.S.Ed. Hon. Secretary and Treasurer: R. P. White, Esq., M.B.Ed., M.R.C.S. Committee: J. White, Esq., J.P., M.R.C.S.; W. C. Barnish, Esq., M.R.C.P.Lond.; N. Hannah, Esq., L.R.C.P.Ed.

ROYAL NORTHERN SEA-BATHING INFIRMARY, SCARBOROUGH.—The annual meeting of the supporters of this institution was held on the 20th inst. The report stated that the infirmary was open from May 1st to Dec. 12th, during which time 562 patients were admitted, being 39 more than in 1884, and the largest number that has been received in the institution in any one year since it was established. The income had amounted to £1578 and the expenditure to £1498.

KING'S COLLEGE HOSPITAL.—The report read at the annual court of the corporation of this hospital on the 24th inst. showed that during the past year the number of cases under treatment in the hospital had been 2205, and the number of attendances in the out-patient department 28,653. The deficit for the year amounted to £5032. On the 12th prox. a public meeting is to be held at the Mansion House to consider the question of the financial position of the institution.

THE HELEN PRIDEAUX MEMORIAL FUND.—At a meeting of the subscribers to this fund, presided over by Sir William Gull, on the 20th inst., it was resolved that the income derived from the sum now raised be given as a prize every second or third year to a woman who has already completed the ordinary course of medical education, to help her on to a further stage, and that it be called the "Helen Prideaux Prize." It was also resolved that the Dowager Lady Stanley of Alderley, Mrs. Garrett Anderson, and Mrs. Stanley Boyd be made trustees of the fund, and that the duty of awarding the prize be left absolutely in their hands.

THE SEAMEN'S HOSPITAL.—The fifty-sixth annual meeting in connexion with this hospital was held on the 24th inst., when the report showed that during the year 1551 patients had been under treatment, against 1751 in 1884; and the number of out-patients relieved was 5874, against 5329. The building has been rearranged, and now accommodates 258 patients, instead of 243 as formerly; the system of drainage has also been remodelled. Since the foundation of the institution 133,397 patients have been admitted, and of these 106,023 were discharged as cured and 7515 died.

HYDROPHOBIA IN PARIS.—There were, according to Dr. Dujardin-Beaumetz, 19 deaths from hydrophobia in Paris last year—a number higher than in previous years; and yet the number of stray dogs destroyed was also higher—viz., 5060. Of these 19 persons, 15 were males and 4 females. The time of incubation varied from 19 months (in the case of a young man of twenty-six) to 29 days (a child of eleven.) In only one case was the time of the bite unknown. Excluding that, and the exceptional case of 19 months, an average of about 2 months is arrived at for the time of incubation. As to duration of the disease, the extreme limits were 1 day and 8 days; average 3½ days. In no case were the lower limbs bitten.

THE DALRYMPLE HOME FOR INEBRIATES.—At a meeting of the British Medical Temperance Association, held on Feb. 24th, Dr. B. W. Richardson in the chair, Dr. Norman Kerr, consulting physician to this Home, gave a *résumé* of the results of his second year's experience. Seventy-eight cases had been admitted, thirty-seven under the Act and forty-one as private patients; of these, seven were doctors and five lawyers. There were also merchants, men of fortune, stockbrokers, farmers, clerks, military officers, &c. Of the sixty discharged, and whose after-history was known, one-half had been so much improved as to be able to fulfil the duties of their station in life. The success of the Home had exceeded Dr. Kerr's expectations.

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Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ARMSTRONG, BENJAMIN, L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer for the Hainton District of the Louth Union.

BAKEWELL, R. H., M.D., has been appointed Visiting Physician to the Christchurch Hospital, New Zealand.

BRAUND, JAMES M., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Marhamchurch District of the Stratton Union.

CAPE, JOSEPH T., M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer for the Halwell District of the Totnes Union.

COLTART, W. WILSON, L.R.C.P.Lond., M.R.C.S., has been reappointed Medical Officer for the Headley District of the Epsom Union.

COX, WILLIAM A., M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer for the Banstead District of the Epsom Union.

DODSON, ARTHUR E., L.R.C.P., M.R.C.S., has been appointed Medical Officer to the Wandsworth and Clapham Union Workhouse.

HAINS, L. J. C., L.R.C.P.Ed., L.R.C.S., has been appointed Medical Officer for the Harberton District of the Totnes Union, vice Hains, resigned.

JOHNSON, H. SANDFORD, L.F.P.S.Glas., L.K.Q.C.P.I., has been re-appointed Medical Officer for the South Brent District of the Totnes Union.

OSBURNE, C. A. P., L.R.C.P.Ed., L.R.C.S., has been appointed Medical Officer for the Fourth District of the Church Stretton Union.

PIZEY, G. P., M.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Ninth District of the Bedminster Union.

RANDLE, J. MAYNE, L.R.C.P.Lond., M.R.C.S., has been reappointed Medical Officer for the Ugborough District of the Totnes Union.

UBSDELL, HENRY, M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer for the Staverton and Rattery District of the Totnes Union.

WELLS, Sir T. SPENCER, Bart., F.R.C.S., &c., has been appointed Consulting Surgeon to the Hampstead Home Hospital and Nursing Institute, vice John Gay, F.R.C.S., deceased.

WILSON, J. E. C., L.R.C.P.Ed., L.R.C.S., has been appointed Medical Officer for the Clowance and St. John's District of the Parish of Stoke Damerel Union.

WILSON, S. M. W., M.R.C.S., L.S.A.Lond., has been appointed Consulting Surgeon to the West Norfolk and Lynn Hospital, vice Lowe, resigned.

Births, Marriages, and Deaths.

BIRTHS.

APPLEBE.—On the 22nd inst., at Pemberton House, Hay, Breconshire, the wife of E. A. Applebe, L.R.C.P., of a son.

BURN.—On the 21st inst., at Ecclesbourne, Bedford-hill, Balham, the wife of W. Barnet Burn, M.D.Lond., of a son.

DAVY.—On the 12th inst., at Woodland-road, Upper Norwood, the wife of Surgeon-Major F. Arthur Davy, M.D., Medical Staff, of a daughter.

JACKSON.—On the 17th inst., at 64, Cambridge-terrace, Hyde-park, W., the wife of Herbert F. Vaughan Jackson, M.R.C.S.Eng., L.R.C.P.Lond., of a daughter.

LAMB.—On the 21st inst., at Kensington-park-gardens, the wife of W. H. Lamb., M.B.Lond., of a daughter.

LEACROFT.—On the 21st inst., at Hartington-street, Derby, the wife of J. W. Leacroft, M.B.Aber., L.S.A.Lond., of a daughter (stillborn).

MATCHAM.—On the 11th inst., at Gladstone-street, Southwark, the wife of Alfred Matcham, M.R.C.S., L.R.C.P.Ed., of a son.

SWEETING.—On the 23rd inst., at 40, Charleville-road, West Kensington, the wife of R. D. R. Sweeting, M.R.C.S.Eng., and S.Sc.Cert.Cantab., of a daughter.

MARRIAGES.

DAUNT—GODDEN.—On the 20th inst., at the Parish Church, Croydon, George Daunt, L.R.C.P.Ed., L.R.C.S.Ed., fourth son of Nicholas Daunt, co. Cork, to Lilian Alice A., fourth daughter of Wm. Godden, of Hollington, South Norwood-park, Surrey.

LEY—NORRIS.—On the 17th inst., at Holy Trinity Church, Birchfield, by the Rev. Pelham Maitland, M.A., Henry James Ley, M.B.Edin., youngest son of the late Richard Ley, M.R.C.S., of Ringmore, Teignmouth, to Nellie Pratt, second daughter of Richard Norris, M.D., of Birchfield. No cards.

LYONS—CRUX.—On the 18th inst., at St. Luke's, Oseney-crescent, Surgeon-Major Frederick Lyons, Medical Staff, to Emily Pickering, only surviving daughter of the late Frederick Crux.

PEARSE—HEYLAND.—On the 27th ult., at St. George's, Hanover-square, Francis J. Pearse, younger son of Dr. Pearse, of St. George's-square, S.W., to Agnes, youngest daughter of the late Captain Langford Heyland, formerly 17th Lancers.

DEATHS.

HATCHETT.—On October 21st, at Blantyre, Lake Nyassa, East Africa, of fever, Frederick William Hatchett, L.S.A.Lond., youngest son of the late John Charles Hatchett, formerly of Newtown Lodge, Hungerford, Berks, and Preswylfa, Neath, aged 26.

HOUNSELL.—On the 22nd inst., at Woodlands, Torquay, Henry Strangway Hounsell, M.D.

LIVESEY.—On the 1st inst., of exhaustion, following rheumatic fever, Ernest Livesey, M.R.C.S.

MASSY.—On the 17th inst., at Powis-road, Brighton, Richard Tuthill Massy, M.D.

ORD.—On the 18th inst., at Paragon-place, Brixton-hill, S.W., George Ord, F.R.C.S., aged 84.

SUTRO.—On the 19th inst., at Finsbury-square, Sigismund Sutro, M.D., F.R.C.P., in his 71st year.

WORDSWORTH.—On the 22nd inst., at his residence, Harley-street, W., John Cawood Wordsworth, F.R.C.S., late Senior Surgeon to the Royal London Ophthalmic Hospital, Moorfields, second son of the Rev. Wm. Wordsworth, of Monk Bretton, Yorkshire, in his 63rd year.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

EXAMINATION OF CANDIDATES FOR HER MAJESTY'S ARMY, INDIAN, AND NAVAL MEDICAL SERVICES.

Medicine.

Tuesday, February 9th, 1886, from 10 A.M to 1 P.M.

1. A case for Critical Analysis and Commentary:—"A young man whose breath was not short generally, and who had always been used to active exercise, began to observe that on running long or fast the breathing would become noisy like that of a 'roaring' horse. For twelve months he had been in the habit of riding fast for several hours daily, believing he would thereby improve his breathing powers. On one occasion, having put his horse to full speed, he brought on a severe fit of palpitation, and his breath had been shorter ever since. During the past three months he had an occasional dry cough, and frequently a pain in the centre of the chest. He nevertheless persevered with his active exercise, but now chiefly walking; and one day when making some exertion with his arms in fencing, he was suddenly seized with extreme oppression of breathing, spasm, and panting. On recovering from this condition there followed frequent cough and shortness of breath, especially on any increased exertion, with occasional attacks of increased difficulty of breathing in the morning. He had lost strength and colour. Pulse 80 (weak and unsteady). On careful examination of the chest, the breath sounds were found distinct in every part, especially inspiration, which was louder and harsher than usual. No prolonged expiration, wheeze, or crepitus. Above the left scapula the breath and voice sounds were tubular. The heart sounds were very weak; and a slight venous murmur was heard in the neck. The movements of the chest, its shape, and percussion sounds were normal. Night attacks of difficult breathing continued, described as being in the throat and of a choking character. About a week after the first examination of the patient, and when the more severe symptoms had existed three months, there occurred a bad attack of breathing in the morning. For two days before that he had walked continuously for three hours and a half (endeavouring to improve his breath), and was so much exhausted that he could eat no food. Next morning, on awaking, he had the 'bad attack of breathing,' which almost suffocated him. He had felt exhausted and weak ever since, and could take very little solid food. On listening to the chest, the inspiratory sound was heard loud in every part, and somewhat harsh in tone, especially at the upper parts of the chest; but no laryngeal stridor or hoarseness such as is present in laryngitis. The tubular sounds were still distinct above and within the left shoulder blade; but abnormal pulsation could neither be heard nor felt in any part. Inability to take solid food added to the increasing weakness of the patient; and two days later he had fallen on the floor unconscious after a fit of difficult breathing with laryngeal spasm. On recovering consciousness, he remained free from cough and spasm; the pulse was steady and breathing tranquil, but accompanied with a laryngeal sound; and laryngeal spasms continuing to recur at shorter intervals tracheotomy was had recourse to; but the breathing was not relieved thereby, and death followed one hour and twenty minutes after the operation." State your views regarding the probable origin, the progress and development of the symptoms and physical signs in this case, with their mutual relationship, if any; lastly, give some explanation as to why tracheotomy failed to give relief.

2. A case for Critical Analysis and Commentary:—"Elizabeth R——, aged forty, was admitted into St. Thomas's Hospital, September 11th, 1876; married, with five living children, ages varying from five to sixteen years; three miscariages, first twelve months after marriage—a three months' fœtus; the last four months before admission. General ichthyosis, but no history of syphilis. Habits not very temperate; ordered a pint and a half of beer daily, besides some spirits; patient had suffered from morning sickness independently of pregnancies. Nine months before admission vomiting became more frequent; had great pain across the stomach and in the back, with persistent diarrhœa, cough, loss of appetite and flesh. With these symptoms the abdomen began to swell. She remained in hospital until October 25th, and during this time her condition was as follows:—Emaciated; venous stigmata on cheeks; jaundiced tint of conjunctivæ; abdomen enlarged, measuring thirty-nine inches at umbilicus; liver much enlarged, measuring nine inches in right mammary line; and lower margin felt hard, sharp, and even below umbilicus; surface smooth; moderate ascites; frequent vomiting and constant diarrhœa; no sign of cardiac disease, but slight dulness and tubular breathing at apex of right lung; temperature at night usually 101° F.; occasional attacks of profuse epistaxis; no albuminuria. On leaving hospital she seemed better; no ascites, and no diarrhœa. One month after leaving hospital the abdomen began to swell again. Towards the end of January, 1877, diarrhœa returned; and on Feb. 29th, the patient was readmitted into hospital, her condition being as follows:—Very weak and emaciated; girth of abdomen thirty-seven inches and a half; liver still very large, measuring in the right mammary line nine inches and a half, and extending from nipple to below umbilicus; surface hard and slightly tender, generally smooth, but a large projecting mass felt in epigastrium; spleen enlarged; moderate ascites; constant diarrhœa (eight to ten watery motions, without pain, daily); no vomiting;

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tongue unnaturally red and clean; appetite bad. Skin sallow and anæmic; no decided jaundice, but urine contained bile-pigment and one-eighth albumen. Almost constant epistaxis and greater fetor of breath; pulse 120; heart healthy. She became daily worse, and on March 2nd she vomited about a pint of dark blood; the ascites diminished slightly, but diarrhœa and epistaxis persisted, and on March 15th she died from exhaustion." Discuss the pathology and probable morbid anatomy of this case, and in doing so state, first, in inches, the ordinary extent of hepatic dulness in the right mammary line, and define the anatomical limits of the upper and lower margins of the liver in health in the same line; second, explain in detail the origin and development of the symptoms, physical signs, and your conclusions as to diagnosis; third, describe how you would treat such a case; and, lastly, in your account of what you expect to find (post mortem), give some explanation as to the possible or probable nature of the projecting mass felt during life in the epigastrium.

3. Describe the characteristic lesions in a typical case of enteric (typhoid) fever when death has taken place towards the end of the second week, and give an account of the stages through which the lesions may pass.

4. Finding a patient comatose and stertorous of whom you can obtain no history, you are required to diagnose as between narcotic and alcoholic poisoning, uræmia, epilepsy, or external injury on the one hand, and from apoplexy on the other. State the main points on which you would rely in distinguishing between these conditions.

5. What do you understand by "cardiac tonics"? Name the medicines used as such. Describe their action on the heart in full and in poisonous doses (defining such doses); and mention the kind of cases and the conditions of the heart in which cardiac tonics may be of use; and also the risks attending the administration of them.

Chemistry.

Tuesday, February 9th, 1886, from 2 P.M. to 4 P.M.

1. What is ammonia? Give its symbol. Describe some process by which it may be prepared.

2. Describe the action of chlorine as a bleaching and a disinfectant agent.

3. By what common properties are chlorine, bromine, iodine, and fluorine distinguished from the other elements?

4. To what extent may carbonic acid accumulate in the air of a room beyond the normal amount in the atmosphere without rendering the air of the room unfit for human respiration?

Zoology.

Tuesday, February 9th, 1886, from 4 P.M. to 6 P.M. (Not more than one question in each subject to be answered.)

1. Refer to its subkingdom, class and order the red coral of commerce.

2. Contrast the respiratory system of the whelk (*buccinum*) with that of the snail (*helix*).

3. What are the most important modifications presented by the sternum in birds? Give examples.

Botany.

4. Describe a typical vegetable cell and cite an example of a plant whose grade of differentiation never passes beyond that of a simple cell.

5. What is the most characteristic action of the leaves of plants on the atmosphere? How is this modified by the presence or absence of sunlight.

6. Point out the difference between a syncarpous and an apocarpous ovary. Give an example of each from genera contained in the Pharmacopœia.

Physics.

7. What is electrical induction? Describe the changes in which this phenomenon essentially consists.

8. Explain the formation of dew.

9. What is the law which expresses the loss of weight of a solid body when immersed in a liquid?

Surgery.

Monday, February 8th, 1886, from 2 P.M. to 5 P.M.

1. Describe the various conditions of an artery which may give rise to an aneurysm. Under what circumstances, in a case of popliteal aneurysm, would ligature of the femoral artery be imperative without waiting to test the effect of other measures?

2. What are the general external characteristics of the following calculi:—1. Uric acid. 2. Oxalate of lime. 3. Phosphate of lime. What is the explanation when two of these form a single calculus? Describe the microscopical appearance of crystals of oxalate of lime and uric acid.

3. What tissues does enchondroma most commonly affect? What are its general and microscopical characteristics?

4. Describe the causes, symptoms, and usual results of acute periostitis, and the treatment under each condition?

5. Describe the fractures to which the neck of the femur is liable, in what direction the force must be applied to produce either variety, and the treatment to be adopted in each.

6. What are the conditions known as "concussion of the brain," and in what respect do they differ from that of "compression"? What treatment should be adopted in "concussion of the brain"?

Anatomy and Physiology.

Monday, February 8th, 1886, from 10 A.M. to 1 P.M.

1. Certain bones enter into the formation of the orbit, describe the share which each bone takes in the construction of that cavity. Give a brief account of its contents, describing the relative positions of all the parts you name. (This does not include the anatomy of the eye.)

2. Describe the origin, distribution, and anatomical relations of the arteries and their branches which supply the foot with blood.

3. Describe the anatomical relations, connexions, and structure of the large intestine, giving also an account of its functions and of the processes carried on in that portion of the intestinal canal.

4. What are the origin, anatomical relations, distribution, and functions of the glosso-pharyngeal nerve and its branches?

5. Describe the dissection by which you would expose the lingual artery, giving an account of the relative position of neighbouring parts.

Medical Diary for the ensuing Week.

Monday, March 1.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Alex. Hill: On the Brain Mechanism of Smell and Sight.

ROYAL INSTITUTION OF GREAT BRITAIN.—5 P.M. General Monthly Meeting.

SOCIETY OF ARTS.—8 P.M. Prof. F. Guthrie: Science Teaching (Cantor Lecture).

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—8 P.M. Casual communications by Drs. W. St. George Elliott and J. C. Foran.—Dr. Dudley Buxton: Physiology of Nitrous Oxide.

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Dr. A. Hughes-Bennett: Spastic Paralysis. Election of Officers and Council at 8 P.M.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Annual Meeting. Election of Officers and Council for 1886-87. President's Address.

Tuesday, March 2.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Mr. Charles T. Newton: The Unexhibited Portion of the Greek and Roman Sculptures in the British Museum.

SOCIETY OF ARTS.—8 P.M. Mr. John Mackenzie: Bechuanaland and Austral Africa.

PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Shattock: Congenital Cystic Kidney.—Mr. Lockwood: Pistol-shot Wound of Cranium, &c.—Sir W. MacCormac: Tumour of Palate.—Mr. Bilton Pollard: Villous Tumour of Accessory Thyroid.—Dr. Gulliver: Malignant Disease of Thyroid in Myxœdema.—Mr. Pitts: Ossifying Sarcoma of Radius.—Dr. F. Taylor: Aneurysm of Septum Ventriculorum.—Dr. S. West: Cases of Aortic Aneurysm.—Mr. Clutton (for Dr. Floyer): Congenital Skin Tumour of Sigmoid Flexure. Card Specimens:—Dr. Payne (for Dr. Jacob of Leeds): Tumour of Finger.—Mr. Pollard: Dermoid Cyst of Testicle.—Dr. Lediard: Senile Ovarian Blood-cyst and other specimens.—Dr. Turner: Hepatic Cells in Blood of Portal Vein.—Dr. Carrington: Mitral and Tricuspid Stenosis.—Mr. E. H. Fenwick: (1) Fibro-sarcomatous Polypi from Bladder; (2) Papilloma of Bladder.—Mr. Mekins: (1) Dislocation of Cervical Spine; (2) Carcinoma involving both Superior Maxillæ.—Dr. Drewitt: Heart and Pericardium from a case of Rheumatic Nodules.

Wednesday, March 3.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Alex. Hill: On the Brain Mechanism of Smell and Sight.

OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Dr. Lewers: Case of Circumscribed Sarcoma of Uterus and Vagina.—Dr. Matthews Duncan: On Contraction, Inhibition, and Expansion of the Uterus.—Dr. George Coates: A case of Labour in a Primipara suffering from Mitral Disease.—Dr. Amand Routh: A case of Serous Perimetritis.

SOCIETY OF ARTS.—8 P.M. Mr. C. V. Boys: Calculating Machines.

Thursday, March 4.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. W. Boyd Dawkins: The Ancient Geography of Britain.

PARKES MUSEUM OF HYGIENE.—8 P.M. Mr. Shirley Murphy: Metropolitan Defences against Infectious Diseases.

HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Mr. R. Sisley: Retro-peritoneal Sarcoma.—Mr. A. L. Silcock: Cystic Sarcoma of Mesentery simulating an Ovarian Cystic Tumour.—Mr. W. Adams: Chronic Rheumatic Arthritis especially affecting the Hip-joint.

Friday, March 5.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Alex. Hill: On the Brain Mechanism of Smell and Sight.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—8 P.M. Mr. Percy Dunn will show (1) Large Pulmonary Infarct; (2) Sarcoma of Testes and Cord; (3) Congenital Mitral Stenosis with General Cardiac Hypertrophy, weight of heart 27 oz.—Brigade-Surgeon Curran: Collection of Drawings and Photographs illustrative of Venereal Disease and Goitre in the Himalayas.—Mr. Swinford Edwards: On Urethral Fever, with Records of Three Fatal Cases.—Mr. Hurry Fenwick: On the Precautions to be adopted in the withdrawal of Residual Urine.

ROYAL INSTITUTION OF GREAT BRITAIN.—9 P.M. Dr. Alexander Macalister: Anatomical and Medical Knowledge of Ancient Egypt.

Saturday, March 6.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Rev. C. Taylor: The History of Geometry.

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Stewart's Instruments.)

THE LANCET Office, Feb. 25th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Feb. 19	30·12	E.	34	33	...	37	33	...	Overcast
,, 20	30·19	N.E.	35	33	...	38	33	...	Overcast
,, 21	30·19	E.	36	34	...	39	33	...	Cloudy
,, 22	30·41	N.E.	35	33	...	40	32	...	Overcast
,, 23	30·35	E.	34	33	...	36	33	...	Snowing
,, 24	30·20	E.	29	...	...	37	26	...	Fine
,, 25	30·13	E.	35	33	...	...	28	...	Overcast

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

MEDICAL SECRETS AND LAW COURTS.

P. E. J.—A medical man may be compelled in a court of law to divulge secrets communicated to him in his professional capacity. This is a matter beyond his choice or control, and involves no discredit to him, as the divulgence of secrets in vulgar ways of gossip, or short of the demands of the law, certainly would. In the particular case mentioned, and in the mental condition of the patient, the statements made to the medical man have very little value in themselves as evidence.

Dispenser.—1. We do not think any risk would be incurred by so doing.—2. Yes.

THE ARMY MEDICAL STAFF.

To the Editor of THE LANCET.

SIR,—In an annotation in your issue of the 6th inst. (p. 273), entitled "Medical Education in Russia," the burden laid on medical men by the State is commented on. I do not think the conditions so hard as those imposed by the British Government on officers of the Army Medical Staff, who voluntarily retire after ten years' service, with what they are pleased to call a "gratuity." These officers are liable to serve again in case of "national emergency" (i.e., whenever the Army Reserve is called out), until they complete the age of fifty-five years; so that a medical officer joining at the age of twenty-one and retiring at the age of thirty-one forfeits his liberty for twenty-four years for £1000, for which he has served ten years. While he is re-serving, he receives the pay of the rank in which he retired; but such fresh service only counts towards the period required for increased gratuity or for pension, five and ten additional years respectively. Is it likely a national emergency would continue for five years, or that such a series of emergencies would occur as would enable a medical officer, from time to time, to complete the additional periods required? A retired medical officer who has purchased a practice with his "gratuity" may be called on to re-serve. He must sell his practice, probably at a heavy loss, and rejoin with the foregoing glowing prospects before him! The State does not incur any expense in the education of Army Medical Staff officers, except that involved in the Netley course. Surely, ten years' service repays them for that outlay. I do not suppose they would give medical men the "gratuity" could they now secure their services without that inducement. I remain, Sir, yours faithfully,

W. J. LE GRAND,
Late Surgeon, Medical Staff.

Rudworth-street, S.E., Feb. 10th, 1886.

"PSORIASIS ECZEMATOSUS."

To the Editor of THE LANCET.

SIR,—Allow me to suggest to your correspondent, "Sans Succès," the chrysophanic ointment, spread on muslin, prepared by P. Beiersdorf, Apotheker, Altona, Wohlers Allee, No. 40.

I am, Sir, yours truly,
J. S. GRUBB.

Ealing, W., Feb. 20th, 1886.

INSURANCE OFFICES AND INADEQUATE MEDICAL FEES.

Dr. Fred. E. Pearse of Frome forwards us a correspondence which he has had with the 'Sickness and Accidental Assurance Association, Limited,' including eleven or twelve letters, in which he had to fight, inch by inch, for a proper fee of one guinea, and at length got it only by the determined threat of the County Court. The office at first sent him 7*s.* 6*d.*, and justified itself by saying that this had been stated at the outset to be the fee given by the office. Dr. Pearse denied having received any such statement at the outset, and with proper dignity declined the successive advances of the office by half-crowns or more. His example is one to be followed.

Mr. George A. Hawkins-Ambler.—We are afraid the publication of the letter might give rise to a discussion on a matter which is scarcely within our province.

ATTENDANCE BY UNQUALIFIED ASSISTANTS.

To the Editor of THE LANCET.

SIR,—Allow me to state that Mr. Bowell of Hunslet is not a raw student from the Medical School working for a low salary, or for nothing but his board and lodgings, as are a large number of the assistants employed in Leeds, but is a gentleman forty-six years of age, of twenty-seven years' practical experience, who has attended 10,000 cases of midwifery, and has conducted solely two large practices in Hunslet for his uncle and cousin, the late Drs. Gisburn. I pay Mr. Bowell a salary of £150 per annum. It is true he lives in his own house (the property of his wife); but I fail to see any harm in that. He lived in it when he was conducting the practices named above, and had his name on the house, just the same as he has now. Since I obtained his services no alteration has been made, and it is well known in Hunslet that he is unqualified. He is, however, respected thoroughly by every class of the community. With one or two exceptions, he is on friendly terms with the medical men of the locality; and I can assure you that for years the leading consultants of Leeds have met him when he was in sole charge of critical cases. He always acts under my advice, and has less of his own way than when he was acting for his cousin, the late Dr. Gisburn. Dr. Gisburn, for certain reasons, was unable to see his patients frequently, and so most of the work fell upon Mr. Bowell, who was the means of saving his cousin's practice from being lost. In fact he was better known in Hunslet than was his employer. This is not so now. Where Dr. Gisburn went once to see a patient, I go thirty times or more, and everything is under my complete control. The people at Hunslet are very angry at the way Mr. Bowell and I have been treated in this matter, and it would certainly go hard with one or two professional parties if I mentioned their names in connexion with getting up this petty persecution. How many unqualified students in Leeds are entrusted with important cases whilst their masters are elsewhere? How many branch practices are carried on by unqualified gentlemen for miserable salaries? Let the profession at Leeds answer these questions; and then, if the majority are not guilty of illegal practices by employing unqualified assistants, let them put down one who does employ an unqualified gentleman.

In justice to myself, I ask the insertion of this letter in your valuable journal. I may also add that I can give all names, if necessary.

I am, Sir, yours faithfully,
H. ARTHUR ALLBUTT, M.R.C.P., &c.

Leeds, Feb. 18th, 1886.

THE CASE OF H. P. FREUND.

To the Editor of THE LANCET.

SIR,—The case of Herbert Percy Freund has on several occasions been alluded to in THE LANCET, and once more is specially mentioned in an annotation in your issue of the 20th inst. It may not be generally known that this unfortunate man, who has been repeatedly brought before the London magistrates for religious monomania, and has been by them sentenced to various terms of imprisonment, owes his breakdown to overstrain whilst working for the Bachelorship in Medicine of the London University. At the City of London School, where he was a schoolfellow of mine, he was remarkable for his jovial good humour and geniality. Whilst holding a good position in the sixth form he won the St. Thomas's Hospital Scholarship, which covered the cost of the fees of his medical curriculum on the condition of his successfully passing his examination when due. He was consequently most anxious not to fail from the fear that he might thus lose his scholarship. The fact that in spite of his anxiety he passed the First M.B. Lond. in 1874 within a year and three-quarters of the date of the commencement of his medical study was sufficient proof of his ability, more especially as he secured Honours in the Preliminary Scientific Examination at the end of his first year. The strain, however, told, and shortly after the First M.B. Examination he became eccentric and depressed, took to ascetic habits and a solitary life, and was unable to continue study, becoming later on a confirmed religious monomaniac. May I ask whether something could not be done for him, at least, by old members of the City School (I believe he belonged to the "John Carpenter Club") or of St. Thomas's Hospital, if only in the way of placing him in an asylum, so as to prevent the scandal of his frequent appearances in the police courts. I for one would be very glad to help or to hear of others similarly disposed. I am, Sir, yours faithfully,

W. P. MEARS, M.D.

University of Durham College of Medicine, Newcastle-on-Tyne, Feb. 20th, 1886.

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INDISCRIMINATE SALE OF NARCOTIC POISONS TO THE PUBLIC.

To the Editor of THE LANCET.

SIR,—So many cases of poisoning have been reported of late in the medical and daily papers, that it is high time something was done to put a stop to the indiscriminate way in which chemists supply narcotic and other poisons to the public at large without medical order or prescription.

Two cases have within the past three months come prominently before my notice on board ship, which tend to prove how easy a thing it is for a layman to become possessed of dangerous and subtle poisons. Both cases occurred on board one of the Cape mail steamers. The first was a woman (a third-class passenger) who was proceeding to the Cape. Having occasion to visit her in her cabin, I was astonished to find a quart bottle full of laudanum, which she took twice daily in tablespoonful doses. She told me she never had the least difficulty in getting the laudanum at the chemist's, and as soon as the bottle was finished she had it refilled. This woman was undoubtedly afflicted with that terrible opium craving, but she was able to purchase, only too easily, the drug which will so surely cause her complete dissolution. The other case was a young gentleman of considerable fortune, who was taking a voyage to the Cape for the benefit of his health. He had with him two large bottles of solution of morphia, which he procured at a chemist's before leaving England, and he was in the habit of taking about sixty drops of this nearly every night at bedtime, to induce sleep, as he told me. This young man was strongly addicted to drink, and frequently retired to bed in a half intoxicated condition; whilst in this state he would pour out the morphia solution into a tumbler, add some water and drink it off, afterwards retiring to bed. Fortunately for him no ill-effects followed; but how different might have been the result!

These are two cases only out of many which I have observed on board ship, and they go far towards showing that we are not likely to see our mortality list from poisoning diminished so long as the public are supplied wholesale with these narcotic and dangerous poisons. Now that our profession, numerically speaking, is so much better represented in Parliament, let us hope that at least one of our medical brethren in Parliament will find time to turn his attention to this most important subject. I am, Sir, yours very truly,

HERBERT E. WRIGHT, L.R.C.P., &c.,
Feb. 17th, 1886. Senior Surgeon, Castle Mail Packets Co.

Physician and Surgeon.—A medical and a surgical qualification from any of the Royal Colleges will entitle their possessor to the privilege mentioned. These diplomas can be obtained in either division of the United Kingdom.

G. P. is the best judge of the proper fee to be charged. There is no rule that would apply, apart from the circumstances of the special case.

A QUESTION IN MEDICAL ETHICS.

To the Editor of THE LANCET.

SIR,—Your decision in the following case would be valued:—

A is called in to see B's wife, prescribes for her, and gives directions notifying that the symptoms will probably not completely subside within a month. Right days afterwards, at the third visit, A is understood to consider the patient so much better that his visits are then discontinued. Within a week or so, the sickness returning as bad as at first, B sends for C, without saying anything to A or C. When A discovered this he waxed wroth, but B justified himself on the grounds that A had ceased to attend. Is this justification sufficient, or does B owe A an apology? It may be mentioned that no fees have passed, and that B had been on occasions a patient of both A and C, but that Mrs. B, being a bride recently arrived, had not been a patient of either before.

I am, Sir, yours truly,
Feb. 23rd, 1886. ALPHA.

*** B did not act with candour and consideration to A. He is not to be justified on the plea that A's attendance had ceased. He owes an apology to A. C owes it to A to say as much to B as we have said of his conduct.—ED. L.

A Subscriber.—Supposing the case to be as stated, A is very badly used by B, and would be justified in seeking some legal redress if he cannot prevail on him to submit the questions in dispute to friendly arbitration.

H. W. H.—Dr. Weir Mitchell of the United States has published a book on the subject.

"MUMPS."

To the Editor of THE LANCET.

SIR,—Allow me, in answer to Dr. Hutchinson's request for information on the above subject (THE LANCET, Feb. 20th, p. 382), to say that, in my opinion, the rule referred to is a good one, and should be enforced against all infectious diseases. The initial stage both of mumps and of measles is highly infectious. School officials should not allow children to attend when any members of that family are ill, even with sore throat, until the nature of the illness is ascertained, and never while there is infectious illness at home. I wish this was the rule in all schools. I am, Sir, your obedient servant,

Feb. 23rd, 1886. WILLIAM SQUIRE, M.D.

MEDICAL STRIKE AND THE MEDICAL INSTITUTION AT LIVERPOOL.

We learn from a paragraph in the *Liverpool Mercury* of Feb. 5th, that at a meeting of the Medical Institution a committee of the leading medical gentlemen of the city was chosen to investigate charges brought against a medical officer of one of the charities of performing reckless operations without consultation with his colleagues, whose name and eminent position lend confidence to any charity with which they are associated. This is a serious paragraph to appear in a daily paper, and we should like to know more of the facts which constitute its explanation.

Vindiciæ.—1. There is no absolute rule of co-operation between a principal and his assistant, except such as is implied in their essential relationship. A principal is always entitled and expected to supervise cases, however competent his assistant may be. The only thing necessary in such relations is mutual respect and consideration.—2. We cannot give the composition of the tincture referred to.

W. H. O. has not enclosed his card.

"FRIENDLY SOCIETIES' MEDICAL INSTITUTIONS."

To the Editor of THE LANCET.

SIR,—There is sure to turn up some opponent to almost every reformer; and I cannot conceive anyone writing in support of the above institutions. Your correspondent, "Medical Officer (F.S.M.I.)," who writes in your issue of to-day, has not had much experience of the working man, or he would not be so ready to uphold this system of hard labour for our profession. I have been connected with two of the largest amalgamated societies in England, as one of their medical officers; and I can safely pledge myself that so long as I can support myself in any other employment I will never accept office under them again. The work is hard, unthankful, unprofitable; insults, abuse, and inconsiderateness abound. As to members being qualified to receive the benefits of such institutions, there is a shameful disregard as to conditions of admission. New members are almost forced upon the doctor; because if they are not passed, or receive certificates of any kind when they want them, there is sure to be a "row" and some fault-finding, either in the club or committee, with the medical officer. Besides, many outsiders who are well able to pay for private medical attendance join as dispensary members, paying very limited charges, having equally as much benefit as club members, and certainly swallowing more physic than they could obtain for twenty times the amount from a private practitioner. I believe that the club system has done more to ruin our profession than enough. I do not say that the profession is not to blame; but this degrading and "lumbago" sick-certificate work is becoming a working-man's privilege, and as a result bringing contempt on us. No one can deny that there are some decent working-men who are averse to taking advantage of our cloth; they are exceptional. Lastly, the persons who are reaping a rich reward out of our labour are the representatives of these associations. There is a secretary, treasurer, president, vice-president, and committee, all of whom are paid out of the subscriptions. Hence the doctor has to do more work to support these gentlemen.

I am, Sir, yours faithfully,
Feb. 20th, 1886. A RETIRED CLUB-ASSOCIATION DOCTOR.

L.S.A.—Not in the present state of the law.

Dr. Lewers.—In an early number.

"SYMPATHETIC IRRITATION OF THE PNEUMOGASTRIC."

To the Editor of THE LANCET.

SIR,—Upon the principle that giving tone to the nervous system lessens its irritability generally, and believing as I do that this is best and most speedily accomplished by full doses of quinine, especially if good sleep be procured at the same time, I would advise your correspondent, Dr. Towers-Smith, to give to his patient the third part in a wineglass of water of the following mixture every night:—℞ Disulphate of quinine, ʒss.; dilute hydrobromic acid, ʒiss.; hydrate of chloral, ʒii.; syrup of oranges, ʒvi.; to three ounces of water. If after giving the above three doses there should still be irritability, an addition may be made of ten minims of the solution of morphia to each dose, and the three doses repeated. I am, Sir, yours truly,

Feb. 22nd, 1886. A READER OF "THE LANCET."

Mr. Dyer.—The qualifications named are undoubtedly high, but qualifications only in medicine.

USE OF IODIDE OF POTASSIUM IN ANEURYSM.

To the Editor of THE LANCET.

SIR,—The use of this drug in heroic doses for the treatment of aneurysm is somewhat older than Dr. Burney Yeo seems to be aware of. In the wards of the Royal Infirmary of Edinburgh Dr. Warburton Begbie had a number of cases treated in this way, some of the details of which I remember very well, as early as 1861–62. Many of my fellow-students of that time undoubtedly will remember the Highland packman, Macalpin, who had a large aneurysm perforating his sternum, and who yet was able to do the hard work of his business so long as he was under the influence of iodide of potassium without any progress of the disease. I do not know if the treatment was originated by Dr. Warburton Begbie, but certainly he had it in habitual employment, and was extremely successful with it. I am, Sir, yours faithfully,

Birmingham, Feb. 7th, 1886. LAWSON TAIT.

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INTERMITTENT ALBUMINURIA WITH OXALURIA.

To the Editor of THE LANCET.

SIR,—May I say in your valuable columns regarding the coincidence of intermittent albuminuria with oxaluria that I have often found these symptoms follow the repeated ingestion of sauces or pies made of the stalks of common rhubarb, sold at the greengrocers' after January in each year. It was the practice of students at Yale Medical School in former days to secure fine large crystals of oxalate of lime for microscopy by eating these foods and collecting the crystals from their own urine subsequently. The practice was attended with discomfort to many from prolonged backache and irritable bladder, and in these cases I have found albuminuria coincide with the oxalates, lasting while the rhubarb was indulged in. I have good reason for thinking that cider, drunk freely, is competent to induce similar symptoms.

I am, Sir, very respectfully yours,

Ilford, Feb. 22nd, 1886. H. W. JONES, M.A., M.D. (Yale, U.S.A.).

Mr. H. Martin, M.B.—This being the first examination of surgeons of medical staff for promotion to surgeon-major, the questions for examination have not yet been published. Many years ago, when the examination was in force, the questions were published in the departmental Blue Books.

Dr. James Adam.—Yes, shortly.

LONDON FEVER HOSPITAL.

To the Editor of THE LANCET.

SIR,—In the report of the annual meeting of the governors of this institution, which appeared in THE LANCET of last week, the paragraph beginning—"The expenditure amounted to £8543, which was an increase of £1842 over that of the preceding year," should read was a *decrease*. I am, Sir, your obedient servant,

Feb. 23rd, 1886. E. BURN CALLANDER, Sec.

SCARLET HOSIERY.

To the Editor of THE LANCET.

SIR,—Will you allow me to draw the attention of the medical profession to the presence of arsenic in scarlet socks and stockings? A friend of mine suffered rather severely last year by wearing such a pair; and only last week I extracted two decigrammes of the poison from one pair, and a decigramme and a half from another. Surely, manufacturers should be compelled to send out their goods worn next to the skin free from a poison so easily absorbed.—I am, Sir, yours obediently,

Marylebone-road, N.W., Feb. 17th, 1886. JOHN WOODLAND.

Mr. A—— (Cheapside) is thanked for forwarding the cards.

Dr. Blenkinsop.—Yes, if not too long.

E. W. B.—No.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Fenwick, London; Dr. Creighton, London; Dr. Charteris, Glasgow; Mr. Davies-Colley, London; Dr. Cheadle, London; Dr. Ernest Sansom, London; Mr. C. S. Kilner, Bury St. Edmunds; Dr. Mundie; Mr. J. P. Lowe, Bath; Mr. Hobson, Leeds; Dr. Haslam, Birmingham; Dr. Mapother; Mr. Grubb, Ealing; Mr. L. Ash, Holdsworthy; Dr. F. E. Pearse, Frome; Dr. Herschell, London; Mr. Dunlop, London; Dr. Philips, Bournemouth; Dr. Mears, Newcastle-on-Tyne; Surg.-Major Jagoe, Londonderry; Mr. J. Dyer, London; Mr. Hawkins-Ambler, Kirkburton; Mr. H. Symonds, Oxford; Messrs. Pease and Pratt, Darlington; Mr. J. Startin, London; Mr. T. H. Morse, Norwich; Dr. J. A. Lindsay, Belfast; Mr. F. P. Atkinson, Surbiton; Mr. H. A. Allbutt, Leeds; Mr. Salway, London; Mr. Arnold, Providence, R.I.; Mr. H. J. Buck, London; Dr. Spender, Bath; Mr. Meadows, Hastings; Mr. G. Shirres; Mr. Black, Edinburgh; Mr. Tomkins, Leicester; Mr. Ellis, Shipley; Dr. Kreider, London; Dr. Adam, London; Dr. Blenkinsop, London; Mr. Berry, Wigan; Dr. Clement Dukes, Rugby; Mr. J. L. Kerr, Manchester; Dr. Ainslie Hollis, Brighton; Mr. Glendinning, London; Dr. Barnes, London; Mr. A. Sutro, London; Mr. Johnson, Bingley; Mr. F. Fowke, London; Mr. Blomfield, Paris; Miss Dora Doone, London; Fleet-Surgeon Norbury, Plymouth; Mr. A. Powell, Worcester; Mr. Crassweller, London; Dr. Pavy, London; Mr. R. Harrison, Liverpool; Dr. H. W. Jones, Ilford; Mr. J. B. Crozier, London; Mr. Vincent Richards; Dr. Squire, London; Mr. Callander, London; Dr. Murrell, London; Dr. O. Pritchard, London; Mr. J. A. Philip, London; Mr. Hastings, London; Messrs. Loeflund and Co., London; Mr. Juler, London; Mr. Heyland, Kingstown; Mr. Woods, Sligo; Messrs. Hodge and Co.; Mr. Blumer, Stafford; Dr. Cashey, Jersey; Mr. Wood, Chelsea; Dr. Holmes; Dr. Macnaughton Jones, London; Rev. H. Grantham, Tring; Messrs. Allen and Hanburys, London; Mr. Barron, Sheffield; Mr. Slagg, Prestelgn; Mr. Hambly, Bristol; Messrs. Toome and Co., London; Messrs. Oliver and Boyd, Edinburgh; Messrs. Ford and Co., London; Messrs. Smith and Son, Manchester; Mr. Jeaffreson, Newcastle; Mr. Sheedy, Stockton-on-Tees; Dr. Carson, Oldham; Mr. Freeman, London; Messrs. Nelson, London; Mr. Hanbury, Bristol; Mr. Claxton, Ely; Messrs. Beale and Son; Mr. Logan, Newcastle; Mr. Sampson, York; Mr. Graham, Bristol; Mrs. Morgan, Clevedon; Mr. Long, Sherborne; Mr. Davies, Cardigan; Dr. Jacob, Leeds; Alpha; A Surgeon; Vindiciæ; The Director-General of the Army Medical Department; The Director-General of the Medical Department of the Navy; Nemo; L. A., Chester; H. W. G.; Medicus; E. W. B.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Gamgee, St. Leonards; Mr. Bagshaw; Mr. Allinson, Dewsbury; Mr. Pope, South Shields; Mr. Taylor, Sheffield; Mr. Ashworth; Mr. Davenport, London; Mr. Soper, Dartmouth; Mr. Fulton, Toronto; Mr. Groom, Herne Bay; Mr. Ley, Teignmouth; Mrs. Hall, Ross; Mr. Wynne, Eccleshall; Mr. Curme, Childe Okeford; Messrs. Maclachlan and Co., Edinburgh; Mr. Hinchcliffe, Shrewsbury; Dr. Jones, Llanfairfechan; Mr. Thom, Norwich; Mr. Orme, Bristol; Mr. Priestman, Newcastle-on-Tyne; Mr. Shannon, St. Mary Cray; Mr. Aveling, Paddington; Mr. Webster, Brighton; Messrs. Macmillan and Co., London; Mr. Kirkby, Leeds; Mr. Poole, Moreland; Mr. Glascote, Manchester; Mr. Charlesworth, Oldham; Dr. Nedwill, Christchurch, New Zealand; Messrs. Paterson and Co., London; Messrs. Farwig and Co., London; Mr. Carmoul, Dumfries; Dr. Dowding, Bournemouth; Mr. Jones, Aberystwith; Miss Alston, Roath; Mr. Harvey, Cairo; Mr. Townsend, Exeter; Messrs. Thew and Sons; Mr. Baker, Birmingham; Dr. Shortridge, Honiton; Mr. Hamill, Tamworth; Messrs. Read and Co., Bristol; Mr. Robertson, Edinburgh; Mr. Kerr, Glasgow; Mr. Goodwin, Maidstone; Mr. Casella, London; Mr. Jones, Mountain Ash; Dr. Testi; Dr. Eberle, Thirsk; Mr. Davison, Buenos Ayres; Mr. Morgan, Hornsey; Mr. Miller, London; Mr. Hunter, Hammersmith; Mr. Beckman, London; Messrs. Porteous and Co. Glasgow; Mr. Bassett, Manchester; Mr. Lea, Exeter; Miss Minks, Chelsea; Dr. Wright, Romford; Mr. Disney, Halesowen; Dr. Lewers, London; Mr. Tarbut, London; Mr. Pixton, Ramsgate; Mr. Cresswell, Yarmouth; Mr. Evans, Penybont; D., Westbourne-terrace; A. B., Guildford; M.B., London; W. M., Manchester; Beta; Zeta; A. B. C.; X. Y. Z., Bath; Medicus, Haverfordwest; C. V.; Chemicus; Lady Superintendent, Bath; Alpha, Carlton; A. B., Ramsgate; Surgeon, Leeds; Lady Superintendent, Jersey; A. E., Beckenton; X. Y. Z., Hammersmith; Delta, Castleford; Miner, Sheffield; Galen, Hastings.

Bristol Mercury, Western Guardian, Chicago Daily Inter Ocean, Glasgow Evening News, Pendleton Reporter, New Zealand Tablet, Western Daily Mercury, Bombay Gazette, Lynn Advertiser, Bury Post, Bath Herald, Spitalul Revistă Medicală, &c., have been received.

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A Clinical Illustration OF CERTAIN PHASES OF THE RHEUMATIC DIATHESIS.

By W. B. CHEADLE, M.D., F.R.C.P.,
PHYSICIAN TO ST. MARY'S HOSPITAL, SENIOR PHYSICIAN TO THE HOSPITAL FOR SICK CHILDREN, GREAT ORMOND-STREET.

THE collection of patients in my wards at the Hospital for Sick Children at the present time affords such an excellent illustration of certain points raised in my lectures on Diseases of the Heart in Children, published in THE LANCET of Oct. 17th and 31st last, that I venture to give a brief account of them. The points in question are more especially the connexion of the slighter degrees of rheumatic arthritis and of other and less common phases of true rheumatism with organic disease of the heart and with chorea, and the influence of hereditary or constitutional tendency as a predisposing cause. The collection of patients, I may add, is a fortuitous one—a pure chance medley of cases admitted in the ordinary way without selection or design. They number in all twenty-two, and each has been examined (1) as to the occurrence in the patient of any distinct acute or subacute joint affection which could be classed as rheumatic—i.e., evidenced by swelling, stiffness, tenderness, and pain, and by the existence of subcutaneous tendinous nodules, of erythema, or other sign judged to be indicative of the rheumatic tendency; and (2) as to the occurrence of any similar manifestations in near blood-relatives. In this investigation I have had the valuable assistance of the registrar, Dr. Chaffey; and we have not been content with mere routine and general questions as to the occurrence of rheumatism or rheumatic fever, but have made minute specific detailed inquiries as to clinical symptoms, so as to verify statements and identify the affections with which the patients or their relatives might be credited. Similarly, we have not been content with a general inquiry as to whether such and such a disease was in the family, but have inquired into the medical history of the various members and relatives of the family as far as possible individually. It has been most instructive and suggestive to find how, in many instances, the original clinical history, taken in the ordinary way, has been modified by the closer examination of the further special inquiry.

In order that the significance of the following synopsis may be more readily understood, I have marked as Class A all cases in which rheumatic manifestations occurred in the patient; those in which rheumatic affection could be traced in blood-relatives of the first degree (i.e., father, mother, brothers, or sisters) as Class B; and those in which like affections occurred in relatives of the second degree only (i.e., grandfather, grandmother, uncles, aunts, or cousins) as Class C; those in which no rheumatic history of any kind could be found being left unmarked.

Synopsis of Cases.

CASE 1.—Henry S——, aged eleven. Purpura hæmorrhagica. No rheumatic affection in the patient. No rheumatic affection can be traced in any relative on either the father's or mother's side.

CASE 2.—William M——, aged five. Cerebral tumour. No rheumatic affection of any kind in the patient. No rheumatic affection in any relative on either side.

CASE 3. Classes A, B (?), C (?).—Isaac H——, aged ten. Heart disease (mitral stenosis and regurgitation, with advanced hypertrophy and dilatation). Three attacks of slight arthritis; knees, elbows, wrists, and knuckles red, painful, and stiff. The last attack occurred a fortnight ago, and was attributed to chill from sitting outside an omnibus in a cold wind. There are several subcutaneous nodules on each elbow. The boy's father died young of heart disease, from which he had suffered since childhood (probably rheumatic). The patient's aunt—the mother's sister—had chorea when a child; her mother had chronic rheumatism (not definite).

CASE 4. Charles H——, aged six. Xeroderma and eczema. No rheumatic affection in the patient. No rheumatic affection in any relative on either side.

CASE 5. Edward C——, aged seven. Late rickets. No rheumatic affection in the patient. No rheumatic affection in any relative on either side.

CASE 6. Class A.—Ernest W. M——, aged five. Chorea For the last three weeks the fingers of both hands were swollen, tender, and stiff, so that he had difficulty in closing them; pain, stiffness, and tenderness of right knee. Over the great vessels at the base of the heart the second sound is replaced by a well-marked bruit (aortic regurgitation). No rheumatic affection in any relative on either side.

CASE 7.—Frederick H——, aged four. Empyema. No rheumatic affection in patient. No rheumatic affection in any relative on either side.

CASE 8. Class B (?).—Arthur J. P——, aged eleven. Hydatid of liver. No rheumatic affection in patient. A sister has had pain and stiffness of the joints; never laid up with it, but probably rheumatic.

CASE 9.—Walter C——, aged ten. Eczema. No rheumatic affection in patient. No rheumatic affection in any relative on either side.

CASE 10. Class C (?).—Francis W——, aged three. Infantile paralysis. No rheumatic affection in patient. Maternal grandfather and uncle had rheumatic fever (doubtful).

CASE 11. Classes B, C.—Joseph M——, aged ten. Chorea. The patient has had no attack of arthritis; no erythema. Has no affection of the heart, or any condition which could be deemed rheumatic, unless it be the chorea. But the father has had rheumatic fever; the mother's brother had rheumatic fever and chorea as a child, and heart disease, of which he died. The mother has "rheumatism," her father and mother likewise. The father's mother had "rheumatism," and his brother, but the exact nature of these affections is not with certainty ascertained.

CASE 12. Walter H——, aged seven months. Rickets. No rheumatic affection in patient. None in any relative on either side.

CASE 13. Matilda Jane S——, aged eight. Hemiplegia. No rheumatic affection in patient. The family history could not be obtained.

CASE 14. Class C (?).—Harry C——, aged nine. Acute nephritis. No rheumatic affection in the patient. The paternal grandmother had "chronic rheumatism"; the aunt on the mother's side had chorea as a child.

CASE 15. Classes A, B.—James H——, aged eight. Heart disease (mitral stenosis and regurgitation, with marked hypertrophy and dilatation). Two attacks of slight pain, stiffness, and swelling of knees and ankles; the first eighteen months ago; the heart said to have been affected then. One attack of rheumatic fever six months ago. The mother has had rheumatic fever.

CASE 16. Class B (?).—Harry B——, aged four. Bronchitis. No rheumatic affection in patient. A brother has "rheumatics," a sister "rheumatism, heart disease, and consumption." The exact nature of these affections could not be satisfactorily ascertained.

CASE 17. Class A.—Charles G——, aged ten. Chorea. Six weeks ago had slight pain, stiffness, tenderness, swelling of wrists, fingers, and knees, lasting fourteen days. Presystolic murmur and thrill. Marked erythema; raised purple blotches; urticarious wheals. No history of rheumatic affection in any relative on either side.

CASE 18. Class C.—Albert H——, aged five. Empyema. No rheumatic affection in the patient. Mother's brother had rheumatic fever and heart disease.

CASE 19. Classes A, B, C.—Ernest Q——, aged nine. Mitral disease of heart.[1] Pain and stiffness of joints off and on for the last six months. For the last four days, elbows, knees, and ankles stiff and tender. The patient's sister is now in Victoria ward of this hospital with acute rheumatism and heart disease. The father's sister has had rheumatic fever; the mother's father had rheumatic fever.

[1] This patient has since developed chorea in hospital.

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CASE 20. Class C.—William J——, aged four. Rickets; otorrhœa. No history of rheumatism in patient. Mother's mother had rheumatic fever.

CASE 21. Classes A, C.—Rose W——, aged eight. Chorea. Mitral disease of heart, hypertrophy, and dilatation. Subacute rheumatism six weeks ago. Ankles, knees, and wrists red, stiff, swollen, and tender; nodules on the elbows. The mother's sister had rheumatic fever.

CASE 22. Class A.—George W——, aged six. Mitral disease of heart (systolic and presystolic murmurs, and some dilatation). No joint affection. Subcutaneous nodules on both elbows and both knees. No history of rheumatic affection in any member of the family on either side.

It will be seen that in the whole 22 cases there are 4 of organic heart disease and 4 of chorea, the remaining 14 being made up of very varied forms of children's diseases. Now, of the 4 cases of heart-disease all are included in Class A, and 3 out of the 4 cases of chorea; but no case of any other disease out of the remaining 14. In Class B are included 2 of these 4 cases of heart-disease and the remaining case of chorea; also probably, but not certainly, the case of bronchitis, and that of hydatid of the liver—i.e., 2 out of the 14 heterogeneous cases. In Class C come also 2 of the 4 cases of heart affection, 2 of the 4 cases of chorea, while of the 14 heterogeneous cases only one case of empyema, with probably, but not certainly, the case of infantile paralysis and that of acute nephritis. Moreover, it will be seen that 1 case of heart disease appears in all three classes; another in Class A, and probably in Classes B and C also; and a third in Classes A and B. Again, 1 case of chorea appears in both Classes A and B, and 1 in both Classes A and C. Not one of the 14 heterogeneous cases occurs in Class A at all, and, including even doubtful cases, 2 only in Class B and 2 in Class C, but not one in the two Classes B and C together. In other words, in all 4 cases of organic disease of the heart, and in 3 out of 4 cases of chorea, there is a certain history of rheumatic affection in the patient. In one of these cases of heart disease there is, in addition to personal rheumatism, evidence of rheumatic affection in blood-relatives of both first and second degree; in another, in addition to personal rheumatism, probably in relatives of both first and second degree also; and in a third, again in relatives of the first degree, in addition to personal rheumatism. In two of the cases of chorea, in addition to the rheumatism in the patient, there is evidence of rheumatic affections in blood-relatives, in one case of the first and in another of the second degree; while the case of chorea, in which there is no evidence of any rheumatism in the individual, there is double history of rheumatic affection in blood-relatives of the first and second degree. The contrast between these cases of heart disease and of chorea and the remaining cases in respect to rheumatic connexion is most striking. In not a single instance could any phase of rheumatism be traced in the individuals themselves; in two instances only, including even doubtful cases, in blood-relatives of the first degree; in two more in blood-relatives of the second degree; but in none was there evidence of rheumatic taint in relatives of both the first and second degree together. It is not to be inferred that the incidence of the rheumatic connexion exhibited in the present tenants of the wards is exactly representative. The proportion in chorea, for example, is beyond the average, and the frequency of rheumatic taint in the general cases is probably somewhat below it. The picture is too small, but as far as it goes it is accurate and true; the general lesson it teaches is trustworthy, and is, I think, very striking and suggestive.

ROYAL ALBERT ASYLUM, LANCASTER.—On Feb. 26th Lord Winmarleigh, Chairman of the Central Committee, presented certificates of proficiency in "first aid to the injured," awarded by the St. John Ambulance Association, to thirty-three of the officers, attendants, and nurses of the asylum. His lordship drew attention to the extent and value of the work of the Association, and expressed gratification that the scheme of instruction, which had proved so serviceable in many centres of industry, had been utilised, through the lectures of Dr. Shuttleworth, the medical superintendent, as a means of improving the qualifications of those on whom devolved the personal care of the afflicted inmates. It may be mentioned that no less than sixty-seven of the institution staff joined the classes for instruction and thirty-four entered for examination.

Clinical Lecture
ON
CATARACT.

Delivered at the Eye Infirmary, Newcastle-on-Tyne.

BY C. S. JEAFFRESON, F.R.C.S. ED.,
SURGEON TO THE INFIRMARY.

(*Continued from p. 388.*)

HAVING spoken of the symptoms of cataract as they present themselves in elderly persons, let us say a few words upon those attending lamellar and some other forms of congenital cataract which are usually first noticed in children and young persons. Lamellar or laminar cataract not infrequently occurs in children of impaired constitutional vigour. In not a few cases a history of inherited specific taint may be obtained, and not infrequently the subjects of them are liable to convulsive attacks in infancy. There may be evidence of changes in the nervous centres, with amblyopia and nystagmus. If the cataract is not marked and giving rise to unmistakable objective symptoms, its existence is usually overlooked till the time of life arrives when children commence to use their vision for amusement or educational purposes. It is then noticed that the child has difficulty in seeing as clearly as his fellows. He not infrequently stumbles over things in broad daylight, and at dusk his vision improves. Small objects he wishes to look at he places close to his eyes like a myopic person, and the complaint usually made by the parents is that he is very short-sighted. Sometimes objects are placed laterally to get a clearer view of them. The explanation of all these symptoms is simple. It is clear that when the pupil dilates at night a larger piece of the lens is uncovered, and some of the transparent margin being uncovered allows a clearer view of objects to be observed. The patient puts objects nearer to him because he sees them under a larger angle, and holding them laterally enables the rays to pass through the marginal and clear parts of the lens. Although when the pupil is contracted it is not always easy to recognise this form of cataract with the naked eye in ordinary daylight, owing to a transparent layer of the lens intervening between the cataractous portion and the observer, oblique illumination with dilatation of the pupil immediately reveals the true state of matters. I need not tell you that the symptoms will vary in intensity in accordance with the amount of lens structure which is affected, and its density and both these circumstances are liable to very great variation. Some patients manage to struggle through life with the affection when it is slight and stationary. In others some operative treatment soon becomes necessary. I fear, however, that the time at my command will scarcely enable me to deal with these to-day.

Now, gentlemen, I will pass rapidly in review the different methods of treatment cataract necessitates. I need not tell you that it is a malady which admits of no medical treatment. Changes in the transparency of the lens once effected, its original condition is never restored. I must make an exception to this rule in the case of diabetic cataract, if certain cases which have been reported lately are correct. It is possible for very considerable degrees of opacity to clear away and vision to be restored. Personally, I have seen many cases of diabetic cataract in all stages, and I never have seen any such changes as those to which I refer, even when the elimination of sugar had been almost completely checked. I have always found the lens unchanged, and I confess to a certain amount of incredulity, although I cannot pass the matter over. I am inclined to think, in some of these cases at least, that a mistake has occurred. In diabetes scotomata frequently occur, producing great amblyopia, and if in conjunction with these symptoms the greenish reflex from the lens which is so frequent in age and some other conditions were present, a mistaken diagnosis of cataract might easily be made by an inexperienced person unassisted by oblique illumination or the ophthalmoscope. Then, if the scotoma cleared away and vision were restored, an impression that the lens had regained its transparency

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would be produced. Of course proper medical treatment in a general way is useful in many cases of cataract. It is a disease of degeneration, and not infrequently there is evidence of some flaw or crack in the constitution, proper attention to which may delay the advance of the malady. Not a few suffer from albuminuria, atheromatous degeneration of the vessels, or gout, and it is well in all cases to institute a careful examination of the urine, the heart, and the great vessels. You may discard, too, all the nostra which savour of quackery, in the shape of the local use of ammoniacal solutions, phosphorised oil, and electricity; they are absolutely of no avail. When the cataract is already considerably advanced, and in nuclear cataract sometimes at a comparatively early stage, artificial mydriasis induced by atropine is often of service in improving sight, but it should be used with caution, and not without first having ascertained that no glaucomatous tendencies exist. Half a grain of sulphate of atropia dissolved in one ounce of water is usually quite sufficiently strong, or you may use the hydrobromate of homatropia in the form of one grain to the ounce. Its effect is not so prolonged as atropine, and it requires to be more frequently applied; but it is less likely to induce glaucomatous affection, though not absolutely free from this danger. Having fulfilled these temporary indications, we must be patient and wait till the time comes for operative treatment.

What is the proper time for surgical treatment? That is a question which has been debated for years without being satisfactorily answered, and indeed it is a question which is not open to any categorical reply. An infinite number of circumstances must influence it in each individual case. In most cases it is advisable to wait till the cataract is what we call mature. That occurs when the whole of the lens matter has become degenerated. The lens then lies like a ripe fruit in its capsule; it is not absolutely loose, but its connexion with the capsule is materially loosened, and when the latter is ruptured the whole lens escapes, leaving no cortical matter behind. How can we judge if a cataract has arrived at maturity? If by oblique illumination we get no shadow of the iris upon the lens, and with the mirror there is no red reflex from the fundus, we may feel pretty certain that the cataract is mature. Now there are many cases in which this condition of maturity is most tardy in occurring; a degree of opacity is reached which prevents all useful occupation being followed with comfort. In these cases the surgeon is often opportuned to operate by the patient, and has himself a strong desire in that direction, but is restrained by the knowledge of the comparative difficulties and imperfect results which occur after operations upon immature lenses. Many devices have been sought to produce an artificial maturation of the cataracts and thus diminish the painful period of suspense in which these patients are kept. Massage of the globe has been much vaunted. It may be performed alone, or a primary iridectomy may first be performed and the massage applied direct to the lens by stroking it with a blunt instrument. This operation requires much care and delicacy in its performance, as there is danger of detaching the lens from its zonula. An iridectomy alone is very efficacious sometimes. I have very frequently adopted it with advantage, and it has this to recommend it, that it facilitates the steps of the subsequent extraction when it becomes necessary, although many patients object to it because it makes two operations necessary instead of one. Puncturing the lens is another method of producing artificial maturation, but it is not unattended with danger, and is not always so successful as one would *à priori* suppose. In nuclear and cortico-nuclear cataracts the sclerosis of the lens fibres renders them inapt to imbibe the aqueous humour. We see this sometimes where an attempt has been made to perform the old operation of couching, and after some forms of accident, when the lens may be seen to lie for years in the anterior chamber without undergoing any alteration.

As a cataract may be immature, so also it may become if left to itself hyper-mature. This is a condition which is also less favourable for operation. The lens becomes small and contracted, it may even become loose in its capsule, its ligamentous attachments become less firm, and there is danger of detachment; the iris is more sluggish and less elastic, and the lens has difficulty in passing through it; the vitreous becomes softened, and altogether the immediate dangers of an operation are much greater than when the lens is immature. Hyper-mature cataracts are not infrequently seen in patients coming from distant country districts. They are the outcome of a popular and widespread fallacy—for which, I regret to say, the profession are in no small degree responsible—that in cataractous patients no operation should be performed until the patient is practically blind. The degree of blindness is not always in direct proportion to the maturity of the cataract. Some persons with mature cataracts can see fairly well; nevertheless, they should be operated upon, and any delay after that period gives opportunities for regressive changes to develop themselves.

What rule should we adopt with regard to operations in cases of persons suffering from monocular cataract, or in those in which the cataract is very unequally developed in each eye? In cases of monocular cataract, the result of disease or traumatism, I usually explain the circumstances of the case to the patient, pointing out the advantages he may gain in the event of success from the assistance of the operated eye in binocular vision, its cosmetic advantages, and the chances, remote though they may be, of accident or disease some day affecting the good eye at a time when, from disuse and regressive changes having set in, an operation upon the other would be too late to be attended with the same measure of success, if any. When both eyes are cataractous, but one in advance of the other, I always advise and urge an operation to be performed when the first lens arrives at maturity. The infinitely small risk of sympathetic ophthalmitis developing in the unoperated eye is not, to my mind, worth taking into consideration; at all events, it in no way counterbalances the advantages of the proceeding, which when successful saves the patient from being withdrawn for any lengthy period from occupations which may have great importance for him. But, gentlemen, as I said before, in all these matters no hard and fast line can be laid down; each case must be judged upon its merits. I have not that dread of sympathetic inflammation occurring as the result of cataract operations which seem of late years to have grown upon the profession. I have now performed many hundreds of operations for cataract of different kinds, including congenital and traumatic cases, and I can safely say that, to my own knowledge, either direct or indirect, I have not seen such an untoward result to occur once. I have no doubt it does occur sometimes, and more frequently in some clinics than others,—notably where the so-called peripheral operations are performed, and the wound is subjected to a process of pulling about and unnecessary manipulation in performing what I believe is euphemistically called its "toilette." I have sometimes been astonished at what seemed to me the great length of time and labour some continental operators devoted to the removal of the smallest particles of cortical débris, and felt that if there were any truth in the septic theory of sympathetic ophthalmitis, the danger of so much manipulation and such frequent introduction of instruments within the eyeball must be much greater than that of leaving small pieces of cortex untouched. But I shall refer to this matter again.

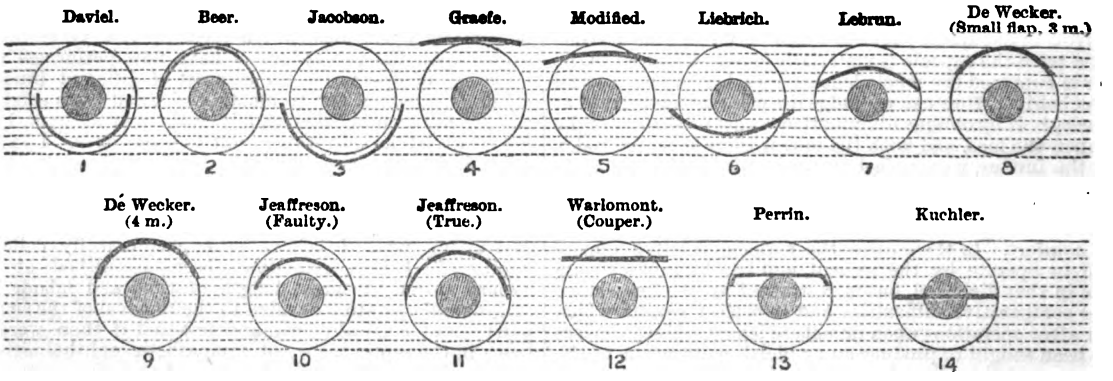
Now, gentlemen, having made up your mind that an operation is necessary, what method are you to choose? Perhaps no operative procedure in the whole range of surgery offers such an *embarras de richesse* as that of removing a cataract. The cornea, corneo-scleral junction, and sclerotic margin have been divided in almost every conceivable direction and extent by instruments of innumerable shape and form. The names of inventors of cataract operations and cataract instruments would, I verily believe, fill a column of *The Times* newspaper, and some of these inventors, I am uncharitable enough to think, would be well pleased to see such a list in print. There is, at all events, one satisfaction in all this: there is no scope left for any inventors in the future, and the mental energies of the succeeding race of practitioners cannot be better employed than in coming to a conclusion as to which is the best, or of sifting the wheat from the chaff, as far as all the different operations are concerned. All this diversity of opinion upon cataract operation can by careful analysis be reduced within certain limits. We may roughly arrange cataract operations into three principal divisions:—1. Operations without incision: displacement; solution or discission. 2. Operations with incision and laceration of capsule: flap; linear; median. 3. Operations with incision without lacerating the capsule: flap; linear. In the first class we may say that displacement is now obsolete, and discission is reserved for rare cases. The second class contains all those groups of operation which are usually performed for the extraction of senile cataract. The third class, containing the operation for the removal of the cataract within its capsule, is not much practised

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in this country, although everyone must occasionally perform it. Within certain limits every surgeon should follow the method in which he feels confidence, or in which personal experience has given him peculiar facilities of execution. The performance of a cataract operation is to the surgeon what the execution of a difficult and intricate piece of music is to a musician. It looks simple, but it requires a certain amount of muscular and mental co-ordination. If the musician were frequently performing his difficult piece in one key, and were suddenly asked to play it in another, he would probably fail, or at all events would succeed indifferently. So a change in performing a cataract is usually at first attended with some indifferent success, and operators should not rashly change their mode of procedure unless they are sure that the change is for the better.

There are certain fundamental principles which should guide us in the choice of a cataract operation. 1. That the lens should have an easy and free delivery. 2. That the wound should be in a favourable place for apposition of its edges. 3. That the wound should lie in structures which best resist traumatic influences. 4. That the optical properties of the cornea should be as little interfered with as possible. 5. That no unnecessary mutilation should be practised upon the organ of vision.

Now, gentlemen, I have placed upon a diagram fourteen different plans of sections which have been adopted by various operators. (See illustration.) Time, I fear, will not allow me to enter at length upon all the points connected with them, but I will briefly examine their bearings as regards the principles I have laid down. We shall find that, as in other things so with cataract operations, we cannot attain



an ideal standard of perfection. Every operation violates one or more of these principles in a greater or less degree. The selection of an operation is a question of carefully balancing its advantages and disadvantages and applying it to the individual case upon which we are going to operate. A careful operator will therefore occasionally modify his procedure according to circumstances, and exercise a certain amount of eclecticism.

For nearly a century Daviel's operation was the classic operation for extraction. It occupied the inferior half of the corneal circumference and lay well within the cornea; it was subsequently modified by Beer, who removed the incision to the upper segment and brought it close to the sclero-corneal margin; as such it is now usually known as the "flap operation." Now, there can be no question that the merits of this operation are very great indeed. Personally I performed it for very many years after others had abandoned it. Ultimately I was induced to give it up; I did so with difficulty and regret; it was my first love, and, like all first loves, occupies a reverential place in my memory and my affections. Its merits are that it is easy of performance and can be done without an assistant—a matter in country practice of great importance. (An assistant who is not trained to a surgeon is worse than useless to him). It gives ample room for the escape of the lens, does not interfere with the pupil, and leaves an eye, when successfully performed, which leaves nothing to be desired as far as cosmetic conditions are concerned, and with regard to optical conditions may be said to be perfect. Now, what are its alleged disadvantages? Suppuration of the cornea, prolapse of the iris, loss of vitreous, iritis, tedious healing, and subsequent astigmatism from alterations of the curvature of the cornea. These accidents do occasionally occur after this operation; but, as you will see, they are dangers which are in a greater or less degree incident upon all cataract operations; and it is to obviate or minimise the one or the other that so many different operations have been introduced. Suppuration of the cornea is unquestionably the most prominent of its disadvantages. A large area of the cornea is cut off from its base of nutrition, and is apt in consequence to suppurate and necrose rapidly. Now, personally, I did not find this occurrence was so frequent as many other operators had done; it did not exceed 7 per cent. in close upon 400 cases. But on the Continent and in some of our large cities, where the constitutional conditions of patients are either below par or perverted by over-stimulation and excesses of all kind, no doubt the percentage would be much higher in the most skilful hands. Skill in operating has but little bearing upon the question; it is a question more of hygiene, both personal and as regards surroundings after the operation. The introduction of antiseptics into ophthalmic surgery—or perhaps I should rather say of the care and cleanliness which the antiseptic system necessitates—has done much to reduce the dangers of suppuration. Still there are risks in a large clinic over which it is absolutely impossible the surgeon can exert his immediate and constant control, and there always will be in this, as in other operations, a higher percentage of cases of failure in hospital than in private practice.

Another objection which with me was of considerable influence was the difficulty in some cases of keeping the flap in apposition. Occasionally the cornea was found thin or had lost its elasticity, and wrinkled easily. The movements of the lid would turn the flap back upon itself, and even after the most careful dressing this would sometimes occur, favouring suppuration and leading to hernia of the iris. Loss of vitreous is a complication which I think is a little more liable to occur, owing to the size of the wound and the consequent weakening of the support of the zonula. On the other hand, the free exit of the lens necessitates but little after-manipulation, which is not an infrequent cause of escape in some more modern operations. In properly selected cases I am still inclined to think that this operation is one which in its entirety is still deserving of a place. In France, which is the country of its birth, it still has staunch and able advocates. Holding these views, you may ask, Why have I abandoned it? When I commenced ophthalmic work fifteen or sixteen years ago, I had to practise at considerable disadvantages. The inconveniences and sanitary defects of our hospital were very great; we had no skilled nursing; and many of the patients could only remain a few days under our care, and had to journey long distances to their homes, where they often remained considerable periods without being seen. For patients so situated I came to the conclusion that flap extraction was not the best operation. I have still occasionally performed it in private cases, and now that I have a well-appointed and perfect hospital, with skilled nursing at my command, I should feel disposed to give it again a more extended trial in properly selected cases, but, as you will see by and bye, the latest development of peripheral extraction approaches so closely to it that I should have to do little more than change the knife with which I operate.

The feeling of dissatisfaction with the flap operation led

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to the development of the so-called linear extraction. This operation, which originated with Messrs. Bowman and Critchett, was performed with a large triangular knife resembling a keratome, which was introduced perpendicularly with the sclero-corneal junction and pushed home. The base of the knife was large enough to make a wound through which, after the capsule had been lacerated, the lens could be extracted by means of a scoop or small spoon. In this way the formation of a flap was avoided and the dangers of suppuration much diminished, but the bruising of the iris and the frequent introduction of instruments into the anterior chamber were the cause of frequent iritis and irido-choroiditis. I will not dwell further upon this operation. I am not aware that anyone practises it in the present day except under special circumstances—for instance, in soft cataracts occurring in early life. Occasionally I make use of it under these circumstances, but instead of making the section upwards I generally make it on the nasal side of the cornea.

(To be concluded.)

A FURTHER CONTRIBUTION ON

CYCLIC ALBUMINURIA;

WITH OBSERVATIONS ON THE EFFECT OF VARIOUS CONDITIONS UPON THE DIURNAL APPEARANCE OF ALBUMEN.

BY F. W. PAVY, M.D., F.R.S.

I DREW attention at the Cardiff meeting of the British Medical Association to a form of albuminuria which occurs in persons otherwise presenting an appearance of being in a healthy state. Cases were narrated which showed that a diurnal variation of a more or less regular nature was to be noticed in the condition of the urine, and that what was observed one day was repeated with more or less closeness day after day for weeks, months, and even years. On account of the existence of this character I applied the term "cyclic" to the class of case under consideration, and in its vindication the following remarks may be offer ed. In reality, the term simply expresses a fact observed in connexion with the case. Necessarily there must be some determining cause for every round of events, whether it is apparent to us or not, and in the instance before us, whatever the explanation, whether from an influence arising within or operating from without, the fact stands that under the ordinary round of daily life a cyclic train of phenomena as regards the condition of the urine is observable. But there is a point of greater importance than the mere question of nomenclature, which is that the actual cyclic character susceptible of recognition may afford the means of distinguishing the class of case which is admittedly spoken of as "albuminuria in the apparently healthy" from the class falling within the category of albuminuria from Bright's disease. If subsequent experience should sustain the conclusion deducible at the present time, the distinction of the one class of case from the other is a matter of no inconsiderable importance in the interests of the public. To be regarded unnecessarily in the light of a person the subject of ordinary Bright's disease may entail a serious hardship through the effect exerted upon the future position in life. At the same time the uneasiness created in the minds of the relatives and friends must not be lost sight of. Looking at the number of cases that have come to light, and the incidental way in which the discovery has been made of the presence of albumen—for it does not usually start from the person himself being conscious of the existence of anything wrong,—it may be inferred that there is a large number of persons going about at the present time in the state in question without having a knowledge of it. Such being the position in which these cases stand, we, as members of the medical profession, incur a responsibility in determining the manner in which they should be viewed, and it behoves us, in justice to those who are guided by our precepts, to make ourselves fully and rightly informed with regard to them.

Concurrently with the insertion of my Cardiff communication in the columns of THE LANCET, a leading article was given upon the subject. Therein is cited the case of a young lady suffering from what was supposed to be "adolescent albuminuria," where it was observed that the urine passed shortly after rising was always highly albuminous. If she got up for breakfast, the urine, it is stated, was albuminous in the forenoon; if she got up after lunch, in the afternoon; and if after dinner, in the evening. Observations that I have recently made give a forcible significance to this remark, and apparently show that it has a wide bearing in connexion with the cases to which I am drawing attention. The following suitable case presenting itself, I noted the condition of the urine after (1) fasting till late in the forenoon, (2) remaining in bed till the middle of the day, and (3) taking a cold bath in the early morning and afterwards returning to bed.

E. M. B——, aged twenty, came to me in November last by the advice of Mr. Harcourt Coates of Salisbury. He belongs to a healthy family, presents a healthy appearance, and has not suffered from scarlatina. He has been engaged as a probationary clerk in the Bank of England for four years, during which time he has not missed more than ten days' attendance at the office from sickness, and this only at different periods in consequence simply of a "cold or biliousness." He did not know that anything wrong about him existed till he presented himself six months back for undergoing the medical examination to which the probationary clerks are subjected before being accepted for the permanent staff. The examination was conducted in May, and he was informed afterwards that he had not passed. He subsequently learnt that it was on account of his urine containing albumen that he had been rejected. Discordant opinions were afterwards given regarding his case by those who saw him, evidently due to the different periods of the day at which the urine was passed that was examined. When he underwent examination at the Bank, it was about 11 A.M. that the urine was passed for analysis. Investigation of the state of the urine, conducted upon several days, showed that in the early morning it was always entirely free from albumen, whilst at 10 A.M. and 11 A.M. albumen was to be found, sometimes in larger quantity than at others. Towards the latter part of the afternoon there was less, and almost invariably at bedtime it was again entirely free. The specific gravity was usually high, sometimes as high as 1034, and many specimens were turbid from a deposit of lithates. Microscopic examination revealed crystals of oxalate of lime, and upon some occasions uric acid. There were no casts or blood-corpuscles. The case being a marked one of cyclic albuminuria, and willingness having been expressed by the subject of it to try the effect of fasting, remaining in bed, and the employment of a cold sponge-bath, the following observations were conducted. In two of the three sets of observations it will be seen that no effect was witnessed, whilst in the other a decided influence was found to be exerted.

Fasting during the morning.—Dec. 9th: E. M. B—— got up at 7.30 A.M., and took nothing to eat or drink till 11 A.M., when he breakfasted. The urine passed at 7.30 A.M. presented the following characters: sp. gr. 1031; no albumen; acidity 7·947 per 1000; turbid from lithates. The urine passed at 11 A.M. (before breakfast) threw down, on testing, a decided precipitate of albumen. At 4 P.M. the quantity is recorded as a trace. On Dec. 12th the urine passed on rising between 7 A.M. and 8 A.M. was free from albumen. Nothing was taken till 12.30 P.M., and just before this time urine was voided. The specimen contained a moderate amount of albumen. At 4 P.M. the albumen had become reduced to a trace, and at bedtime there was none. Thus, with the absence of food, albumen showed itself as under ordinary circumstances.

Keeping in bed during the morning.—On Sunday, Dec. 6th, E. M. B—— kept in bed till 12.30 P.M., not rising even for passing the specimens of urine which were collected. Breakfast was taken at 8.30 A.M. Urine was passed at 8 A.M., 11 A.M., and at 12.30 P.M., the time of rising. All three specimens were free from albumen. At 2.30 P.M. there was no albumen, at 6 P.M. there was a questionable trace present, and at bedtime (11 P.M.) the record is a trace. On the following morning at rising it was, as usual, free. On the 13th the morning was passed in bed till 11 A.M. Urine was collected at 8.30 A.M. and again at 11 A.M. Both specimens were free from albumen. At 4 P.M. there was a faint trace, and at bedtime a decided amount present. Thus keeping in bed led to the urine remaining free from albumen throughout the morning. The appearance of albumen was thrown on till later in the day, and then only an insignificant amount was found in comparison with that ordinarily observed.

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Cold bath in the early morning, and return into bed afterwards.—The object of this observation was to see if exposure of the surface to cold contributed to occasion the passage of albumen. For determining this point the bath required obviously to be employed under circumstances when albumen might not be expected otherwise to show itself. On Dec. 15th, E. M. B—— rose at 8 A.M., took a cold sponge bath, returned into bed, had breakfast, and remained in bed till 11 A.M. Urine was voided at 8 and 11 A.M., and both specimens were free from albumen. The urine passed at 4 P.M. contained a faint trace of albumen. That passed on going to bed was free, as was likewise that passed on rising the next morning, whilst the 11 A.M. specimen contained albumen as ordinarily observed. It was for the purpose of strengthening the information supplied that the examination of the urine was thus extended into the following day. On Dec. 17th the observation of the 15th was repeated, and I desired that the bath should be prolonged as far as convenient in order that a decided impression might be exerted upon the surface. The 8 A.M. urine was free from albumen. The 11 A.M. specimen gave a doubtful indication of the presence of the merest trace. The 4 P.M. specimen contained a faint trace, and that passed at bedtime a trace. On the following day the urine passed on rising was free, whilst that passed at 11.30 A.M. contained the usual amount for this period of the day under exposure to ordinary circumstances. The bath, therefore, did not produce any effect upon the urine. The condition observed was practically the same as after simply remaining in bed.

In two other cases I have obtained information, and it corresponds in nature regarding the influence of keeping in bed beyond the usual hour of rising. Both these cases were first seen by me some time ago, but I did not include them in my original communication, as I desired to have them under observation for a longer period before I made use of them.

Miss S. O—— was brought to me in February, 1885. She was then eleven years of age, and I was told that albumen had been noticed since the previous Whitsuntide. It was then looked for on account of a slight illness which there was some suspicion might be scarlatina, although there were no definite symptoms of it. The discovery of albumen, however, led to the conclusion, rightly or wrongly, that an attack of scarlatina had been passed through. When falling under my observation the case presented the characters of cyclic albuminuria, and has since continued to do so. In December last I wrote to the mother and asked her to keep her daughter in bed till the middle of the day, and to let me have specimens of urine sent for examination. It had been usual for albumen to become visible about 9 or 10 A.M.—Dec. 15th: The hour of rising was postponed till noon. The urine passed at this time was free from albumen. That passed at 9 P.M. contained a large quantity. The observation was repeated at the end of January, and upon this occasion specimens for the day prior were also sent to me.—Jan. 27th: The urine passed at 7.30 A.M. was free from albumen, whilst that passed at noon and also at 9.15 P.M. contained a notable amount.—Jan. 28th: The hour of rising was delayed till noon, breakfast, however, being taken as usual. Urine was collected at 8 A.M. and noon, and both specimens were free from albumen. The urine passed on going to bed at 9 P.M. contained a large amount.

The other case consisted of a boy whom I first saw in July, 1884; he was then thirteen years of age. The mother had been instructed in testing for albumen, and for some time the urine had been tested daily for days together at different periods of the day. The albuminous condition had been known to exist for two years. The mother told me that what she had generally noticed was that, whilst in the early part of the morning the urine was free from albumen, it contained a notable amount about 10 or 11 A.M., and that during the afternoon it usually disappeared. She regarded it as a bad day for the boy if the albumen did not disappear during the early part of the afternoon. At this time the condition excited grave apprehensions, and was watched with great anxiety from day to day, keeping both mother and son in a constant state of uneasiness, and acting in a decidedly prejudicial way upon the boy's progress in life. I advised that the testing should be abandoned and the boy dealt with as though he had something more than the prospect of an invalid life before him. I saw him in January, 1885, and then not again until the middle of December. It occurred to me at this visit to ask the mother if, when she was undertaking the daily examination of the urine, she had noticed any variation in relation to getting up and keeping in bed. She immediately replied that she had always noticed that the albumen did not appear till the boy had been on his feet for about an hour. These were the words she made use of, and the circumstance, she remarked, had struck her forcibly. As long as he remained in bed there was no albumen; and upon one occasion he was in bed for a fortnight with an attack of jaundice, and all this time the urine was quite free from albumen. Directly he got up it returned as before. She thought it strange, also, that when suffering from a cold, if she kept him in bed, there was no albumen. I had said nothing to prompt these remarks, and the evidence therefore may be accepted as strikingly corroborative of that otherwise obtained. Moreover, an explanatory idea had been framed in her mind upon the matter. It appeared to her, she said, as though getting up caused the albumen to filter from the kidney.

Taking it as accepted that there are certain cases of albuminuria of the kind that has been referred to standing distinct from those falling under the category of Bright's disease, the object presenting itself to be attained is to acquire information which will give us a full knowledge of their history and enable us to recognise them when they may happen to fall under view. The cyclic character noticeable in the condition of the urine under the ordinary round of daily life constitutes a valuable feature in the case from a diagnostic point of view; and the influence exerted by keeping in bed throws an important light, certainly from one aspect, upon the origin of the daily revolution observed.

Grosvenor-street, W.

ON THE

CAUSATION AND NATURE OF HYPERTROPHY OF THE PROSTATE.

BY REGINALD HARRISON, F.R.C.S.,
SURGEON TO THE LIVERPOOL ROYAL INFIRMARY, AND LECTURER ON CLINICAL SURGERY IN VICTORIA UNIVERSITY.

IN a paper recently published[1] on some Changes in Form of the Prostate and Floor of the Bladder I have shown that the inter-ureteral bar of muscular fibres so frequently met with in cases of enlarged prostate is to be regarded as the outcome of efforts, by the development of extraordinary agents of micturition, to expel urine from a part where it is apt to lodge and cause inconvenience. In connexion with these investigations, I have met with instances where an unusually depressed state of the floor of the bladder, or trigone, appeared to me to have existed previously to an enlarged prostate; in fact, that a condition of residual urine preceded, and was not the sequence of, enlargement of the gland. The trigone, or floor of the bladder, in addition to being a highly sensitive part, is peculiar in that it contains but few muscular fibres in its composition; muscle in abundance may be found as low as a line corresponding with the openings of the ureters, and marking the superior boundary of the trigone, and below in the prostate; between these two points the power of muscular contraction can hardly be said to exist. Assuming that, from any cause, such as long retention of urine, habit, position of the body, or the weakness connected with advancing years, the trigone, or non-contractile part of the bladder, becomes permanently depressed or altered in form, so that the person finds himself unable to get rid of the last half-ounce or so of urine, the effect will be frequently repeated expulsive efforts in all the muscles immediately adjacent to a part which, by reason of its connexions and structure, has no power of exercising contractility. This will eventually lead, as I have shown, to the hypertrophy of the muscular fibres between the orifices of the ureters—the inter-ureteral bar—as well as, I believe, to that of the muscular fibres so largely entering into the composition of the prostate. In this, I submit, will be found the immediate cause of prostatic hypertrophy. The change being an example of an hypertrophy, its production by conditions favouring the formation of over-growths observed in the body seems to be reasonable. Such a view, as applied to the large prostate, is strengthened by certain clinical observations. A frequent desire to empty the bladder is constantly met with in what is regarded as the earliest stage of

[1] Liverpool Medico-Chirurgical Journal, July, 1885.

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prostatic hypertrophy, and long before the gland has assumed any considerable size; the more frequent the calls are to urinate, the more rapidly does the prostate grow, and all circumstances which tend to increase irritability of the bladder may be said to favour the development of this condition. Lastly, the only means which are known to have caused the opposite state—namely, that of atrophy, to be engrafted on the hypertrophied gland—are those which for a considerable time converted a muscular and physiological act into a purely mechanical one; for instance, the case I published[2] some years ago (since repeated with equally satisfactory results), where by the wearing of a cannula inserted through the perineum the process of micturition was reduced to the mechanical act of turning a tap on the part of the patient. Though regarding senile enlargement of the prostate as an hypertrophic change, I was at a loss to explain how it was induced until I met with instances where, from the conformation of the bladder, an irritating condition of residual urine seems to have preceded, and not to have been the consequence of, an enlarged prostate. Instances in practice are not uncommon in elderly males where all the symptoms usually assigned to prostatic enlargement are present, without there being evidence, beyond the presence of some residual urine, that any physical change in the gland has taken place.

I have frequently noticed that condition of unnatural contractility about the muscles connected with micturition, to which Sir James Paget's expression of "stammering with the urinary organs" may be applied, precede prostatic hypertrophy. I have a case under observation, where a locomotive engine-driver, aged fifty-three, has, owing it is believed, to the constant concussion connected with his occupation, been a stammerer of this kind. Rectal examination now shows that his prostate is commencing to enlarge, as not only is it increasing in breadth, but a distinct band of what I take to be muscular tissue is to be felt stretching across and filling it up. I was able to demonstrate this to my house-surgeon, Dr. Collins, and my clinical class, who had no doubt about the facts, whatever the construction placed on them might be. The sequence of events in this case appears to have been enforced retention by reason of the man's employment, incomplete emptying of the bladder, irregular and spasmodic efforts to expel residual urine, terminating in commencing hypertrophy of the muscles principally involved—namely, those associated with the expulsive action of the bladder. The frequency with which the floor of the gland is the first to show the hypertrophic change seems to strengthen the inference I have drawn from the development of the inter-ureteral bar, and to indicate that both conditions are the direct result of straining and an excess in the expulsive action of the bladder and associated parts. Structurally, the inter-ureteral bar and the hypertrophied prostate are identical, with the exception that in the latter will be found the follicles which have led to it being regarded as a glandular body. It is impossible to examine some of the commoner forms of advanced prostatic hypertrophy without being struck with their resemblance to what I would describe as growing casts of the interior of a frequently contracting bladder.

But it may be urged that if repeated expulsive action on the part of the bladder causes enlargement of the prostate to follow, how is it that stone and urethral stricture do not in like manner occasion it as a uniform consequence? To this I would reply that stone and stricture as excitants of expulsion are general or varying in their operations, and do not, as a rule, merely involve a limited area of the bladder wall; consequently the hypertrophy following stricture is universal so far as the viscus is concerned. In the same way, the whole bladder is involved when a growing prostate becomes in addition an obstacle to micturition. When a stone is fixed to the bladder, it is, I believe, subjected to precisely similar influences on the part of the bladder wall immediately adjacent to it as those described in connexion with the trigone, and may result, as I have seen, in a circumferential development of muscular tissue sufficient in some instances to produce sacculation. This is not an uncommon process, and may be studied with advantage in those cases where secondary calculi are developed as a consequence of surface irregularities produced by a large prostate, and which I have referred to elsewhere as fixed or stationary stones.[3] Further, it may be urged that such an explanation cannot be held to cover those instances where persons with more or less enlarged prostates do not suffer from them. I have investigated cases of this kind generally with the result of finding out that, at some period in their history, considerable urinary irritation was present and persistent. That an hypertrophy may prove to be *a precise compensation*, without, on the one hand, falling short, or, on the other, overlapping, I think we have evidence of here as in other parts of the body. It has been objected that enlargement of the prostate cannot be regarded as a mere muscular hypertrophy, as it does not occur during those periods of life which are most remarkable for muscular activity and development. On the other hand, it is hardly necessary to remark that, though an hypertrophic act in which muscular tissue is principally involved, it is really prompted by alterations in the form or function of a contiguous part which are the products of advancing years.

It may not be out of place to observe in connexion with analogous processes of hypertrophy, which in general terms have been referred to, that the best marked are those where structural defects are remedied, not in the part itself at fault, but in that which is adjacent. In the heart it is not the valve that is reproduced, but the ventricle or auricle which is augmented. Nor does the analogy cease here, for as the hypertrophied heart in turn occasions symptoms peculiar to itself, in like manner does the large prostate produce its own derangements. In conclusion, it should be remembered that the changes and diseases to which the hypertrophied gland is liable, and about which there is much to be said of great practical value, must not be confounded with the primary lesion it is desired here to refer to.

In addition to the valuable paper and plates by Sir Charles Bell, on the Muscles of the Ureters,[4] mention must be made of Mr. Viner Ellis's communication on the Muscular Arrangements of the Genito-urinary Apparatus.[5] In reference to the impossibility of dissociating the functions of the bladder and prostate, the latter author remarks: "I would propose the name 'orbicularis vel sphincter urethræ' for both the prostate and the prolongation around the membranous urethra; whilst I would confine the old term, 'prostate' (without the word 'gland') to the thickened and more powerful part near the neck of the bladder. This orbicularis may be considered as only an advanced portion of the circular layer of the bladder, though it must have the power of acting independently of the vesical fibres." The truth of this I never fully realised until I had practised, and watched the result of, a considerable number of operations, undertaken with the view of permanently relieving urgent symptoms attendant upon the large prostate.

Liverpool.

[2] British Medical Journal, Dec. 24th, 1881, and April 8th, 1882.
[3] Annals of Surgery, June, 1885.

THE EARLY TREATMENT OF RHEUMATOID ARTHRITIS.

BY JOHN KENT SPENDER, M.D. LOND.,
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EVERYONE who writes about rheumatoid arthritis is expected to begin with an apology for not calling it "osteo-arthritis," according to the precept of the College of Physicians. The apology is needed. An unscientific nomenclature condemns itself. An old writer says that "syllables govern the world";[1] and our conceptions of a scientific fact are governed by the terminology which represents it. A word or a phrase has teaching power, and moulds our belief even against our will. An old doctrine may have almost passed away; but the verbal symbol, if unchanged, recalls the doctrine, and the bond of logical association is too strong for us. Hence, as there are many reasons for rejecting the term "rheumatoid arthritis," there ought to be some potential reason for retaining it; and the fact is that no other term expresses with such graphic force a special group of clinical symptoms and anatomical changes. When fully developed no clinical picture is more easy to recognise; but the difficulty is to recognise it in the early stage when its outlines are only feebly marked. To study the evolution of a chronic disease is not a mere "pathological exercise,"

[4] Med. Chir. Trans., London, vol. lii. [5] Ibid., vol. xxi.
[1] Selden's Table Talk.

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but is associated with the distinction and the success of therapeutic art.

I put, then, in the very foreground of my paper these postulates of chronic rheumatoid arthritis. Firstly, it is a disease which, though often springing out of ambush on a person in seemingly fair health, is an epilogue (or epiphenomenon) in the sense of being always preceded by a period of anæmia or defective nerve tone. Secondly, the natural tendency of the disease is almost always from bad to worse. Thirdly, the disease must be grappled with in the earliest possible stage if the medical battle is to be fought with any hope of victory. There is a point beyond which there is no hope of doing anything at all. Now, what can be predicated of a disease which bears these characters? One writer asserts that it is a nutritive disturbance of the joints peculiar to old age or premature old age, and that it is analogous to the atheromatous process which occurs in the internal tunic of the arteries at this time of life.[2] It is a sufficient answer to recall the fact that young people (even before puberty) are occasionally crippled by rheumatoid arthritis—people, I mean, whose youth is untinctured with the least trace of senility. The disease was considered by the late Dr. H. W. Fuller to be closely allied to struma, although he always called it by the misleading title "rheumatic gout." There can be no doubt that in a large number of cases there is a history of pulmonary or cerebral tubercle in the same family, or among kindred closely allied to the patient. Many high authorities might be quoted to the effect that the disease may come on as the treacherous sequel of repeated hæmorrhage (whether as menorrhagia or otherwise), of prolonged lactation or frequent childbearing, and especially of profuse leucorrhœa. Dr. Garrod says that excessive mental anxiety, and that kind of bodily fatigue which is the effect of night-watching, are potential elements in the etiology of rheumatoid arthritis. A note ought to be made of that curious pathological bias which associates nearly every form of chronic joint disease with something wrong in the nervous system. M. Charcot tells us that he has seen, coincident with nodular arthritis, certain nervous affections, such as shaking palsy and locomotor ataxy; but Trousseau remarks, with a touch of humour, that there is really no proof of any correlation in the pathogeny of these nerve diseases and nodular rheumatism.

Now, as a sort of bracket to bind together many stray phenomena, are we to forge a new thing and call it by the grand name of an "arthritic diathesis"? Fond and vain inventions are some of these so-called diatheses; spurious coin to hide the penury of genuine metal. As provisional schemes, or as stepping-stones to a wider pathological economy, a humoral or a neural diathesis has its value. Otherwise it is a mere empiric swing of the pendulum from blood to nerves, and then from nerves to blood again. But the phrase "arthritic diathesis," when rigorously examined, seems to mean this: Bone displays at different epochs of life a susceptibility to diathetic and enthetic influences, which renders it a delicate index of physiological vigour. If there be anything bad in the system, bone catches it up and tells the tale. Bones are not metaphysical abstractions, because they are out of sight; nor are they on a lower dynamic level than the soft tissues. Now, as the ends of bones are their *working* part, they are more exposed to the disintegrating forces which all work implies. Gout and rheumatism go to joints, not as such, but because they contain much of those structures which gout and rheumatism love to fasten upon. There may be plenty of rheumatism and gout in a body without any joint affection at all; but rheumatoid arthritis is a textural degeneration of joints *as such*, the outcome of wear and waste, though not the special property of any rank or age. That the degeneration is arthritic instead of being anything else does not make it a "diathesis," for any decay may spring out of some inherited or acquired weakness.

Is not our way now a little clearer? Is it not time to abandon utterly the untrue title "rheumatic gout"? Wherever this phrase is current, sounds of salicin and colchicum float in the air. In spite of discomfiture, again and again the routine and useless prescriptions are written, because salicin is "good for rheumatism," and colchicum is "good for gout."[3] The duty is done, and if the diseases will not obey the traditions, so much the worse for the diseases. Some natures are crushed by constant defeat, but others are roused to the necessity of better generalship, and ask, "Where does the therapeutic fault lie?" Is rheumatoid arthritis to be put in the same catalogue as cancer and all the other incurables? Verily not. It is a question of clinical insight and tact. Grapple with rheumatoid arthritis in its earliest manifestation; let us disengage ourselves from all scholastic theories of its origin and nature; and let our therapeutic aims be clear and easy to be carried out. It does not help us one morsel to repeat what Haygarth, Cruveilhier, and Heberden thought and taught in this matter. A procession of these honoured masters is the merest pageantry of old physic. They came, they saw, and in many things they conquered; they did wonders, but they could not conquer in everything; much seed which they flung about bore no fruit. We know more than they without being necessarily their betters; and if our finer therapeutic harvest does not enable us to do more good, so much the greater discredit to ourselves.

To cure a disease, or even to substantially relieve it, we must understand its beginnings and trace it from its germ. The earliest symptoms of rheumatoid arthritis are subtle, and easily confounded with other things. If rheumatism be uppermost in our minds, and if we see a great deal of it, we shall call all pains "rheumatic" which infest joints and muscles. Weakness and spanæmia are the natural allies and sequels of rheumatism; and if we hear a history (however remote) of rheumatic pyrexia, we shall probably conclude that our patient's aches and stiffness are only renewals of old troubles. Thus is the veil woven which blinds the clinical vision, and we ourselves are the artificers who weave it. How, then, are we to identify rheumatoid arthritis in its early simple phase, so that we may steal a march upon it and prevent its development? Putting aside for a while the academic distinctions of the acute, chronic, and irregular forms, we search for the ideal picture. A woman (rich or poor, it matters not) has gone through much childbearing, or has endured a long lactation and perhaps more leucorrhœa, or has been the victim of bodily privation and mental anxiety. One morning she awakes and feels a pain in her wrist; she thinks that she must have twisted or overworked it; she blames the weather or a hundred trivial things, and she winds up her random meditations by calling it "only a little rheumatism." Or there is pain in and among the carpal bones; there is effusion in the synovial sheath which surrounds and guards these bones; the hand looks thicker when held up and viewed sideways, and it cannot be easily opened and closed. Or there are tenderness and tightness in the palm, so that the hand involuntarily shuts when left to itself to relieve tension of the palmar fascia. Perhaps the lower limb suffers first, and the patient cries, "I have something wrong in the hollow of my foot; there is pain every time I bend the instep when walking up and down stairs." Next the ankle swells, and the difficulty of walking increases. An unwary doctor says that the ankle "has been sprained," and he may order cold douches with other very inappropriate remedies. But the supposed injury does not get well, and presently there is a puffiness around and above the malleoli, with an increasing lameness and weakness in the limb. Then, strange to say, instead of going straight to the knee, the disease may fly to an upper limb, crippling in rapid succession fingers, wrist, and elbow. Sometimes the fingers are swollen, reminding us of erythema or chilblain; and more often the first and second metacarpo-phalangeal articulations are early and severely affected. A very characteristic feature is the quick and obstinate flexion of the elbows; and now and then we see cases in which a shoulder or hip is the single joint involved and permanently injured. But there is a group, not numerically small, in which the ruin of joints is subordinate to an intense and cruel neuralgia, flitting about over nerve-threads and nerve-centres, murdering sleep, crushing the functions, creating a misery and a weakness which smother all the joy of life, and even overthrowing the intellectual and emotional faculties, so that the issue thereof may be insanity and suicide.[4]

It is quite true that the arthritis we are considering may

[2] Dr. Althaus: British Medical Journal, Sept. 28th, 1872.

[3] The term "rheumatic gout" may be appropriately given to certain hybrid forms of rheumatism and gout together, and to these only; they are not uncommon, and are not always easily diagnosed.

[4] A little monograph might be written on the early neural symptoms (not causes) of rheumatoid arthritis. Vaso-motor phenomena are quite common in the form of coldness or purple blushing of the skin. Sensorial aberrations are recognised in the various grades of dysæsthesia, from the feeling of numbness or "pins and needles" to severe aching and sudden pain. Muscular cramp or spasm is often complained of. The spinal phenomenon of shivering is now and then exactly synchronous with the earliest outward signs of rheumatoid arthritis. It is remarkable how little this subject has been examined.

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be the sequel of an injury; such an injury, I mean, as may occur in the routine duties of domestic life, and be deemed hardly worthy, perhaps, of medical care. The accident is forgotten by lapse of time, but the weakened joint structures are more vulnerable to pathological storms. When disease comes, its effects may not be separable in outward guise from the injury which went before; and it must be remembered that a joint which has been once dislocated is an easy prey to rheumatoid arthritis. Then this disease so often follows rheumatic pyrexia that the one may seem only a postscript or appendix to the other; but this postscript is different in substance and in form, although its gross physical result is merely an increment of previous shock and damage. In our Mineral Water Hospital we see many mixed forms of this kind, in which true gout or true rheumatism began the sequence of morbid changes; and it has been only after years of privation and toil that the later degenerative changes have set in, ruining finally and completely those joints which were partially spoiled before. Another matter of interest is this: The joints which have been most actively engaged by the special craft of the patient, whether this be husbandry or carpentry, needlework or washing, are usually the first to show signs of arthritic deterioration. The complementary forces of hypertrophy and atrophy have been stirred; synovial secretion becomes muddy, cartilage is torn to shreds, bone is ground down to its primitive elements, and all because the mill so seldom stops; the mangle, the spade, and the needle go drudging on without that rest which is not less physiological than moral. Once more. The etiological alliances of rheumatoid arthritis are many and far-reaching. The disease may have for its companions nearly every form of degradation which can beset animal tissues. In the dulness of a clinical fog we sometimes drift about, and can get no further than a provisional guess of "arthritis"—a guess which almost anyone can make; and then it is that the textural behaviour of eyes, hair, skin, and teeth becomes a valuable landmark, and offers material for a safe diagnosis. Nor are the important viscera less worthy of attention than the dermal appendages. So that although the arthritic phenomena may appear mixed and intertwined beyond all unravelling, there are generally some salient features which proclaim that the "rheumatoid" type of disease is the dominating one, giving a case a distinctive name and determining our views of its prognosis and treatment.

I have tried to enumerate the various points which help us to identify a disease which for obstinacy and intensity has its analogues among the malignant nosologies. But even a so-called cancer has one comparatively benign aspect, which is this: if totally rooted out in a stage which has been called local, in so far that there is no apparent poisoning of the fluids of the body, there may be a positive end to it, and neither itself nor anything like itself may ever return. On the other hand, a disease which is multiple almost from the beginning, by reason of many bones and many joints, creeps and lurks about we hardly know where; if ousted from one ground of vantage, it retreats to another only a little further away: the cunning marches of a vegetable parasite are not more difficult to follow. Here, then, is our plea for early battle with a merciless enemy. Pure rheumatism and pure gout differ from that enemy profoundly in their susceptibility of control by therapeutic effort. Even when joints are badly injured by erratic gout and repeated rheumatismal attacks, there is a wide scope for recovery if bony ankylosis and adhesions among the soft structures have not gone beyond a certain degree. But a joint, big or small, wrecked by this rheumatoid disease, is the despair of medical art according to our present knowledge. It is very pitiable when the vertebræ are so mortared together that the trunk moves like a rigid machine, when the head cannot nod or turn to either side, and when the lower jaw is so nearly motionless that food cannot be properly received and masticated. And if, in addition, the lower limbs are crippled so that support and the power of locomotion are destroyed, the general health suffers from lack of exercise, and the nervous system is prostrated by the sense of incurable helplessness.[5]

(To be concluded.)

[5] I have a copy of Dr. Robert Adams' "Illustrations of Rheumatic Gout," published in 1857. There is a plate exhibiting the havoc made by the disease on a large flat bone like the scapula; and several plates depict the "cartilaginous and bony foreign bodies" in different joints. Compare an excellent account in Mr. Barwell's treatise on Diseases of the Joints; and there are plates in Mr. Quain's Clinical Lectures. Dr. Garrod's medical survey of the subject should also be studied in Reynolds' System of Medicine.

CASE OF

PELVIC ABSCESS IN AN UNUSUAL POSITION, SIMULATING SOFT FIBROID TUMOUR OF THE UTERUS.

BY A. H. N. LEWERS, M.D. LOND., M.R.C.P. LOND.,
ASSISTANT OBSTETRIC PHYSICIAN TO THE LONDON HOSPITAL.

E.M——, aged thirty-six, married, having had eight children and three miscarriages (all before the fourth child was born), was admitted into the London Hospital on June 23rd, 1885, complaining of a swelling in the abdomen and of a red discharge from the vagina. Her last labour (four weeks previously) was a quick one; she lost a good deal of blood after the child was born, but otherwise the labour was quite normal, and she seemed to recover as usual, getting up on the tenth day, without having had any pain, shivering, or feverishness since her confinement. On the tenth day, when she got up she noticed the swelling in the abdomen for the first time; it was then much smaller than it was on admission, but had gradually increased to its present size. On the day she got up she felt so weak that she was obliged to return to bed. When she moved, even in bed, she had a dragging pain in the hypogastrium, but she had no pain so long as she lay still. She had had a red discharge from the vagina ever since her confinement.

On admission, the patient was thin and anæmic. The abdomen was somewhat distended. A smooth, elastic swelling was felt rising up from the pelvis to the level of the umbilicus; it was not tender. The swelling was symmetrically situated with regard to the middle line. It was dull on percussion; laterally, beyond the limits of the swelling, the abdomen was resonant. Nothing could be heard on auscultation over the tumour. The patient was put under the influence of ether in order that the relations of the swelling might be the more thoroughly determined. Through the speculum the sanious discharge was seen to be issuing from the os externum. A catheter having been passed to make certain that the bladder was empty, a swelling was felt in front of the cervix depressing the anterior fornix. Bimanually, this swelling was found continuous with that already noted in the hypogastric region. The uterus was movable; every upward impulse given to the cervix moved the tumour with it. The body of the uterus could not be made out distinct from the tumour. It was thought that the latter extended rather further towards the left than to the right. The sound was not used on this occasion. The temperature was 101·4° on admission, and varied for some six weeks subsequently from 102° at night (on one occasion 103·5°) to 99° in the morning.

On July 13th Dr. John Williams very kindly saw the case with me, and was of opinion that, while the case was an obscure one, the probability lay in favour of the tumour being a soft fibroid. The sound was passed; it reached a depth of three inches and a half, and passed towards the right.

Aug. 13th.—The patient has been treated since the last note with ergot, at first by the mouth and afterwards hypodermically, without any alteration taking place in the size of the tumour. A catheter being passed into the bladder, it was found per vaginam that it would be impossible to puncture the tumour in that situation without puncturing the bladder. An aspirator needle was therefore put into the swelling in the middle line, about midway between the umbilicus and the pubes, and a pint of extremely offensive pus drawn off, the tumour entirely disappearing.

Five days afterwards the swelling was as large as at first; it was tapped again on Aug. 22nd, and 22 oz. of pus were drawn off similar in character to the last. After each tapping the abdomen was firmly bandaged.

29th.—The swelling has filled up again, and is, if anything, larger than ever. To-day an opening was made under antiseptic precautions into the swelling, the edges of the abscess wall stitched to the skin, and a large drainage-tube five inches long inserted.

From this time to Sept. 15th the patient went on without a bad symptom, the temperature only once reaching 100°. The wound was dressed about every other day, the cavity of the abscess being washed out at each dressing with iodine-water and some iodoform placed in the deep end of the drainage-tube before reinserting it. The discharge, which had at first been very offensive, became quite sweet. The abdomen was

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firmly bandaged after each dressing, large pads of lint being placed on each side of the wound.

On Sept. 15th, at 9 A.M., the patient had a rigor lasting seven minutes, the temperature rising to 101°. She complained of pain in her limbs and sore-throat; the pulse was very small and frequent (148). There was no pain in the abdomen, and the wound was looking well. There was a slight erythematous rash on the chest and arms. In the absence of any other discoverable cause, it was thought that these symptoms were due to absorption of iodoform, which had been very freely introduced into the abscess cavity. The cavity was therefore washed out with carbolic lotion, and the iodoform and iodine-water omitted. The next day the temperature was normal, and all the symptoms had disappeared.

Nov. 9th.—The temperature has remained normal since last note. The drainage-tube (which has been shortened from time to time and replaced by narrower ones) was left off altogether to-day. Since Oct. 5th the patient has gained 11 lb. in weight; she feels and looks very well. On Nov. 4th the catamenia came on, and ceased to-day, no red discharge having previously taken place from the uterus for more than three months. The uterus is freely movable, the body of it being drawn to the left side. The sound passes two inches and a half. There is still a small sinus an inch and a half deep in the abdominal wall, but there is little or no discharge from it. A fine probe coated with nitrate of silver was passed into it.

Dec. 31st.—The patient has been a fortnight at Eastbourne. The sinus is the same length as before, but only admits a very fine probe. She says the last menstrual period lasted a fortnight, but otherwise she has been quite well, and has maintained her weight.

Remarks.—It will be seen that considerable doubt existed for some time as to the nature of the abdominal swelling. It might have been a case of super-fœtation, the swelling being explained by the presence of a second less advanced ovum in the uterus, or in one horn of a double uterus; and it was on this account that the sound was not used when the case was first seen. The tumour did not, however, harden under manipulation, nor were there any physical signs of the presence of a fœtus, and the size of the tumour remained stationary. Other conditions the possible existence of which had to be considered were: soft fibroid of the uterus, suppurating fibroid, ovarian cyst, pyo-salpinx, and suppurative perimetritis or parametritis. "Soft fibroid" was the diagnosis provisionally made, and in favour of it there was the close attachment of the tumour to the uterus, the two moving together when an impulse was given to either, and the increased length of the uterine cavity—three inches and a half. Even the aspiration and resulting disappearance of the tumour did not absolutely exclude fibroid, as it might have been a fibroid that had undergone suppuration. But the small size of the tumour when first noticed by the patient on the tenth day after delivery, and its increase in size from that time up to the twenty-eighth day, was against the tumour being a fibroid. A pyo-salpinx is not commonly so large as this swelling, and the woman having been recently confined, the probability was against pyo-salpinx, which, if single, diminishes the chance of pregnancy occurring, and if double, as it usually is when it exists at all, is an absolute bar to conception. The absence of acute pain at any time was strongly against the supposition that the tumour was a suppurating ovarian cyst, and equally against a suppurative perimetritis. On the whole, it seems most probable that the tumour was due to a parametritis in the connective tissue between the uterus and bladder, which went on to suppuration. It is certain that the lower half of the abscess was bounded below and behind by the anterior surface of the uterus, below and in front by the bladder. It should have been said that at the time when the abscess was drained the general cavity of the peritoneum, so far as could be ascertained, was not opened.

Wimpole-street, W.

ST. PETERSBURG MEDICAL SOCIETY.—The election by this Society of the following office-bearers for the year now commencing has recently taken place:—President: Dr. Sutugintsum. Vice-President: Dr. J. Gribovski. Secretaries: Drs. Rabinovich and Dembo. The Society has also conferred the distinction of its honorary membership on Prof. Hyrtl and Dr. Péan.

CASE OF SCARLET FEVER ARISING OUT OF THE LATE MILK EPIDEMIC IN MARYLEBONE;

WITH UNUSUAL SYMPTOMS.

BY JULIUS POLLOCK, M.D., F.R.C.P.

I HAVE lately seen three cases of scarlet fever due to the contaminated milk that was lately distributed in Marylebone, and one of them presented features so unusual that it may be worth recording.

On the 9th of last December I was asked to see a young lady, Miss A. B——, aged nine, who, it was said, had come out in a rash. On calling, I was told that the child had been taken unwell rather suddenly the day before, and had been sick. Upon examining the rash, I had no doubt that the disease was scarlet fever; indeed, it was quite a typical case, with the bright scarlet rash, the sore-throat, the tongue, the fever, and the rapid pulse, as described in books. The child did not appear to be very ill, and as the rash was well out and the throat affection mild, I gave a favourable prognosis as to the issue of the case. The patient was at once isolated in an upper room, and a skilled nurse from St. John's House obtained. There was much speculation as to the source of the disorder, and, as nothing was then known about the milk, it was put down to accidental contagion. I ordered a mixture containing some carbonate of ammonia and citrate of potash, and the child was put to bed and kept on suitable diet. Every means was used to prevent the spread of the fever to the other children, five in number. The case progressed very favourably, and on the 14th the rash was nearly gone and the child practically convalescent. The next day, after some previous indisposition, her elder sister, aged eleven, came out with a bright-red rash, sore-throat, &c., and joined Miss A. B—— in the isolated room. All went well with both the patients until Dec. 29th, when I found the glands on each side of Miss A. B——'s neck a good deal swollen, a temperature of 103°, pulse 112 (at 10 A.M.), and another rash beginning to come out about the ankles and wrists. Both the children had had a warm bath with carbolic soap the day before, and Miss A. B—— warm linseed-meal poultices to both sides of the neck. Next day, the 30th, the glands had much gone down and gave no further trouble, but the rash had largely developed itself, was out thickly upon both thighs and legs, and thinly scattered about the rest of the body, a few spots appearing on the face. It looked to me more like psoriasis than any other eruption I had seen, but without the silvery scale. There was no rash at all on the other child. On the 31st the rash was still more marked, and of a dark-red colour with rather a coppery hue. In the course of this afternoon symptoms of acute cystitis came on, with painful and frequent micturition, the urine being loaded with blood, but containing no more albumen than the blood would account for. The next day I had the advantage of a consultation with Dr. Gee, to whom, however, the rash was as strange as to me. It occurred to both of us that the eruption and the cystitis might be due in some way to the use of the carbolic soap. I ordered some citrate of potash besides the old mixture, and some extract of belladonna (a quarter of a grain) as a suppository twice a day. I may mention here that the cystitis went on for about a week or ten days, getting gradually better, and finally disappearing, leaving no untoward results. On Jan. 2nd the left leg was observed to be rather swollen about the calf, which was very tender. The rash was fainter, but well out. In a day or two the whole of the left leg was much swollen and very tender along the track of the vessels. On the 5th Mr. George Pollock saw the child with me, and we were agreed as to there being probably some thrombosis of the femoral vein. The leg was wrapped in wool and kept absolutely at rest. On Jan. 11th the leg was still much swollen, especially high up, and the rash was still quite visible, though the general health was very good. On Jan. 15th the leg was a good deal smaller. From this time the leg slowly diminished in size, and the patient rapidly gained health and strength. At present (Jan. 21st) the left leg is still somewhat larger than the right, and there are faint traces of the rash left. The general health is very good.

I have very little comment to make upon this somewhat curious case. It would be very interesting to know what

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part (if any) the use of the carbolic soap played in producing the rash, and what relation the cystitis had to the scarlet fever or the carbolic soap. Was the block in the veins of the leg a part of the original disease, or in any way related to the second rash or the cystitis?

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

SEAMEN'S HOSPITAL, GREENWICH.
SURGICAL CASES, WITH REMARKS.
(Under the care of Mr. TURNER.)

IN the following cases, all of which present some points of interest, two—namely, the varicose condition of the veins of the lower extremity, and the injury to the shoulder—are specially worthy of note. Obstruction to the return of blood through the inferior cava is a rare condition, and in most of the cases recorded has followed parturition and been rapidly fatal, there being a septic thrombosis of the vessel. Some disease of the liver (occasionally malignant), the presence of tumours, or even simple thrombosis, dependent possibly on constitutional disease, will cause it. The last is a very rare condition, and most of the cases which have lived beyond a year or two have been due to this cause, and it is probable that to some such state was due the blocking in this case. The superficial veins appear to have adapted themselves fully to the altered condition. Fracture of the scapula is not common, though there are several cases on record. Here the acromion would appear to have been broken, as well as the outer extremity of the clavicle. The acromion is the part of the clavicle most exposed to injury, and the part most frequently broken.

CASE 1. *Extensive Varix, probably due to blocking of the inferior Vena Cava.*—Patrick G——, aged thirty, a sailor, was admitted into the hospital with a recent chancre and amygdaloid glands. With the exception of ague he had had no previous illness. His bowels were habitually constipated, acting only once in from five to eight days; defecation was often accompanied by pain in the hypogastric region. He looked a well-nourished, muscular man. The veins of both lower extremities were dilated and varicose, more especially on the right side. Over the front of the abdomen all the veins were dilated, one being especially prominent and varicose, extending from the pubes to the upper part of the chest. The current of blood was upward in these veins. There was a very marked right varicocele and dilatation of the veins of the back, especially on the right side. Nothing abnormal was discovered in the heart or lungs, and there was no evidence of any tumour anywhere. The patient said the veins had been enlarged "as long as he could recollect," and that he remembered the large vein on the chest and abdomen since he was ten years old. He could not account for them in any way.

CASE 2. *Large Bursal Tumours.*—Henry G——, aged fifty-two, blind for the last twenty years, had made his living by letting lodgings. He had done all the scrubbing of the floors himself. He first noticed a swelling on his right knee seven years ago, and a second one formed in front of the left two years ago. Both swellings gradually increased in size; that in front of the right knee had been discharging matter for two years. On admission the patient was a healthy-looking man. From the front of the right leg, immediately below the patella, projected a hard rounded tumour eleven inches and a half in circumference. On its outer side was a sinus discharging thin pus. Over the left patella was a fibrous tumour rather more than two inches in diameter. The tumours were removed with antiseptic precautions, and the wounds healed by first intention, with no constitutional symptoms. The tumours consisted of fibrous tissue concentrically arranged round a small central cavity, and were evidently bursal in their origin.

CASE 3. *Old Fracture of Spine of Scapula and of Acromial end of Clavicle.*—Daniel C——, aged fifty-two, a sailor, was admitted into the hospital on June 24th, 1885. Three months previously he was knocked down by a heavy sea and became insensible. He soon recovered his consciousness, and his right shoulder was then found to be injured. The captain pulled at his arm and something "went in with a jerk." He had been unable to use the arm since. On admission, the outer end of the clavicle projected upwards, and could be felt lying on the acromion process of the scapula. Below and to the inner side of this was a small piece of movable bone—apparently the tip of the acromial end of the clavicle slightly enlarged by callus. Upon carrying the finger along the spine of the scapula, there was found a notch about two inches and a half internal to the tip of the acromion. On each side of the notch was a little irregular callus. The acromion process was tilted downwards, and its upper surface looked more backward than on the sound side. This displaced acromion limited outward rotation of the humerus, the great tuberosity coming into contact with it when this movement was attempted. The deltoid was wasted, and there was considerable impairment of the movements of the arm, owing probably to injury to the muscles, which from the man's account had been much bruised and hurt by the accident.

CASE 4. *Necrosis of Upper Jaw following Scurvy.*—James F——, sailor, aged fifty-one, suffered from scurvy in April, 1884. His gums were spongy and tender, and an Italian doctor removed some teeth and dead bone from his mouth. The necrosis gradually extended, and he came to this hospital in December. The greater part of the palatal process of the superior maxilla was exposed, the gums had receded, the teeth had fallen out, the breath was very foul, and the patient generally ill. There was a sinus just below the inner canthus leading down to exposed bone. On Dec. 18th the greater part of the hard palate on the affected side was removed by the mouth, also a portion of the anterior wall of the antrum. There still remained a large amount of exposed bone, which was fixed and immovable. He was much improved by the operation, and began to gain flesh and strength. On Jan. 16th, 1885, two more pieces of dead bone were removed by the mouth. The remainder of the exposed bone gradually became covered, the sinus by the inner canthus healed by April, and the man was discharged with little if any deformity. The opening in the mouth leading into the antrum had contracted so as hardly to admit the tip of the little finger. It should have been noted above that for some considerable time after his admission into the hospital he suffered from effusion into the knee-joints.

CASE 5.—*Abscess in the course of the Spermatic Cord, simulating Hernia.*—Arthur H——, aged three, was admitted on June 5th, 1885, with a tense, hard, non-fluctuating swelling in the inguinal region, not extending into the scrotum. There was no impulse on coughing. Both testes were present in the scrotum. The child was very restless, continually crying; any examination of the tumour apparently gave much pain. The mother had first noticed the swelling the day before admission, and the child was said to have vomited during the night; the bowels were confined; tongue slightly coated. Temperature between 101° and 102°. The child was carefully watched, but after admission there was nothing like sickness. Ice was applied to the swelling, which on June 9th (the fourth day) presented at one spot well-marked fluctuation. The bowels acted naturally on this day. On the following day (June 10th) the signs of abscess were well marked. A small incision was made with antiseptic precautions, and about half an ounce of laudable pus evacuated. The wound had quite healed two days afterwards, and the patient was discharged on June 13th. It was discovered after his admission that he had struck himself in the scrotum with a sharp stick about a fortnight previously, and that he had again injured himself by a fall the day before—i.e., on the day his mother first noticed the swelling. There was no trace of any injury of the scrotum.

Remarks by Mr. TURNER.—The cause of the blocking of the inferior vena cava in Case 1 could not be made out; nor could it be ascertained why the varicosity should be greater on the right side of the body than on the left. There was no enlargement of the spleen accompanying the ague; and but for chronic constipation and the syphilis he had only just acquired, the man seemed a healthy subject. He was examined most carefully on more than one occasion, but no

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evidence of tumour or swelling could be detected. Case 2 is of interest only on account of the size of the tumours, and that they occurred in a man from the usual cause—kneeling. Case 3 is an illustration of a somewhat rare injury—fracture of the spine of the scapula. The acromion process had been tilted to such an extent as to seriously interfere with the rotation of the humerus. Such a small piece had been broken off the acromial end of the clavicle that the upward displacement of the inner fragment resembled a dislocation of the acromio-clavicular joint. Case 4 shows how little deformity may follow necrosis of the upper jaw, provided the dead bone be removed or come away by the mouth. In Case 5 the inguinal swelling closely resembled a hernia, and but for the absence of vomiting might easily have been mistaken for it. The history given was very confused and untrustworthy.

KIMBERLEY HOSPITAL, CAPE COLONY.

SUCCESSFUL LIGATURE OF COMMON ILIAC ARTERY FOR ANEURYSM OF EXTERNAL ILIAC; REMARKS.

(Under the care of Mr. L. S. JAMESON, Senior Consulting Surgeon.)

Mrs. M——, aged twenty-eight, a thin Dutchwoman, was admitted on April 20th, 1885. Eleven months ago she first noticed a small swelling, the size of a nut, in the right groin. This gradually enlarged during the next six months to the size of an apple, occasioning no pain. The patient then felt a "beating" sensation in the swelling, with pain and numbness down the leg, the tumour enlarging more rapidly and becoming much softer. No specific history.

On admission she was a spare woman, all of whose organs were fairly healthy. Immediately above Poupart's ligament there was an oval swelling about the size of the head of a new-born child, with marked pulsation, extending outwards to within half an inch from the iliac spine, inwards to the middle line, and upwards to the level of the umbilicus. On deep pressure the tumour appeared still larger. The upper portion of the tumour was solid; the lower portion soft and of a deep purple colour, appearing as if the slightest pressure would rupture the skin. There was marked swelling of the whole of the right limb; no œdema; practically imperceptible pulsation in the posterior tibial artery. Morphia was given frequently during the next twenty-four hours, to relieve pain, until the consent of the patient and her friends to an operation could be obtained.

April 21st.—The bowels having been thoroughly opened by a large enema, chloroform followed by ether was administered. From the extent of the tumour it seemed impossible to expose the common iliac artery by operating on the right side; so Mr. Jameson determined to make the incision on the opposite side, afterwards crossing over the pelvis to the right common iliac artery. A curved incision was made on the left side of the abdomen from an inch above the level of the umbilicus to within an inch and a half of the middle of Poupart's ligament. The transversalis fascia having been divided to full extent of incision on a director, the peritoneum was stripped up with the fingers from the iliac fossa forwards and inwards till the left common iliac was exposed. This was followed up to the aorta and then down the common iliac, the latter being well overlapped by the tumour, the aneurysm evidently springing from the external iliac lower down. A previously prepared stout carbolised silk ligature was then placed about the middle part of the common iliac; all pulsation in the aneurysm at once ceased on the application of the ligature. Some slight hæmorrhage from a small vessel in front of the sacrum was checked by pressure of the finger for a couple of minutes without the necessity of using ligature. The external wound was then closed by deep and superficial sutures, and dry dressing applied. The pulse was fair on recovery from the anæsthetic. The patient was placed on her right side to permit the leg to remain horizontal, as the hip-joint was considerably contracted by the tumour. The limb was wrapped in cotton-wool and surrounded by hot bottles placed at a moderate distance. No stimulants were given, and milk was taken in small quantities, one-third of a grain of morphia being administered hypodermically every four hours.

22nd.—Morning temperature 101°; evening temperature 101·6°. Slight pain and restlessness. Morphia increased to five minims (one grain equal twelve minims) every four hours. No return of pulsation, but the wound is a little more discoloured in its lower part.

23rd.—Morning temperature 100·8°; evening temperature 101·4°. Slight oozing of bloody serum from the lower part of the wound. Morphia increased to one-third of a grain every three hours. Pulse 120, weak. No distension of the abdomen during the night; one liquid motion.

24th.—Morning temperature 100·6°. Had several hours' sleep; no pain. Brand's essence of beef added to milk diet, also to have three ounces of brandy in the twenty-four hours. Slight bloody serum still oozing from wound. Dry boracic lint changed twice a day. During the next three days no change worthy of note.

28th.—Temperature 99·2°. No pain; deep and superficial stitches removed. A moderate discharge of bloody serum. Gaping of the external parts at the lower end and in the middle of the wound. Evidently deep union throughout.

29th.—Temperature normal. Pain in the leg. Morphia reduced to half a grain every six hours.

May 1st.—Remaining superficial stitches removed; free discharge of healthy pus. From this period the external wound rapidly healed, also a large bed-sore over the sacrum, the size of the palm of the hand, from which she was suffering on admission. Patient remained in hospital three months longer, the tumour diminishing slowly in size.

Oct. 15th.—Dimensions of tumour on deep pressure were still two inches and a half by three inches, but quite solid. Both knee and hip-joints were considerably contracted, but the patient was able to get about with some difficulty. Otherwise she was in perfect health.

Remarks by Mr. JAMESON.—The great difficulty of the operation appeared to be at first sight to get at the artery at all from the extent of the tumour, but as no other treatment, such as compression of the aorta, seemed to give any chance of success, and as the aneurysm must prove fatal by rupture within a few days at the most, it was determined to attempt it. It was only when the patient was on the table under anæsthesia that considering it impossible to get at the artery from the same side Mr. Jameson determined on operation from the other side, though without any data of such an expedient having been adopted before. However, in this case necessity and success must justify what would otherwise have appeared foolhardy.

ANEURYSM OF THE AORTA SIMULATING ANEURYSM OF THE INNOMINATE TREATED BY SIMULTANEOUS LIGATURE OF THE COMMON CAROTID AND SUBCLAVIAN; REMARKS.

Samuel M——, aged fifty-nine, was admitted under the care of Mr. Jameson with a pulsating tumour the size of an orange at the lower part of the neck on the right side, extending upwards to the lower border of the thyroid cartilage, outwards to the junction of the outer and middle third of the clavicle, and inwards a quarter of an inch beyond the middle line. The sternal end of the right clavicle was about half an inch more prominent than the left. A faint systolic bruit was heard all over the tumour. The patient complained of continuous agonising pain in the right arm and right side of the chest. There was extensive bronchitis, and he could only sleep in a sitting posture.

Mr. Jameson ligatured the right common carotid and right subclavian arteries. The day after the operation there was no pain. Both wounds healed by first intention. Temperature normal throughout. The tumour became harder and pulsation diminished during the next two months; after that pain in the left arm came on. At this time Mr. Jameson was compelled to leave Kimberley, and on his return, six weeks later, Dr. Wolffe, the resident surgeon, informed him that the patient had died a week previously; and at the post-mortem examination he had found that the aneurysm had existed in the commencement of the arch of the aorta; that there was a thick fibrous laminated wall on the right side; and that to the left there was an enormous thin-walled sac which had eroded the spinal column pretty deeply.

Remarks.—There can be no doubt that a partial cure was effected by the operation, and certainly it enabled the patient to enjoy three months of comparative health free from pain. No antiseptics, further than strict cleanliness and boracic lint dressings, were used in either of the foregoing cases. When Mr. Jameson first went out to Cape Colony, seven years ago, he asked Mr. John Marshall as to the advisability of providing himself with the parapher-

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nalia for strict antiseptics. He remarked: "You are going to an antiseptic climate, and don't require them." This opinion had since been fully justified. Going there direct from some years' residence in a large London hospital, the difference, Mr. Jameson states, was astonishing; grave injuries, such as compound fractures of the limbs, where amputation would appear imperative, healing in a marvellously short time under some simple dressing, such as wet boracic lint.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Annual General Meeting.—President's Address.

THE annual general meeting of this Society was held on Monday last, Dr. George Johnson, F.R.S., President, in the chair.

The report of the Council was read by the hon. secretary, Mr. Howard Marsh. Thirty new Fellows have been elected, and twenty-one Fellows have been lost by death. The total number of Fellows is now 736. The report of the hon. librarians states that the additions to the library during the year 1885 consist of 422 works. The number of volumes in the library is about 36,000. During the past year the Society's collection of portraits of members of the medical profession has been enriched by the addition of sixty-three new portraits. The adoption of the report was proposed by Dr. C. West, seconded by Mr. R. W. Parker, and carried.

The President then read his address, which contained very interesting matter. Speaking of Henle, by whose death the Society had lost one of its foreign honorary Fellows, Dr. Johnson said that one of the most interesting and important of Henle's anatomical discoveries was that of the muscularity of the middle coat of the arteries, which he clearly described and figured in his "Allgemeine Anatomie," 1841, p. 498, plate iii., figs. 8, 9, and 10. This discovery formed the anatomical basis for the experiments and conclusions of Brown-Séquard and Bernard, which led to our present knowledge of the regulating function of the muscular arterioles and of the vaso-motor nerves. And assuredly until this knowledge had been acquired we were but imperfectly acquainted with the forces which are concerned in effecting and regulating the circulation of the blood. It has now been proved to demonstration that the muscular force possessed by these Lilliputian canals is so great that the united forcible contraction of the pulmonary or of the systemic arterioles is more than equal to the propulsive power of the corresponding right and left ventricles of the heart, and in consequence the onward movement of the blood may be thereby arrested. This arrest of the circulation by the contraction of the muscular arterioles is most easily demonstrated in the lungs. Physiologists all agree in teaching that the function of the arterioles is to regulate the blood-supply to the tissues, and to exert, in short, what he had ventured to call a "stopcock" action upon the blood-stream. In reply to Dr. Goodhart's objection to the "stopcock" theory that there is no such antagonism in nature as it would imply, he said he need only refer to the notorious fact that muscular antagonism in the case of both voluntary and involuntary muscle, with resulting physiological harmony, is of constant occurrence. Referring to the discussion on cholera, Dr. Johnson said that if it did not increase our knowledge, it served to bring into view the very contradictory opinions which are held, not only with regard to the etiology, the infectiousness, the pathology, and the treatment of the disease, but also with reference to such easily and often demonstrated anatomical facts as to the relative amount of blood in the two sides of the heart during the stage of collapse when the chest is opened soon after death.—A vote of thanks was proposed by Dr. Grailly Hewitt, and seconded by Dr. Symes Thompson, for the President's address. The vote of thanks to the retiring members of Council was proposed by Dr. Althaus, seconded by Dr. B. O'Connor, and acknowledged by Dr. C. T. Williams. The vote of thanks to the retiring secretary, Dr. Douglas Powell, was moved by Dr. Church, seconded by Dr. Buzzard, and carried with acclamation. The President declared that the result of the ballot was the unanimous election of the gentlemen nominated by the Council, and published in THE LANCET last week.

PATHOLOGICAL SOCIETY OF LONDON.

Congenital Cystic Kidney. — Pistol-shot Wound of Cranium.—Villous Tumour of Accessory Thyroid.—Cancer of Thyroid in Myxœdema. — Ossifying Sarcoma of Radius.—Aneurysm of Septum Ventriculorum.—Congenital Skin-tumour of Sigmoid Flexure.

Dr. J. S. BRISTOWE, F.R.S., President, was in the chair at the ordinary meeting of this Society, held on Tuesday last.

Mr. SHATTOCK read a paper on Bilateral Cystic Disease of the Kidneys in the New-born. The specimen shown proved beyond all doubt that the cysts are retention-cysts, since all transitions were traceable from long dilated passages to the more definitely circumscribed cysts; and the smaller cysts, as well as the dilatations, were lined with similar well-formed cubical epithelium. It was possible that the cystic disease might arise from a histological mal-development of the kidney, and that the spaces were retention-cysts originating in the tubules of the mesonephros or Wolffian body. The frequent association of other malformations with congenital cystic disease of the kidney, pointed out by Virchow, was worthy of remembrance in this regard. In the specimen shown there were no other abnormalities; the ureter was normal and pervious, as also the renal pelvis and calyces. The kidney was smooth externally, presented traces of lobulation, and the capsule could easily be separated. The organ measured three inches long and two inches broad. Since the discovery of widely distributed remains of the Wolffian body in the ovarian stroma, increasing interest has attached to cystic ovarian disease; similar remains of Wolffian bodies were to be found in the testicle. The metanephros, which forms the permanent kidney, is only a specially differentiated posterior portion of the primitive mesonephros or Wolffian body. Adopting Kölliker's view that the renal tissue is formed by tubular extension from the branching upper end of the ureter, it may be conceived that the congenital cystic kidney results from a want of differentiation of the metanephric blastema from that of the mesonephros or Wolffian body. The existence of two or three ureters could be understood embryologically when we remembered that in the mesonephros of the amphibia there were as many ureters as there were segments of the mesonephric kidney.—Dr. NORMAN MOORE considered that if the glomeruli were normal, the cystic disease was most probably congenital, and not due to interstitial nephritis.—Mr. J. B. SUTTON had seen examples of congenital cystic disease of the kidneys in many mammals. He had detected frequently the remains of the mesonephros in the ovary and testicle. The anterior end of the kidney of teleostean fishes was admitted to be of mesonephric origin.—Dr. QUARRY SILCOCK referred to the large amount of well-formed fibrous tissue in Mr. Shattock's specimen. He had seen cases of cystic disease of the kidneys associated with cysts in the liver.—Mr. SHATTOCK replied that the arteries were healthy in his specimen. Klein had figured cells in the stroma of the human kidney, indistinguishable from those lining the tubules, and so mesonephric remains in the kidney might be ound to be not unfrequent. Congenital cysts differed from all those acquired after birth, both in their mode of origin and anatomical characters. The fibrosis he explained as secondary to the tension exercised by distension of the cysts in the manner that cirrhosis of the liver ensued after experimental ligature of the bile duct.

Mr. C. B. LOCKWOOD exhibited a specimen to show the effects of a Pistol-shot Wound of the Brain. It was a case of attempted suicide; the bullet passed through the hard palate, orbit, ethmoid, and frontal part of the brain, and made its exit in front of the coronal suture. There were signs of intra-cranial inflammation. At the end of twenty days an abscess developed, was opened, and the bullet with some bony débris removed. The bullet had not entered the lateral ventricles. There were no signs of meningitis. The patient lived one month after the receipt of the injury, and died from septic poisoning. Stupor was the chief symptom, though he could be roused and could remember recent events. In reply to Mr. Marmaduke Sheild, Mr. Lockwood said that it was not certain until the abscess was opened whether the bullet lay beneath the scalp or within the skull. The aperture of exit in the calvaria was larger than that of entry.

Mr. BILTON POLLARD showed a Tumour which he considered had been developed in an accessory Thyroid Gland

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When first noticed the growth was about the size of a pea, and was situate in the right anterior triangle, about two inches from the middle line at the level of the upper border of the thyroid cartilage. The tumour grew gradually, and attained the size of a hen's egg in a year and eight months; during the next four months it grew rapidly, and when the patient was admitted to University College Hospital it nearly filled the right anterior triangle of the neck. It was freely movable, but did not alter in position during deglutition. It was so deeply placed that during its removal it was found necessary to excise along with it the middle third of the scalenus anticus muscle and two inches of the internal jugular vein. Two enlarged glands were removed from the lower part of the posterior triangle, but they were not examined microscopically. The tumour consisted, in the main, of a cyst about the size of an orange; it was lined with a smooth membrane, and into its interior several villous growths projected. The solid portion of the growth was divided by fibrous septa into compartments, which were closely packed with a granular substance, which microscopical examination proved to be composed of delicate villous processes lined with short columnar epithelial cells. In some parts the growth was composed of small spaces and tubes lined with cubical epithelium and filled with a colloid substance, The structure of this portion bore close resemblance to that of the thyroid gland. The origin of the tumour was open to doubt, but Mr. Pollard thought its appearances were fully explained by supposing that it grew from an accessory thyroid gland, that cysts had first been formed, and that subsequently they had become filled with delicate papillary growths. In reply to the President, Mr. Pollard said that the growth was of benign character and had not infiltrated, though it was adherent to the scalenus anticus muscle.—Dr. NORMAN MOORE had seen a villous growth in a large cyst of the thyroid gland. Accessory thyroids were very rare. If there were a new growth in an accessory gland he would expect the thyroid itself to be enlarged.—Mr. J. B. SUTTON considered that the tumour might have developed about the lower end of the thyroid canal, and said that a German author had described accessory thyroids in a situation which would correspond to this.—Mr. POLLARD said there was no perceptible enlargement of the thyroid body.

Dr. GULLIVER showed a specimen of Cancer of the Thyroid Gland associated with the symptoms of Myxœdema. It came from a woman aged forty-four. The cancer had grown round the trachea and compressed the œsophagus slightly. On the right side the sterno-thyroid muscle was adherent and infiltrated, and the lymphatic glands on this side were much enlarged. During life there were all the features of myxœdema of four years' duration. There was some stridor towards the end, but no dysphagia, and the patient died from asthenia. The specimen was interesting and rare; such a combination of disease had hitherto not been recorded. Myxœdema had been seen in association with tubercle. The partiality that cancer had for atrophied organs or for organs whose functional activity had ceased was illustrated by this specimen. In a case of Mr. Shattock's of sporadic cretinism (patient aged thirteen) the thyroid gland also showed a typical form of cancer, which was of course of more recent date than the atrophy of the organ.—Dr. HADDEN asked whether Dr. Gulliver regarded the cancer as in any way causative of the myxœdema. In thirty fatal cases of myxœdema of which he had notes no cancer had been found. In myxœdema the thyroid showed interstitial changes together with proliferation of the epithelial cells.—In reply, Dr. GULLIVER said he regarded the cancer as an epi-phenomenon.

Mr. BERNARD PITTS read notes of a case of Ossifying Sarcoma that occurred in a young man aged twenty-one, who was first seen on June 24th, 1885, with a swelling of the right wrist, over which the skin was reddened, hot, and tender, but the joint was not involved. There was a history of a sprain two years previously. Iodide of potassium led to no improvement. A large gland developed at the bend of the elbow. On July 14th an operation was performed, when new bone was found about the wrist and regarded as of inflammatory origin. Later on, a pedunculated exostosis appeared at the upper part of the left fibula and another below the right great trochanter. At the site of the wound there developed a large nodulated mass, which extended from the wrist upwards. On August 26th pleuritic effusion had developed, and death took place on September 29th. At the necropsy the left pleura was found to be infiltrated with the ossifying sarcoma, and formed an almost perfect cast of the thorax on that side. The growth infiltrated many parts of the lung, and could be traced distinctly along the branches of the pulmonary artery. The primary and secondary growths were composed of large round cells bounded by alveolar walls, which were calcified. The primary growth was a sub-periosteal ossifying sarcoma. A point of interest was the entire absence of soft structure in the line of operation and the consequent mistake in the early diagnosis. The lymphatic glands were directly infected, being very much ossified.

Dr. FREDERICK TAYLOR showed an Aneurysm of the Septum Ventriculorum, which came from a man aged fifty-five, who died from cerebral hæmorrhage. The aneurysm developed at the site of the undefended space; it was a globular sac, with an opening of triangular shape, measuring half an inch by five-eighths of an inch; the sac was about five-eighths of an inch in depth. It bulged into the right auricle and right ventricle. There was no evidence of endocarditis, and this absence, with the smooth character and site of the aneurysm, led him to regard the specimen as of congenital origin. A soft systolic murmur was heard at the apex during life. Another similar specimen, dating from 1858, was also shown from the museum of Guy's Hospital.—Mr. STANLEY BOYD exhibited a specimen in which there had been endocarditis of some duration; there was an aneurysm projecting from the right side of the aortic cusp beneath the left coronary artery; it was divided by a septum. —Dr. ANGEL MONEY related the case of an idiotic girl, aged seven, who had pyrexia and a systolic murmur, which was loudest over the septum. There was an aneurysm of the undefended space that opened up the layers of the septal cusp of the tricuspid valve. All the cardiac valves were in a peculiarly "pouched" condition, probably due to syphilis, and there was a large gumma in the brain.—Dr. PERCY KIDD referred to specimens of aneurysm of this region which he had exhibited last session; one occurred on the posterior aspect of the undefended space, and was an aneurysm due to endocarditis; this was a very rare condition.—Dr. S. COUPLAND referred to a remarkable specimen deposited in the Middlesex Hospital Museum. It came from a man aged twenty-four: there was a cavity in the septum ventriculorum, and the two ventricles communicated through it; it was situate below the undefended space, and each orifice was small as compared with the cavity which lay between them, which was lined by very tough membrane; one orifice was surrounded by tough vegetations. Probably a laceration of muscular fibres had taken place as the result of hæmorrhage, and the aneurysm had eventually burst into both ventricles. The specimen was almost unique.

Mr. CLUTTON showed for Dr. Floyer a specimen of Congenital Cutaneous Polypus, which had been removed from the sigmoid flexure. The patient, a girl of eight or nine years of age, was taken suddenly ill in October, 1884, with pain, rigors, high temperature, and diarrhœa, and in the course of three weeks passed a large quantity of very offensive matter and blood, and in another week after this discharge a tress of hair of considerable size was removed from the anus. The acute symptoms subsided in four or five weeks, but she still continued to suffer from very distressing symptoms of tenesmus, which had been a source of great discomfort throughout her illness. About Easter, 1885, a tumour was noticed, during these attacks of tenesmus, to protrude at the anus, and was returned as often as it appeared, with relief to the patient's symptoms. In August, 1885, she came under the care of Dr. Floyer, who, whilst treating her for chronic constipation, found, on examination of the abdomen, a swelling in the left iliac fossa. Shortly after this, in examining the rectum, Dr. Floyer thought he felt a polypus attached by a double pedicle to the mucous membrane at a considerable distance from the anus. Mr. Clutton was then asked to see the case. Under chloroform it was easily demonstrated that the tumour in the iliac fossa was the polypus, which could in efforts of straining be forced down into the rectum. The pedicles were tied with silk, and the tumour removed. The specimen exhibited to the Society was shown to possess a perfect cutaneous envelope covered with fine short hairs. At a spot near the pedicles there was a bald shining patch, with a sinus in its centre, which was thought to have been the seat of the abscess described in the history of the illness in October, 1884. A long tress of hair was also shown, which was believed to have been attached to the tumour over the surface of this abscess. The central parts of the polypus were composed of fat and fibrous tissue with a little

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bone. Allusion was made to a similar case recorded by Dr. Port in the Pathological Society's Transactions, vol. xxxi., the only difference being in the exact seat of the growth in the two cases. Dr. Port's specimen was removed from the mucous membrane of the rectum, at about two inches and a half from the anus; whereas in the case now recorded there was evidence to show that it was seated at the juncture of the sigmoid flexure with the rectum.—Dr. FLOYER regarded the lump, which was still present in the iliac fossa, as the remains of the pedicle.—Dr. CHARLEWOOD TURNER suggested that an ovarian tumour might have penetrated the sigmoid flexure and become inverted there.—Mr. J. B. SUTTON believed that the tumour originated about the neurenteric canal, and was an example of a very rare tumour. In reply to Mr. Boyd, he said the epiblast at the anus only invaginated for about half an inch to three-quarters of an inch.—Mr. CLUTTON felt sure that the residual lump was the remains of the pedicle, and said that the centre of the tumour contained bone.

The following card specimens were exhibited:—Dr. Payne for Dr. Jacob of Leeds: Tumour of Finger. Mr. Pollard: Dermoid Cyst of Testicle. Dr. Lediard of Carlisle: (1) Senile Ovarian Blood-cyst; (2) Hernia Reduced *en masse;* (3) Cancer of Rectum—Excision; (4) Cancer of Œsophagus—Gastrostomy. Dr. Turner: Hepatic Cells in Blood of Portal Vein. Dr. Carrington: Mitral and Tricuspid Stenosis. Mr. E. H. Fenwick: (1) Fibro-sarcomatous Polypi from Bladder; (2) Papilloma of Bladder. Mr. Makins: (1) Diastasis of Cervical Spine; (2) Carcinoma of both Superior Maxillæ. Dr. Drewitt: Heart and Pericardium from a case of Rheumatic Nodules. Mr. Lunn and Mr. Larder: Aortic Aneurysm.

CLINICAL SOCIETY OF LONDON.

Traumatic Inguinal Aneurysm; Rupture of Sac; Ligature of Arteries.—Aneurysm occurring in Stump.—Intussusception of Upper Part of Jejunum.—Acute Intestinal Obstruction with Acute Peritonitis; Abdominal Section; Rapid Recovery.

AN ordinary meeting of this Society was held on the 26th ult., Mr. Thomas Bryant, F.R.C.S., in the chair.

Mr. C. MANSELL MOULLIN read a paper on a case of Traumatic Inguinal Aneurysm; Rupture of Sac; Ligature of the Common Femoral and External Iliac Arteries. The patient, a man aged thirty-four, had received a severe blow in the groin from the edge of a flat piece of iron about four weeks before admission. There was a good deal of swelling and discolouration about the part for some days. Three weeks after receiving the blow the swelling reappeared, and continued to increase in size until the morning of admission, when, during an effort, he was seized with violent pain, and a large pulsating tumour made its appearance in the groin, extending into the scrotum and perineum. The foot and leg were not much swollen, but the skin in the groin was red and œdematous, and the scrotum much discoloured. An incision was made into the swelling over the femoral artery (after an abdominal tourniquet had been applied), and a longitudinal slit found in the wall of the vessel, immediately under Poupart's ligament. A director was passed down it, the artery separated and tied below the injured part with catgut. A fresh incision was then made above Poupart's ligament, for the purpose of securing the external iliac above the rupture. No other vessel was tied. The blood-clot, some of which was old and very adherent, some quite recent, was turned out as far as possible, a large drainage-tube inserted, and the limb carefully wrapped up in cotton-wool. The subsequent course was perfectly simple, except that the wound suppurated freely, and, until a side opening was made, remained full of decomposing clots. The limb wasted exceedingly, and a small slough formed on the side of the heel, but the gangrenous patch was only the size of a shilling. Four months after, pulsation could just be detected in the posterior tibial, and perhaps in the anterior.

Mr. SYMONDS read a paper on a case of Aneurysm occurring in a Stump. A man aged forty-six sustained a compound fracture of both bones of the leg in the site of an old syphilitic ulcer, on the floor of which the tibia was exposed; he was admitted into Guy's Hospital on Aug. 7th, 1883. Gritti's amputation was performed under full antiseptic precautions. The man was cachectic, and had lost a good deal of blood. Suppuration, with a foul discharge, occurred, and, later, two abscesses were opened on the outer side of the stump, and one on the inner. Healing took place very slowly, and when discharged, nine weeks after the operation, the stump was somewhat swollen and hard, especially on the inner side. Five days later he returned with blood oozing from a pin-like opening in the original cicatrix, and two days afterwards, when admitted, the bleeding was severe, and a large pulsating swelling was observed on the inner side. The skin over it was red and œdematous. There was thought to be an abscess communicating with the femoral artery. Before laying open the swelling the superficial femoral was ligatured, the whole thigh being œdematous. When cut into, blood alone escaped. The incision was enlarged, the clots turned out, when alarming hæmorrhage occurred from the femoral. This was found to come from a small aneurysm which had ruptured. This was laid open and the vessel tied above and below. The artery was isolated by passing a catheter into it. The man ultimately recovered, though slowly, and had a sound and useful stump. In his remarks, Mr. Symonds said the aneurysm had formed on the vessel two inches above the amputation site, and existed previous to the man's first discharge, and had ruptured soon afterwards. He referred to the rarity of the case, and to the general belief that aneurysm does not follow ligature of a healthy vessel from pressure, nor embolism of an artery unless the embolus be in a state of active change, and sets up a similar inflammatory and softening process in the wall of the vessel itself, which then yields to the ordinary blood-pressure. Admitting these facts, Mr. Symonds thought that a condition similar to that found in embolism must be looked for to explain the present case. It was suggested that the explanation of the cause of the aneurysm lay in the inflammatory state of the stump, and Mr. Symonds thought it best explained by supposing the vessel to have been involved in the acute inflammatory process which ended in other parts in the formation of pus, but in the vessel in softening only. He supposed that a peri-arteritis existed, reducing the vessel wall to an embryonic state, just as was seen to occur in the floor of ulcers, and in inflamed connective tissue. The localisation was explained by supposing that at the point affected the vessel formed part of the wall of an abscess or sinus. In support of this suggestion, the condition of the vessels in the walls of phthisical cavities, from which hæmorrhage occurred, was cited. Here, either an aperture in the wall of the vessel was found or an aneurysm. The latter change, he believed, was not uncommon in phthisis, and Mr. Symonds suggested that aneurismal dilatation will be found to precede secondary hæmorrhage in stumps more frequently than is now supposed. A paper which he published in the Transactions of the Pathological Society, vol. xxxv., page 146, was referred to as illustrating the case. In this paper two vessels affected with acute arteritis were described and figured, on one of which several aneurysms also had formed, secondary hæmorrhage resulting from the rupture of one of these. Referring to his suggestion in the above paper, that in secondary hæmorrhage an unhealthy condition of the wound and vessel existed, and that the bleeding was determined not so much by failure of clot formation as by suppurative arteritis, Mr. Symonds said that the present case gave support to that view, and brought into harmony hæmoptysis and secondary hæmorrhage. He suggested that in both the processes, so far as regards the vessel, are identical, and result sometimes in the formation of an aperture, and sometimes of an aneurysm.

Mr. T. BRYANT was disposed to agree with Mr. Symonds' views, and believed that secondary hæmorrhages usually resulted from an arteritis originating about the seat of injury of the vessel. Reference was made to the case of a man with compound fracture of the thigh, for which amputation was performed; so rapid was the healing that only one sinus discharged purulent fluid at the end of two weeks; but fatal hæmorrhage occurred at the end of the fifth week. The femoral artery was found to be diseased by suppuration that had destroyed the coagulum. At the time it was suggested that the arteritis was due to torsion of the vessel, but Mr. Bryant did not adopt that suggestion. He asked why Mr. Moullin laid open the traumatic aneurysm in the first instance, instead of ligaturing the external iliac artery.—Mr. MOULLIN said the skin was so œdematous and red that it appeared as though suppuration had occurred.—Dr. GOODHART agreed with Mr. Symonds that cases of aneurysm from embolism and hæmoptysis from aneurysms in pulmonary

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cavities supported his views of surgical secondary hæmorrhage. Years ago he had taught that such hæmorrhages were due to suppuration which had extended along the tract of the artery. As the result of Listerism and consequent freedom of wounds from suppuration, he had not during the last five or six years seen cases of the kind.—Mr. PEARCE GOULD asked Mr. Moullin why the upper ligature was placed so far above the wound of the artery, thus leaving the deep epigastric and circumflex to supply blood below it.—Mr. BENNETT inquired of Mr. Symonds whether ligature of the common femoral would not have been preferable to that of the superficial femoral artery, and then why he had ligatured above the aneurysm at all; would not the use of a tourniquet and local treatment of the aneurysm have answered all purposes?—Mr. MANSELL MOULLIN said the aneurysm was situate immediately under Poupart's ligament, and he could not have reached the artery below the ligament. No other artery was ligatured.—Mr. SYMONDS, in reply, said it would no doubt have been better to have selected the common femoral for ligature, and admitted that it would have been better still to have controlled the vessel by a tourniquet, and then to have dealt with the aneurysm; but he did not do this because he thought there was pus in the cavity, and considered that the hæmorrhage might have proved more difficult to control.

Mr. GOODHART read notes of a case of Intussusception of the upper part of the Jejunum, of twenty-one months' standing. Its clinical interest depended upon its long duration and upon the resemblance of the abdominal tumours during life to a floating kidney. The case occurred in the practice of Mr. Sandford Arnott of Brixton. The patient, a girl aged nineteen, had been first seen a year and three-quarters before her death, and was then suffering periodical attacks of vomiting and abdominal pain, with progressive wasting. A knotty irregular tumour was felt in the lower part of the abdomen above the uterus. She then attended the out-patient department at King's College for eight months, and subsequently at University College, suffering from obstinate constipation, fæcal tumours, and what was thought to be a floating kidney. She was relieved by enemata of sulphate of magnesia, but, notwithstanding, her attacks recurred, and in these she was frequently seen by Mr. Arnott. The abdominal tumour never disappeared, but latterly it altered its position, and came to correspond with the situation of the left kidney. It varied in size and shape, some days being decidedly kidney-shaped, and generally it had a curve in its length, the concavity being towards the umbilicus. She was seen by Dr. Goodhart in her last attack, and was then pale and thin, although not appearing extremely emaciated; her mother described her as hardly ever free from sickness for more than a week, the actual attack lasting generally twenty-four to thirty-six hours. Lately she had been sick almost daily. The abdomen being exposed, the existence of a dilated stomach was at once apparent, it occupied the upper half of the abdomen, and its muscular contractions were plainly visible; but below this, in the left inferior quarter of the abdomen, was a second tumour, running from the flank obliquely downwards towards the pubes. This was the mass that had been felt throughout the progress of the case. It was an elongated tumour that underwent slow rhythmic alterations, becoming alternately hard and soft, and was obviously some part of the intestine "in labour." Vaginal and rectal examination gave no additional information. However, it was clear that there was some intestinal obstruction, although there was no sufficient material for determining its exact nature. She had never passed any blood, the evacuations being always of a light-brown colour, and, although she suffered from constipation, it was never such as to resist the action of an aperient. It was arranged that she should be admitted to Guy's Hospital, but before this was accomplished she died, apparently from the exhaustion of the continued vomiting. Mr. Arnott and Dr. Goodhart made an inspection. The dilated stomach occupied the greater part of the abdomen; below, and to its left, in the inguinal region were two or three coils of small intestine—small, but prominent, as if something pushed them up from behind, and on turning them aside a large intussusception was seen; it ran from near the spine into the pelvis, and looked more like rectum in thickness and size, but it proved to be small intestine, the neck of the intussusception being at the commencement of the jejunum. It was about eighteen inches in length, and when further examined was found to be associated with, and no doubt caused by the existence of, large polypoid masses of growth which sprang from the mucous membrane of the small intestine in several parts. In reply to Mr. Bryant, Dr. Goodhart stated that at no time was any blood passed per rectum, and there had been no actual constipation.—Mr. R. J. GODLEE mentioned a case of intussusception that existed without producing constipation. It occurred at the North-Eastern Hospital for Children, and the child passed a large quantity of fæces. Another case happened in University College Hospital many years ago; there were symptoms of intestinal obstruction, which led to the performance of colotomy on the right side, but without any tumour to account for the obstruction being found. Later on abdominal section was performed, still without success. The patient recovered from both operations, and died afterwards, when a long intussusception of the large bowel was discovered.—Mr. BARKER said that in this case there was a tumour of the wall of the bowel that produced obstruction and led to the intussusception.

Mr. A. E. BARKER read notes of a case of Acute Intestinal Obstruction, followed by Acute General Peritonitis, for which he performed abdominal section, releasing the implicated bowel, and thoroughly sponging out the peritoneum, with the result of rapid recovery. The patient was a man aged twenty-three, who had enjoyed good health, with the exception of flatulent dyspepsia, up to Saturday, November 14th, 1885. At 7 P.M. on that day he had a loose motion with a feeling of sickness, and three or four minutes later was seized with a violent pain in the abdomen, and fell down, rolling about on the floor in the most acute suffering. This pain commenced at a point midway between the umbilicus and the right groin. At 7.30 he began to vomit, and continued to do so through the night, and next day, until Monday evening, when Mr. Barker was sent for. At the onset he was seen by Mr. Knaggs of Camden-road, who gave large enemeta with opium internally, and hot fomentations over the abdomen. This treatment was continued with much judgment for the next forty-eight hours, but with no relief. On the contrary, the pain increased, and became general over the whole abdomen, the vomiting continued of a grass-green colour, but never became stercoraceous, the abdomen grew more and more distended, and the centre of acute tenderness shifted to the left side of the umbilicus. The peritoneum also began to fill with fluid, there was complete obstruction of the bowels from the first, and no flatus was passed. No distinct tumour was to be felt anywhere. When seen by Mr. Barker on Monday evening the condition was very grave, and he at once decided to perform abdominal section, regarding the case as one probably of obstruction from a constricting band, or from volvulus of the small intestine. With strict antiseptic precautions, the abdomen was opened in the middle line from the umbilicus to the pelvis, and was found to contain much flaky serum and free gas; the intestines were coated with lymph and moderately distended. The small intestine was now passed through the fingers from below upwards, until the middle third of the jejunum was reached. When this was drawn upon, there came a sudden rush of fluid through the portion held in the fingers, and the next moment there came out a loop of bowel deeply congested and ecchymosed, and distended to about three or four times its normal girth, and containing much fluid. Beyond this loop the gut was distended and moderately congested, but was sharply marked off against the implicated loop by the absence of ecchymoses. The bowel was now passed through the fingers downwards, to make sure that no other obstruction existed, and then the cæcum and vermiform appendix were turned out of the wound and examined with the same object; they were quite sound, though sharing in the inflammatory distension and congestion to a slight extent. The hand was now passed into the abdomen, and every part of it was explored, but nothing further was found. The gut having been carefully cleansed was now replaced, and the whole abdomen was mopped out with carbolised sponges, passed into every recess on long holders. The greatest accumulation of inflammatory products was found in the flanks and pelvis, and required repeated sponging. When the whole cavity had been cleaned the wound was united with seven deep and two superficial carbolised silk sutures in the usual way, and was dusted with iodoform and dressed with salicylic wool, secured with a broad binder. The patient bore the operation well on the whole. He had a good deal of pain in the night, and vomited twice before

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morning. The vomited matter was no longer bilious, but consisted of watery altered blood. It came up for the last time at 9.30, twelve hours after operation. The patient progressed extremely well from this time, the peritonitis disappearing rapidly. The wound was dressed for the first time on the fifth day, and was then found united by first intention. Five of the stitches were taken out, and the wound was supported by broad strips of sticking plaster applied directly to the skin with salicylic wool and a binder over all. On the seventh day the remaining stitches were removed, and the wound was supported as before. On the eighth day a motion was passed spontaneously, and again on the ninth. These motions were stained with old blood. On this day, owing to an error in diet, he vomited and burst open the upper two-thirds of the wound, in spite of the strapping, and a knuckle of the intestine protruded. On seeing this six hours later, Mr. Barker removed the dressings, cleansed the protruded gut under the spray, wiped out the abdomen and the wound, and replaced the gut. The opening was closed as before, and similarly dressed. The temperature in the rectum rose on the night following to 102°, but beyond this there were no disquieting symptoms throughout convalescence, the patient being able to take light solid food a couple of days later. The wound healed in great part by first intention, but some of it by granulation. In reviewing this case, Mr. Barker dwelt upon the following points:—1. The nature of the obstruction. 2. The performance of abdominal section in the midst of acute general peritonitis. 3. The rapid disappearance of the latter after operation. He pointed out that from a comparison of this with recorded cases there could be no doubt that it was a case of volvulus of the jejunum, a very rare condition. The whole case corresponded closely with the few others on record, only one of which had been operated on. The onset of general peritonitis he regarded as an extra reason for early operation in such cases, and showed that this view was supported by pathological reasoning and clinical experience. The rapid disappearance of the peritonitis, due to the release of the intestine and cleansing of the abdominal cavity, was then commented on, and it was pointed out that the good result was, besides, in great part to be attributed to the judicious treatment of the case from the first with opium and enemata, and the comparative rest that the bowels were then placed in up to the time of operation, which was not delayed a moment after it was evident that other means had failed. That such an operation could only be successful when performed early and under the strictest antiseptic treatment was also averred.—Mr. BRYANT considered that the whole case was most successful, and a brilliant piece of surgery from beginning to end. He also agreed with the diagnosis, and thought that the only other condition that could account for the case would be a band. He asked Mr. Barker to explain how the gas developed in the peritoneal cavity. In his opinion peritonitis was not a contra-indication to abdominal section.—Dr. KINGSTON FOWLER referred to a case that occurred some years ago at the Middlesex Hospital which was the counterpart of Mr. Barker's. To Mr. Hulke, who operated, Dr. Fowler suggested that the right side of the abdomen should be searched with a view to finding the collapsed intestine; this was actually done and the site of obstruction was easily found. It was thought to be a volvulus that had been untwisted suddenly by drawing on the intestine. The patient lived four days and passed several copious motions, but died of syncope without obvious cause. Dr. Fowler opined that it was much easier to handle collapsed bowel, and his suggestion had been followed by Mr. Pearce Gould and Mr. Clutton and others.—Dr. CARRINGTON raised the question whether Mr. Barker's case was not one of acute peritonitis, observing that acute peritonitis and effusion were not common results of acute obstruction. The diagnosis of volvulus rested on the ecchymosed condition of the loop of the bowel and the passage of blood-stained matter. Both these factors might be accounted for on the supposition that acute peritonitis had set up an acute enteritis.—Mr. BARKER, in reply to Dr. Carrington, urged that the lowest four-fifths of the bowel were certainly not inflamed, and the patient at no time passed blood-stained fluid in the motions, or with the enemata; then, again, the work of Mr. Treves showed that acute peritonitis was very frequent—four out of eight cases—in the recorded instances. The intestine was not collapsed below the volvulus, but was slightly distended, which might be attributed to the peritonitis. The mode of onset and the remarkable way in which the symptoms disappeared after operation also favoured the diagnosis of volvulus.

The following living specimens were exhibited:—Mr. R. J. Godlee: A case Illustrating the Effects of Injury of the Cervical Sympathetic; a large (? neuro-fibromatous) tumour was removed from the right side of the neck of a girl aged eight, the pupil on that side was small, dilated but slightly when shaded, not at all with cocaine, contracted to light and in accommodation, dilated with atropine. Mr. R. W. Parker: Congenital Tumour of the Neck in an infant two months old, which almost disappeared during inspiration, being most prominent during the act of crying. Mr. G. H. Makins: Congenital Syphilis in a boy aged seventeen, with thickening and elongation of radii and tibiæ. Mr. C. Ballance: Compound Depressed Fracture of the Skull in the Right Temporal Region; removal of large pieces of bone, recovery.

EPIDEMIOLOGICAL SOCIETY.

Diphtheria.

A MEETING of this Society was held on Wednesday, Feb. 10th, Dr. Walter Dickson, R.N., President.

In a paper read by Dr. D. ASTLEY GRESSWELL on Diphtheria as a Chronic Malady in particular Individuals, with liability in them to Recrudescence, he put forward the following questions: "Is the chronic tonsillar inflammation which is left in particular persons after an attack of diphtheria due to continued sojourn in them of the material cause of diphtheria, and do the violent reactions of the tonsils of these persons to weather changes involve likelihood of rendering them diphtheritically infectious?" He had of late, while prosecuting inquiries into diphtheria in various parts of the country on behalf of the Local Government Board, come across a considerable number of persons who had been suffering from this condition, and he thought of them as having been the centres for dissemination of the virus of diphtheria in as many as six outbreaks of diphtheria. Dr. Gresswell detailed these outbreaks. In one of the outbreaks a boy who contracted diphtheria by personal infection in July, 1883, and who ever since had been subject to sore-throat, seemed to have been such a centre. In another instance a girl had been such a centre. The orphan inmates of an asylum were mentioned as having probably maintained diphtheria in their own persons for several years. In a family in which diphtheria had been repeatedly manifesting itself for some years past, one member seemed to have been an almost constant source of infection. He showed from these examples how the prevalence of diphtheria might be supposed to be sustained in a community. Analogies were drawn between the manifestations of chronic and recrudescent diphtheria and the manifestations of certain other diseases—syphilis, glanders, typhoid fever, &c. Special stress was laid upon the analogy which diphtheria in acute and chronic phases presented to gleet and gonorrhœa. Dr. Gresswell thought of rejuvenescence, as known amongst the cryptogamia, as being a phenomenon of like nature with that of the revival of the activity of diphtheritic and other virus in a person once infected by the virus. Finally, he dwelt upon the unwholesomeness of the dwellings in which these persons have generally lived; and he concluded with an exhortation that our dwellings might be made wholesome, and that the special attention of the therapeutist might be given to those persons who suffer from chronic tonsillar trouble sequent upon an attack of diphtheria.—In the discussion which followed, the President, Sir W. Smart, Dr. Thorne Thorne, Dr. Lawson, Dr. McKellar, Dr. Moir, and Mr. C. E. Paget took part.

SANITARY PROTECTION ASSOCIATION. — The fifth annual general meeting of the members of this Association was held on the 27th ult., when the council congratulated the Society upon the continued increase in the number of members. During the past twelve months there have been 424 first year's inspections at the residences of new members, 456 annual inspections, 282 inspections of works, 72 special inspections, and 30 inspections at Eton. The latter inspections were at the College and masters' houses. The statement of accounts presented showed the total receipts as £2422, and the total expenditure £1948, leaving a balance in hand of £474.

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Reviews and Notices of Books.

Practical Bacteriology. By EDGAR M. CROOKSHANK, M.B., F.R.M.S., Demonstrator of. Physiology, King's College, London. London: H. K. Lewis. 1886.

WE warmly welcome the appearance of this very handsome and practically useful book. Its author modestly styles it on the title-page "an introduction to practical bacteriology based upon the methods of Koch," but it is amply sufficient for any worker in this continually extending field of research. The publication of such a work, which supplies a distinct need, serves to remind us of the very great importance which the subject of bacteriology is attaining. It is not so long since the relation between micro-organisms and disease was regarded as hypothetical and visionary. Now we are convinced of its occurrence, for it is supported by an array of demonstrable facts, thanks to the large body of patient and careful investigators armed with the powers supplied by all the technical improvements of modern microscopy. The methods which have been elaborated to determine the presence and distinguish the varieties of bacterial organisms, and to prove their intimate connexion with morbid processes, are as delicate and as trustworthy as any employed in scientific research. But the study demands for its pursuit the devotion of much time, extreme care, and no little skill, and hence it has been pursued by comparatively few. In this country, especially, the bacteriologists form but a slender band, which will doubtless receive many recruits when so excellent a manual as the one before us becomes widely known. Nevertheless we venture to think that the time has come for a public recognition by the higher teaching bodies of the importance of this branch of science. It needs a laboratory specially fitted with appliances solely for its pursuit, whilst those who prosecute the research require to be biologists quite as much as pathologists. The institution of bacteriological laboratories should, then, we think, be seriously advocated, and we may appeal to the Universities to take the lead and found chairs of bacteriology, which should no longer be dependent for its study upon private enterprise, or be expected to form a part of the pathological courses. For just as the pathologist has to extend his range of view far beyond the regions of bacteriology, so also must the bacteriologist pursue his researches outside the limitations of pathology. We confess to a dread lest the progress both of pathology and of bacteriology suffer by the endeavour to combine the two branches of science, simply for the reason that at one most important point—that of the etiology of disease—they necessarily commingle.

It is impossible to avoid such thoughts in the presence of a work like this of Mr. Crookshank's, which shows how vast is the field covered by bacteriology. The style and matter of the book are wholly commendable. It is drawn up on a very systematic plan, and the details of the laboratory are expounded with great care and sufficient fulness to make them useful to all, whether those to whom these methods of research are familiar, or those who may desire to begin this fascinating study. In the first chapter are described the apparatus and material requisite for the laboratory; in the next the methods of examination of bacterial organisms in various media, and in cultivations; then follows a description of the preparation and staining of sections of tissues, the preparation of the several nutrient media and the methods of culture, the subject of inoculation experiments upon animals, and, lastly, the examination of animals so inoculated for the detection and isolation of the bacteria. Mr. Crookshank has certainly succeeded in imparting an enormous amount of information in this part of his work, which makes it just what a laboratory handbook should be.

The second part consists of a systematic description of all known micro-organisms, to which, in the case of the more important, are added practical directions for their detection. A comparatively brief, but interesting and accurate, review of the progress of knowledge concerning bacteria, and especially of their classification, introduces this part. The author adopts, and indeed closely adheres to, the classification given by Zopf in his monograph "Die Spaltpilze." At the same time it is fairly acknowledged that the arrangement of these minute organisms is a provisional one, and that morphological characters often do not indicate specific differences, which are to be sought in the whole life-history of the microbe. Some idea of the degree to which the search for micro-organisms has been carried may be gathered from the simple fact that, besides the eighty-one species described in this chapter, there are no fewer than eighty others which receive notice in the following chapter as having been observed by writers, but either not described or not distinguished as distinct species. The largest number of micro-organisms are to be found amongst the bacteriaceæ, with its six genera and forty-seven species, and to these may be added forty-one other species more or less indeterminate. Amongst the five genera of coccaceæ there are thirty species described, but the indeterminate class contains no fewer than twenty-five varieties of micrococcus and three of staphylococcus. The characters of each variety are clearly and succinctly set forth, the more important—as the bacterium pneumoniæ crouposæ, spirillum choleræ asiaticæ, spirillum obermeierii, bacillus anthracis, bacillus tuberculosis, and bacillus typhosus, &c.—being dealt with in fuller detail, with additional instructions as to the best methods of their detection. As an example of the mode of treating the subject we may cite haphazard the following, p. 131:—

"BACTERIUM UREÆ (Micrococcus ureæ, Cohn).—Cocci 1·25—2 μ in diam., singly or in chains and rods. The rods split up by division into chains of cocci, and the latter are finally set free. The cocci increase further by subdivision, and a jelly-like membrane develops around them. Masses of cocci exist in the form of irregular or rounded lumps. Cultivations after twenty-four hours consist exclusively of rods, after forty-eight hours of cocci-chains, and in fourteen days of zoogloeæ; the cocci transplanted into fresh nourishing solution again grow into rods. These observations point to the existence of a pleomorphic species—*Bacterium ureæ;* and the former nomenclature, Micrococcus ureæ, must be regarded as untenable. They are aerobic; occurring in urine, they set up ammoniacal fermentation, converting urea into carbonate of ammonia."

In the appendix is given an account of the yeast and mould fungi, and also instructions for the examination of air, soil, and water.

A notable feature of the volume consists in the number and excellence of the coloured plates and engravings which abound. They alone deserve careful study, and they are simply invaluable as illustrations of the text. The bold type in which the volume is printed forms also an attraction which is not to be lightly disregarded. In fine, we are fairly justified in the opinion that the work is one which in every respect deserves, and will doubtless receive, a foremost place in scientific literature.

The Life of Sir Robert Christison, Bart., M.D., D.C.L., Professor of Materia Medica in the University of Edinburgh. Edited by his SONS. In Two Volumes. Vol. I.: Autobiography. William Blackwood and Sons, Edinburgh and London. 1885.

THE autobiography of any fairly efficient man covering fifty years of his active life, if well done in a literary respect, could scarcely fail to be of interest. Human life is a far more interesting piece of natural history than we are apt to imagine in these days, when it sometimes seems that to be considered interesting things must be visible only with

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a microscope or a telescope. The interest of any human life increases of course with the individual qualities of it, and with its relation to others. In the case of Sir Robert Christison we have the life of a man who succeeded in attaining a considerable longevity, and who at any stage of life seemed to be up to his duty, and even his opportunities, and who filled for a long period a large space in the eye of his illustrious city and university, and had played no mean part in the history of British medicine, of medical jurisprudence, and of medical education. In a succeeding volume we shall see more of what others think of Christison; in this, the first volume, we see what he thought of himself, and that is a fine subject for study. Some very worthy men have had an excellent opinion of themselves, and every page of this autobiography justifies us in saying that Christison was one of those men who after careful stock-taking came to a fair amount of self-approval. He was not one of those men who prized popular applause. He doubtless thought with Pope—

> "One self-approving hour whole years outweighs
> Of stupid starers, and of loud huzzas."

And yet a very superficial knowledge of Christison, the professor, the physician, the witness in great cases, the member of the Medical Council, &c., will suffice to show that his high opinion of himself was shared by all good judges, and that in the multifarious subjects in which he took an interest the materials for a judgment were scarcely complete till he had spoken.

It is difficult to analyse the different parts of this autobiography in any notice possible in our space: we must do the best we can. Let us observe the fact that Christison seems to have had an abiding habit of making notes of the events of his life. So it happened that when he had completed fifty years of his professorship, and he could not conveniently climb a high mountain—his favourite recreation,—he bethought himself of finding complete relaxation and of saving his future biographers trouble, in compiling this autobiography, which abounds in everything that is high and good, and which will be read by most medical men, especially Edinburgh men, throughout the world. Lineage from the Vikings; High School contests of scholarship, and the history of High School rivals and contemporaries; the value of school successes as a prognostic of future success in life; the merits of classical *versus* scientific school-work; the Edinburgh University, and its long subjection to the Town Council; his voyages to London in Leith smacks; the London school and the backwardness of medical teaching when Christison came to St. Bartholomew's Hospital; the Paris school, and the charming word-portraits of its chief members, Majendie, Dupuytren, Orfila, and others; the fevers of Edinburgh, which Christison studied so well and took so freely; his six attacks of fever, with the careful observation for that time of a temperature under the tongue of 107°; the stories of Burke and Hare: the fortunate appointment to a physicianship in the Royal Infirmary in 1827, and his devotion to pathological and clinical work—are specimens of the material in which the volume abounds. And when we add that the literary style of the work is of the best, bold, correct, without pedantry, personal, faithful, whether relating a foolish duel in Paris or a contest for an Edinburgh chair, or the contradiction of scientific and legal opinion in courts,—we have said enough to justify an opinion that the book is one of the most valuable contributions to biography which we have recently had to notice, and to warrant us in looking forward with much interest to the second volume.

OUR LIBRARY TABLE.

The Student's Guide to the Practice of Medicine. By M. CHARTERIS, M.D. Fourth Edition. London: J. and A. Churchill. 1885.—The appearance of another edition of this little work shows that it is appreciated by students; and the author has certainly done his best to convey as much information as possible within its limited compass. Its revision has been undertaken upon the basis of the revised "nomenclature," and its value is enhanced by a copious Therapeutical Index and Glossary. The work is trustworthy, and may safely be recommended to the beginner, or used, as intended, for a "guide" to examinations; but it ought not to deter the student from seeking that fuller information which the larger text-books supply. The fear is that our examination system may tend to confine the student within too narrow limits, and that he is liable to be satisfied with a minimum of knowledge. The more excellent the manual for his purpose, the more likely is he to neglect that profounder study which, although beyond the requirements of an examining board, is very essential to the making of a sound practitioner.

Select Methods in Chemical Analysis (chiefly Inorganic). By WILLIAM CROOKES, F.R.S., V.P.C.S., Editor of the *Chemical News.* Second Edition. Rewritten and greatly enlarged. London: Longmans. 1886.—Mr. Crookes, whose discoveries in pure science have added so much to the empire of thought, has in this book conferred a most practical boon upon all who are engaged in chemical work. With labour which can only be appreciated by those whose lives are spent in the laboratory he has tested a large number of the new analytical methods which have been proposed of late years, and has arranged and sufficiently described those which were found to be useful and trustworthy. Of course the book is a compilation, but it is the compilation of a master who brings skill and judgment, and not mere paste and scissors, to bear upon his task; and equally, of course, it is imperfect, for the author has omitted methods which, being universally known, can be found in ordinary manuals. So greatly does the new edition differ from the old that it is correctly described as having been rewritten, but the old lines have been followed, and if the book is larger it is simply because so many new methods have been introduced. All the elements, even the rarest, are included. Thus we find minute directions for the separation of cerium, didymium, samarium, and lanthanum, the author justly considering that no one of them can properly be ignored. Such a work is obviously one for the chemist rather than the physician; but some chapters, notably the three last, which are devoted to general analytical processes, manipulation, and tables, will be of the highest value to all workers in physiological and hygienic chemistry. The description of modern methods of filtration and gas analysis, sufficiently illustrated by woodcuts, would alone render the book valuable to the physiologist. To the chemist it is essential.

St. Bartholomew's Hospital Reports.—The "In Memoriam—Francis Harris, M.D." has been written by Dr. Samuel Gee in his precise, truthful, and learned style. Dr. Norman Moore gives an introduction to "The Book of the Foundation of St. Bartholomew's," which work is very quaint and interesting. Here are a few headings of chapters:—"Of a Woman y take with the palsy"; "A Myracle of a Mayde"; "Of a Childe that receyvyd his Syght;" "Of an howse untouchid yn myddyl of the Fyer"; "Of a certeyn Yonge Woman." Drs. T. C. Shaw, Ormerod, Percy Kidd, V. Harris, S. West, Norman Moore, Habershon, A. E. Garrod, H. H. Tooth, Herringham, Ferguson, Roughton, Duckworth, Bullar, Haig, and Styan, and Messrs. Spicer, Owen Lankester, C. A. Norton, Walsham, and Butlin, contribute articles on various subjects. Dr. W. S. Church's note on the "Six Gifts of

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Theophilus Philanthropos, or Robert Roole," an appendix to "Our Hospital Pharmacopœia and Apothecary's Shop," vol. xx., p. 279, is full of curious matter.

Royal London Ophthalmic Hospital Reports. Edited by MARCUS GUNN, M.A., F.R.C.S. Jan., 1886.—This, the first part of the eleventh volume, contains the following papers: 1. E. Nettleship on the Pathological Changes in Syphilitic Choroiditis and Retinitis. 2. Arthur Benson on the More Modern Operations for Trichiasis. 3. W. Jennings Milles: The Curator's Pathological Report, embracing the subjects of Detachment of the Vitreous Body, cases of Intra-ocular Sarcoma producing Sympathetic Ophthalmitis, and cases of Sympathetic Inflammation of the Eyeball. 4. W. A. Brailey on Intra-ocular Sarcoma exciting Sympathetic Disease. 5. E. Nettleship: Miscellaneous Observations and Cases. 6. Marcus Gunn on Sympathetic Inflammation of the Eyeball.

The Journal of Physiology. Edited by M. FOSTER. Vol. 7, Part 1.—This part is entirely occupied with a long and valuable paper by W. H. Gaskell on the Structure, Distribution, and Function of the Nerves which Innervate the Visceral and Vascular Systems. The memoir is illustrated with four plates.

Burdett's Official Intelligence.—Mr. Burdett's admirable book reaches its fifth number in the volume for the present year. To such as are at all familiar with the literature of the Stock Exchange it will be unnecessary to say more than that the present volume will fully sustain the high reputation for completeness and accuracy which the work has enjoyed from the first. The book, indeed, stands quite alone in English literature, giving as it does a financial abstract of every joint stock company in the United Kingdom, and a statistical account of every negotiable security, whether British or foreign, that is offered on the Stock Exchange. It is not only thus encyclopædic in its range, but it is equally conspicuous for the fulness and precision of the information conveyed. The author has made excellent use of his position to collect his facts at first hand from those who know them best, and has made them accessible by an excellent system of arrangement and a copious index. A notable feature of this work are the dissertations on financial topics, which form a preface to the statistical matter. These are of much more than merely passing interest. For example, the number now under review contains as clear a *résumé* of the fiscal system of Great Britain, under the title of "Imperial and Local Taxation," as can well be compressed into five-and-thirty pages. Indian finance, again, is made the subject of another essay—less complete, indeed, but still full of suggestion and information for the general reader, who may have Indian securities in his view. Another paper of peculiar interest at the present time is that on "Colonial Loans, Finance, and Development." In a word, whether regard be had to the literary or the tabulated matter, the book will be pronounced excellent by everybody who has recourse to it, and as there is no class throughout the community to whom the judicious investment of savings is a matter of more vital importance than it is to medical men, we gladly acknowledge the service which Mr. Burdett has rendered to them.

ROYAL HOSPITAL FOR CHILDREN AND WOMEN.—The annual court of governors of this institution was held on the 26th ult., when it was stated that during the past year the in-patients had numbered 479, the out-patients 6015, and the patients attended 28,054. The committee appeal most urgently for new annual subscriptions in order that the income of the hospital, which is now about £2000 per annum less than the required expenditure, may be placed on a firmer and more permanent basis.

VACCINATION GRANT.—Mr. S. A. Jolly, of Puddletown, Dorchester, has received the Government grant for efficient vaccination in his district.

New Inventions.

THE BURROUGHS MODEL MEDICINE-CHEST.

MESSRS. BURROUGHS, WELLCOME, & Co., of Snow-hill, have submitted to our notice their new medicine-chest, which they claim to be compact, portable, of good quality, and moderate cost. Most of the medicines contained therein are in the form of the well-known Wyeth's compressed tablets, consisting solely of the actual drugs. Those which are intended for local effect upon the mouth and throat are compressed quite hard, so as to dissolve slowly, and to have the effect of a prolonged gargle, as, for instance, the tablets of chlorate of potash, to the utility of which we have on a previous occasion directed attention. Those tablets which are intended for internal administration are so compressed as to disintegrate readily. In addition to these tablets, the chest also contains "valoids" of belladonna and aconite, which are stated to represent the activity of the best quality of the drugs in a highly concentrated form, each minim representing a grain of the drug. Another bottle contains "eucalyptine," a preparation of the eucalyptus. The remaining contents of the chest comprise peptonising powders (Fairchild's), zinc ointment, spermaceti ointment,



bandages, antiseptic pads, and a measuring-glass. With regard to the latter, we would suggest that it would be much improved if graduated in drachms, &c., instead of the domestic but unsatisfactory "spoons." The box is neatly made, and forms a really handy and excellent little medicine-chest. It should, however, containing as it does concentrated solutions of such deadly drugs as aconite, belladonna, &c., be provided with an efficient lock and key, instead of the ordinary hasp with which the specimen sent to us is furnished. The bottles which contain the solutions alluded to are of blue glass, and so shaped as to avoid all chance of error; but they might be more obviously labelled with the danger signal of "poison," and their corks might be more efficient. Doubtless, however, these are inadequacies which the designers will remedy before submitting the chest to the profession. The complete contents are:—Tablets of salicylate of soda (5 grs.), Dover's powder (5 grs.), potass. chlor. (5 grs.), bismuth subnitr. (5 grs.), ammon. chlor. (3 grs.), nitrate of potash (5 grs.), bisulphate of quinine (2 grs.), potass. bicarb. (5 grs.), cathartic comp. (U.S.P.), "soda mint." and peptonic tablets, "valoids" of aconite and belladonna, eucalyptine, peptonising powders, zinc and spermaceti ointments, antiseptic pads for wounds, bandages, and a measuring-glass in case. It is certainly difficult to imagine how more could be included within so small a space.

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THE LANCET.

LONDON: SATURDAY, MARCH 6, 1886.

A SUMMARY of the measure by which it is now proposed to amend the Lunacy Acts will be found in another column. The main provisions again set forth have been discussed from time to time; in fact, there is no feature of novelty in the Bill introduced by the present Lord Chancellor, and, except that the necessities of procedure required that it should be brought in by a member of the Government, the Earl of SELBORNE might have reintroduced it. In principle we have already expressed approval of the purposes formed, and, speaking generally, of the several means by which it is designed to compass them. There are matters of detail which will require to be discussed later on, but nothing will be gained by criticising clauses of the Bill until it has reached a stage of greater advancement. Indeed, it must be in the House of Commons that the fate of the measure is decided. We are glad to know that the Government is in earnest on the subject of lunacy law reform, and that it is prepared to afford greater protection to the sane, while the prompt treatment of insanity in its earliest beginnings is facilitated by the obvious policy of removing absurd restrictions. The extension of the voluntary system to England is of great importance. As regards the "private asylum question," we think that may be hopefully left to adjust itself, under the influence of a provision that public authorities may—it ought to be *shall*—provide for private needs. Meanwhile, though giving a cordial assent to this Bill as far as it goes, we can bate nothing of our original contention that the whole subject of certifying is in urgent need of a "root-and-branch" revision. The new safeguards to be created by this measure will doubtless be of some service, and in the absence of better help we accept them thankfully; but what is really needed is such a system as should place the treatment of mental disease on a strictly professional footing, by making it a medical function, and permitting the practitioner to act solely as a physician, without loading his actions with the intolerable burden of a legal significance. Medical certificates ought to have no force as legal warrants. Such a force is wholly foreign to their nature and purpose, and alien to the character of those who sign them. Physicians ask nothing from the law in aid of the treatment of the insane. They do not desire more control over their patients than the common law gives every citizen for the protection of his neighbour or himself in case of emergency, and which amply covers all a practitioner needs to enable him to treat a case of delirium or excitement arising from any cause. The requirement of formal certificates which brand the persons named therein as lunatics and disable them from the exercise of legal rights, such as the making of wills and the signing and execution of deeds, is a monstrous demand on a profession which is, or ought to be, exclusively engaged in the remedy of morbid affections, and has neither the time nor the inclination to do dirty work for the law.

THE presidential address recently delivered by Dr. DALLINGER before the Royal Microscopical Society afforded an insight into the extent to which the modern improvements in microscopical technique are enabling the observer to penetrate the mysteries of cell life. The nature and functions of the nucleus have long been subjects of controversy; and we have had opinions ranging from an admission that the nucleus is the most important element in the cell to those which regard it as inert and useless. The remarkable researches of FLEMMING and STRASSBURGER upon karyokinesis have practically determined the question of the importance of the nucleus, besides showing how complex is its structure; and Dr. DALLINGER'S studies, although in the same direction, have carried us a great deal further. He observed the behaviour of the living nucleus in the lowliest monads or septic organisms, and has, by the use of the highest available microscopic powers, thrown a flood of light upon the subject. These organisms multiply ordinarily by fission—a process in which the nucleus shares; but the two last products of a long series of fissions are seen to fuse together, and after a period of rest their investing envelope bursts, liberating numbers of germs. These germs, at first semi-opaque, become within from fifteen to thirty minutes hyaline, and increase in size up to a certain point. The germ now appears devoid of vitality, but in point of fact it is the nucleus itself which has passed into a resting state for the purpose of elaborating its internal structure. A delicate investing membrane is formed, then the protoplasmic substance becomes granular, gradually assuming formed characters in the production of extremely delicate threads, which by a process of weaving or plaiting soon bestow on the whole of the nuclear body a definite structure. Material now forms on the exterior of the nucleus, until the organism finally attains its adult size and begins to move. In the monads observed the flagellum appears suddenly, and can be seen to be derived from the nucleus. Thus, even in these unicellular organisms, we seem to have a sexual process alternating with a process of mere fission. The union of two organisms, their fusion into one, is followed by the production of germs; these germs are the nuclei of the future organisms, and they contain within them the power of developing into the fully formed monad, the production or secretion of the cell-protoplasm being preceded by a series of changes within the substance of the nucleus itself—changes which may be compared with those occurring in the impregnated germ of higher forms of life. Equally interesting are the facts which Dr. DALLINGER observed in the further life-history of these microbes. He says that in about five minutes after the adult stage is reached fission commences, and he has been able to see that this process of self-division is initiated in the nucleus. Indeed, we have here the karyokinetic process reproduced, for the first indications of change are observed in the plexiform structure, which becomes in great part aggregated at one pole of the nucleus; and then ensues the division of the

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nucleus followed by that of the body-substance, the two nuclei presenting the plexiform structure throughout. When the fission process is at an end and is about to give place to the generative, then the organism takes on amœboid characters and fuses with its fellow. The fusion is complete—cell body and cell nucleus merging into one uninucleated organism; but before this happens the nucleus has lost its plexiform structure and becomes enlarged and milky-looking, finally diffusing through the whole body substance of the globular mass, which is then transformed into a germ sac. The process of generation is completed in about six hours, when the sac ruptures and gives issue to the countless germs whose further development was alluded to above.

A mere bald statement of these discoveries can give no idea of their importance, or of the patient labour involved in them. We are in the presence of the "infinitely little," and have been permitted to witness the process of generation in its simplest manifestation. It seems hardly possible that we can penetrate further; indeed it is questionable whether it is optically possible to produce more delicate instruments than those with which Dr. DALLINGER worked. Nor is it possible to go beyond the facts which he has adduced—as for example, to inquire into the nature of the influence, call it spermatic or other,—whereby from the fusion of two cells a host of potential cells arise, each of which has the properties of its parent, and is destined to undergo the same cycle of changes. But if we are limited by the imperfection of our faculties and instruments, we are yet made aware of a fact which is capable of the widest application—namely, that the cell-nucleus is possessed of inherent powers, which render it the essential constituent of the cell itself; that it constitutes the ultimate germ (and sperm) whence the organism is evolved. Moreover, we can grasp more clearly from these researches the rapidity with which the process of generation is carried on among these microbes, and are more fully impressed than ever with the teeming life that everywhere abounds. As Dr. DALLINGER remarked, "We are no nearer to the solution of what life is," but through him we have had displayed the vital process in its simplest expression. To attain this knowledge he must have devoted hours to continuous observation of one special monad; he must have watched and chronicled every change that it underwent, employing for this means the most exquisite apparatus that can be devised, with the result that biological science has been enriched by a series of facts which a short time ago would have been deemed to rank among the unknowable.

No branch of practical surgery is of more universal importance than that which deals with the arrest of hæmorrhage. Not only is bleeding an almost universal attendant on wounds, and the loss of the vital fluid if carried beyond a certain minimum degree a matter of extreme moment, but the arrest of all oozing from wounded vessels has an important influence upon the process of repair. The question is invested with the highest interest to the student, on account of the remarkable natural processes which participate in the repair of injuries to bloodvessels, and also from the enormous benefits which have accrued to mankind from the improvements which have been introduced into this department of practical surgery, and which stand out as chief landmarks in the history of the art. The introduction of the ligature is undoubtedly the greatest improvement ever made in the treatment of hæmorrhage, and so strong is the faith of surgeons in it that it would be a matter of the utmost difficulty to supplant it by any other measure. Two more modern methods of treatment, however, are destined in all probability very largely to limit the use of ligatures—viz., torsion and forci-pressure. Although torsion of arteries was known to the ancients, it was rediscovered and introduced into practice by AMUSSAT in 1828, and two celebrated French surgeons, VELPEAU and THIERRY, urged its claims, and largely practised it. About the same time FRICKE introduced it into Germany. Slowly it travelled over to England, where it excited little attention until the surgeons of Guy's Hospital—COOPER FORSTER and BRYANT in particular—and Mr. CALLENDER, showed that it was a simple and very trustworthy method of arresting hæmorrhage from even the largest arteries. Its superiority to the old hempen ligature is incontestable; but the introduction of unirritating and absorbable animal ligatures has somewhat altered the terms of comparison between ligature and torsion, and much more closely assimilated the two methods. In each case the separation of the end of the artery is avoided, and a button of tissue at its end is either slowly absorbed and replaced by living tissue or encapsuled by it. As, therefore, the *modus operandi* of the two methods is almost precisely the same, the comparison between them must depend upon the special readiness with which each may be employed. Both are alike rapid, and in dexterous hands certain; but torsion has the great advantage over the ligature of not requiring the aid of an assistant. The surgeon himself seizes the artery and twists it, while for the ligature it is necessary that while one holds the vessel in the forceps another throws the thread around it. A second great advantage on the side of torsion is that in its application the surgeon is entirely independent of others for the preparation of his material. But when using prepared catgut or such-like ligatures, the surgeon is dependent upon the maker of the catgut in the first place, and then upon its having been rendered completely aseptic. Atheroma or advanced calcification of an artery renders it very readily occluded by torsion, although, strange to say, it is even yet to be found in surgical text-books that for torsion to succeed, a healthy state of the artery wall is essential. There is one condition, however, which militates very powerfully against successful torsion, and that is peri-arteritis, or adhesion of an artery to its sheath; in such cases the vessel can be seized together with its sheath and easily ligatured, but torsion is almost if not quite impracticable. Torsion s also inferior to the ligature for the closure of wounded veins.

The case of the smaller arteries is again different; for torsion to succeed, it is important that the vessel be seized cleanly and gently drawn out from its sheath before it is twisted, and the smaller the artery the more difficult does this become. The same condition renders it difficult to surround a vessel cleanly with a ligature, and surgeons are in the habit of seizing a small bunch of tissues around a small artery and including the whole in the noose. There

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is, however, one drawback to such a step, and it is that the ligature may slip and the bleeding burst out anew. It is just in such cases that forci-pressure is so valuable. Few instruments have done more to simplify operations than the valuable hæmostatic forceps introduced by KŒBERLE and SPENCER WELLS. The same principle had been made use of many years ago by DIEFFENBACH in his "bull-dog" forceps, but the modern instrument is vastly superior to his. The forceps can be used in two or three ways. Thus they are employed to compress strands of tissue previous to their division with a knife, or bleeding points are seized by them and occluded, until by torsion or ligature the wounded vessel is safely closed. But, in addition to this, they are of extreme value as sole hæmostatic agents. When an artery is compressed in this manner its two inner coats break across and curl up inside, while the outer coat has its elasticity destroyed, and is squeezed into a corrugated, flattened band. An internal coagulum speedily forms on the inverted inner coats, and the fate of the compressed end of the vessel is similar to that of the knob at the end of a twisted artery or to an aseptic absorbable ligature and the tissue it includes. Quite small arteries are very quickly occluded by such forceps, but when the vessels are larger it is necessary to observe two precautions. The first is to remove the forceps with great gentleness, in order that in so doing the compressed outer coat may not be opened out through the tendency of the tissue to adhere to the steel. The second is not to remove the forceps too quickly, but to wait until the blood has had time to begin the formation of the internal coagulum. The best way of employing this hæmostatic agent, in such a case as the excision of a tumour or the amputation of a breast, is to seize each artery as it spouts with a pair of forceps; then, when the excision is completed, and the surgeon has satisfied himself of the sufficiency of the operation, and that there are no other bleeding points requiring attention, the forceps should be carefully removed one by one, in the order in which they were applied. By adopting these precautions it is usually unnecessary to employ any other means for the arrest of hæmorrhage unless a considerable artery is wounded. Similarly, in an amputation, when the main vessels have been picked up and twisted or tied, if these pressure-forceps are applied to every point which bleeds when the tourniquet is loosened and removed, and then these forceps are carefully removed in the order in which they were applied, all the vessels will be found securely sealed in the great majority of cases. The arrest of hæmorrhage in operation wounds has been in this way reduced to the greatest simplicity, and not the smallest advantage has been the adoption of methods which can be employed by the surgeon unaided.

While, therefore, the aseptic ligature, properly prepared and applied, is a thoroughly trustworthy means of treating hæmorrhage, we would limit its application to the cases of large arteries in which torsion is inapplicable, to cases of hæmorrhage from smaller vessels not quickly arrested by forci-pressure, and to the case of wounds of large veins In the case of large and medium-sized arteries, where torsion is not specially contra-indicated, we believe it to be superior to the ligature, and in the vast majority of cases of bleeding from small vessels forci-pressure is the most simple, expeditious, and efficient means for its arrest which the surgeon has at his disposal.

THE metal tin, though long known, for it was used in the manufacture of bronze, has not entered to any large extent into the Pharmacopœias of this, or, so far as we know, into those of any other country. The word "bedil," which is translated "tin" in the Old Testament, "stannum" in Latin, and *κασσίτερος* in Greek, is not certainly to be identified with that metal, and, according to ROSCOE and SCHORLEMMER, it is doubtful whether the metal which the Phœnicians are said to have brought from the Cassiterides, whose exact locality was unknown to HERODOTUS, was really tin. It is certain, however, that the metal was known to PLINY, that after CÆSAR'S conquest it was obtained from the Cornish mines, and that DIODORUS SICULUS describes its conveyance to a small island named Iktis, the topographical features of which, as described by him, correspond accurately with those of St. Michael's Mount in Cornwall.

Most authors hold with ORFILA that tin has no toxic properties, since it is but slightly attacked by a solution of hydrochloric acid of the strength in which this acid exists in the gastric juice, and hence can only be absorbed in small quantity. According to Dr. PATENKO of St. Petersburg, who has lately devoted himself to the study of the toxic effects of tin, it has been administered in England in the metallic state, in accordance with instructions given by Dr. ALSTON, who published some lectures on materia medica in 1770. These instructions are that the patient should take a purgative of senna and manna on a Thursday before a new moon; on the following day an ounce of metallic tin is administered in four ounces of syrup; on Saturday half an ounce more tin is administered in two ounces of syrup, and the same quantity on Sunday; on Monday another purge of senna and manna is given. The success of the remedy, if it ever prove successful, has been attributed by some to the presence of arsenic, which is always present in ordinary tin; whilst MM. CAHOURS and SOLYET consider that an active compound, distannethyl, may be formed in the intestine and become the active agent. Other experiments have shown that the injection of the protochloride of tin into the jugular vein of a dog, in doses not exceeding five grains dissolved in ten parts of distilled water, causes death with tetanic symptoms in from one to fifteen minutes, or if ingested, vomiting, debility, and death. On post-mortem examination the gastric mucous membrane, and even that of the duodenum and jejunum, exhibited thickening and ulceration.

M. PATENKO'S researches, pursued in Professor VULPIAN'S laboratory, were confined to the metal itself and to the bichloride. He commenced by giving to two dogs three grains of chemically pure tin in powder once daily with the food, and continued its administration for six weeks. No indications of any injurious effects were observed; on the contrary, the animals preserved excellent appetites, and were lively and gained in weight. It was incidentally shown at the necropsy of one of the dogs that the metal had not caused the expulsion of numerous ascarides with which it was infested, nor of a tænia serrata. The urine contained no tin, nor was any found in the brain, liver, spleen, or

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kidneys. The powder was present in the fæces. It did not therefore appear to be absorbed.

The administration of the bichloride of tin gave different results. The animals experimented upon were frogs, guinea-pigs, and dogs, and it was injected subcutaneously, thrown into the peritoneal cavity, and introduced into the stomach. When subcutaneously injected it caused, in small and diluted doses, local anæsthesia, which augmented and extended when larger quantities were employed. Strong solutions caused gangrene, which penetrated deeply, destroying not only the whole thickness of the skin, but subjacent organs, such as the liver and stomach. Injections made into the peritoneal cavity exhibited its caustic properties, but no special peculiarities. Injected into the veins, in doses not exceeding three-fourths of a grain, death rapidly followed, but the immediate cause of death was not apparent, and has not been ascertained, though it was probably due to the action of the agent on the central nervous system and upon the muscles. The action on the stomach was not marked; even when given in rather large quantities for some time with the food, it only caused indigestion. On the whole, therefore, the observations of Dr. PATENKO confirm those of previous experimenters, and show that the metal has no poisonous action, but that the bichloride acts essentially on the central nervous system and the muscles.

WE have somewhat recently commented on certain views which Dr. GRESSWELL has enunciated in connexion with the recurrence of diphtheria in families and with its appearance in individuals without apparent chance of its having been contracted from any recently acute case; and, as will be seen from our summary of the proceedings of the Epidemiological Society, these views were at the last meeting of that Society discussed at some considerable length. Any carefully considered opinions connected with the etiology of diphtheria are worthy of notice, for the disease is one about the causation of which little that is definite is known; and all who have had the opportunity of perusing the reports which Dr. GRESSWELL has prepared on diphtheria for the Local Government Board will at least give him credit for painstaking investigations into the matters concerning which he writes.

The special view to which we now advert is that diphtheria, instead of being merely an acute infectious fever, may become chronic and be marked with periods of infective recrudescence. Thus, persons have often been met with who, whilst suffering from this so-called recrudescent diphtheria, have apparently been the starting-point for the fresh infection of a large number of persons hitherto healthy, and indeed for a fresh outbreak of the disease in a community; and it has been found that the persons who have acted as the originators of such outbreaks have themselves been sufferers from diphtheria some months before, and that what has apparently been in them nothing but a slight attack of tonsillitis has developed infective properties leading to a diffusion of the original malady in a marked form. So, also, children who have been apparently quite cured of their diphtheria, and whose fauces have assumed a healthy appearance, have some months after been found with diphtheritic patches about their tonsils, and they have then acted as centres of infection to others. It is of course somewhat difficult to say whether such cases are due to renewed infection, or whether they result from a renewed vitality of the original infection, but from the number of instances in which these sets of conditions have been observed Dr. GRESSWELL is inclined to the latter view, and he has taken occasion to support his opinion by reference to a considerable number of cases which he regards as somewhat typical examples of the occurrences referred to.

The analogy of other diseases is also quoted in support of this view. Thus, syphilis is cited as a disease which first appears as an acute disease and then in a chronic and recrudescent phase, and this without there having been any chance of renewed infection. Ague and its periodic recurrences, and the relapses of such diseases as relapsing fever and enteric fever are quoted as bearing upon the point. Glanders, again, is referred to as being acute on the one hand, or chronic and associated with active states when infectiveness reappears on the other hand. The relation of gleet to gonorrhœa is also spoken of in the same connexion, and a further analogy is found in certain phases of the development of protoplasmic molecules. It is finally suggested that the recrudescence of disease in the cases referred to is nothing but the rejuvenescence of a specific parasitic organism after one of those stages of rest which may be observed in the life history of so many organisms.

During the course of the discussion on Dr. GRESSWELL'S paper it was pointed out that many of the phenomena of diphtheria to which he had adverted might be explained in a very different way; but we do not refer to the question with the object of supporting one set of views or the other. We have rather drawn attention to the paper in order that other observers who are likely to have practical acquaintance with diphtheria in all its phases may have an opportunity of testing the validity of the view which has been formulated. Any step in the direction of acquiring accurate information concerning the various phases which this obscure disease exhibits, or of getting rid of views as to it which will not bear the test of experience, will help towards the solution of a difficulty which is very generally felt.

Annotations.

"Ne quid nimis."

THE HOMES OF THE WINDSOR POOR.

THE complaints we have raised concerning the housing of the poor at Windsor promise to bear fruit. As we explained at the time in our special report on the subject, the grievance is of old standing, but till recently it has always been successfully hushed up. The Rev. Arthur Robins has for more than ten years agitated this question, and consequently he became one of the best-abused men in Windsor. There were interests at stake which the necessary improvements might compromise; and many efforts were made to conceal the truth from both the Royal Family and the public. This, however, was no longer possible after the publication of our report minutely describing some of the slums of Windsor particularly as the matter was then taken up by the press generally. The *Standard* and *The Times* gave great prominence to the grievance, the provincial newspapers reprinted all the information, and even some Canadian and Australian

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papers protested against the shameful condition of the Royal borough. We need scarcely remark that, in such a campaign, the partisans of sanitary reform early elicited the full sympathy of Her Majesty. Indeed, the entire Royal household and also the household troops are naturally at one with us in the desire to see the poor of Windsor profit to the full by the sanitary legislation which till now has remained almost a dead letter in this historic town. The force of outside public opinion having thus fairly turned the tide, many of the notable inhabitants who but a short time ago protested that the complaints were grossly exaggerated are now loud in their demands for reform. The indignation meetings which were to be held against us are all forgotten; even the Rev. Arthur Robins, who, it was suggested, deserved to be thrown into the Thames, may soon be recognised as a public benefactor. In any case, the Bier-lane district, which he has so long denounced, is at last definitively condemned. Mr. Richardson Gardner, M.P., recently presented a scheme to the corporation for rebuilding the whole of this slum. He proposed to raise, we believe, some £50,000 in £5 shares; and the company to be formed will be under the patronage of all the influencial residents in the neighbourhood, including two Royal princes, whose names, however, we are not as yet at liberty to mention. The vile houses, constituting the courts leading into Bier-lane, will be pulled down, including the rag shop and the slaughter-house that stand within a stone's throw of the Castle walls. Modern dwellings will be built in their stead, and these, it is maintained, will yield a fair interest on the capital invested. Already there are five good new cottages in Bier-lane, which, though rented at only 4*s*. 6*d*. a week, are, financially speaking, a sound venture. The work which will now be done might have been undertaken long ago, seeing that at present there seems little or no resistance. It must nevertheless be acknowledged that the storm we have succeeded in raising by means of the press has materially contributed to bring about this result; for the land can now be obtained at a reasonable price. Some time ago a gentleman offered to buy four or five hovels, but could not do so because the owners were making about 40 per cent. out of this low-class property. Now the cry is so strong, and the prospect of the intervention of Parliament so far probable, that it would not be safe to ask any exorbitant price for the land. The district therefore will be bought up and rebuilt, and thus the Alsatia of Windsor, where both the cholera and small-pox epidemics first broke out, will be swept away. Model cottages and houses, built, if possible, in a style to match with the grand old Castle which will tower above them, are to be completed in time for the Queen's jubilee. The work of regeneration must not, however, stop here. Close to the Castle and near the station, Bier-lane is the most obvious eyesore of Windsor; but there are other equally vile hotbeds of dirt, dilapidation, and demoralisation. The defects of South-place are, from a sanitary point of view, even worse than those of Bier-lane. Yet some idea of this latter district may be gathered from the fact that the material—window frames, doors, bricks, planks, rafters, &c., which constitute the twelve or fourteen houses of Red-lion-row, Bier-lane—only realised at auction the sum of £20. This same property produced in rents £100 a year; thus again showing that the worst property is often the most remunerative, and that nothing but an awakening of the public conscience can bring about the purification of these wretched dwellings, where unscrupulous speculators are able to profit by poverty, crime, and vice to extort exorbitant rents.

MR. COOPER FORSTER.

WE much regret to have to announce the death of this well-known and distinguished surgeon, who expired at his residence in Upper Grosvenor-street on Tuesday last from the effects of an attack of enteric fever. Mr. Cooper Forster left London on Jan. 21st for Cannes, where he arrived two days later, and where he stayed until Feb. 16th. He then went to Nice, remaining there four days, and subsequently to Mentone, which latter town he left for home on Feb. 23rd. We understand that when he left London he was in good health, and that on Feb. 13th he wrote a letter to Dr. Wilks from Cannes in which he did not in any way allude to the state of his health. We are informed, however, that on Feb. 3rd or 4th, on returning from a walk of some distance, he felt unwell and vomited, and from that date he gradually became worse. He expressed great dislike to the foreign food and manners, and his appetite not returning, Mr. Forster decided to come home at once, and accomplished the journey from Mentone, one of thirty-six hours, without stopping and without taking other nourishment than a biscuit and a bottle of soda-water. He sent for his old colleague and friend, Dr. Wilks, on the morning after his arrival. Dr. Wilks found him in a state of collapse, with rapid jerky breathing, and a temperature of 103° F., and on the following day called in Dr. Habershon, who also remained in attendance till the end. On Sunday Sir James Paget and Mr. Jonathan Hutchinson met the above-named gentlemen in consultation, but unfortunately Mr. Cooper Forster never rallied, and died from exhaustion on Tuesday, in the sixty-third year of his age. Mr. Cooper Forster, who was President of the College of Surgeons last year, had retired from practice on the very day on which his office as president expired, having that afternoon given orders for the removal of the plate from his door. Mr. Forster, during his stay in the Riviera, had stopped at hotels in the towns he visited. The funeral takes place at Kensal-green to-day (Saturday), leaving Grosvenor-street at 1.30 P.M.

PASTEUR ON HYDROPHOBIA.

THE total number of cases that have now been treated for the prevention of hydrophobia amounts to 350. The first 200 of the cases appear to have been submitted to the preventive inoculations more than two months ago. M. Pasteur asserts that statistics prove that in the majority of cases of hydrophobia in man the disease develops within sixty days of the receipt of the bite of a rabid animal. Consequently he claims that his treatment has been most successful, seeing that not a single case submitted to him, within a reasonable time after the bite, has developed any signs of hydrophobia. We confess that such a conclusion is in every way reasonable: it is reasonable, not so much from the statements as to time, as from the circumstance that so large a number is dealt with. It appears to be inconceivable that of 200 cases of certified bites from rabid dogs not one should be followed by hydrophobia if the treatment be not assigned as the cause of the immunity. We could explain away the immunity if only a few cases were concerned, but hardly, we think, where so large a number of individuals have been bitten more than sixty days ago, and yet without any becoming the subject of hydrophobia. Only one case, which Pasteur unwillingly treated, has succumbed to the disease. This was the case of a girl who had been bitten thirty-seven days before he saw her. Symptoms of the disease appeared ten days later, and, if the case proves anything, it goes to support M. Pasteur's opinion, for the fatal result occurred well within the period above mentioned as the most probable time for the appearance of the disease. In science, and especially in medical

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science, caution at all points must be exercised; but if the success hitherto achieved by the Professor be maintained and strengthened by the further experience of a few more months, the method will prove a boon to humanity, a gain to science, and justly merits the applause of the human race. M. Pasteur announced his intention last Tuesday of endeavouring to overcome diphtheria by measures similar to those adopted against small-pox and hydrophobia.

A NEW FRAUD IN MILK.

A LETTER which has lately appeared in one of the morning papers states without exaggeration a risk to which the milk-supply of London and other towns is exposed. The Health Exhibition of 1884 made all the world familiar with the ingenious and useful cream separators, in which, by centrifugal action, cream is separated from milk in a few minutes. The process is an excellent one. The cream is, as we have found by recent analyses, of good quality; while the skim-milk—for so we must call the residual milk,—not having had time to undergo the lactic fermentation, is sweet, palatable, and a most valuable food. Considering the high price obtained for the cream, whether as cream or butter, the skim-milk ought to be sold at a very low price, and if properly described, say as "separated milk," it would be a boon in all households, and particularly in poor ones. But the very fact that this skim-milk is so like ordinary milk suggests the possibility of a fraud which is only too likely to be adopted by unscrupulous tradesmen. In the letter to which we have referred, "A Consumer," who evidently knows what he writes about, expresses his belief that this skim-milk is mixed by the vendors with ordinary milk, and, sold at 3*d.* or 3½*d.* per quart, yields a much better profit than genuine milk at 5*d.* The question, then, arises—How is this new fraud (for a fraud on the consumer it obviously is) to be met? Unfortunately the answer is by no means easy. Even if, as "A Consumer" suggests, a raid were made on the stations where such skim-milk was known to be delivered, it would be difficult to prove that it was destined for fraudulent purposes; and once inside the premises of the vendor, who can say what becomes of it? It will perhaps be said that such an admixture can be detected by analysis, as the removal of cream and the addition of water are. But unfortunately the analyst cannot detect any one of these frauds unless they are practised to an extent that a skilful tradesman can easily avoid. Milk is not an article of constant composition, but a variable mixture, and the public analyst is therefore compelled, in order to avoid the risk of injustice, to take as his standard the very poorest milk. The limits at present approved are, as is well known, fat 2·5 per cent., and solids not fat (casein, sugar, and ash) 8·5 per cent. This is a very poor milk indeed, poorer than should be sold except with special description and at a lower price. But down to these limits the wily milkman may water, skim, or add skim-milk, and laugh at the public analyst. We suppose he could be convicted if the inspector saw the water added, but even this seems doubtful, as in the case we have supposed the analyst would be unable to prove adulteration by certificate. The only difficulty in the case arises, as we have on previous occasions pointed out, from the absurd state of the law. After the Food and Drugs Act came into operation it was found that it was powerless to prevent the fraudulent addition of water to spirits. Pure brandy is not pure alcohol, and there was no rule by which any judge could decide how much water brandy might naturally contain. Accordingly a second Act was passed defining the quantity of water to be allowed in brandy and other spirits, and since then there has been no difficulty at all. We hold that in the same manner limits of strength should be assigned by Act of Parliament to milk. The fat should be 3 per cent. and the other solids 9 per cent., and it should be the duty of the vendor not to sell any milk below these limits. The watering or skimming of milk would then be no offence in the eye of the law, and we believe that a considerable strain upon the consciences of many tradesmen would in this way be avoided. The public would then be sure of getting milk of moderately good quality. They would be saved from fraud because they would have no right to expect anything better, and such milk would, in fact, be sufficient for the uses of life. Richer milk would of course be sold in addition, and those who wanted it would be prepared to pay for it.

CRIMINALS SOBERED AND MADDENED, AND MIXED.

THE effect of prison discipline on the minds of convicts is governed by the ordinary laws of nature. Some half-mad brains are sobered and rendered sane, while sound minds give way under the strain of monotonous misery. Unless a proper classification of prisoners be made, and suitable changes are carried out from time to time with a view to avoid evil associations, most disastrous consequences must ensue. The Howard Association, always on the alert for good work, has done well in taking up the subject of classification of convicts in Irish prisons and criminal asylums. We would, however, suggest that, if the best practicable results are to be obtained, it will be essential to keep quite distinct two totally different matters, which seem just now to be in some peril of confusion. The corruption of morals regretted by chaplains is a different matter from the preservation of sane minds and the recovery of the insane desired by doctors. They are things apart, though not necessarily antagonistic. We are not in the least degree disposed to endorse the proposition that it would be better to keep criminals in solitary confinement rather than allow them to associate lest their morals should be further debased. We doubt whether it is ever justifiable to shut a man up with the demon of his own thoughts as his sole companion. Better put him out of his misery at than once than do that. If no better scheme can be devised to send the sobered criminals back to their cells lest they should be corrupted by association we would prefer to let morals run the risk of being debased in convict life. There ought, of course, to be no sane convicts in criminal lunatic asylums, and no lunatics in ordinary prison gangs; but beyond making this separation we do not desire to see the hobby of the advocates of "the separate system" rampant in the prisons of Ireland or elsewhere.

HYALINE DEGENERATION.

Dr. H. STILLING, of Strasburg, has (Virchow's *Archiv*, Bd. 103, Hft. 1) adduced evidence to show that so-called hyaline degeneration may pass on to amyloid degeneration, regarding the former as an early stage of the latter. To test this point it was necessary to show that in recent cases of amyloid degeneration areas of hyaline change are present, and that a transition between the two forms can be traced; and also to establish the fact that hyaline degeneration is met with in those diseases which are known to give rise to waxy degeneration, the hyaline replacing the waxy form in cases where the chronic disease has been cut short by some intercurrent affection. Stilling's researches were conducted upon the spleen, as being the organ which is the earliest to undergo amyloid change; and he employed for the detection of that morbid material, and distinguishing it from hyaline, the iodine and sulphuric acid reaction mainly, various other staining reagents being used for the tissues. He says that he has quite abandoned methyl-violet as a test for waxy disease, because it has the property of reddening colloid, and

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is not so delicate in the detection of waxy material as iodine is. Details are given of a case of phthisis, where the spleen showed a combination of amyloid and hyaline change; and a number of other cases of acute and chronic disease, where the hyaline product was found, are referred to. Hyaline degeneration in the spleen is found in the walls of the arterioles as well as in the follicles themselves. It commences in the former in the muscular coat, destroying the fibres and their nuclei; not invading the intima, but sometimes involving the adventitia. In the follicle, bands and wedges of the material separate the lymph-corpuscles; and the change is most marked in the centre of the follicle, where it commences by the swelling and transformation of the protoplasm of the cells. Stilling regards it as a deposit, and not as a metamorphosis, and proceeds to point out the striking similarity, not only in appearance but in distribution, that this hyaline change bears to waxy degeneration of the same organ. The diseases in which the hyaline deposit was found were, with two exceptions, of the same class—viz., chronic inflammation of bone and joints, and chronic inflammatory (tubercular) disease of the lungs—as those in which waxy disease occurs; the only distinction being that the hyaline change occurred in cases of shorter duration than the amyloid did. In one case the spleen appeared to be amyloid, but it did not yield the characteristic tests of that degeneration, and was found to be the seat of abundant hyaline changes. It is possible that the involvement of arteries in the change has something to do with its subsequent progress; but an explanation of the difference between the hyaline degeneration of tubercle and that which seems to be only the precursor of amyloid disease is, Stilling thinks, to be found in the lack of vascular supply in tubercle, as compared with that of the regions affected by amyloid degeneration. The degenerative process in a tubercle is thereby arrested at the hyaline stage.

LONDON WATER.

RECENT comments in the London daily press on the purity of London water call for some notice from us, as they are liable to lead to dangerous misconception. It is well known that for years past there has been considerable divergence of opinion between Dr. Frankland, who has analysed the water officially, and Messrs. Crookes, Odling, and Tidy, who have done so on behalf of the water companies. We have no intention of entering into this controversy. Dr. Frankland frequently finds fault with the water, while the other distinguished chemists cannot speak too highly in its praise. Thanks to the constant pressure of public criticism, the water of London has improved very greatly of late years. Not only have more suitable intakes been adopted, but far more attention has been paid to filtration, and, even if not as ideally perfect as the London companies represent, the water-supply of London is now fairly satisfactory. We can never think a sewage-polluted river like the Upper Thames a good water-supply, but we suppose it is for the present the best available, and the companies are certainly now trying to make the best of it. But it would be folly to ignore the risks of such a supply simply because they cannot be accurately measured. The most noxious forms of impurity are not revealed by chemical analysis or even with any approach to certainty by the so-called bacteriological method. The transmission of cholera by water is a question illuminated at present by only a feeble and doubtful light, but it would be madness to ignore the possibility that a water, safe at ordinary times, may become deadly when certain minute organisms float in it. We are safe enough in our water-supply just at present; but should we or ought we to feel safe if cholera raged in the Upper Thames Valley? We might not suffer, but who can be certain that we should not? Gravest of all, to our minds, is the risk, however slight, that if cholera were here some chance unforeseen pollution might introduce the seeds of death into the river in the immediate neighbourhood of the intake of one or more of the great companies. Little can be done before the summer, and we can but hope that that useful sanitary lesson, another cholera epidemic, may be spared us; but we cannot too often repeat that the disease may come with the summer; and if it show its face in the Thames Valley the authorities will be criminal if they do not watch the sources of our water-supply as they have never been watched before. Let them remember the fearful doubt, to say the least, that attached to the water of East London in the last epidemic.

THE QUEEN AND THE MEDICAL PROFESSION.

WE announced last week that Her Majesty had signified her gracious intention of laying the foundation stone of the new building about to be erected for examination purposes on the Thames Embankment. We hail with satisfaction and gratitude this new proof of the interest which the Sovereign takes in the progress of medicine, and in the prosperity of its recognised corporations. There will be a peculiar fitness in the performance of this Royal function, at the present conjuncture, because it will serve to mark with Royal favour the endeavour of the Royal Colleges to achieve by self-help a large measure of that reform which has been denied to them by successive Parliaments. Looking to the history of medicine, it is manifest that the art of healing and the enterprise of its professors have uniformly owed more—far more—to Royal favour than to Parliamentary aid or patronage. The first English writer on Medicine was Richardus Anglicus, who flourished at Oxford about 1230; but contemporary with him, dying in 1241, was Nicolas de Ferueham, and this physician King Henry III. called to his court and made his domestic counsellor, with a large salary. From that time down to the present year of grace the most distinguished physicians and surgeons of the day have almost uniformly been employed by the Sovereign and practised under Royal favour. We all know how much the illustrious Harvey owed to the encouragement extended to him by Charles I., who was personally interested in some of his experiments. Since the days of Linacre, who was successively physician to Henry VII., Henry VIII., Edward VI., and the Princess Mary, and who, with the aid of Cardinal Wolsey and by favour of Henry VIII., in 1518, founded the College of Physicians, that body has enjoyed Royal favour, and now, when its President is the favoured physician of Victoria, Queen of these realms, in 1886, there is an especial interest, which the whole profession will feel, in the august commencement of new and appropriate buildings for the use of the joint Colleges. We trust no pains will be spared to make the occasion worthy of its significance and place in the annals of English Medicine.

FIERCE DOGS.

ANOTHER instance of a horrible set on a child by a dog has been brought before Mr. Newton at the Marylebone Police-court. The dog was the property of a solicitor, and was taken out by his servant, who called on a Mrs. Luck with the dog (a fox terrier). It soon seized her child by the cheek, and was only detached with difficulty, taking a large piece of the flesh, and seizing the elbow of the mother, who rescued it. The solicitor denied his liability, and the magistrate refused to order the dog to be destroyed. He warned the owner (whose liability for compensation in this case is to be tried in another court) that he would be held responsible for the future behaviour of the animal. Dogs that can behave as this one did have a very questionable *raison d'être*. We have scarcely ever read of a more outrageous attack, and the law ought to be more efficient.

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CLINICAL SOCIETY OF LONDON.

THE last meeting of this Society was of a remarkably interesting character, from the number of papers read and living specimens shown. For full details of the proceedings reference should be made to the report. Dr. Goodhart read the notes of a case and exhibited the specimen of an extremely rare form of intussusception occurring at the upper part of the jejunum in the very neighbourhood of the duodenum. During life the case appeared to be of the most obscure kind; the stools were never known to contain blood, and actually there was no complete obstruction of the bowels, for the patient continued to pass motions throughout the whole course of the case. The swelling due to the intussusception appears at one time to have been regarded as a movable kidney. Mr. Barker's paper placed on record a remarkable success in abdominal surgery; but some doubt appears to exist as to the precise nature of the case, which the author regarded as originating in volvulus of the upper part of the jejunum. The facts of the case may well be interpreted on Mr. Barker's theory, and it would be exceedingly difficult to prove that his supposition was not the right one. On the other hand, it should not be forgotten that minute ulcerations of the duodenum and other parts of the intestine may occur without the examiner being able, even after death, to discover the perforation. The rapid improvement that followed the operation of abdominal section, though in favour of the author's interpretation, might also be explained on the assumption of a slight extravasation of intestinal contents. The intense form of peritonitis, its wide extent and mode of onset, are at least as consistent with the notion of perforation as with that of volvulus, even though it be borne in mind that several of the recorded cases collected by Mr. Treves of volvulus of the region in question were accompanied by severe peritonitis. In Mr. Barker's case the intestinal obstruction appears to have been complete, and if the volvulus were the cause of this, it seems unusual that the bowel below the obstructed portion should not have been collapsed. On this feature, however, there must rest some doubt. It is possible that the absence of collapse below the seat of obstruction might have been due to peritonitis, causing tympanites, though it may be difficult to realise that a bowel collapsed in the first instance should subsequently become inflated by the action of a serous inflammation.

THE BRAIN SURGERY OF THE STONE AGE.

MR. VICTOR HORSLEY gave an interesting lecture on Wednesday last in the Botanical Theatre of University College, at a meeting of the Medical Society of that institution. After showing how the earliest implements used for cutting purposes were made either of shell or stone, and having briefly described the mode in which the Bronze age succeeded the Stone age through the utilisation of copper alloyed with tin and was followed by the iron and steel periods, Mr. Horsley discussed the evidence that existed as to the extent in which brain surgery existed amongst the inhabitants of the caves and villages of the Stone epoch. By means of the lime-light he showed photographs of skulls which had various kinds of holes. Some of these perforations had admittedly been produced by the pick-axe of the finder. The skulls were from "finds" chiefly in the lower and middle thirds of France, and being found buried beneath the floor of caves side by side with stone implements, the inference was drawn that they belonged to the Stone epoch. Other holes in the skulls were either made soon after death for purposes of embalming, or were else the witnesses of an unsuccessful surgical operation. There was again a third class of holes which were clearly the result of primitive kinds of trephining; for there were evidences in the smooth and rounded character of the edges, the presence of hard osteophytes and even of prolonged suppuration in the form of osteoporotic material, that some of the perforations had been made during life, and the patient had lived long after their production. Most of these specimens belonged to individuals who had been young at the time of operation. The majority of the holes were situate in the parietal region, and, as Mr. Horsley showed, over Ferrier's "motor area." The author also believed that such trephinings had been done for cases of some kind of epilepsy. Altogether the lecture was very interesting, and afforded scope for much ingenious hypothesis, of which Mr. Horsley freely availed himself.

THE CEREMONY ON THE THAMES EMBANKMENT.

THE hour at which Her Majesty the Queen will graciously lay the foundation stone of the new Examination Hall on the Embankment, on Wednesday, March 24th, will be at or about 11 o'clock A.M. We believe that the space at the disposal of the two Colleges on this occasion is limited. Indeed, a circular has been issued to the Fellows of the College of Surgeons requesting them to state whether they wish their names to be included in the list of Fellows desirous of being present, from which list the places available for witnessing the ceremony will be assigned by drawing lots. The Fellows of the College of Physicians, not being so numerous a body, will, we believe, have the opportunity of being present should they wish. We fear, however, from the above intimation, that the space will be very limited indeed, and that large numbers of practitioners, to say nothing of students, will be greatly disappointed at not being able to attend on so important an occasion, when Her Majesty bestows a high and rare honour on the medical profession. We understand that only some thirty or forty of the gentler sex will be enabled to be present to witness this gracious act of the first lady of the land.

THE SANITARY CONDITION OF EAST GREENWICH.

AT an inquest held in the board-room of the Greenwich Union, on Feb. 26th, by Mr. E. Arundel Carttar, several facts transpired which pointed to the defective sanitary state of the neighbourhood. The subject of the inquiry was the cause of death in the case of a young woman named Gibson, who died nine days after her first confinement. The friends of the deceased were disposed to attribute the fatal illness to carelessness on the part of the doctor in charge of the patient, inasmuch as they alleged that the unfortunate woman succumbed to inflammation of the lungs consequent on catching cold through the bedclothes getting wet whilst a vaginal injection was being used. The case illustrates well the readiness with which an erroneous conclusion may be arrived at, and how ignorant the ordinary mind is of the care which is required in selecting the premisses for an argument which are true in themselves. In the first place, the injection before mentioned was employed because the patient was feverish and had abdominal pain, and because the lochia had become offensive; in fact, there was quite sufficient evidence to warrant the medical man in assuming the patient had puerperal fever; and, secondly, it was exceedingly improbable that the temporary dampness of the bed would of itself induce acute pneumonia. The post-mortem examination revealed a small rent in the perineum (the late stages of the labour had been unusually rapid), a small portion of placenta adherent to the uterine wall, and acute general peritonitis, most marked in the pelvic region. The questions then occur—How did the infection take place? Was it autogenetic? Was it communicated by the doctor or nurse? Or had the sanitary conditions of the house and neighbour-

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hood anything to do with its causation? In support of the latter proposition, it may be stated that the same tank supplied the watercloset and the house generally, including drinking-water for the residents. The apparatus intended to regulate the flushing of the closet was out of repair, and had been so for some time. There was an accumulation of excreta in the pan of the closet, which was only periodically and partially removed by throwing slops down. The roadway in front of the house was not paved, not even macadamised, and in this condition it is said to have been since the houses were built some two years since. Furthermore, the houses are situate on marshy soil at or below the level of the Thames bed. It was given in evidence at the inquest that diphtheria had been rife in the locality—in such severity, in fact, as to occasion a special investigation by the authorities. No wonder, then, that under such circumstances puerperal fever should arise and assume a grade of fatal severity. Although the actual source of the disease in the case under consideration was not traced, enough facts were adduced to lead the jury to entirely exonerate the medical man from all blame, and to point out the necessity for a complete examination into the dangers threatening the public health of the district. At the same time, it is a matter of paramount importance that it should be generally known that no person who has recently been in attendance on a case of infectious or contagious disease—such as puerperal fever, erysipelas, or diphtheria—is justified in entering the chamber of a parturient woman; and medical men cannot be too careful as regards their direct personal responsibility, nor too anxious in shielding their patients from the harm that may arise from the carelessness or ignorance of others.

DENSITY AND MORTALITY.

THE late Dr. William Farr was one of the first to call serious attention to the constant relation between density and mortality. The arbitrary boundaries, however, of our large English towns place the greatest difficulties in the way of calculating, even approximately, the relative density of town populations, measured by the number of resident inhabitants per acre of the town areas. The English census, moreover, gives no information from which more trustworthy statistics of density can be calculated. The Scotch census, however, gives not only the number of apartments in each tenement, but also the number of inhabitants found resident therein. These facts supply the basis for far more trustworthy statistics of density than any that can be obtained for England. Dr. James B. Russell has recently turned these facts to very good account in a report he has recently issued on the Vital Statistics of the City of Glasgow. Dr. Russell remarks that "if we could ascertain the cubic contents of every dwelling-house or room we should get to the heart of this element of density in the physical circumstances of the inhabitants of towns." The information he has been able to obtain from the Scotch Census Report, however, goes a long way towards supplying really trustworthy density figures. It appears from Dr. Russell's interesting table that there is a very close relation between mortality and the number of inhabitants per inhabited room. This table gives the mean annual death-rate in the ten years 1871-80, the persons per acre of area, the rooms per tenement, the persons per room, and the percentage of population living in tenements of one room and of five rooms and upwards, with the average number of persons per tenement of these two classes, in each of the eight principal towns of Scotland. These figures prove conclusively that, whereas mortality bears no very constant relation to density of population measured imperfectly by persons per acre, its relation to density measured by persons per inhabited room is very clearly marked. It appears, for instance, that the number of persons per room was equal to 1·87 in Dundee, 1·91 in Greenock, 1·98 in Paisley, and 2·05 in Glasgow; and, further, that the mean death-rate rose steadily in the same order to 25·7, 27·4, 27·8, and 28·6 per 1000 respectively in these four towns. In the other four of the eight towns the mean death-rate ranged from 21·7 in Aberdeen to 23·2 in Edinburgh; the persons per room in these four towns ranged, but not in quite the same order, from 1·31 to 1·67. It is probable that these slight inequalities in the parallelism between mortality and density, measured by the number of persons per inhabited room, would disappear if account could be taken of the size of the rooms. The value of these statistics of density of population in the Scotch towns emphasises the desirability for urging that at the next English census measures should be taken for obtaining information relating to the housing of the people similar to that which was obtained at the last census for Scotland.

THE REGULATION OF SUB-LET HOUSES.

IN a recent monthly report, Dr. Dudfield, medical officer of health for Kensington, draws attention to a decision which may affect the several codes of bye-laws which have during the past few years been drawn up as to houses let in lodgings. One clause of the model code issued by the Local Government Board gives power to the authority to summon the landlord to attend at the office of the authority to "supply the information necessary for the registration of the house," and to give certain particulars as to the total number of rooms, the number occupied by members of more than one family or let in lodgings, the manner of use of each room, and the number, age, and sex of each of the occupants of the several rooms used for sleeping. A certain landlord having failed to appear, he was summoned for neglecting to comply with this first bye-law, but his counsel contended that the regulation was *ultra vires*, for although the authority had power to make regulations for fixing the number of persons who may lawfully occupy the house, &c., yet they had, under the Act, no power to compel the attendance of a landlord at their offices. Sir James Ingham sustained the objection of the defendant, but at the same time he observed that the question was too important to be settled by him, and that a case should be stated for a superior court. We trust that this advice may be acted upon in order that the matter may be finally settled. But in the meantime we may point out that Dr. Dudfield has, in his district, always felt that the best way of supplying such information as the authority could act on, was to direct the several sanitary inspectors to obtain the necessary details as the result of an actual inspection of the premises concerned, and he looks with but little concern to any adverse final decision which may be arrived at. In short, if the clause be found to be illegally imposed on landlords, Dr. Dudfield thinks that an even more efficient method of arriving at the end in view is still available.

PUBLIC HEALTH IN VICTORIA.

THE last report of the Central Board of Health of Victoria contains considerable evidence of sanitary progress in the colony. Such matters as food adulteration, infant life protection, calf-lymph vaccination, and the provision of sanatoria for infectious diseases are receiving much attention, and a proposal has been made to the Government to appoint at least one inspecting medical officer on the same lines as the appointments connected with the Local Government Board at home. Improvements are also proposed at the quarantine station, but the record of work in connexion with the quarantine laws can hardly be regarded as affording a happy illustration of that system. Thus, small-pox is quarantined in Victoria, and the healthy as

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well as the sick are subjected to that process. A single case of small-pox arrived in the R.M.S. *Rome*, and all the passengers were quarantined, the detention apparently lasting for at least fourteen days. The result was unfortunate, for we read that shortly after the release of the vessel a case occurred at Carlton, and then a number of other cases occurred in and around Melbourne, and a few in country districts. Had the colony, after isolating the solitary sick person and resorting to such disinfection as was practicable, trusted to vaccination as a protection, the probability is that the disease would not have spread, and the vexatious detention, which the result shows to have been useless in so far as preventing the extension of the disease is concerned, would have been avoided. The adoption of the true measures for the prevention of infectious diseases is, we believe, always more or less hindered by resort to the old quarantine system, and nowhere has its abandonment been followed by such fortunate circumstances, as regards the promotion of public health, as in the mother country.

WHAT WILL THE BOARD SAY?

"MR. CHILDERS informed Mr. Thorold Rogers that the Metropolitan Board of Works were charged with carrying out the recommendations of the Royal Commission on the Pollution of the Thames, and he had called on the Board to say what they had done in the matter." This is satisfactory as far as it goes. The Board, which created the nuisance, and which for so many years has ignored the condition upon which power was entrusted to it, ought, after its signal defeat before the Royal Commission, to have taken instant and vigorous action to remedy the proved evil, and to avert the danger to which during the coming summer the metropolis will be exposed. We can only hope that a prompt and satisfactory answer can be made to the pertinent inquiry of the Home Secretary. But we cannot pretend to be sanguine. As far as we know, all that has been done is the carrying out of some experiments on precipitation at Crossness, the nature of which has not, we believe, been published, and a disinfection of the sewage, which is as illusory as it is expensive. We know what the answer ought to be. It ought to be that all known schemes had been carefully studied, the expense of each computed, and some one or two chemical processes selected which could at the shortest possible notice be adopted at the present outfalls, and that in addition one or more alternative schemes had been prepared for taking the sewage lower down the river and there purifying it, as the Royal Commissioners advised. The public ought to know as soon as possible what the Board has and has not done, and we trust Mr. Thorold Rogers will renew his question at no distant day.

EXCESSIVE PAROCHIAL ECONOMY.

THE frugality of parochial guardians, as a class, has by this time become proverbial. The tendency in itself is in the right direction, and we have nothing to say against it as a generally safe guide for practice. It may, however, be too implicitly followed, and of this we are reminded by a recent example. The Honiton board have lately had to consider the re-election of their medical officers, and are disposed to reduce the present salaries of these gentlemen before admitting them to a further term of office. We congratulate the board on the moderation with which they have recommended the adoption of this step. At the same time we must admit that their proposal itself does not seem to us equally reasonable. The prevailing commercial and agricultural depression is said to necessitate the proposed reduction. It has also been stated that the medical officers have provisions at a cheaper rate now than formerly; and, further, that the abolition of tolls has diminished their expenditure. We do not wish by any means to disregard the present unfortunate condition of trade, or to discountenance needful and just economy; still we cannot, on examination, accept the conclusion of their arguments. It would surprise us very much to learn that the salaries in question will bear diminution, even in consideration of the circumstances above mentioned. There seems also to be good reason to doubt the reality of the supposed profit on expenses which these hard times are said to have introduced. Road expenses continue, though the toll-gate is no longer a means of exacting them. Depression in agriculture, again, affects the payment of medical bills in a degree probably quite equal to its effect on the incomes of landlords, farmers, and the county population in general. The medical officers of Honiton can, of course, best judge for themselves as to the bearing of the proposed reduction on their own finances. We do not consider that a satisfactory objection to the present rate of remuneration has been brought forward, and the Board of Guardians will, we hope, see that in their proposal rather too much has been made of the necessitous condition of the country.

DELAY AND DISEASE AT TOULON.

THE Mayor of Toulon, the Prefect of the Var, and the engineer of the town of Toulon have been on a deputation to Paris. They had interviews with M. de Freycinet, President of the Council of Ministers, with the Minister of War, the Minister of Commerce, and the Minister of Public Works. They pleaded the absolute necessity of at once carrying out sanitary works to prevent the recurrence of cholera and other epidemic diseases in the great maritime fortress they represented. But, in answer to this most urgent and justifiable request, they were informed that the Budget Commission had decided that no large and new public works should be undertaken before the year 1888, As the project for the draining &c. of Toulon will, it is estimated, cost £48,000, it enters the category of new and important public works, and therefore cannot be sanctioned. The same technical objection could not, however, be raised to the dredging and improvement of that portion of the port assigned to trading vessels. It is probable that harbour works of this description, involving an outlay of £8000, will be undertaken this year; but that little or nothing will be done to remove the numerous sources of infection which render the town of Toulon a disgrace to modern civilisation. Abandoning for the moment the project of drainage for the entire town, the Mayor of Toulon besought M. de Freycinet to facilitate some temporary measures. such as the roofing over of certain ditches which serve as sewers, and notably the ditch that receives the drainage of the town slaughterhouse. M. de Freycinet promised to support a vote of credit for this object, and admitted that the State should contribute half the sum, as Toulon is an arsenal town with but small resources of its own. Thus the matter stands. When we consider the insanitary condition of Toulon, its high death-rate, and the fearful havoc created by the cholera epidemic, we are compelled to urge that the decision of the Budget Commission should not stand in the way of saving innumerable and valuable lives. Typhoid is endemic in Toulon, small-pox is now exceptionally prevalent, and military and naval recruits must be quartered on the summit of the mountains, or in forts built out at sea, to prevent the outburst of epidemics in the regiments. To check extravagant public works, many of them mere embellishments of an ornamental description, is probably a financial necessity in France; but where public health is concerned it has been demonstrated over and over again that prudent expenditure is the truest economy.

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THE QUEEN AND THE ICE ACCIDENT AT WINDSOR.

WE are glad to hear that the Queen has manifested great concern with respect to the fatal accident that has recently occurred on the ponds adjoining Cumberland Lodge, Windsor Park. The whole administration and condition of this Royal domain demands immediate inquiry. To our knowledge, complaints were recently made with regard to the absence of adequate means for saving life at the Virginia Water. It was suggested wheels might be affixed to a flat-bottomed boat, so that it might be pushed forward to rescue anyone falling in the water. Should the ice break, oars could be substituted for the poles employed in punting the boat on the ice. This simple and inexpensive request was, however, cast aside, though precisely two hours after the letter containing this petition had been forwarded to the competent authority a man who was skating fell into the water in one of the deepest parts of the lake. Luckily he was a good swimmer, and succeeded in saving his life. Perhaps if he had been drowned the authorities would have seen the necessity of taking some measure of precaution. This is in keeping with several other grievances for which Windsor and its neighbourhood has become too notorious. Under such circumstances pressure emanating from the highest quarters and supported by public opinion is needed, and will not, we are convinced, be withheld.

THE DARENTH SMALL-POX CAMP.

AN important decision was last Tuesday given in the case of Fleet *v.* the Metropolitan Asylums Board. This was an appeal by Mr. Fleet, a resident and owner of property in the neighbourhood of the Camp, against a previous refusal to grant an injunction to restrain the defendants from continuing the use of the Camp for cases of small-pox. The appeal was heard before Lord Justice Cotton, Lord Justice Bowen, and Lord Justice Fry, and each of the learned judges agreed that the appeal must be dismissed. Lord Justice Cotton, in delivering judgment, pointed out that "the legal question to be decided was whether there was an appreciable injury to the healthiness of the plaintiff's property. The plaintiff must make out that there was real danger, otherwise, however much they might feel the hospital to be an annoyance, they could not get an injunction." The only important question raised was whether the hospital could be a source of danger through infection aerially conveyed, but on this point the "expert" evidence was so contradictory that the allegation was held to be not proven. Lord Justice Bowen's remarks deserve further consideration than we fear they are likely to receive. He said, "a court of justice was not a fit place for the exercise of inductive logic. Life was short, and it was impossible to give endless time to the examinations of a scientific theory for the benefit of one set of litigants. No doubt sooner or later science would discover and assert with confidence whether infection does blow across the hills and valleys, but he declined to be driven into the scientific question or to forecast the future." With the exception of Mr. Power's investigations concerning the Fulham Hospital and those of a few health officers whose districts contain or are in proximity to small-pox hospitals, the whole question has been relegated to the lawyers. There has as yet been no other thought about the whole matter than whether one or another person has suffered pecuniary loss; the loss of life, which has undoubtedly occurred in the neighbourhood of small-pox hospitals, and which is far more important than loss of money, has not been deemed of sufficient consequence to warrant a complete inquiry by either of the hospital-providing boards. But even if the subject be considered purely from the monetary point of view there is no question that the necessary investigation could have been conducted at a mere fraction of the cost to which the London ratepayers have been put through the inaction of these authorities. We would commend Lord Justice Bowen's remarks to their consideration.

PITY THE POOR PEERS!

ACCORDING to the Earl of Limerick, who seemed to speak feelingly, the Lords of Parliament assembled in their own Chamber are in a pitiful predicament. Their lordships' feet are in a cold bath, while their "lordships' heads are swimming in an atmosphere of a very different kind." Now, as the Earl warned his brother peers, with practical truthfulness, this state of things is of benefit to no one except their lordships' doctors. The Lord Chancellor was able to corroborate the statement of the noble Earl by the evidence of his own experience at the bar of the House. He (Lord Herschell) had spent much time in that building and had never returned home without a headache, which he had never experienced in his practice before other tribunals. Their lordships laughed when the advocate who had pleaded before them, now their chairman, made this avowal. There was just a little tremulous irony in their merriment, which seemed to suggest that perhaps a part of the headache might be due to the tribunal rather than to the building in which it sat. However this may be, we heartily pity the poor peers with their feet in a cold bath and their heads swimming, and we wish them well out of their troubles, even though their lordships' gain should be our loss. There is this great practical difficulty about the ventilation of the two Houses of Parliament: The chambers must needs be large enough to accommodate all those who are entitled to assemble within them, although it rarely happens that anything like the full number is reached. The buildings must be kept warm, and there must not be draughts. We confess that it has always appeared to us a mistake to place edifices so large as those required for the accommodation of Parliament under a complicated system of artificial heating. It would be better and easier to subdivide the work considerably, and enforce the maintenance of a common temperature on the officials responsible for the heating and ventilating of both Houses. The air supplied to the chambers and corridors is deprived of its freshness before it is allowed to mix with the contained atmosphere, and it is actually impure air the members of the two Houses inspire. Only those who have spent many consecutive hours, night after night some four days a week through long sessions, know how terrible the infliction actually is. Not only the peers, but the members of the lower House of Parliament deserve the pitiful sympathy of their fellow-men in relation to their sad experience in this matter of deficient or defective ventilation.

THE EVERTON MURDER.

ON the 15th ult., Michael Lavelle, aged sixteen, was tried before Mr. Justice Day at the recent assizes held in Liverpool, for the wilful murder of a man named Maxwell Kirkpatrick, by striking him behind the right ear with a wooden roller, such as is used in timber-yards. It was noticed that the prisoner held the weapon in both hands. The deceased was knocked down and rendered insensible by the blow, but in about five minutes he recovered sufficiently to be able to walk home with assistance, the man who aided him noticing that blood was flowing from his right ear. After reaching home the deceased called upon a medical man, who advised him to return at once and go to bed. He did so, and when visited by the doctor shortly afterwards was found to have become unconscious, continuing in that state until his death, which took place on the following morning, between sixteen and seventeen hours after receiving the fatal blow

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At the trial, Dr. Ellis, the deceased's medical attendant, stated that there was no external evidence of fracture, nor was there any wound. He remained with deceased during the whole time of his illness, with the exception of a brief interval, and subsequently made a post-mortem examination. It was then found that the inner table of the temporal bone was fractured to the extent of three inches, and that the cause of death was compression of the brain, there being a clot between it and the membranes at the seat of the injury. The prisoner was found guilty, with a strong recommendation to mercy, and sentenced to death. An official communication has, however, since been received at the gaol in which he is confined to the effect that the execution will not take place—presumably on account of the youth of the prisoner. It would be interesting to know whether any consultation was held, and the question of an operation considered. It is possible, seeing how the locality of the injury was indicated by the hæmorrhage from the right ear, that the case might have been a suitable one for trephining. Assuming the facts as above stated to be correct, the removal of the clot might have been successfully accomplished, and if there were no other fatal injury the deceased's life might have been saved. It is most important in all cases involving so serious a charge as murder or manslaughter that the advice of a second practitioner should be sought, and that the post-mortem examination should be made in the presence of some surgeon skilled in medico-legal investigation. It is possible that this was done in Lavelle's case; but it would be more satisfactory to have the matter placed beyond doubt. The published reports of the case contain no record of such proceeding.

EXPERIMENTAL AORTIC REGURGITATION.

BY lacerating the aortic valves by the aid of instruments passed into the aorta through the carotid artery, M. François Franck has been able to study the immediate and remote effects of this experimental form of aortic regurgitation. In some cases death supervened rapidly, especially when the heart was diseased previously. If the animal survived, the arterial tension, at first lowered, mounts again, and the heart becomes hypertrophied and its vascular activity is increased. According to M. Franck the excessive work of the heart is not to be solely attributed to the aortic reflux, but also to an irritation of the sigmoid region, on the ground that slight lesions or a superficial irritation of this region give rise to similar hypertrophy. He also explains the danger of syncope of cases of aortic incompetence by the excessive and prolonged distension of the cardiac cavities, as well as by the depression of the arterial tension of the brain.

HEARING, READING, AND THINKING.

THE interesting address of Mr. Goschen to the students of the London Society for the Extension of University Teaching gathered together from twenty-five or more centres of the metropolis, with the Lord Mayor in the chair, was an embodiment in a general way of the pithy Baconian principle: "Reading makes a full man, conversation a ready man, and writing an exact man." It is by a combination of these three that all-round intellectualism is to be gained. Mr. Goschen defined a lecturer as a condensing machine: "He condenses for the benefit of his audience the result of his own reading." But condensation of intellectual food means more or less indigestibility. Thus, teaching by lecture falls short of that fulness of illustration which is necessary to the entire grasp of the subject. It is a far better training for the lecturer than his audience. The colloquial method of teaching tells more to the advantage of the hearers than the oratorical. Students of medicine who estimate the advantage to themselves of the set lecture compared with the colloquial demonstration on such subjects as anatomy, physiology, or pathology, or, still more, on practical medicine and surgery, will form a correct idea as to which is the better method of teaching. Within the past quarter of a century a great change has come over our medical schools, the demonstrative and colloquial teaching replacing the oratorical. But whatever the method, it is, after all, the close and unwearied application of the student himself that gives the real mental training, and the more difficult the subject to the individual the better the training. When the present Bishop of London, at the time he was Head Master of Rugby, was examined before the Royal Commission on Public Schools, he gave as his reason for retaining Greek as an essential element in the highest education that of all subjects it was the most difficult, and therefore formed the best mental training. Every student has the equivalent of Greek in the subject which is the most difficult for him to acquire. If he masters this, he need not despair of the rest; and when in after-life new and complex problems present themselves in the practice of his profession, the training which the mastery of his most difficult subject afforded him will best fit his mind to solve these.

GRANULAR MATTER AND DILATANCY.

A PRINCIPLE of granular matter, named "dilatancy," having a very wide application, formed the subject of an interesting lecture at the Royal Institution by Prof. Osborne Reynolds. It can be easily understood that the aggregate interstitial space in a pile of shot may undergo considerable variations in amount between a maximum and minimum. A convenient mode of measuring the variation in the amount of interstitial space was suggested by Prof. Reynolds in the form of an indiarubber-bag containing sand, in which the interstitial space is occupied by water; the variations in the amount of water could easily be determined by a kind of manometer in communication with the interior of the indiarubber bag. If the bag be filled with water and sand so that the water was at a certain height in the manometer it was found that certain amounts and directions of pressure on the bag caused a fall in the height of the water in the projecting tube, evidently showing that the interstitial space in the bag had become augmented. It is well known that in walking on certain sands at the seashore the parts around each foot impression become dry-looking, whilst that under the foot gets wetter than it was; Prof. Roberts perceives in this phenomenon an illustration of the dilatancy of granular matter.

SANITARY INSPECTION IN WATERFORD.

SOME difficulty has arisen in Waterford in connexion with payment for medical services under the Labourers Act. The work in question consists in the sanitary inspection of newly-erected cottages. Its amount varies considerably in accordance with the plan adopted in building, and doubtless with the distance to be traversed by the inspector in different cases. We learn, for example, that in one district there are several cottages under the same roof, a matter which must somewhat facilitate their examination. A more distinct plan of structure necessarily implies a greater outlay of time and energy. There seems to be no fixed tariff in Waterford or its neighbourhood for the settlement of such professional claims, and it is evidently very desirable that some common agreement on this head should be brought about. We are informed that in Youghal £1 was the fee allowed for examination of a cottage, and in Drogheda 5*s*. The practitioners of Waterford have adopted the mean between these sums (10*s*.) as their profes-

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sional charge, while the union board of that town are divided between the latter sum and the Drogheda minimum, the majority being in favour of allowing the lesser fee. The inspection of a house, even a cottage (which, be it remembered, includes in the groundwork the most important area from a sanitary point of view) is an occupation which not only takes up a considerable amount of time, but calls for skill of a superior order for its correct performance. In many cases 10*s.* would not be an excessive fee, and it might not, indeed, in some cases sufficiently pay the inspector. A maximum of 5*s.*, except in consideration of steady employment in this way and of local facilities as to distance and the like, we should consider too low. From want of an intimate knowledge of the special circumstances, we cannot enter at length into the dispute between Waterford and its sanitary advisers, but there is much to be said, in our opinion, for the retention of the rate of payment requested by the latter, while, on the other hand, some reduction may very well be made where the cottages are contiguous or are under the same roof.

THE SALE OF POISONS.

WE are glad to find that the question of the sale of poisons is likely to occupy the attention of the Legislature at no distant date. On the 26th ult., in the House of Lords, the Earl of Milltown asked what steps it was proposed to take in the matter, and reminded the Government that last session a Bill dealing with the subject was introduced in the House. He alluded to circumstances which had recently occurred as showing the extraordinary facility with which persons absolutely unknown to vendors might obtain the most deadly poisons. Earl Spencer stated that the question was under consideration, and he hoped in a few days to be in a position to make a definite statement as to the intentions of the Government.

A CONSTANTINOPLE PHYSICIAN ON HOSPITAL ADMINISTRATION.

DR. PARDO, of Constantinople, writing in the *Gazette Médicale d'Orient*, complains of the condition of the hospitals connected with the various powers represented at the capital of the Ottoman empire. Reports of hospitals in other civilised countries, though they by no means always describe matters as being in a fully satisfactory condition, still serve to expose defects and to let the light of public opinion shine upon the condition of the buildings and the conduct of the officials, in a way which is impossible in an Oriental city. He hints that appointments to the staff ought always to be made by *concours*, and a strict system of control and inspection instituted and maintained. As to the *concours*, however, he does not seem to be hopeful about its feasibility in consequence of the difficulty of obtaining a competent and impartial jury. Again he ventures an opinion that "the practitioner—and all are practitioners here—should not perform operations except where absolutely necessary and of acknowledged utility, leaving bold enterprises to the great masters of the art, who possess all the requisite qualities, immense knowledge, and ability, which justify them in assuming responsibility." Two cases of hazardous operations of which he was witness are mentioned: one could not even be completed for lack of instruments and of intellectual resource on the part of the operator. The hospitals ought to be built, furnished, and regulated according to all the most improved methods, or there should be no hospitals at all (!); a double set of buildings being required, so that all in turn may lie empty, and be disinfected for six months every year. Dr. Pardo once communicated his views to an ambassador whose hospital he was attending, and was answered somewhat sarcastically by an intimation that the only way to achieve the desired result would be for the ambassador to give up his two palaces for the purpose, to which the doctor retorted: "I would not refuse your excellency if they were in the best hygienic condition, but they leave much to be desired in that respect." With regard to lunatic asylums, if the picture Dr. Pardo gives of what he has seen is not "ancient history," a very searching inquiry should be made by trustworthy inspectors as to the conduct of these establishments.

THE BIRMINGHAM MEDICAL SCHOOL.

FAITHFUL to the motto on their municipal arms, "Forward," our brethren in the Midlands are making great and successful strides in the reorganisation of their medical school, which has attained an unprecedented degree of prosperity. The increasing number of students has not unnaturally been influenced by the powerful attraction of the General and Queen's Hospitals united for purposes of instruction under a clinical board, over which Sir James Sawyer presides. The pupils also have access to the wards of the spacious Borough Asylum, the superintendent of which, Mr. E. B. Whitcombe, has lately been appointed clinical lecturer in Lunacy and Mental Diseases in connexion with Queen's College. Soon after Mason Science College was established, Mr. Oliver Pemberton projected a scheme for its alliance, in the interests of medical education, with the old Queen's College. The plan won general assent, and has now been in successful working for some years. In chemistry and physiology, botany and physics, the Birmingham medical students have at their disposal the great resources of Mason College; while anatomy and physiology, medicine and surgery, materia medica, pathology, diseases of women, and ophthalmology are taught at Queen's College. To Dr. Alfred H. Carter belongs the credit of having initiated a complete reorganisation of the anatomical department, which is now in a high state of efficiency under the direction of Professor Bertram Windle, with Dr. Hogben as his principal assistant, and Dr. Foxwell, Mr. Haslam, and Mr. Jordan Lloyd as demonstrators. The Anatomical Museum has been enriched and rearranged at great expense and labour; and the same work is now in hand for the materia medica and the pathological departments. It is only just to add that the large class of students have shown themselves worthy of the increased advantages placed at their disposal, by steady and very good work. Their junior medical society at Queen's College is a model of organisation and useful activity.

INDUBITABLE CONGENITAL TUBERCULOSIS.

AN eight months' fœtus was taken from a cow, the subject of advanced tuberculosis, by Dr. Johne. The placenta and uterus were free from tuberculous lesions, but in the lower lobe of the right lung a nodule the size of a pea was detected containing four caseous centres. The bronchial glands were congested and also tuberculous. The liver contained numerous grey granulations. Microscopically the tubercular structure was confirmed; masses of epithelioid cells with giant corpuscles containing tubercular bacilli were discovered.

FALSE CERTIFICATE OF A SUICIDE'S DEATH.

FALSIFICATION of death certificates, even when prompted by a wish to avoid wounding the feelings of relatives, is a very serious matter, in foreign countries as much so as here. Two St. Petersburg practitioners who attended a girl who had poisoned herself with opium yielded to the entreaties of the parents and gave a certificate that the cause of death was "heart disease," and so of course no difficulty arose about the burial. The case, however, he

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recently come before the law courts, and in spite of the defence set up that the certificate was not an official document, but intended solely for the use of the statistical department, the two doctors were condemned to two days' imprisonment and a fine of ten roubles (£1).

A NEW journal dealing with forensic medicine, criminal anthropology, and law is being brought out in Lyons under the title of *Archives de l'Anthropologie Criminelle et des Sciences Pénales.* The editors are MM. A. Lacassagne, Professor of Forensic Medicine; R. Garraud, Professor of Criminal Law; Henry Coutagne, Chef de Travaux of Forensic Medicine; with Dr. A. Bournet as secretary. The journal will appear six times a year. The first number contains the following articles:—1. Report on Criminal Law and Penal Sociology, by M. Garraud. 2. Practice of Judicial Medicine in France, by M. H. Coutagne. 3. Indecent Assaults on Little Girls, by M. Lacassagne; also a critical review of foreign works by M. Bournet, and varieties.

ON Tuesday evening Sir Joseph Fayrer gave a lecture at Exeter Hall to the members of the Young Men's Christian Association. The subject of the address was "The Natural History, Habits and Diffusion of Cholera, and what might be done to prevent or mitigate it." The lecture was attentively listened to, and appeared to be much appreciated by an intelligent audience. Lord Fortescue proposed and Sir H. Pitman seconded a vote of thanks to Sir Joseph for his excellent discourse.

IT is stated that there is no foundation for the rumour recently current to the effect that the Government have resolved to accept Mr. Stansfeld's motion for the 16th inst. for the repeal of the Contagious Diseases Acts. The subject has not yet been before them. Mr. Stansfeld has obtained first place on the date mentioned, and will proceed with his motion in due course.

ON the 1st inst. the death occurred of Dr. Daniel Elias of Southport. The deceased, who was about fifty years of age, had been in practice in Southport for twenty-eight years, and was well known and highly respected by all classes. He was one of the honorary consulting medical officers of the Southport Infirmary, but resigned the post a few days prior to his death.

THE corner stone of the new College Buildings of the London Hospital will be laid on Tuesday next, March 9th, at 3 P.M. The new Home for Nurses in connexion with the hospital will be open for inspection during the afternoon.

MR. EDWARD FREEMAN, D.C.L., has consented to allow himself to be nominated for the office of Lord Rector of Edinburgh University in November next.

THE next annual meeting of the Italian Ophthalmological Association is to be held at Genoa in September.

THE DEAD DOGS.—At the meeting of the Enfield Local Board on the 25th ult., the medical officer reported that a large quantity of decomposed dogs was placed in heaps upon a farm in the district. A member of the board stated that the milk in his dairy was tainted whenever the heaps were turned over or moved, and that it was only lately that disinfectants had been used. About 750 bodies per week are sent down, but as many as 1200 have been received. A committee was appointed to be present at the next turning over of the heaps.

Pharmacology and Therapeutics.

HYPNONE.

IN a recent number of the *Bulletin Général de Thérapeutique*, Dr. Dujardin-Beaumetz and Dr. G. Bardet give an account of the physiological action and therapeutic uses of a substance to which they propose to apply the term "hypnone." It has many names, the best known being acetophenon; but although they may be useful as indicating its chemical composition, they are ill-adapted for the requirements of the practical physician. It is made by distilling together a mixture of benzoate and acetate of lime. At ordinary temperatures it is a clear, colourless liquid; but on exposure to even a moderate degree of cold it is converted into a mass of beautiful crystals. It is simply a laboratory produce, and as yet has not been manufactured for commercial purposes. Its price is somewhat high; but as the dose is small this is a matter of little importance. It has a most persistent characteristic odour, so that few patients would care to take it unless enclosed in capsules. Its physiological action is very marked, and there is reason to suppose that we are in possession of a hypnotic only second to urethan. In cases of simple insomnia, unattended with pain, its action is marvellously prompt, and there are absolutely no after-symptoms, such as nausea, headache, or constipation, which so frequently follow the administration of opium or morphia. It has as yet been but little used in this country, but the reports so far are said to be most favourable. We owe a debt of gratitude to Dr. Dujardin-Beaumetz for giving us this new remedy.

RUSSIAN DIURETICS.

The Russians have great faith in diuretics, and therefore many drugs of this class are popular as household remedies. Some of these, such as foxglove, were in use amongst the peasants long before they were admitted into the category of even extra-pharmacopœial remedies prescribed by professional men. Dr. S. A. Popoff has recently made some researches on the action of certain household diuretics, communicating his results to the recent congress of Russian doctors. Cloud-berries (Rubus chamæmorus) are almost unknown in scientific medicine, though a paper on their diuretic quality was written in 1856 in German by Dr. Trinkovski, who recommended them in hydrocephalus. Dr. Popoff prepared infusions, decoctions, and tinctures, and also an acid which he believes to be the active principle, and found, by experiments on animals, that considerable increase in the urinary secretion was produced by the administration of any of the preparations by the mouth, under the skin, or into the veins. This occurred also when the spinal cord and the splanchnics were divided, and when the animal was under the influence of curare. There was no alteration in the blood-pressure, and but slight palpitation of the heart. The only cases in which any slowing of the heart occurred were those in which a solution of the acid was introduced directly into the jugular. Nikanoroff's experiment of causing defibrinated blood to circulate through the kidney, first alone and then containing the acid in solution, was tried, and the amount of blood flowing out of the renal veins determined, but no positive results were thus obtained. The author has no doubt that the cloud-berry acts by directly stimulating the renal tissue without acting on the heart or circulatory system. It has thus, he says, an effect similar to that of antihydropin (tincture of black-beetles), which is well known in Russia and prescribed frequently, but this latter has the more powerful action of the two.

AFRICANA PARONYCHIA PATINIOSIA.

Dr. Crescencio Garcia, in a note communicated to a Mexican medical journal, mentions the employment of the above-named plant (which grows abundantly in some parts of the country, especially in marshy localities) for the treatment of malarial fevers. He says that he believes that it is almost always beneficial, to some extent even in cases of a pernicious character. When he was a youth he experienced the benefit of it himself during an attack of tertian ague of a choleraic type. The leaves and root are generally made into a decoc-

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tion, and large quantities drunk by the patient during the pyrexial attack. Dr. Garcia himself prescribes definite acid and alkaline preparations, and though he does not claim for Africana the power of superseding other febrifuges, he finds it very useful as an adjuvant.

BRUCINE.

Brucine seems to be endowed with local analgesic properties of a marked order. The burning sensation imparted to the tongue by certain spices can be relieved, according to M. Mays, by the application of a solution of brucine to the part in the proportion of 5 per cent. It has been employed to assuage the pain occasioned by the presence of ulcers on the tongue and gums. Rubbing the back of the hand with a 2 per cent. solution causes a decided loss of sensibility in the part. The pain resulting from friction with croton-oil is said to be relieved by a 5 per cent. solution; as also that of pruritus vulvæ and the result of a sinapism.

WITHANIA SOMNIFERA.

This solanaceous plant, widespread along the shores of the Mediterranean, is said to possess hypnotic properties. Dr. Trebut has essayed to verify these assertions and isolate the active principle. An alcoholic preparation gave excellent somniferous results in various subjects suffering from emphysema, alcoholism, and phthisis. An alkaloid has been extracted, absurdly called somniferine; its sulphate is crystalline; to it is due the hypnotic effects; it does not dilate the pupil.

DIURETIC PROPERTY OF CUCUMIS CITRULLUS.

Various preparations, chiefly compounded with honey and sugar, are made of the Cucumis citrullus in the south of Russia, where it has great reputation as a diuretic. It has not as yet been used by medical men, but only as a popular remedy. Dr. S. A. Popoff, who has been making experiments with it, found that when the syrup was introduced into an animal's veins, urine poured out of a cannula inserted into the ureter for several minutes.

COCAINE IN VAGINAL OPERATIONS.

Dr. Yakub has successfully employed a 20 per cent. solution of cocaine in two gynæcological operations, kolporrhaphy, or, to it give a less alarming name, suture of the perineum and vagina, and the removal of a papilloma from the posterior wall of the vagina. The solution was applied five or six times, and complete local anæsthesia produced. Both the wounds healed by first intention.

THE LUNACY ACTS AMENDMENT BILL.

THE principal objects of the Lunacy Acts Amendment Bill are:—1. To furnish safeguards against the improper confinement of persons as lunatics. 2. To put a stop to the system of single patients, except in the case of lunatics so found by inquisition, and to prevent the establishment of any new licensed houses. 3. To give facilities for the medical treatment of persons who desire to submit to treatment and of idiot and imbecile children. 4. To enable public asylums to be provided for the reception of lunatics not paupers. 5. To give increased powers to the Court for administering the property of lunatics. 6. To make certain amendments in detail with a view to the consolidation of the Lunacy Acts.

The Bill adopts in the main the recommendations made by the Report of the Select Committee on Lunacy Law in the year 1878. The following clauses are selected from the Act as being most likely to prove interesting to the medical profession:—

I. The power of an "officiating clergyman" and overseer to confine a pauper patient is taken away. A report upon every private patient is to be sent to the Commissioners in Lunacy within a month after the patient's reception as a lunatic, and a visit is to be made to the patient as soon as possible. At the end of three years after the reception of a patient, and at the end of every subsequent year, a special report is to be made on his case. If no report is made, the order for his detention comes to an end. If the report is not satisfactory, the patient is to be visited, and, if it is thought proper, discharged.

II. Any person may apply to the Commissioners for authority to have a patient medically examined with a view to his discharge if his detention should prove improper. Encouragement is given to the relatives of a pauper lunatic to take charge of the lunatic by allowing the visitors of the asylum to pay for the lunatic's maintenance whilst under the care of his relatives. Power is given to the Commissioners to make inquiries as to persons who are treated as lunatics in charitable and religious establishments and in the houses of persons who derive no profit from the charge.

III. Persons who, though not of unsound mind, are desirous of submitting to medical treatment may be received as boarders in hospitals and licensed houses.

IV. Persons not paupers may be received in county and borough asylums upon special terms, and the justices of counties and boroughs are authorised to provide accommodation for lunatics not being paupers, either by enlarging existing asylums or by establishing new asylums. Justices are also empowered to purchase licensed houses.

V. Power is given to the Court to appoint a committee of the estate only of a person who, upon inquisition, is found capable of managing himself, but incapable of managing his affairs. Although under the existing law a person may be deprived of his personal liberty upon an order signed by a relative and two medical certificates, there is no power (except in cases under £2000 or £100 a year) to protect and administer his property without the expensive procedure of an inquisition. This is amended by giving power to the judge in lunacy to exercise all the powers over the property of a person confined under order and certificates, or incapacitated by age or infirmity, which he could exercise upon inquisition.

VI. Miscellaneous amendments: (*a*) As to the letters of patients; (*b*) amendments as to licensed houses; (*c*) amendments as to asylums: (*d*) The provisions for the registration of hospitals where lunatics are received; (*e*) power to retake lunatics escaping into Ireland, Scotland, or England. Power has also been taken to amalgamate the lunacy departments if it is found expedient to do so.

1. (1) This Act may be cited as the Lunacy Acts Amendment Act, 1886, and shall come into operation on the 1st of January, 1887. This Act shall not extend to Scotland or Ireland.

2. (1) The justices of every county and borough shall appoint out of their own body as many fit and proper persons as they shall deem necessary to exercise the powers conferred by this Act upon justices of the peace in relation to orders for the reception of lunatics not being paupers.

3. (1) Except in cases of urgency, no person, not being a pauper or a criminal lunatic, and not being a lunatic so found by inquisition shall be received or detained as a lunatic in any asylum, hospital, or licensed house, or as a single patient, without an order under the hand of a judge of county courts, stipendiary magistrate, or justice of the peace having jurisdiction in the place where the lunatic is. No relative of the person applying for an order under this section, or of the lunatic, or of the husband or wife of the lunatic within any of the degrees of kindred included in the term "relative," as defined by this Act, shall be capable of making such order. (2) The order shall be obtained upon a private application by petition, accompanied by a statement of particulars and by two medical certificates on separate sheets of paper, under the hands of two duly qualified medical practitioners. (5) The petitioner shall undertake that he or someone specially appointed by him will visit the patient once in every six months. (7) One of the medical certificates accompanying the petition shall, wherever practicable, be under the hand of the usual medical attendant, if any, of the alleged lunatic. Where the person to whom the petition relates has been received under care and treatment under an urgency order, neither of the medical certificates accompanying the petition shall be signed by the medical practitioner who signed the certificate accompanying the urgency order. (8) Nothing herein contained shall prevent a consultation between the persons signing the certificates at any time or place before the signature thereof. (9) Upon the presentation of the petition, the judge, if satisfied with the evidence of lunacy appearing by the medical certificates, may forthwith make an order thereon, or may appoint a time, not being more than seven days after the presentation of the petition, for the consideration thereof, of which appointment notice (unless personally given to the petitioner) shall be sent to the petitioner by post. (11) The petition shall be considered in private, and no one, except the petitioner and the persons signing the medical certificates shall, without leave of the judge, be present at

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the consideration thereof. (12) The judge, if not satisfied with the evidence of lunacy appearing by the medical certificates, may make such further inquiries as he may think fit, and may take evidence on oath, and may visit the alleged lunatic. (13) The judge may make an order on the petition or dismiss or adjourn the same for any period not exceeding fourteen days. (14) Every judge, and all persons admitted to be present at the consideration of any petition, shall be bound to keep secret all matters and documents which may come to his or their knowledge, except when required to divulge the same by lawful authority. (18) No order under this section shall authorise the taking or reception of a patient after the expiration of seven clear days from its date. (19) A copy of the petition shall be sent to the Commissioners or Clerk of the Visitors by the clerk of the asylum, superintendent of licensed house, or person having charge of a single patient, upon the admission of a private patient.

4. (1) In cases of urgency an alleged lunatic (not a pauper) may be received and detained upon an urgency order, accompanied by one medical certificate. (2) The medical practitioner must in such a case have examined the alleged lunatic not more than three clear days previously to the reception of such person. (3) An urgency order may be signed before or after the medical certificate. (4) An urgency order shall, if possible, be signed by a relative or by the husband or wife of the alleged lunatic. (6) An urgency order may be made as well after as before the petition has been presented. (7) Shall remain in force for seven days from its date.

6. No medical certificate accompanying a petition for an order for the reception of a private patient, or accompanying an urgency order, shall be signed by the petitioner or person signing the urgency order, or by certain relatives, or by the assistant of such person.

18. Gives power to justices to order payment of remuneration to medical practitioner for examination of alleged lunatic, whether pauper or not.

38. All letters from patients to be forwarded to the Lord Chancellor or Commissioners unopened.

39. There shall be posted up in every asylum—(*a*) The right of every patient to have any letter written by him forwarded to the Commissioners or Masters in Lunacy. (*b*) The right of every private patient to request a personal and private interview with a Visiting Commissioner or Visitor.

51. The committee of management of any hospital may grant to any officer or servant incapacitated by illness or age, who has served not less than fifteen years and is not less than fifty years old, a superannuation allowance, not exceeding two-thirds of his or her salary.

COURSE OF INSTRUCTION AT HASLAR.

THE sixteen gentlemen who recently obtained commissions as surgeons in the Royal Navy having joined Haslar Hospital, the eleventh session of the Naval Medical School was opened on the 1st inst. Among those present were the Commander-in-Chief, Sir George O. Willes, K.C.B.; Sir John Watt Reid, M.D., K.C.B., Director-General of the Medical Department of the Navy; Inspector-General Dick, R.N.; Captain Colomb, R.N., H.M.S. *Duke of Wellington;* Deputy Inspector-General Mortimer, R.N.; Brigade Surgeon Codrington, A.M.S.; Mr. Giffard, R.N., Secretary to the Commander-in-Chief; Fleet Surgeon Maclean, R.N.; and Flag-Lieutenant Floyd, R.N.

Fleet Surgeon Walter Reid, M.D., who conducts the course of instruction, delivered the opening address. He pointed out the advantages to those entering the Naval Medical Service of a residence at Haslar Hospital, with its many naval associations and surroundings, and gave an outline of the course that would be carried out during the session.

At the conclusion of the address the Medical Director-General thanked the Commander-in-Chief for being present; and Sir George Willes, speaking in response, welcomed into the naval service the gentlemen who had just entered, and offered them some friendly advice, of which, after fifty years' experience of naval life, he knew the great value.

The opening ceremony over, all present adjourned to the mess-room, where the visitors were entertained at luncheon by the officers of the establishment.

THE MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.

AT a meeting held on Feb. 26th, the Central Committee of the Association of Members of the College of Surgeons passed the following resolution: "That the Association of Members of the Royal College of Surgeons, believing that the proposal to increase largely the number of Honorary Fellows of the College would in no way tend to a solution of the questions now pending between the Council and the Members, determines to resist the adoption of such a scheme as being detrimental to the best interests of the College, its Members and Fellows."

At the same meeting a sub-committee was appointed to consider and report to the Central Committee such alterations in the existing charters of the College as it may seem advisable to draft, in view of the presentation to the Privy Council of the petition now in course of signature by the Members of the College.

LONDON SANITARY PROTECTION ASSOCIATION.

AT the fifth annual general meeting of this Association, held last Saturday, in their offices, 1, Adam-street, Adelphi, Mr. Robins, F.R.I.B.A., read the report of the Council, which congratulated the members on their numbers, now exceeding 1000. The report gives a long list of country mansions inspected by the engineers during the year, also a list of important buildings in London and the neighbourhood, including amongst others the London Lock Hospital, St. Thomas's Hospital (part of), Grove Hall Asylum, Bow, and Bethnal House Asylum. The general character of the houses inspected was as insanitary as ever, only 5 per cent. being found in perfect order, and 9½ per cent. (in addition) in fairly good order, whilst in 60 per cent. foul air was escaping directly into the houses, and in 21 per cent. sewage was partly retained underground by leakage or choking of pipes.

In moving the adoption of the report, the Chairman said that their system was one of practical testing. The engineers continued to use the "smoke rockets," and found them very useful.

Mr. Timothy Holmes, honorary treasurer, having read his report—showing the receipts (including balance brought forward) to be £2422, and expenditure £1949, leaving a balance of £473, against which are outstanding claims to the amount of about £200—congratulated the Association on the progress which had been made, which he had no doubt would have been much more rapid but for the very satisfactory state of the public health. He alluded in feeling terms to the death of the founder of the Association, Professor Fleeming Jenkin, who had been his own personal friend.

Mr. C. S. Loch, of the Charity Organisation Society, in seconding the adoption of the report, said it was hopeless for them to try to persuade the labouring classes of the importance of keeping their houses in a good sanitary state unless a good example were shown by the class above them.

The report was adopted unanimously, after which all the outgoing members of Council were unanimously re-elected, and the meeting separated after the customary votes of thanks.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5925 births and 4217 deaths were registered during the week ending February 27th. The annual death-rate in these towns, which had steadily increased in the preceding four weeks from 22·1 to 24·4 per 1000, was last week 24·2. During the first eight weeks of the current quarter the death-rate in these towns averaged 23·1, and was 1·6 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 13·1 in Derby, 17·9 in Leicester, 18·1 in Bradford, and 19·3 in Halifax. The rates in the other towns ranged upwards to 28·9 in Manchester, 29·4 in Preston, 30·0 in Plymouth, and 30·5 in Blackburn. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had increased in the previous four weeks from 360 to 425, declined again

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last week to 385; they included 161 from whooping-cough, 91 from measles, 34 from scarlet fever, 33 from "fever" (principally enteric), 33 from diphtheria, 32 from diarrhœa, and not one from small-pox. These zymotic diseases caused no deaths last week in Norwich, Derby, or Birkenhead; whereas they caused the highest death-rates in Nottingham, Plymouth, and Blackburn. Whooping-cough caused the greatest mortality in London, Portsmouth, and Salford; measles in Oldham, Nottingham, Plymouth, and Blackburn: scarlet fever in Leeds: and "fever" in Preston and Wolverhampton. The 33 deaths from diphtheria in the twenty-eight towns included 20 in London, 5 in Bristol, and 2 in Birmingham. Small-pox caused 1 death in Liverpool, and not one in any of the twenty-seven other large towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had declined in the preceding fifteen weeks from 90 to 10, rose to 15 on Saturday last, and 7 new cases were admitted to these hospitals during the week, against but 1 and 2 in the previous two weeks. The deaths referred to diseases of the respiratory organs in London, which had been 479, 584, and 639 in the preceding three weeks, further rose last week to 647, and exceeded the corrected weekly average by 181. The causes of 108, or 2·3 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Leeds, Leicester, Portsmouth, and in five other smaller towns. The largest proportions of uncertified deaths were registered in Salford, Oldham, Hull, and Norwich.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 24·5 and 22·3 per 1000 in the preceding two weeks, rose again to 23·5 in the week ending February 27th, but was 0·7 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 14·1 and 15·3 in Leith and Aberdeen, to 20·8 in Paisley and 31·0 in Glasgow. The 580 deaths in the eight towns showed an increase of 29 upon the number in the previous week, and included 19 which were referred to whooping-cough, 12 to diarrhœa, 6 to "fever" (typhus, enteric, or simple), 6 to scarlet fever, 5 to measles, 3 to diphtheria, and not one to small-pox; in all, 51 deaths resulted from these principal zymotic diseases, against 53 and 46 in the preceding two weeks. These 51 deaths were equal to an annual rate of 2·1 per 1000, which was 0·1 below the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 17 and 13 in the previous two weeks, rose last week to 19, of which no fewer than 17 occurred in Glasgow. The 6 deaths referred to "fever" showed an increase of 4 upon the exceptionally low number in the previous week, and included 2 in Greenock and 2 in Leith. Five of the 6 deaths from scarlet fever occurred in Glasgow. The 5 fatal cases of measles included 3 in Edinburgh, and 2 in Glasgow; and the 3 of diphtheria corresponded with the number in the previous week. The 12 deaths attributed to diarrhœa showed a decline from the numbers in recent weeks, but slightly exceeded the number in the corresponding week of last year. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 135, 144, and 153 in the preceding three weeks, further rose last week to 159, and exceeded by 34 the number returned in the corresponding week of last year. The causes of 65, or more than 11 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 33·6 and 31·8 per 1000 in the preceding two weeks, further declined to 30·4 in the week ending Feb. 27th. During the first eight weeks of the current quarter the death-rate in the city averaged no less than 32·3 per 1000; the mean rate during the same period did not exceed 23·5 in London, and 18·5 in Edinburgh. The 206 deaths in Dublin last week showed a further decline from the still higher numbers in the previous two weeks, and included 22 which were referred to the principal zymotic diseases, against 26 and 20 in the previous two weeks; 18 resulted from whooping-cough, 2 from "fever," 1 from diphtheria, 1 from diarrhœa, and not one either from small-pox, measles, or scarlet fever. These 22 deaths were equal to an annual rate of 3·3 per 1000; the rate from the same diseases last week did not exceed 2·7 in London and 1·4 in Edinburgh. The fatal cases of whooping-cough, which had been 10 and 16 in the previous two weeks, further rose last week to 18, and exceeded the number returned in any week since the second of this year, when they were 19. The 2 deaths referred to "fever" corresponded with the number in the previous week. Four inquest cases and 3 deaths from violence were registered, and 57, or more than a quarter, of the deaths were recorded in public institutions. The deaths both of infants and of elderly persons showed a considerable increase upon the numbers in the previous week. The causes of 30, or nearly 15 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

INDIA OFFICE.—The Queen has approved of the following admissions to Her Majesty's Indian Medical Service:—Henry Robert Woolbert, George Henry Baker, Thomas Grainger, M.D., Joseph Rosamond Adie, Arthur Charles Younan, Alfred William Alcock, Arthur Rea Edwards, and John Macfarlane Cadell to be Surgeons in the Bengal Medical Establishment.

The Queen has approved of the retirement from the service of the following officer of Her Majesty's Indian Military Forces:—Surgeon-Major Richard Power, of the Bengal Army. The following officers are granted a step of honorary rank on retirement:—Surgeon-Major Edwin Clement Bensley and Surgeon-Major Richard Power, both of the Bengal Army, to be Brigade Surgeons.

RIFLE VOLUNTEERS.—18th Lancashire (Liverpool Irish): David Edgar Flinn, Gent., to be Acting Surgeon.

Correspondence.

"Audi alteram partem."

THE RATIONAL (?) METHOD OF TREATMENT OF HYDROPHOBIA.

To the Editor of THE LANCET.

SIR,—I think it very necessary to give a caution in regard to Dr. Roy's recommendation of the hypodermic injection of snake-poison in rabies. Dr. Roy tells us "that while brooding over our failures it struck him that Nature could not be so improvident and callous as to leave us thoroughly helpless and unprotected"; and so the brilliant idea is advanced that Nature has been good enough to provide against the ills of mad dog bite by sending us blessings in the shape of venomous snakes. Dr. Roy may be unaware that curara has certain, so to speak, physiological properties in common with cobra-venom; and he is possibly unaware also that curara has been recommended as a remedy in hydrophobia—not, it must be confessed, with any very great success. Passing over the crude, and in some particulars incorrect, description of the physiological action of snake-venoms, I come to the extraordinary recommendation that one grain of cobra-venom should be injected every two hours into the tissues of a person suffering from rabies, according to the symptoms observed. In determining the dose of venom to be injected, Dr. Roy states that he has fixed upon the "happy medium," as ten or fifteen grains are injected into the tissues by a good bite. Now, it is impossible for us to determine what quantity is injected into the tissues at one bite; all we know is that about thirteen grains of the liquid venom—which upon drying is reduced to four or five grains—are obtained from a full-grown vigorous cobra by a certain process, and that that quantity represents almost, if not quite, the contents of the poison glands at one time.

The question then arises, What quantity of cobra-venom would be sufficient to destroy the life of a full-grown man? As we have no direct evidence to guide us, we must take such cases as bear upon the subject. There is a case on record (Chevers's Medical Jurisprudence) in which one krait —a snake having poison glands of a much smaller capacity

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than those of the cobra—killed three men and seriously poisoned a fourth, one after the other. Supposing the glands to have contained eight grains of the liquid venom—an excessive estimate, seeing that the animal was only three-quarters grown—the last man mortally bitten could not have received more than two grains at the very utmost, sufficient to prove fatal in less than eighteen hours. The Indian Snake-poison Commission, of which I was a member, showed that a dog weighing 17 lb. could be killed by the hypodermic injection of one-sixteenth of a grain of dried cobra-venom, equal to about one-third of the fluid venom, in thirty-two hours. It is therefore highly probable that the smallest fatal dose of liquid cobra-venom does not exceed two grains, and that is giving the very outside limit.

Now for the next point. Everyone practically acquainted with the subject knows that cobra-venom is a cumulative poison. After the injection of a grain into the tissues of a full-grown man no symptoms would be manifest in two hours, so two grains would certainly be injected—an undoubtedly mortal dose.

Would it not have been better for Dr. Roy to have put his theory to the test first in the case of the lower animals. Mad dogs are by no means uncommon in India, and, fortunately, we are not tied down by any foolish restrictions. At any rate, such an experiment as he recommends in the case of the human subject would be utterly unjustifiable in the face of the facts set forth, and in the absence of any successful experimental investigations on the lower animals.

I am, Sir, yours truly,

Goalundo, Bengal, Jan. 29th, 1886. VINCENT RICHARDS.

LUNACY IN THE DOMESTIC CIRCLE.

To the Editor of THE LANCET.

SIR,—The Lunacy Laws, which are about to be consolidated and amended by Acts of Parliament, introduced by the Lord Chancellor, who is the State guardian of lunatics, as he is of minors, recognise, as heretofore, but two conditions of mind. These are lunacy and sanity. The intermediate state, of which medical practitioners are fully cognisant, displays itself in the form of eccentricities, often innocent, but sometimes malign, and is not recognised by law till the subject is so lost to self-control as to be unable to resist breaking the law. Nor is it as a rule admitted, if the crime falls short of something very heinous, that this intermediate state divests an individual of responsibility. The great dramatist so depicted his ideal in "Hamlet" that experts of the present day are divided in opinion as to whether he intended the madness to be feigned or real. A nineteenth century jury would in all probability in such a case realised acquit a murderer on the ground of insanity, while in the absence of murder they would on similar evidence to that of the dramatist pronounce the person sane. There are many "Hamlets" at large in society, causing as much remorse in their family circle as Hamlet is represented to have done, yet equally difficult to pronounce insane. Some of these will not be recognised as insane till they become murderers. Many of the criminal lunatics have passed through the intermediate state recognised by medicine, but not admitted by law. Most people can point to friends or acquaintances a little "touched." The peace and happiness of many a domestic circle are marred by such ones. So long as these remain innocent they may be fairly left to themselves, but something is needed to enable relatives to have control exercised whenever the want of mental balance threatens to lead on to such disregard of moral and social order as is often seen. The line between the individual of one false idea and the lunatic is indefinable. The false impression in the sane should be transient, while in the insane it is persistent. It may not be easy for the law to take cognisance of such a one, "nor stands it safe with us to let his madness range." If, however, a medical man certifies that a person is of unsound mind, he renders himself liable to an action at law, in which a jury may take a different view, and thus the medical man may be subjected to heavy costs and damages. In the proposed amendment of the Lunacy Laws protection should be given to practitioners certifying to the best of their ability and belief, or they will evade the responsibility, and leave lunatics to the care of their friends.

I am, Sir, yours obediently,

March 1st, 1886. GENERAL PRACTITIONER.

"THE CORPUS LUTEUM."

To the Editor of THE LANCET.

SIR,—The leader in your issue of January 30th, on the above subject, raises some old questions of great importance, which are not yet finally settled, though the facts upon which their settlement depends are known; they are as follows:—A corpus luteum is a structure developed in the higher mammalia for the purpose of closing, in a round-about way, the wound of the ovary caused in the process of extrusion of an ovum; the plicated yellow membrane developing ultimately into connective tissue and a cicatrix. The complicated method of this process has probably some additional purpose which is not at present clear. A corpus luteum is a corpus luteum or it is not one—that is to say, there is no such thing as a false one. Again, all corpora lutea are of menstruation, or more correctly, of ovulation, and the great question raised is, in what way does the corpus luteum, when impregnation occurs, differ from the corpus luteum when impregnation does not occur? The answer is that while there is often a difference in size, there is no such constant difference as to lead us to say with certainty that impregnation has or has not occurred. The only certain difference is in their duration: in the one case the duration of the corpus luteum as a body of characteristic appearance, and not simply a shrivelled mass of connective tissue, is limited to five or six weeks; in the other, if pregnancy is maintained to the full time, to a similar period after parturition, or after abortion if that takes place. The average size of the two, I believe, is frequently the same, and not very large, the average longest diameter not exceeding half an inch; the largest corpora lutea, which sometimes, though rarely, almost equal the ovary in size,[1] and measure from three-quarters to an inch in length, are, with some exceptions, only developed when pregnancy occurs; an exceptionally large corpus luteum without pregnancy is figured by Coste in his Atlas (Plate I[a], Fig. 5), and I have seen one in an ovary removed by Mr. Willett for early cystic disease. It is well known that there may be no corpus luteum at all either with or without pregnancy, and it appears that the corpus luteum is subject to the same variations in extra- as in intra-uterine pregnancy. Coste recognised the difficulty, and, on page 260 of the "Histoire du Développement des Corps Organisés," he answers the question of the possibility of being able to determine, by the characters of the corpus luteum, if a woman had or had not been lately pregnant. "Je crois, pour ma part, à la possibilité d'une semblable détermination,.....mais il ne faut pas oublier que, dans une question aussi délicate, on ne peut avoir recours à ce moyen de conviction que pour les cas où il a une incontestable signification, car il y a des circonstances dans lesquelles on ne peut en tirer aucun parti."

The matter appears to stand thus: we are unable to say, with certainty, in a large proportion of cases, from the characters of a corpus luteum whether pregnancy has or has not occurred, and the value of this as a single criterion for our own information is limited, and for medico-legal evidence quite unreliable. No one, however, who has carefully studied the anatomy of parturition and abortion should have much difficulty in deciding whether a uterus and vagina have undergone one of these processes recently, say, within a month or six weeks of the event, especially in such cases when some complication has caused the death of the patient.—I am, Sir, your obedient servant,

Harley-street, Feb. 9th, 1886. WALTER G. A. GRIFFITH.

"MR. HORSLEY'S CRITICISM OF PROFESSOR SCHIFF."

To the Editor of THE LANCET.

SIR,—Now that Dr. Huggard has made the *amende honorable*, I should be loth to seek a further hearing did I not feel that the importance of Professor Schiff's latest announcement deserves special attention by your readers. Dr. Huggard quotes Professor Schiff (*verbatim*) as saying that although the opinion that the crossed lateral (pyramidal) tract is motor is a very general one, he (Professor Schiff) is going to prove that it has no such function. It

[1] See specimen No. 3072, Path. Series, St. Bartholomew's Hospital Museum.

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certainly is a very general opinion, and it seems to me that Professor Schiff will have to follow the example of Professor Ptthmllnsprts, in Kingsley's "Water Babies"—i.e., "get up very early in the morning and eat his breakfast overnight" "in order to prove" the contrary; and yet I daresay, like that distinguished person, he too will do it, "at least to his own satisfaction."—Yours sincerely,

Park-street, W., Feb. 26th, 1886. VICTOR HORSLEY.

P.S.—The last paragraph of Dr. Huggard's letter will be fully criticised in my paper in the forthcoming April number of *Brain*.

LIVERPOOL.

(*From our own Correspondent.*)

A YEAR'S PORT SANITARY WORK.

DR. J. STOPFORD TAYLOR, the medical officer of health, has just presented to the Health Committee his annual report on the work done by the officers of the port sanitary authority, 1885. Of a total of 20,894 vessels which entered the port during the year, 4078 were inspected, of which 2841 were British, 3873 were found in fair sanitary condition, and 205 defective. In 72 the forecastles, peaks, deck-houses, or cabins required cleaning, as well as painting or lime-washing; in 12 the bulkheads were defective; in 80 there was deficient ventilation; in 22 the closets were faulty; and in 19 the deck over the quarters occupied by the crew required caulking. The improvements mentioned in former reports continued, and all suggestions of the inspector were readily complied with. The condition of the French, Spanish, Italian, Russian, and Greek vessels had been fairly satisfactory during the year; the German, Danish, Belgian, Dutch, Swedish, and Norwegian continued to be kept in excellent order. The Liverpool-owned vessels were, as a rule, in very good condition, and so also were most of the English ships. The steamers carrying Lascar crews appeared to a casual observer to be crowded and untidy, but on inspection there was sufficient room, and the crews' quarters were in a very fair condition. The Spanish ships had shown a decrease, which might, in a measure, be accounted for by the epidemic prevalence of cholera in Spain.

THE LATE REV. HUGH STOWELL BROWN.

Liverpool has sustained a severe loss in the death of the well-known Baptist minister, the Rev. Hugh Stowell Brown. The deceased was a warm supporter of the local medical charities, whose claims he used to advocate long before the institution of Hospital Sunday, in the establishment of which he took a warm interest, and was from the first a member of its committee.

THE DISPENSARIES.

The annual meeting of the Liverpool Dispensaries was held last week. A resolution to abolish the honorary medical appointments, substituting a paid chief medical officer at each of the three dispensaries, was carried by a small majority. A great change has taken place in the position of these institutions within the last thirty years. Formerly the honorary appointments were eagerly sought and keenly competed for by local physicians and surgeons, who subsequently rose to the highest position. But of late years this has not been so, and there has been comparatively little competition for the honorary offices, although a pecuniary honorarium has been added of forty guineas annually. There is much to be said in favour of the proposed change. It is to be hoped that better accommodation will be provided for the resident medical officers, both present and future, at the North Dispensary, which was built a great many years ago, in which the apartments, especially the bedrooms (if, indeed, they deserve such a name), are simply wretched. It speaks volumes for the patience of the resident medical officers that they have so long endured such a state of things.

THE LORD BISHOP AT THE ROYAL INFIRMARY.

The Right Rev. Dr. Ryle, Bishop of Liverpool, preached on Sunday last in the chapel of the infirmary at the afternoon service. The chapel, which is the gift of a former president, was filled to overflowing by the patients and officials. The musical part of the service was well rendered by a choir of nurses. After the service the bishop visited the wards.

NORTHERN COUNTIES NOTES.

(*From our own Correspondent.*)

NEWCASTLE INFIRMARY.

IT was stated at the annual meeting of this institution and some points of which I briefly alluded to in my last letter, that the idea generally prevails that all in-patients are admitted in consequence of being provided with a letter from a governor who is a subscriber to the hospital of two guineas a year, and that these letters are sometimes thoughtlessly given to impostors who, on the strength of them, are without question received into the hospital. This is not the case; no patients are admitted whose cases are not real and generally pressing ones; and, further, it is shown that many are received who have no letter. It is shown in the report that of the 2846 admitted in the past year, only 1294, or less than one-half, were provided with letters. Cases of accident are always received the moment they reach the door. It was also pointed out, as regards the fact of the number of casuals relieved being double that of five years ago, that one cause has had a powerful effect on the increase of late—namely, the large amount of distress which has prevailed in the district. "Hunger and nakedness have produced disease, whilst the sufferers, often clerks and artisans who have once held a respectable position in society, having been long without employment, have not the means of procuring food, much less of applying to their ordinary medical advisers for relief." It was also shown in the report that the financial position of the infirmary is far from being satisfactory, as evidenced by the fact that the annual subscriptions have remained nearly stationary in amount for nearly a quarter of a century, and for the past year have been actually less by about £150 than they were ten years ago. Altogether there was a deficiency of income of over £5000. The infirmary had received from the Hospital Sunday Fund £1916 14*s.* 7*d.*—more than last year by £169 3*s.* 5*d.*

THE MATCH-POISONING MANIA.

The match-poisoning mania appears to be extending in the North. A case is reported from Sunderland in which a young man, aged twenty-two, during some depression of mind from ill-health, attempted to destroy his life. He steeped the heads of a box of matches in some hot tea, which he swallowed. Fortunately the rash act was observed by his father, and immediate steps were taken to counteract the poison, so far apparently with success.

DEATH FROM LEAD POISONING.

An inquest has been held by the city coroner of Newcastle on the body of Eliza Jane Hutchinson, who had died rather suddenly. It was shown that the deceased, a single woman aged twenty-eight, had worked for three years at a white lead factory in Newcastle, and had been under treatment three months ago at the Newcastle Infirmary for lead poisoning. In her last and fatal illness she was seized with sickness, pain in the head and limbs, and then appeared to go into a fit of an epileptic nature, from which she did not recover. The verdict was "Death from natural causes accelerated by the effects of white lead poisoning." It is to be feared that these cases will recur from time to time, unless some means can be devised for doing without female hands in the manufacture of white lead.

NEWCASTLE CLINICAL SOCIETY.

The annual banquet of the Clinical Society took place on the 19th ult. at the Central Station Hotel in this city. Dr. Limont presided, and in addition to being well attended by practitioners in the district, the entertainment was very spirited and successful. Dr. Campbell undertook the onerous and important post of secretary, and he and the other promoters are to be congratulated on the result.

DEATH OF DR. MORRIS, CHESTER-LE-STREET.

Great regret has been felt here in medical circles by the almost sudden death of Dr. Walter Cameron Morris, an active general practitioner at Chester-le-Street. Dr. Morris received a severe chill in the course of his arduous duties, which brought on acute enteritis, from which he never rallied, dying on Feb. 12th, after five days' illness. He was attended by Dr. Drummond of this city, and also by Dr. Wards of Pelton Fell. Dr. Morris held several important public appointments, as well as being ordinary medical

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attendant to the Earl of Durham and the household at Lambton Castle. He was in his thirty-sixth year, and leaves a widow and two children.

Newcastle-on-Tyne, February 22nd.

EDINBURGH.

(*From our own Correspondent.*)

THE LATE DR. SIDEY.

By the death of Dr. James A. Sidey Edinburgh has lost one of its best-known practitioners, and a citizen of wide culture and marked literary tastes. In addition to his very extensive general practice, Dr. Sidey held the post of Surgeon to the Calton Prison, one of the most extensive penal institutions in Scotland, and one which has of late years undergone great improvement in its sanitary and domestic arrangements under his advice. Striking evidence of the wide respect in which the deceased gentleman was held was forthcoming last Monday on the occasion of his funeral, which was attended by a very large gathering of his professional brethren and of the general public, notwithstanding the extremely inclement weather which prevailed.

SMALL-POX AT QUEENSFERRY.

Some anxiety has been felt in the neighbourhood of Edinburgh during the last few weeks in consequence of an outbreak of small-pox which has occurred in and around Queensferry, a small town about eight miles from this city. The occurrence was the more alarming from the fact that nearly 2000 operatives are employed there in the construction of the Forth railway bridge, a gigantic piece of engineering work, which it will take several years to accomplish. It was feared that the disease might spread rapidly amongst these workmen, and Queensferry become a focus whence its ravages might spread in various directions. By the prompt action of the local sanitary authorities, and especially of Dr. James Hunter, the medical officer in charge of the works, this risk has been obviated; for at an expense of about £500 a floating hospital has been fitted up on board the *Hugomont*, which provides for the complete and early isolation of cases as they arise. The ship has been arranged on the general plan adopted in the floating hospital on the Thames, and is moored in the Firth of Forth at a safe distance from the shore. Arrangements for thorough fumigation and disinfection have also been completed, and it is anticipated that the disease will shortly be entirely stamped out.

ROYAL SOCIETY OF EDINBURGH.

At the last meeting of this Society, Professor Douglas Maclagan, Vice-president, in the chair, several important papers were read relating to physical science. Sir William Thomson dealt with an interesting point in regard to Newton's law of attraction; he finds that in the case of particles of matter at distances of less than ten micro-millimetres from one another the general law that attraction varies inversely as the square of the distance does not hold true, but that a mutual attraction in an enormously increased ratio comes into action. As an explanation of this deviation from the Newtonian law he offers the ingenious suggestion that there are mutual movements established amongst the molecules of the contiguous particles of matter, in virtue of their close contiguity, analogous to those which result in the cohesion of the molecules, of which each of the particles of matter is itself made up; and that this, superadded to the ordinary gravitation of masses of matter, explains the sudden increase in mutual attraction observed when dealing with these minute distances. A paper by Dr. John Aitken on the effect upon climate of the small conducting power of snow was communicated by Professor Tait. Dr. Aitken finds that although the temperature observed on the surface of snow may be several degrees below zero, that registered immediately underneath the snow layer is not below 32°F. This accounts for the fact that advanced vegetation may be found to have taken place under a thick layer of snow; but although the vitality of vegetable organisms is thus preserved by the presence of a layer of snow which prevents radiation of heat from the soil beneath it, such a soil is cut off from the absorption of heat from the sun's rays so long as the covering of snow persists, and as a result there is great retardation of the season in regions where a great thickness of snow must be removed before the sun's rays gain access to the surface of the soil.

Edinburgh, March 2nd.

ABERDEEN.

(*From our own Correspondent.*)

DEAN OF THE MEDICAL FACULTY.

PROFESSOR STEPHENSON has been appointed Dean of the Medical Faculty in room of Professor Brazier, who lately resigned both that office and the secretaryship, which has not yet been filled up. Many graduates and students will have pleasant recollections of Professor Brazier as the kind and genial secretary who was ever willing to give them the benefit of his advice and lend a sympathetic ear to their complaints.

THE PHYSIOLOGY CHAIR.

Mr. J. McGregor Robertson, M.A., M.B., C.M., Muirhead Demonstrator of Physiology in Glasgow University, is a candidate for the Chair of Physiology in Aberdeen University. He graduated with honours in Medicine and Surgery in 1880, and has since then devoted himself to physiology. He has also written a text-book on "Physiological Physics."

MEDICAL OFFICER OF HEALTH FOR THE CITY.

Dr. Matthew Hay, Professor of Medical Jurisprudence in the University, and Dr. Theodore Thomson, Resident Assistant Medical Officer to the South-Eastern Hospital, London, are candidates for the post of medical officer of health for Aberdeen. Dr. Hay's professorial duties occupy him only one hour a day for three months in the year, so that practically he could devote the whole of his time to the work of the sanitary department. In his letter of application, Dr. Thomson says he acquired his special public health training under Dr. Littlejohn of Edinburgh, and during the last two years he has made a special study of the various forms of acute infectious diseases, with their prevention, and the kindred subjects of isolation and disinfection.

ABERDEEN ROYAL INFIRMARY.

In their report to be submitted to the next general meeting of the managers of the Royal Infirmary, the Special Sub-inquiry Committee recommend that the medical staff should be increased by (1) a medical officer for diseases of women, (2) two assistant physicians, (3) a surgeon for diseases of the ear, (4) a medical officer for diseases of the skin, (5) a second assistant surgeon, and (6) two additional house residents, a surgeon, and a physician. The Committee of Management must be sadly perplexed by the number of plans for the reconstruction of the hospital submitted for their consideration. Mr. Saxon Snell has sent in a third sketch plan which shows an extension of the medical side of the present building, a new surgical pavilion, and the adaptation of the surgical side of the present building for clinical and administrative purposes. This scheme provides 236 beds, at an estimated cost of £25,000. The financial problem is not the least of the difficulties in the question of remodelling the hospital, and it must be disheartening to the managers, and more particularly to those specially interested in and working out the proposed changes, to find the income for the past year fall short of the expenditure by no less a sum than £956.

SMALL-POX AT WOODSIDE.

Small-pox has made its appearance among the rag-workers at Woodside, near Aberdeen; but the cases were at once removed to the local epidemic hospital, and so the disease is not likely to spread. Almost every year rags give rise to one or two cases of small-pox among the workers in the rag department of the Woodside Paper Works, but prompt isolation has hitherto prevented an epidemic.

OPERATION FOR CANCER OF THE STOMACH.

At a recent meeting of one of the Medical Societies Professor Ogston gave a short account of an operation which he had performed on a patient suffering from cancer of the stomach. Excision of the pylorus, the seat of the disease, was meditated, but the cancerous affection was so extensive that this was neither advisable nor possible, and Dr. Ogston therefore determined to make a duodenal fistula. A loop of

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the duodenum was included in the wound in the abdominal wall, and an opening was made into the bowel on the second day. The patient made an uninterrupted recovery; was regularly fed through the opening in the duodenum after the second day; was out of bed in ten days after the operation, and in three weeks left for his home in the country.

Aberdeen, March 2nd.

IRELAND.

(From our own Correspondent.)

DUBLIN HOSPITALS COMMISSION.

THE sittings of the Dublin Hospitals Commission were resumed last Monday, when some of the medical staff of Mercer's Hospital were examined, to reply to the charges made against that institution by Mr. O'Grady, the senior surgeon. Mr. Holmes, Treasury Remembrancer, a member of the Commission, elicited the fact that there were several gentlemen on the Board of Governors who did not contribute a single shilling to the funds of the hospital, which he considered one of the most important circumstances brought out in the inquiry. The inquiry was continued on the following day. The report of the Commission, which has been so long delayed, will be waited with interest.

THE COLLEGES AND THE LORD-LIEUTENANT.

The following address has been presented to His Excellency the Lord-Lieutenant by the President and Fellows:—"We, the President and Fellows of the King and Queen's College of Physicians in Ireland, beg to approach your Excellency on your arrival in this country as Her Majesty's Viceroy. Our College, which derives its existence from charters granted by Her Majesty's royal predecessors, King Charles II. and King William III. and Queen Mary, and which had additional powers conferred upon it by Her Gracious Majesty in 1878, has ever been mindful of the important trust committed to it, and has endeavoured to discharge its functions by furthering the advancement of medical science and by securing a succession of educated physicians for the service of the State. The King and Queen's College of Physicians has at various times rendered its aid and professional advice to the Government in devising and carrying into effect measures dealing with the public health, and now, as at all times, the College will consider it to be its duty, as it is its anxious desire, to afford every assistance to Her Majesty's Government in all matters relating to both curative and preventive medicine." An address has also been presented by the Royal College of Surgeons to the Lord-Lieutenant, welcoming him to the country as the representative of Her Majesty, inviting his favour to the corporation, and expressing the hope that in future years his recollections of Ireland may be of a pleasurable kind.

BELFAST MAIN DRAINAGE.

This scheme will shortly come before a select committee of the House of Commons, and it is generally expected that it will be opposed by a section of the ratepayers. There is no doubt, however, that a drainage scheme of some kind is urgently required, for it is stated that at present the sewers are blocked up by the tide twice every day, while sewer gas is forced up and into dwelling-houses by defective traps. The chief objection against the scheme of the borough surveyor is that the sewage will go back on the slob and cause a nuisance; and Mr. Lanyon, an eminent engineering authority, believes that this result will take place because the discharge of sewage can only take place after half-ebb, and that it will have to force its way out against the higher level of low water. It is, however, asserted that the discharge can take place and be completed during the first half of the ebb, which removes the difficulty suggested. On the whole, the scheme of the Corporation appears a feasible one, and one which it is to be hoped will not be delayed by a futile opposition.

POLLUTION OF THE RIVER LEE.

Last week in the Vice-Chancellor's court application was made to make a consent a rule of court at the relation of the Cork Corporation against the Macroom guardians. The action was instituted for an injunction to restrain the defendants from using any sewer, &c., for conveying sewage into the Sullane, thereby affecting the purity of the water of the river Lee and rendering the same unfit for use and dangerous to the inhabitants of Cork. It appears that the water-supply of Cork is obtained from the Lee, about two miles above the city, and that the towns of Macroom and Massytown are on the banks of the Sullane, one of the tributaries of the Lee. Some time since several cases of typhoid fever occurred in Cork, which were suspected to be due to impure water-supply, and on inquiry it was found that the drainage of Macroom and the other town was conveyed into the Sullane, and the proceedings above referred to were taken to remedy the evil. The Macroom guardians have agreed to carry out a plan by which any further pollution of the water will be prevented.

NATIONAL LYING-IN HOSPITAL.

In addition to the two large maternity institutions, which have performed so much valuable work in Dublin amongst the poorer classes for so many years, a third lying-in hospital was established some time since, and the first annual meeting of the friends of the hospital was held last week. In consequence of the distance at which it is located from the other lying-in institutions, and because of the large suburban district with which it is contiguous, there is no doubt that it will carry out a very useful work, more especially when the hospital is recognised by the various licensing bodies. The master of the hospital is Dr. William Roe, professor of midwifery in the Royal College of Surgeons, who has had great experience in obstetric practice.

The annual meeting of the Dublin Sanitary Association was held last week, and the incoming president for the ensuing year, Dr. Grimshaw, delivered an address bearing on the sanitary condition of the city.

Dublin, March 2nd.

MEDICAL NOTES IN PARLIAMENT.

The Sale of Poisons.

IN the House of Lords on the 26th ult., in reply to the Earl of Milltown, Earl Spencer stated that the Government were now considering the question of the sale of poisons, and in a very short time he hoped to be able to inform the House whether they intended to introduce a Bill.

The Lunacy Acts Amendment Bill.

The Lord Chancellor, in moving on the 1st inst. the second reading of the Lunacy Acts Amendment Bill, stated that it was impossible to exaggerate the importance of the subject with which this Bill proposed to deal, and few would deny the necessity that existed for fresh legislation with regard to it. The provisions of the Bill, which is substantially the same as the one introduced last year by the Earl of Selborne, having been clearly explained, Lord Coleridge, referring to the proposed extinction by degrees of all private asylums, said that he had been of opinion since he had gained any experience in this matter that it was impossible to effect a real and satisfactory change in the lunacy law as long as it remained possible—human nature being what it was—for those persons who kept asylums to have an interest in retaining patients who were placed in their charge. He thought no one with any experience at all could doubt—regard being had to human nature—that to give a medical man an interest in retaining a patient was to subject his moral nature to a strain which few could bear. He trusted that, so far as this Bill went, something would be done to prevent the multiplication of those asylums. He was glad to see that there were alterations proposed in the Bill regarding the present state of the law as to the examination of patients. He thought that some more stringent provisions might with advantage be introduced in the Bill. Especially was this the case with respect to the examination of the lunatic when it was conducted by the magistrates. It should always be conducted with the assistance of a medical man, and after notice to the lunatic himself that he was to be subject to such an examination, in order that he might be given an opportunity of taking part in the proceedings, and of explaining, if he could do so, the circumstances on which his alleged lunacy was founded. He had known of cases where persons had been examined without the slightest idea on their part that they were being examined, and without the slightest expectation on their part that their imprisonment in an asylum was pending. So far as he could see, another useful provision was not to be found in the Bill: According to the present state of the law, the person who put the law

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in force against a lunatic, however *bonâ fide* he might act, was not protected. He could not help thinking that this state of the law in many instances caused great hardship, the persons so acting being oftentimes subject to actions for heavy damages. He submitted that some provision protecting the person who acted in a *bonâ fide* manner should be inserted in the measure. The Earl of Milltown, Earl Beauchamp, Lord Bramwell, and others having joined in the debate, the Bill was read a second time.

The Lighting and Ventilation of the House.

On the 2nd inst. the Earl of Limerick moved that the evidence of John Percy, M.D., taken before the Select Committee on the Office of the Clerk of Parliaments and Office of the Gentlemen Usher of the Black Rod in session 1869 be laid upon the table, and that the same be printed. The evidence would be of much value in reference to the lighting and ventilation of the House. The motion was agreed to.

The Pollution of the Thames.

In the House of Commons, on the 25th ult., Mr. Childers, in reply to Mr. T. Rogers, said that the recommendations of the Royal Commission on the Pollution of the Thames by the outfalls at Barking Creek and Crossness had been repeatedly under the consideration of the Metropolitan Board, who have charge of the sewerage of London. They have not yet finally reported their conclusions, but he would press the Board for an early answer.

The Lunacy Commissioners' Reports.

In answer to Mr. W. Corbet, Mr. Childers said that the English Commissioners will undertake to have ready by the end of April, for presentation to Parliament, a tabular statement showing the total number of lunatics in various institutions up to the beginning of each year. The Scotch Commissioners expect to be able to present their report in future by the middle of June.

Army Medical Officers.

In reply to Sir T. Lawrence, Mr. Campbell-Bannerman said that no British medical officers had been sent to report on the campaign between Servia and Bulgaria.

Aberdeen University.

On the 2nd inst., in reply to Mr. J. Campbell, who asked the Secretary for Scotland whether he was not mistaken in referring recently to the chair of physiology at Aberdeen as being at present vacant, Mr. Trevelyan stated that he had received a letter from Professor Stirling intimating that he does not propose formally to resign till the close of the present session.

Medical News.

UNIVERSITY OF CAMBRIDGE. — At a congregation held on the 25th ult. the degree of M.B. was conferred on

W. D. Anderson, Trinity.

ST. ANDREWS UNIVERSITY.—The honorary degree of Doctor of Laws has been conferred on

Dr. A. Keiller, F.R.S.E.

SOCIETY OF APOTHECARIES.—The following gentlemen passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on the 11th ult.:—

Pridham, William F., Cromwell-crescent, South Kensington.

Passed on the 18th ult.:—

Deyns, Charles John, Fenny Stratford, Bucks.

Passed on the 25th ult.:—

Kempe, Charles Edward, Ladbroke-grove-road.
Ward, Stanley Edward, Haverhill, Suffolk.

THE death is announced of Dr. Pleischl, formerly assistant to Professor Oppolzer of Vienna.

ON the 27th ult. Dr. B. W. Richardson delivered a lecture on the "Medical Aspects of the Temperance Question" in the Free Assembly Hall, Edinburgh, in the presence of a large audience.

RATING OF PUBLIC CHARITIES.—A conference of authorities of public charities will be held at Guy's Hospital on the 6th inst. (to-day) at 3 P.M., to consider the best means of promoting the passing of an Act of Parliament to restore to public charities exemption from liability to local rates.

ROYAL INSTITUTION.—Professor Arthur Gamgee, M.D., F.R.S., Fullerian Professor of Physiology, R.I., will on Tuesday next (March 9th) begin a course of six lectures on the Function of Circulation. Dr. John Abercrombie, senior, has been elected a member of the Institution.

ROYAL BERKSHIRE HOSPITAL.—At the forty-seventh annual court of the governors of this institution, held on the 23rd ult., it was reported that the balance of £1933 due to the treasurer at the beginning of 1885 had by legacies and donations been paid off and a small balance left to be carried to the current year. The ordinary receipts amounted to £5710 and the expenditure to £6940. The number of in-patients had amounted to 1038, and out-patients to 1536.

ROYAL HOSPITAL FOR CHILDREN AND WOMEN.—The annual general court of governors of this institution was held on the 26th ult., when the committee reported that the number of in-patients during the year was 479, as compared with 471 in 1884; and of out-patients, 7132, as compared with 6015. The reliable income of the hospital was about £2000 per annum less than the required expenditure, and they therefore appealed most urgently for new annual subscriptions, which really form the surest portion of income, donations necessarily being of a fluctuating character, and requiring the committee to make extraordinary efforts to meet expenditure. The deficit at present existing was £450, against £420 last year. The expenditure for the past year had been £3562.

HASTINGS HOSPITAL.—An important discussion, reopening the question of the building site of the new hospital, which, after having been before the public for something like thirteen years, was believed to be definitely settled, took place at the meeting of the governors of the institution on the 2nd inst. Notwithstanding the fact that the former edifice has been wholly demolished and the fresh foundations got in, it was proposed that another site be purchased at a cost of £6000 for the purpose of erecting thereon a new hospital. The arguments in favour of the new project were that the ground on which the old infirmary stood could be sold for £15,000, and that the new site would be more open and in every way more suitable. Eventually a vote was taken, when 47 were in favour of the motion and 22 against. The minority demanded a poll.

MEDICO-PSYCHOLOGICAL ASSOCIATION. — The quarterly meeting of this Association was held at Bethlem Hospital on the 24th ult., Dr. H. Rayner in the chair. Dr. Mickle read a paper on "Some Abnormal Forms of Breathing," and a paper by Dr. Savage was also read on the subject of "Drunkenness in relation to Criminal Responsibility," in the discussion upon which latter paper the opposite views held by judges in recent cases were remarked upon as leaving the present legal aspect of the subject in an unsatisfactory state.—The examinations for the certificate in Psychological Medicine will be held as follows: For England, on March 29th and 30th, Nov. 30th, and Dec. 1st, at Bethlem Hospital; for Scotland, in July next (date unfixed), and Dec. 11th, at the Royal Edinburgh Asylum; and for Ireland, on Jan. 22nd, at Dublin. Candidates intending to present themselves for examination must give notice thereof fourteen days prior to the examination. In England, to Dr. Rayner, Hanwell; in Scotland, to Dr. Rutherford, Dumfries; and in Ireland, to Dr. Courtenay, Limerick.

HOSPITAL SATURDAY FUND.—The board of delegates of this fund met on the 27th ult., when it was decided to hold the ladies' street collection on July 17th next, the workshop collection being due and payable, as usual, on and after the first Saturday in September. A statement was submitted by the Secretary, showing that the organisation had, during the twelve years of its existence, distributed £74,271 among the hospitals, dispensaries, convalescent homes, and surgical appliance societies of the metropolis. In 1874, when the fund was started, only £6141 was collected, and six years afterwards there was merely an addition of £11, but in 1885 the receipts had increased to £11,192. The awards advanced from £4494 in the first year to £5250 in the sixth, and £9500 in the twelfth year. The percentage of expenses to awards was £35·20 in the first four years; 18·30 in the second four years; and in the last four years 14·50. The Council was instructed to investigate the working expenses with a view to the reduction of the cost of management without impairing the efficiency of the work done.

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Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BARTLETT, JACOB H., L.R.C.P.Ed., L.F.P.S.Glas., has been appointed Medical Officer for the Sarratt District of the Watford Union.

BLATHERWICK, CHARLES, M.D., M.R.C.S., has been appointed Government Inspector of Alkali Works in Scotland.

BLUMER, F. MILNES, B.A., M.B., has been appointed Medical Officer of Health for the Borough of Stafford.

BROWN, ARTHUR F. F., M.B.Dur., M.R.C.S., has been appointed Medical Officer for the Rochester District of the Medway Union.

CLAY, AUGUSTUS FREDERIC, M.R.C.S., L.S.A.Lond., has been appointed Casualty Surgeon to the Queen's Hospital, Birmingham.

GODDARD, CHARLES ERNEST, L.R.C.P.Lond., M.R.C.S., A.K.C.Lond., has been appointed Surgeon to the Sudbury Village Hospital; and District Medical Officer and Public Vaccinator for No. 2 Harrow Division of the Hendon Union.

MEADOWS, Dr. ALFRED, has been appointed Consulting Physician Accoucheur to the St. George's and St. James's Dispensary.

Births, Marriages, and Deaths.

BIRTHS.

BRACE.—On the 1st inst., at Queen's-gate-terrace, S.W., the wife of William H. Brace, M.D., of a son.

CAMPBELL.—On the 24th ult., at Princes-gate, Liverpool, the wife of W. Macfie Campbell, M.D., of a son.

DEIGHTON.—On the 27th ult., at St. Bernard's, Hills-road, Cambridge, the wife of Frederick Deighton, M.A., M.R.C.S., of a son.

GILKES.—On the 23rd ult., at Carisbrooke-road, Walthamstow, the wife of Norton Gilbert Gilkes, M.R.C.S., of a son.

GRAHAM.—On the 23rd ult., at Sloane-terrace, Sloane-street, Chelsea, the wife of Arthur Graham, L.R.C.S., L.R.C.P.Ed., of a son.

MCKENZIE.—On the 1st ult., at Musgrave-road, Berea, Durban, Natal, the wife of A. McKenzie, M.B., C.M.Edin., M.R.C.S.Eng., of a son.

RINGER.—On the 21st ult., at Lower Seymour-street, Portman-square, the wife of Deputy Surgeon-General Theobald Ringer, Bengal Army (retired), of a son.

SAWTELL.—On the 24th ult., at Stapleton-hall-road, Stroud-green, N., the wife of T. H. Sawtell, M.D.Lond., of a daughter (stillborn).

SPARROW.—On the 23rd ult., at Haslemere, East Southsea, Hants, the wife of Gordon Sparrow, M.R.C.S., L.R.C.P.Ed., of a son.

STAMPER.—On the 26th ult., at Pembroke Dock, the wife of J. Fenton Stamper, M.D., of a son.

VERDON.—On the 22nd ult., at Brixton-road, S.W., the wife of Walter Verdon, M.D., of a son.

WILLES.—On the 28th ult., at Crooms-hill, Greenwich, the wife of William Willes, L.R.C.P., M.R.C.S., of a son.

WILSON.—On the 28th ult., at Roorkee, India, the wife of Surgeon-Major James Wilson, of twins.

MARRIAGES.

BROWNE—DAVIES.—On the 3rd inst., at Lancaster-gate, W., Surgeon-Major Andrew Lang Browne, M.D., Medical Staff, younger son of John Browne, M.D., of Dundalk, Ireland, to Edith Margaret, only daughter of the late Rev. Thomas M. Davies, M.A., Rector of Llanilid-cum-Llanharran, Glamorganshire.

DAVIS—ATKINSON.—On the 2nd inst., at Christ Church, West Hartlepool, by the Rev. H. E. Savage, Edwin Harry Davis, M.R.C.S., L.S.A.Lond., to Mary, daughter of James Atkinson, M.D., of West Hartlepool.

FAULKNER—BEEBY.—On the 10th ult., at St. John's Church, Colaba, Bombay, Alexander S. Faulkner, Surgeon, I.M.S., 19th Bombay Infantry, to Anne W., daughter of the late Rev. W. Beeby.

STIVENS — DRABBLE. — On the 25th ult., at St. Peter's, Bayswater, B. Lyne Stivens, M.D., M.R.C.S., to Isabel Jemima (Bella), only daughter of G. W. Drabble, Esq., of Pembridge-square, and Los Altos, Sandown, Isle of Wight.

DEATHS.

FALWASSER.—On the 4th ult., at Neemuch, Central India, Francis Falwasser, Surgeon-Major, Army Medical Staff, F.R.C.S., fourth son of the late John Frederick Falwasser, J.P., of Sherborne, Dorsetshire.

FORSTER.—On the 2nd inst., at Upper Grosvenor-street, J. Cooper Forster, M.B.Lond., ex-President of the Royal College of Surgeons, in his 63rd year.

MAGENISS.—On the 1st inst., at The Bolton, Peter Magenis, L.R.C.P.Ed., M.R.C.S., formerly of Euston-road.

SIDEY.—On the 24th ult., at Heriot-row, Edinburgh, James A. Sidey, M.D., aged 61.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

BOOKS ETC. RECEIVED.

BUMPUS, J., London.
The Rational Treatment of Strictured Urethra by Absorption. By G. C. Macdonald, M.R.C.S. pp. 72, with Coloured Plates.

CHURCHILL, J. & A., New Burlington-street, London.
The Prescriber's Pharmacopœia. Revised and Edited by Nestor Tirard, M.D.Lond. Sixth Edition. pp. 168.
Outlines of Infectious Diseases: for the Use of Clinical Students. By Jas. W. Allan, M.B. pp. 120.
Clinical Lectures on the Diseases of Women. By J. Matthews Duncan, M.D., LL.D., &c. Third Edition, much Enlarged, with Appendices.
Hospital Sisters and their Duties. By Eva C. E. Lückes. pp. 164.

CLOWES & SONS, Charing-cross, London.
The Optical Manual, or Handbook of Instructions for the Guidance of Surgeons in Testing the Vision of Recruits, &c. By Surgeon-General T. Longmore, C.B.

GRIFFIN, C., & Co., Exeter-street, Strand, London.
The Management of Labour and of the Lying-in Period. By H. G. Landis, A.M., M.D. pp. 329.

HIRSCHWALD, A., Berlin.
Vorlesungen über Pharmakologie für Aertze und Studirende. Von Dr. C. Binz. III. Abtellung (Schluss).
Ueber Piper Methysticum (Kawa). Untersuchungen von Dr. L. Lewin.

KEENER, W. T., Chicago.
Insomnia and other Disorders of Sleep. By Henry M. Lyman, A.M., M.D. pp. 239.

KEGAN PAUL, TRENCH, & Co., Paternoster-square, London.
Sunshine and Sea: a Yachting Visit to the Channel Islands and Coast of Brittany. By a Country Doctor. pp. 266, with Illustrations.

LEWIS, H. K., Gower-street, London.
Elements of Materia Medica and Pharmacy. By Alfred W. Gerrard. pp. 491.
Lewis's Pocket Medical Vocabulary. pp. 215.
On the Fœtus in Utero as Inoculating the Maternal with the Peculiarities of the Paternal Organism. By Alex. Harvey, M.A., M.D. pp. 140.
On Diseases of the Lungs and Pluræ, including Consumption. By R. Douglas Powell, M.D.Lond. Third Edition, Rewritten and Enlarged. pp. 497, with Illustrations.

LONGMANS, GREEN, & Co., Paternoster-row, London.
The Rotifera or Wheel-Animalcules. By C. T. Hudson, LL.D.Cantab., and P. H. Gosse, F.R.S. Part II.

PENTLAND, YOUNG J., Edinburgh.
Atlas of Venereal Diseases. By P. H. Maclaren, M.D., F.R.C.S.E. Fasc. IV.

ROKKER, H. W., Springfield, Illinois.
Seventh Annual Report of the State Board of Health of Illinois. With an Appendix. pp. 613.

SMITH, ELDER, & Co., Waterloo-place, London.
St. Bartholomew's Hospital Reports. Edited by W. S. Church, M.D., and John Langton, F.R.C.S. Vol. XXI. pp. 312-103.
The Two Foundations of St. Bartholomew's Hospitals, A.D. 1123 and A.D. 1546. By Morrant Baker, F.R.C.S. pp. 43.

STYLES & CASH, New York.
Essentials of the Physical Diagnosis of Thoracic Diseases. By E. Darwin Hudson, jun., A.M., M.D. pp. 63.

THIN, J., Edinburgh.
Remarks on the Epidemic of Measles in Sunderland. By H. Drinkwater, M.D., C.M., &c. pp. 68.

TRÜBNER & Co., Ludgate-hill, London.
Puerperal Convulsions and the Diseases of the Puerperal Period. By Joseph Kucher, M.D. pp. 311.

VAIL, J. H., & Co., New York.
The Laws and Mechanics of Circulation, with the Principle involved in Animal Movement. By W. H. Triplett, M.D. pp. 516, with numerous Illustrations.

WARNE, F., London and New York.
Food and Feeding. By Sir Henry Thompson, F.R.C.S., &c. With an Appendix. Fourth Edition, Considerably Enlarged. pp. 174.

Diphtheria and its Management; by J. E. Winters, M.D.—An Experimental and Clinical Study of Air-Embolism; by N. Senn, M.D. (Collins, Philadelphia.)—Our Duty towards Animals; by Philip Austin.—Le Vaccin de la Fièvre Jaune; par Dr. Domingos Freire.—Transactions of the Medical and Chirurgical Faculty of the State of Maryland, 1885.—Lectures on the Care and Treatment of the Insane, for the Instruction of Attendants and Nurses; by W. C. Williamson, M.D. Parramatta.—Examinations of the Auditory Organs of School Children; by Dr. F. Bezold of Munich.—Kystes Tumeurs perlées et Tumeurs Dermoïdes de l'Iris; par Prof. E. Masse. (Masson, Paris.)—Index Medicus, Vol. VIII., No. 1.—The Art of Primary Union; by Frank H. Hamilton, M.D.—Das Polarisirte Licht; von Dr. Med. J. Pohl-Pincus. (Grosser, Berlin.)—Zur Aetiologie der Skoliose; von Dr. Felix Schenk. (Heinecke, Berlin.)—A Universal System of Shorthand; by W. J. O. Michell.—The Climate of South Central Florida; by J. M. Keating, M.D.—Traitement des Collections Purulentes du Foie; par le Dr. Eugène A. Caravias.—Good Words, Sunday Magazine, Leisure Hour, Sunday at Home, Boy's Own Paper, Girl's Own Paper, March.—Progress of Electrolysis in Surgery; by Robert Newman, M.D.

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Medical Diary for the ensuing Week.

Monday, March 8.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Frederick Treves: On the Anatomy of the Intestinal Canal and Peritoneum in the Mammalia.
SOCIETY OF ARTS.—8 P.M. Mr. Boverton Redwood; Petroleum and its Products (Cantor Lecture).
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Cases of Aneurysm of the Aorta by Drs. W. H. White, F. de Havilland Hall, and Gilbart Smith.

Tuesday, March 9.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Arthur Gamgee: The Function of Circulation.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Mr. J. Bland Sutton: A case of General Seborrhœa or "Harlequin Fœtus."—Dr. Paul Chapman: On Cardiography, with special reference to the Relation of the Time of Duration of Ventricular Systole to that of Diastolic Interval.—Dr. Hebb: A case of Tuberculosis of the Skin.
ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8.30 P.M. Dr. J. G. Garson: Exhibition of Instruments for Anthropometric Research.—Mr. Arthur J. Evans: The Flint-Knappers' Art in Albania.—Mr. W. H. Penning: Notes on a few Stone Implements found in South Africa.—Mr. Bruce Foote: Notes on some Prehistoric Finds in India.

Wednesday, March 10.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 3 P.M.; and Saturday, 1 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Frederick Treves: On the Anatomy of the Intestinal Canal and Peritoneum in the Mammalia.
SOCIETY OF ARTS.—8 P.M. Mr. E. Price Edwards: The Experiments with Lighthouse Illuminants at the South Foreland.
HUNTERIAN SOCIETY.—8 P.M. Dr. Arthur Davies: Four Cases of Cerebellar Disease.—Dr. Turner: On Arteritis.—Mr. Symonds: Histological Characters of Diphtheritic Membrane.
EPIDEMIOLOGICAL SOCIETY OF LONDON.—8 P.M. Sir Wm. R. E. Smart: Cholera Epidemics in Ships and Fleets.
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Mr. A. D. Michael: Life History of an Acarus, one stage whereof is known as Labidophorus-talpæ, and upon an Unrecorded Species of Disparipes.
BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens will be shown by Dr. Bantock, Dr. Barnes, Mr. Lawson Tait, and others. Mr. Lawson Tait: Notes on two cases of Porro's Operation.

Thursday, March 11.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. W. Boyd Dawkins: The Ancient Geography of Britain.
SOCIETY OF ARTS.—8 P.M. Mr. Leon Warnerke: Films and Paper as Substitutes for Glass in Photography.
OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8.30 P.M. Report of Committee on Sympathetic Ophthalmitis.—Mr. Priestley Smith: On Primary Glaucoma in Relation to Age.—Dr. Bristowe: Hæmorrhage into the Brain attended with Optic Neuritis.—Mr. W. H. Jessop: (1) A New Pupillometer; (2) On Herpes Frontalis affecting the Eye.—Mr. W. Adams Frost: A New Model showing the Movements of the Eye.—Mr. W. Lang (for Dr. J. W. Barrett): A New Microtome.—Dr. Argyll Robertson: On the Operation of Central Blepharoraphy.—Dr. L. Werner: On so-called Central Guttate Choroiditis.—Mr. R. Brudenell Carter: Two New Forms of Perimeter. Living and Card Specimens at 8 P.M.

Friday, March 12.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Frederick Treves: On the Anatomy of the Intestinal Canal and Peritoneum in the Mammalia.
CLINICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Roderick Maclaren (Carlisle): Hernia Cerebri successfully treated by closing the opening in the Skull with a Silver Plate.—Drs. Whipham and Myers: On some Chronic Nervous Sequelæ of Small-pox, especially as affecting the Speech (illustrated by living specimens).—Dr. Samuel West: A case of Baruria in a Woman.—Mr. Jonathan Hutchinson: A case of Necrosis of the Lower Jaw from the medicinal use of Phosphorus.—Dr. Ewart will exhibit a Modification of the Binaural Stethoscope suited for Differential Observations.
ROYAL INSTITUTION OF GREAT BRITAIN.—9 P.M. Mr. Reginald Stuart Poole: The Discovery of the Biblical Cities of Egypt.

Saturday, March 13.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Mr. Edward B. Poulton: The Nature and Protective Use of Colour in Caterpillars.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, March. 4th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Feb. 26	30·23	N.E.	31	Froz.	...	40	28	...	Cloudy
,, 27	30·31	S.E.	32	Froz.	...	40	30	...	Foggy
,, 28	30·17	E.	33	Froz.	...	34	31	...	Overcast
Mar. 1	29·82	S.E.	33	33	...	41	30	...	Overcast
,, 2	29·34	W.	37	35	...	42	32	·30	Cloudy
,, 3	29·41	N.E.	33	Froz.	...	36	31	...	Overcast
,, 4	29·88	W.	30	Froz.	...	...	27	...	Hazy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

APPLICATION OF IODOFORM IN DIPHTHERIA.

DR. A. F. RICHMOND of Greenock writes to say that he has cured a very severe case of diphtheria by means of iodoform only. It was applied to the patches on the palate and the fauces (with a camel-hair pencil moistened with mucilage) three times a day. The child also inhaled vapour of iodoform whenever he suffered from dyspnœa, and was invariably relieved by it. The vapour was produced at the lowest possible temperature, so as not to change its chemical and curative properties. The child was unable to swallow for two days previously to being seen by Dr. Richmond, and within half an hour of the application of the iodoform he was able to take a little milk, and afterwards continued to drink with ease. The tongue became clean, and remained so. The child cut three teeth during his illness (which lasted thirteen days) and was slightly salivated towards the termination of the complaint. The salivation was, however, only a little more than might take place in a perfectly healthy child when teething. There was no hyperpyrexia, and the muscular nerve-twigs were not affected; consequently he has had no paralytic symptoms, and is now in good health. Dr. Richmond has also been using iodoform with marked benefit in the treatment of various other complaints—viz., phthisis, erysipelas, herpes, burns, and scalds.

Mr. S. C. Biswas.—It has long been recognised that attacks of asthma may be excited by gastric disorder. See Hyde Salter on Asthma, and Sir Andrew Clark in the *International Journal of Medical Sciences*, Part I., just published.

Dr. Charteris is thanked. The matter scarcely needs comment.

PITYRIASIS CAPITIS.

To the Editor of THE LANCET.

SIR,—I should be glad to hear from any of your readers of a remedy, or treatment that would be likely to prove successful, in a case of pityriasis capitis. The patient, a healthy young woman, has had the disease two years, and has been treated almost constantly during that time.

I am, Sir, yours truly,

Lakefield, Ont., Feb. 15th, 1886. WM. CALDWELL, M.D.

"USE OF IODIDE OF POTASSIUM IN ANEURYSM."

To the Editor of THE LANCET.

SIR,—I observe a letter under the above heading in your issue of to-day (p. 431), by Mr. Lawson Tait. I was always under the impression that heroic doses of the iodide in aneurysm were first employed by Dr. G. W. Balfour of Edinburgh.

I am, Sir, yours faithfully,

Manchester, Feb. 27th, 1886. AN EDINBURGH GRADUATE.

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THE ABUSE OF PROVIDENT DISPENSARIES.

Medicus writes to the *Manchester Guardian* complaining of the serious injury done by so-called provident dispensaries which have no proper limit of wages in their conditions of membership. We need not say that we entirely agree with our correspondent.

A Surgeon.—Daniel Oliver's little book (Macmillan); Gerrard's Elements of Materia Medica and Pharmacy (Lewis).

CONSULTING PHYSICIANS' FEES.

To the Editor of THE LANCET.

SIR,—Would you oblige an old subscriber by inserting the following particulars in your columns, as I should be glad of your opinion and that of others in the matter.

Mr. A., a clergyman, aged forty (a curate, but with some private means), who has been lately taking duty in the neighbourhood of London, and had consulted me once or twice, called in January to know if, in my opinion, he was in a fit state of health to accept some clerical duty which had been offered him in Edinburgh. I examined him carefully; and as his lungs were perfectly sound, and he had, in short, no organic mischief whatever, but was clearly hypochondriacal, I urged him to go, telling him the bracing climate would probably set him up, and that, in my opinion, the worst thing he could do was to go on doctoring, as I knew he had been taking remedies for the last six or seven months. He then told me the following history, and I use the *ipsissima verba*. On coming to reside near London in July, he went into a chemist's at the West-end, and asked the name of a good consulting physician. He called on the one recommended, and saw him again the next week. Mr. A. then told him that his income would prevent his paying many visits; but would Dr. ——, he asked, see him twice for the guinea? "Certainly," was the reply, "if Mr. A.'s case proved to be a lengthened one." At the end of the fifth visit, nothing being said as to the reduction of the fee by Dr. ——, Mr. A. reminded him of his kind promise. The following is stated to be his reply: "Oh, I have considered the matter, Mr. A., and I am very sorry that I cannot reduce the fee in your case; but I will do this for you—I will give you extra time for the money, and you can pay me half the fee at the time, and let the other half remain for the present." Mr. A., by his own confession, evidently acquiesced in this, feeling, he said, "he was in the doctor's hands." So matters went on until January, Mr. A. going weekly to see Dr. ——, and in a certain week paying two visits. On receiving the Edinburgh offer, he asked Dr. —— about it. The following is the reply stated to be given: "Edinburgh will not do at all for you; it is too bleak, and you would be very liable to have bronchitis. Besides, who is to look after you as I do if you go there? You see, Mr. A., you are only three-quarters well, and the best thing you can do is to reside near and stay until you are quite recovered. Mr. A., as I have stated, then called to see me, to hear my opinion, which I gave him. Mr. A. also stated that Dr. —— wished particularly to see him the next week, as he had altered the prescription. On examining it, I found the change made in the tonic to be syr. zingib. *vice* syr. limonis. On hearing the above, I requested Mr. A., for his own satisfaction, to see one of the first London consultants, and he consented to do so. I need hardly say, my opinion of Mr. A.'s case was corroborated word for word; and I advised Mr. A. to send half-a-guinea to Dr. ——, which was due, and strongly advised him to pay no more visits. The half fee was sent, and Mr. A. received the following letter and enclosure from Dr. ——.

——— street, ——— square, W., Feb. 17th, 1886.

DEAR SIR,—Thanks for your note enclosing half fee. I am very glad to find by your letter that you are so much better in health, though I fear you are quite well [*sic.* Let us hope the word "not" has been accidentally omitted.] I expected to have seen you as usual, in accordance with our agreement. I have asked my clerk to send you the number of half fees still owing, so that there may be no mistake. (You paid the usual fee, £1 1*s.*, up to 31st of August.)—I am, yours very truly, ———.

——— street, ——— square, W.

Items of the Rev. ——'s account with Dr. ——.
From Sept. 10th, 1885, to Feb. 5th, 1886.

26 visits paid	£27	6 0
11 fees paid	11	11 0
	£15	15 0
By cheque	0	11 0
	£15	4 0

Now, Sir, I should wish to ask: (1) Can a consulting physician recover fees? (2) Considering the particulars of the above case (it being remembered, too, that Dr. —— consented to take half fees if the case was a long one), is my patient morally bound to pay the balance of £15 4*s.*, even though he acquiesced in the proposal? I tell him he need not fear being legally sued for the amount; but he does not desire to do anything shabby in the matter.

I enclose my card, but for obvious reasons sign myself at present

Yours obediently,

London, Feb. 19th, 1886. SUBURBAN.

*** 1. A member of the College of Physicians is prevented by the bye laws of his College from taking legal measures for the recovery of fees.—2. Supposing the above to be an accurate account of this matter—it is, of course, one-sided,—the patient is not morally bound to pay the balance.—ED. L.

INCREASE OF POPULATION IN THE EUROPEAN STATES.

ENOUGH is already known of the result of the German census, taken on December 1st last, to enable German statisticians and publicists to institute comparisons and draw inferences as to the relative growth of population in the various countries of Europe. During the last five years the population of Prussia has increased by 3·79 per cent. This is not as high a rate as during the preceding quinquennial periods. During the eighteen years from 1867 to 1885 the population of Prussia had increased by 17·87 per cent., which gives an annual average increase of 0·918 per cent. The annual rate of increase in Austro-Hungary during the eleven years from 1869 to 1880 (no later figures are available) was only 0·49. In Italy the annual increase for the decade 1871–81 was 0·60 per cent. In France (omitting Algiers and the colonies) the annual rate of increase for the fifteen years from 1866 to 1881 was 0·15 per cent. In Great Britain and Ireland, for the decade from 1871 to 1881, the annual increase was 1·01 per cent. In European Russia, including Finland and the Don Cossacks, in the thirteen years from 1867 to 1880, the average annual increase was 1·38 per cent.

Mr. B. M. H. Rogers.—We are acquainted with the facts of the case, and do not see that a charge of injustice can be maintained.

M.B., L.R.C.S.E. has not enclosed his card.

"MONTROSE SANITARY DISTRICT."

To the Editor of THE LANCET.

SIR,—I hope you will excuse the liberty I am taking, but I cannot help thinking you have been rather too severe on the report of my friend, Dr. Lawrence, of Montrose. Perhaps, however, you are not aware of the position we medical officers of health hold in the North Country, nor the salaries we get. We are, with the exception of Glasgow, Aberdeen, and Edinburgh, all in private practice. Dr. Lawrence has the magnificent salary of £12 for looking after the health of a town of more than 16,000 inhabitants. Surely his report at least equals his salary. My salary for acting as medical officer of health and police surgeon is the princely sum of £10, for which I am expected to do all a police surgeon's duties and attend to the health of nearly 16,000 inhabitants.

I remain, Sir, yours truly,

Forfar, Feb. 27th, 1886. WILLIAM F. MURRAY.

*** We entirely concur with our correspondent as to the inadequacy of the salary referred to, but we must hold that if an officer accepts a post involving the performance of certain generally accepted duties, those duties should be performed and the report of the proceedings of the officer should give evidence that they are performed. So also, the fact of the post having been accepted at an inadequate salary should not be urged as a reason to the contrary. In the case in question we would express no opinion as to the duties not having been performed, but we fail to find evidence of it in so far as the report is concerned.—ED. L.

Nux Vomica.—The graduate of a foreign university has a right to use his title, though his degree is not registrable.

Mr. G. V. Eales.—The paper is marked for insertion.

THE PUBLIC HEALTH ACT.

To the Editor of THE LANCET.

SIR,—Some years since I drew attention to the omission in the Public Health Act referred to by Mr. J. E. Johnson-Ferguson in the House of Commons on the 23rd inst., *vide* "Notes in Parliament" in your issue of the 27th ult. In order to provide a remedy, so far as my own district was concerned, I obtained the insertion of the following brief clause in the Birkenhead Corporation Act, 1881:—"80. The provisions contained in section 126 of the Public Health Act, 1875, shall apply to any person, being in charge of any infectious dead human body, who exposes such body."

I am, Sir, yours truly,

Birkenhead, March 2nd, 1886. FRANCIS VACHER.

Owl.—1. The case is one for consideration rather than for absolute gratuitous attendance.—2. Any reasonable sign or indication of a medical residence for the benefit of those in search of it at night is kind, but garishness is to be avoided.

Dr. Illingworth.—We fear we shall be unable to find room for the letter.

A CURIOUS CASE OF TRIPLE PREGNANCY.

To the Editor of THE LANCET.

SIR,—The following case may be sufficiently interesting to place before your readers.

Mrs. T—— was delivered three months ago of a healthy male child. For four days all went well. On the evening of the fourth day intense labour pains set in, and a substance the size of a pigeon's egg was expelled from the vulva. On examination, this proved to be twins, in a perfectly healthy state. The patient made a good recovery, and three months afterwards the first-born child was healthy and well. This was the patient's first pregnancy.—I am, Sir, yours obediently,

Seven Sisters-rd., N., March 1st, 1886. HAYGARTH ADDISON, L.F.P.S.

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THE SHEERNESS MEDICAL BENEFIT SOCIETY.

WE have received a very glowing account of the first annual meeting of the above Society. The financial statement contained in the *Sheerness Guardian* is, however, very far from clear, reading as though the medical officers received £4307 19*s.* 4*d.*, which we assume to be not the true reading.

B. M.—1. Our correspondent is well entitled to the fee he mentions; but the case is one of those cross cases which it is not desirable to take into a court. The mere want of concord between two professional men is an unseemliness which should not be exposed. He will do well to take no notice of the slanderous story. 2. A few drops of tincture of opium with hot fomentations are often the best treatment for a rigid os. The more difficult question in such cases is the administration of ergot, which comes in best when the passages are well dilated.

Mr. G. R. Williams is referred to our advertising columns for the only information we possess on the subject.

Surgeon-Major Gray.—Soon.

THE NEW COLLEGE OF SURGEONS AND PHYSICIANS.

To the Editor of THE LANCET.

SIR,—At the ceremony of laying the foundation-stone of the new College of Surgeons and Physicians by Her Gracious Majesty the Queen I think that a portion of the ground around it should be set aside for medical students, so that we might by our numbers show how much we appreciate the great honour conferred upon us by Her Majesty. Admittance could be by tickets issued at the different hospitals; and I am sure the students would willingly pay a small sum for them, which would defray the expenses. If desired, I feel certain it would be possible to form a guard of honour of those students who are members of the Artists' and other Volunteer corps.

I remain, Sir, yours obediently,

Guy's Hospital, March 1st, 1886. A. RAMSEY LACEY.

Zeno of Elea.—The attention of the corporations whose diplomas are held by the individual should be called to the circular.

W. H. O. may refer to an article on the subject in THE LANCET, March 13th, 1875; also to the number for July 14th, 1883, page 88.

H. Rust.—We cannot insert an appeal without authentication.

Dr. Sansom.—If possible, next week.

SAFETY IN DISPENSING MEDICINES.

To the Editor of THE LANCET.

SIR,—The following is a very simple and, I believe, satisfactory way of reducing to a minimum the dangers of dispensing poisons. Over the corks or stoppers of all the poisons put a closely-fitting capsule (it can be made of common strong paper), which must be removed before the cork or stopper, thus rendering two operations necessary before the drug be dispensed. Dispensers, no matter how busy, will find this check but a trifling inconvenience. Extra business is not, in my opinion, the chief cause of these lamentable mistakes being made. It is probably more likely due to the fits of abstraction the mind is apt to fall into, and which must be very great indeed to get the better of this precaution.

I am, Sir, faithfully yours,

March 1st, 1886. SAMUEL CONSTABLE.

Æ.—The question is legal rather than medical; but our correspondent, we should say, has a strong claim on the parties who sent for him, and on one occasion paid him.

T. G. P. should make application to C. P. Wilson, Esq., St. Katharine's Dock House, Tower-hill.

Dr. R. Diaz Barea (Madrid).—Thanks. We will bear the application in mind.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Pavy, London; Dr. Charteris, Glasgow; Dr. Spender, Bath; Mr. Jalland, York; Dr. Shuttleworth, Lancaster; Mr. Clement Lucas; Dr. Clouston, Edinburgh; Dr. Suckling, Birmingham; Mr. Stephen Paget, London; Mr. W. Coates, Manchester; Dr. Caldwell, Lakefield; Mr. Cooney, London; Mr. Partridge, Stroud; Mr. Clarke, Leicester; Mr. Biswas, Oxford; Mr. Benthall, Twickenham; Dr. Thompson, Bideford; Dr. J. Adam, London: Dr. W. H. Stone, London; Dr. F. S. Gramshaw, Stillington; Dr. Newman, New York; Dr. Lewers, London; Mr. H. Addison, London; Dr. Cory, Buckhurst Hill; Professor Humphry, Cambridge; Dr. W. F. Murray, Forfar; Mr. Francis Vacher, Birkenhead; Mr. F. H. Wigmore, London; Mr. Gubb; Mr. C. Williams, Norwich; Mr. Symonds, London; Dr. Herschell, London; Mr. W. A. Holmes; Mr. Hadaway, Garlinge; Dr. Rentoul; Messrs. Steele and Ellis, London; Dr. Rayner, Hanwell; Mr. Sampson Gamgee, Birmingham; Mr. Stott, Colney Hatch; Mr. Myrtle, London; Mr. V. Horsley, London; Mr. T. D. Pryce, Newtown; Dr. J. Gordon, East Linton; Dr. Barea, Madrid; Dr. Williamson, Ventnor; Dr. Pollock, London; Dr. Fowler, London; Mr. Harper, Barnstaple; Dr. W. F. Wade, Birmingham; Mr. A. J. Harvey; Messrs. Hall and English, Birmingham; Dr. Ward, Oxford; Mr. Collins, London; Mr. Scott, Manchester; Dr. Adam, West Malling; Dr. Benton; Messrs. Smith and Elder, London; Mr. Graham, Bristol; Mr. Hunter; Mr. Luck, Finsbury; Dr. Hammond, London; Messrs. Govan and Co., Tunbridge; Mr. St. Dalmas, Leicester; Miss Dendy, Newport; Mr. Hope, London; Miss Andrews, Jersey; Dr. Murrell, London; Mr. Dennys, Southampton; Dr. Meldon, Belfast; Mr. Peel, Dover; Mr. Martindale, London; Mr. Running, Hackney; Mr. Drake, Exeter; Mr. Beldon, Dublin; Mr. Bramwell, Staffs.; Mr. Cole, Holywell; Messrs. Wyers and Co., Dublin; Mr. Pike, Malvern; Mr. Lawrence; Mr. Soper, Dartmouth; Mr. D. Maguire, London; Dr. Brailey, London; Mr. T. Holmes, London; Mr. A. W. Renton, London; Mr. Cursham Corner, Lohdon; Dr. Whitham, Haworth; Mr. Barlow, Dalston; Dr. Neale, London; Mr. H. Mallins, Watton; Dr. Rogers, London; Mr. Unswick, Liverpool; Messrs. Negretti and Zambra; Mr. L. Humphry, Cambridge; Owl; Nux Vomica; Zeno of Elea; B. M.; Asylum; Lizadell, West Brighton; Pendavey, Sladesbridge.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Little, Liverpool; Messrs. Roberts and Co., London; Mr. Bottomley, Ashton-under-Lyne; Dr. Marsh, Hindley; Mr. Sampson, York; Mr. Sinclair, South Shields; Messrs. Nelson and Sons, Leeds; Messrs. Smith and Son, Dublin; Mr. Jordan, Birmingham; Mr. Guest; Mr. Twyford, Hanley; Messrs. Gorham and Co., Tonbridge; Messrs. Woolley and Sons; Mr. Ward, London; Dr. Ritchie, Ottley; Mrs. Tarrette, Bristol; Mr. Mason; Mr. Pearce, Collyton; Mr. Hambly, Bristol; Mr. Adams, Ipswich; Mr. Herbert, Denbigh; Mr. Blore, Leeds; Mr. Heywood, Manchester; Mr. Brown, Tredegar; Dr. Eberle, Thirsk; Mr. Rhodes, Manchester; Mr. Bennett, Haverfordwest; Mr. Dunlop, Southampton; Dr. Hedley, Gosforth; Mr. Crawhall, Durham; Dr. Wilson, Liverpool; Station; G. C.; Viator; T., Llanfair; Homo, Devonport; Colonial Agency, London; Gordon, Grantham; Q. P.; Max; Juno, Huddersfield; Medicus, London; Inquirer, Limerick; Medicus, Great Harwood; M.R.C.S., Ilford; H. P., Notts; X. Z.; Medicus, Minchinhampton; A. B. J., Haydon Bridge; Medicus, Bath; Delta; D. H., Brighton; T. G. A.; Medicus, Southsea; Studens, Newcastle-on-Tyne; Surgeon, Battersea; A. B. C., Herne Hill; Elta; Surgeon, Chelmsford; Alpha, Wakefield.

Liverpool Echo, Waterford Mail, Hampshire Post, Manchester Guardian, Pulman's Weekly News, Invention, Wellington Weekly News, Kensington News, Bangalore Daily Post, Scotsman, Strathearn Herald, Hull Daily News, Leeds Mercury, Review, The Heretic, &c., have been received.

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Clinical Lecture
ON
CATARACT.

Delivered at the Eye Infirmary, Newcastle-on-Tyne.

BY C. S. JEAFFRESON, F.R.C.S. ED.,
SURGEON TO THE INFIRMARY.

(*Concluded from p. 437.*)

WE now, gentlemen, come to consider an operation which took the profession by storm, and for many years held its own in almost every clinic in Europe. I allude to Graefe's modified linear extraction. Like everything which originated in the intellect of the illustrious professor of Berlin, it was sure to command the respect and attention of the profession. The enthusiasm with which it was greeted, and the rapidity with which it threw all other operations into the shade, was only equalled by the success which attended his discovery of iridectomy as a means of treating glaucoma. It cannot, however, be said that the former has stood so well as the latter the inevitable test of time and experience. Year by year the various modifications which were made in it told but too inevitably that it was not giving that satisfaction which its first introduction gave promise of. Each operator in succession varied it somewhat, until at last, as De Wecker wittily expressed it, nothing remained of the operation but the knife. With your permission I will more minutely describe this operation, as its various steps may be made the keystone for our future remarks upon cataract operations in general.....

I wish, gentlemen, to point out what I consider — indeed, what are generally now considered — the disadvantages and dangers of this operation. In the first place, if you have accurately followed my description, it cannot have failed to impress you that it is a tedious and difficult operation. The incision is not easy to make with exactitude, and if extending too far into the sclerotic it gives rise to great dangers. The iridectomy requires great care and skill, and, what to my mind is a great drawback, necessitates an assistant. There is not infrequently a troublesome amount of hæmorrhage from the sclerotic and iris, which obliges the operator to wait for its cessation or continue the further steps of the operation in the dark. The exit of the lens is not always easy. The proximity of the wound to the zonula weakens its support, and there is therefore great danger of loss of vitreous at an early stage, and subsequently in the removal of débris from the anterior chamber. An error at any stage of the operation is difficult to rectify, and sometimes brings about complete failure When all the steps of the operation are successfully completed, the after-progress is certainly more rapid and less complicated. There is no flap to suppurate, and the excised piece of iris precludes in a great measure the dangers of iritis and occlusion of the pupil. On the other hand, an eye which is at all prominent is deformed in appearance. All these are serious defects, and, to my mind, constitute serious drawbacks to the practice of the operation. But there is another which is still more fatal, and that is the frequency with which the operation has been followed by sympathetic ophthalmia. Statistics show that the accident occurs in about 2 per cent. of cases. If the absolute truth could be ascertained, I have little doubt that the percentage would be still higher, but there is naturally a desire to pass over this extremely disagreeable subject.

Weaned from the old flap operation and dissatisfied with the new, ophthalmologists began to look on all sides for some operation which would meet every demand and obviate every danger. Like the search for the philosopher's stone, this effort has been and is likely to be fruitless. No operation can satisfy every demand of facility of execution at the moment and freedom from dangers in the subsequent healing. The principle of linearity, once developed, was by some carried *à outrance*. In conformity with the geometrical necessity that an incision in a spherical body to be truly linear must be in one of its meridians in a direction passing through its centre, Kuchler advised and practised a horizontal section through the centre of the cornea. Strange to say, so inclined are some schools to sacrifice practice to theory, he did not lack supporters, although the results, as must have been foreseen, were attended with most destructive results to the eye as an optical instrument. Further attempts were made with slight modifications in the same direction. Giraud Teulon practised an incision which was linear, but higher than Kuchler's, being transported to the vertical edge of the pupil. Perrin made a short rectangular flap. Notta made his incision in a linear direction, but slightly higher. All these operations, gentlemen, are, I think, undesirable; they are exposed to the fatal objection that in a large proportion of cases they lead to adhesions of the iris to the wound, a condition which is dangerous in the extreme, not unfrequently leading to chronic destructive inflammation of the eye. I have never practised them, and I hope no one does in the present day.

We come now to consider another class of operations. These are typically represented by what is called the Belgian operation. They include Lebrun's, Warlomont's, Liebreich's, and De Wecker's (although I do not here speak of De Wecker's last operation). Though differing in minute details, all these operations have this in common, that they hold a medium position between the old flap and the linear operations. Some approach more nearly to one, some to the other; and in proportion as they do so, speaking generally, they partake in a greater or less degree of the dangers of the type from which they spring. I will now briefly describe these operations.....

The description I have given of cataract operations brings us to a period very closely approaching the present day, and for years I performed the Belgian operation in most of the cases which presented themselves to me. I found that as regards suppuration of the cornea the danger was much diminished; on the other hand, I found that complications from iritic adhesions were more frequent, and gradually I carried my incision higher. Many other operators experienced the same difficulties, and followed the same plan to obviate them. De Wecker has lately most persistently and energetically advocated the performance of what he calls his "small median flap." He forms a flap of the upper third of the cornea, keeping well within the corneo-scleral junction so as to form a small conjunctival flap, with which the wound is covered or protected after the completion of the operation. What are his real claims to call the operation his own I don't know; many others seem also to have called it theirs. In Juler's book you will see it described as Anderson Critchett's. The operation which I usually perform, and have performed for some years, is a kind of medium between the Belgian and De Wecker's. (See Fig. 11.) The incision commences on a little lower plane and is carried into a little higher plane than Lebrun's, and it does not reach quite so high as De Wecker's. It lies wholly within the cornea, and does not trench upon the sclerotic or produce a conjunctival flap, unless accidentally the incision is carried too high. No iridectomy is performed unless a prolapse at the time of operation cannot be easily and immediately reduced, or sometimes in cases where there is reason to believe much cortical matter remains in the anterior chamber, in which case a small iridectomy is made, as it much facilitates a clearance of the anterior chamber. In a large proportion of cases, as I shall show you after the lecture, a clear central movable pupil is obtained. In those in which an iridectomy has been performed the shape of the pupil will vary with the amount of iris that has been removed. The advantages of this operation are:—1. Its easy performance. 2. It does not require an assistant. 3. In a large proportion of cases it leaves a clear circular pupil like the old flap operation. 4. It is very little liable to suppuration. 5. It is never, in my experience, followed by sympathetic iritis. 6. It rapidly heals, and is a good operation for persons who cannot remain long under treatment. Its disadvantages are that the incision is sometimes a little small, and the delivery of the lens somewhat tedious. (See Fig. 10.) As a result, generally rather more cortical débris is left in the anterior chamber than is desirable, but this may be removed by careful manipulation. And here, gentlemen, to my mind, an important question arises—To what extent should we carry this cleansing process? Ladies who take the longest time

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over their toilettes do not always look the best; and in my experience a tedious toilette after a cataract operation sometimes leads to disastrous results. Experience can alone indicate the cases in which it is advisable not to manipulate too much.

The operation I have just described, gentlemen, I certainly consider the most satisfactory; it is a middle course between the Scylla of linearity and the Charybdis of flap extraction, and minimises the danger of each whilst claiming most of their advantages. I am not quite certain that the linear knife is the best for making the corneal section, and I have had a small knife made upon the Wenzel type, but as yet have not had sufficient experience to speak of it confidently. It certainly obviates an accident which, though not of very frequent occurrence or of great import when it happens, is best avoided. I allude to the iris falling against the edge of the knife, and a small piece being cut off on making the section. I think, gentlemen, we have arrived at a period when we cannot expect much better results than those we get. The removal of a cataract must be attended with some risks and some dangers; success cannot always crown our efforts. If statistics are to be relied upon, some operators have reduced their failures to 2 and 3 per cent., or even lower. Though I think in good selected cases such an amount of success is attainable, I do not believe anyone, however dexterous, could obtain such results from a large number of average cases containing immature, hyper-mature, and complicated cases of cataract such as present themselves at every large clinic. I calculate that I cannot have performed much less than 1200 cases of cataract extraction during the last sixteen years in my private and public practice, and of these close upon 1000 will have been cases of senile cataract. If I were able to give them to you in a statistical form I fear I should only bore you, and, further, the time at my disposal and the lack of clinical assistance have prevented me keeping accurate records of them all. Statistics, it has often been said, are only of value to mislead those who consult them. They certainly are only of use to the person through whose hands the cases have passed, and who understands, if I may so put it, the delicacy of their compilation. One hundred cases of cataract in the practice of one person cannot be usefully compared with one hundred in the practice of another. The cases themselves may differ materially. One may select only mature and uncomplicated cases. The patients may be of a different class. A rural and an urban population bear operations very differently. Lastly, though not least, the means of treating patients after the operation may vary infinitely. In my earlier cases I laboured under great disadvantages. Our hospital was small, inconvenient, and destitute of the most ordinary sanitary conditions. The result was that a considerable number of my patients were virtually treated as out-patients. Nevertheless, most of them did extremely well, and the virtue of necessity taught me a lesson which I have subsequently applied with advantage, and that is that in ordinary weather cataract cases should not be too closely confined after the first few days. I think from what I have said you will gather that it is useless to compare statistics of different operators, or even one's own, at different periods. Statistics to be of value should enter into every detail, and should in fact be accompanied by a complete and minute history of each case. The impossibility of doing this without the assistance of a number of clinics is obvious to all, and even with their assistance they could only be partially kept. Many of the cases disappear in a mysterious manner long before they are healed, and though known to be doing well never come back even for suitable glasses. Generally the results of my cases as regards loss of sight or complete failure have been as follows:—In the earlier periods of my career I performed 400 cases of flap extraction, with an average failure of 10 per cent. But, as I before said, my earlier cases were performed under great difficulties. I have now a comfortable and well-appointed hospital both for my private and public patients, with all the latest improvements science can command. My losses when performing the Belgian operation amounted to 7 per cent.; these were chiefly from secondary complications; and my losses in the last 200 cases performed by the method last described, and which for the sake of distinction we may call the "modified flap" or "small flap," has been 5 per cent. Latterly, for my own purposes, I have begun to classify my cataract cases somewhat after the manner in which some insurance companies classify their lives—viz., first class, second class, and third class risks. The first class contains all the cases of mature cataract in healthy persons not over seventy years of age; they are the best selected cases, and in them there should not be a proportion of failures exceeding 2 per cent. The second class contains all cases of immature or hyper-mature cataract, and cases of persons over seventy in whom the iris is sluggish and there is evidence of regressive changes in other structures of the eye than the lens; such cases, though not always easy to describe, are familiar to the practised eye of an ophthalmologist. The third class would contain cases in which distinct complications exist—iritic adhesions, sub-inflammatory conditions of the conjunctiva, blepharitis with slight ectropion, myopia in high degrees, increased tension, and abnormal lowering of sight in proportion to the cataractous condition of the lens. The second class would not have a much larger percentage of total failures than the first class, but would contain a larger proportion of the partially successful cases. The third class would contain by far the larger proportion of total failures, and if an operator, however dexterous, frequently undertook these cases, it would soon increase his percentage of losses.

It is not only in operative measures, gentlemen, that the treatment of cataract has made advance. It was to be expected that the development of the antiseptic system should find some application in ophthalmic surgery, although for a long time it resisted its charms. Wounds of the globe and cornea have a very effective and natural air-tight dressing in the shape of the lids, which keeps the parts in apposition and to a certain extent places any wound in the position of a subcutaneous incision. They are removed in a great measure from the influences which produce traumatic infection, and they usually heal quickly and well; still, suppuration does sometimes happen, with effects that are peculiarly disastrous to the organ of vision, producing irremediable and rapid destruction. To guard against these untoward results some have advocated and practise the strictest antiseptic precautions, including the spray and the full development of Listerian dressings. The greater part, however, content themselves with a modified form of antisepticism, which is certainly attended with beneficial results. The irritability of the mucous membrane of the eye will not tolerate contact with some of the more powerful forms of antiseptics and germicides; but in boracid acid, salicylic acid, weak solutions of corrosive sublimate, and iodoform we have substances which will fulfil all the indications we require. The details, as I carry them out, are as follows: On the morning previous to the operation the patient should twice have his eyes thoroughly bathed with a saturated solution of boracic acid made with boiling water, and slightly coloured with tincture of lavender; or a lotion containing two grains of corrosive sublimate to eight ounces of water. The lotion should have free access to the eye and permeate the inferior and superior cul-de-sac, its last application being immediately before the operation. After the operation the external parts are again cleansed with the same lotion and the closed lids covered with an oval-shaped piece of lint, well smeared with boracic vaseline of the strength of one drachm to one ounce. The hollow of the eye is then filled with cotton wadding and a knitted bandage applied over all. De Wecker, on the completion of the operation, rubs iodoform ointment over the corneal wound with a small spatula. I fancy this is an unnecessary complication; it might, to my mind, produce superficial irritation and hyperæmia, which would prove an initial step towards graver pathological changes. I need not say that the greatest care should be taken that the instruments are thoroughly cleansed, and those which I am about to use are always placed in a small vessel containing the same lotion that has been applied to the eye. These precautions, gentlemen, are certainly quite worthy your attention. They are simple and easy of execution, and they do not require a great deal of time or labour. But there are other points which we must not omit to mention. Persons who suffer from cataract have frequently other complications in the shape of slight congestive conjunctivitis, blepharitis, epiphora, obstruction of the nasal duct, and other things. All these are conditions which militate against a successful issue, and must receive careful attention and appropriate treatment. Do not allow yourselves to be led hurriedly into performing an operation in these cases until matters have been put into the best position possible. A few weeks' careful treatment and observation of such a patient will not be thrown away, and

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may convert what would have been a complete failure into a success.

One word on the question of anæsthesia, which time and space forbids my discussing more fully. The introduction of cocaine has practically removed cataract from the class of operations requiring general anæsthesia, and chloroform or ether should be reserved only for cases in which we are called upon to operate upon children or young persons who cannot exert any control over their nervousness, or for those special cases in which it is intended to remove the cataract in its capsule through a large section, or to accompany the operation by an iridectomy.

In conclusion, gentlemen, let me remind you that it is not always the surgeon who is the most brilliant and accomplished operator who can show the largest number of successes, but rather he who studies his cases, looks at them in every aspect, and exerts a personal supervision over every detail of the operation and the subsequent treatment, with a careful eye to eliminate all influences which may exert, directly or indirectly, a baneful effect upon the case. We cannot do better than bear in mind, with regard to the operation, the words which that accomplished writer and thinker Addison applied to life: "If you wish for success, make Perseverance your bosom friend, Experience your wise counsellor, Caution your elder brother, and Hope your guardian genius."

ON COMPRESSION OF THE INNOMINATE ARTERY.

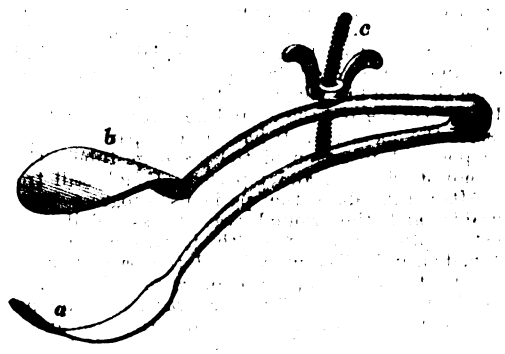
WITH NOTES OF A CASE.[1]

BY THOMAS ANNANDALE, F.R.S.E.,
REGIUS PROFESSOR OF CLINICAL SURGERY IN THE UNIVERSITY OF EDINBURGH.

IN this paper I propose to consider:—1. Temporary compression of the innominate artery in connexion with prevention of hæmorrhage in operations or injuries involving its main branches. 2. More permanent compression of this same artery in connexion with the treatment of aneurisms, involving its main branches.

1. It was my good fortune more than twenty years ago to assist the late Mr. Syme in many of his important operations upon aneurysms after the "old" method. In two of these cases the aneurysms involved the axillary artery, were of very large size, filled up the whole axilla, and projected under the clavicle, so as to make compression of the third part of the subclavian artery difficult and uncertain during the operation of laying open the sac. In one of these cases Mr. Syme made a small incision through the skin immediately above the clavicle and parallel to it, so as to allow the finger of an assistant to be passed into the wound, and so compress the subclavian artery more directly until the sac was opened, and the axillary artery secured at the point of communication with it. It occurred to me at the time of this operation that there was a certain amount of risk in opening into the aneurysmal sac or of rupturing it above the clavicle with the finger, an accident which would have much complicated the proceeding; and it further occurred to me that an axillary or subclavian aneurysm might so project into the neck as to make temporary compression of the subclavian artery between the heart and the aneurysm impossible. I accordingly made some dissections on the dead subject and some observations on the living body, and as a result of these I found that temporary and efficient compression of the innominate artery could be accomplished by a very simple proceeding. In order to assist in this compression I had constructed the instrument shown in the accompanying illustration. This instrument has now been in my collection for many years, but it was only quite recently I had an opportunity of using it in the case presently to be described. It consists of two blades (*a b*) united by a hinge joint and separated and approximated by means of a fine screw (*c*); its application will shortly be explained. I advocate the following method of compressing the innominate artery when the circulation in its chief branches cannot otherwise be controlled, as in the case of wounds or operations involving the right subclavian and first part of the right carotid artery. Make an incision in the middle line of the neck about two inches in length over the lower part of the cervical trachea, the same as is usually made for performing low tracheotomy; cut down through the various textures until the trachea is exposed, and it will then be found that the finger or a director can be insinuated by a careful separation of the tissues behind the innominate artery, and this vessel compressed against the sternum or sterno-clavicular articulation, so as to stay all circulation in its branches. This fact I demonstrated upon the living subject in the case appended to this paper. If preferred, the blade *a* of the compressor, protected by a piece of indiarubber tubing, can be gently passed behind the artery in the same way, the blade *b*, protected by an indiarubber pad, being placed outside over the upper part of the sternum. The instrument has been so curved that it lies across the neck obliquely without compressing the trachea. This instrument was also tested upon the case already referred to, and was found to be efficient. The special curve in the lower blade was found to be important in preventing the artery from slipping downwards over its point when compression was made. Although this case ended fatally, the temporary compression with the finger and instrument was not, in my opinion, the cause which led to fatal hæmorrhage, and it is important to note that no chest complication followed the proceeding.

2. Ligature of the innominate artery for the relief of aneurysm, involving the first portions of the right subclavian and right carotid arteries, has proved to be so fatal a proceeding that even with improved animal ligatures and antiseptic precautions surgeons hesitate to practise it. Neither has compression of the innominate artery in these cases given much encouragement. In the cases published



by Bickersteth[2] and Porter,[3] secondary hæmorrhage from the point of the artery compressed proved fatal. In both cases the compressor employed was applied direct to the walls of the artery, and was narrow in form. In Porter's case a kind of double aneurysm needle was used, and in Bickersteth's case wire connected with an ingenious arrangement of elastic bands formed the compressing agent. Having recently endeavoured to carry out compression of the innominate artery in a case of subclavian aneurysm by a method differing from those of Porter and Bickersteth, I record a note of it. I am especially wishful to report the case because the cause of the secondary hæmorrhage which killed the patient was unexpected, and requires careful consideration in connexion with the present and common use of indiarubber drainage-tubes. My proposed method of procedure in this case was: 1. To expose the innominate artery by means of the incision advised, with antiseptic precautions. 2. To insert one end of an indiarubber drainage-tube under the artery, and leave it there in position until the tissues had become accustomed to its presence, and until the risk of a septic condition of the wound was diminished. 3. When the latter conditions had been obtained, to introduce the small blade of the compressor into the drainage-tube, and carry on compression of the artery more or less continuously according to the effect produced.

J. B——, aged fifty-three, was admitted into the Royal Infirmary under my care on May 14th, 1885. His history was that in April, 1884, while lifting a heavy weight, he felt "something give way" at the root of his neck, and he became very faint and remained so all day. In the evening of the same day he noticed a swelling above his right

[1] Read before the Medico-Chirurgical Society of Edinburgh, Feb. 3rd, 1886.

[2] Medico-Chirurgical Transactions, vol. 56.

[3] Dublin Quarterly Journal, vol. 44.

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clavicle, which pulsated and slowly increased in size. On admission, an aneurysm of the third and involving a portion of the second part of the subclavian artery was diagnosed. He was treated by rest, careful diet, and the iodide of potassium for about a month, with the result that his symptoms were relieved, but the aneurysm remained in much the same state. He then left the hospital at his own desire, and he promised to return if he became worse. Nothing more was heard of him until he was readmitted in May, 1885. His symptoms had again increased, and he complained much of a dull aching pain over the right side of his chest, and shooting towards his back. The aneurysm was the size of a small orange, and pulsated strongly; a marked bruit was present. The tumour was situated immediately above the centre of the right clavicle, and the pulsation passed down into the axillary artery, which was somewhat dilated. The heart-sounds were normal, except that those over the aortic area were fainter than usual. The radial pulses showed signs of slight atheroma. The other internal organs were healthy. No history of syphilis could be obtained. On May 27th I exposed the innominate artery by the median cervical incision, and readily separated with my finger and a director the tissues, so as to allow the former to pass behind the artery and compress it against the sterno-clavicular articulation. The compressor was then applied, and found also to act in thoroughly staying all circulation in the vessel and its branches. The compressor having been removed, an indiarubber drainage-tube, with a diameter of half an inch, was inserted into the wound and adjusted so that its one extremity lay behind the artery and the other protruded from the external wound. The drainage-tube was secured in position by a piece of silk thread tied round the neck. The operation was performed with the usual antiseptic precautions, and the wound was dressed with salicylic wool applied loosely over it. On the 28th his temperature was 99·4°. The wound was dressed, and looked well. On the 29th he complained of pain in the wound, and had a slight dry cough. His temperature was 102°. On the 30th his cough was better, and his temperature was 101·2°. On the 31st the wound was dressed for the second time since the operation. It had in great part healed, except at the point of insertion of the drainage-tube. The tube was removed, cleaned, and replaced. Cough still troubled him. After this date the patient's progress was most favourable, and the wound was dressed daily; it remained aseptic. On June 6th it was noted that the cough had entirely disappeared and the patient was otherwise well. He still complained of some pain in the lower part of the neck. On the 7th there was a small quantity of blood upon the dressings, but nothing to cause any alarm. On the 8th, while the patient was sitting up in bed, serious arterial hæmmorrhage suddenly took place, which was temporarily checked by passing the finger deeply into the wound and compressing the artery against the sternum. Shortly afterwards I visited him, and finding that the bleeding proceeded from a point in the innominate artery, I prolonged the original incision along the line of the clavicle so as to expose the artery more thoroughly and apply a ligature round it. As I required to keep the finger of one hand upon the bleeding point, I found it impossible to pass a ligature round the vessel between the heart and this finger, although I made several attempts to do so. I then applied the compressor in the way described, and this completely stayed the bleeding. By this time the patient was almost pulseless, and, although no further bleeding took place, he sank and died about five hours after. The post-mortem examination disclosed an aneurysm about the size of a hen's egg involving a small portion of the second and the whole third portion of the subclavian artery. The axillary artery was also dilated, especially in the first part of its course. At a point on the posterior aspect of the innominate artery, and immediately below its bifurcation, there was an oblique slit or ulceration nearly a quarter of an inch in length involving its entire coats; the other portions of the artery and the heart and aorta were in good condition, and did not show any marked traces of atheroma. The ulceration in the coats of the artery exactly corresponded to the point against which the drainage-tube rested, and there were two small spots on the trachea which showed signs of commencing absorption, the result of the pressure of the same tube.

In connexion with this case I would remark, first, upon the cause of the fatal secondary hæmorrhage; and, secondly, upon the future prospects of compression of the innominate artery for the relief of aneurysms on the right side of the neck.

1. The cause of the fatal hæmorrhage was, in my opinion, the ulceration of the coats of the artery owing to the continuous pressure of the drainage-tube. I am not aware that the pressure of a drainage-tube has been thought likely to lead to so serious a result as in the present case, more particularly when the wound in which it lay remained aseptic; but from the experience of this case and of others of which I have quite recently heard, I consider that we must now reckon this risk as possible and avoid any lengthened continuous pressure upon a large bloodvessel by a drainage-tube. It may be said that the manipulation of the artery when the drainage-tube was first introduced may have assisted in destroying or weakening the coats of the artery, but as the artery was in a healthy condition and the manipulations of it were conducted with gentleness, I do not think so, and would attribute the rupture entirely to the results of the pressure of the drainage-tube.

2. Owing, then, to the unexpected accident caused by the drainage-tube, my proposed suggestions for the treatment of this case could not be carried out; nor do I advise that they should in any future case be employed exactly upon the same lines. I do, however, still hope that by some modification of the compression of the innominate we may succeed in relieving aneurysms which admit of no treatment other than the unsatisfactory one of ligaturing this artery. The direction of this modified compression should, I venture to assert, be on the principle of applying, with the assistance of a central cervical incision, digital or instrumental compression to the innominate artery, the patient being under the influence of some anæsthetic. Such compression should not be too continuous, and should be combined with distal ligature or compression, or, if thought advisable, with electrolysis.

THE EARLY TREATMENT OF RHEUMATOID ARTHRITIS.

BY JOHN KENT SPENDER, M.D. LOND.,
PHYSICIAN TO THE MINERAL WATER HOSPITAL, BATH.

(*Concluded from p. 441.*)

THE subject of Treatment is bright or dark according to circumstances—very bright if we have faith in our work, if the disease be in an early stage, and if we will take endless trouble to prevent a small spark from becoming an unmanageable flame. The therapeutics of rheumatoid arthritis is encouraging if we rightly estimate the proportion of general and local treatment, if the social and hygienic surroundings of a patient be favourable, and if we can secure the help of intelligent relatives and sensible nurses. When the nature of a case is clear, and the gravity of the coming evil plainly seen, it is downright treason to hide or to minimise it. Our duty is to be truthful, and at the same time it is a privilege to be hopeful; and in this spirit we shall best undertake what we are going to do.

Local treatment I put without hesitation in the foreground. By this is meant, not that in the long run the local treatment is the more important, but that we ought to begin with it, because time is urgent, and because in this manner we can make the earliest and deepest impression. Here is something wrong (call it what we will) in structures near the surface of the body; it is reasonable, it is almost certain, that we shall first influence this evil tendency by corrective discipline applied closely to the parts affected. It is easy to write with an air of learning about counter-irritation, although we know little about it as a theory; but there can be no doubt of its power as a piece of therapeutic work. Almost alone among recent writers has Dr. Mitchell Bruce advocated the necessity of vigorously striking home on the joints themselves.[1] It is satisfactory to quote a good authority in favour of a practice which I have followed for ten or twelve years. But the laws and limits of counter-irritation must be stringently observed. To put a cantharides blister all over a joint, or to paint the whole exterior of a joint with liniment of iodine, is to commit a grave therapeutic blunder. The antipathies of resentment are stirred in the vaso-motor apparatus under the skin, and the immediate

[1] Quain's Dictionary of Medicine. But it must be admitted that Dr. Bruce's opinions of the pathogeny of rheumatoid arthritis are contrary to established doctrine.

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harm overshadows all possible future good. Mr. Furneaux Jordan's rule is plain and wholesome physiology. "Put your irritating agent," he says, "on the circumjacent skin, or, in other words, the neighbouring nerve and vascular territory." The artificial hyperæmia thus created draws away perverted force from the diseased area, and helps to restore an equilibrium. Paint a ring of linimentum iodi around the lower part of a thigh, two fingers' breadth away from a threatening 'rheumatoid' knee; let the ring be one inch and a half wide; renew it every two or three days, according to the coarseness or delicacy of the skin. Paint a similar ring below the knee, renewing it, not at the same time, but alternately with the ring above. If a cantharides blister be applied, let it be always on the cardiac side of a joint; and the blistered surface should be allowed to heal immediately. Another excellent method of counter-irritation is the frequent sponging of the affected joints in the earliest stage with water as hot as can be borne, the calorifacient edge of the heat being blunted by covering a joint with flannel or layers of muslin.

Many are the fine degrees and finer shades of what we call counter-irritation, and the method of using it should be always of the slow and quiet kind. Turpentine and its congeners are incendiary drugs, kindling a rapid fire which can be seldom kept within modest bounds. But there is a more generalised and tranquil method of so-called counter-irritation, which consists of immersing the whole body in hot or tepid water. The Bath thermal waters owe much of their repute to the well-attested faculty of alleviating the medical group of joint disorders, known as rheumatic, gouty, and osteo-arthritic. There is something in natural thermal water which confers upon it unique therapeutic power; for when stripped of the accessories of change of air and scene, of recreation and rest, a residual virtue is discovered which baffles the most searching inquisition. Thermal medicine is a matter of experience and tact; but this point stands out beyond all cavil, that the machinery of thermal bathing is successful in exact proportion to its early use. When proper means have been neglected at the proper time, then that stupid hope which leans upon anything will build castles in the air, and imagine a natural magic in ores, herbs, and waters. From this indolent delay there is often a cruel awakening. But if the regimen of a thermal spa be accepted and obeyed when a rheumatoid arthritis is in its dawn, if the twilight beginnings of a destructive disease are grappled with bit by bit, and hands are joined all round to beat back the foe, we may sometimes win the day when we least expect it, and add laurels to the honourable warfare of medical art.

Douching and shampooing are therapeutic kinsfolk to bathing, and (as a rule) all should go together. "Wet douching" is preferable when joints are sensitive and muscular action is attended by labour and pain. But for rousing structures out of drowsiness, and for stimulating them when afflicted with vital apathy, few agencies are so useful as "dry" hot and warm douches (the body being out of water). The thermal arrangements in Bath have been lately much improved; and a room has been attached to the "Queen's Baths," in which all the best appliances of Aix-les-Bains can be enjoyed, with foreign *doucheurs* and *doucheuses*. Shampooing is a technical mystery which cannot be too highly praised. The younger the patient who is menaced with rheumatoid arthritis, the more important does it seem to carry out stroking (*effleurage*) of the joints and tender kneading (*petrissage*) of the neighbouring muscles. The limbs should be always in the least constrained posture, and the application of bandages and laced supports will test the surgical instinct of the "wise physician." It cannot be said that the external use of drugs does any good; but I have been long accustomed to order the mild inunction every night of the iodide of potassium and soap liniment.

Climate is an element of soothing and healing value. To avoid the English winter and spring sounds disloyal; but to those who can afford it the sacrifice is imperative, and aliens they must be for six or seven months in the year. Between November and May residence should be taken up on the Mediterranean sea-coast, or part of the time may be spend in a sub-tropical sea voyage. This may need to be repeated every year for several years before complete success is obtained. Rheumatoid arthritis is a disease *par excellence* of the north temperate zone. But as the vast majority of people can only dream of the Mediterranean and the luxuries of Algiers and Egypt, they must learn to do the best for themselves in their own country, and to live in a dry and not too cold part of England; out of the "search of the glacier wind," says Mr. Ruskin, and as much as possible in the "rays of the rare sunshine." Internal medicines capable of doing good may be divided into two classes:—(*a*) Those of unquestioned efficacy, because of their obvious physiological appropriateness; and (*b*) those of secondary utility, but helpful according to their mode and measure of administration. In the front rank of the first class stands cod-liver oil, food and physic together; if begun in small quantities with pancreatine or orange wine, it may be pushed discreetly until half a pint is consumed every week. This must be continued for months, perhaps for years, omitting the middle of the summer; and it is a merciful plan to allow a holiday from all drugs once a fortnight. Citrate of iron (five or six grains) and iodide of sodium (two or three grains) may be dissolved and given together in chloroform-water once a day. Among our pharmaceutical resources of lesser importance are strychnia, arsenic, and syrup of the iodide of iron. When arsenic agrees, it may rise to the dignity of a valuable medicine, and there is no reason why it may not be given with the iron and cod-liver oil. Syrup of iodide of iron has been extolled by several writers, and is certainly a model of quiet harmlessness.

Countless hygienic rules may be laid down, and it will be a happy chance if our patient obeys half of them. Rooms well ventilated night and day; the steady morning and afternoon trudge out of doors, to keep muscles and joints from stagnation, and to promote the "metabolism" of effete stuff from the body; plenty of sun and sea; clothing adapted to the ever-shifting stress of weather; and meals of varied and well-cooked food. And if the mind and the affections be rightly guided what more can we do? In short, what we call the prophylaxis of cerebral and pulmonary consumption is the most rational way of warding off the diathetic state which leads to rheumatoid arthritis. The victories of preventive medicine have only begun to be unfolded.[2] When the hands and feet are the members first attacked, and the fingers are early disabled by pain and swelling in the smaller joints, the regular application of galvanic electricity may be tried. I cannot say much in its praise, and the therapeutic uncertainty of electricity has now become almost a proverb.[3]

From an abundance of clinical material I select a case which is interesting, because it shows what can be done when there is a determination all round to do the very best. In April, 1881, Sir Andrew Clark kindly entrusted to my care a young lady, aged seventeen, the daughter of a gentleman (a most munificent churchman) residing in the north of England. During 1879 she suffered much from chronic ulceration of the throat, and was obliged to leave school in March, 1880, "weak, white, and tired." The hands began to swell, and then the feet; many spas were visited during this summer for the benefit of her health; but in February, 1881 (after a severe winter), she became gradually worse, and pain and stiffness began to be felt in the left thigh and both shoulders. When she came to Bath she had great difficulty in raising herself from a chair, and walked with a stoop forwards; the muscles of the limbs were flabby from want of use; but there was no emaciation, and her manner and general tone were full of sprightliness and animation. The medical history of the family was good, with a marked exemption from rheumatic troubles. Many details are omitted for the sake of brevity; and it will suffice to say that a course of six weeks' thermal bathing here, followed by a similar period of perfect rest at Buxton, seemed to give the first impulse to that convalescence which was all the more firm and real because it was spread over several years. Every winter and early spring were spent at San Remo or at Cannes; sometimes there was a short visit to Aix-les-Bains; and four or five of the summer and autumn months were spent in England. Skillful shampooing was constantly used, and cod-liver oil was taken with as much regularity as possible. I heard from my patient once or twice every year; and in the last

[2] Horace tells Mæcenas that if he would live sound and in perfect health, the same indulgence which was granted to him when ill must be granted when he was afraid of being ill:—

"Si me vivere vis sanum rectèque valentem,
Quam mihi das ægro, dabis ægrotare timenti,
Mæcenas, veniam."—EPIST., lib. i., 7.

[3] In a paper read (June, 1880) to a Yorkshire branch of the British Medical Association by Dr. Little of Ben Rhydding, three cases are related of successful treatment by electricity, shampooing, and Russian baths. In the early stage of rheumatoid arthritis, however, Turkish baths and chamber vapour baths only weaken the patient without arresting the disease.

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letter (from Cannes, dated Dec. 22nd, 1884) she says: "I have been so well this year. I am much stronger and better this year than last; I can walk much quicker, and have much more use of my hands. My weight also has largely increased." Now this patient might have been easily given up as hopeless; nor would there have been any ground for hope if she had been one of the crowd of those sufferers who are exposed to the chances of weather and poverty and mental depression. In these the little store of nerve force is exhausted by the physiological maintenance of common life. There is no reserve, no hidden power equal to the fervour and passion of driving out of the system a retrogressive change. There may be an amelioration of health, but the "supple government" of the joints can never be renewed.

In divers ways I have now endeavoured to show the "grief and gravity" of a terrible disease; to be a friendly monitor of its sure ending if unchecked, and to give a hopeful tone to our prognosis when opportune events put us in command of the whole line of treatment. In few diseases is time so irrevocable. Our pity should be aroused when beholding the monumental effigies of once bright and active men and women, now laid on sofas or Ilkley couches, and dependent for the humblest office on the ministry of others. The Laureate cheerily sings—

> "Oh! well for him whose will is strong,
> He suffers, but he will not suffer long."

But our dirge is of those who are doomed to suffer long, notwithstanding the comfort of a "strong will" and a supernatural grace. The corporate conscience of the whole profession ought to be stirred in this matter, for it is a reproach to medical art if any curable disease be let run into an incurable form. Dynamic disturbances, which may be easily plucked out in the early blossom, become anarchic and rebellious in their time of fruit. To wait for "specific" remedies or to trust to random discoveries is idle play and not scientific medicine. I venture to express the opinion that the proper treatment of rheumatoid arthritis consists in seizing the right threads at the very beginning, and in holding them with a fighting purpose to the very end. And it will be a natural conclusion to my argument if I suggest that the means be always precisely adapted to our aims, measuring the one with the other under the varying circumstances of race, sex, temperament, and age.

Bath.

SPASTIC PARALYSIS.[1]

BY A. HUGHES BENNETT, M.D., F.R.C.P.

MR. PRESIDENT,—At your invitation I attempt to bring before the Society a subject of great importance. It concerns a morbid state of widely-spread occurrence, and one which must therefore frequently come under the notice of every medical man. It is, notwithstanding, a condition very obscure in nature, causation, prognosis, and treatment. In consenting to open a conference on spastic paralysis, I do not anticipate that the darkness which surrounds the question will be illuminated by any original revelations of my own. I am, however, encouraged to venture the undertaking by the belief that directing attention to the leading problems to be solved will, without effort on my part, supply a text which the learned may expound, and thus initiate a discussion which may prove of scientific and practical value.

Spastic or spasmodic paralysis is the name which has been given by Professors Erb and Charcot, not to a disease, but to a group of symptoms—to a clinical picture—which must be familiar to everyone. It essentially consists of a morbid condition in which motor weakness, exaggeration of the tendon phenomena, and rigidity of muscles are the prominent and characteristic features. Owing to the existence of these physical states the patient afflicted suffers from certain symptoms which as a consequence ensue—namely, deficient voluntary activity, tremors, peculiarities in gait, and distortions of the limbs. This combination of circumstances is, moreover, not of necessity associated with any interference with the general health or the functions of the body, and the intellectual, sensory, and nutritive organs may be preserved intact. In short, this train of abnormal symptoms, to which the term "spastic" has been applied (owing to muscular spasm being the leading feature of the disorder), is strictly confined to the motor elements of the nervous system.

The *distribution* of this spastic condition varies. It may be confined to a single limb, it may assume a hemiplegic or a paraplegic form, or it may involve all four extremities and every district of the body. As regards *causation*, it may be associated with degeneration of the lateral columns of the cord, secondary to disease of the brain or pyramidal tract, as in cerebral hæmorrhage, myelitis, &c.; or the lesion may be of primary origin in the same regions, thus constituting a disease *per se*, as in so-called primary lateral sclerosis. Also it is met with as a functional disorder from unknown causes, as in hysteria; and it may be the result of certain definite blood-poisons, such as strychnia and lathyrus cicera. Further, as to *pathology*, it is frequently accompanied with demonstrable structural alteration in the nervous system, which appears to be its direct cause, and as often all traces of discoverable tissue change are absent. Again, the *progress* of the disorder is not uniform: at one time it invades rapidly, is acute, and of short duration; and at another is insidious in origin, chronic, and of long persistence. Finally, its *termination* varies, in some instances the disease being hopelessly and permanently incurable, while in others the patient rapidly and completely recovers. This varied distribution, origin, pathology, progress, and termination of the same group of symptoms furnishes a mystery to unravel, and serves to show how perplexing are the difficulties of the subject under notice.

Various theories have been propounded to explain the occurrence of spastic paralysis, the essential features of which, it may be repeated, are motor weakness, exaggeration of the tendon phenomena, and muscular rigidity. Professor Charcot maintains that the symptoms are due to irritation of the ganglion cells of the grey matter of the cord by degenerated contiguous fibres of the lateral columns. It is now well known that a destructive lesion of the motor cortical area in the cerebral hemispheres, or in any portion of the pyramidal tract, induces secondary degeneration of the efferent fibres below, which are thus cut off from the trophic influences of the cells in the grey matter of the brain. This sclerosis extends downwards as far as the multipolar ganglia in the anterior cornua of the cord, and the hypothesis suggested is that the morbid process on reaching the cells causes their irritation, and as a consequence the phenomena of spastic paralysis. That this theory is plausible cannot be denied, and it is possible that it may be a factor in the production of the clinical symptoms in question. It is at best, however, only an imperfect explanation, and not the essential cause, as spastic paralysis may exist in its most typical form when no degeneration of nerve fibres can be demonstrated, as in various functional complaints such as hysteria. Moreover, it may occur under circumstances where it is impossible to conceive the presence of any such permanent or gross structural alteration, as in strychnine poisoning or during the hypnotic state.

Another theory, and perhaps the most popular, asserts that the symptoms of spastic paralysis are due to the simple severance of the spinal from the cerebral centres. In this way it is supposed the inhibitory action of the higher is removed from the lower ganglia. These last are, as it were, thus permitted, from want of control, to run riot, and as a consequence to manifest hyper-excitability of reflex acts, in the shape of increased tendon phenomena and muscular rigidity. It is admitted that during the absence of brain influences the reflex excitability of the cord is augmented, but the train of symptoms included under the term spastic are not produced. Moreover, in sudden destructive lesions of the brain, such as hæmorrhage into the pyramidal tract, although spastic symptoms subsequently ensue, they do not appear until a considerable period of time has elapsed. Now, if simple inhibition were the sole cause of the phenomena, we should expect the effects to be most marked at the moment of interruption, and not gradually acquired, as is the case.

A third theory, which is a modification of the last, maintains that when cerebral influences are suppressed the uncontrolled action of the cerebellum as a stimulator of muscular tonus becomes prominent, and hence the stiffness which takes place. The same arguments which can be

[1] An introduction to a discussion on the subject at the Medical Society of London, March 1st, 1886.

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urged against the last hypothesis seem to me to equally hold good against this. A further proof of its inability to account for the position is, that when the cord is completely divided, as in transverse myelitis, spastic symptoms subsequently ensue, although all communication between the cerebellum and cord has been severed.

Such are the leading theories which have been advanced to explain the phenomena of spastic paralysis, as well as some of the reasons to show that no one of them by itself is adequate to account for their production. While it is not difficult thus to take a negative view of the position and criticise existing doctrines, it is not so easy to successfully assume a positive and constructive attitude, and to replace received opinions by others more worthy of acceptance. In attempting to frame a hypothesis which will harmonise with all the facts of the case, it seems to me that the entire question must be viewed from a more comprehensive standpoint than heretofore. The present tendency of neurological science is towards specialisation, and doubtless the great advances it has made of late years is mainly due to success in that direction. At the same time, in order that the accumulation of isolated facts may be utilised to the fullest extent, the laborious process of individual inquiry must be supplemented by generalisation. In the disorder under consideration, as well as in many other morbid states, by taking a more extended view of the situation, it may be found that the supposed classical lesion of a disease is only one factor in its etiology; that, indeed, it may be a result rather than a cause, and that a variety of circumstances from different directions may all equally tend to produce the same effects. Looking, then, at the clinical picture of spastic paralysis, as it were, from a distance, and taking into consideration the manifold conditions of its causation, progress, and morbid anatomy, the following conclusions seem to me to be those which best accord with known facts.

From whatever source the disorder may arise, the symptoms are essentially the same, varying only in distribution and degree. The characteristic motor weakness, the exaggerated tendon reflexes, and the muscular rigidity belong to the same series of phenomena, and have the same physiological signification. The common factor in the production of this series of conditions is an abnormally increased irritability of the motor ganglion cells in the anterior cornua of the cord. Physiological knowledge has taught us that one of the functions of these centres is to maintain a certain degree of permanent tonus of muscular fibre. For this purpose integrity of the reflex arc is necessary. Hence if either the ganglion itself, or its afferent or efferent elements are destroyed, the muscle relaxes, and its response to mechanical percussion (in other words, its tendon phenomenon) is lost. If, on the other hand, the ganglion is from any cause in a state of hyper-excitability, the opposite conditions ensue—namely, hyper-tonicity or rigidity of muscle and spastic symptoms. The order and extent in which the different symptoms appear to develop seem to bear some relation to the amount of excitability of the cells; hence the first manifestation of their irritable weakness is motor paresis, and then in order appear, according to its degree of severity, increased tendon reflexes, clonic spasms, muscular rigidity, and permanent contracture.

If, then, a morbid irritability of motor ganglia is the common property of all forms of spastic paralysis, we have next to determine how this in turn is produced. I believe that this is not to be found in any single explanation, but that a variety of circumstances may act as exciting agents. These circumstances may be mainly divided into three categories: (1) Primary irritation of the ganglion cells themselves; (2) their irritation through the afferent and efferent paths from below; and (3) their irritation through the pyramidal tract from above.

The ganglion cells may be primarily affected in many ways. Strychnia and other poisons, for example, may directly derange their nutrition and produce temporary spastic symptoms. Changes in the quality of the blood, such as anæmia, fevers, &c., may in a lesser degree be followed by the same results, and it is common in such circumstances to meet with muscular weakness, increased tendon phenomena, and a tendency to cramp and stiffness of muscle. The same irritable weakness is found in most exhausting ailments, such as phthisis and convalescence from acute diseases, in which the grey matter of the cord participates with the other tissues of the body in an abnormal readiness to respond on stimulation. It is still further developed in those states of nervous instability characterised as neurotic, such as hysteria, in which spastic symptoms often reach a very high degree.

In addition to direct irritation of the ganglion cells themselves, these elements may be influenced by irritation from below. The well-known observations of Brown-Séquard demonstrated that injury to afferent fibres may cause so-called spinal epilepsy—in other words, extreme hyper-excitability of the grey matter of the cord. Again, Dr. Weir Mitchell, and my colleague, Dr. Donkin, have advanced clinical reasons to show that over-stimulation of the efferent tracts may produce the same results. Such evidence tends to indicate that peripheral irritation of both afferent and efferent fibres may alike lead to hyper-activity of the ganglia to which they are attached.

Influences from above may in like manner be followed by similar results. Experimental irritation of the motor cortical area induces muscular spasm. In disease the same occurs. It has been observed that during an epileptiform attack—that is, during a period of cortical irritation—there is both contraction of muscle and exaggeration of the tendon phenomena, showing that the excitement of nerve tissue has extended to the cord. Even after voluntary motion has been abolished, owing to the temporary exhaustion which follows an explosion of the cortical motor centres, the exalted functional activity of the lower ganglia may remain, and consequently the spastic symptoms may continue. In a short time, however, when the secondary irritation of the cord subsides, the symptoms disappear. In like manner, irritation from inflammation or otherwise in any portion of the pyramidal tract may be followed by similar results, and if the cause be chronic the symptoms may be permanent.

Again, it has been found that not only an irritative lesion, but destruction of the cortical motor area subsequently, but not immediately, leads to muscular hyper-tonicity. The same takes place from disease of any part of the pyramidal tract by which the distal portion is separated from the cerebral trophic elements. This may possibly be due to direct irritation caused by the secondary descending sclerosis, as suggested by Charcot. But prior to demonstrable degenerative change in the lateral columns there are evidences of motor instability, as a few hours after an apoplexy exaggerated tendon phenomena gradually develop. It is therefore obvious that nutrition changes, as a result of removal of cerebral trophic influences, must exist in the motor tract before structural alteration can be apppreciated. The nature of this change, whether vascular, molecular, or dynamic, we do not know, but that it is sufficient to produce objective functional symptomatic disorder is certain. A plausible explanation of this fact would be that anæmia or other nutritive modification of the pyramidal tract was the almost immediate consequence of the disorganised trophic centres above, and that this change in the circulation or molecular stability led to irritable weakness of the adjacent grey matter of the cord. The same effects might supervene upon conditions other than those of actual gross cortical disease, as when the higher nervous elements, without demonstrable anatomical change, are functionally disordered. In such a case the actions of the parts below which are dependent for their constancy on healthy influences from above, would be deranged. Thus from functional irritability or depression of the cerebral cortex there might arise instability of the pyramidal tracts and the motor apparatus connected with them, and, as a consequence, a train of typical spastic symptoms. Such excitants would be all the more potent in a predisposed subject in whom the spinal ganglion cells were already in an abnormally exalted condition, as in such the slightest physical injury readily provokes muscular spasm. Under the same or similar conditions it is but a step further to realise that psychical influences may act as exciting agents for the production of like results. Thus, misdirected volition, emotion, or imagination acting as afferent stimuli might be the originators of abnormal motor phenomena, even when the nervous system itself is in other respects healthy. Again, even normal mental impulses may cause undue motorial demonstrations if the spinal centres are hyper-excitable, as is seen in strychnine poisoning, hysteria, &c. It is therefore obvious that if both these abnormal conditions exist together—that is, increased power of the higher centres to receive or originate mental impressions, and augmented capacity of the lower centres to respond to psychical stimuli—the effects will be the more violent in degree and permanent in duration, and serves to explain the severity

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and intractability of many functional disorders. It also gives an explanation of the fact that under these circumstances the physical motor symptoms are sometimes such as could not voluntarily be produced in health, as instanced by the phenomena of hypnotism and hysterical malingering.

In connexion with these reflexions it is a question of the greatest practical importance to know whether repeated and permanent functional over-activity or depression can lead to demonstrable structural changes in the tissues affected. *A priori* reasoning would favour such a hypothesis, although there is not a sufficient series of recorded facts to demonstrate it. At present brevity compels me to forego speculation on this interesting subject. Everything, however, seems to indicate that the causes which lead to hyper-excitability of the ganglion motor cells, and consequently to the production of spastic paralysis, are of an active or irritating rather than of a passive or inhibitory nature. This is supported by many facts; among others, that when one side of the body is primarily affected, there is invariably a tendency for the other gradually to become involved; also, that all circumstances which allay irritability, such as rest, sleep, tranquillity, and sedatives, relieve the symptoms, while the reverse conditions of emotion, exertion, injury, and stimulants augment them.

To sum up, it is suggested that spastic symptoms, from whatever cause arising, are essentially due to abnormal functional hyper-excitability of the motor ganglion cells of the anterior cornua of the cord. The hyper-excitability may for various reasons be inherent in the cells themselves, or may be induced therein by influences emanating from the brain, the cord, or the peripheral nerves. These influences are probably of an irritating nature. The irritation, when it exists in the pyramidal tract, may be excited there either directly by organic disease or functional excitement, or indirectly by changes in its nutrition as a result of severance from its trophic centres. These changes in nutrition may be either gross or dynamic. The gross changes usually follow gross disease of the cortical centres, while the dynamic changes may either follow their structural alterations or their functional disorder. Finally, this functional disorder of the motor tract may have its origin in psychical as well as in physical activity. These theoretical considerations concerning the pathology of spastic paralysis, like other hypotheses, are open to criticism. I admit they are somewhat involved, but this is scarcely to be avoided in attempting to account for the complicated circumstances connected with this group of symptoms.

If, gentlemen, the doctrinal speculations on the subject we are discussing are uncertain, the practical difficulties met with at the bedside are none the less perplexing. As their clinical features are now well recognised, I pass over those forms of spastic paralysis associated on the one hand with secondary changes from gross disease of the nerve centres, and on the other with obvious functional disorder. I limit myself to directing attention to a condition in connexion with this subject, which has always seemed to me most obscure, and which I cannot find anywhere accurately differentiated or satisfactorily explained. It is a group of symptoms which everyone must have met with, and of which there are in the other room several illustrative examples. In my own limited experience it is of frequent occurrence; and I find in my note-books of the last two or three years the detailed account of twenty-four typical examples. An individual, either male or female, in otherwise good health, without obvious cause, gradually experiences slight weakness in a limb—say, the leg. This, as a rule, very insidiously increases, and, after a year or more, extends to the arm of the same side, sometimes to the opposite leg, and subsequently to all the extremities. On examination motor weakness is detected without incoördination; there are clumsy and feeble actions of the upper, and a weak, shuffling, stiff, gait with the lower, extremities. At an early stage there is great exaggeration of the tendon phenomena, the cutaneous reflexes remaining normal. Afterwards ankle-clonus is developed, and later slight stiffness of the muscles and trepidation of the limbs. The general health remains robust, and all the organs and functions of the body are normal. Sensibility and nutrition continue unimpaired. Occasionally, but very rarely, in my experience this abnormal condition is acute, and reaches its full development with great rapidity. The affection may entirely recover, but as often it persists for many years without change, or slowly increases in severity. The disorder is one evidently limited to the motor apparatus. It imperfectly answers to the description of the "primary lateral sclerosis" of Erb and Charcot, but differs from that disease, inasmuch as it is of common occurrence, it frequently recovers, and also because spasm of muscle with its consequences is not the leading feature of the affection. It is a condition which, when occurring in women, is almost invariably pronounced to be hysterical; when in men, it is vaguely called paraplegia or myelitis. For convenience I describe the group of symptoms under the term "hyper-tonic paresis," a symptomatic nomenclature which commits to no theory. This in every respect answers to the hypothesis I have already advanced concerning the nature of spastic paralysis.

In conclusion, I venture to suggest the following points for discussion:—1. Is the organic degeneration of the lateral columns of the cord, so frequently associated with spastic symptoms, essential for their production; or may they be accounted for by functional derangement of the same regions, or of the psychical or motor centres? 2. Whether organic or functional, is the primary seat of disease in the cells of the brain or cord, or in the conducting fibres, central or peripheral? Are the symptoms the result of irritation or inhibition? 3. May primary functional disorder eventually lead to secondary organic degeneration? 4. Regarding the cases described under the term hyper-tonic paresis. What is the anatomical substratum of the affection? Where and in what manner does it originate? Is the condition one of organic or functional disease, and by what clinical criterion is the point to be determined during the life of the patient? What is the cause, prognosis, and treatment of the disorder?

A CASE OF RUPTURE OF THE KIDNEY.

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THE following interesting case is, I think, on account of its comparative rarity worthy of record.

On April 10th, 1885, I was called to see S. G——, aged thirteen, a collier, who it was stated had been severely injured by a fall of coal while at work in one of the company's pits. I found him lying on his back with the shoulders raised up, thighs flexed (especially the right one), face pale and of anxious appearance, surface cold and bathed in sweat, pulse rapid and feeble, and respiration shallow and of intercostal type, there being but slight diaphragmatic movement. A deep breath caused intense pain in the right lumbar region. He had vomited several times, and was, in fact, in a state of collapse. On examination I found an extensive contusion in the right lumbar region, and slight abrasion of skin over the eleventh and twelfth ribs. The patient complained of such intense pain on pressure that I was unable to ascertain if any ribs were fractured. There was also a slight contusion on the right shoulder, another in the hypogastrium, and another on the posterior aspect of the right thigh. There was no tenderness on pressure in the hypogastrium. In the evening he passed a large quantity of bright arterial blood, mixed with urine, and vomited several times.

April 11th.—11.30 A.M.: Very weak and anæmic. Pulse hardly perceptible at the wrist. Had vomited constantly during the night, and had passed urine tinged with blood. Some fulness in the right iliac region, with dulness on percussion. Complained of great pain all over the right half of the abdomen, and tenderness on pressure.

12th.—Yesterday, about 9 P.M., he passed some urine slightly tinged with blood. To-day he has voided nothing from the bladder. There has been no vomiting. Complained of pain all over the abdomen. Thighs strongly flexed on abdomen, and abdominal walls rigid. Died in the night from a combination of anæmia and shock, having lived sixty hours since the accident.

Necropsy.—I made a post-mortem examination in conjunction with Dr. Coates (chief surgeon to the works) and Dr. Henderson (senior assistant-surgeon, Tredegar Iron Works). Body short for the age, and thin. The right side of the abdomen showed extensive bruising. On opening the abdomen we found a large quantity of blood in the peritoneal cavity. No injury to the diaphragm or liver and no fracture of any ribs could be detected. There was no

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apparent injury to the intestines, but portions of the ileum in the neighbourhood of the kidney showed commencing peritonitis. The right kidney was displaced downwards and forwards, and lay in the iliac fossa; behind it was an enormous amount of blood-clots and effused blood, the latter extending along the cellular tissue almost to the middle line of the abdomen in front. There was also a quantity of blood-clots immediately in front of and on the right side of the lumbar vertebræ, overlying the solar plexus and semilunar ganglion; this had apparently spread along the renal plexus of vessels; it did not extend over to the left side of the vertebræ. The peritoneum anterior to the kidney was severely lacerated, and so allowed escape of blood into its cavity. The upper half of the kidney was literally smashed into a pulp, but more so on the anterior surface than the posterior, extending down to the pelvis of the kidney. There were several large branches of the renal artery laid open. We could detect no wound of the trunk artery or vein. There was also a small deep jagged wound in the lower half of the kidney on the posterior surface, which looked as if a rough object had been driven into it. The ureter appeared to be completely blocked by a blood-clot. Bladder empty and healthy; left kidney and ureter healthy. There was no evidence of the lower ribs having been driven through the abdominal walls.

Remarks.—The noteworthy feature of this case is how such an extensive injury to the kidney should have been caused without fracture of any ribs. The sudden cessation of hæmaturia was apparently due to clots in the ureter. The rapidly-increasing anæmia, together with the hæmaturia and fulness of the iliac region, pointed presumably to hæmorrhage from the kidney; accordingly, astringents were given. Mr. H. A. Reeves, F.R.C.S., in a case published by him in THE LANCET of Oct. 4th, 1884, says that as soon as it is found that hæmorrhage is not controllable after trial of every known means, a lumbar incision should be made over the kidney, and all clots and blood removed, and the kidney also, if necessary. It occurred to me, if it would have been justifiable to cut down and remove the kidney as soon as it became evident that hæmorrhage was profuse, obviously in such cases to wait the effect of a lengthy trial of astringents means waiting till too late. I do not feel competent to give an opinion as to the actual cause of this injury; but remembering the fact that the boy was crushed beneath a great mass of coal, it occurred to me that the kidney may have been suddenly dislocated, as it were, by the force of the blow, and at the same time caught between the vertebræ and the suddenly compressed ribs; and what makes this idea more tenable is the fact that the boy was small and very thin for his age, and that the anterior portion of the kidney was the most severely damaged.

Kettering.

ON A

FATAL CASE OF ACUTE DELIRIOUS MANIA COMPLICATED WITH PAROTITIS.

BY JAMES M. WILLIAMSON, M.D. EDIN.,

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THE patient in this case was an American lady, aged forty, but looking older. She was a highly educated and talented woman, and was the principal of a large educational establishment. Overwork had brought on nervous prostration and insomnia, for which Dr. Hammond, of New York, ordered rest from work and change of scene. For twelve months the patient followed this advice, travelling in England, but without much benefit. During April, 1885, while at Bournemouth, she had a throat attack, suspected to have been diphtheritic, and accompanied by what she called "delirium." The patient came to Ventnor early in the next month (May), and consulted me on the 10th for insomnia. Her catamenia, regular as yet, began on the 12th, and brought on increased restlessness and irritability, upon which chloral and the bromides made no impression. On the 14th she was in bed, her mind excited and wandering. The pulse was rapid, but the temperature not elevated. The tongue was dry; the breath offensive; appetite absent; but the bowels were not confined, and the urine was freely voided. In two days more she was deliriously insane, howling, laughing, incessantly talking, struggling, and trying to bite. She spat out food and saliva, and urine and fæces were passed into the bed, which had been made up on the floor. Morphia, given hypodermically, increased the excitement; but chloral—administered with much difficulty—somewhat lessened it. On the 21st she was seen with me by Dr. Blandford of London, who confirmed the diagnosis. As the heart had begun to intermit, the chloral was abandoned, and paraldehyde ordered instead. The food was limited to eggs and milk. From this time slight improvement took place until the 24th, when swelling of the left parotid gland was observed. The swelling had taken place rapidly during the night, and extended to the malar bone and behind the angle of the jaw; it was hard and very tender, but free from redness. Two days afterwards the right parotid took on the same action, giving the patient the characteristic aspect of mumps. During gleams of consciousness much complaint was made of pain, and attempts at swallowing were virtually abandoned. Feeding by the nares was impracticable, whilst hæmorrhoids that bled copiously at every touch precluded the use of nutrient enemata. No suppuration took place in the parotids, but from this time the strength swiftly declined. Exhaustion passed into coma, and death took place on the 29th, which was the sixteenth day of the illness.

Remarks.—It is to the occurrence of the parotitis in this case that attention is drawn, and it is worth noting because it really turned the balance against the patient at the critical point in her illness. Without referring to the difficulties it threw in the way of treatment, the question of causation is full of interest. It was clearly not a case of idiopathic parotitis. Anyone who had for the first time seen the patient when both parotids were swollen would assuredly have thought of mumps and meningitis; but even had there been no history the delirium could not have been mistaken for that of meningitis. The condition was symptomatic, and not idiopathic. A great deal is heard now of the sympathy between the parotids and affections of the generative organs; in this case, however, although the approaching menopause may have had some share in inducing the maniacal attack, so far as could be ascertained there was nothing wrong with the external or internal organs of generation, or with the mammæ. The case ranks with those similar affections of the parotid which have long been known to occur towards the termination of fevers. Some have held that in these circumstances the parotitis results from a spread of the specific poison of the fever. Since the condition has been seen in pneumonia, however, others have ascribed it to the extension of oral inflammation. The present instance confirms the latter view. The mucous membrane of the mouth was dry and parched and covered with dead epithelium; possibly the milk that was retained in the mouth helped to increase the oral inflammation; but no aphthæ were seen. The incessant action of the jaw and the retention of saliva in the parotid may have been contributing agents. So far as I can gather, this parotid complication, well-known in some severe diseases, does not appear to have been much recognised in connexion with acute delirious mania.

Ventnor, Isle of Wight.

ON SOME OF THE PROPOSED CHANGES IN THE LUNACY ACTS.

BY JAMES ADAM, M.D.,

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THE measure introduced by Lord Selborne is already familiarly known to the public and the medical profession. It was presented to the House of Lords during the last session of the last Parliament, and was ordered to be printed on March 26th, 1885. It met with by no means unanimous approval, and some of its provisions were so much objected to that they led to the resignation of Lord Shaftesbury as chairman of the Board of Commissioners in Lunacy; but it was hailed with satisfaction by others, and it came at last to be accepted on the belief that it was necessary to do something to allay the public agitation and suspicion which had been strongly aroused on the subject. The Bill passed through

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the House of Lords, and as amended in committee was ordered to be printed on May 30th, 1885; but, owing to the change of Government occurring about that time and the rapid winding up of the session, it became a dropped order, and did not reach the House of Commons.

The principal objects sought to be attained by this Bill may shortly be stated as follows:—To furnish safeguards against the improper confinement of persons as lunatics; to give facilities for the medical treatment of persons who desire to submit to treatment; and to enable public asylums to be provided for the reception of lunatics not paupers. It was stated that the Bill adopted in the main the recommendations made by the report of the Select Committee of the House of Commons on Lunacy Law in the year 1878, and that the principle of the Scotch procedure had been adopted. No part of the Bill was more warmly discussed than Section 3, which provided that, except in cases of urgency, a person not a pauper should not be confined as a lunatic without an order of a county court judge, stipendiary magistrate, or justice, to be obtained upon a petition presented, if possible, by a relative, and accompanied by two medical certificates; and it was the retention of this provision in the Bill after protest against it by Lord Shaftesbury which led to his resignation, as already stated. It is perhaps unnecessary to remark that it is on this point also the Scotch procedure differs most essentially from the English; and much has been urged both for and against its adoption in England. In Scotland, except in cases of emergency or voluntary submission to treatment, with the previous assent of the Board of Lunacy, no person of unsound mind can be legally received into an asylum for the insane without the warrant of a sheriff, who is the principal legal functionary in each district. The sheriff grants this warrant upon the petition of a relative of the patient or other person, accompanied by the certificates of any two legally qualified medical practitioners resident in Scotland; but it is distinctly and clearly understood, and even stated by sheriffs, that they look upon their functions in this respect as "purely ministerial"; they consider their duty simply to consist in examining the various documents put before them, and if they are found accurately filled in the warrant is granted without further question; the alleged lunatic is neither seen nor examined by the sheriff personally, or those acting under him.

Now, it may be asked, where is the actual and real safeguard to the liberty of the subject here which does not already exist in the English Acts? In each country there is the same intervention of a relative or other person and of two medical practitioners. In England the "ministerial" act of the sheriff alone is wanting; but in place of this is substituted, and admirably substituted, the vigilant supervision of the Commissioners in Lunacy, for within twenty-four hours of the admission of a patient into an English asylum, a copy of the order of the relative or other person, who takes the place of the petitioner in Scotland, and the two medical certificates, must under penalties be submitted to the Commissioners in Lunacy. There is no "merely ministerial" performance of duty here; the slightest omission, flaw, or inaccuracy calls for amendment. Within a given time, or if the facts indicating insanity stated are vague or not sufficiently strong, a further statement of facts will certainly be called for, and if not forthcoming the patient may be summarily discharged. The framers of the Bill of last year seem, while adopting the Scotch procedure in the main, to have been fully alive to the weakness of the "merely ministerial" function assigned to the sheriff in Scotland, for it is expressly stated in the Bill that in order to give the county court judge, magistrate, or justice in England something more than "merely ministerial" functions in cases which require investigation, he is empowered, if he considers the statements in the medical certificates unsatisfactory, to make inquiries, and, if he thinks it necessary, to *visit* the alleged lunatic. The wisdom of the provision giving these increased powers to the civic authorities has been much contested by those who have had the best opportunities of watching the practical working of the Lunacy Acts. At a meeting of the Medico-Psychological Association, held at Bethlem Hospital in May last, this question was fully discussed, and the general feeling elicited during the discussion was that magisterial interference was not desirable in England, but if its adoption by the Legislature should prove unavoidable and unpreventable, that the evil should be minimised to the utmost extent. A resolution was finally agreed upon in this event, as follows: That the function of the magistrate to visit and examine a patient ought to be omitted from the Bill; that the power of the magistrate should be purely "ministerial"; and that, when any doubt on medical questions arose, the magistrate should only have power to direct a further medical examination. Thus the argument with regard to the desirability and the usefulness of the introduction of the magistrate &c. revolves in a circle.

I have, I think, succeeded in showing that the "ministerially" signed warrant of the sheriff in Scotland is a practically useless document in so far as it gives increased security to the liberty of the subject in that country. This is practically admitted in England, for it is proposed in the Lord Chancellor's Bill to give something more than "merely ministerial" functions; whereupon this proposal to extend magisterial powers in England, as compared with Scotland, is at once met by the almost unanimous opposition of those best qualified to judge of the effects of such magisterial interference upon the patient himself, his relatives, and the privacy of domestic affairs; and we are forced to return to the point in the circle from which we started, and the question once more presents itself—Is it or is it not desirable to alter the existing law at all on this point?

A further and important question, however, still remains open for consideration, which is closely connected with the desirability or otherwise of the introduction of the magistrate, and that is the degree in which protection would or would not be afforded under a warrant issued by a magistrate to members of the medical profession on whom the duty might devolve of signing the certificates. Should the magistrate be introduced in any future Bill, and his duties be defined in it to be "merely ministerial," possibly more responsibity would thus be thrown upon medical certifiers or witnesses than if the magistrate were empowered to act in his "judicial" capacity. In connexion with this arises the interesting question, What is the present legally protective value to members of the medical profession of the sheriff's warrant in Scotland? An answer to this from high legal authority would be exceedingly useful in solving many existing doubts on the subject. It may be remarked *en passant* that the Lord Chancellor's Bill as amended in committee contained the following clause, which seems to afford adequate protection to medical practitioners; and a similar clause must of necessity find a place in any future Bill if medical men are called upon under it to perform similar duties, otherwise they will probably be declined: "A medical practitioner who in the manner required by this Act signs any certificate that a person is of unsound mind shall not be liable to any civic or criminal proceeding for signing such certificate, or for any act done with the view of enabling the practitioner to sign the certificate, if the certificate is signed and the act is done in good faith."

No dissentient voice has hitherto been raised to the admirable principle announced of affording facilities for the medical treatment of persons who desire to submit to treatment. Clause 30 provides for voluntary residence in asylums of *any person* who has obtained the previous consent of the commissioners or visitors. This practice has been long in beneficial operation in Scotland, and it is not confined there, as at present it is in England, to persons who have within a period of five years been previously in an asylum under certificate. The same remarks apply to the new certificate of urgency. A clause certainly does already exist in the present English Acts which permits reception of a patient in cases of urgency on one medical certificate, but the steps which require to be taken subsequently neutralise its value. In Scotland the certificate of emergency is frequently used, and it is found very efficacious in enabling dangerous patients to be at once placed under proper care and control for a given period, during which, if necessary, more formal documents can be procured.

Finally, by Clauses 54, 55, and 56 of last year's Bill, power was conferred on justices of county or borough asylums to make such alterations in or additions to the asylum, either by way of detached buildings or blocks of buildings or otherwise, for the purpose of providing accommodation for lunatics not paupers; justices were also empowered to make provision for the reception of pauper and private patients together or in separate asylums, and also to provide separate asylums for patients suffering from any particular class of mental disorder. The powers thus conferred upon justices, although merely permissive, clearly would have enabled them to provide for the poorer classes other than paupers, by annexes &c. to existing county or borough

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asylums; but the powers seem vague and ill-defined with regard to the provision to be made by justices for some 3321 patients of the upper and middle classes who are now resident in the metropolitan and provincial houses licensed for their reception by commissioners and county justices, the friends of whom would probably object to their removal from private and domestic surroundings suitable to their stations in life to the precincts of a pauper asylum. In introducing his Bill to the House of Lords, the Lord Chancellor, however, remarked that there was nothing to prevent justices purchasing for a fair value the existing licensed houses in which these patients are now under care, and converting them into public institutions.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et mortorum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. BARTHOLOMEW'S HOSPITAL.

A CASE OF DOUBLE POPLITEAL ANEURYSM; LIGATURE OF BOTH FEMORAL ARTERIES; RECOVERY.

(Under the care of Mr. MORRANT BAKER and Mr. BRUCE CLARKE.)

THE treatment of double popliteal aneurysm would be carried out by the majority of surgeons in a similar manner to that used in the following case. Some still object to the employment of digital compression before ligature, believing that such treatment injures the vessel and leaves the patient in a worse condition if unsuccessful. But when the pressure is properly regulated and skilfully applied, in cases where the artery at the point of pressure is healthy, no local damage arises, and after-ligature is quite satisfactory. As the risk of operation is increased by the simultaneous ligature of the two vessels, few would be inclined to perform it, although it has been done with success.

For the following notes we are indebted to Mr. Frederick H. Wigmore, house-surgeon.

J. P——, aged thirty-eight, a compositor, was admitted into Darker ward on Dec. 28th, 1885, suffering from double popliteal aneurysm. Three months previously he first noticed in the left popliteal space a pulsating tumour about the size of a walnut, which had gradually increased in dimensions. Two months ago he experienced very considerable pain in the right popliteal space, and his knee-joint was treated as for rheumatism. There was no history of individual injury or family history of aneurysm, but there was a distinct account of syphilis ten years ago.

On admission the man was pale and badly nourished, with numerous pits of small-pox on his face. In the left ham, and situated just behind the knee-joint, was a pulsating swelling about the size of a hen's egg. The whole tumour was very soft, and could be made almost completely to disappear by slight pressure when the common femoral was controlled by the finger; and if, while the sac was still compressed, the common femoral was allowed to go free the aneurysm was found to fill by gradually increasing leaps and bounds, three pulsations at least being required to distend it to its usual limits. The pulsation was expansile, and synchronous with the heart's beat. There was no thrill to be felt by the hand placed upon it, or bruit when the stethoscope was applied. The pulse in the tibial arteries was feeble. In the right leg there was a large and feebly pulsating tumour as large as a man's clenched fist, extending from between the hamstring tendons under the inner hamstrings as far round in front as the inner border of the rectus muscle, and on the outer side to the tendon of the biceps. There was a distinct thrill to be felt and bruit to be heard in the tumour, which was very painful. The patient had been losing flesh, and was manifestly very weak. His appetite was bad. The temperature was just above normal. The bowels were rather confined. The pulse at the wrist was strong, but intermittent. Urine: sp. gr. 1020; acid; contains phosphates, but no albumen or sugar. Both radial and tibial arteries were hard. An examination of the chest and abdomen disclosed the following physical signs:—Movements fairly good; vocal vibrations increased at right apex; no thrill to be felt. Heart's dulness normal. Right apex slightly impaired to percussion. A somewhat flatter note to be obtained in the second right intercostal space near sternum and over aorta. On auscultation expiration at right apex was found to be prolonged and tubular; vocal resonance increased over same area. Heart sounds: first sound thumping at apex; second pulmonary and second aortic sounds loud and forcible; aortic sounds conducted some distance from sternum; first aortic sound soft and altered, but not a murmur. Posteriorly the physical signs corresponded with those in front of the chest. No crepitant sounds anywhere. Liver and spleen not felt. Pulsations of abdominal aorta forcible and pronounced.

Since pressure upon the common femorals easily controlled the pulsations in the aneurysms, it was determined to try the effect of such pressure before resorting to ligature of the artery. Accordingly, at 3.30 P.M. on Jan. 2nd, a Holden's shot-bag containing 9 lb. was applied (a finger intervening) to the right common femoral, high up. The pulsations were readily controlled, and there was an increase in hardness of the sac. At 6.45 P.M. the patient was much exhausted, and the pressure was discontinued. The pulsation was almost checked, and the sac was very hard. The pulsation recommenced, however, in a very short time.

Jan. 3rd.—Pressure was applied from 9 A.M. to 1 P.M. and from 3 to 7 P.M. The result was not satisfactory, the pulsations being as strong as ever. Complains of some pain in the right tumour. Pulse 100; temperature subnormal.

5th.—On the right side the aneurysm seems to have extended a little up the limb, and pulsation appears to be strong over a wider area. Complains of some numbness.

6th.—2 P.M.: A discoloured patch observed on the skin over the right aneurysm. Œdema behind ankle. The aneurysm has extended slightly up the thigh. The patient was consequently taken down to the operating theatre, and, he having been placed under ether, the right femoral artery was tied by Mr. Morrant Baker at the apex of Scarpa's triangle. The artery was tied in two places with kangaroo-tendon ligatures and divided between, there being an interval of about three-quarters of an inch between the two ligatures. A small drainage-tube was inserted, and the wound, having been cleansed with warm carbolic lotion, was closed with silver sutures. The whole was dressed with sanitas oil (1 in 30 of olive oil), lint, and antiseptic gauze. The limb was carefully wrapped in cotton-wool, and hot bottles were placed in the bed.

7th.—Passed a good night. Has taken food well. Limb warm; no pulsation to be detected in the aneurysm. The tumour on the left side remains the same.

8th.—Toes warm and moist; blush returns after pressure. Temperature normal.

9th.—Aneurysm pulsates; has diminished in girth three quarters of an inch since the operation; wound dressed and looking well; sensation of limb unimpaired. The aneurysm of the left leg seems to have extended upwards and downwards in the popliteal space. No discolouration of the skin or œdema of the leg. Girth, 12¾ in.

11th.—Wound dressed and doing well. No change in left aneurysm.

12th.—Drainage-tube withdrawn, and not replaced. Left aneurysm appears to have extended, and the skin over it is slightly discoloured. Temperature subnormal. On account of the rather sudden alteration in the aneurysm, the left femoral artery was, in the absence of Mr. Baker, tied by Mr. Bruce Clarke near the apex of Scarpa's triangle in two places, and divided between. Kangaroo tendons were used as ligatures. A drainage-tube was inserted, and a dressing of moist carbolic gauze was applied.

14th.—The right wound shows some signs of slight discharge from the track of the drainage-tube; elsewhere it is healed. The left wound had its drainage-tube removed. The temperature has gone up to 101·5°; pulse 120.

15th.—Right wound looking exceedingly well; left wound appears healthy; no pulse in either aneurysm; sensation not impaired, and toes warm. Feels comfortable.

19th.—Right wound quite healed, and dressing discontinued.

20th.—Left wound is breaking down; pus discharging;

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dressings blood-stained (venous). Temperature fluctuates between 98° and 100°.

21st.—Dressing on left side still blood-stained. A good deal of sanious pus expressed from the wound. Syringed with carbolic lotion, and dressed with carbolic gauze.

23rd.—Superficial veins of right leg somewhat distended. A vessel pulsates over the left aneurysm. Left wound improving.

28th.—Left wound much improved; some hardness surrounds it; discharge less. Temperature natural.

29th.—Left wound much better, but still discharges slightly; some hardness remains round wound; no pain; no rise of temperature; general condition excellent.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST.

AORTIC REGURGITATION, WITH ACUTE CONGESTION OF THE LUNGS, RELIEVED BY FREE BLEEDING.

(Under the care of Dr. SAMUEL WEST.)

ALFRED P——, aged twenty-five, was admitted on Dec. 4th, 1885, with extreme dyspnœa, due to cardiac mischief. Nine months ago a ton of clay had fallen out of the side of a tunnel upon his chest. He lay for two hours unable to move, and had to lay up for two days, after which he experienced no further distress until three months ago. He was then seized suddenly with shortness of breath, but without pain. This had got worse since. He had never had rheumatic fever, but his work was hard and he had drunk heavily. His feet had gradually swollen, and he had been much worse for the last fourteen days.

On admission the dyspnœa was extreme, and the patient was somewhat cyanosed. There was much œdema of the legs. A double murmur was heard over the whole præcordium, which was thought to be probably friction. The patient was put to bed and slept quietly till 8.30 A.M., when he was suddenly seized with severe dyspnœa. He was greatly distressed and excited, throwing himself about. He became more and more cyanosed, and spat up some bright bloody sputum. The lungs became rapidly engorged, and he seemed to be dying. It was clear that he had an attack of acute congestion of the lungs of cardiac origin, and that he would die unless relieved in some way. The sister in charge, a woman of thirty years' experience, said he was lost and nothing could save him. It was decided to bleed him. This was done at once to the extent of nearly a pint from the arm, and as the blood flowed the blueness diminished and the breathing was relieved. A little opium and ether were given, and in an hour all immediate danger was past. The pulse, which before bleeding was thumping and hard, became slower and softer, and by midnight the sputum had ceased to be blood-stained.

Dec. 5th.—Heart's action quieter; loud double aortic murmur audible.

6th.—Patient better. Cardiac dulness extends to the right of the sternum, and upwards to the third rib; the apex is in the mid-axilla in the sixth space. The liver is much enlarged downwards and painful. The œdema is less, and the bronchitis and the cyanosis are almost gone.

From this time the improvement was continuous up to a certain point, the patient of course remaining in bed, but being comfortable and sleeping and eating well. He remained in a stationary condition for about a month, and then the œdema began to increase and the patient to slowly but steadily lose ground, and he finally died on Jan. 22nd, without further symptoms of importance. The temperature had risen to 101° during the last week of life.

The post-mortem showed disease and rupture of the aortic valves. The left anterior was chiefly affected; it was torn, and a free tag had rubbed the septum and led to endocarditis, with the formation there of a small aneurysm.

Remarks by Dr. WEST.—The acute symptoms on admission I attributed to sudden failure of the heart, the rupture of the valve having taken place three months before, according to the history; as no infarct was found in the lungs this explanation was probably correct. The great interest of the case lies in the effect of the bleeding. The patient was at the time actually dying, and it seemed almost hopeless to do anything; but the only thing was bleeding, and that copiously. The effect was like that of a charm, for as the blood flowed the threatening symptoms disappeared one by one, and the danger passed away. It may seem heroic to bleed freely in aortic disease, and such treatment would be in place only in exceptional cases, but I have no doubt that in this case the prolongation of life for seven weeks may be rightly referred to the treatment adopted. Bleeding in the chronic pulmonary of mitral disease to relieve a dilated right ventricle is a recognised and not unusual method of treatment. The present case shows that it may be equally in place in appropriate cases of aortic disease.

EDINBURGH ROYAL INFIRMARY.

ANEURYSM OF THE ABDOMINAL AORTA.

(Under the care of Dr. BYROM BRAMWELL.)

G. S——, aged thirty-two, a foreman labourer, presented himself on Jan. 2nd, 1886, complaining of pain in the back and a swelling in the abdomen. The patient, a very big and formerly very muscular man, who was now somewhat pale and flabby-looking, stated that the pain in the back commenced several months ago, and that for the past five months he had been under treatment (rest and iodide of potassium, sixty grains three times daily) in the Sunderland Infirmary. On inquiry, it was elicited that he had been subjected to very heavy work and strain, that at one time he had drunk freely, and that he had had a soft chancre and bubo, but no secondary syphilitic symptoms.

Physical examination.—A large pulsating tumour, the pulsation being lateral and expansile, extended from the zyphoid cartilage to within half an inch of the umbilicus, and was situated for the most part to the left of the middle line. On auscultation, a well-marked systolic murmur was audible over the tumour in front and on both sides of the spine (louder on the right than on the left side) behind. The patient stated that he was somewhat short of breath on exertion. The right pupil was smaller than the left; there were no symptoms of intra-thoracic pressure; the pulses were equal, and the heart seemed normal. No dulness was detected over the manubrium sterni, but some pulsation could be felt deep down in the supra-sternal notch. When the patient lay on his back with his head low, both heart-sounds were very distinctly heard over the manubrium sterni, and there was at the same spot very distinct bronchial, almost tubular, breathing; there was also, when the patient was in this position (flat on his back with the head low), some apparent pulsation in the veins at the root of the neck. When the patient sat up and leaned the head forwards, the tubular breathing and venous pulsation in the neck disappeared and the localised loudness of the heart-sounds was much less audible.

Remarks.—Dr. Bramwell emphasised the fact that when a robust and apparently healthy man complains of a fixed pain in the back, an aneurysm of the abdominal aorta should always be suspected; the suspicion was strengthened if the patient had led a laborious life, had been subjected to heavy strains, had drunk hard, or had had syphilis. It must be remembered that a cicatrix in the groin or in the penis, though presumptive, was not certain evidence of syphilis. In this case there could be no doubt as to the nature of the condition, but the diagnosis of an aneurysm of the abdominal aorta was not always an easy matter. A case was mentioned in illustration of the difficulties of diagnosis in which the aorta was encased in a mass of cancerous glands; in that case there was: (*a*) very severe pain in the back; (*b*) a tumour fixed to the spine, localised in the course of the aorta, and presenting most distinct lateral and expansile pulsation; together with (*c*) a systolic murmur audible both over the tumour in front and over the back behind. The physical signs of an aneurysm of the abdominal aorta were, in fact, exactly simulated; and it would have been impossible to have arrived at a correct diagnosis had it not been for the fact that a lump, the size of a small orange, evidently a malignant growth of rapid formation, was situated just above the left clavicle. A systolic murmur was very generally present in aneurysms of the abdominal aorta; this was not the case in aneurysms of the thoracic aorta; in that condition, provided that the cardiac valves were healthy and there was no murmur conducted from the heart, a murmur was more often absent than present; a murmur might be said to be absent under such conditions in at least 50 per cent. of the cases. It must not, however, be supposed that a systolic murmur heard over the abdominal aorta was distinctive of aneurysm. This was more especially the case when auscultation was made from the

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front, in which position the mere pressure of the stethoscope, by constricting the vessel, was sufficient to produce a murmur. When, however, auscultation was made from behind, this source of error was avoided. If a murmur were heard in the vertebral groove behind, and if the observer were satisfied that it was not propagated from the chest, but generated in the abdominal aorta itself, it was very strong, but by no means conclusive, evidence of aneurysm. In the above case the murmur was heard more loudly in the right than in the left vertebral groove; this probably showed that the aneurysmal sac was attached to the right side of the spinal column, notwithstanding the fact that in front this aneurysmal tumour was placed to the left of the middle line. Dr. Bramwell did not feel quite certain that in auscultating the back he might not have mentally reversed the two sides by mistaking the right for the left, as one is sometimes apt to do; if this had been the case, the error would probably have been brought to his notice by some of the students who subsequently examined the patient. The exact cause of the shortness of breath which the patient felt on exertion was not definitely ascertained. The tubular breathing and localised loudness of the heart-sounds over the manubrium sterni, and the venous pulsation at the root of the neck, were possibly due to the presence of a small aneurysmal sac filled with solid coagula under the upper part of the sternum. A case was referred to in which somewhat similar physical signs were proved on post-mortem examination to be due to this cause. This was merely advanced as a suggestion and not as a diagnosis. As the result of a single and somewhat hurried examination, Dr. Bramwell did not feel himself able to express a positive opinion on the point. There was no dulness on percussion. The pulsation in the supra-sternal notch was not of much corroborative value; it might be due to simple dilatation of the aortic arch, and was, indeed, not unfrequently present in perfectly healthy persons.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Harlequin Fœtus.—Cardiography.

AN ordinary meeting of this Society was held on Tuesday last, Mr. G. D. Pollock, F.R.C.S., President, in the chair.

Mr. J. B. SUTTON read a paper on a case of General Seborrhœa or "Harlequin" Fœtus. The case was a typical example of what is usually known as the "harlequin" fœtus. Although the condition is a very rare one, it has received a variety of names; but as the term "general seborrhœa" expresses the pathology of the disease, and that of "harlequin fœtus" is an excellent clinical expression, both have been retained. Details of the microscopical characters of the skin were given, and an argument was furnished for regarding the affection as being due to abnormal formation of the vernix caseosa, which, instead of being shed into the amniotic fluid, forms concrete masses which adhere to the skin. The paper ends with an appendix containing references to all the recorded cases known to the author.—Dr. COLCOTT FOX said that all authors were of opinion that the disease was limited to the epidermis. No doubt there were cases of general seborrhœa which differed, however, in the circumstance that the termination is not necessarily fatal, which is the invariable result of the harlequin fœtus. Kyber called it a diffuse keratosis; a purely developmental anomaly of the epidermis. Charles Robin and Chambard, with all recent authors, concurred in this view. Kyber said the disease began before the development of the sebaceous glands. What alliances had this condition with true ichthyosis? Though Hebra and Kaposi had asserted that true ichthyosis began in all cases some time after birth, yet Dr. Fox felt sure that this was incorrect, for he knew of some cases in which the ichthyotic skin was certainly congenital. He believed that true ichthyosis and the harlequin fœtus were of identical nature.—Dr. RADCLIFFE CROCKER had examined the skin in Mr. Sutton's case, taken from the scalp and chest, and he dissented from the author's view of the microscopic appearances. The disease was an ichthyosis. There was no kind of seborrhœa that produced any such change; and in seborrhœa the skin beneath was perfectly healthy. Hebra asserted that in the harlequin fœtus there was not the enlargement of the papillæ that pertained in ichthyosis, but Dr. Crocker had found the papillæ much elongated in Mr. Sutton's specimen. An extension downwards of the inter-papillary pillars of the rete Malpighii was also observed. Further, the horny layers dipped down and followed the conformation of the papillary layer. Dr. Crocker believed that ichthyosis congenita was a proper name for the disease.—Dr. CHARLEWOOD TURNER also agreed with the conclusions of Dr. Fox and Dr. Crocker. A defective secretion of sebum led to the accumulation of epidermal scales. He considered that there was a defective development, and not a hypertrophic condition.—A FELLOW, after referring to the uncertain state of knowledge concerning the source of the liquor amnii, asked whether the liquor amnii were deficient or altered in any way in Mr. Sutton's case.—Mr. J. B. SUTTON admitted that there was room for a difference of opinion as to the microscopic nature. The masses on the skin were most marked where the vernix caseosa occurred in the greatest quantity, and the disease developed from the fourth to the eighth month of fœtal life when the sebaceous secretion was most active, so he considered that there was an excessive amount of sebum in the masses on the skin of the harlequin fœtus.

Dr. PAUL CHAPMAN communicated a paper on Cardiography, with special reference to the relation of the duration of the Ventricular Systole to that of the Diastolic Interval. The author, after discussing previous works on the subject, especially that of Dr. A. H. Garrod, gave a table of measurements, taken from healthy individuals, of the duration of ventricular systole and diastole in each cardiac revolution, for every increase of five beats in frequency per minute between 45 and 150. He showed that in the human subject the duration of systole diminishes by a constant quantity as the pulse frequency increases, the constant diminution being ·0085″ for every increase in frequency of five beats in the minute. He gave this table as one which might be safely used by future workers as a basis of comparison for estimating departures in disease, while emphasising the fact that the duration of ventricular systole may vary, in health, from the measurements given in his table within the limits of ·02″; an increase being most common with the lower pulse rates. A decrease at the higher rates extending beyond the limit above mentioned must be considered abnormal. The influence of increase or of diminution of blood-pressure on the duration of ventricular systole was discussed. The importance of the rapid diminution in duration of systole providing the heart with an increased amount of rest was pointed out; and it was remarked that a high pulse frequency is not necessarily attended with rapid cardiac failure; though in some cases rapid failure did quickly ensue. Marked departures from the normal relative duration of systole and diastole were then noticed. The results of experiments with digitalis and convallaria majalis were given, and illustrative tracings shown. The instrument employed in making the observations was the air-containing cardiograph of Dr. Burdon Sanderson.—Dr. BROADBENT considered that the profession was indebted to Dr. Chapman for the labour that he had bestowed on the subject. The relation in time of the systole to the diastole was of much importance; there were cases in which no cardiographic tracing could be obtained. He had been interested in the subject before the appearance of Dr. Garrod's paper. He believed that the relative duration of systole and diastole could be gauged accurately by the stethoscope, and this had been his special method of observation. The clinical interest and prognostic importance of the gradual diminution of the duration of systole were remarked upon. The cardiograph gave tracings which were consistent with stethoscopic observation. He considered, in opposition to Dr. Chapman, that blood-pressure had a great deal to do with the diminution of the duration of systole. In fevers the diminution was due to diminished resistance in the peripheral circulation. In some pyrexiæ no diminution occurred, as in scarlet fever, during the early stage, with a frequent pulse, when the arteries were not relaxed. The normal rhythm might be lost, and auscultation reveal the complete "tic-tac." The diastole might be actually shorter than the systole. Similar phomomena were met with in acute renal disease, in which a slight elevation of temperature was accompanied by considerable increase in the peripheral resistance. In some cases of acute albuminuria the heart rhythm varied almost from day to day; here cardiac exhaustion played a part. He had also observed the lengthening of systole gradually diminish as the heart

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gained power. In cases of heart failure in diphtheria, when the interval between the first and second sounds was diminished, we had an early and very significant sign of the cardiac exhaustion. The precipitate following of the second sound on the first sound was due to an imperfect emptying of the ventricle, and he also conjectured that the second sound might appear before the ventricle had ceased to contract. Controlled by careful stethoscopic examination, he believed that cardiographic tracings were of considerable value.—Dr. A. E. SANSOM spoke of the value of Dr. Chapman's observations. He had used the cardiograph clinically for many years past. In his early observations he had used Jalabin's instrument, but later Pond's sphygmo-cardiograph. The cardiograph was, in his opinion, of much practical value. It was possible to distinguish mitral stenosis from aortic regurgitation with a thrill by means of the cardiograph. This he had verified in two recent cases. In mitral stenosis the diastolic interval was much elongated in the ratio to systole, as 1 to 1·8. This was regarded as an important point in the diagnosis of mitral stenosis, together with marked irregularities in rhythm. In a case of mixed aortic and mitral regurgitation the ratio of systole to diastole was 1 to 0·3. Digitalis might be very harmful in some cases of aortic regurgitation by prolonging the duration of the diastole.—Dr. ANGEL MONEY, working with Gowers' cardio-sphygmograph, had come to the following conclusions: That the cardiograph was valuable as a record of the mode of action of the myocardium in some cases of heart disease, but it was an incomplete record. Careful auscultation and palpation were of more value in determining the state of the myocardium, and, consequently, in giving a prognosis. Cardiograms were, in his opinion, of but little value in diagnosing the nature of valvular lesions. Mitral stenosis frequently gave an almost special cardiogram, but even this might be simulated by a healthy heart under the influence of emotional excitement. He possessed cardiograms taken from different forms of valvular lesion which could not be distinguished from one another.—Dr. CHAPMAN, in reply, could not agree with Dr. Sansom that the lengthening of the diastole was absolutely characteristic of mitral stenosis; lengthening might happen from many other causes than this form of valvular lesion. He concurred with Dr. Money in thinking that the cardiograph revealed and recorded the state of the myocardium as to muscular or nervous exhaustion. He would employ it clinically rather with a view to prognosis than diagnosis.

MEDICAL SOCIETY OF LONDON.

General Annual Meeting.—Spastic Paralysis.

THE annual general meeting of this Society was held on March 1st, at 8 P.M., after which the ordinary meeting took place, Dr. W. M. Ord, the retiring President, in the chair. The treasurer, Mr. A. E. Durham, read the report of the financial affairs, which showed that the Society was in a prosperous condition. The hon. librarian, Dr. W. H. Allchin, read a report on the state of the library, which had now been fully catalogued. Dr. Ord and Mr. Durham had each contributed £20 towards the expenses of the library. Dr. Kingson Fowler read the report of the trustees of the Fothergillian Fund. The subject of the Fothergillian Prize has not yet been selected for the year 1888. Mr. Arthur E. Durham moved, and Dr. Sutherland seconded, a vote of thanks to Dr. W. M. Ord on the termination of his presidency. Mr. Noble Smith moved, and Dr. Allchin seconded, the vote of thanks to the retiring vice-presidents and other retiring members of the Council. Dr. Coupland proposed, and Mr. Harrison Cripps seconded, the vote of thanks to the retiring secretary, Dr. J. Kingston Fowler. This resolution was carried with acclamation, and Dr. W. M. Ord spoke of the very valuable services that Dr. Fowler had rendered both to the President and the Society at large. The report of the scrutineers of the ballot (Drs. Hayward and Sutherland) showed that the gentlemen nominated by the Council for office for the ensuing year had been unanimously elected. (*Vide* THE LANCET, p. 400.)

Dr. W. HUGHES BENNETT read a paper on Spastic Paralysis, which appears *in extenso* in our present issue.—Dr. HUGHLINGS JACKSON said he believed he was responsible for the view that increased muscular action of spastic states might be attributed to loss of cerebral influence. Abolition of the functions of local inhibitory centres of the spinal cord was a hypothesis advanced by Gowers, and accepted by him. He still was of opinion that some forms of rigidity were due to unrestrained cerebellar influences, as, possibly, in the rigidity of paralysis agitans. Mention was made of a case of epileptic attacks in which the clonic spasm was almost limited to the left arm, yet after the fits, which were very numerous, the knee-jerk was first abolished on that side, though later on it increased and ankle-clonus developed; even at the onset of a fit the knee-jerks were exaggerated, although the legs were not affected with clonic spasm.—Mr. VICTOR HORSLEY said that in artificial degenerative processes the same exaggerated phenomena pertained as in disease in man. He did not think the hypothesis of Gowers—that of miniature inhibitory centres of the spinal cord—would help to explain matters. Richet had worked very fully at the phenomena of hypnotism. The paper by Dr. Bennett raised the question of the connexion between higher and lower centres.—Dr. ANGEL MONEY advanced reasons for thinking that the hypothesis of Gowers might prove of value in understanding the phenomena of temporary rigidity.—Mr. HARRISON CRIPPS spoke of the mechanical contraction of muscles in old cases of spastic paralysis.—Dr. W. M. ORD hoped that the discussion would tend to throw light on the clinical value of the phenomena.—Dr. W. B. HADDEN said that he had noted ankle-clonus in a case of pernicious anæmia; the necropsy showed that there was lateral and posterior sclerosis. In a case of chronic right hemiplegia and hemi-spasm he had detected no change in any part of the nervous system, nor also in a case of fatal tetany. He had seen ankle-clonus in the sound leg when a patient had been laid up with fracture of the opposite leg. In his opinion sclerosis did not necessarily produce rigidity or exaggerated reflex phenomena; on the other hand, we might have the phenomena of hyperkinesis in the absence of lateral sclerosis.—Dr. ORD said that the case of pernicious anæmia already alluded to occurred in a robust and ruddy railway guard, whose disease began after a curious shock which the patient described as ascending up the left arm and down the left side. He was interested to know how far the anæmia might have been dependent on the spinal lesions.—Dr. BEEVOR considered that spasm and increased deep reflexes might not be due to the same cause; they did not always appear together; the latter frequently preceded the former. After ordinary epilepsy he had observed ankle-clonus and increased knee-jerks on the side most convulsed.

Aneurysm of Aorta.

At an ordinary meeting held on Monday last, Mr. R. Brudenell Carter, F.R.C.S., the new President, in the chair,

Dr. W. H. WHITE read notes of a case of Aortic Aneurysm that occurred in a married woman aged forty-three. When first seen she was suffering from intermittent pain and vomiting, possibly due to a gall-stone; she had suffered once seven years previously from the same complaint. On Feb. 20th, 1885, the urine contained bile, and Dr. White noted the following symptoms: Left pupil smaller than the right; right and left jugular veins were swollen; the left radial pulse was weaker than the right. There was a distinct thrill about the second right costo-sternal articulation, and also slight pulsation in the supra-sternal notch and first right intercostal space; about the same area there was dulness and a loud to-and-fro murmur. There was no sign of pressure on the recurrent laryngeal nerve and no dysphagia; the left chest expanded less than the right. Profuse perspiration and thirst were marked symptoms at times. Later in the course of the case there was dulness of the left side, with absence of vocal fremitus and breath sounds. Hæmoptysis was occasionally present. The pain at times called for the administration of hypodermic injections of morphia. The patient died in a state of collapse, accompanied by profuse hæmoptysis, on Jan. 21st, 1886. Rest in bed, low diet, and iodide of potassium were the agents used in treatment. Ergot lessened the volume of the pulse, and appeared to control the hæmorrhage. At the necropsy some fluid was found in the left pleural cavity. The heart was slightly enlarged, its cavities empty, and the left ventricle somewhat hypertrophied. The aorta was greatly distended, much thickened by atheroma, and sacculated. The left bronchus was blocked, and the left lung collapsed; the left pulmonary artery was also somewhat pressed upon. There was a fibroid tumour of the uterus. The uterus, ovaries, and peritoneum were the seats of round-celled sarcomata, which also existed in the left lung. A

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round-celled growth also occurred in the adventitia of the aorta. The aneurysm had extended backwards and to the left, causing erosion of the vertebræ. — Dr. DE HAVILLAND HALL read notes of a case of Aneurysm of the Aorta in a man aged thirty-six, in whom there were four distinct aneurysms. The voice was affected early in the disease. The patient was first seen on July 1st, 1885. There were pain in the shoulder, headache, dyspnœa, deficient entry of air into the left lung, absence of pulsation in the left axillary, brachial, and radial arteries, and the right brachial was very rigid. There was a cataract of the left eye. Percussion revealed a dull area at the apex of the left lung; later on, pulsation and bulging developed at this site. Feeble pulsation in the left radial and brachial arteries returned. The dulness increased in area. Pain was experienced in the right mammary region. Dulness appeared in the second right interspace. A diastolic bruit was heard at the base of the heart, which varied in distinctness from time to time. Death ensued on Feb. 12th, 1886. At the necropsy sixteen ounces of serum were found in the left pleural cavity and one ounce in the pericardium. A tumour as large as a cricket-ball was detected at the top of the left side of the thorax. Both lungs were œdematous. An aneurysmal dilatation was detected at the first part of the arch of the aorta the size of a Tangerine orange; another large aneurysm was present at the junction of the second and third parts of the aorta, nine inches in circumference. The left pneumogastric nerve was destroyed. The left carotid ran along the wall of the large aneurysm for three inches. The aortic valve allowed of slight regurgitation. There was a large dilatation of the first part of the arch, and the third aneurysm opened out of this. The diagnosis was made by Dr. Hall as soon as the laryngoscopical examination revealed paralysis of the left vocal cord. In treatment with iodide of potassium, he advocated the same principles that Dr. Balfour had recently laid down in THE LANCET.—Dr. C. THEODORE WILLIAMS referred to the stridulous character of the voice that obtained in some cases of aneurysm—a stridor which was particularly remarkable when the patient coughed. Cancer of the mediastinum might give rise to paralysis of the left vocal cord.—Dr. W. M. ORD thought the interest of Dr. White's case was chiefly pathological. Dr. de Havilland Hall's case appealed more to the clinical physician. A murmur at the site of the orifice of the pulmonary artery was occasionally present in cases of aneurysm of the sinus of Valsalva. In all cases of alteration of the voice the larynx should be examined. In a large number of cases the vocal cord was fixed in the position of adduction, and not in the cadaveric position. Dr. Ord had taken tracings from aneurysms which, from having fluid contents, became solid and yielded tracings with the cardiograph similar to those obtained by Dr. Richardson.—Dr. S. WEST asked whether Dr. White considered there was any causal relationship between the sarcoma and the aneurysm. The number of cases in which blood-casts were expectorated and the patient lived for a long time was not great. In a case of phthisis he had met with those blood-casts.—Dr. D. W. FINLAY spoke of the value of iodide of potassium in the treatment of aortic aneurysm.—Dr. A. ROUTH alluded to the occurrence of menstruation within ten days of death, when the ovaries were so much diseased.—Dr. WHITE, in reply, repudiated the notion that the aneurysm was in any way causally related to the sarcoma.—Dr. DE HAVILLAND HALL said in his case the left vocal cord was in the cadaveric posture because both adductor and abductor muscles were paralysed; there was no stridor, and none was to be expected, as the rima was freely open.

ACADEMY OF MEDICINE IN IRELAND.

Dentigerous Cyst.—Perforating Ulcer of the Stomach.—Bright's Disease.

AT the meeting of the Pathological Section on Jan. 15th, MR ARTHUR BAKER read a paper on a case of Dentigerous Cyst occurring in the lower jaw of a boy aged sixteen. The tumour had existed for six months previous to operation. When opened an unerupted canine tooth was found at the bottom of the cyst. This tooth showed the malformation known as dilaceration of its root. The importance of diagnosing cases of this disease was shown by the fact that in a similar case, where the cyst was not recognised, one-half of the jaw had been excised.—Mr. STORY said there was only one other case on record in which a dilacerated tooth was found occupying the cavity of one of those so-called dentigerous cysts.—Dr. MACSWINEY said cases of teething were sometimes met with in children, where it seemed impossible for the unaided powers of the child to erupt the tooth, and on such occasions he had seen a soft tumid condition over the tooth, which had not escaped through the gum, and which, when incised with a gum lancet, had given exit to a clear viscid fluid. There was in such cases a sort of cyst under the unbroken gum and resting on the crown of the tooth.

Dr. FINNY exhibited an extremely rare specimen of an Oval Ulcer (one inch by half an inch) of the Stomach, situated on its anterior wall two inches and a half from the cardiac and two from the lesser curvature, leading up to and perforating the heart. The floor of the ulcer was the muscular structure of the under surface of the left ventricle, about one inch from the apex; and the ulcer, after perforating the stomach, had eaten through the diaphragm and the pericardium. The stomach was adherent to the diaphragm round the ulcer, but the adhesions were very slight and of recent date. The pericardial sac had been obliterated by adhesive inflammation, and over the whole of the left ventricle the adhesions were very dense. Through the larger of several interstices between the exposed muscular tissue of the apex a probe could be passed upwards, and was found to enter the left ventricle behind a musculus papillaris attached to the posterior mitral curtain. The patient from whom the morbid specimen was removed had died of syncope on December 9th, 1885, preceded by the passage of blood from the bowels. Strange to say, there was no hæmatemesis. At the necopsy the stomach and the whole intestinal canal were found full of liquid blood, the stomach alone containing two quarts. The source of the blood was the left ventricle, and it is probable that it escaped into the stomach during both systole and diastole. The fatal steps in the pathological history of the case were: (1) Ulcer of the stomach, of unknown duration; (2) rheumatic pericarditis and adhesions of the left ventricle to the diaphragm, with obliteration of sac; and (3) recent activity in the ulcer perforating into the muscle of the heart. The general muscular structure of the heart under the microscope was perfectly normal, and free from fatty degeneration, except the fibres at the floor of the perforation, which were granular and broken down, though free from all fat. Dr. Finny referred to the anatomical relations of the liver and stomach to the diaphragm, and stated by observations made, that while, in the majority of instances, the liver by its left lobe entirely separates the stomach from the portion of the diaphragm to which the pericardium is applied, there are exceptional specimens where the left lobe of the liver is small and pointed, where a small triangular portion of the extreme front of the pericardial aspect exactly corresponds to the anterior wall of the stomach in the very position of the ulcer present in this case. There are three similar cases recorded in Vienna: the first by H. Chiari in 1880, the second by F. Brenner, and the third by Oser in 1881; and each of these observers, like Dr. Finny, seemed to have been unaware of the other reported cases.—Dr. FRAZER had seen two cases of gastric ulcer, both of which occurred in young females, and were attended by rupture. In both the patients survived for a time—one for some years. He was enabled, by the recurrence of the rupture in both cases afterwards, and by circumstances brought under his notice after death, to verify the fact that the ulcers had perforated the stomach and had afterwards healed.—Dr. DUFFEY said he had observed a case of ulcer of the stomach in which an opening was formed into the lungs, causing a gangrenous abscess. He presented the specimen to the museum, and it was now on the table of the College of Surgeons. The case reported by Professor Chiari occurred in a woman seventy-one years old. That of Professor Oser was in a woman of the same age. Brenner's case occurred in a woman of fifty-five.—Dr. HENRY KENNEDY said, according to his experience, when the ulcer was on the anterior wall of the stomach, the suffering was very much less than in other cases, and was also intermitting. On the other hand, when the ulcer was down near the pylorus, the pain was nearly constant on the occasions of taking food.—The PRESIDENT remarked that Dr. Finny, speaking of the manner in which the ulcer, after perforating and causing an adhesion of the pericardium, made its way to the ventricle of the heart, laid stress on what he called solution by the gastric juice of the muscular wall of the heart. That seemed rather a startling novelty in

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pathology, and he should prefer to arrive at some other explanation of the fact. The idea of solution by gastric juice was suggested by Chiari's case, in which it was stated that the muscular fibre of the heart round the situation where the rupture occurred was in a condition of fatty degeneration. Unless there was some very good evidence that the solution in Dr. Finny's case was caused by the gastric juice, he would incline to think that some form of degeneration was present also. Hardly any part of the abdominal viscera was subject to so much irregularity as to position, size, and shape as the left lobe of the liver. Therefore what had occurred in Dr. Finny's case did not present any great difficulty to his mind.—Dr. DUFFEY said there was one circumstance mentioned in Chiari's case which, although no weight was attached to it by the reporter, might be of importance—namely, that in the wall of the sac close to the opening into the stomach a hard brittle mass was found, which chemical examination proved to be composed chiefly of silicates, and which was probably a piece of glass that had been accidentally swallowed.—Dr. MACSWINEY said that solution of tissue by gastric juice was only possible after there had been necrosis of the tissue. In Dr. Finny's case a portion of the pericardium might have become dead tissue.—Dr. FINNY, in reply, said in his case the specimen contained no foreign body. He thought the fact of a chamber having been formed between the heart and the pericardiun showed that probably a gastric ulcer first formed the abscess, and that it opened from the stomach, forming a smaller one underneath the diaphragm, and thence reached the pericardium. Having regard to the slight character of the adhesion between the outer surface of the stomach and the diaphragm, he did not think the passing of the ulcer through the diaphragm could have set up such pericarditis as was found in the case. He thought that pericarditis was due to a rheumatic attack which had preceded the perforation of the diaphragm by the ulcer from the stomach. Nor did he see any difficulty about the solution of the muscles of the heart by the gastric juice. Dr. Purser and Dr. Bewley, who had examined the floor of the ulcer and the granular muscular tissue of the heart, would bear him out in the statement that not the least appearance of fatty degeneration was exhibited by the portions of those parts that were examlned under the microscope. The base of the ulcer and the muscular tissue of the heart were turned into a granular débris, which was the result of the solution. The rest of the heart was perfectly healthy, and showed no sign of fatty degeneration whatever. Nor did he see why the heart should not have suffered from the action of the gastric juice, when they saw that the tendinous portion of the diaphragm, which opposed the progress of the ulcer, was dissolved by the gastric juice at the floor of the ulcer. Having thus gone through the diaphragm, which was of its full thickness, the gastric juice might have acted in a similar way on the muscular tissue of the heart.

Dr. A. W. FOOT showed Kidneys as representative examples of the last stage of parenchymatous nephritis when the organs have undergone atrophic changes. They exhibited the variety of Bright's kidney called by Dr. G. Johnson the "small fatty kidney." The specimens were obtained from the body of a labouring man of thirty-three years of age, who had been habitually exposed to the cold and moisture of the Wicklow mountains in which he lived.

CAMBRIDGE MEDICAL SOCIETY.

AT the meeting held on January 8th the following communications were made.

Salivary Calculus of Unusually Large Size.—Mr. CARVER showed this specimen, which he had removed from a man aged seventy. It formed a swelling in the floor of the mouth to the right of the middle line, and just behind the sublingual gland, and when explored with a needle was found to be of stony hardness. It was easily removed with scissors. The patient had only noticed some tenderness there for about five or six weeks. There was no enlargement of any of the salivary glands or other symptoms. The stone was ovoid in shape, pointed at both ends, and of a pale yellowish-white colour. It weighed 141½ grs., and measured 1 3/5 in. by ⅘ in. broad, with a circumference of 2½ in. to 3 in. Mr. Carver remarked upon the large size of the calculus, it being one of the largest ever recorded. These calculi were not uncommonly found in the ducts of the sublingual and submaxillary glands, but were rare in Steno's duct. The severity of the symptoms was by no means commensurate with the size of the calculus, in many cases great swelling of the glands and surrounding irritation being caused by a very small concretion.

Retro-uterine Hæmatocele.—Dr. BRADBURY read the notes of Charlotte C., aged twenty-eight, married, admitted into Addenbrooke's Hospital on May 13th. All her sisters suffer from excessive menstrual periods as well as herself. She was quite well till marriage nine years ago, but nine weeks afterwards miscarried, and was laid up for some time. She subsequently had several miscarriages, with pain and hæmorrhage, and bore one child at full term, but suffered from post-partum hæmorrhage. The history of the present illness was that she went ten days beyond the time for her menstrual period, and then had severe bearing-down pain, followed by profuse hæmorrhage and sickness. She became blanched, with sinking pulse, faintness, and noises in the ears. Vaginal examination showed the os uteri to be more open than normal. The abdomen was distended and tender, and the patient was unable to micturate, and kept her legs drawn up. After a time the distension gradually subsided, allowing a swelling to be felt just below the umbilicus, tender to the touch, fairly resonant all over except in left iliac fossa, and friction could be heard over it. The bladder contained three ounces of urine. Per vaginam, the uterus was pushed close under the symphysis pubis, and Douglas's pouch was distended by a soft doughy mass. On June 8th she passed a quantity of blood by the bowel; soon after the tumour began to subside. On the 19th she had a slight attack of pleurisy, but continued to improve in every other respect. On July 24th the swelling in Douglas's pouch had disappeared, leaving the uterus anteverted and more fixed than natural. On Aug. 15th she was discharged, being almost well. The temperature chart during the first three weeks showed an evenng rise to about 102°, and morning between 99° and 100°, for the rest of the time being slightly above the normal. Dr. BRADBURY remarked that this was a well-marked case of pelvic hæmatocele in a hæmorrhagic subject. Was it due to abortion, or had the menstrual period been delayed? There was at first no swelling to be felt in Douglas's pouch; the blood afterwards gravitated there and formed a tumour. The symptoms were very like those of parametritis, but the passage of blood per rectum and the diminution of the swelling cleared up the diagnosis. The treatment was rest in bed, and a hypodermic injection of one-sixth of a grain of morphia when the patient was suffering from the effects of the hæmorrhage, which proved very effective.

Tubercular Meningitis following soon after a Blow on the Head.—Mr. MARTEN was able, through the kindness of Dr. MacAlister, under whose care the patient was placed, to bring forward the case of a boy aged seven, who previous to his fatal illness had appeared to be enjoying fairly good health, with the exception of slight discharge from both ears, which had persisted for some months. His head was knocked against a wall on Dec. 10th, and from this date he was unable to attend school, suffering from sickness and persistent headache. He continued to go about till the morning of the 20th, and was then found by his mother totally unconscious. He remained in the same condition till the 22nd, when it was noted that he was perfectly unconscious, the pupils equal and reacting to light, the breathing quick and shallow, pulse small but regular, lips covered with sordes, tongue thickly coated, abdomen much retracted, tâche cerebrale very marked, and all the limbs quite stiff. He continued in the same unconscious condition, and died ten days after the blow was received. The mother, one brother, and sister had died of phthisis. The post-mortem showed the body to be well nourished; no evidences of any injury. On removal of the skull-cap the convolutions of the brain were found to be much flattened, and a few tubercles were seen scattered about its base and up the Sylvian fissures, with obvious meningeal inflammation around. There was a marked excess of fluid in the ventricles, and a dilated foramen of Munro. The lungs were studded with tubercles, especially at the apices. The kidneys showed caseous deposits in the pyramids and some pyelitis. There was no evidence of extension of the inflammation from the tympanum. Mr. Marten said the case was of interest from a medico-legal point of view, as it was difficult to determine to what extent the blow was the cause of death. Fortunately the meningitis proved to be tubercular, and a verdict of death from natural causes was returned.

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Exostosis of Great Toe.—Mr. WALLIS showed this specimen, removed from a woman aged thirty-three. It had been growing for fifteen years, and had caused great pain. The whole of the last phalanx was removed. The growth sprung from the knotty terminal part of the phalanx, and not the epiphysis, and was covered with cartilage.

MIDLAND MEDICAL SOCIETY.

A MEETING of the above Society was held on Wednesday, Feb. 3rd, the President, Dr. Holmes JOY, in the chair.

Healed Phthisical Cavity.—Dr. FOXWELL showed a case of Healed Phthisical Cavity in a man who had been in the General Hospital under his care for repeated hæmoptysis, continuous pyrexia, and considerable excavation at the right apex some months previously, and who had now for two months done his work as a commercial traveller's porter. At present there were no signs by which the existence of a cavity could with certainty be diagnosed, owing to the amount of fibrotic contraction, nor was there any indication of progressive disease.

Anæsthesia of Hand. — Dr. SUCKLING showed a man who had been under his care suffering from complete Anæsthesia of the Left Hand. Ten months previously, in lifting an 18-gallon can of milk with a fellow porter, his assistant dropped the can, and the patient suffered a severe strain of the arm; anæsthesia and paresis of the hand immediately followed. There was no trophic or electrical change, and the only symptom that might have indicated actual injury to the roots of the brachial plexus was a slight dilatation of the left pupil, which might have been due to irritation of the root of the first dorsal nerve. Dr. Suckling concluded that the case was one of functional hyperæsthesia, and probably due to hypochondriasis, the man seeming depressed. The functional nature of the affection was proved by his rapid recovery after faradisation, and by the fact that if, when blindfolded, a mark was made some distance below the line where he said he could feel, when the bandage was taken off, he always felt down to this mark, so that a daily diminution of the area of anæsthesia was produced by deceiving him in this manner.

Antipyrin. — Dr. SAUNDBY exhibited the temperature charts of two cases of pneumonia and two cases of enteric fever created by Antipyrin. The temperature had been taken simultaneously in the rectum and axilla, and the result showed that the curves were almost completely parallel. Exceptionally, a slight fall in the axilla was accompanied by no fall or even a slight rise in the rectum, but the general course of the temperature was the same in both places. The observations were made in some cases every hour, in others every two hours. Dr. Saundby referred to a paragraph in THE LANCET where Professor Jaccoud was made to assert his disbelief in the utility of antipyrin, on the ground of its heat-reducing effect being solely peripheral, the rectal temperature remaining the same, or even rising, while the axillary temperature fell. He believed these charts disproved that assertion, and were evidence of the powerful antipyretic effects of this drug.

Flat-foot.—Mr. BARLING showed a youth on whom he had operated for Flat-foot. The deformity had arisen after acute rheumatism three years previously, and was of the most severe kind, especially on the right side. The left foot was treated by forcible manipulation, the right by Ogston's operation, as the enlargement of the tubercle of the right scaphoid prevented restoration of the arch until it was mostly removed. The arch of each foot is now excellent as far as appearances go, and the patient can walk some miles without distress; but although there appears to be bony ankylosis on the right side, yet that is, from the patient's statement, the weaker foot. It is important, however, to remember that it was the worst before treatment.

A meeting was also held on Wednesday, Feb. 17th.

Cyst of Parovarium.—Mr. TAYLOR showed a Papillomatous Cyst of the Parovarium which had been successfully removed by abdominal section. The patient was also suffering from uterine myoma and protrusion of the cervix uteri from the vaginal orifice. Since the operation no protrusion has occurred, showing that this was due in great measure to the weight of the tumour which was removed. Twisting of the pedicle and the rapid development of a blood-cyst below the original tumour occurred shortly before operation, and the case forms a good example of those complicated ones which almost defy classification. The appendages on both sides were removed. Mr. Taylor also showed a specimen and drawings of multiple minute cysts or vesicles of the broad ligament from a case operated on by Mr. Tait. This was a very rare condition, and he did not believe that any similar case had been described. He thought it possible that the case might be one of herpes of the broad ligament.

Hemilateral Myelitis.—Dr. SUCKLING showed a man who had been under his care for Acute Hemilateral Myelitis due to Syphilis. The patient was now able to walk, but complained of weakness of the left leg and of numbness of the right. Dr. Suckling had carefully investigated the muscular sense, and found that it was defective on the side of the lesion, the patient being able to distinguish between half-ounce and quarter-ounce weights on the right side, but not on the left. In this case Brown Séquard's dictum, which Dr. Ferrier had recently opposed, was confirmed. The case had been fully reported in the *Birmingham Medical Review* for August, 1885.

Mr. CHAVASSE showed the Stomach and Œsophagus from a case of Gastrostomy; a Vesical Calculus, weighing 5½ oz., that he had successfully removed from a man aged twenty-one by lateral lithotomy; and half an Inferior Maxilla from which a spindle-celled sarcoma was growing: this was removed from a man aged forty. During the operation the larynx became blocked with thickened mucoid discharge, and tracheotomy was performed to relieve the dyspnœa. The patient at the present time is doing well.

Mr. WALTER FOWLER showed a youth on whom he had performed a partial excision of the wrist for disease.

Dr. FOXWELL read a paper on Acute Laryngitis in Children.

Reviews and Notices of Books.

BACTERIOLOGY.

1. *Researches on Bacteria in the Blood* (*Untersuchungen über Spaltpilze im menschlichen Blute*). Von Dr. G. V. HOFFMANN. Pp. 82. Berlin: Hirschwald. 1884.
2. *The Schizomycetes* (*Die Spaltpilze*). Von Dr. W. ZOPF, Dritte Auflage. Pp. 127. Breslau: Ed. Trewendt. 1885.
3. *The Mycetozoa or Myxomycetes* (*Die Pilzthiere oder Schleimpilze*). Von Dr. W. ZOPF. Pp. 174. Breslau: Ed. Trewendt. 1885.
4. *Zymotic Sketches: Fermentation-fungi and Disease-fungi* (*Zymotische Skizzen - Gährungspilze - Krankheitspilze*). Pp. 600. Von. Dr. M. VOGEL. Hamburg: J. F. Richter. 1885.
5. *Pathogenic Microbes* (*Les Microbes Pathogènes*). Par le Dr. C. ARTIGLAS. Première Fascicule. Pp. 260. Paris: G. Masson. 1885.
6. *Bacterial Etiology of Infectious Diseases* (*Die Bakterien-Ætiologie der Infections-Krankheiten*). Von Dr. HUGO MITTENZWEIG. Pp. 135. Berlin: Hirschwald. 1885.
7. *Microbic Doctrine of Yellow Fever and its Preventive Inoculations* (*Doctrine Microbienne de la Fièvre Jaune et ses Inoculations préventives*). Par le Dr. DOMINGO FRRIRE. Pp. 451. Rio Janiero: Imprimerie Nationale. 1885.
8. *Bacteria in Erysipelas* (*Des Bactéries dans l'Erysipèle*). Par le Dr. G. NEPVEU. Pp. 8. Paris: Larousse. 1885.
9. *Study of the Pathogeny and Pathological Anatomy of Erysipelas* (*Etude sur le Pathogénie et l'Anatomie Pathologique de l'Erysipèle*). Par le Dr. M. DENUCÉ. Pp. 165. Paris: Steinheil. 1885.

THE literature of bacteriology grows apace, for the very nature of the subject is favourable to many extravagant theories, as well as much imperfect observation. The essays and monographs which form the subject of this notice are, indeed, of most unequal merit, but they illustrate fairly well some of the facts and fallacies that surround the question. Thus Hoffmann's *brochure* (1) is written to establish a fact, hitherto denied by the majority of competent observers, that normal human blood contains an abundant quantity of micro-organisms, which under appropriate conditions may assume pathogenic properties. Where

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others see only "granular matter" the writer sees living cocci and bacteria, and is clearly of opinion that the species may be transmuted, and even developed, into higher forms of fungi altogether. The two works of Dr. Zopf (2 and 3), dealing respectively with the bacteria and the mycetozoa, are of a different class. Forming contributions to the "Encyclopædie der Naturwissenschaften," they comprise a valuable systematic synopsis of these lowly forms of vegetable life, and are treated on a strictly botanical plan. To take the work dealing with the schizomycetes (spaltpilze) as an example: It opens with chapters upon morphology, on spore production and zoogloea formation, on physiology, including the nutrition of these organisms, their action upon surrounding media, and the influence upon them of physical and chemical agents; then the methods for their investigation are described; and, finally, the characters of each species are fully detailed. It may be interesting to quote the classification adopted. Ord. 1: Coccaceæ. Gen.: Streptococcus, Merismopedia, Sarcina, Micrococcus, Ascococcus. Ord. 2: Bacteriaceæ. Gen.: Bacterium, Spirillum, Leuconostoc, Bacillus, Vibrio, Clostridium. Ord. 3: Leptotricheæ. Gen.: Crinothrix, Beggiatoa, Phragmidiothrix, Leptothrix. Ord. 4: Cladotricheæ. Gen.: Cladothrix. Dr. Zopf is admitted as an authority on the subject, and he has certainly done much to systematise the knowledge hitherto gained upon the great variety of these minute forms of life, many of which play a large part in the etiology of disease. To pass from such writings to the rather voluminous book of Dr. Vogel (4) is to leave the firm ground of science to enter upon the most treacherous and insecure footing of speculation. The intention of the writer has been the praiseworthy one to harmonise the processes of disease with those observed in fermentation outside the body; but every page is full of the most extraordinary propositions and extravagant theories. He seems to believe that the bacterial groups are directly derived from the higher fungi, and describes and figures from various morbid secretions and products forms and structures the like of which have not, we venture to think, been met with before. It is inevitable, we fear, that the zymotic theory should lead to such absolutely erroneous work; but we could hardly have deemed it possible that any competent microscopist could have seen the things here described, or having seen them could have drawn such conclusions from his observations.

The lectures of Dr. Artiglas (5) were delivered in the Bordeaux Faculty of Medicine. They do not contain much that is novel, but are fairly accurate in the descriptions they contain of the recent work upon tuberculosis and pneumonia. For these two subjects occupy the major part of the book; one lecture, also, being devoted to actinomycosis, and a few others to generalities upon microbes, their investigation and relation to infective diseases. The bacillus tuberculosis of Koch is regarded as the same organism as the coccus described by Toussaint and the zoogloea of Malassez and Vignal—a variable morphology being not considered at all opposed to general conceptions of bacterial growth. It is asserted, also, that the pneumonococcus appears under various forms, and a contrast is drawn between the action upon the human organism of the tubercular microbe and the pneumonic. The subject of the nature of pneumonia, which precedes a description of its special microbe introduces the reader to the now well-worn historical facts pertaining to the epidemic occurrence and contagious manifestation of the disease. We cannot say that the lectures are profound, or that they are original; whilst some of the illustrations of apparatus, &c., might certainly have been more artistically rendered.

Far more satisfactory is the compilation of Dr. Mittenzweig (6), which comprises within a limited compass most of the essential facts concerning the pathogenic bacteria. There are chapters upon morphology, cultivation, inoculation, and the relation of bacteria to disease. It is pointed out that Naegele and Zopf are the chief supporters of the view of the mutability of species; Koch of their constancy; whilst Buchner holds a position on this question midway between the two opposing camps. The writer thinks that Koch's view is the most feasible; whereas, as we all know, many ingenious arguments to the contrary have been based on the occurrence of transitional and mixed types of specific disease. A clear distinction is drawn between the saprophytic and pathogenic bacteria; and the mode of operation of the latter upon the body is also well stated—viz., the general disturbance produced by ptomaines and the local disorders—as in erysipelas and diphtheria, typhoid fever, and tuberculosis, set up by the actual growth of the micro-organism. Sanitation and treatment based on the bacterial hypothesis are also discussed, and a brief description is given of each of the proved pathogenic organisms, a somewhat disproportionate allowance being accorded to the subject of cholera.

It is somewhat difficult to assign its proper value to the bulky and elaborately illustrated work of Dr. Domingo Freire (7). It constitutes a report to the Government of Brazil, and merits much praise for the evidence given of much patient and diligent labour in the endeavour to solve the problem of yellow fever, and suggest measures for its prophylaxis. Dr. Freire claims to have discovered the cause of this terribly fatal disease, and to have established a means of preventive inoculation. The discovery requires, however, to be verified, and, if we may judge from the evidence in its support adduced in the pages of this work, we should fear that the verification will be lacking. For in spite of the numerous descriptions and frequent illustrations given of the "cryptococcus xanthogenicus," it is difficult to see in it any very striking or distinctive characters. It is declared to occur in various stages of development, and to form cellular bodies containing pigment and spores, to multiply with great rapidity, and to be detected in large numbers in the blood and tissues, in the substance of organs, in the black vomit of the disease, in the bile, and in the urine. In this ubiquity it may claim to rank higher than any known pathogenic organism. It is aerobic and lives at the expense of the blood-globules and albuminoids of the body. Again, the cultures which Dr. Freire produced in milk, broth, gelatine, potato, and earth, are described as forming black masses, which certainly have characters not resembling the cultivations of any other known microbe. Its inoculation into animals is followed by rapidly fatal results and a reproduction of the micro-organism in the animal's body; and it is found in large amount in the hospital wards devoted to yellow fever cases and in the earth of the burying-grounds that receive the bodies of those who have died of the disease. All this and more is stated, so that the reader may be persuaded that the discovery is a reality; and yet there is, it seems to us, a lack of the precision of statement and clear definite enunciation of fact which are so necessary in establishing the truth of a question of this kind. However, acting upon the facts he has obtained, Dr. Freire obtained permission to practise preventive inoculations by means of the attenuated virus; and he not only details his method, but gives a list of the persons of all nationalities who were subjected to the practice. Certainly they show a remarkable immunity from the disease to which they were exposed during the epidemic of 1883-84; but in spite of these facts, it is better to withhold judgment until, as we have said, the facts and conclusions can be controlled and verified by other authorities. The volume is also rich in details of the pathological anatomy of yellow fever and of some of its clinical phenomena, and had it been written in a less diffuse style

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it would be an even more valuable contribution to literature than it is.

Dr. Nepveu's *brochure* (8) is a reprint of a paper written in 1870, and the object of its republication has doubtless been to show that more than ten years before Fehleisen's discovery, Nepveu had observed bacteria in the blood in erysipelas. The paper consists of a brief account of the examination of the blood in a few cases of this disease, the organism being described as the *bacterium punctum* of Ehrenberg; it was found in greatest abundance in blood drawn from the vicinity of the cutaneous inflammation.

Dr. Denucé (9) reviews at length the pathological anatomy of erysipelas in a manner which shows much diligence in historical and literary research, as well as evidence of skill in personal observation. Briefly he confirms the facts obtained by Fehleisen—viz., that the organism of erysipelas is a *streptococcus* which occurs in groups in the dermal connective tissue spaces, in the lymphatics, and in the subcutaneous tissue. He reminds us that its specific nature has been proved by the crucial test of human inoculation; in one case (inoculated by Jariche) of cancer of the breast the experiment was unfortunately fatal. Proofs are given that the secondary lesions of erysipelas may be assigned to the invasion of the blood by the micro-organism.

The Anatomy of the Intestinal Canal and Peritoneum in Man. By FREDERICK TREVES, F.R.C.S., Hunterian Professor at the Royal College of Surgeons of England, Surgeon to and Lecturer on Anatomy at the London Hospital. London: H. K. Lewis. 1885.

THIS is a reprint of Mr. Treves' Hunterian Lectures delivered at the Royal College of Surgeons last year, and which have already been published in another form. The lectures are founded upon the result of the careful examination of 100 consecutive subjects undertaken before any changes from decomposition had occurred, compared in many instances with the conditions found in some of the lower animals. Mr. Treves has succeeded in elucidating some obscure points; such, for instance, as the fossa duodeno-jejunalis, its formation and its relation to retro-peritoneal hernia, and mesenteric holes and mesenteric herniæ. The point, perhaps, of most immediate surgical interest is the demonstration that, contrary to the usual teaching of text-books, a meso-colon is more common on the left than the right side in the proportion respectively of 36 and 26 per cent. There is therefore more danger of opening the peritoneum in performing lumbar colotomy on the left side than on the right. Where, however, the disease for which the operation is indicated is undoubtedly seated in the rectum or sigmoid flexure, the operation will continue to be done on the left side rather than the right, so as not to interfere with the function of a greater length of the intestine than is necessary. For the future, however, surgeons will be less fearful of right lumbar colotomy in all cases in which it is clearly indicated, or in which there is a doubt whether a fistulous opening on the left side would meet the requirements of the case. We could wish that these useful lectures had been published in a more convenient form. The quarto size is not suitable for a modern library and for a book of such small dimensions. Rough-edged parchment paper is picturesque, but not convenient to turn over; and it is a great convenience to the reader to have the illustrations, which, in this case, are of great value in explaining the text, intercalated in the text rather than bound up at the end. The illustrations are also rather more roughly executed than is customary in English scientific works.

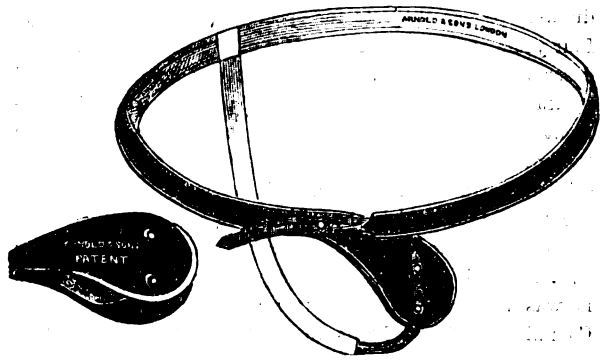
Minutes of the General Medical Council, of its Executive and Dental Committees, and of its Branch Councils for 1885. Vol. 22. London: Spottiswoode and Co., Grace-church-street, E.C.

THIS volume of the Minutes of the Medical Council is one of more than usual interest. Besides the resolutions of the Medical Council relative to the erasure of the names of several practitioners from the Register and the revision of the recommendations of the Council, it contains very interesting tabular statements as to the visitation of examinations and the various results of the investigations by the Statistical Committee. The seventeen tables included in these investigations are of very great value; they contain information of the time, places, and results of medical study, and of the ratio of medical practitioners to population, which it would be impossible to meet with elsewhere, and which cannot be too deeply studied by all who are interested in the profession, whether in its educational aspects or in its relation to the public wants.

New Inventions.

TRUSS WITH GLYCERINE PAD.

THE new truss for which letters patent have been granted to Messrs. Arnold and Sons, of West Smithfield, appears to be a great improvement on existing trusses. The pad is made of indiarubber and filled with glycerine, which is found after frequent trials and long experience not to



evaporate or escape, always remaining soft and comfortable, and has sufficient resistance to overcome ordinary forms of hernia. The pad, from its peculiar construction, adapts itself better than any other, as it completely closes the external ring without the possibility of enlarging it.

THE COMPOSITION OF HOPEINE.

To the Editor of THE LANCET.

SIR,—A good deal of obloquy having fallen upon the pharmaceutical trade in England in the eyes of our French neighbours, it would be as well if some explanation of the alleged facts in the above matter were afforded. In the *Nouveaux Remèdes* for February, Dr. Bardet, to quote an article in the *Pharmaceutical Journal* for Feb. 13th, "does not hesitate to say that if a fraud has not been practised, as he is inclined to think, it is at least incumbent on Dr. Williamson, as the discoverer of the alkaloid in the hop, to demonstrate the fact of its existence in that plant, and to clear up more thoroughly the remarkable resemblance between hopeine and morphine." It appears that Dr. Bardet purchased at a high price some so-called hopeine of some English manufacturing firms, and on testing the specimens could not find any distinction between them and morphine. M. Petit obtained the same result with other specimens. The language used across the water about this is, to say the least of it, expressive. We learn from the same article in the *Pharmaceutical Journal* that samples of the new alkaloid have been obtained and are now undergoing analysis at the Pharmaceutical Society's laboratory. As this was some weeks ago, by this time some results must have been obtained, and these results ought in justice to be given to the professional public. It is not a nice thing to think about that such an accusation should hang over our manufacturing pharmacists, on whom we as medical men are accustomed to fully rely, without any explanation. Trusting you will not allow this matter to be hushed up. Yours truly,

March 4th, 1886. SEISMOS.

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THE LANCET.

LONDON: SATURDAY, MARCH 13, 1886.

ON Tuesday next in the House of Commons, Mr. STANSFELD will call attention to the Contagious Diseases Acts of 1866 and 1869, and will move, "That, in the opinion of this House, the Contagious Diseases Acts, 1866–1869, ought to be repealed." The whole history of these Acts, from their passing to the present time, has been so fully given in recent issues of THE LANCET, and the question is now reduced to so fine a point, that it is only necessary to recapitulate a few facts, and to show what will be the effects should Mr. STANSFELD'S motion be carried. The question to be decided is, are prostitution and venereal diseases proper subjects for special legislation? Twenty-four years ago a Select Committee of the House of Commons described the state of prostitution at our home, naval, and military stations as "appalling," and pressed on the Government of that day the necessity of at once grappling with the mass of vice, filth, and disease which surrounded the soldiers' barracks and the seamen's homes. The result was the Act of 1864, which, though causing a great reduction of disease, was found to be insufficient, and, after an inquiry by a medical committee extending over nearly two years it was replaced by Mr. CHILDERS' Act of 1866. Select Committees of the Lords in 1868 and Commons in 1869 reported so favourably of this Act and its results that it was followed by the Act of 1869, which considerably enlarged the sphere of its operations and improved the former one in several details. Then arose the opposition to these Acts, which has continued ever since, and an attempt to repeal them in 1870 was defeated by a large majority, the matter being referred to a Royal Commission. The Royal Commissioners, while recommending certain changes, one of which was that the compulsory examinations of women should be discontinued, reported favourably of the Acts, and strongly urged their maintenance. "We attach," they say, "great importance to the maintenance of a system which, if it cannot altogether annul, may at least materially mitigate, a pestilence which is not, like other contagions, of occasional occurrence, but one of perennial growth. The offenders who bring this affliction upon themselves by their own vicious indulgence may have no claim to the compassionate care of the State, but the numerous innocent persons who suffer from the disease are surely entitled to consideration." We venture to express our hope, therefore, that while due consideration is paid to the sentiments of the people in regard to prostitution, no misapprehension as to the real moral bearings of the question, and no want of courage, will be suffered to prevent the application of such remedy as may be practicable to this great evil. The firmness of a former Parliament withstood the storm of clamour with which the discovery of vaccination was assailed by the ignorance and prejudice of the day, and relieved posterity from a scourge which was the terror of earlier generations; and we would fain hope that an attempt to stay the progress of a plague scarcely less formidable in its ravages is not to be hastily abandoned.

In 1871 a memorial in favour of the Acts was signed by 2500 medical practitioners, including, with very few exceptions, all the leading physicians and surgeons, and presented to Lord ABERDARE, then Mr. BRUCE, Home Secretary. Motions for the repeal of the Acts were brought forward in 1873, 1875, and 1876, and defeated by large majorities; in 1878 a similar motion was "talked out," and in 1879 it was met and defeated by the previous question being carried. In the last-mentioned year a Select Committee of the House of Commons was appointed to inquire into the Acts, and whether they should be maintained, amended, extended, or repealed. After an inquiry extending over four years, they reported that the Acts had successfully served the two objects to which they were directed — the diminution of venereal disease and the increased efficiency of the army. In discussing the question of repeal they report:—

"But apart from this consideration, it is most important that Parliament and the country should clearly understand what the simple and absolute repeal of the Acts, including the abolition of police surveillance and of State-aided lock hospitals, would mean in districts where they have been in operation for thirteen years and more. It would mean: (*a*) Full licence for venereal disease of all kinds to disseminate itself, unchecked either by police control or by hospital treatment. (*b*) A serious diminution in the effective strength of our army and navy, which would be especially felt in the event of their services being suddenly called into requisition. (*c*) The relegation of numbers of these unhappy women to the state of hopeless misery, squalor, and disease in which they lived before the system was introduced. (*d*) The letting loose of increased crowds of abandoned and diseased women and girls of all ages upon streets and thoroughfares swarming with soldiers and sailors, with little or no practical check or control over their behaviour. It is scarcely surprising that such a prospect should excite feelings of dismay in the minds of the more intelligent and thoughtful inhabitants of subjected districts."

In 1883 the compulsory examinations of women were abandoned in consequence of a resolution of Mr. STANSFELD to that effect having been carried by what is generally admitted to have been a snatch vote. In consequence of this, the number of admissions into the Government hospitals for females has fallen off 50 per cent., there has been a great increase of disease among both soldiers and seamen, and, in short, all the evils enumerated above have occurred, with this modification—viz., that those women who voluntarily apply at the lock hospitals are admitted and detained there until cured. Should Mr. STANSFELD'S resolution be carried on Tuesday, even this moderate and humane arrangement will have to be abandoned, for without the sanction of Parliament no funds can be obtained wherewith to carry on the lock hospitals, all or any of them, for a single day. It is most important that members of the House of Commons should be well aware of the effect of their votes. All the preceding facts can be verified by reference to the reports indicated, and do not admit either of dispute or modification. It is not now a question of compulsory examinations or of police control, or compulsory admission into hospital. It is a question of common humanity, Are the Government lock

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hospitals to be all closed, the unfortunate prostitutes who are now in them to be driven into the streets uncured, and all who may in future apply for admission to be denied? This is the question which each member must ask himself, for on the answer depends whether he will vote for or against Mr. STANSFELD'S motion.

THERE are few practitioners among the middle or upper classes who are not called upon from time to time to advise a consumptive patient regarding the choice of a sanatorium where he may seek restoration to health, or at least escape the gloom and damp of the English winter. The choice is one of the most delicate problems which present themselves to the physician, inasmuch as it involves not only a thoroughly correct estimate of the constitutional peculiarities of the patient and the type of his malady, but also a knowledge of foreign countries, which few have the opportunity of acquiring by travel and personal observation. We think we shall be doing a service to the profession by endeavouring to disseminate a knowledge of some general principles on this question which may now be regarded as almost universally accepted.

First of all, there are many cases where the resort to foreign travel should be resolutely forbidden. Nothing casts greater discredit upon the profession or is more injurious to individual careers than the indiscriminate ordering abroad of all consumptives. Many a one, who might at least have enjoyed a peaceful *euthanasia* amid the comforts of home and surrounded by familiar and sympathetic faces, is cast overboard as a corpse by strange hands, or dies miserably in a foreign lodging-house. Where the malady is far advanced and steadily progressive, where wasting is a very prominent symptom, where there is persistent pyrexia unrelieved by remedies, or where ulceration of the bowels exists, foreign travel is usually quite unavailing, and cannot be honestly recommended. It ought to be very strongly laid down that travel is not admissible as a *dernier ressort*. If reasonable hope of benefit does not exist, it is cruel and culpable to advise a measure which is never indifferent, but either promotes recovery or accelerates the fatal issue. We speak thus strongly not from any want of faith in climatic treatment—of the enormous value of which, when rightly directed, no one can be more profoundly convinced than ourselves,—but because we are keenly conscious of the lamentable discredit which one case of obvious and avoidable failure casts upon an important and hopeful branch of therapeutics.

Having decided that our patient is in a fit state for foreign travel, we have to approach the more difficult question of the selection of a suitable resort. If the patient retains a fair amount of vigour, if free from general bronchitis, cardiac or renal disease, severe digestive disturbance, and serious nervous debility, we think there can be little doubt that the high altitude treatment, as pursued at Davos, St. Moritz, and Samaden in Switzerland, Bogota in the Andes, Manitou springs in Colorado, and elsewhere, affords by far the best prospect of success. Much wasting or persistent pyrexia are, *pro tanto*, contra-indications to this line of treatment, but the essential indication for its adoption is the retention of a fair amount of circulatory and digestive vigour. The patient who has decided to have recourse to the mountains should observe two precautions: first, he should make the journey in two or three stages, so as to become gradually habituated to the novel atmospheric conditions prevailing at high altitudes; and secondly, if he selects a resort where frost and snow prevail, he should remove thither at the end of summer or beginning of autumn, instead of waiting for the advent of winter, in order that he may learn to bear the strain of the aerial rarefaction before being called to add thereto the strain of intense cold. The high altitude treatment has the great advantage of tempting to vigorous out-door exercise and amusement, and thus gradually lures the patient to relinquish his habits of invalidism, which in warm and sedative climates he only learns to hug the more closely. We are still much in need of satisfactory statistics to show beyond cavil the results of treatment at the high stations, but there can be no doubt that much good has been thus effected, and that this line of practice is steadily advancing alike in professional and in public favour.

Of the lowland resorts there are two types—the marine (such as Cannes, Algiers, Malaga, or Madeira) and the inland (such as Cairo, Assouan, Bloemfontein, or the riverine towns of New South Wales). Warmth prevails alike in both, but in the former case we have warmth *plus* humidity, in the latter warmth *plus* a high degree of dryness. Yet individuals vary so much, and the climate of any locality is such an infinitely complex factor, that it is extremely difficult to lay down any rules, even approximately. Some specific indications and contra-indications, however, exist, and it is highly desirable that they should become more widely known. Thus the presence of nervous disturbance—hysteria, neuralgia, sleeplessness—should be an absolute bar to Cannes or Nice; hepatic troubles preclude recourse to Algiers; intestinal derangement is a sign-post that Madeira must be avoided, as there diarrhœa is so prevalent as to be known as the "island complaint." Writers on consumption lay down various rules regarding the sanatoria most adapted to different types of the disease, but those who have had the largest experience of foreign health-resorts will be the most ready to admit that prediction on this subject is still most difficult and uncertain, and that more seems to depend upon the constitutional condition of the patient, his idiosyncrasies of nervous, circulatory, and digestive organisation, than upon the type of his malady, regarding which rules are apt to be arbitrary and so beset by inevitable qualifications as to be practically useless.

Australia has long had a high repute for consumption—a repute which is thoroughly well founded, yet in much danger of being imperilled by ignorance or neglect of one or two fundamental principles. The parts of the great Australian continent suitable for phthisis are the great inland plains, where the climate is singularly dry and equable, intensely hot in summer, but agreeable at other seasons. The littoral is quite unsuited to consumptives, and few worse climates exist for such cases than Melbourne, where extreme and sudden changes of temperature, frequent dust-storms, and open sewers combine to produce a condition of things pernicious in the last degree to the phthisical sufferer. No wonder the Australian practitioners express their astonish-

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ment as one shipload of consumptives after another disembarks and settles in Melbourne, there to lose in a few weeks the benefit usually acquired on shipboard and soon to sink into a premature grave. Such patients should not lose a day in departing for the interior, or they may safely cross Bass's Straits and settle in the charming and healthful island of Tasmania.

The Cape is not so popular now as in its palmy days, when it was the half-way house to our great Eastern dependency. Cape Town is all that it should not be in a sanitary sense, and frequent epidemics have from time to time scourged its inhabitants for their neglect of Nature's laws. The suburbs are charming, and possess reasonable accommodation; but the climate is somewhat treacherous, and storms are frequent. The climate of the interior is more equable, and in the main healthful, whilst means of transit and accommodation of all kinds are becoming less primitive and trying to invalids.

One last word regarding health-resorts for phthisis. When the patient has found one to suit him, let him remain there, and neither return home nor rove beyond it; neglect of this rule has brought many a young life to a too early extinction.

THE state of the central nervous system in sleep is a fertile subject for discussion, replete with interest, full of uncertainty, and possessing as much bearing on the welfare of the human race as any other subject that could be named. The cerebral cortex is during healthy sleep in a state of functional inactivity; its nutritive processes are unknown, though it is conjectured that ascending metabolism is at its maximum and descending at its minimum—exactly the reverse of the waking state. What degree of sleep occurs in the nervous centres that lie below the level of the cerebral cortex is also an unknown quantity. During the waking state it is the function of the cerebral cortex to spontaneously originate functions, just as it is for the heart to go on beating or the breathing to continue its undulations. Many of the lower nervous centres during sleep are in a condition of over-activity; this over-activity is not ordinarily manifest, because these lower centres only act as the result of some recognisable excitant. Being such an extensive system and possessing functions so diverse, different parts of the central nervous system may be in very different conditions at one and the same time. The bulk of the cerebral cortex may be inactive whilst some of the centres are still in partial action. We say partial action, because it is probable that complete functional activity of a cortical centre is impossible unless the whole of this region is sensitive. This is the only kind of way in which scientific physiologists can interpret the phenomena of somnambulism, dreaming, ecstasy, and the like. An interesting contribution to the subject has recently appeared from the pen of Dr. LYMAN.[1] "Natural sleep is that condition of physiological repose in which the molecular movements of the brain are no longer fully and clearly projected upon the field of consciousness." This is Dr. LYMAN'S definition. We cannot acquiesce in the statement. We would grant that it is a question of molecular movements, but then it is not said what sort of molecular motion. Clearly during sleep we have two opposite conditions. There is no doubt that functional activity of the brain ceases; in other words, there is loss of consciousness. How incomplete, then, is a definition that asserts that molecular movements are no longer fully and clearly projected upon the field of consciousness. It had better be said that there is no field of consciousness on which molecular movements can be projected. Physiologically, consciousness itself must be regarded in its essence as a form of molecular motion; what it is psychologically we have no means of knowing. Again, the definition is, we believe, incorrect, because, though molecular motion that produces function is in abeyance, it is also indisputable that some molecular motion must be going on in order to regenerate and restore the nutrition of the brain. After a period of repose the brain is able to continue working for a very much longer time than would be possible (without deterioration) if it had previously been in action. It may be conceded that sleep may vary in depth but in health the degree of "dissolution" of the cerebral functions should be notified by the absolute abeyance of the highest functions of the brain. There should be no dreaming—no action, in other words, of the visual, auditory, or any other of the higher centres. In somnambulism, which also varies in extent as well as in depth, the phenomena are best explained, not on the assumption of a general depression or dissolution of function taking place equally and in all directions, but by continuance in action of certain tracts of the central and peripheral neuro-muscular system. In somnambulic lethargy, to which Dr. LYMAN devotes a section, we read that this condition represents the form that outwardly resembles profound sleep. In this condition there is a persistent loss of consciousness, and the sleepiness or functional inactivity is of great depth, so that the patient breathes but feebly, and the circulation is reduced to a low ebb; swallowing and other organic functions even participate in the reduction. The chapters on Dreams and Somnambulism and Artificial Somnambulism are well constructed, and contain a large amount of readable information; but the exigencies of our space preclude the further consideration of the subject at present.

[1] Insomnia and other Disorders of Sleep. London: Trübner and Co. 1885.

WHEN commenting on the subject of Lunacy Law Reform in our last issue, it was observed that, "as regards the 'private asylum question,' we think that may be hopefully left to adjust itself, under the influence of a provision that public authorities may—it ought to be *shall*—provide for private needs." The hope is, that when adequate accommodation has been provided for the care and cure of the insane of all social classes in public institutions, there will not be any considerable number of cases in which recourse is had to the private or licensed houses; and in a reasonable time, without any need for the ratepayer to dip his hands further into his pockets than he is at present, unhappily, compelled to dip them for lunacy purposes, private asylums, not being any longer profitable undertakings, will cease to exist. We go further, and hope and believe that the friends of the unsound in mind will for their own protection choose public and official guardians for their patients in preference to private and non-official custodians; so that after the new system comes fully into operation, the bare fact of

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desiring to place an alleged lunatic in a private house would give a *primâ facie* appearance of desire for a hole-and-corner procedure in preference to the open-handed way of sending the insane at once in the broad light of day to a public institution.

Meanwhile, it is impossible to hide from view that the method proposed in the new Bill is neither a public-spirited nor a wholly satisfactory one. It is, in truth, an attempt to evade the expenditure of what may well be regarded as an equitable sum in purchase money for the existing asylums. The idea of the private asylum clause is to set up a rival business, conducted by public officials, which it is anticipated will more or less quickly ruin the business of the existing proprietors and lessees of private asylums by drawing away their customers. It would, of course, be far better to go into the market and buy the licensed houses at a fair price. The law has so long sanctioned the private asylum system that it is obviously sharp practice to try to supplant those who have invested money in this enterprise on the faith of a Government monopoly, instead of dealing with them on commercial principles. If, instead of buying up the goodwill and plant of the telegraph companies, the Government had started an opposition business in telegraphy, there would have been a loud and justifiable outcry. Yet this is what the Government proposes to do with regard to the private asylums. If the business of hotel- and lodging-house-keeping for the insane be a profitable enterprise, as we are compelled to believe it is, there can be little doubt that it will prove a paying business in the hands of the public authorities now in charge of county and borough asylums. They will make money by the venture, and the profits that accrue will be available for the reduction of the rates. The very great success of quasi-public institutions—such, for example, as St. Andrew's Hospital, near Northampton—is in itself conclusive as to the advantages which will be gained by grafting this private business on the public business of the local asylums. We have no doubt whatever as to the result. As soon as public asylums take paying patients these institutions will be generally preferred, not only for patients just above the rank of paupers, but for the well-to-do. It is therefore necessary to face the fact that a ruinous blow is being struck at the private asylum system by the measure now before Parliament. Meanwhile, as we have said, it is a foul blow in a commercial sense, and we must protest against it as unfair to the proprietors of, and investors in, licensed houses.

The proper course, beyond all doubt, is to buy up the existing properties; and this might, as we have suggested, be very well done by the creation of guaranteed stock bearing a fixed rate of interest, having a marketable value, and being readily transferable. It is not necessary to make any special call on the rate- or tax-payer. The stock issued, being guaranteed, might be made redeemable at the expiration of a reasonable period. This seems to us the best way of getting over the difficulty. The present conjuncture is not one at which it would be easily practicable to induce the Government or the Legislature to sanction the raising of a large capital sum to buy up the private asylums; but if these were taken over by the State, stock might be issued in payment of the purchase money, and each proprietor would then be able to hold or sell at pleasure, while the bonds, being guaranteed, would be negotiable at fair prices. On public grounds it is most desirable to expedite the substitution of public for private asylums; and if the course we suggest were adopted, there would be no insuperable obstacle to the completion of the necessary change within a few months, or one year at the utmost. When, or before, the Bill now in charge of the Lord Chancellor comes to be submitted to the House of Commons we venture to hope the suggestion we reproduce, and which has been so repeatedly urged in these columns, will receive the attention we think it demands and deserves.

Annotations.

"Ne quid nimis."

THE CEREMONY ON THE EMBANKMENT.

WE understand that His Grace the Archbishop of Canterbury will take part in the ceremony of the laying of the foundation-stone of the new Examination Hall of the Conjoined Colleges by Her Majesty the Queen, on March 24th, and also that the choir from the Chapel Royal, Savoy, are to attend. The details of the ceremony are not yet, we believe, completely elaborated, but we hope to be able to give next week full information as to the way in which it is to be carried out. It is long since the Sovereign has taken an active part on such an occasion; the honour, therefore, conferred on our profession is graciously and peculiarly a marked and flattering one, and we are confident that no efforts will be wanting to make the occasion not only a most notable red-letter day in the annals of English medicine, but that it may be also the means of leaving in these restless and unstable days in the memory of our Queen a pleasurable reminiscence of the loyalty and devotion of those of her subjects who are engaged in the honourable profession of medicine. We are glad to be able to add that there is every prospect that room will be found for the Members as well as the Fellows of the College of Physicians. The Fellows and the Members of the College of Surgeons, their number being so great, will have to abide by "the chance of the die." A very large majority of gentlemen who hold the licence of the College of Physicians are also Members of the College of Surgeons; these will accordingly have, at least, a chance of being present; there are, however, some few who have contented themselves with the L.R.C.P. Lond. May we venture to suggest that, especially as previously to the conjuncture of the two Colleges inducements were offered to them to consider this diploma a complete one, it would be a gracious act to give them some opportunity of being present on an occasion which cannot but afford them considerable and special interest.

MEDICAL REFORM.

THERE seems a disposition in some quarters to try to resuscitate the question of medical reform. No one can be more sensible than we are of the faults and defects of the present state of our medical examining bodies, and still more of the Medical Council, by which they are supposed to be governed and supervised. But we must express our strong opinion against any attempt to deal with these questions at the present moment. To expect any serious attention to be given to them in the present position of parties and of public affairs is to betray a sanguine disposition, which we at least do not possess. Any legislation in present circumstances would be unworthy of the name, and would leave the chief points of medical reform un-

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touched. Even the introduction of a few direct representatives of the profession to the Medical Council may be dearly bought. And such would be the case if this one point were gained and every prospect of gaining other points were abandoned. The tension and rivalry of parties paralyse Parliament for dealing with such questions without disappointing all those who are earnest in wishing to see old institutions adapted to existing conditions. Sir Lyon Playfair is no doubt well acquainted with the essential points of medical reform. Further, he is no longer bound in a servile relation to one set of the institutions likely to be affected by legislation. Yet more, he may be credited with having long since escaped from the strange delusion that the overcrowded medical profession does not attract a sufficient number of men to fill the vacancies occasioned by death and other causes. But even so, he cannot manufacture time, or alter the fact that Parliament is absorbed with other questions.

THE AGMINATE AND SOLITARY GLANDS.

THE notion that atrophy even to total disappearance of the Peyerian and solitary glands of the intestine proceeds with advancing age bids fair to be dispelled by a painstaking research which we owe to Adolf Passow (Virch. *Archiv*, 101, Hft. 1). By aid of a very simply devised apparatus, Passow set himself to count the number of follicles and Peyer's patches in the intestine in subjects of all ages dying from various affections; he also calculated the total area occupied by the Peyer's patches, and reckoned the relative proportion this occupied to every 1000 square centimetres of the intestinal surface. He gives a table of forty-five cases so examined, and his calculations and method may best be gathered by citing, with necessary curtailment, one of the observations so tabulated:—"No. 27—a man aged thirty-six, much emaciated, died of phthisis; small intestine measured 789 centim. in length and 7 centim. (mean) in breadth; the highest Peyer's patch was met with at a distance of 140 centim. from the pylorus; number of patches 19; total superficies of patches, 61·85 sq. centim, or 11·29 per 1000 sq. centim. of intestine. There were 24·61 solitary follicles per 25 sq. centim. of intestine, giving a total of 5406 of these glands." In only one case, a female aged forty-nine, the subject of tabes, neither solitary nor agminate glands could be detected. In another case, a man aged twenty-six, there were only 0·5 follicles per 25 sq. centim., or a total of 123 in the whole of the small intestine. But such a small number was exceptional, for only six cases had fewer than 1000, the highest number being 8961 (or 76 per 25 sq. cm.), found in a girl nine years of age; whilst among adults the highest number occurred in a man aged sixty-one—viz., 5760 follicles (or 25·1 per 25 sq. cm.). As a rule the number of follicles increases from the pylorus downwards, but exceptionally the pyloric segment of the duodenum contains more than other portions of the bowel. As to Peyer's patches, variations in number and area occurred within wide limits—e.g., in one case the area occupied per 1000 sq. cm. of intestine was 18 sq. cm., in another 1·9 sq. cm. In one case there were only 6 patches, an infant of nine months; in another 41 patches, a woman of twenty-four years. An old man aged eighty-one presented 15 Peyer's patches, with relative area (per 1000 sq. cm.) of 15·8 sq. cm.; in the same subject there were 12·13 solitary follicles per 25 sq. cm. of intestine, or a total of 2377 well-marked though small glands. By calculating the average superficial dimensions of the intestine in adults and children, and the average proportionate number of solitary follicles, the interesting result appears that whereas the intestinal surface has in adults nearly four times the area that it has in children, the relative number of follicles is precisely reversed. Thus in adults the intestinal superficies averages 5582 sq. cm., in children 1513 sq. cm.—i.e., a ratio of 3·68 : 1; the number of follicles per 25 sq. cm. averages in adults 11·28, in children 45·11—i.e., a ratio of 1 : 4·09. But, on the other hand, there is no definite relation between the period of life in adults and the number or extent of these follicular glands; some of the greatest differences in these respects being seen between subjects of the same age, whilst a young man of twenty-six had no more than an old man of eighty-one. Nor was it found that any constant relationship occurred between the Peyerian glands and the solitary follicles; a deficiency in the one was not accompanied by an excess of the other. Briefly it would appear that these lymphatic structures attain their greatest development in childhood; that with the growth of the body they do not increase; but that remarkable variations occur with respect to their persistence, exceptional degrees of this warranting a belief in a "lymphatic constitution" of the affected subject finally, that total absence of them is phenomenal, but not unknown, and certainly not a necessary concomitant of old age.

BUTTERFLIES IN WINTER.

A TEDIOUS, protracted drive in a carriage on a wintry day, with a bitterly keen wind, and most insufficient clothing! Such were the conditions under which many young ladies, mere girls, by no means too hardily trained, made their *début* into society the other day by Royal introduction. Nor was the occasion much different in this respect from others of the same kind, or, indeed, from other gatherings of less pretentious kinds. Custom has been at work in the same way all through the winter, not at Buckingham Palace, but everywhere, fixing its yoke on every neck, fit or unfit, careless of climate, health, or any consequence—of almost everything, it would seem, except tradition. We will not say that reforms in the way of adaptation to season and sense have given us no sign of their advent. The low bodice—that model of classical and doubtful taste in dress, that tempter of disease too often successful—is giving place to forms of dress more rational and more safe. Hours of assembly are changing slowly, and it is coming to be questioned whether the cold small hours of the morning must be reached before the guests depart. Yet, withal, improvement is slow, and we can only look hopefully for the time when society in every rank, the higher and the lower, will recognise that even such pleasures, to afford the most refined enjoyment, do not demand quite so lavish a sacrifice of more sober considerations.

DEATH-RATE AND SANITATION IN RUSSIA.

A SERIES of admirable articles on vital statistics and the importance of sanitary measures is now appearing in one of the St. Petersburg daily papers, founded on a paper by Dr. Eck. The statistics given are certainly of a nature to set every one in Russia thinking seriously about taking measures to improve them. Thus for the year 1882, which seems to be the last year whose vital statistics are available, the mortality in the ten southern provinces was 2·6 per cent., in the seven eastern provinces 3·9 per cent., in the thirteen middle provinces 6·2 per cent., in the sixteen western provinces 3·1 per cent., and in the fourteen northern provinces 3·7 per cent. After mentioning the various sanitary improvements called for, as drainage of various kinds, a supply of wholesome drinking-water, attention to and regulations about buildings of all descriptions, and the establishment of infectious hospitals, Dr. Eck goes on to say: "There is no need for us to puzzle ourselves how these matters are to be done; England has accomplished so much that we need simply adapt what is ready to our hands to our own circumstances. In Germany, France, Austria, and Italy steps are already being taken in the same direction, and all these

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countries take England as their chief model, so that we need not be ashamed to do so too." He then appeals to the economic importance to Russia of a reduction of the mortality. On the principle of example being better than precept, he goes into a long but easily comprehensible calculation of the comparative working value of horses whose ages at death vary; and he then takes the respective death-rates of Russia (35), Germany (27), and England (19), and, by means of a method of computation unusual amongst British statisticians, explains that they show that an Englishman has 53 years of life, while a German has 37, and a Russian 29 only. Reckoning a man's working years to commence at the age of 18, an Englishman has 35 years in which to earn against the Russian's 11, and the latter will probably not save much more in his 11 working years above what it costs him to live than has been already expended upon him during his 18 unproductive years; but an Englishman will have 24 years more in which to go on earning and saving. Again, out of 1000 inhabitants in Russia, only 373, or 37 per cent., are of an age to earn, while in England there are 660, or 66 per cent.; or each individual of working age in Russia has to provide for two non-workers, while in England he has only half a non-worker for whom to be responsible.

RATING OF HOSPITALS.

THE movement for the recognition of the rights of hospitals to continue to enjoy their old exemption from the payment of local and other rates continues. Its last manifestation was a conference of authorities of public charities held at Guy's Hospital on Saturday last under the presidency of the treasurer, Mr. Edward Lushington. There were present, among others, the Earl of Leven and Melville, the Hon. Tatton Egerton, M.P., Major Morgan, Mr. O. V. Morgan, M.P., Sir Henry Peek, Professor Leone Levi, Colonel Hamilton, M.P., and many other members of Parliament. Various resolutions were passed, including one pledging the meeting to support a Bill to be introduced into Parliament to restore the old exemption of public charities. The arguments on this subject, as regards hospitals, are certainly all on one side, and the very least the State can do in the present impecunious condition of these institutions is to pass the Bill. Hospitals save the money of the taxpayers both by providing for the poor when sick, and by hastening their restoration to health. All other countries endow their hospitals. The least we can do is not to tax our own.

ACTION UNDER THE CHOLERA ORDER IN THE PORT OF LIVERPOOL.

As many as 20,894 vessels entered the port of Liverpool in 1885, and of these 4078 were submitted to inspection, with the result that 205 were found to be in a defective sanitary condition. The German, Belgian, Dutch, Swedish, and Norwegian vessels are those which, belonging to foreign nations, are best kept; and the Liverpool owned vessels are, as a rule, in very good condition, and so also are most of the English ships. Indeed, the systematic inspection of vessels in English ports and the requirements of the port authorities are having a most beneficial influence on shipping entering our ports. Three vessels were during the year dealt with under the Cholera Order. The *Mayo* was from Carthagena, and a man sick of diarrhœa was on board; but after medical inspection the vessel was released. In a similar way the *Donati* from Barcelona was allowed to enter the port. The third was the *Cartagena*. After leaving Marseilles on August 8th, she started for Oran; but the whole crew, engineers and officers, becoming affected with diarrhœa, she had to put back, two of the crew dying on the return journey, and two others being received into the Marseilles hospital. On August 26th she sailed for Carthagena, and, having taken water and provisions on board, she left there on Sept. 11th. Two of the crew were taken ill on Sept. 13th, another could not work, and several members of the crew were from time to time attacked with diarrhœa and colic. On arrival at Liverpool fresh water and provisions were sent on board, two of the crew were received into the port hospital at New Ferry, and then the vessel was released. Dr. Taylor points out the fact that, as in the case of the *Saint Dunstan* in 1884, the diminution in the general prevalence of diarrhœa and uneasiness in the bowels and the rapid recovery of the sick were remarkable on the vessels being supplied with fresh water. The importation of small-pox from Canada by means of shipping also gave rise to much increased activity during the later months of the year, and a number of patients were received into the City small-pox hospital, the vessels undergoing disinfection.

THE COLD WEATHER AND THE DEATH-RATE.

THE last weekly return of the Registrar-General shows that during the week ending last Saturday the annual death-rate in the twenty-eight large English towns, having an estimated aggregate population of rather more than 9,000,000, was equal to 26·6 per 1000. In London the rate was 26·9, and in the twenty-seven provincial towns it was 26·2. Taking the last four weeks, in which the fatal effect of the recent cold weather has been most marked, the variations in the mean death-rates in the various towns have been very wide. While the mean rate in these four weeks was 24·6 in the twenty-eight towns, it was only 17·6 in Leicester, 18·7 in Hull, and 19·9 in Sheffield; whereas it ranged upwards in the other towns to 28·4 in Preston, 28·5 in Plymouth, 30·0 in Manchester, and 32·7 in Blackburn. The rate in London during the same four weeks was 25·6, and only slightly above the average in the twenty-eight towns. The cold weather during February, to which this great, though unequal, rise in the death-rate has been due, was quite exceptional. The mean temperature at the Royal Observatory, Greenwich, for the month was only 33·7° F., and 4·8° below the mean temperature for the month in 100 years. It is more than thirty years since we have experienced so cold a February; in 1853 the mean temperature of that month was 33·3°, and in the memorable frost of 1855 the month's temperature was so low as 29·4°. The recent death-rate, bearing in mind the low temperature, affords very favourable comparison with the rates that prevailed in the corresponding periods of several recent years in which the mean temperature was much higher. It is worthy of note that during the first nine weeks of this year the deaths referred to diseases of the respiratory organs in London have only exceeded the corrected average in the ten preceding years by 127; in the first six weeks of the year they were 446 below this average; while the excess in the three weeks ending last Saturday was 573.

THE ANATOMY OF THE LUNG.

THE capillary network of the pulmonary alveoli, the respiratory network, whose vessels are scarcely large enough to allow of the passage of the red blood-discs, and whose meshes are almost extinguished during congestion, forms an immense mantle of blood of the thickness of a red blood-corpuscle, and having a superficies, according to Küss, of 150 square metres, representing about two litres of blood. Not knowing by what method Küss had arrived at this estimate, M. Marc Sée has, by an elaborate calculation, endeavoured to ascertain for himself the correctness of Küss's assertion. A brief note in the *Union Médicale*, No. 27, describes the method Sée adopted, and also the result obtained, which was 130 to 135 square metres, or nearly the same as that of Küss.

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SCOTTISH HOSPITALS AND THEIR MEANS OF SUPPORT.

A VERY instructive and thoughtful account of the work of the Scottish hospitals, and the way in which they are supported, appears in the *Glasgow Herald* of March 3rd. Like English hospitals, they suffer from impecuniosity; and the chief interest of the article is in its discussion of the ways in which the several items of income might be raised so as to balance the expenditure. Of the twenty-two general hospitals of Scotland four are endowed, so that only eighteen depend solely on voluntary subscriptions. In 1885 they treated 24,668 in-door patients and 118,538 out-door or dispensary cases. The ordinary expenditure was £115,616, or, applying the whole cost to in-door cases, £4 13*s.* 9*d.* for each patient, as against over £8 in English hospitals. The total *ordinary* income is £95,001, made up of the following items: interest from investments, £22,986; students' fees, £5612; payments for patients' board and treatment, £4014; total contributions and donations for maintenance (about 4*d.* per head of the entire population), £62,389. The *extraordinary* income, on the other hand, consisting principally of legacies and special donations, was £56,767, from which has to be deducted not only £18,156 of extraordinary expenditure, but the £20,615 deficit in the ordinary income and expenditure account. As to the ways in which this regular annual deficit is to be made up. The proposal to put hospitals as a burden on the rates is ably discussed and wisely rejected, as tending to pauperise the people, to dry up the springs of charity, and to fall most heavily on those classes of taxpayers least able to bear it. If any departure from the voluntary system is to be adopted, the writer would prefer a grant from the imperial exchequer, giving no impression to local feeling of a *right* to use the hospitals for common purposes. An extra penny on wine and spirits, he thinks, for this purpose would do no harm. But he holds that voluntary system has not failed, and that with a little more care and trouble it can be developed so as to raise contributions from subscribers, from the working classes, and from churches.

LEAD-POISONING.

DR. SINCLAIR WHITE, the medical officer of health for Sheffield, has recently published an excellent and interesting report on the action of the Sheffield water on the lead communication-pipe and its effects on the health of the community. A number of cases of chronic lead-poisoning occurred during last year amongst persons not engaged in any of the trades in which lead is used, analysis showing that the drinking-water in every case contained a sufficient amount of lead to account for the poisoning. An examination of the water-supply led to the fact becoming known that the water of only some parts of the town contained lead to any appreciable extent. Sheffield derives its water from two distinct sources, with separate systems of distribution; the first is from the hills around Redmires, which is collected in reservoirs near its origin, and runs in a conduit to a reservoir at Crooke, known as Hadfield Reservoir, whence it is distributed to certain high-lying districts; the other source is from the hills around Strines and Agden, which runs in a conduit to a reservoir known as Godfrey Reservoir, and is thence distributed to the two low-lying parts of the town. The persons who suffered from lead-poisoning resided in the high-lying districts. The Redmires water is collected from moorland, the surface peat varying in thickness from a few inches to several feet, and beneath this are shale and millstone grit of the carboniferous system of rocks; both the peat and shale contain iron pyrites, and the water was distinctly acid in reaction, the acidity being most intense in the higher portion of the collecting grounds. The Strines and Agden water was not acid. The cause of the acidity in the Redmires water was the subject of careful investigation, and it was found possible that this had resulted, firstly, from the action of soft water on the iron pyrites, giving origin to free sulphuric acid; secondly, from ulmic and humic acids, which are caused by the decomposition of vegetable substances; thirdly, from the atmosphere, which contains large quantities of sulphurous acid, the result of the large consumption of coal in the town. Assuming that the first two possible causes had been in force, the impregnation of the Redmires water is explained on the ground that this neighbourhood contains iron pyrites, while the water from Strines and Agden, from containing more alumina, which would neutralise the acid, would give less evidence of the presence of free acid. A further analysis of water taken from sources where the water had passed through new and old lead pipes showed that the former contained a much larger amount of lead than the latter, the former containing from 0·14 to 0·61 grain per gallon, whereas the latter contained from 0·14 to 0·42 grain per gallon. Again, long pipes led to greater pollution of the water than short ones, and the length of time the water had stood in the pipes was also directly related to the amount of lead contained. The report ends with a statement of the results of filtration: carbon and spongy iron filters removing all traces of lead. Dr. White deserves much credit for a painstaking piece of work. His report will be read with much interest by all concerned in public health administration.

A MYSTERY EXPLAINED.

A CURIOUS tale reaches us from Rochester, U.S., illustrating the belief held by some that there is mysterious sympathy between the individual and detached portions of his anatomy, or as the Americans would term it his "physical economy. It is related that a woman who had recently suffered amputation of the foot experienced acute pain in a corn on one of the toes—a fact the like of which often enough comes under the observation of the surgeon, and which, though marvellous to the patient, is easily explained on physiological grounds, for the irritation of sensory fibres of a divided nerve is *referred* to the terminal distribution of those fibres. But the most curious part of the story tells how that on disinterment of the foot a bandage was found tightly embracing the toe on which there had been a painful corn, and how that on the loosening of the fillet the quondam possessor of the foot gained complete relief from her distressing symptom. It may readily be imagined with what wonderment the woman contemplated "the spiritual link" which held in union her greater self and her far-removed extremity, without dreaming of what explanation on a more material basis of the phenomenon in question might be forthcoming. Granted the truth of the principle of "referred pain," as stated above, one need only suppose a coincidence of two altogether unconnected events—the cessation of the pain and the removal of the bandage—to explain the apparent association. But there is another element which should not be disregarded, which may have played an important *rôle* in delivering the woman from her suffering—namely, a psychical state, whether of expectancy or belief; or, on the other hand, mere emotion independent of the mind. It is well known how fear inhibits pain—e.g., most people must have experienced a diminution or cessation of toothache when brought within a measurable distance of the dentist's forceps; and yet, for all that, the physical basis of the pain can scarcely be supposed to have been withdrawn. In the case under consideration, the patient had been wont to associate the painful corn with tight pressure or other form of mechanical injury, and to feel relief on the withdrawal of the source of irritation. What more likely than that, on

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learning how the enshrouded foot was "cramped" and "in an uneasy position," she should attribute the pain she now felt to its former cause, and, conversely, the deliverance from pain to the removal of the bandage. These are matters which in the uneducated nurture an innate tendency to superstition, but which to those having a knowledge of the physiology of the nervous system are only illustrations of the manifold ways in which mystery is uncloaked.

LAUDANUM-TIPPLING.

ACCORDING to Dr. O'Hanlon, medical officer to the Spennymoor Local Board, opium-drinking is prevalent to a surprising extent among women in the north of England. The possible ill-effects of the drug on the suckled infants of such women are obvious. Miners' wives appear to be most addicted to the habit, which is by its mode of exercise rendered only the more attractive, insidious, and doubly dangerous in its after injurious effects. The opium is drunk dissolved in proof spirit. These disclosures, as is well known, do not mark a new departure in the use of poisons. They are novel only as proving the extension of an old evil already noted as existing in some degree in every order of society. They inform us, moreover, of a combination of two pernicious practices, drinking and drugging. Experience has shown how hard it is for any governing body to control the abuse of alcohol, and it may be doubted how far the Legislature should proceed in this direction. In the absence of any such remedy, temperance education and agitation have already accomplished much by means of spontaneous effort. The case with regard to opium is different. While the beginnings of its action and ascendancy are in many cases less glaringly hurtful in the public view, and therefore, perhaps, less demonstrable by argument, its final effects on the system are at least equal to the results of drunkenness. Moreover, we are dealing from the first with a drug in the strict sense, a deadly poison, and a medicine, which has no legitimate use for any but a remedial purpose. It is clearly, therefore, within the power and duty of the common law to deny to the public, whether salesmen or buyers, their usurped discretion in treating this substance as a domestic commodity. The weakness of the Poisons Act is generally admitted, and in nothing perhaps is it more apparent than in these most recent proofs of its deficiency.

UNUSUAL RASH AFTER SCARLATINA.

THE report of a case of scarlatina followed by a secondary ambiguous rash on the fourteenth day, in THE LANCET of March 6th, by Dr. Julius Pollock, will be a source of consolation to those practitioners who have from time to time found themselves puzzled and unable to define and name those curious cases of septic infection of the throat in which an ambiguous rash is a common feature. Whenever the throat is the seat of an acute inflammatory affection, there appears to be a disposition to the absorption of, and impregnation of the blood by, some fermentive poison. If the case reported by Dr. Pollock is viewed apart from the attack of scarlatina, it becomes one of sore-throat followed by infiltration of the glands of the neck, irritation of the mucous membrane of the urinary tract, and impregnation of the skin to the production of rash, and, finally, septic thrombosis of the femoral vein. This group of symptoms is now and then seen in the surgical wards in cases of pyæmia. The rash varies from one resembling scarlatina, as best seen in surgical scarlatina, to another resembling measles; sometimes it is more in the nature of the first stage of an attack of acute herpes, but differs from herpes in not going on to the vesicular stage; or it may, like Dr. Pollock's case, resemble the non-scaly stage of psoriasis. In fact, the form of rash is very variable and often very transient, being seen one day and absent the next, with liability to recur. The copper colour of the rash to which Dr. Pollock refers is unusual in a strictly septic eruption, nor is it common for the rash to remain out so long as in this case. When a consultation between such accomplished men as Dr. Julius Pollock, Dr. Samuel Gee, and Mr. George Pollock leaves the exact nature of the disease undefined, it indicates an unexplored field for future clinical investigation by practitioners who see most of these diseases in family practice. Our readers will be interested in, and may be able to assist in answering, the questions raised at the end of the report of Dr. Pollock's interesting case of unusual secondary rash after scarlatina.

CHEAP NUTRITIOUS VEGETABLE FOOD.

AT a time when food is plentiful, but work and wages scarce, a timely hint on dietetics may be of service. The pecuniary advantage of a vegetable diet sufficient for the maintenance of healthy nutrition has been pleaded by a correspondent, and the subject is one deserving of consideration. Something may be said, indeed, on physiological grounds in support of such a diet. While the more easy and perfect assimilation by man of certain substances, especially of nitrogen, when derived from animal rather than vegetable tissue, must influence us in favour of a mixed diet wherever possible, there is no doubt that the human body can be maintained in vigour and efficiency on food from which meat is excluded, if enough of it be taken. The rural population, even in our own days, sustain themselves largely on this principle. Might not many of those who people "starving London," and other of our cities in a similar condition, benefit by adopting the same regimen? There are some, at all events, of the unemployed whose poverty does not prevent their acting thus. Meat and fish may not, perhaps, be purchasable even for one meal; yet enough oatmeal, flour, or pease-flour, might be had, at a less cost, to furnish food for several such. Beef-suet can be had for a trifle, as also can bones, and these will add considerably both in flavour and nutriment to the value of the farinaceous materials. The simplest cookery, if thorough, will make an excellent dish of any of these ingredients. The cheapness of such fare should not be allowed to discredit its utility. There is, we are told, and we partly believe it, some such tendency among the poor. Never has it been less justifiable; and we venture to hope that many who are now in straits, though not quite destitute, may be induced by these remarks to think well of provisions which are exceedingly cheap, and are yet esteemed in their plainest form by not a few in wealthier circumstances.

DESTRUCTION OF REFUSE IN KENSINGTON.

A GOOD deal of opposition has been raised to the proposal of the Kensington vestry to destroy their house and trade refuse from the north part of the parish by means of one of Fryer's destructors to be erected on a piece of land formerly forming brickfields. The opposition was based on the grounds of nuisance and injury to trade. As regards nuisance it is somewhat difficult to speak from experience, because few of the destructors in use limit their work to dealing with such comparatively innocuous substances as the house and trade refuse of Kensington will be; thus in some towns excreta, the contents of pail-closets, and sludge from manure works are also so dealt with. But we are bound to say that, even under those circumstances, it is astonishing how little nuisance is created, and such nuisance as exists is rather dependent on the site on which the destructor is erected being turned into a depôt for the various forms of filth and refuse to be dealt with, than on the mere destruction of the materials concerned. If the destructor in

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Kensington be constructed as proposed, and if, to avoid accumulations of refuse, it be kept burning, as is intended, both day and night, we doubt whether any noteworthy nuisance will arise. So far as injury to business is concerned, it appears to be laundry work that is most in question; and unless the laundresses themselves succeed in convincing the public that clothes sent to them to be washed are likely to suffer by reason of the refuse works, no one will trouble his head about the destructor on these grounds. It is necessarily unpleasant to have a refuse destructor as a near neighbour, especially when the alternative is an open recreation-ground, and to this extent we are fully in accord with the complainants; but under existing conditions the destruction of refuse is becoming every year more and more necessary, and sites for destructors must be found.

LONDON HOSPITAL MEDICAL COLLEGE.

ON Tuesday last the corner-stone of the new buildings connected with this College was laid by Mrs. William James Thompson, the wife of the Chairman of the College Board. Among those present were the Chairman of the Hospital (General Keating, V.C., C.S.I.), Sir Wm. Rose Robinson, K.C.S.I., General Nicolson, C.B., the members of the hospital staff, and other friends of the hospital. The usual bottle deposited in the stone contained a copy of THE LANCET, the prospectus of the college, a scroll signed by the members of the staff and of the house committee, and the customary collection of coins. The new buildings practically represent an entirely new college for the London Hospital. Of the old college little now remains, nothing, indeed, except the chemical laboratory and theatre. The new erection will afford ample accommodation for the rapidly increasing number of students, will provide a new museum and lecture theatres, a new dissecting-room, a very spacious library, and a series of rooms—dining, smoking, cloak-rooms, &c.—which will be devoted to the "Club" for students connected with the hospital. Not the least important of the additions to the college is a series of small rooms for small classes and for special demonstrations.

AMBROISE PARE.

MALGAIGNE'S historical and biographical introduction to the three volume edition of Paré's works (Paris, 1840) has always been held in merited esteem as one of the most learned contributions to the literature of surgery; but it is defective in some important particulars, for want of documentary evidence. This has now been discovered in the National Archives of France and in family papers, and given to the world by Dr. le Paulmier, through Charavay Frères (Paris, 1885). Born at Laval in 1510 of very humble parentage, Paré overcame all the disadvantages of poverty and defective education, and worked his way, through a life full of vicissitude, to the position of surgeon-in-chief of two of the kings of France and of recognised leader amongst the surgeons of his time in all countries. He was a prolific author for over forty years, had a large private practice, and rode many thousand miles as chief surgeon to the national armies. No labour seemed too great for him. He found favour with no less distinguished contemporaries than Bernard Palissy and Coligny, Sylvius and Catherine de Medicis. When Henry II. was accidentally but fatally wounded in the famous tournament by Montgomery, Paré was first consulted, and then Vesalius attended from Brussels. A Huguenot, Paré was spared by Charles IX. in the massacre of St. Bartholomew; and the orthodox members of the Paris Faculty, who had waged a long and envious war against the master-surgeon, witnessed the double triumph of his morality and of his professional skill. Of nine children by two wives, three daughters survived him but no son. At his death, on Thursday, Dec. 20th, 1590, Paré was a wealthy man, and held a commanding position. He was interred two days later in the church of St. André-des-Arcs, and, contrary to the wish he had expressed, with great pomp. He was of middle height, and had always enjoyed robust health. Conscious of his great powers, he sometimes laid himself open to the charge of vanity, but his honour was never questioned. He was a hard fighter, but a faithful friend; and in the practice of his profession he won gratitude as much by his considerate kindness as by his consummate skill. He has come to be regarded as, beyond question, the father and founder of modern surgery.

REFORM OF THE CORONER'S COURT.

IT is disheartening to find that the subject of reform in relation to the coroner's court has been so effectually shelved by the abortive inquiries made from time to time during the last ten years with the ostensible purpose of effecting necessary changes. At the present moment the tribunal which is practically the most useful, though not the most efficient, part of the judicial machinery for the purpose of repressing crime stands in a worse position than it occupied before attention was pointedly directed to its defects. It is discredited, and those who are responsible for the conduct of its business are hampered in the discharge of their duties. It surely need not tax the time of the Legislature too heavily to discuss and pass a Coroner's Bill, if only a good working Bill embodying the reforms which have been so repeatedly indicated could be drafted and launched under ministerial patronage. The best plan seems to be to constitute the coroners local officers of inquiry with special qualifications as medical jurists and analysts, so that the facts to be afterwards dealt with by the purely legal tribunals may be thoroughly sifted by a technical court of first instance. The coroners thus acting would be available as assessors to the higher courts in special cases, or they might be empanelled as a jury in cases of need to determine issues involving special knowledge. The local coroner's "courts" or juries would thus be restored to their old position as corps of observation to see fair play—as it were—by the representative of the Crown, the "crowner" or coroner. There would be great convenience in considering this proposal just now while the Bill before the Legislature for the amendment of the lunacy laws is passing through Parliament, because there is much need of a local official before whom questions of lunacy might be raised; and the creation of a class of specially qualified coroners who were possessed of technical knowledge, and at the same time raised above the suspicion of bias by being wholly official, would greatly facilitate the working of the new statutes relating to the care and custody of lunatics.

PREVENTION OF RIVER POLLUTION.

A MEETING was held at the Mansion House on Wednesday, on behalf of the Society which has been formed to procure effective legislation for the prevention of river pollution. The Lord Mayor presided, and the meeting was attended by the Attorney-General, Lord Hardwicke, Mr. Hastings, M.P., and others interested in the question. The Attorney-General pointed out the objects which the Society had in view, and dwelt upon the reasons which had led to the failure of the legislation of 1876 to protect rivers from receiving sewage and the refuse from manufactures, and he urged that the only remedy was to be found in further legislation, which would enable the subject to be dealt with as a national question. If legislation is to be effectual, it was argued, the duty of protecting rivers must no longer be imposed upon local sanitary authorities, who are often themselves the chief offenders, and it must be open to all persons

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affected by the pollution to set in motion the machinery for preventing its continuance. Mr. Norman Bazalgette spoke strongly in favour of a standard of impurity being fixed by law, so that no question should remain to be settled by those who have to enforce the Act, and he referred to that of the Metropolitan Sewage Commission as being the best that can be adopted. This is obviously debatable ground, and if the Bill which is introduced by Mr. Hastings pass the second reading, it may be expected that it will be modified in this as well as in some other respects in committee. But with the general principles of the Bill we are in accord, for the fact remains that the pollution of rivers is at the present time a standing danger to the country, and the Act of 1876 has been found altogether wanting in the means which are required for the effectual dealing with this danger.

EPSOM COLLEGE.

SIR ANDREW CLARK, Bart., has kindly consented to take the chair at the twenty-third festival dinner of the Royal Medical Benevolent College, to be held at the Holborn Restaurant on Thursday, May 11th. As the College has no endowment, the whole cost of maintenance of the fifty foundation scholars and the fifty pensioners has to be defrayed out of the annual subscriptions and donations; these, we regret to see it stated, have for some years past been insufficient for the purpose. The pressure for the admission of foundation scholars is so great that it will be lamentable if it should become necessary to reduce their number; but a reduction will be inevitable unless the regular income can be increased. Under these circumstances we are sure that the profession will "rally round" so distinguished and representative a chairman as Sir Andrew Clark, and will use their influence, which is great, with the public on behalf of an excellent institution, the benefits of which, by the way, are not altogether limited to the disciples of healing.

THE PEABODY BUILDINGS IN 1885.

THE Trustees of the Peabody Donation Fund have recently issued their twenty-first annual report, which relates to the year 1885. It is eminently satisfactory to learn that the sphere of usefulness of this fund is constantly enlarging. At the close of last year the population housed in the dwellings erected by and belonging to the fund exceeded 20,000, and the assets of the Trust, consisting almost exclusively of the various blocks of buildings, exceeded £881,000, or £381,000 more than the £500,000 originally bequeathed to the Trust by Mr. Peabody. The net income of the fund, arising from the balance of rents in excess of expenses, now considerably exceeds £20,000, and steadily increases from year to year; and as this net income is added to capital by reinvesting it by the provision of improved dwellings, there is practically no limit to the beneficial influence of the fund upon the housing of the poor in London. The buildings already in occupation at the end of last year contained nearly 5000 tenements, of which more than 3000 were tenements of but one or two rooms. The report states, moreover, that the average weekly earnings of the head of each family in residence at the close of the year was under 24*s*., and the average rent of each room very slightly exceeded 2*s*. These figures refute many of the objections that have been made from time to time against the management of the fund. With reference to the vital statistics of the population housed in the Peabody Buildings during last year, it appears that the birth-rate was equal to 45·2 per 1000, which was 12·7 in excess of the mean birth-rate in the whole of London. The death-rate, including the deaths in hospitals of inhabitants of the buildings, was 19·6, and was practically identical with the general London rate. The rate of infant mortality was 139 per 1000 of the registered births, and 9 below the average rate in London. The population of the Peabody Buildings is essentially a working-class population, and its mortality statistics have therefore special interest. For comparative purposes, however, it is necessary to bear in mind the age-constitution and other circumstances of the population, which materially affect its death-rate. It may be noted, as might be expected from the birth-rate, that the inhabitants of these buildings include an undue proportion of children—namely, 19 per cent. under five years of age, against 13 per cent. in London. On the other hand, only 3 per cent. of the Peabody population are of persons aged upwards of sixty years, whereas the proportion in the whole of London is 6 per cent. One other point should also be borne in mind. The statistics of the Peabody Buildings take no account of those residents who drift into the metropolitan workhouses, although nearly 13 per cent. of the total deaths in London last year occurred in workhouses. On the whole, however, after making allowance for these disturbing influences, the death-rate in these buildings last year affords evidence of satisfactory sanitary condition, although more detailed mortality statistics of this working-class population would possess especial interest.

UNSTRIATED MUSCLE IN THE KIDNEYS.

THE presence of a few scattered smooth muscular fibres in the kidneys has been noticed by several observers, and especially by Henle and Eberth; but Dr. Jardet of Vichy has, in a short memoir contributed to the *Archives de Physiologie* of February 15th, shown that there is a regular system of such fibres. Most of the text-books state that a layer of smooth muscular fibres is present in the pelvis and calyces, the origin of which is referred to the double muscular layer of the walls of the ureter. Henle describes a special muscular annulus, composed of longitudinal and circular fibres around each papilla, lying just beneath the membrana propria. The longitudinal layer ceases at the plane of the floor of the pelvis; the circular layer may be traced some distance into the renal substance. The function of these fibres is to drive the urine forwards from the papilla into the pelvis. Eberth found, in man, a plexus of unstriated muscular fibres with large meshes on the surface of the kidney. Some of these fibres dip into the cortical substance of the kidney. The system of fibres described by Dr. Jardet were first noticed by him in pathological specimens, but were afterwards found to be present in the normal kidney. The situation, when they came clearly into view, was in transverse and vertical sections of the pyramids of Malpighi. They occupied the perivascular conjunctival sheath of the vessels, and never extended far amongst the renal tubuli. The fibres are grouped into small fasciculi, which spring from the pelvis and run parallel to the larger arteries and veins, but do not constitute a complete sheath to any vessel. They become hypertrophied in lithiasis, in hydronephrosis, and in all chronic inflammations of the kidney.

ETHER AND OPIUM IN SMALL-POX.

DURING a recent meeting of the Medical Society of the Paris Hospitals, MM. Dreyfus-Brissac and Balzer mentioned that they had tried M. du Castel's ether and opium method of treating small-pox for a considerable time, and had convinced themselves of its efficacy. It consists in subcutaneous injections of ether, a daily dose of from fifteen to twenty centigrammes of opium being administered by the mouth. In severe and confluent cases the papules become abortive, suppuration is diminished, and the general improvement is rapid. M. Balzer prefers administering the ether as well as the opium by the mouth, but M. du Castel considers this less efficacious than the hypodermic method.

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COMPLIMENTARY DINNER TO SIR W. ROBERTS.

ON Saturday, the 6th inst., the members of the medical profession of Manchester and the district gave a complimentary dinner to Sir William Roberts, in recognition of his great services to medical science, and to congratulate him upon the honour of knighthood recently conferred upon him. The dinner took place at the Queen's Hotel, Manchester, Dr. Henry Simpson presiding, and there were about sixty guests. All the hospitals of the district were well represented by the presence of members of their various staffs, and there were also a number of other gentlemen, most of whom had either been fellow-students of Sir William Roberts, or had been for many years intimately associated with him in Manchester. After dinner the President, having given the usual loyal toasts, proposed the health of Sir William Roberts, whom he had intimately known from the time when they were fellow-students at University College Hospital. He referred briefly to Sir William's fruitful professional career, from the publication of his first essay on "Wasting Palsy" onwards, alluding more especially to his "Urinary and Renal Diseases," and his more recent work on Digestion. In doing so he emphasised the care which Sir William had always taken to make his work of real and lasting value, and not to write so as merely to catch the ear of the ὁι πολλοι. The toast was drunk with the greatest enthusiasm. Sir William Roberts, in his reply, cordially thanked his friends for the welcome they had given him, and dwelt upon the good fellowship and unanimity of the members of the medical profession in Manchester. The President's health was given by Dr. Buchanan, of the Local Government Board, who related sundry amusing anecdotes of the days when Sir William Roberts, Dr. Simpson, Dr. Briggs, Mr. Smart, he himself, and many others present were fellow-students with Sir Henry Thompson, Sir William Jenner, and others whose names are of world-wide celebrity. Dr. Briggs then proposed the health of Mr. Lund, who briefly replied, after which the evening was concluded with songs from Dr. Simpson, Mr. Dowse, and Mr. Luckman. The necessity imposed upon many of the guests of catching trains to outlying towns caused a somewhat early termination to a most enjoyable evening.

A HIGHLY PRAISED DIURETIC.

THE treatment of dropsy with Apocynum Cannabinum (American Indian hemp), by no means to be confounded with cannabis indica, was lately the subject of an interesting paper read by Dr. Andrew H. Smith before the New York Academy of Medicine in the section of Materia Medica and Therapeutics. This plant is indigenous in America, and has long been used and prized for its diuretic properties. Dr. Rush called it "the vegetable trocar." Dr. Mott used it, but thought it too active for any but sthenic cases. In 1869 attention was re-directed to it by Dr. Harvey Jewett of Canandaigua, N.Y., who, "as a tonic and diuretic," regarded it as more efficient in the cure of general anasarca and in removing the accumulation from serous sacs than all other remedies known to the profession. In atonic cases he recommended small doses at short intervals. A rapid cure was the result in his hands, where there was not incurable organic disease. The drug has a place in the Pharmacopœia of the United States, in the form of powder of the root and a tincture prepared from this (see Martindale and Westcott's Pharmacopœia). But Dr. Jewett used a decoction made with one drachm of the bark of the fresh root to eight ounces of water; of this the dose was half an ounce every six hours. In 1875 Dr. Hutchins related a case of general anasarca, with pleuritic effusion and hydropericardium, extreme dyspnœa, and enormous distension, in which some of the drug gathered by and got from Jewett acted so that in forty-eight hours the man who had been so frightfully distended was reduced to a skeleton. Dr. Smith's cases were three in number. One was a failure, perhaps owing to a bad selection of the drug. In another—a case of renal disease, with scanty urine and threatening uræmia—the apocynum excited profuse diuresis, and danger was averted. The third case was one of general anasarca, ascites, and œdematous lungs, with extreme dyspnœa, face cyanotic, and mind wandering. All diuretics had failed, and it seemed unwise to annoy the patient with further treatment; but as a *dernier ressort* the apocynum was tried, and the quantity of urine was raised from between six and twelve to thirty ounces, and the urgent symptoms were relieved. The drug evidently deserves attention, and to have its action and uses defined.

THE ABUSE OF PROVIDENT DISPENSARIES IN MANCHESTER.

THE Manchester and Salford Provident Dispensaries scheme is a very large one, and ought to be worked upon very strict principles; but we have had occasion to question whether the dispensaries were not open to great abuse, chiefly on account of the abolition of the rule which prescribed a wage limit beyond which persons were not admissible as members. Very explicit confirmation of our views is supplied in a letter by a working man published in the *Manchester Guardian*, and which is so much to the point that we give it in full.

"Pendleton, Feb. 27th, 1886.

"DEAR SIR,—I would have answered your note sooner, but I have been working late and have not had an opportunity before now. While I sympathise to a certain extent with the object of the provident dispensary, yet I fear and know that it is largely taken advantage of by the improvident. I have known many members of above earning from 40*s.* to 60*s.* per week (piecework), able to lose and win heavy bets, stop days off work drinking, and otherwise squander their earnings, and yet take advantage of this and other charities. Of course it is a long-vexed question how to deal with such. Still I presume it is more of the well-to-do you want to know, and of these I do know some—one a family of five (wife, husband, and three children); husband 35*s.*, and children earning upwards of 30*s.* per week. I am not quite sure if they are all in, but I know the husband is a member and recently received benefit. I knew a young man (single), wages upwards of 36*s.* per week, who received considerable benefit. He has lately left Pendleton. Also I know a man (married, two children), wages over 40*s.* per week, who received benefit. He has lately left Pendleton. I have not the paper, but I think Mr. Harwood referred to some rule that applicants for membership were inquired into before being admitted. This is certainly not the case. I joined myself among upwards of a hundred more in the works some three years ago, and I think I am safe in saying not one case was inquired into if suitable; certainly mine was not, and the question of wages was not mentioned by the agent who came down to propagate the scheme.

"I am, &c., ——."

LYING-IN HOSPITAL MORTALITY.

THE reports of the mortality of lying-in hospitals form much pleasanter reading than it used to be. That of the General Lying-in Hospital, York-road, Lambeth, is before us. The medical report, by Dr. Williams and Dr. Champneys, is very satisfactory. There were 395 women confined in the hospital, of whom 4 died. As out-patients 850 women were confined, and 2 died. The cause of death of the two out-patients is not stated. At first sight the death of four in-patients looks unsatisfactory, but in a footnote it is explained that only one of these died of septicæmia. Two women were admitted in advanced consumption, and the fourth death was from chronic renal disease. The exclusion of such cases would improve the results, but they would reflect little credit on the humanity of the physicians.

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A hospital exists, not for show tables of mortality, but for the accommodation of the afflicted. We have before alluded to the care with which antiseptic douches, ventilation, and cleanliness are practised in this institution, and to which, doubtless, the abeyance of septicæmia is largely due. In the last five years 1508 women have been delivered, of whom 11 have died, or 1 in 142; 218 nurses have been trained, and 52 midwives, of whom 42 have obtained the diploma of the Obstetrical Society. As regards the mortality, it is to be noticed that it is the total mortality from all causes, including diseases unconnected with childbirth. Cases leaving before recovery had taken place were traced, and the result is embodied. This care and candour are to be much commended. We have only one fault to find with the medical report, and that is its brevity. Short of mortality, what were the complications of parturition, and how were they dealt with? What was the average duration of labour? What the proportion of primiparæ? What the frequency of instrumental cases? What the defects or diseases of the infants born in the hospital (400), of whom 10 were stillborn and 12 died after birth. The last paragraph of the general report is devoted to a warm and well-earned acknowledgment of the services of Dr. Williams, whose other duties have compelled his resignation, but who leaves the hospital in a very different position from that in which he found it.

THE URINE IN PUERPERAL ECLAMPSIA.

M. DOLERIS has found that some specimens of the urine of patients with puerperal eclampsia give, on drying, crystals whose composition is at present undetermined, but which are slightly soluble in alcohol and soluble in acidulated water, and a somewhat concentrated solution of which injected into animals killed a rat and three sparrows, while comparative experiments made with a portion of solution containing no crystals produced no effect. M. Doleris found a normal amount of urea in the blood of two patients dead of the disease, but an increased amount in that of two others who were cured. In one case only were soluble and toxic ptomaines met with. He believes that puerperal eclampsia is of an infectious nature, for it is not only the kidney which is affected but other organs, the liver in particular presenting characters more or less allied to those noted in acute yellow atrophy.

THE PORT OF LONDON.

THE provision of a new steam launch has led to a large increase in the amount of inspection carried out by the officers of the Port Sanitary Authority of London, and as many as 12,663 vessels were thus dealt with during the latter half of 1885. This work tends steadily to improve a large amount of shipping of various nations, and thus to conduce to the general benefit of crews and passengers. During the past half year an unusual number of structural alterations have been made with a view of improving the hygienic condition of vessels, and many of these have been found necessary even in the case of perfectly new vessels. It would doubtless save much expense in the long run, if the medical officers of ports were consulted as to the sanitary aspects of the question whilst the ships were building, for it is of necessity a somewhat costly thing to alter forecastles when the vessels are finished, and Dr. Collingridge does well to point this out. Special precautions were taken to prevent the importation of articles of infected clothing belonging to persons who had died of cholera and other spreading diseases. As regards cholera itself, no case or suspected case appears to have entered the Thames; but the arrangements for isolation and disinfection, which are well devised and excellently carried out in the case of the other dangerous infectious diseases, were kept in readiness. During the month of August a large number of boys in the training ship *Warspite*, lying off Charlton, were attacked with diarrhœa, and after a very exhaustive inquiry into its possible causes, Dr. Collingridge finds himself compelled to attribute it to the foul state of the river. The boys were all seized in the night; and the worst nights, in point of numbers attacked, were those when the river was very bad; whereas when the river was less foul the disease subsided; and we feel that, so long as the Thames remains in its present state, the report is correct in describing so much of it as lies above Gravesend as an improper place for mooring such a vessel. The port hospital and its ambulance launch are kept in good order, nuisances are well controlled, and the enforcing of the provisions of the Canal Boats Acts, which has now been thrown upon the Port Sanitary Authority, has been commenced in a manner that gives good promise of efficient administration in this matter.

THE FUNCTIONS OF THE CORPUS STRIATUM.

HERRN BAGINSKY and Curt Lehmann brought before the Physiological Society of Berlin, at the meeting on Nov. 13th, 1885, the results of their researches on the functions of the corpus striatum. They remark that as these organs lie deeply embedded in the brain they cannot be reached without considerable damage being inflicted on other parts, and they took pains to adopt a method which should minimise this injury. They found the plan which gave the most exact and uniform results was to plunge a fine glass tube into the corpus striatum and place the other extremity of the tube in connexion with an exhausting syringe, by which the substance of the corpus striatum could be sucked out. The experiments were made on rabbits. If that part which projects into the ventricle were removed, the phenomena presented were that the fore and hind limbs of the opposite side were extended if the animal were previously in the sitting position. The extremities, and especially the anterior limbs, could easily be placed in anomalous positions, in which they remained till a stronger stimulus was applied. The movement of the extremities offered a certain resistance to the hand of the operator, which was greater than that of the opposite side. No motor defect was observed when the animal ran or made other voluntary movements. The temperature of the body remained normal, or only rose slightly and at a late period. The animal showed great excitability and much tendency to fear upon various sense impressions, making energetic efforts to escape by jumping from side to side. When the brain substance was removed down to the corpus striatum, without injury to that body, the same symptoms were observed, except that the rise of temperature was more common and greater. The authors of the memoir therefore arrive at the conclusion that the functions of the corpora striata do not differ materially from those of the superjacent brain substance.

ISOLATION ARRANGEMENTS AT DERBY.

WE are glad to find that the Corporation of Derby have at last decided to erect a permanent hospital for the isolation of infectious diseases. The experience of Derby in this respect has hitherto not been fortunate, except in so far as it has been useful in preventing the sanitary authorities of other districts from erecting temporary buildings under the influence of panic. Such buildings rarely answer the immediate purposes for which they are erected, and their after history is one which is full of warning, for the buildings are often allowed to decay, and they deter people from accepting the isolation offered them; or if they are kept in decent repair they are very costly. And, worse still, the

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existence of these barn-like buildings prevents the erection of proper hospitals. Derby, after some thirteen years' experience of such a building, now intends to erect a proper hospital of thirty-two beds. The number of beds is by no means excessive, amounting as it does to one bed for every 2800 inhabitants; but the County Infirmary has a special fever pavilion, and the immediate isolation which may be expected to follow on the notification of infectious diseases which is compulsory in the borough may tend to make a larger amount of accommodation unnecessary. From the report before us we learn that no Isolation Pavilion has been provided for. We should counsel the authority to reconsider this matter, for if they do their work promptly and efficiently they will stand much more in need of a pavilion containing accommodation in separate small ward-rooms for one and two patients, than for large ward-buildings so designed that if a single patient suffering from one infectious fever is received into any one of them, no other case of a different disease can be taken into it. It has more than once happened that authorities with two large pavilions have been obliged to keep all their available accommodation in working order because they happened to have taken in two patients who were suffering from two different diseases. An isolation pavilion such as has been designed by the Local Government Board would, under these circumstances, have provided better and more suitable accommodation in two small rooms, and this at a minimum cost for maintenance and administration.

AN EXPERIMENTAL INQUIRY INTO THE NUTRITIVE VALUE OF BEEF EXTRACTS.

AT a recent meeting of the College of Physicians of Philadelphia Dr. Thos. J. Mays read an important paper, in which he described the results of a series of careful experiments made with various beef extracts upon the isolated frog's heart. An abstract of the paper appears in the *Medical News* of Philadelphia of Feb. 27th. Dr. Mays conducted his experiment as follows. The Kronecker-Bowditch heart apparatus was used, and was connected with a proper recording apparatus. By means of a double cannula it could be supplied with any desired material, and in order to keep it pulsating regularly, minimum shocks of one Daniell's cell through a Dubois sliding induction coil were employed every four seconds. The heart was first of all well washed out with a ·6 per cent. saline solution, after which it was allowed to work with the same until all its stored-up material was exhausted and its pulsations reduced to zero. Then a weak solution of the inorganic salts of the beef extract was tested, and found to fail in every instance to induce cardiac contractions; a solution of urea failed in the same manner. Solutions of various beef extracts diluted with the ·6 per cent. saline solution were then employed. Solutions of 1 in 100 and 1 in 500 failed to restore contractile power to the heart, but when the extracts were diluted in the proportion of 1 in 666 to 1 in 2000 the heart's action was revived and maintained. This having been ascertained, another series of comparative experiments was undertaken. A heart, having been prepared as before, was filled with a 2 per cent. solution of dried bullock's blood, and the number of times the heart beat was taken as a standard. The heart was then washed out with the saline solution and filled with one of the fluids to be tested, and the number of contractions counted. In this way the nutritive value of these solutions of beef extracts was compared with that of dried bullock's blood, which is stated to be one-third of fresh blood. Five beef extracts were thus tested, and their value was found to be very similar, for if the standard of dried bullock's blood be taken as 100, the contractions excited by these solutions were respectively 58, 59, 60, 61, and 62, which, allowing for errors in the experiment, may be taken as a uniform figure, 60. A mixture of beef extract with milk and gluten, sold under the name of beef peptonoids, ranged at 74. From these experiments Dr. Mays infers that solutions of beef extracts are absorbed and assimilated by the isolated frog's heart, that they contain material which has the power of inducing muscular contraction, and that they are entitled to be called nutrients in the full sense of that term. In a further series of similar experiments, Dr. Mays hopes to show which of the many organic constituents of these preparations really possess this power; but owing to the difficulty of isolating them this part of the investigation has not at present been completed. In view of the great diversity of opinion as to the nutritive value of beef-tea and meat extracts of all kinds, accurate scientific observations, such as those of Dr. Mays, are of considerable interest and of great practical value.

THE PASTEUR INSTITUTE.

THE institute that is to be named after M. Pasteur will stand as a monument of his great services in the cause of suffering humanity. International in its scope—for it is reckoned that the single establishment will be able to cope with the average annual number of cases of hydrophobia,—it is but right that the subscription list should be open to the world at large. The estimated cost of the edifice is 80,000 francs. Already a large sum has been contributed. Paris will add by this projected scheme one more claim to be regarded as the first city in the world.

SIMPLE CONTINUED FEVER.

PROBABLY no investigations in medicine are more directly responsible for the saving of human life than those which caused the three diseases—typhus, enteric, and relapsing fevers—to be distinguished from each other. They have enabled the etiology of these affections to be definitely studied, and have been the foundation upon which has been erected the whole superstructure of the means for their prevention. Clinically, these diseases differ from each other in so many important particulars that to those who study medicine at the present time there is almost a feeling of surprise that they were so long confounded with each other. But the knowledge which was required to enable them at first to be differentiated was not at once available. Observation was based upon previous observation, and many workers were required to add their contributions to the total sum necessary for the attainment of a definite decision. The work, however, which has already been done is not all that is required for a proper understanding of the acute febrile affections, which still cause loss of life in this country. During the decade 1871-80 as many as 25,643 deaths were registered in England and Wales from "simple continued fever." Under this heading is doubtless classed more than one disease, and before there is any possibility of the prevention of this vast mortality prolonged and patient work must enable each to be clearly understood. Fortunately the opportunities for their study have increased, and are still increasing year by year. Improved microscopical and biological methods add to the hope that by their means first one point and then another will be gained until the whole can eventually be trusted to teach lessons not less valuable to mankind than those which served to show that the conditions which give rise to typhus are altogether different from those producing enteric fever, and that both sets of conditions differ from those upon which relapsing fever is dependent. Such work as Mr. Alfred Lingard is now carrying out in connexion with disease caused by the air contents of sewers is especially of the kind likely to lead to definite gain, and the Grocers'

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Company deserve the gratitude of all interested in the public health for the opportunity they have given for his researches. These have already been fruitful in their results, and the observations which are in progress will, we anticipate, be the beginning of a better understanding of those mysterious affections which we have been content as yet to class together as simple continued fever. The profession will gladly await the completion of these studies. The premature publication of investigations which are still in progress is to be deprecated, for it is above all things necessary that every observation should be fully substantiated.

THE HEALTH OF THE PREMIER.

WE learn that Sir Andrew Clark at his morning visit on Thursday found the Premier progressing favourably, but still needing to carefully keep his room. Mr. Gladstone is suffering from a feverish bronchial catarrh without complication. Obviously, in the present season, such an attack must not be neglected; but it is confidently expected that Mr. Gladstone will be able to be in his place next week.

MEDICAL SOCIETY OF LONDON.

A VERY successful dinner was held on Saturday last at the Holborn Restaurant, Dr. W. M. Ord, the retiring president, being in the chair. In responding to the toast of "The Army, Navy, and Reserve Forces," Sir Guyer Hunter, M.P., considered that the "capitation fee" for Volunteers was altogether inadequate. Dr. Broadbent proposed the toast of "The President," and spoke in feeling terms of their friendship and of the success that had attended the Society's meetings during the past year.

EFFECT OF LIGHT ON BACILLUS ANTHRACIS.

ACCORDING to M. Arloing, gas-light is slightly prejudicial to the growth of the bacillus anthracis. The sun-light of summer rapidly suppresses the vegetation of the spores if the rays of light can penetrate easily the fluid media that hold the bacillus in suspension. Sun-light also interferes with the growth of the mycelium, and is an agent as effective as heat for the attenuation of the virus of charbon. The effect of sun-light is due to the action of all its component rays; the effects are proportional to the intensity of the light and the transparency of the media.

CLASSICAL EDUCATION AND SOCIAL POSITION.

A SOMEWHAT long debate has taken place in the Bavarian Landtag on the question of the admission to the University faculties of medicine of students who have received their preliminary education in real gymnasia—that is to say, in institutions corresponding to the modern sides of our public schools, where Greek is not taught, but greater attention is paid to science and modern language than in purely classical schools. This proposal did not command the sympathy of the majority of the members, although it was admitted that a knowledge of Greek is by no means necessary to enable a student to become a first-rate scientific practitioner. The *Münchener Medicinische Wochenschrift*, referring to this subject, remarks that in many other countries a classical training is not required of medical students, but that the want of this is found to lower the social status of the profession in those countries—this being notably the case in England—"where even for the highest medical diploma, M.R.C.P., a knowledge of Greek is not compulsory. Nevertheless medicine in England has produced much valuable original work; but the profession is obliged to be content with a subordinate position, the highest circles of society to which the clergyman and the lawyer have access being closed to the doctor;" and in particular he is never raised to the dignity of the peerage, "the prejudice against the medical profession being doubtless due to the fact that the majority of English doctors are lacking in refined classical education" (!) With this sad example as a warning, let the profession in Germany "hold fast by the talisman which is its only security in claiming a position equal to that of the other learned professions—a classical training." Though it is much to be desired that as high a standard of preliminary education as possible should be insisted on, it can hardly be true that the cause of the "subordinate position" which the medical profession is said to hold is due to the want of a knowledge of Greek, which is probably far less usual amongst doctors than amongst military and naval men, whose profession of arms has certainly no reason to complain of any want of social consideration, and which leads pretty frequently to a seat in the House of Lords—a Chamber, too, which, fortunately perhaps for some of its hereditary members, does not close its portals to those destitute of a "refined classical education."

THE LATE PROFESSOR PANUM'S SUCCESSOR.

FOR the late Professor Panum's post of Professor of Physiology in the University of Copenhagen four candidates presented themselves before a committee of experts, one of whom, Professor Holmgren, had been specially invited from Upsala. Each candidate read papers on various topics, and the committee decided in favour of Dr. Chr. Bohr, who had been assistant to Professor Panum and had been specially recommended by him as his successor. The other candidates were Dr. Buntzen and Dr. Vogelius.

THE INCUBATION PERIOD OF SMALL-POX.

PROF. EICHHORST of Zurich has had an opportunity of accurately observing the incubation periods in three cases of small-pox occurring in a medical man and two medical students. They were very nearly alike, and much shorter than is commonly supposed, being respectively nine days eight hours, nine days eight hours, and nine days fourteen hours; whereas it is usually stated to be from twelve to fourteen days.

ON the 8th inst. the death occurred, at his residence in Salisbury, of Mr. R. W. Read, F.R.C.S., Deputy Inspector-General of Army Hospitals. Mr. Read studied medicine at St. George's Hospital, and became a Licentiate of the Society of Apothecaries and a Member of the Royal College of Surgeons in 1841, a Fellow of the Royal College of Surgeons of England in 1857, and a Fellow of the Royal College of Physicians of Edinburgh in 1859. He was appointed an assistant-surgeon in the Army Medical Department in 1844, became a surgeon in 1855, surgeon-major in 1864, Honorary Deputy Inspector-General in 1869, and was placed on half-pay in the same year. Mr. Read, who was a magistrate for the city of Salisbury, had contributed papers on "Revaccination in the Army" and "Radical Cure of Hydrocele," &c., to the columns of this journal.

THE Vienna Town Council on the 5th inst. discussed and rejected the proposal of the Princess Metternich that medical men should be sent from that town to Paris to learn M. Pasteur's method of treating hydrophobia; but a resolution was passed that the Government should be requested to take the matter into its own hands.

THE Countess of Dufferin has written for the April number of the *Asiatic Quarterly Review* a paper describing the objects of the Fund for supplying female medical aid to the women of India, which is identified with her name.

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ON the 3rd inst. the death occurred at Rochester of Deputy Surgeon-General Alexander Guthrie, principal medical officer of the Chatham district. The deceased officer, who was in his fifty-fourth year, joined the Army Medical Service in 1854, and served in India during the mutiny, being present at the action at Cawnpore and the siege and capture of Lucknow; he served also in the Trans-Gogra campaign and the Afghan expedition of 1880.

AT an investiture held by Her Majesty at Windsor Castle on Tuesday last, George Edward Paget, Esq., M.D., with other Knights Commanders of the Order of the Bath, was introduced into the presence of the Sovereign, who conferred upon him the honour of knighthood, and invested him with the insignia of the Civil division in the Second Class of the Order.

ON the 10th inst. the death occurred of Dr. John Storrar, the representative of the University of London in the General Medical Council and late chairman of Convocation of that University. We hope in a future number to give some particulars of the services rendered by the deceased to the cause of medical education in this country.

THE Professorial Senate in Vienna have under discussion the question of establishing a dental school in connexion with the medical faculty. A committee has been appointed, consisting of Professors Albert and Billroth and Drs. Schiff and Sternberger, docents in odontology, to draw up a scheme for consideration.

THE outbreak of yellow fever on board H.M.S. *Urgent* at Port Royal which we mentioned in a recent issue still continues, and the vessel has been removed to the quarantine ground and thoroughly cleansed and fumigated. Amongst the latest deaths was that of Mr. Anderson, surgeon of H.M.S. *Tyne*.

DR. DUDGEON of Pekin, who is said to possess great influence with the leading statesmen of China, is writing a History of Opium. The work, which is partly in type in Pekin, will contain much novel information concerning the early history of the supply and its introduction into China.

IN an action brought by the governors of the London Hospital to recover possession of more than 100 houses in Whitechapel, judgment was given on the 9th inst. for the plaintiffs. The action was brought against the leaseholders on account of breach of covenant to repair.

WE understand that the Colleges of Physicians and Surgeons of Edinburgh and Glasgow have just decided to throw open to women their conjoint examinations and "triple qualification" in medicine, surgery, and midwifery.

TELEGRAMS from Venice received in Rome announce that a case of cholera has occurred on board a brigantine, which arrived there a few days ago from Greece. The vessel was immediately sent to the quarantine station.

DR. ROBERT SAUNDBY has been appointed consulting physician to the Birmingham and Midland Counties Hospital for Women, in succession to the late Dr. Heslop.

THE annual report and balance-sheet for 1885-86 of the Vaccination Officers' Association, which has just been published, is a highly satisfactory one.

THE ILLNESS OF THE LATE MR. COOPER FORSTER.

THREE possible causes for Mr. Cooper Forster's illness were discussed by his medical attendants, and the post-mortem did not satisfactorily determine which of them or any other was the efficient one. The deceased gentleman left London for Cannes on Jan. 21st, and stayed there about three weeks; he then proceeded to Nice, where he remained a few days, and then on to Mentone. He was here but a few hours, and then returned straight home, arriving on Feb. 24th. At the beginning of the latter month he felt unwell, and after that he gradually lost his appetite and strength so as to be unable to take his usual walks, such as he had accomplished on his first arrival at Cannes. During the last week of his sojourn abroad he ate scarcely anything, until his appetite at last entirely failed, and he at once resolved to return home. He was unable to secure a "coupé lit," and was obliged to take his seat in a crowded carriage, his fellow-passengers kindly affording him as much opportunity as possible for rest. He ate nothing during the journey, and when he arrived home his servant was struck by his deadly appearance and with difficulty got him to bed. When I saw him he had a most haggard look, spoke in a whisper, as if suffering from the most extreme exhaustion. After a few hours he became very feverish, his tongue parched and hard, and his temperature 103°. This temperature was reached each successive afternoon, falling two degrees in the morning. His loathing for food was extreme, and most of what he took he rejected. Dr. Habershon then saw him, and was unremitting in his attention until the end. No maculæ appeared and no diarrhœa. He passed a very restless night, and on the following day could still take but little food. Dr. Habershon suggested some effervescing quinine, but he refused a second dose. We were first in hopes that his loss of appetite from foreign living was the sole cause of his illness, but we subsequently believed that he must have been the victim of typhoid fever. Sir J. Paget and Mr. Hutchinson discovered no cause for blood-poisoning, but the latter thought that a chronic skin eruption from which the patient suffered might be important. There was a painful spot in the left arm, which he attributed to a sprain in fishing. On the third day he took his food, stimulants, and quinine better, and we believed we saw an improvement. On the fourth day he continued to take a fair amount of nourishment, but in the evening became more prostrate, pulse more feeble, and gradually sank.

Dr. James Anderson and Mr. J. Hutchinson, jun., made the post-mortem examination. They found the organs congested, as is usually the case in those dead of blood diseases, and they thought the kidneys were not quite sound. These organs acted most efficiently during life. There was no disease of the intestines. This fact excludes the question of typhoid—unless, indeed, it may exist without the usual phenomena in persons of advancing age. In these Peyer's patches are inactive or atrophied, a reason given by Dr. Tweedie why typhoid fever does not affect aged persons. If the theory be true that Peyer's glands first receive the germ and then develop it until they become the infective source of the disease, it might even then be a question whether the system would be completely proof against the effects of the typhoid poison, even if these glands no longer existed. If so, it might kill without the usual intestinal lesion, just as scarlatina may prove fatal without a rash, or variola without pustulation. In typhoid, however, the anatomical basis is supposed to lie in the intestines, and, with our present views, the possibility of its existence without this must be rejected.

As regards Mr. Forster's illness having been due to a subacute gastritis, brought about by unpalatable food, there is much to be said in its favour. The capability of this producing a febrile condition is set at rest by the observation of Sir J. Paget when we talked it over in consultation. Sir J. Paget had a relative, a clergyman, working hard in the East-end of London, and, forgetful of the necessity of eating good food, he became so much impoverished that he was obliged to desist from his labours, but by care and feeding soon regained his health. During the time of his illness the temperature of the body was much above normal. One is aware

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that in children the fever accompanying gastro-intestinal disorder is very high, and to this complaint gastric fever was formerly appropriately given. The term is now discarded, as it was constantly substituted for the more specific term typhoid; nevertheless, there is much need of the expression, since the fever is the most marked symptom, and the gastric disturbance not sufficiently defined to allow of an anatomical name. Our patient might be said, then, to have a gastric fever, and brought about much in the same way as in children—by improper diet. He had not travelled during youth, and when of late years he had gone abroad he had on the two occasions suffered much from the living. I met him once at Cologne, and he was then ill, suffering from gastro-intestinal disturbance and looking very haggard. I prescribed for him, and he hurried home. On the other occasion, his son-in-law informs me, he became very ill and lost flesh. He was naturally a good feeder and liked good things; the foreign *cuisine* was not to his taste, and he could rarely obtain a meal to his order. Everyone must have known friends, if he has not suffered in his own person, affected by strange viands. In spite of the variety of dishes, the perpetual iteration of the same sauces to accompany what the *ménu* may please to call fish, flesh, or fowl, produces at last absolute disgust, until the appetite altogether fails, the tongue becomes coated, and a change of residence is absolutely necessary. In Mr. Forster's case there were two precedents exhibiting the ill effects of foreign diet. In the last and fatal instance he remained abroad until he absolutely ate nothing, fell into a state of inanition, and then took a journey of thirty-six hours in the bitterest weather. It may be remembered, too, that his character was such as was likely to make him suffer more than persons of a placid disposition. Although an amiable man and good-natured to an extreme, so that he was never so happy as when he was regaling his friends around him, he was imperious. In an English hotel his presence was soon known to host and waiters, and his dinner and wines were at his dictation and not theirs; or on a railway journey, station-master and guards soon found that they had a passenger to be respected. But in a foreign land he had to succumb. Often he could not get his meals *à la carte*, but was forced to sit down to the "filthy *table d'hôte*," and against his will be thrust into the last seat of a crowded railway carriage. He was thus liable to be in constant opposition, instead of accommodating himself to the novel surroundings. All these circumstances must be taken into consideration in discussing the cause of our friend's death. From what I knew of him, I believe the inanition caused by want of accustomed food and the annoyance of foreign manners were sufficient to account for his fatal illness.

SAMUEL WILKS.

MEMORANDA AS TO MR. COOPER FORSTER'S ILLNESS.

BY JONATHAN HUTCHINSON, F.R.C.S.

The death, after a very short illness of an obscure nature, of one so highly esteemed and widely friended as Mr. Cooper Forster has naturally excited much and painful interest in professional circles. I had written out the following memoranda for my own use, but am induced by Dr. Wilks to offer them, with a few modifications, as an appendix to his own more valuable report. Dr. Wilks saw much more of our mutual friend during his last week of life than I did, and the case was essentially a medical one. Anything that I can add must be taken as of value only in reference to the dermatological part of the case. It will be seen that, even with the negative light afforded by the necropsy, the illness remains one which it is difficult if not impossible to name. All will probably agree that, whatever the original malady was, the unfortunate journey home much hastened its fatal progress, but on other points opinions will doubtless differ widely. The case is in itself an important one, and, apart from the personality of its subject, deserves to be placed on record in detail.

On Wednesday evening, Feb. 24th, I received a telegram from my friend, asking what time he could see me in the morning, his message implying that he intended to call on me. I at once sent a reply to Grosvenor-street, saying that I would call on him if he would let me know when he reached home. To this I had no reply, and consequently I did not call to see him till the afternoon. He had never opened my letter, having felt too ill to do so. On Thursday, February 25th, I called and saw him in bed. (Dr. Wilks had seen him before I did on the same morning.) He told me that he had got an eruption. He took off his night-shirt and showed me an eruption of brown papules on his chest and back. They were from the size of split peas to that of sixpences, slightly raised, and well margined. Some of them were rather smooth in the middle, but none of them actually glossy. On the right shoulder was one larger than the rest, as big as a halfpenny, and considerably raised in the centre. Most of them were rather thicker in the middle than at the margins, and shelved down gradually. He had few or none on the abdomen and limbs. He told me that the eruption had first been noticed on his chest before he left home for Cannes. He had left home on Jan. 21st, so that this would have been about six weeks ago. He said that whilst at Cannes and Nice he had been losing flesh and strength, had had a poor appetite, and had been "dreadfully constipated." He had travelled home alone, and I understood that his motive was to get advice as to his eruption, about which he was very anxious. He said that he had suffered much on his journey home, and had not been able to take any food. He looked very ill, but was perfectly clear in his mind. He got out of bed for my inspection of the eruption. I examined his throat and found no sores on the tonsils, but was struck with the red colour of all parts of his mouth—tongue, cheeks, palate, and fauces. I thought that his mouth must feel sore, but he assured me that it did not. It was not at this time dry, but simply very red. Dr. Wilks afterwards told me that it had been dry in the morning. He had been standing out of bed for a few moments for my inspection. The light was very bad—a foggy afternoon and a chamber candle. I suggested that his eruption looked a little like lichen planus. To this he replied that he had felt sure that I should call it "lichen planus." It will be observed by dermatologists that it did not closely conform to that disorder. I asked him whether he had worn any new vests, and he told me that he had, and that when he first noticed the papules he thought they must be due to the irritation of his vest, and had it changed. The spots, however, did not disappear, but continued to come out. At the time of my visit he had not used the thermometer, and I had not one with me. His pulse was then 110, at which he expressed surprise, and said it had never before been more than 80, and that he had "had neither rigor nor fever, but only felt desperately weak." He promised to use the thermometer in the evening, when he expected a second visit from Dr. Wilks. I advised him that, as no diagnosis could be made, he had better do nothing but keep quietly in bed and take light food. He had had some soup, but said that he had not the least appetite. I was to see him again by better daylight next morning. On Friday morning it was a dense fog, and I deferred my visit till the afternoon. On calling then it was still very dark, and I arranged to meet Dr. Wilks next morning, and did not go upstairs. On Saturday morning I met Dr. Wilks and Dr. Habershon. They had just been in his room, and as they suspected fever, and as it was deemed desirable to let our patient rest as much as possible, we agreed that I should not trouble him by further examination then, but that we should all meet on the next morning. On Sunday morning Sir James Paget was kind enough to join Drs. Wilks and Habershon and myself in consultation. Mr. Forster was looking much worse than when I had last seen him on Thursday afternoon. He was much more prostrate, and his tongue and mouth were so dry that he could scarcely speak so as to be understood. Yet he was perfectly himself, and quite acute in his remarks. The eruption on his chest and back was less conspicuous, but essentially the same as on Thursday. Some of the smaller spots on the upper part of the abdomen had been suspected to be those of typhoid, but there was really no definite distinction between them and others on his chest of the kind already described. He had taken an aperient, which had acted. He had been sick once or twice. He was too ill for us to make any very minute examination of the skin. He complained of pain in the left arm, and appeared to be sensitive to the slightest pressure on the humerus, just above the insertion of the deltoid. The skin looked red, and the arm a little swollen, but there was nothing positive. He flinched whenever the bone was touched, but no enlargement of it could be distinguished. We did not examine it much on account of his great debility. Just as we were leaving he reminded us that we had not looked at his throat. His mouth was everywhere quite dry, and sticky mucus hung about the pillars of the fauces. We all thought him very ill, and likely to die, but there was no reason to expect

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such a rapid termination as that which followed. After this consultation I did not see him again, as it was deemed a medical case, but he was visited two or three times daily by his friends and colleagues, Dr. Habershon and Dr. Wilks. From what they have told me, I believe that he got rapidly weaker in spite of the free use of brandy, quinine, and fluid food. His intellect remained quite clear. His temperature was never (excepting once 103°) more than 102°, and his pulse often not 100. His tongue remained dry. On Monday morning he looked more depressed, and the unfavourable prognosis which we had all formed on Sunday was strengthened. At the evening visit on Monday he was so weak that his pulse flickered, and Dr. Wilks made a hypodermic injection of brandy. He was now clearly sinking. He died about 4 o'clock the next morning.

The post-mortem (on Thursday) was chiefly of interest in that it quite put aside the suspicion as to typhoid. The small intestines were most carefully examined, and there was no trace of disease. The most conspicuous condition found was acute hæmorrhagic congestion of both kidneys. There was some serous fluid in both pleural cavities and congestion of the lower and posterior parts of the lungs. These conditions had probably developed during the last few hours of life. No jaundice had been noticed during life, but there was at the necropsy yellow staining of all the viscera, which suggested its commencement. The heart was healthy. I am sorry that I cannot give a more exact account of the eruption than I have done. My first inspection of it was by candle-light in a fog, and as I expected to have other opportunities I did not keep him long uncovered. I believe that there were a few spots on the forearms, and Dr. Habershon told me that he had noticed one which was scaling. The spots were certainly not the smooth glossy ones of lichen planus, nor did they observe the rule as to uniformity of size.

It seems certain that Mr. Forster was in his usual health when he left for the Continent. Of this I have been assured by several who saw him just before he started. Whilst away he failed in appetite and strength, and used to complain of being weary, and was occasionally sick. That he was not very ill even when he started on his return journey may be assumed from the fact that he elected to travel alone, and that he left his family there. His reason for hurrying home was not that he felt very ill, but that he was anxious about his eruption and did not wish to consult anyone abroad. That his journey did him great harm there can be no doubt. It was performed in extreme discomfort. He was unable to take food or to sleep, and the weather was very cold. When he reached his house he looked like "a man stricken for death," and could only just manage to get upstairs. The one only objective symptom up to this date had been the eruption on his chest and back. This had begun before he left England, but had increased during his stay at Cannes. I cannot escape the conviction that this eruption was an important part of his illness. It was a very peculiar one, almost limited to his chest and shoulders. I think there was none on his lower extremities, and very few, and very small, spots on his abdomen. It had developed slowly, and there had been no glandular swellings and no sore-throat. Next to the rash the most conspicuous condition was the red and dry mouth. His tongue (on Sunday) did not show, as is often seen, a dry streak in the middle, but was as dry as it could possibly be in every part, rough, and red. Yet he would not admit that his mouth was sore. His temperatures were never very high (102°). His pulse did not quicken or fail in power at first at all in keeping with his appearance of prostration. It was only within twelve hours of his death that his pulse materially failed. He had noticed this himself, and told me that it had never been more than 80. My impression is that the case was one in which a patient, in whom a condition allied to lichen planus was developing, was subjected to cold and fatigue in a long journey, with the result of inducing local congestions and of greatly intensifying the constitutional disturbance which now and then attends this disease. Hebra at first taught that lichen ruber was always fatal, and only changed his opinion when he found the good results which followed the use of arsenic. Death, however, occurred, not quickly, but after an illness of some months or a year, and after the skin had become very extensively involved. Some cases of pemphigus are attended from the first by great prostration, and many would end speedily in death were it not for the use of arsenic. In such cases, however, the extent of skin affected is always much greater than it was in Mr. Forster's case. The redness and dryness of the mouth suggested that acute stomatitis was about to develop, and that the case might be allied to certain rare affections in which a very sore mouth is coincident with a skin eruption, and there is a definite tendency to death by prostration. It may be suggested that some poison (fever or other) was received during his stay in France, but it must be replied that the eruption was undoubtedly present before he left home. As to the real cause of acute pemphigus or lichen planus we know nothing. That it probably concerns the nervous system rather than the blood may be inferred from the manner in which arsenic cures them. Of cases in which a sore mouth was coincident with a skin eruption, and either ended fatally or threatened to do so, I have seen five or six examples. Four were in men about Mr. Forster's age, and two of these died at the end of five months. The eruption on the skin of these was mixed, being like pemphigus in part, and in part papular, with tendency to papillary growth. In another case (which recovered) only a few papules showed themselves on the backs of the hands. If Mr. Forster's case be one of this class, it is to be noted that the eruption preceded the stomatitis, and that both were insignificant in comparison with the constitutional depression. Indeed, it cannot be said that Mr. Forster ever had stomatitis; his mouth was simply congested and dry. That the eruption was in some connexion with the constitutional disturbance is a conclusion favoured by the facts of his stay at Cannes. As early as Feb. 4th he had complained of weakness after a walk, and had vomited, and from this date he had lost flesh and strength. His eruption had begun to show itself before this, and was increasing as his loss in health increased.

The necropsy was made by Dr. James Anderson and my eldest son, none of Mr. Forster's more intimate friends feeling able to be present. They were not told more than that the case was supposed to be one of typhoid, and hence the omission to examine the arm. Excepting at the visit on Sunday, however, the arm had not attracted any attention, nor had any further complaint of pain in it or elsewhere been made. The following are notes of the post-mortem as written out at the time:—

"Body bile-stained; abdomen slightly distended; yellowish from decomposition. Subcutaneous fat considerable. Lungs extremely œdematous and congested; left base almost airless. Effusion of about 15 oz. into left pleural cavity; a few ounces into the right one. Heart-muscle fairly nourished. Valves healthy. No effusion into pericardial cavity. Endocardium very much bile-stained. Abdomen: Dense adhesions of omentum and of liver to anterior abdominal walls. Tag of omentum adherent to abdominal wall in front of cæcum not recent. Some old adhesion between parts of small intestine. Considerable old inflammation in neighbourhood of gall-duct, with some recent retro-peritoneal hæmorrhage. Foramen of Winslow closed. Nothing abnormal was found in the small or large intestine, except that the wall of the latter was much sodden, but showed no ulceration. Kidneys large; capsules stripped easily; surface showed irregular congestion, and hæmorrhages with a few cysts containing blood-stained fluid. On section the cortex was extremely soft, breaking down at points, and studded with numerous milary hæmorrhages and a few as large as a pea. Pyramids congested. Changes most marked in right kidney. Liver bile-stained and fatty; no hæmorrhage; no evidence of distension of ducts; no calculi in gall-bladder. Spleen large, dark, and of medium consistency.

(Signed) "JAMES ANDERSON, M.D.
"JONATHAN HUTCHINSON, JUN., F.R.C.S.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.—At the thirty-seventh annual meeting of the governors of this institution on the 9th inst., it was reported that the number of in-patients treated during the past year amounted to 1908, as against 1899 in the preceding year; the number of out-patients was 11,778. The income amounted to £7150.

NEW MEDICAL SOCIETIES IN RUSSIA.—Two new Medical Societies have recently been started in Russia. One is for the study of syphilis and dermatology, and has already met several times, the president being Prof. B. Tarnovski, and the vice-president Prof. Polotebnoff. The other, devoted to ophthalmology, is in process of formation.

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Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

River Tyne Port.—The reports from this port district afford an excellent example of systematic sanitary work, and of a state of preparedness for such emergencies as may arise in an important port. No less than 13,530 vessels were inspected, and structural improvements were ordered to be carried out in 330 cases. Amongst the vessels entering the port were 563 coming either directly or indirectly from ports infected or suspected of cholera, and exceptional care was exercised with regard to these, especially with reference to the question of water-supply. A new floating hospital is being erected in the port to replace the existing one, which is, by reason of old age and otherwise, becoming insufficient for the purposes of the district, and during 1885 eleven patients, all of whom recovered, were placed under isolation. On the whole Mr. Henry Armstrong's report is a very satisfactory one.

Bedford Urban District.—Notwithstanding a severe fatality from whooping-cough and from measles, the death-rate for this borough was slightly under 18 per 1000 during 1885; the deaths under one year being at the rate of 153 per 1000 registered births. The zymotic rate was heavy, reaching as it did 3·9 per 1000. Small-pox was introduced into the town, but by the aid of vaccination and isolation in hospital it was checked. Bedford is by no means free from the anti-vaccination movement, and hence Dr. Prior advises his readers to study the story told in the last report of the Medical Officer of the Local Government Board about the prevalence of small-pox in Kilmarnock in the last century. Such a study should suffice to show what small-pox was before the introduction of vaccination. He also refers to the experience of Leicester as inapplicable to Bedford, on the ground that in the former town the authorities go beyond the provisions of the law and quarantine all households in which a case of small-pox may appear. We may add to this that deaths from small-pox in the Leicester hospital are not registered as occurring in the borough, but in a totally different district, where the hospital is situated. Diphtheria, which has by no means given up its hold on this neighbourhood, caused ten deaths, and Dr. Prior promises to discuss the subject in a separate report. It is satisfactory to note that the phthisis death-rate was during 1885 the smallest recorded for twenty-five years. Considerable improvements are in progress in connexion with the public water service, and a large amount of valuable sanitary work continues to be carried out in the district.

Shipley Urban District.—Mr. Ellis reports that 22 isolated cases of scarlet fever occurred, and he points out that it is by no means an easy thing to prevent the spread of this disease in a district where so many children are massed together in public elementary schools. This we admit, especially where means of isolation are not resorted to, and it seems curious that the report proceeds to state that no cases of infectious disease arose necessitating removal to the Fever Hospital. But with the aid of the school authorities the results appear to have been fairly satisfactory. The general sanitary circumstances of the town are, according to Mr. Ellis, in a satisfactory state, the record of the inspector of nuisances is a good one, and the death-rate for 1885 was 16·2 per 1000 living.

Guisborough Combined District.—Small-pox was imported into Guisborough during the course of the year reported on, and no provision being made by the sanitary authority for the isolation of first cases of infectious diseases, the infection spread from three centres and became epidemic, no less than 42 houses and 130 persons being attacked. At Loftus, on the contrary, the same disease was at once isolated, and no spread resulted. The birth- and death-rates for 1885 were 35·0 and 17·7 respectively. The death-rate had varied from 13·9 in the Saltburn urban district to 19·0 in the Skelton and Britton district.

Ashton-in-Makerfield Urban District.—Scarlet fever was almost continuously present in this district during the past year, the disease having commenced in the previous year. The deaths which resulted were 24 in number, and Mr. Hannah states that the usual preventive measures were adopted. The only hospital then available seems to have been a temporary one, which stood in much need of repairs, and it is not stated whether it was used or not during the epidemic. We fear not, for in February, when scarlet fever was already fatally prevalent, we learn that the hospital was "dispensed with." But a new hospital is apparently approaching completion, and better success in the direction of prevention may therefore be anticipated in the future. The general death-rate was 21·6 per 1000.

Holsworthy Rural District.—This rural district has, in parts, an unnecessarily high death-rate, it being in excess of that for England and Wales, and that for Holsworthy parish reaches 25·6 per 1000. Mr. Linnington Ash has often advised the provision of means of isolation, and in pointing out how small-pox, when once imported, spread amongst a crowded aggregation of navvies, he disclaims all responsibility for the untoward result. Not even a barn could be procured for the isolation of the first case, and yet no provision was made in advance. Then a temporary hospital was erected, which, if precedent be followed, will prove all but useless for further emergencies. In all, the epidemic cost over £300. Further improvements have been carried out as regards the water-supply of the district, but in Holsworthy itself the supply available cannot be regarded as meeting the requirements of the place. A good deal of routine sanitary work is in progress, and the report is made very complete by the addition of a number of excellent statistical tables, which must have considerable local interest.

Stroud Rural District.—Enteric fever at Stonehouse is referred to in this report, and it is lamentable to read of the loss of valuable lives there, when all that was needed to prevent the loss was prompt action in the directions indicated by the medical officer of health. Mr. Partridge shows conclusively how great is the need of improved water-supplies in various portions of the district. That of Painswick is chiefly from polluted wells, although this has been reported before. At Horsley matters are much the same, whereas a good supply is allowed to run to waste. It seems, in short, evident that there is something very wrong in this matter of water-supply, and that risk of disease and death is in consequence imminent. If this further report fails to move the sanitary authority to energetic action, the case is one in which the inhabitants should consider whether they would not do wisely to make a definite complaint of default under Section 299 of the Public Health Act, 1875.

Thingoe Rural District.—From this report we gather that, both as regards the prevention and extension of disease and in the matter of providing permanent remedy for nuisances calculated to injure health, steady work is continuously carried out. Mr. Kilner is, however, very naturally not content with some of the means of drainage which lead to the pollution of the river, but a line of action tending to diminish the resulting evil has been adopted. The birth- and death-rates for 1885 were 27·2 and 15·2 per 1000 respectively.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5485 births and 4630 deaths were registered during the week ending March 6th. The annual death-rate in these towns, which had been equal to 24·4 and 24·2 per 1000 in the preceding two weeks, further rose last week to 26·6, and exceeded the rate recorded in any week since March, 1883. During the first nine weeks of the current quarter the death-rate in these towns averaged 23·5 per 1000, and was 1·0 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 17·9 in Brighton, 18·0 in Hull, and 20·4 in Oldham. The rates in the other towns ranged upwards to 34·0 in Preston, 34·6 in Wolverhampton, 35·4 in Plymouth, and 36·4 in Blackburn. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 425 and 385 in the previous two weeks, rose again last week to 403; they included 171 from whooping-cough, 101 from measles, 42 from diarrhœa, 31 from "fever" (principally enteric), 28 from scarlet fever, 27 from diphtheria, and 3 from small-pox. No death from any of these zymotic diseases was recorded last week in Wolverhampton; whereas they caused the highest death-rates in Portsmouth, Bolton, Plymouth, and Blackburn. Whooping-cough caused the greatest mortality in Plymouth, London, and Portsmouth;

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measles in Bolton, Plymouth, and Blackburn; scarlet fever in Birkenhead; and "fever" in Cardiff. The 27 deaths from diphtheria in the twenty-eight towns included 19 in London and 5 in Liverpool. Small-pox caused 3 deaths among the residents of London, 2 in Liverpool, and 1 in Brighton, and not one in any of the twenty-five other large towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had been 10 and 15 on the preceding two Saturdays, had declined to 7 at the end of last week; and no new case was admitted to these hospitals during the week, the admissions in the preceding two weeks having been 2 and 7. The deaths referred to diseases of the respiratory organs in London, which had increased in the preceding six weeks from 477 to 677, further rose last week to 745, and exceeded the corrected weekly average by 294. The causes of 96, or 2·1 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Plymouth, Derby, and Birkenhead. The largest proportions of uncertified deaths were registered in Sheffield, Oldham, Halifax, and Bolton.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 22·3 and 23·5 per 1000 in the preceding two weeks, further rose to 24·9 in the week ending March 6th, but was 1·7 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 17·1 and 17·4 in Aberdeen and Dundee, to 25·2 in Paisley, 30·1 in Glasgow, and 31·1 in Perth. The 614 deaths in the eight towns showed a further increase of 34 upon the numbers in the previous two weeks, and included 19 which were referred to whooping-cough, 7 to "fever" (typhus, enteric, or simple), 7 to diarrhœa, 4 to scarlet fever, 3 to diphtheria, 3 to measles, and not one to small-pox; in all, 43 deaths resulted from these principal zymotic diseases, against 46 and 51 in the preceding two weeks. These 43 deaths were equal to an annual rate of 1·7 per 1000, which was 0·6 below the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 13 and 19 in the preceding two weeks, were again 19 last week, of which 17 occurred in Glasgow. The 7 deaths referred to "fever" showed a slight further increase upon the low numbers in recent weeks, and included 4 in Glasgow. Three of the 4 deaths from scarlet fever, 2 of the 3 from diphtheria, and all the 3 from measles, were returned in Glasgow. The 7 deaths attributed to diarrhœa, of which 3 occurred in Edinburgh and 2 in Glasgow, were 2 below the number in the corresponding week of last year. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had increased in the preceding four weeks from 135 to 159, further rose last week to 170, and exceeded the number in the corresponding week of last year by 51. The causes of 73, or more than 11 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 38·6, 31·8, and 30·4 per 1000 in the preceding three weeks, further declined to 30·1 in the week ending March 6th. During the first nine weeks of the current quarter the death-rate in the city averaged, however, no less than 32·0 per 1000; the mean rate during the same period did not exceed 23·9 in London and 18·3 in Edinburgh. The 204 deaths in Dublin last week showed a further decline of 2 from the numbers returned in the preceding three weeks, and included 15 which were referred to the principal zymotic diseases, against 26, 20, and 22 in the previous three weeks; 10 resulted from whooping-cough, 4 from "fever" (typhus, enteric, or simple), 1 from diarrhœa, and not one either from small-pox, measles, scarlet fever, or diphtheria. These 15 deaths were equal to an annual rate of 2·2 per 1000; the rates from the same diseases being 2·8 in London and 1·6 in Edinburgh. The fatal cases of whooping-cough, which had been 16 and 18 in the previous two weeks, declined last week to 10. The 4 deaths referred to "fever" showed an increase of 2 upon the number returned in each of the two previous weeks. Five inquest cases and 4 deaths from violence were registered, and 60, or nearly a third, of the deaths were recorded in public institutions. The deaths of infants showed a decline, whereas those of elderly persons were more numerous than in either of the preceding two weeks. The causes of 17, or more than 8 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

WAR OFFICE.—Army Medical Staff: Surgeon-Major Hopetoun Currie Collier is granted retired pay, with the honorary rank of Brigade Surgeon.

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Inspector-General of Hospitals and Fleets Henry Fegan, C.B., M.D., has been placed on the retired list.

The following appointments have been made:—Fleet Surgeon Henry Hadlow, to the Royal Naval Hospital, Chatham; Surgeon Arthur W. Russell, to the *Hyacinth*; Surgeon Horatio S. R. Sparrow, to the *Polyphemus*; Surgeon Henry A. W. Richardson, to the *Osprey*; Surgeon Evan St. M. Nepean, to the *Triumph*; and Surgeon William W. Jacobs, to the *Royal Adelaide*.

RIFLE VOLUNTEERS.—1st Volunteer Battalion (the Duke of Cornwall's Light Infantry): Honorary Assistant-Surgeon Andrew Harvey resigns his commission.—2nd Renfrewshire: James Tomlins, Gent., to be Acting Surgeon.—3rd Volunteer Battalion (the South Staffordshire Regiment): Surgeon John Fraser, M.D., is granted the honorary rank of Surgeon-Major.

Correspondence.

"Audi alteram partem."

DEATH FROM CHLOROFORM.

To the Editor of THE LANCET.

SIR,—I beg to forward you particulars of the recent death here from chloroform. The Lady Flora Wilmot, aged twenty-five years, had been under my care for various minor ailments during the last eighteen months. With the exception of a gouty tendency, her constitution was, I believe, sound. On Wednesday, Feb. 24th, I was asked to meet her at Mr. Scott's residence at Swansea (her dentist) for the purpose of administering an anæsthetic for the extraction of the right molar tooth. Nitrous oxide gas not being available, I gave chloroform in preference to bichloride of methylene or ether (both of which I had by me), because for the purpose I considered it the best anæsthetic, and also because her ladyship, having taken it two or three times before, expressed a preference for it. Everything about the chest being perfectly loose, and the patient sitting in the dentist's chair, less than a drachm was sprinkled on lint in an open inhaler, which the gag kept from closely fitting round the mouth and nose. A similar quantity of chloroform was added a second and third time before perfect anæsthesia occurred. The tooth was then removed, and recovery followed without a bad symptom. The patient had taken it capitally, and in all two drachms had been given. Five days afterwards (March 1st) I again administered chloroform for Mr. Scott (this time at the patient's residence) to remove the adjoining bicuspid tooth. The patient was seated in a low deep-backed well-pillowed easy chair, and was therefore more reclining than on the former occasion. The result of the chloroform before having been so satisfactory, I again administered it in the same way, and, as before, two drachms were given in all, with a similarly good result. The inhaler having been removed, Mr. Scott took out the tooth, cleaned his forceps, and stood by the patient's side. I remarked, "I hate giving chloroform for you dentists because you will have your patient sitting up." This led to a reply from Mr. Scott, who then poured out a tumblerful of water and asked the patient to rinse her mouth, as the gums were bleeding. No water was taken, and I observed she was not sufficiently conscious yet, and we still stood by the patient. I had during this time one finger on the temporal artery, whilst with the other hand I was raising the eyelid and watching the pupil, which, having been dilated during unconsciousness, had become normal and the conjunctiva sensitive. Suddenly the pupil became

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again widely dilated, I could no longer feel the pulse, and the face became blanched. The chair was immediately turned back, the head lowered to the ground, and the body and limbs raised. Nitrite of amyl sprinkled on a handkerchief was applied to the nose, and, although the heart could not be felt beating, the breathing still continued for, I should say, at least two minutes. Artificial respiration, drawing out the tongue, and lifting the jaw forward, were of no avail—not the slightest sign of recovery followed. A post-mortem examination was refused. Yours obediently,

Swansea, March, 1886. J. FARRANT FRY.

THE ETIOLOGY OF PROSTATIC ENLARGEMENTS.

To the Editor of THE LANCET.

SIR,—In an interesting communication by Mr. Reginald Harrison upon the above subject in your issue of the 6th inst., we read that he believes a depressed trigone permits the accumulation of residual urine, induces the hypertrophy of the inter-ureteral bar, and thus is the immediate cause of prostatic hypertrophy. He states further that this hypertrophy is localised to the vesical floor, and contrasts its limited area with the general hypertrophy following stricture. I would ask, Is it physiological that a hollow muscular viscus under the control of one definite centre (Budge, Gianuzzi) can contract so often in a limited section of its small area so as to produce hypertrophy of that section, and of that alone? Again, I would submit that the inter-ureteral bar is mostly made up of muscle bundles derived from the sides and back of the bladder itself. Is it reasonable to suppose that one part of those bundles can hypertrophy without a similar change in the remainder of those bundles? I would mention that in an examination of over 400 fresh bladders I have never met with hypertrophy of the inter-ureteral bar either in prostatic enlargement, stone, or stricture, unless there was a coexisting and corresponding hypertrophy of the entire viscus. But a theory like that on which I thus venture to comment, emanating from one so well known as Mr. Reginald Harrison, upon a subject so controversial and so important, demands serious consideration and discussion. He would be conferring a real benefit upon his London *confrères* were he to bring forward his views, and the specimens upon which he mentions they are based, at the Pathological Society.—I remain, Sir, faithfully yours,

E. HURRY FENWICK.

George-street, Hanover-square, W., March, 1886.

INVERSION OF THE UTERUS.

To the Editor of THE LANCET.

SIR,—Dr. Barnes, in THE LANCET of Feb. 27th, appears to resent my remarks in a previous number, where I endeavoured to show that incision of the os previous to reducing an inverted uterus had been practised before 1868. Dr. Pratt, in the *Medical Times and Gazette*, thus writes in March, 1868, when speaking of the operation referred to above:—"This mode of treatment is not new, although not mentioned by Murphy, &c.....but Dr. Wassiege of Liège says that it is the only legitimate, as it is the most effective, plan." This, I think, proves that the operation must have had an established reputation abroad before 1868, the date of Dr. Barnes' first operation. Certainly, I had no wish, nor could I succeed if I had, to detract from Dr. Barnes' high merits, and I feel rather aggrieved that the "valuable" Digest should be described as referring chiefly to "three medical journals." Had it fallen to the fate of Dr. Barnes to keep up the Digest, week by week, month by month, and year by year, he would soon have discovered that it embraced, in addition to the "three principal medical journals," seven or eight others, which secures a reference to every subject, either in English or foreign literature, that is of practical value to the medical profession.

I am, Sir, yours faithfully,

RICHARD NEALE, M.D., Lond.

Boundary-road, N.W., March 3rd, 1886.

THE South Hornsey Local Board are endeavouring to obtain from the Ecclesiastical Commissioners their interests in Crissold Park, with a view to its preservation as an open space for the use of the public.

MANCHESTER.

(From our own Correspondent.)

OWENS COLLEGE.

AT the half-yearly meeting of the Court of Governors of the Owens College, held on the 2nd inst., it was reported that satisfactory progress was being made with the work of extension of the College buildings, which has been going on for the past two years, and that the Coupland-street block will be ready for use at the beginning of the session 1886-7, and the museums will be ready for the reception of the collections in natural history and geology in the spring of 1887, and thus be complete prior to the visit of the British Association in that year. The façade to Oxford-road presents an imposing appearance, and the tower, now almost completed, stands out a commanding landmark for a considerable distance round, while within the grounds the quadrangle which will be formed when the entire plans are carried out is complete on three of its sides. The report stated that there were at present a total of 1244 students in the various departments of the College. The Council had accepted with much regret the resignation of Sir Henry Roscoe as Professor of Chemistry, owing to his recent election as member of Parliament for the southern division of the city. It was resolved to establish an engineering laboratory in the College, at a cost of £6000.

SIR WILLIAM ROBERTS.

The meetings of the Medical Society are not often graced with the presence of Sir William Roberts, but on Wednesday last he gave a very interesting *resumé* of some experiments he had made upon the solubility of gouty deposits (the bi-urate of soda) in various solutions of soda, potash and lithia salts. As usual with him, the work was on the scientific side of medicine, and yet not without a direct bearing upon the practice of the same. Sir William has been much more before the public the last few days than is his wont; on Monday last he was presiding at the annual Welsh dinner held on St. David's Day, and on Saturday a complimentary dinner was given to him on the celebration of the honour of knighthood recently conferred upon him. Dr. H. Simpson was in the chair, and most of the leading members of the profession in the town and districts were present, amongst the visitors being Dr. Buchanan of the Local Government Board.

PROVIDENT DISPENSARIES.

At the annual meeting of the Provident Dispensaries it was stated by the chairman that 20,000 persons had joined these institutions, and thus had been rescued from going begging to medical charities, and also as a result of ten years' work the proportion of persons seeking gratuitous medical attendance at our hospitals who were in a position to pay for the same had been reduced from 42 per cent. to 12½. The subscriptions of members had amounted during the past year to £3560, of which £2000 had been paid to the medical staff. Thus much from the provident dispensaries' point of view; but there have been several communications during the past few days from medical men and others tending to show that, if they have been the means of preventing abuse of the hospitals, the dispensaries themselves are not altogether without reproach, seeing that no limit is placed upon the income of those entitled to join them; and that, as a matter of fact, many do join who are well able to pay the ordinary medical fees charged to the working classes, and thus great injustice is done to those members of the profession whose work is perhaps the heaviest, and certainly the worst paid.

LOCAL MEDICAL CHARITIES.

A very interesting little *brochure* has lately been printed by the Infirmary Committee relating to one of its allied branches — the Barnes Fever Hospital, — compiled by Dr. Renaud, formerly one of the physicians to the institution, and now consulting physician to the infirmary. He briefly traces its history, from the formation of the first fever house in 1796, through all its various changes down to the present time. Much of the history consists of personal reminiscences, and well deserves the permanent record thus given to it. The last additions to this hospital have but recently been finished, consisting of two new blocks of wards and a large nurses' home, the latter of sufficient size

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to accommodate fifty inmates, the total cost of these extensions being something like £10,000, and still further outlay is, it is understood, shortly contemplated. At another branch of the infirmary—the asylum at Cheadle—the completion of the extensions of the buildings were celebrated on the 25th ult. by a fancy dress ball, at which, in addition to all those of the patients who were fit to mix together, a number of invited guests, including several members of the staff, were present. The dancing took place in the handsome new recreation-room, which was prettily decorated, and the whole scene was one of exceptional brilliancy. The Hospital for Consumption is advancing each year in importance and in the amount of work done by it. At the annual meeting, in common with all the other charities, the committee ask for increased support to meet additional expenses, and appeal for an increase of no less than £1000 per annum for working expenses. The committee has been fortunate in obtaining the services of Dr. Simpson and Mr. Hardie as physician and surgeon respectively in place of Dr. Gamgee and Mr. Young, who have resigned during the past twelve months. The total amounts received from the Hospital Saturday and Sunday Funds so far are £6751—a sum below last year's collections; but this may be increased considerably yet, as the whole of the contributions have not yet come in.

Manchester, March 8th.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

NEWCASTLE CHILDREN'S HOSPITAL: MUNIFICENT OFFER.

THE annual meeting of the above hospital was held lately, under the presidency of Sir W. G. Armstrong, C.B. The report stated that the number of in-patients treated had been 138, as compared with 156 in 1884; the decrease in the number was due to the fact that the hospital had been twice cleared of its inmates during the year, on one occasion owing to an outbreak of measles, and once during the summer to allow of the repainting and cleaning of the whole building. The number of out-patients was 2483, as compared with 2087 in 1884. It was stated in the medical report that the 2483 out-patient cases involved 7000 separate consultations by the physicians or surgeons. Mr. John Fleming, a governor of the hospital and a solicitor in this city, in moving the adoption of the reports, referred to the unhealthy situation of the hospital, situated as it is in the midst of a very poor and overcrowded population; and as a convalescent home was an acknowledged want in connexion with the hospital for the perfect recovery of the children, he had thought it would save expense if a new hospital were to be built in an airy situation, and thus combine the advantages of hospital and convalescent home in one building. He further offered to purchase a site for the new hospital, and to build and furnish it complete; and, taking into consideration the growing requirements of the city and district, he thought the new hospital should be large enough to receive from sixty to eighty in-patients. Mr. Fleming wishes to build the hospital as a memorial of his late wife, and that its erection should be at once commenced, so that the next annual meeting might be held in the new building. Mr. Fleming's munificent offer was gratefully accepted, and in the discussion which followed it transpired that the present hospital building was freehold, and might be sold at an enhanced value for business purposes, and thus augment the income of the hospital. The Children's Hospital has been in operation here for about twenty-three years, and at first began on a very small scale. Dr. William Murray and Mr. Joseph Fife were the first medical attendants. The former is in active practice as a physician here, but the latter retired a few years ago. A good deal of the popularity of the hospital has been owing to the energy with which both these gentlemen undertook the duties. It had a good start, and has never flagged since. I regret that the medical founders were not mentioned at the meeting.

OPIUM AMONG MINERS' WIVES.

According to Dr. O'Hanlon of Spennymoor, the use of opium in the mining districts of the county of Durham would appear to be on the increase. At the last meeting of the local board, in his report for 1885, he referred to the excessive use of intoxicants as being a great source of disease in the town, likewise the chewing of tobacco and the use of narcotics in the form of opium and laudanum. "Few people," he said, "were aware of the enormous consumption of opium among miners' wives; they were left at home for a long time alone and taught each other the habit."

A FOURTEEN-YEAR-OLD MOTHER.

At the Stockton Police Court a man aged forty-four was charged, under the Criminal Law Amendment Act, with assaulting Clara Wilson, aged fourteen. Lately the girl gave birth to a child, and on being questioned she stated that the defendant (who was remanded) was the father.

Newcastle-on-Tyne, March 8th, 1886.

GLASGOW.

(From our own Correspondent.)

DISCUSSION ON CANCER.

THE most important event in this session of the Pathological and Clinical Society has been the discussion on cancer. It began with a demonstration of the various forms of malignant growth, illustrated by over a hundred microscopes and numerous casts, specimens and diagrams, so arranged as to show the structure and mode of extension of cancers. The discussion proper lasted for several nights, and was carried on not only by local pathologists and surgeons, but also by some from other parts of the country, amongst whom was Mr. Jonathan Hutchinson. It forms a notable contribution to the literature of the subject.

STUDENTS' UNION.

The students of Glasgow University are remarkably fortunate in their day and generation. A movement was set on foot among them at the beginning of last year for the establishment of a union, and a committee was appointed to further the scheme. Designs for a building, consisting of a hall capable of seating 400, with smaller rooms for the meetings of affiliated university societies, have already been prepared, the estimated cost being from £5000 to £6000. The main difficulty was want of funds. This has been got over, however, and the movement has received a great impetus through the announcement, recently made, that a gentleman, whose name is in the meantime withheld, a medical graduate of the university, has promised a sum of money sufficient to defray the cost of erecting the building. Generosity of this kind is as commendable as it is rare. One point which is much discussed among the students has reference to the site most appropriate for such a building. There is a pretty general feeling in favour of some situation more central than the university grounds, one nearer the localities where the majority of the students live, for the Scotch students, unlike English university students, do not reside in college.

DR. B. W. RICHARDSON'S VISIT.

Glasgow has recently been favoured with a visit from Dr. B. W. Richardson, made under the auspices of the British Medical Temperance Association. In the course of his visit he delievered two lectures. In the first of these, a public lecture, Dr. Richardson discoursed eloquently on the progress of sanitary science even during his own lifetime, and on the part which temperance played as a sanitary measure. The picture he drew of a town ideally perfect in sanitary matters, with its comparative freedom from disease, its low death rate (9 per 1000), and the long duration of life therein (105 years it ought to be), ended by a peaceful and painless process of euthanasia, were very striking; and no less striking was the picture he drew of the effect on such a community of the introduction of intemperance in the use of alcoholic liquors. His second lecture was to students, and dealt with the more scientific and medical aspects of the action of alcohol. While condemning the use of alcoholic liquors as beverages, he claimed and affirmed the right of the physician to use alcohol as occasion demanded in the treatment of disease.

Glasgow, March 9th, 1886.

THE first annual meeting of the subscribers to the Portsmouth Eye and Ear Infirmary was held on the 23rd ult., when a highly satisfactory report was presented by the committee.

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IRELAND.

(From our own Correspondent.)

DUBLIN HOSPITALS COMMISSION.

LAST week Mr. Thomson, one of the surgical staff of the Richmond Hospital, gave some very valuable evidence before the Commissioners, bearing on the subject of the proposed amalgamation of certain of the Dublin hospitals. He stated that he was entirely in favour of the principle of amalgamation in Dublin, and considered that the Richmond, Whitworth, and Hardwicke ought to be amalgamated with Steevens's Hospital, and a new building erected in the neighbourhood of Christchurch-place. Dublin, he believed, had too many hospitals as compared with its population of 250,000, having ten general hospitals and 919 beds occupied. In Liverpool, with 552,000 inhabitants, there are only four general hospitals and 613 beds; in Manchester, with a population of 393,000, two hospitals, with 440 beds; in Birmingham, with a population of 400,000, two hospitals and 440 beds. On all the hospitals £85,000 a year is spent, including the special institutions, while only £27,400 of that money goes to the maintenance of the patients. It follows that Dublin is over-hospitalled and over-medical-officered. In Mercer's Hospital, for 45 beds there are three surgeons and two physicians, or 9 beds to each; in the Meath, with 85 beds, with a staff of eight, there is an average of 10½ beds each; in Jervis-street, with 25 beds, there are seven surgeons and two physicians, or less than 3 beds each, or, taking 150 beds for the latter institution, 15 beds to each medical officer. In the House of Industry Hospital, with 150 beds and a staff of eight, there is an average of 19 beds; and in the Mater Misericordiæ an average of 27. Mr. Thomson thought that 1200 beds divided over four hospitals would be ample, and was of opinion that the money would be got partly from the grant and partly from the public. He would put the Mater Misericordiæ on one side—it was a sectarian hospital, was not in debt, and should not receive a share of the grant, being managed in the interests of a particular church; he objected also to the nursing being in the hands of any sisterhood. No doubt the advantages of amalgamating certain of the Dublin hospitals is manifest; but with an over-officered medical staff as exists at present, the difficulty would be as to which of the medical officers in each institution amalgamated should retire, and whether they would be entitled to any compensation for the share of the students' fees they at present receive. The subject is a difficult one, and a solution of the matter would be desirable in the interests of all concerned.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

Some time since, the President of the College, Sir Charles Cameron, suggested that the College ought to elect some honorary Fellows from amongst distinguished surgeons, as the existing honorary Fellows were, with one or two exceptions, military or naval medical men. This suggestion has been carried out, for at the last meeting of the Council they unanimously elected as Honorary Fellows the following:—M. Pasteur of Paris, Sir James Paget, Bart., Sir Joseph Lister, and Professor Huxley. The President, I am informed, intends giving a banquet in the College on April 28th, on the occasion of the unveiling of the Dease statue and the opening of the Butcher Museum, and his Excellency the Lord-Lieutenant has accepted the President's invitation to the banquet. It is hoped that some of the newly elected Honorary Fellows will be able to be present on this interesting occasion. The Council will next week elect a Curator of the Museums of the College, at a salary of £250 per annum, in the vacancy caused by the retirement of Mr. Abraham.

ROYAL UNIVERSITY OF IRELAND.

A meeting of Convocation of the Royal University of Ireland will be held on the 6th prox. to elect a member of the Senate in the vacancy which will then occur. Mr. Farrelly, whose term of office expires, will, it is expected, be a candidate for re-election, and will be opposed by Mr. Wm. Thomson, surgeon to the Richmond Hospital.

STUDENTS' AMBULANCE CORPS, BELFAST.

The first general meeting of the members was held last week in Queen's College, Belfast. The chairman having explained the objects of the meeting—namely, to elect a committee and two secretaries *pro tem.*, to organise the corps and make all necessary arrangements,—an election was held for office-bearers. It is stated that upwards of 100 students of the College have joined, and it is expected that drill and training will commence early in the summer.

A life-size portrait of Sir Charles A. Cameron, M.D., the President of the Royal College of Surgeons in Ireland, was last week presented to the Grand Lodge of Ireland by the members of the Masonic Lodge 25, of which Sir Charles Cameron is the efficient secretary.

Deputy Surgeon-General John Madden died at his residence, Rutland-square, on the 8th inst.

Thomas Barker, M.D., of Castleview House, Carlingford, has been placed on the Commission of the Peace for the County Louth.

The late Mr. P. A. Smith bequeathed a sum of £200 to each of the following charitable institutions:—Mater Misericordiæ, Vincent's, Mercer's, Sir P. Dun's, Jervis-street, and Coombe Lying-in Hospitals. The City of Dublin Hospital has also received £100.

Dublin, March 8th.

PARIS.

(From our own Correspondent.)

PTOMAINES AND THE MICROBE THEORY.

AMONG the conclusions formulated by the various speakers who have taken part in the debate at the Academy of Medicine on the pathogeny of disease, those enunciated by Professor Verneuil seem to me the most admissible, as they are the most plausible. In response to the speakers who preceded him, M. Verneuil stated that he recognised two principal origins of general maladies: 1. The invasion by germs which penetrate into the organism from without, and which had their existence in cosmic media. 2. The contamination of the interior of the organism by waste tissues resulting from diminished, augmented, or perverted nutrition. In other words, the learned Professor adopts all which appears to him clearly demonstrated in the microbian theory, or in the theories borrowed from pathological physiology and biological chemistry. As regards the *rôle* of the organism itself in the manufacture of disease, no one perhaps more than M. Verneuil has directed attention to that subject—that is to say, the intimate connexion that exists between a disease-germ and the body which receives it, which is the constitutional states of pathologists. For diseases of physiological origin, the organism no doubt plays the principal *rôle*. For nosological or microbian diseases, the economy is reduced to accept, submit to, multiply or destroy, refuse or reject the germs, without being able of itself to create a single one at any time or in any condition whatsoever. Thus, Professor Verneuil does not in any case admit morbid spontaneity—that is, in the grammatical sense of the word,—as the alterations in *plus* or in *minus* of nutrition are never produced by themselves, which necessarily imply causes on the one hand and pathological specificity on the other; the latter would imply the existence in an absolute manner of beings altogether distinct from those which they invade, and this would lead to the conclusion that there cannot exist at the same time spontaneity and specificity.

DEATH OF DR. BOCHEFONTAINE.

I regret to have to report the death of Dr. Bochefontaine, chief of the laboratory of the Faculty of Medicine of Paris and of the Hôtel Dieu. His death is considered a great loss to science, as he was an indefatigable searcher for biological facts. He was an avowed adversary of the microbian theories, particularly those professed by Pasteur and Koch; and it will be remembered that he was so convinced of the non-contagiousness of cholera that during the epidemic of last year he swallowed a pill composed of the dejections of a cholera patient, and consequently some millions of the comma bacilli, from which he suffered no other inconvenience than a slight malaise. He was latterly engaged in some important researches respecting the real efficacy of M. Pasteur's anti-rabic inoculations, when death overtook him after an illness of three weeks. As he was a most daring experimenter, even upon his own person, it was bruited about that he had fallen a victim to some experiment. The fact is that he had been, as just stated, ill for

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about three weeks, suffering from abscesses in the throat and jaws, resulting from decayed teeth, which ended in fatal periostitis. He was only forty-five years of age.

REPORT ON SUICIDES.

The official report on suicides for the Department of the Seine for the year 1885 gives the following results:—There were 642 suicides or attempts at suicide from January 1st to December 31st. During the preceding year there were 542. Firearms were the principal means adopted, of which there were 225 cases; of these there were 160 for Paris alone and 65 for the rest of the Department. There were 150 suicides by drowning, 88 by hanging, and 142 by asphyxia; the others were effected by precipitating themselves from windows, monuments, &c; 62 were effected by crushing or by poisoning. The principal causes assigned are reverse of fortune, failure in business, dissipated living, particularly when accompanied with the use of alcohol. Several cases of self-destruction occurred among youths, principally among collegians, and the causes given display a high degree of mental precocity or immoral training.

PROPOSED HEALTH EXHIBITION.

An exhibition of everything concerning hygiene is being organised by the Society of Public Medicine at Paris, and is to take place in the month of May next in a large building at the back of the Hôtel de Ville. This exhibition, exclusively of a scientific and technical character, will comprise all plans and models of constructions and of apparatus destined to ensure the salubrity of the ground floor, underground rooms of private habitations, of cheap houses, and public buildings, such as schools, hospitals, and asylums, theatres, meeting or lecture rooms, &c. The exhibition is placed under the patronage of the members of the institute, and of the Academies of Sciences and of Medicine, and also of the Government.

THE TREATMENT OF HYDROPHOBIA.

A commission appointed by the Academy of Sciences has decided upon the establishment of a *locale* in Paris for the treatment of persons bitten by mad dogs. It is to be called "Institut Pasteur," and is to be supported by public subscription. As it is intended to be international, subscriptions are solicited from all parts of the world.

Paris, March 10th, 1886.

NEW YORK.

(From our own Correspondent.)

QUARANTINE.

THE health officer of New York quarantine is paid by fees, the charge for each vessel being $6.50. The total fees per annum are believed to vary from $60,000 to $100,000. There is a movement in the Legislature to abolish the fee system and give him a salary of $10,000. The discussion has brought to light some interesting facts. In 1880, 7827 vessels entered this port, and the receipts of the health officer were $64,000, and of this sum $25,000 were paid for running expenses, leaving a net income of $39,000. In 1885, 5908 vessels arrived, being nearly 2000 less than in 1880, and making a diminution of over $12,000 in the emoluments of the office. If these statements are true, the office is not now so lucrative as has been supposed, for, being a political office, the party in power always lays the health officer under heavy contribution.

THE BOARD OF HEALTH.

The New York Board of Health has been one of the most reputable bodies in the Senate until recently, when its management fell into the hands of the politicians, and now its president is under indictment by the grand jury for receiving bribes for official acts. On his trial the jury stood eleven for conviction and one for acquittal. The effect of the change of administration is visible in every department of the service: officers have been multiplied, salaries incurred, and the duties have been performed with less and less vigour. Public confidence has been very much lessened by the scandal.

DR. ALFRED C. POST.

The death of Dr. Post, President of the Faculty of the University Medical College, at the age of eighty, removes from medical circles a most familiar figure. For half a century he was one of the most active surgeons of this city, and he did not relax in his work until the last week of his life. He seldom failed in his attendance at the meetings of the medical societies, and always took a very lively interest in subjects under discussion. He was as much gratified with every step in advance in surgery as the younger surgeons, and never grew old in the usual way of discarding without trial "new-fangled notions."

YELLOW FEVER INVESTIGATIONS.

A Bill has been introduced into Congress to provide for the appointment by the President of a Commission to proceed to Brazil to investigate the alleged discovery of a method of inoculating for yellow fever. Few physicians have any faith in the professions of Dr. Domingos Freire, and the Bill receives support only from medical officers of the southern quarantines, and especially that of New Orleans

SUDDEN DEATH OF EMINENT MEN.

There have been many sudden deaths of eminent men recently, and the subject is attracting the attention of medical men. Calfax, a former vice-president of the United States, fell dead in a railroad depôt while on a lecture tour. Hendricks, the Vice-President under the present administration, was recently found dead in his bed. And now comes the news of the death of John B. Gough, the temperance orator, who fell, with his arms raised, in the midst of a speech. General McClellan recently died suddenly, but he had been suffering occasionally from angina. Heart disease has proved to be the chief cause of these deaths.

New York, Feb. 22nd.

ROYAL COLLEGE OF PHYSICIANS.

AN extraordinary Comitia of the College was held on the 11th inst., Dr. J. W. Ogle, Vice-President, in the chair. Certificates in Hygiene were granted to Edgar English and John Frederick Williams, who had passed the required examination.

A report was read from the Council upon Dr. West's proposals to form Standing Committees of the College to deal with professional and public matters in which it was desirable that the College should take action. The Council advised the College not to assent to these proposals, the existing system of the appointment of Select Committees whenever occasion arise being quite adequate to the purpose. After a prolonged debate it was finally decided to adjourn the discussion to the next meeting.

A report was read from the Committee of Management of the Examining Board in England, advising: (1) The omission of Medical Botany from the curriculum; (2) an option to candidates of taking Materia Medica and Pharmacy either as part of the First or as part of the Second Examination, and the permission to candidates to avail themselves at once of these alterations. Considerable discussion arose upon this report, and the synopsis of Materia Medica and Pharmacy, but the report was finally accepted without alteration.

ROYAL COLLEGE OF SURGEONS.

AT an ordinary meeting of the Council of the College, held on the 11th inst. the minutes of the last meeting were confirmed. The death of Mr. Cooper Forster was announced to the Council, and a unanimous resolution of condolence with Mrs. Forster and her family was passed. A resolution was passed to inform William Turnbull of his removal from being a member of the College owing to his conviction for manslaughter, the usual notice to be sent to the Medical Council.

The report of the Committee on the mode of obtaining the Fellowship of the College was received, and the two methods proposed by them adopted.

"In one of these the Council would elect to the Fellowship, every year, a certain number, not exceeding ten, of Members of the College, of not less than twenty years' standing, who are distinguished by scientific or professional ability, or by good service rendered to the profession or the public, and who are recommended by ten Members of the College, of whom at least half shall be Fellows, none of the Fellows so recommending being members of the Council.

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"In the other method, Members of not less than fifteen years' standing would be exempted from the First Professional Examination for the Fellowship—that, namely, in Anatomy and Physiology,—and would be required to pass only the Second Examination, as defined in the Regulations for the Fellowship."

The following was also adopted by the Council:—

"That the Council should acquire the power of electing two persons, who shall be considered and named Honorary Fellows of the College, and who, whether Members of the College or not, should be persons who have rendered distinguished service in the advancement of surgery or the sciences allied to surgery. The Honorary Fellows should be exempted from the payment of any fee, and should not have the right of voting for or becoming members of the Council."

The report from the Committee of Management of the two Colleges in reference to the alterations in the curriculum was read and adopted. (See report of the Royal College of Physicians, *supra*.)

The President reported the arrangements made for laying the foundation stone of the new Examination Hall on the 24th inst. The Colleges wish all branches of the profession to be represented; and after lots have been drawn for the seats at the disposal of the authorities, the tickets will be forwarded to the successful Fellows and Members; this will be the only notice of the result of the drawing. The guard of honour will be formed by the Volunteer Medical Ambulance Corps, with probably the Medical Company of the Artists' Volunteer Corps. A military band and the choir of the Savoy Chapel will be present. The Archbishop of Canterbury will open the proceedings, after which an address from the two Colleges will be delivered. Fuller details will be supplied in the programmes which will be distributed on the occasion.

The President of the College received the permission of the Council to give a conversazione in the museum during the coming summer.

Sir Joseph Lister was elected successor to the late Mr. Forster on the Committee of Management.

A letter was read from Dr. Collum, president of the Association of Members, forwarding a resolution of the Central Committee of the Association, expressive of the intention of the Association to resist the proposal to largely increase the number of Honorary Fellows.

The Council proceeded to the consideration of the motion brought forward by Mr. Macnamara on January 14th last, which had been postponed, and he moved his resolution in the following altered form:—

"That the Fellows be requested to state if in their opinion it is desirable to extend to Members of the Royal College of Surgeons the right to vote at the annual election of Fellows as members of the Council."

This was seconded by Mr. T. Smith, but lost by 16 to 4.

Mr. Marshall gave notice that he would propose a resolution at the next meeting of the Council, in reply to the resolution adopted by the Fellows and Members who were present at the meeting held on December 17th last.

MEDICAL NOTES IN PARLIAMENT.

Overhead Wires.

IN the House of Commons, on the 4th inst., in reply to Mr. M'Iver, Mr. J. Collings stated that the Local Government Board had no doubt that if a measure were brought in dealing with overhead wires, powers would be conferred on urban sanitary authorities to make bye-laws or regulations with respect to such wires for the protection of life and property.

Water-supply &c. Bill.

On the 5th inst., on the order for resuming the adjourned debate on the motion for the second reading of this Bill, Mr. Broadhurst stated that since the adjournment of the debate the hon. baronet (Sir J. McGarel Hogg) who was in charge of the Bill had agreed that he would in committee omit such portions of it as empowered the Board to take the initiative in legislation. The Bill would then only enable the Board to oppose measures which they might deem to be adverse to the interests of the metropolis. In these circumstances, Her Majesty's Government would not further oppose the second reading. The Bill was opposed by several members of the House, and after a lengthy debate was rejected by a majority of 54, the numbers being: for the second reading 76, against 130.

Lunatic Asylum Officers in Ireland.

On the 9th inst., in answer to Mr. Corbett, Mr. Morley stated that he believed as a matter of fact lunatic asylum officers are treated in respect of pension pretty much on the same footing as Her Majesty's judges, and far better than permanent Under-Secretaries of State. In Ireland these officers and servants are pensioned on the lines of the Civil Service Superannuation Act. In Scotland he understood they have no pension at all. He did not think it would be possible to induce Parliament to sanction again such terms as have been given in England. Looking to the analogy of the public service generally, it would be difficult to make a case that would satisfy the Treasury of the sufficiency of the claim that all appointments in lunatic asylums in Ireland should be treated exceptionally under the provisions of Clause 4 of the Superannuation Act. The Treasury contribution to public lunatic asylums both in England and Ireland is at the rate of 4*s*. per head per week.

Obituary.

JOHN COOPER FORSTER, M.B. LOND., F.R.C.S.

IT was with a feeling of melancholy surprise, mingled with sincere regret, that the profession received the unexpected announcement that Mr. Cooper Forster had passed away early on the morning of the 2nd inst. A man of magnificent physique, tall, well-grown, and handsome, with a vigour that many a junior might envy, he seemed marked out by nature for a successful career, to be followed by a long term of intellectual age. His professional work terminated only in July last, when he retired at the age of sixty-one from the highest position in his profession, that of President of the Royal College of Surgeons of England. From this time, being possessed of ample means, he determined to leave the field of surgery to his juniors and to spend the remainder of his days in the quiet enjoyment of his family circle. In January he left England with his wife and daughter for a tour on the Riviera. While at Nice he began to lose appetite, which he was inclined to attribute to the difference in diet, but as a feeling of weakness increased he determined to return to England. He travelled home without rest on the way, and arrived at Upper Grosvenor-street in a collapsed state on Wednesday evening, Feb. 24th. He was attended by his colleagues, Dr Habershon and Dr. Wilks, on whose advice his wife and family were communicated with by telegraph. They reached home on Saturday, and he died early on the following Tuesday

Mr. Cooper Forster was born in Lambeth, on Nov. 13th, 1823, and was the son of Mr. John Forster, who practised for many years in that neighbourhood. He was educated at King's College, and afterwards at Guy's Hospital, where he passed through a distinguished career as a student, being one of the first among consulting surgeons to avail himself of the University of London degree, in addition to the Fellowship of the Royal College of Surgeons. He graduated as Bachelor of Medicine in 1847, and was placed second in honours (with a gold medal) in Surgery, and also second in honours in Midwifery. In the following year he was placed eighth for a commission in the army, of which he did not take advantage. In 1856 he was appointed third assistant-surgeon to Guy's Hospital, two having sufficed for the duties up to that time. The following year he distinguished himself by performing the first gastrostomy in England upon a patient suffering from cancer of the œsophagus, under his colleague, Dr. Habershon. He continued to act as assistant surgeon until the retirement of Mr. Hilton in 1870, when he became surgeon to the hospital. In this position he found ample scope for his generous nature and surgical skill. His wards were always beautifully decorated with palms and ferns at his own expense, and his patients received almost paternal care and attention, whilst the sisters and nurses were devoted to his service. It was this which made him feel so acutely the proposals of Miss Burt when first appointed matron; one of which was that the nurses should be removed from ward to ward every

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three months, and thus be detached from their sister and surgeon. Happily, owing to the protests of the staff, this rule was never carried out. Eventually all the new proposals were subjected to a joint committee of the governors and staff, and the retirement of Miss Burt and the appointment of an amiable successor brought this unfortunate dispute to a close. It is needless to revive the particulars of this bitter controversy, which a little tact and judgment on the part of the executive could so easily have prevented; but the circumstances immediately preceding Mr. Cooper Forster's retirement have never been published. It happened during the long vacation of 1881, when many of the staff were away on their holidays, that an important communication was received from the governors. To this an unfortunately worded reply was sent, and as so many of the staff were absent it was signed only by the senior physician and senior surgeon. The governors regarded this reply as a personal insult, imputing to them bad faith, and retorted by calling upon Dr. Habershon and Mr. Cooper Forster to resign. The staff, on reassembling in October, unanimously resolved to withdraw this note, at the same time (what is not generally known) they almost without exception placed their resignations in the hands of Dr. Habershon and Mr. Forster, to be used in case the governors failed to reinstate them, so that at this time the medical school of Guy's Hospital was on the very verge of being broken up. The governors, however, allowed the note to be withdrawn and reinstated their medical officers, who continued to attend the hospital and to lecture for six weeks longer. At the expiration of their clinical lectures, Dr. Habershon and Mr. Cooper Forster, finding their position intolerable, much to the regret of their colleagues, and without consultation with them, resolved to send in their resignations. In this way Mr. Forster's long connexion with his *alma mater* was abruptly severed. It was not, however, passed over without recognition by his former pupils and the profession generally, who subscribed a handsome testimonial for him and his colleague.

Mr. Forster was a man of strong opinions, vigorous in words and actions. He made firm friends, and, as must happen with men of character, an occasional enemy; but those with whom he differed recognised in him an honest, straightforward opponent. His friendship was of a kind which often extended to his friend's friends, and perhaps sometimes led him into opposition to his friend's enemies. If ever he showed weakness, the influence of someone whose friendship he desired to retain would always be found as the source of his hesitation; but indecision was never one of his characteristics. In his home he was the most hospitable and genial of hosts, affable, kindly, and generous. Fond of society, and possessing many tastes outside his profession, he was an amusing and entertaining companion; an affectionate husband and father, endeared to all alike; and his family was typical of the best features of an English home. In his student days he was much given to boating, and was a distinguished amateur oarsman, an exercise he continued to enjoy almost to the end. Of late years he often spent his leisure hours in fishing, another pastime to which he was warmly attached. He took great interest also in fern-culture, and possessed a very valuable and remarkable collection of filmy ferns, in the cultivation of which he was an acknowledged authority.

As a surgeon Mr. Forster was prompt and decided, and ever ready to test new methods, any good in which he would adopt with enthusiasm. In 1867, after a visit to Scotland, he returned fully impressed with the superiority of acupressure over the old silk suture for the arrest of arterial bleeding, and his opinions were published in the Guy's Hospital Reports for that year. In the next volume he has a paper on Torsion, and soon he had adopted this method to the exclusion of every other. When antiseptic surgery was in its infancy he was the first surgeon at Guy's Hospital to put it to the test, and though he did not afterwards follow the method in all its details, he fully recognised the greater safety which the Listerian system gave to operative surgery. Some years ago, when the temperance movement began to make way and some surgeons proclaimed that patients would recover more rapidly from operations if deprived of stimulants, he determined that at Guy's Hospital treatment without stimulants should have a fair trial, and for a time every patient operated on by him was allowed nothing stronger than milk. This he insisted on with his usual determination and exactitude, and it once led to a curious episode between him and a house-surgeon. One evening a patient was admitted with both legs crushed to the knees, and, as has always been the etiquette at Guy's Hospital, the surgeon, after having amputated one limb, allowed the house-surgeon to remove the other. After Mr. Forster had left, the patient was found to be pulseless, and the house-surgeon, sitting by his side, administered brandy at the rate of an ounce every hour until reaction took place. On the following day, when Mr. Forster arrived and discovered that a large quantity of stimulant had been given, his brow darkened, as he sternly inquired why the house-surgeon had acted contrary to his instructions, and it seemed likely that the junior would pass *un mauvais quart d'heure;* but when he had explained the circumstances, and pleaded that he only desired to give stimulants to the limb for which he himself was responsible, Mr. Forster frankly forgave him, and at once admitted that as one of the principals in the case, and on the spot, the house-surgeon had a perfect right to act on his own responsibility. This was very characteristic of him in his relation to juniors. A man who could defend his opinions was always regarded by Mr. Forster with respect, but one who was cringing and uncertain found with him but little favour. Nervous men, perhaps, did not always receive from him due consideration, as he was one of a school that regarded such as unsuited for the medical profession; but no student ever sought his advice or aid without finding in him an earnest and sincere friend.

Besides contributing numerous papers to the Guy's Hospital Reports and to the Societies, Mr. Forster was the author of a work on "Surgical Diseases of Children," founded largely on his experience at the Waterloo-road Hospital for Children and Women, to which he was attached for a long period. He lectured for many years on Anatomy in the medical school, and his lectures were always popular. Afterwards, on the death of Mr. Poland, he was appointed Lecturer on Surgery; but from this chair he retired on the resignation of Mr. Birkett.

Mr. Forster married, in 1850, Adela, the only daughter of Munden Hammond, Esq., of Kennington, by whom he had seven children, four of whom survive. His wife was an accomplished pianist, and many will remember the pleasant musical evenings at which Mr. and Mrs. Forster delighted to entertain their friends. His married life was of the happiest, but was once crossed by a terrible grief. In 1864 he lost two sons from diphtheria, and it was typical of his paternal solicitude and personal self-control that, when suffocation was imminent, he performed the operation of tracheotomy with his own hands.

Mr. Cooper Forster's commanding presence and handsome face will long be missed in the profession of which he was so distinguished an ornament, and a large circle of friends will mourn over the loss of a man of the highest integrity and moral worth.

JOHN CAWOOD WORDSWORTH, F.R.C.S.

IN the subject of our notice there has been lost to the profession a man who, in his quiet unassuming way, had done much for the advancement of its knowledge, and, firm in his honesty of purpose and freedom from the arts of those who "creep and climb into the fold," was to all who knew him intimately an admirable example of the genuine "dignity and reputation of the profession." With all the modesty of true merit, Mr. Wordsworth was unobtrusive almost to a fault; and overshadowed as his life had been for many years by a sense of physical weakness, and, of late especially, by a growing conviction that he also was to be removed prematurely by the like heart failure which had proved fatal to his two brothers, it happened, doubtless, that he was to some extent disqualified, both by his *morale* and by his *physique*, for attracting all the notice he deserved. Among those, however, with whom he was closely associated, his colleagues, contemporaries, and pupils in early days at the London Hospital, his colleagues in the East (when doing good service in Smyrna and in the Crimea), his colleagues and pupils at the Ophthalmic Hospital—among all these were well known the ability, accurate observation, sound judgment, practical skill, and, not least admirable of all in these our days, the honesty, the candour, and the loyalty to his professional brethren, which were his attributes. With his patients, and in private life, he was especially attractive by reason of his gentleness (how often mistaken nowadays for feebleness), his thoughtful con-

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sideration for others, his sympathetic nature, his geniality, and withal his keen but quiet sense of humour qualities which always invited, and never disappointed, the fullest and most implicit confidence.

John Cawood Wordsworth was born in 1823, at Manchester, where his father, the Rev. William Wordsworth (sprung from a collateral branch of the poet's family in Yorkshire), was then a curate. In 1840 he was apprenticed to a well-known general practitioner of Manchester, Mr. John Jesse; and to the end of his days he never ceased to acknowledge the benefits he derived from his association with that gentleman, and to advocate the advantage to anyone intended for the medical profession of a well-ordered apprenticeship, with its early initiation in the routine and the (so-called) "little expedients" of general practice. Proceeding in due course to enter at the London Hospital, he became an earnest and diligent student, and presently, and for two years, acted as house-surgeon. So unremitting was he in his devotion to his duties that, not long after completing his qualifications, his health began to suffer, and his constitution (to quote a good expression of his father), not being "town-tempered," threatened to break down. Acting upon the advice of Dr. Pereira and some other of the authorities of the time, he determined to go to Madeira; but accident took him to the West Indies, where he settled himself down in St. Kitt's in practice. At the end of two or three years, however, his health being apparently thoroughly restored, he returned to London, and in 1849 was elected demonstrator of anatomy and assistant-surgeon to his old hospital, and became a little later one of the assistant-surgeons to the Royal London Ophthalmic Hospital in Moorfields.

In 1855, obtaining leave of absence from the governors of his hospital, Mr. Wordsworth answered to Mr. Sydney Herbert's call for volunteers in aid of the over-taxed military medical staff in the East, and went as surgeon to the Civil Hospital in Smyrna. Situated too far from the scene of active operations, the Smyrna Hospital offered but little opportunity for surgical practice, and he, together with some of his colleagues, proceeded to the Crimea, where he arrived just in time to render good service "in the front" to those wounded in the attack upon the Redan. For three months during the following winter he was attached to the Castle Hospital on the heights above Balaclava, and there his sound surgical knowledge, ready resource, and untiring devotion to duty found ample opening for exercise and ready and grateful recognition. The Crimean medal with Sebastopol clasp, and the Turkish medal, were awarded to him for these services at the termination of the campaign. Returning to Smyrna in the spring of 1856 he married a daughter of M. Chasseaud of that place, and came back to his old house in Finsbury-square. In 1859, wishing to devote himself especially to ophthalmic surgery at the West-end, he resigned his appointment at the London Hospital, "in compliance with the" (then existing) "regulations of that charity," and removed first to Queen Anne-street, and a few years later to Harley-street. As full surgeon to the Ophthalmic Hospital, he continued to utilise the vast (wellnigh overwhelming) material afforded by that institution, until, "compulsorily retired" by inexorable Time, he became consulting surgeon in 1883, having endeared himself during his thirty-one years' service to all who came in contact with him by his many lovable qualities. He was a vice-president of the Medical Society and of the Ophthalmological Society.

The expression employed above, "his health being apparently thoroughly restored" during his stay in the West Indies, was used advisedly. The improvement probably was more apparent than real. Some permanent defect in his blood-making power had, not unlikely, resulted from the lung mischief which at that time threatened his destruction, and was slowly, but surely, impairing his nutrition. It was not less than fifteen years ago that marked symptoms of a feeble heart first showed themselves, and these being aggravated (perhaps caused) by the effect of repeated attacks, more or less insidious and occasionally severe, of rheumatic gout, soon left but little room for doubt that he was to be the victim of cardiac muscular degeneration. And it was in this way that the end came, with frequently recurring paroxysms of angina pectoris, all borne "without one fretful word," and at the last, happily, with a painless pericardial effusion.

Mr. Wordsworth died on Feb. 22nd leaving a widow and one son, who is also a surgeon.

JOHN ARCHER, F.R.C.S.

ON Monday evening, the 8th inst., Mr. John Archer died, after a slight attack of angina pectoris, of which he had several severe seizures during the preceding week. He was seventy-seven, and had practised in Birmingham, his native town, upwards of fifty years. He was a good type of the general practitioner of the old school—honourable, hard-working, and successful. He was for some years one of the surgeons to the Birmingham Lying-in Hospital, and a director of the local Medical Benevolent Society. He was also a past president of the Birmingham Medical Institute, of which he had been uniformly a liberal supporter. A staunch Conservative and churchman, hospitable, and a good man of business, Mr. Archer held a much respected position.

Medical News.

SOCIETY OF APOTHECARIES.—The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on the 4th inst.:—

Andrews, Charles, M.R.C.S., Hammersmith-road.
Shaw, Arthur Orokat, Thorfolk-road.
Snow, Lionel Mason, King Henry's-road.
Soy, Edward, South Lambeth-road.
Vernon, Arthur Heygate, Macaulay-road, Clapham.

On the same day the following gentleman passed the Primary Examination:—

Priestley, Percy, Sheffield School of Medicine.

THE death is announced of Dr. E. Zillner, privat docent in forensic medicine in Vienna.

ON the 3rd inst. the wife of a horse breaker at Beverley gave birth to four girls, all of whom are living and doing well.

HERBERT PENNEL HAWKINS, B.A., of Pembroke College, has been elected to a Radcliffe Travelling Fellowship at the University of Oxford.

A DEPUTATION recently attended at the Local Government Board Offices to protest against the erection of a small-pox hospital at Darenth by the Metropolitan Asylums Board.

VACCINATION GRANT.—Mr. T. Palmer Stephens, of Emsworth, Hants, has received the Government grant for efficient vaccination in the Westbourne Union and the Havant Union respectively (sixth time).

AWARD FOR EXTRA MEDICAL SERVICES. — The guardians of the Havant Union have voted Mr. T. Palmer Stephens a cheque for £20 and their thanks for his extra services and attention to the poor during the epidemic of enteric fever at Emsworth, during the autumn of 1885.

AT a meeting of the City Commissioners of Sewers on the 9th inst., a committee was appointed for the purpose of considering the advisability of sinking wells for supplying the citizens of London with water. The experiment has, it was stated, been successfully carried out by more than one large City firm.

UNIVERSITY OF CAMBRIDGE.—The examinations for medical and surgical degrees will be held on the following days of the Easter term:—First examination for M.B. degree, June 5th; second examination, June 8th; third examination, part 1, May 11th, part 2, May 12th; Bachelor of Surgery, May 15th; Master of Surgery, May 14th.

WHILST Mr. Stowell, M.R.C.S., of Brighton, was driving down Marine-parade, Brighton, a day or two ago, his horse bolted and dashed through a large plate glass window of a shop in Castle-square. Mr. Stowell was so much injured that he had to be taken to the Sussex County Hospital, where he is expected to remain some days.

MEDICAL MAGISTRATES.—The Lord Chancellor has, on the recommendation of the Earl of Ducie, Lord Lieutenant, appointed Dr. Paine, F.R.C.P. Lond., of Stroud, to the Commission of the Peace for the county of Gloucester.—Dr. Frederick H. Daly of Amhurst-road, Hackney Downs, has been appointed a Justice of the Peace for the county of Middlesex, by the Lord Chancellor, on the recommendation of Lord Enfield, Lord-Lieutenant of the county.

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PRESENTATION.—A beautifully illuminated address, framed in oak, with a pair of brass candlesticks and an inkstand, have been presented to Mr. Stenson Hooker, L.R.C.P. & L.R.C.S., on his leaving Midhurst, by the members of the Midhurst Literary Institute, of which he was the hon. secretary.

GLASGOW OPHTHALMIC INSTITUTION. — The seventeenth annual general meeting of the donors and subscribers to this institution was held on the 8th inst. The number of patients treated during the year was 3295, of whom 380 were received into the hospital. The income amounted to £1129, falling short of the expenditure by £120.

ASYLUM FOR CHILDREN WITH CHRONIC DISEASES.—Prince N. Usupoff has given 5000 roubles (£500) towards building an asylum for poor children in St. Petersburg who have been discharged from the hospital for children with chronic diseases. The example of the Russian prince might well be followed by many wealthy persons in this country.

ROYAL LONDON OPHTHALMIC HOSPITAL.—The annual general meeting of the governors of this hospital was held on the 9th inst. During the past year 2118 patients have been admitted to the wards, or 90 more than in 1884, and the number of out-patients was 25,863. The annual subscriptions amounted to £757, and the donations, including legacies, to £4473. The excess of expenditure over income was £303.

SMALL-POX HOSPITAL FOR BRADFORD.—At a meeting of the Bradford Town Council on the 9th inst., it was resolved to contribute the sum of £2000 towards the cost of providing a small-pox hospital in the event of the same being built by the commttee of management of the Bradford Fever Hospital on their land, according to plans to be approved by the corporation, and on condition that such small-pox hospital shall be used exclusively for the accommodation of persons residing in the borough.

ABERDEEN HOSPITAL FOR SICK CHILDREN.—The annual meeting of subscribers to this institution was held on the 3rd inst., when it was reported that the new buildings, affording accommodation for about sixty children as in-patients in the general wards, and eighteen in the infectious wards, were completed. The total number of patients who received benefit during the past twelve months was 1054. The total cost of the extension is estimated at £7154, to make up which a sum of £2275 is still needed. The income amounted to £711, and the expenditure to £717.

BRITISH LYING-IN HOSPITAL.—On the 5th inst., at the annual meeting of the governors of this charity, it was reported that out at a total of 822 cases treated during the past year, there had only been one death. The governors have sanctioned a system of admitting a few paying patients in order to utilise a portion of the hospital premises, but this will in no way encroach upon the funds of the institution or interfere with its benevolent work. The number of annual subscribers has lately suffered a diminution, and the committee appeal for further public support.

WESTMINSTER OHPTHALMIC HOSPITAL.—The annual meeting in connexion with this charity was held on the 5th inst., when a highly satisfactory report was presented by the committee. Since its foundation in 1816 to the 1st of January, 1886, 347,878 persons have availed themselves of the benefits conferred by the hospital. Of this number 12,097 have been admitted as in-patients, and operations have been performed in 25,308 cases. There is accommodation for fifty in-patients, but only fourteen free beds can now be occupied, owing to want of funds.

THE SANITATION OF CALCUTTA.—A most important memorial to the Lieutenant-Governor of Bengal on this subject is now in circulation. It has been signed by all classes of the population and by the entire body of local physicians, and states that since the year 1881 cholera has swept away more than 20,000 people in Calcutta and its suburbs, that in some suburban wards the death-rate has stood at 70 in the 1000, and that during the decade of 1875 to 1884 out of a population of 257,000 in the suburbs no fewer than half have perished. The memorial points out that this mortality is clearly traceable to defective sanitation. It expresses hearty concurrence with the Government policy of strenuous sanitary reform, and suggests certain legislative and other changes which the emergency renders necessary.

BY invitation of the Council a large party assembled on the 25th ult. to inspect the new wards which have recently been erected in connexion with the Royal Hospital for Diseases of the Chest, City-road, at a cost of about £12,000.

NORTH LONDON HOSPITAL FOR CONSUMPTION.—The annual report which was read at the meeting of the governors of this institution on the 10th inst., stated that, notwithstanding the commercial depression, there had been a steady improvement in the revenue of the hospital, and the number of annual subscribers had increased. The total receipts for 1885 had been £4837 11*s.* 2*d.*, against £3029 2*s.* 6*d.* for the previous year. The total liabilities had been reduced from £3610 19*s.* to £2406 4*s.* 3*d.*; but there was still a mortgage of £5000 on the hospital at Hampstead.

DEATHS AT VERY ADVANCED AGES.—Two deaths at very advanced ages are reported in the Russian journals. One is that of a Jew named Sribny, aged 117, in Pereyaslaff, in the province of Poltava, who seems to have retained all his faculties to the last, his eldest son, who is 82 years of age, being less active than his father was just before his death. The second case, which is more exceptional still, is that of a woman named Annah Kubova, who lately died in the province of Baku at the age of 130, and who, with the exception of failure of eyesight, retained her health and intellect to the end. Our authorities for these cases are respectively the *Kiefflyanin* and the *Kaspii*.

ROYAL SURREY COUNTY HOSPITAL.—On the 27th ult. it was reported at the annual meeting of the governors of this institution that 572 in-patients, 166 home patients, and 3279 out-patients had been treated during the past year. It is hoped that the new wing, intended for the reception of thirty additional patients, will be completed and ready for occupation by next winter. The total income amounted to £3769. After the report of the committee had been read and adopted, a lengthy discussion took place on the question of home visitation and the house-surgeon's duties. Many of those present joined in the debate, but no resolution was adopted, and the subject was allowed to drop.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BROWN, WILLIAM J., B.A., M.B., L.R.C.S.I., has been appointed Certifying Surgeon of Factories for the Chester-le-Street District.

CLEAVER, Mr. EDWARD L., has been appointed Public Analyst by the Fulham Vestry.

COLLINGRIDGE, WILLIAM, M.A., M.D., M.R.C.S., has been appointed by the Port Sanitary Committee Public Analyst to the Port of London.

EGAN, FRANCIS, L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer of Health by the Fulham Vestry.

HANDFIELD-JONES, MONTAGU, M.B., M.R.C.P., has been elected by the Governors Physician to the British Lying-in Hospital.

HOPE, E. W., M.D.Ed., B.Sc., L.R.C.P.Lond., Assistant Medical Officer of Health for the City and Port, has been appointed to the Lectureship on Public Health at University College, Liverpool.

HYDE, JOHN K., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Earl's Barton District of the Wellingborough Union.

LEFTWICH, C. HARCOURT, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the West Deptford District of the Greenwich Union.

MALET, HENRY, M.D., M.A.Dub.Univ., has been appointed Honorary Physician to the Wolverhampton and Staffordshire General Hospital.

MOLONY, M. J., L.R.C.P., L.R.C.S., has been appointed Surgeon to the Parnell Quarries, Arklow.

POWELL, H. A., M.A.Oxon., M.R.C.S., &c., has been appointed Honorary Medical Officer to the All Saints' Home for Women and Children, Beckenham.

RIGG, JOHN, M.B., C.M.Ed., has been appointed Medical Officer for the Seventh District of the Preston Union.

ROBERTS, H. W., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the South Deptford District of the Greenwich Union.

SHAW, HARRY CHARLES COSTELLO, L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer of Health for the Mildenhall Rural District; and Public Vaccinator for the Lakenheath District of the Mildenhall Union, Suffolk, vice W. T. Angove, M.R.C.S., L.S.A.Lond., resigned.

SHORLAND, WALTER E., M.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Third District of the Barton Regis Union.

WALKER, J. B., M.R.C.S., late Resident Obstetric Assistant to University College Hospital, has been appointed House-Surgeon to that Institution.

WILLIAMS, MUZIO, R., M.R.C.S., L.R.C.P., L.S.A.Lond., has been appointed Assistant Resident Medical Officer to the London Fever Hospital, vice O. Fowler, M.D., resigned.

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Births, Marriages, and Deaths.

BIRTHS.

BLAKE.—On the 1st inst., at Blackfriars-road, London, the wife of Walter B. Blake, L.K.Q.C.P.I., L.R.C.S.I., of a daughter.

COATS.—On the 6th inst., at The Mount, Fleetwood, Lancashire, the wife of Surgeon-Major J. Coats, Army Medical Staff, of a daughter.

GARDNER.—On the 9th ult., at Bareilly, N.W.P., India, the wife of E. B. Gardner, M.R.C.S., L.R.C.P.Ed., Civil Surgeon, of a daughter.

HAYLE.—On the 7th inst., the wife of T. H. Hayle, M.B., of Rochdale, of a daughter.

NEALE.—On the 28th ult., at London-road, Leicester, the wife of J. Headley Neale, M.B., &c., of a daughter.

PLAYFAIR.—On the 1st inst., at Rutland-street, Edinburgh, the wife of John Playfair, M.B., F.R.C.P.E., of a daughter.

ROBERTS.—On the 2nd inst., at Dragonfield, Uxbridge, the wife of Charles Roberts, M.R.C.S., of a daughter.

ROBERTSON.—On the 4th inst., at Gonville House, Roehampton-park, S.W., the wife of A. Milne Robertson, M.D., of a daughter.

WARD.—On the 6th inst., at Casita, Northumberland-park, Tottenham, the wife of A. Ogier Ward, M.B., of a son.

MARRIAGES.

BLAMPIED—DE GARIS.—On the 3rd inst., at the Town Church, Jersey, John William Blampied, M.R.C.S., L.S.A.Lond., L.M., of West Grove, St. Lawrence, to Alice Mélanie, eldest daughter of Colonel De Garis, Commanding late 4th Royal Guernsey, of St. Saviour's, Guernsey.

EAST—GARMAN.—At St. Stephen's, North Bow, E., by the Rev. T. R. Lawrence, Vicar, Arthur James East, second son of Joseph East, Esq., of The Limes, East Ham, Essex, to Martha, second daughter of Dr. H. V. Garman, of Kent House, Bow-road.

GOULD—WOODRUFF.—On the 3rd inst., at the Parish Church, Leamington, Ernest Edward Gould, M.R.C.S., of Hailsham, Sussex, youngest son of John B. Gould, of Exeter, to Charlotte, eldest daughter of the late John Farrer Woodruff, of Leamington.

MACLEHOSE—MACMILLAN.—On the 6th inst., at Holy Trinity Church, Upper Tooting, Norman Macmillan MacLehose, M.B., of Sevenoaks, youngest son of the late James MacLehose, of Glasgow, to Olive, second daughter of Alexander Macmillan, of Knapdale, Upper Tooting.

PIGEON—GRINDLEY.—On the 9th inst., at St. Anne's, Highgate-rise, N., by the Rev. C. T. Ackland, M.A., assisted by the Rev. C. C. Buss, M.A., Henry Walter Pigeon, M.A., M.B., B.C., F.R.C.S., of Albion-street, Hull, son of Colonel Pigeon, of Bristol, to Nellizzie, second daughter of the late R. Dutton Grindley, Esq., of Highgate, N.

RANKIN—BEEDLE.—On the 23rd ult., L. K. Rankin, M.A., F.R.C.S., to E. Beedle.

SOUTAR—CLARK.—On the 3rd inst., at Barnwood, near Gloucester, James Greig Soutar, M.B., of Barnwood House, to Mary, daughter of the late Rev. J. P. Clark, M.A., Minor Canon and Precentor of Gloucester Cathedral.

THOMSON—WILLIS.—On the 3rd inst., at All Saints', Blackheath, George Lawson Thomson, M.D., of Wootton-hill Lodge, Newbury, to Emily, youngest daughter of the late Thomas Willis, M.D., M.A.Cantab.

WOOLFRYES—MACEWEN.—On the 9th inst., at St. Stephen's, Bayswater, Surgeon-General J. A. Woolfryes, M.D., C.B., C.M.G., to Ada Sophia, youngest daughter of Alexander Palmer MacEwen, of Woodend, Southsea, Hants.

DEATHS.

ARCHER.—On the 8th inst. (after a few days' illness), John Archer, F.R.C.S., of Carpenter-road, Edgbaston, aged 77.

BATTEN.—On the 27th ult., at Ty Gwyn, Brewood, Staffordshire, John Batten, L.R.C.P.Ed., L.F.P.S.Glas., eldest son of A. Batten, Esq., late of Aberdeen, aged 37.

BISHOP.—On the 6th inst., at the Hôtel des Anglais, Cannes, John Bishop, M.D., F.R.C.S.E., Assistant Surgeon to the Royal Infirmary, Edinburgh, aged 44.

BROWN.—On the 5th inst., at Milton Grange, Stourport, George Gwynn Brown, M.R.C.S., in his 76th year.

DOUGLAS.—On the 7th inst., at Woodside, Kelso (after a short illness), Surgeon-Major Francis Douglas, M.D., late of H.M. Bengal Army, in his 71st year.

GUTHRIE.—On the 3rd inst., at Fort Pitt House, Rochester, Alexander Guthrie, Deputy Surgeon-General, Medical Staff, aged 53.

O'CONNOR.—On the 3rd inst., at his residence, King's-terrace, Southsea, Jacob Robertson Headlam O'Connor, M.D., aged 44.

OXLEY.—On the 6th inst., at Wellington Villa, Portswood Lawn, Southampton, Thomas Oxley, M.D., M.R.C.P., formerly Chief of the Bengal Medical Staff, aged 80.

READ.—On the 8th inst., at The Close, Salisbury, Raphael Woolman Read, F.R.C.S.Eng., Deputy Inspector-General of Hospitals, aged 67.

STORRAR.—On the 10th inst., at the residence of his brother, Stratheden House, Blackheath, John Storrar, M.D., late Chairman of Convocation of the University of London, in his 75th year.

WATSON.—On the 4th inst., at Burnopefield House, co. Durham, Henry William Watson, F.R.C.S., aged 66.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, March 15.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Frederick Treves: On the Anatomy of the Intestinal Canal and Peritoneum in the Mammalia.
SOCIETY OF ARTS.—8 P.M. Mr. Boverton Redwood; Petroleum and its Products (Cantor Lecture).
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Clinical Evening. The following cases will be shown. Mr. Edmund Owen: Boy with Reproduction of Upper End of Femur after Furneaux Jordan's Amputation.—Mr. Startin: (1) Case of General Xanthelioma; (2) Diffuse Scleroderma; (3) Angioma. Dr. C. T. Williams: A case of Mediastinal Tumour. Other cases and specimens.

Tuesday, March 16.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Arthur Gamgee: The Function of Circulation.
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Drs. Goodhart and Hale White: Trabeculated Skull in an Infant.—Dr. Percy Kidd: Diffused Symmetrical Cirrhosis of Lungs.—Dr. Hadden: (1) Tumour of Stomach; (2) Single Cyst of Liver (card).—Sir W. Mac Cormac: Tumour of Palate.—Mr. R. Williams: Acute Nephritis in Lambs.—Dr. Handford (Nottingham): (1) Unusual case of Ante-mortem Digestion of Stomach; (2) Right-sided Ulcerative Endocarditis (card); (3) Acute Intestinal Obstruction due to a Band (card); (4) Thrombosis of Left Posterior Cerebral Artery (card); (5) (for Mr. E. Powell) Congenital (?) Atrophy of Right Kidney (card).—Mr. F. T. Paul (Liverpool): (1) Congenital Adeno-sarcoma of Kidney; (2) Calcification of Arteries.—Dr. G. N. Pitt: Hydatid of Liver Embedded in a Syphilitic Deposit.—Dr. Sainsbury: Pyonephrosis from Valvular Obstruction of Ureter.—Dr. Pasteur: Aortic Aneurysm with Mitral Stenosis (card); Mr. Fenwick: Post-trigonal Pouch containing Stone (card).—Mr. Shattock: Lumbo-sacral Meningo-myocele cured by Morton's treatment (card).—Mr. Ballance: Fracture of Thyroid Cartilage (card).

Wednesday, March 17.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Frederick Treves: On the Anatomy of the Intestinal Canal and Peritoneum in the Mammalia.
SOCIETY OF ARTS.—8 P.M. Mr. Vincent Robinson: Eastern Carpets.

Thursday, March 18.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. W. Boyd Dawkins: The Ancient Geography of Britain.
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Mr. S. J. Sharkey: On Spasm in Chronic Nerve Disease (Gulstonian Lecture).
PARKES MUSEUM OF HYGIENE.—8 P.M. Captain M. P. Wolff: The Rational Alimentation of the Labouring Classes.
HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Mr. G. R. Turner: A case of Compound Fracture of the Patella.—Mr. Edmund Owen: Sprained Joints.

Friday, March 19.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Frederick Treves: On the Anatomy of the Intestinal Canal and Peritoneum in the Mammalia.
SOCIETY OF MEDICAL OFFICERS OF HEALTH.—7.30 P.M. Dr. Louis Parkes: The Sanitary Condition of Poor Districts in the Metropolis, with especial reference to their Waterclosets Accommodation.
SOCIETY OF ARTS.—8 P.M. Mr. William Simpson: Experiences on the Afghan Frontier.
ROYAL INSTITUTION OF GREAT BRITAIN.—9 P.M. Mr. W. H. M. Christie: Universal Time.

Saturday, March 20.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Mr. Edward B. Poulton: The Nature and Protective Use of Colour in Caterpillars.

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, March 11th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Mar. 5	29·36	E.	35	33	...	41	29	...	Overcast
,, 6	29·66	N.W.	34	33	...	42	31	...	Hazy
,, 7	30·25	N.W.	32	Froz.	...	37	27	...	Overcast
,, 8	30·32	E.	33	...	...	41	29	...	Cloudy
,, 9	30·44	S.E.	32	...	...	44	26	...	Fine
,, 10	30·40	E.	34	33	...	39	31	...	Overcast
,, 11	30·35	E.	31	...	...	41	27	...	Hazy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

HYDROPHOBIA, ITS PREVENTION AND TREATMENT.

Dr. Illingworth (Clayton-le-Moors) writes to suggest that the biniodide of mercury should be used in the treatment of hydrophobia, and also as a prophylactic in cases of dog-bite, in view of its well-known and powerful action in destroying the germs of syphilitic poison in the blood. Of course, local measures should not be neglected.

Twenty Years' Subscriber.—Certainly not. The prescription is the property of the patient.

Inquirer (Leeds) should consult his ordinary medical attendant.

"SCARLET HOSIERY."

To the Editor of THE LANCET.

SIR,—Permit me to ask through the means of your valuable journal in what way Mr. Woodland's friend suffered from wearing scarlet socks and stockings. Did he suffer from that troublesome and obstinate form of eczema known as arsenical eczema, or from induction by local contact, occurring on the dorsum of the foot, and more particularly on the anterior and lateral aspects of the leg?—or did he suffer from some of the forms of skin disease produced when arsenic is absorbed into the system, with the production of a variety of furunculi or yellow pigmentation of the body or other concomitant symptoms and signs connected with the lower part of the alimentary tract, which are some of the expressions of chronic arsenical poisoning? So far as my experience extends, wearing scarlet hosiery next the skin produces an obstinate form of eczema to treat and not the other conditions mentioned herein, unless the poison has been imbibed per orem for a lengthened period. But it would be interesting to know if any of the above-mentioned conditions or something new has supervened, provided there be exclusion of the use of arsenic as a remedial agent. I have seen, from wearing merino pants of a reddish tint, eczema of the thighs in patients who are addicted to sweat more than the ordinary. The eczema here, as in that from socks, &c., was of an obstinate nature to cure. I have also qualitatively tested bits from pants which produced eczema and found them to contain arsenic.

I am, Sir, yours truly,

March 2nd, 1886. W. A. HOLMES, M.B., &c.

"SYMPATHETIC IRRITATION OF THE PNEUMOGASTRIC."

To the Editor of THE LANCET.

SIR,—Allow me, in answer to Dr. Towers-Smith's request for information upon this subject, to state that I have found great benefit to be derived in these cases from the administration of valerianate of soda in three-grain doses. Valerian, besides being a direct tonic stimulant to the nervous system, undoubtedly has a powerful anæsthetic effect upon the nerve terminals of the vagus in the stomach.

I am, Sir, yours faithfully,

GEORGE HERSCHELL, M.D. Lond.

Moorgate-street, E.C., March 2nd, 1886.

MEDICAL EVIDENCE IN COURTS OF LAW.

Walter Weir, M.B.—We have many times replied to the question our correspondent submits to us. A medical witness is not bound to give evidence as to his opinions; but the difficulty—and it is almost an insuperable one—of determining what constitutes opinion and what mere fact always arises. What is commonly regarded as a "simple fact"—a circumstance grasped and understood at once by the ordinary observer—is in reality an inference, and to draw an inference practically means expressing an opinion. Moreover, if a witness has been examined in a public court, and has stated the result of his observations and the conclusions he drew from them, he can be made to repeat the substance of his depositions when the case is brought before a jury or is otherwise tried; for he has merely to be asked if he spoke the truth on the occasion when he was before the magistrate to give all that is required of him. In civil cases there is no fear of his being deprived of the just reward of his services; for if his clients refuse to pay the fee beforehand, he has only to say that his evidence may or may not be to their advantage. This is a sufficient inducement to secure payment of the "shekels." After all, there are but few instances in which solicitors are mean enough to commit a breach of faith. If our correspondent cannot afford to attend a court for the remuneration specified, he should avoid being a witness of fact, and then he cannot be a witness of opinion.

H. Campbell is referred to the last balance-sheet of the company, to a copy of which every policy-holder is entitled.

Sig. L. Corazza (Verona).—We have unfortunately no recollection of the article mentioned.

SPECIALISTS.

To the Editor of THE LANCET.

SIR,—Your opinion, or that of the profession, upon the following matter will greatly oblige.

I have acted as medical adviser to a family for about two years. Lately I have been treating one of their children. Some time ago, without my knowledge, the parents took this child to Dr. A. He said that he did not treat children, and advised them to go to Dr. B. They went, and when there—the mother of the child tells me—asked Dr. B. if he would meet me in consultation. He said it would be better to continue to bring the child to him. I understand the child was taken several times to his office. Some time ago this same child became ill. The parents requested Dr. B. to call. This he did, and continued to call. Some days ago the child had an attack of convulsions. I was sent for, when the mother made the above statement. At this visit she also told me that Dr. B. had spoken to her concerning the valuable experience he had, owing to the fact that he was connected with a children's hospital. He also added that he not only saw the children during life, but also after death, and that sometimes he had detected "little lumps" on their brain (the parents thought the child had some brain disease).

Now, Sir, I wish to know if Dr. B. acted a professional part in refusing to meet me in consultation when requested to do so; also, was it not his duty—even supposing the parents wished his opinion—to refer them back to me, and for me to arrange for a consultation. I may add that I care not a penny piece for any patient, but my experience has taught me that there is a certain class of doctors who dub themselves "specialist" or "consultant." In this way they induce one's patients to their office, dilate to them on the advantages of hospital experience and specialism, and the next event is—they have added that patient and the family to their general practice.

May I, at the same time, ask you if a doctor has any right to call himself a "consultant"? Mr. Justice Hawkins some time ago ruled that a consultation can take place only between two or more members of the medical profession. He made this remark when a doctor in court said of himself, "I am a consultant." I am, Sir, yours obediently,

March, 1886. M.D.

*** As represented above, the consultant's conduct is quite indefensible. We agree that a consultant is one who consults with his professional brethren.—ED. L.

KISSING THE BOOK.

To the Editor of THE LANCET.

SIR,—I took an opportunity which was offered to me last Thursday, in Mr. Justice Butt's divorce court, to raise a protest against the present manner of administering the oath to witnesses. Two notorious prostitutes had kissed the New Testament a short time previously, and I held that there was in consequence a risk of contagion. Apparently my protest amused the learned judge and many of the barristers, while others expressed their approval of the course which I had taken. Mr. Justice Butt met (as he thought) my objection by asking me to kiss the opened book, and the example may be followed by the diseased and healthy alike. But this does not meet the natural objection of a medical man to *handle* an unclean article. In a divorce court prostitutes will ever be called upon to give evidence, and will probably appear at every sitting; and, for aught I know, the cherished heirlooms which are called New Testaments may have been kissed and handled by generations of diseased individuals. I mentioned the fact in court that an article upon the subject had appeared in THE LANCET.

I am, Sir, yours faithfully,

Derby, March 6th, 1886. THOMAS HARKNESS.

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EYE DISEASES AMONGST RUSSIAN SOLDIERS.

AMONGST the various communications made to the recent Russian Medical Congress on the subject of the prevalence of eye diseases in Russia was one by Dr. Tikhomaroff on the character of the regimental ophthalmic cases in the St. Petersburg district. These cases numbered in 1884 11·63 per cent. of the strength. The most frequent were conjunctival affections. Trachoma, too, was common. In one district hemeralopia occurred very often, the cause not being as yet clearly understood.

Inquirer.—General antisyphilitic treatment with cod-liver oil, and a lotion composed of tinct. cantharidis (ʒ ii.), with spirits of wine (ʒ ii.), lin. saponis (ʒ vi.), and ol. rosmarini (ɱ v.). If alopecia supervene in the secondary stage, it is generally amenable to treatment, but very difficult to cure later on.

LEAD-POISONING FROM MINCING MACHINES.

To the Editor of THE LANCET.

SIR,—Twenty years or so spent for the most part in examining the teeth and gums of all sorts and conditions of men ought, one would think, to render a man perfectly familiar with any appearance that these parts of the human frame can possibly present under any conceivable conditions of health or disease. Yet, strange to say, the phenomena I am about to describe, though in my experience far from uncommon, seem almost entirely to have escaped notice, or, if they have been recognised, to have been attributed to other causes than the true one. In examining the mouths of persons applying to me for professional advice, I have often been surprised by the presence of the blue line on the gums so well known as characteristic of lead-poisoning, and with it the less definite, but to the eye of an expert scarcely less striking, unhealthy appearance of the tongue and palate. I say I have been surprised, for my patients were not of the class one meets in hospital and dispensary practice, men working in lead and not paying too much attention to their personal habits; on the contrary, it was among those patients who were the most intelligent, careful, and well-to-do, those who best appreciated the importance of a thorough comminution of the food as a consideration of its proper exposure to the action of the saliva—it was among such that I most often met the "blue lead line." It was not industrial poisoning, that was certain, and I was eventually led to conclude that it must be from some habit or practice to which all my patients alike had been led by some motive common to themselves but not to others—i.e., to their families. This one condition, then, could be no other than the absence of teeth and inability to masticate, and the consequent practice of employing some mechanical substitute for mastication in preference to bolting their food, as less careful individuals of the variety *homo edentulus* do. In fact, in every case of a blue line on the gums of persons who had lost the majority of their teeth I found on inquiry that the individual constantly employed a mincing machine, and that his meat was cut up by it for him, whereas the other members of the family used it only on the comparatively rare occasions when all partook of mincemeat or sausage. I next proceeded to examine a number of the machines in question at the houses of friends, in the shops, and at one of the exhibitions at the Agricultural Hall, and found that in all the mill was formed by a number of small wheel-like segments strung on a rectangular axis, and each bearing three rudely-cut, oblique teeth, working between a series of fixed plates or blades. The latter were of steel; but the former, I found to my surprise, were of pure lead, so soft as to be easily cut with a knife or scratched with the thumb-nail, and leaving a black line when drawn along a sheet of paper; should they be pressed against one of the fixed blades, a thin film or shaving of lead would be worked off, and since meat when raw has always a slightly acid reaction from the presence of lactic acid, a certain amount of the lead must be liable to solution in the juice. Fats, too, though not containing any free acid, act in the same way on lead. Many obscure forms of dyspepsia may be traced to chronic lead-poisoning too mild to exhibit the commonly recognised symptoms. At any rate, the use of lead in contact with moist and acidulous articles of food in a machine involving a considerable amount of friction cannot but be a source of danger to health, though it is only in the case of persons who use such machines daily that unmistakable symptoms are produced; and I think that some substitute of a harmless metal or a hard wood ought to be insisted on.

I am, Sir, yours faithfully,

February, 1886. CHODWICK BROWN.

THE CASE OF H. P. FREUND.

To the Editor of THE LANCET.

SIR,—Seeing Dr. Mears' letter in your issue of the 27th ult. (p. 430) concerning Herbert Percy Freund, I should be glad if you would kindly give me space to say a few words upon the subject. I feel sure that there are many good, kind-hearted men at St. Thomas's Hospital who would be willing to subscribe to a fund for so sad a case, if someone would volunteer to open one. I, for one, would be pleased to give my small contribution. I cannot refrain from asking why the London University men (especially as they consider themselves A 1 in every respect) have not taken up the case long ago, and not left it to our northern university to broach the subject. Is it that Durham men have more sympathy? Be that as it may, I am very glad that Dr. Mears has proposed a relief fund.—I am, Sir, yours truly,

A. J. HELM MONTAGUE, M.R.C.S., &c.,
March, 1886. Durham University and St. Thomas's Hospital.

EASY-THREADING SEWING-MACHINE NEEDLES.

MR. R. BARLOW, M.R.C.S., with the object of saving trouble and avoiding injurious straining of the eyesight, has introduced a sewing-machine needle which, by the provision of a diagonal gap cut in the eye, may be easily threaded by any part in the length of the cotton. The value and convenience of the device will no doubt be appreciated by those accustomed to use sewing machines.

Isaac Williams may consult the following works on the Stomach:—Hare, 1821; Brinton, 1859 and 1864; Abercrombie, 1828–1837; Prout, 1840; G. Budd, 1855; Habershon, 1857; Lees, 1857; Billard, 1826; Broussais, 1823; Beaumont, 1838; Fenwick, 1880; and Dujardin-Beaumetz.

Mr. W. A. Whittle.—1. The New York *Medical Record*.—2. Messrs. Sampson Low and Co., Fleet-street, London, E.C.

THE USE OF COCAINE IN OPERATIONS FOR PILES.

To the Editor of THE LANCET.

SIR,—The value of cocaine as a local anæsthetic has certainly not been over-estimated. I am not aware that it has yet been used by anyone but myself in the operation for piles; but a perfectly painless and, I believe, very safe operation may be performed by its use. Some three or four weeks ago I was requested to operate upon a gentleman (a chemist), who suggested its use in preference to chloroform. The operation was performed in the following manner. The pile being first bathed with warm water, the dry hydrochlorate of cocaine was dusted over it, which immediately became dissolved in the moisture, and in about ten minutes a grain of the hydrochlorate dissolved in eight minims of distilled water was injected into the base of the pile with the hypodermic syringe, the introduction of which was not felt by the patient. In another ten minutes the pile was enclosed in a very powerful clamp (invented, I believe, by Dr. Downes), which, when screwed down tightly, crushed the base so completely that when the pile was cut away the use of the cautery was hardly necessary. The operation was performed in the evening, and the patient would not consent to remain in bed the next day, but went about his business as usual. He declares that he felt no pain whatever at the time of the operation, and no appreciable pain or inconvenience afterwards. Since then I have performed the same operation, and with equally satisfactory results.

I think the first contribution to THE LANCET on the hypodermic use of cocaine was a letter of mine in your issue of Dec. 27th, 1884, on its use in circumcision. Since then I have used it six times for the same operation, and found it in every case most satisfactory. In one curious instance, nearly twelve months ago, I removed a large Hunterian chancre bodily away with the foreskin, and was naturally curious to see how the parts would heal. The operation was, however, in every way as successful as the rest. I also felt some anxiety about the development of the secondary symptoms, which, however, made their appearance quite in the ordinary way, but disappeared again with remarkable rapidity under ordinary treatment; and although the patient neglects medicine and leads a very irregular life, he does not appear to have suffered from any syphilitic symptoms for some months past. In circumcision I now dust the cocaine on the under surface of the foreskin first, and, the hypodermic syringe being introduced through this surface, even the pain usually caused by its introduction is avoided. I have also used cocaine in many other minor operations, such as amputation of fingers (through a joint); but, of course, in such cases it is impossible to prevent the pain caused by the hypodermic syringe.

I am, Sir, yours faithfully,

Southwick-street, W., Feb. 23rd, 1886. OWEN PRITCHARD, M.D.

PLACENTA PRÆVIA WITH TWINS.

To the Editor of THE LANCET.

SIR,—Mr. Chas. J. S. Digges relates in your issue of Feb. 20th, p. 383, a case of placenta prævia with twins, and regards it as unique. I think I have previously referred to a case of mine that happened about twenty years ago, the circumstances of which I still well remember. Having been from home for some hours, and returning about midnight, I learned that my assistant was engaged with three distinct cases, one being placenta prævia, and finding a note requesting me to come at once, I hastened to his assistance. The woman was very blanched, the flooding being very great. I found the case to be one of complete placental presentation. The os being soft and sufficiently dilated, I lost no time in delivering one child, and on further examination I discovered that there was a second, which was also speedily delivered, accompanied by a severe loss. The uterus, however, quickly contracted, and with a good pad and well-adjusted bandage after the placenta had been removed, all further loss seemed to be at an end, and warmth appeared gradually to return to the surface. I then left the patient in charge of my assistant, as I had to go to one of the other cases, but giving strict directions that he should remain with her until my return. He, thinking her apparently out of danger, left in about an hour. On my return, at about 6 A.M., I found that she had sustained a further slight loss just before my arrival, and had succumbed. Both children were alive, but whether they survived long I do not now remember. This being the only case of placenta prævia I had ever directly lost, it made a strong impression on my mind of the necessity when the exhaustion is great of remaining for some time after delivery.

I am, Sir, yours truly,

Feb. 27th, 1886. GEO. MUNDIE, M.D.

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COLOUR-BLINDNESS AMONG MEDICAL MEN.

To the Editor of THE LANCET.

SIR,—I should like to ask through your journal whether colour-blindness is likely to be a bar to success in practice in the medical profession. The defect might not be without importance in the diagnosis of such conditions as iritis, the exanthemata, or in medico-legal inquiries where the practitioner happened to be called upon to give evidence as to colour of hair, eyes, &c., or of clothing worn by an individual. Are candidates for the naval and military medical services examined as to perfect vision for colours? This topic is suggested to me through my having recently discovered that a medical student whom I was teaching in elementary chemistry was unable to distinguish solutions of cobalt and nickel. This led me to experiment further, though in a rough-and-ready way, with various coloured solutions, the result satisfying me that he is certainly very blind for red and green. He has passed his "first," including chemistry, at Edinburgh. If there is any practical analytical work included in that examination, he must have been fortunate in not getting coloured solutions, nor needing to use flame-colour tests. I am, Sir, yours faithfully,

CHARLES H. PIESSE, M.R.C.S.,
Strand, W.C., March, 1886. Fellow of the Institute of Chemistry.

H. W. G.—Some account will be found in the "Book of Health," in an article by Dr. Herman Weber. Such experience as we have of individual phthisical patients has led us to think exceedingly well of the high tableland of the Darling Downs in Queensland. We believe that the opportunities for medical practice are not good; the population is very sparse, and the towns where practice is more promising are mostly situated on the coast, where the climate is much less suited to such cases.

An Earnest Enquirer.—We do not prescribe.

"PITYRIASIS CAPITIS."

To the Editor of THE LANCET.

SIR,—In reply to Dr. Caldwell's inquiry, in your issue of the 6th inst., p. 476, I beg to say that I have invariably found an application of equal parts of ung. hyd. rub. and vaseline most successful, attending to the general health, especially looking out for a gouty diathesis, avoiding brushing the head too frequently, and always using a fine comb or very soft hair-brush. I am, Sir, yours faithfully,

Leamington, March 8th, 1886. CHARLES MARRIOTT, M.D.

To the Editor of THE LANCET.

SIR,—I would advise Dr. Caldwell to try the following simple treatment:—Direct his patient to wash the head with soap-and-water to which has been added half a drachm to a drachm of sublimed sulphur. I think the best plan is to work the sulphur into a thin cream with the lather and wash thoroughly. If Dr. Caldwell will adopt this treatment I think he will be well satisfied with the result.

I am, Sir, yours truly,

Stony Stratford, March 9th, 1886. J. ANDERSON, L.S.A.

Enquirer (Surgeon) may use daily some hair wash, such as one compounded of liquor ammoniæ fort, ℥j.; ol. amygdal. dulc., ℥j; spiritus rosmarini, ℥iv.; and aqua mellis, ℥ij. Or a lotion containing an ounce of tincture of cantharides to six ounces of water, and made agreeable by the addition of rosemary spirit. We should, however, advise our correspondent to take the first opportunity of consulting some authority, who no doubt would be very glad to give a brother advice.

Sigma.—The case might very well be accommodated in the infirmary or insane wards of a workhouse. It does not certainly appear to be one for an asylum.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

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A Lecture
ON
FLAT-FOOT AND THE CONSTRUCTION OF THE PLANTAR ARCH.

Delivered at Cambridge.

BY PROFESSOR HUMPHRY, F.R.S.

GENTLEMEN,—Frequent as is the occurrence of flat-foot, we seldom have an opportunity of making a dissection of the part. Such an opportunity having recently been obtained here, I will give you a short account of what we found. But before doing so I will make a few remarks upon the mechanism of the foot, and more particularly of the plantar arch.

The astragalus may be regarded as the key-bone of this arch, being the highest bone and transmitting the weight, which it receives upon its trochlear surface from the tibia, to the two pillars of the arch. Of these pillars, the hinder one, composed of the os calcis only, is short, thick, very oblique, slightly curved, with the concavity inwards, and having little elasticity. The anterior pillar, composed of the scaphoid, three cuneiform and three inner metatarsal bones, is longer, less oblique, and more yielding or elastic. Hence in descending from a height, as from a chair or in walking downstairs, we alight upon the balls of the toes. If we alight upon the heel—for instance, if we walk downstairs upon the heels—we find it an uncomfortable and rather jarring procedure. In walking and jumping, it is true, the heel comes first in contact with the ground, but the weight then falls obliquely upon it and is not fully borne by the foot till the toes also are upon the ground. Though obviously the key-bone of the plantar arch, the astragalus differs in several respects from the key-stone of an ordinary arch. It is not, as a key-stone usually is, wedge-shaped, and so placed between the two pillars as to support and receive support from them, and thus to complete and give stability to the arch. The fore part of the astragalus, it is true, may be said in some measure to fulfil these requirements by the apposition of its ball-like anterior surface to the concave hinder surface of the scaphoid bone; but, posteriorly, the astragalus quite overlies and rests upon, without at all supporting, the os calcis. Hence the configuration of the bones has to be supplemented, and the arch is in great measure sustained, by the soft parts. Thus the os calcis, or hinder pillar, is held up to (not supported by) the astragalus by means of the interosseous ligament passing between and binding together the two bones. Secondly, the arch is braced underneath, and the two pillars are held together, by the strong calcaneo-scaphoid ligaments passing from the under and fore part of the heel-bone to the under and hinder part of the scaphoid bone; and these ligaments also directly support the head of the astragalus. Thirdly, the arch is supported on the outer side by a secondary or subsidiary arch continuous with it, which is formed by the outer part of the os calcis, the cuboid bone, and the outer two metatarsal bones; and this subsidiary arch is, in turn, held up by the calcaneo-cuboid ligaments. Fourthly, the plantar fascia extends between, and acts as a tie-beam to, the extremities of the pillars of the arch. There is the additional important difference from an ordinary arch that equilibrium is seldom long maintained, the line of weight which falls upon the astragalus being liable to continual shifting by the raising of one or other of the pillars of the arch during progression. In the ordinary "standing" position, no doubt, the weight is distributed to the two pillars of the arch directly from the astragalus, and indirectly from the calcaneo-scaphoid ligament which receives a part of the weight directly from the astragalus; and the weight is borne about equally by the two pillars. In the third stage of the step, however, when the hinder pillar of the arch is raised by the calf-muscle, which, through the tendo Achillis, acts in the plane of movement of the ankle—a plane that is passing through the os calcis, the middle of the ankle-joint, and the space between the two inner metatarsal bones,—the weight is thrown more forwards, through the head of the astragalus, upon the calcaneo-scaphoid ligament; and that ligament is now severely tried, being thus subjected to much pressure and at the same time to much tension through the pull upon the heel. At this juncture the muscles of the sole come to its relief. Especially so does the tibialis posticus, which, by its strong tendon underlying the ligament and the head of the astragalus and attached to the scaphoid tubercle, the three cuneiform, the cuboid, and the three middle metatarsal bones, assists to support the astragalus and braces the arch and the calcaneo-scaphoid ligament at the very moment when it is co-operating with the calf-muscle in raising the ankle, and throwing the weight upon the ligament. The action of this muscle is therefore very important in contributing to lessen the strain upon, and in giving support to, the calcaneo-scaphoid ligament, at the same time that by raising the ankle it is causing the strain and increasing the weight. The peroneus brevis and peroneus longus have a similar effect in raising the outer ankle and strengthening and steadying the ankle-joint and the plantar arch. The former, through the medium of the leverage afforded by the projecting proximal process of the fifth metatarsal bone, resists the inward tendency of the balls of the toes; and the latter, attached to a similar process of the first metatarsal, braces the under part of the sole, while it throws the weight over the ball of the great toe in the final stage of the step.

A further complication, and an important difference from the ordinary construction of an arch, and a source of weakness in the foot, is the mobility of the bones upon one another, the mobility being greatest between the scaphoid and astragalus, where, as we have just seen, the strain is greatest. The provisions for this movement necessitate the presence here of a ball-and-socket joint, which is ill adapted to bear weight, and which throws the work of resistance to displacement mainly upon the subtending calcaneo-scaphoid ligament. There is probably no structure of its kind in the body which has more arduous duty than this ligament, a duty associated with the high development of the human foot, and the perfect fulfilment of which is requisite for the steady and complete accomplishment of the step in walking. Some mechanical advantage is derived from the slight *out*ward curve of the inner border of the foot between the point of the heel and the head of the first metatarsal bone. This has relation to the direction of the line of weight from the leg upon the foot, which is slightly *in*wards as well as downwards and forwards when the foot is planted upon the ground; and a further resistance to this inward pressure is furnished by the coalescence of the anterior fibres of the deltoid ligament with the inner part of the calcaneo-scaphoid ligament.

The astragalo-scaphoid joint, being a ball-and-socket joint, would permit movement in any direction, but the movements are limited and determined by the ligaments and by the form of the articular surfaces of the calcaneo-cuboid joint with which it is associated, the two forming practically one joint, resembling a hinge-joint; and the movements are thus reduced to flexion and extension, which take place upon an oblique axis, passing from within downwards and outwards through the middle of the ball of the astragalus and the fore part of the os calcis. When the foot is raised from the ground this joint is flexed, and the two curves in the sole which have been mentioned—that with the concavity downwards and the slighter one, along the inner side of the foot, with the concavity outwards—are deepened. When the foot is placed on the ground the opposite condition is produced: the joint is extended, and both curves are lessened—that is to say, the foot is in some degree flattened along the plantar aspect and also along the inner side. The extent to which this takes place depends upon the weight which is thrown upon the astragalus from the leg and the measure of resistance offered by the subtending ligaments and muscles. During these movements of flexion and extension at the middle tarsal joint, associated with the raising of the foot from the ground and the placing it upon the ground, the fore part of the os calcis as well as the proximal or hinder part of the anterior pillar, consisting of the scaphoid and cuneiform bones, rise and fall; and the joints between the astragalus and the os calcis permit the latter bone to move a little obliquely beneath the former, this being requisite for the maintenance of the proper level of the trochlea of the astragalus. Now, if the flexion of this mid-tarsal joint be abnormally excessive or persistent, the double curves are preternaturally increased, and we have the

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condition called "talipes cavus." If, on the contrary, the extension be exaggerated and persistent, the curves are lost, the sole is flattened beneath and is also flattened or bulged on its inner side, and the condition called "talipes valgus" or "flat-foot" is produced.

It may be further remarked that as in the variations upwards and downwards of the chief plantar curve the proximal parts of the plantar arch take their part, and the joints between the astragalus and the os calcis minister to this, so in like manner are the pillars of the arch affected and the calcaneo-astragalar joints concerned in the slighter lateral variations of the lesser or *out*wardly-directed plantar curve. Hence in the bulging of this curve inwards, which occurs in flat-foot, the os calcis and the components of the anterior pillar are inclined inwards, and the astragalus is carried inwards, in many cases so much that the trochlear surface is placed quite internal to the plane of traction of the tendo Achillis, instead of having its middle point in that plane. It is obvious how great a source of weakness this must be.

The interest, therefore, in the mechanism of the foot concentrates itself about the head of the astragalus, and the manner in which, in different positions, it is supported by the calcaneo-scaphoid ligament and the tendon of the tibialis posticus. This part bears a large amount of weight in standing, and has the chief weight thrown upon it in the several stages of the step in walking, more particularly when the foot is planted on the ground and when the heel is being raised from the ground; and the line of weight, especially if the toes be directed outwards, is *in*wards, as well as downwards and forwards. Hence in prolonged walking or standing, when the muscles have become fatigued and the tibialis posticus fails to afford its wonted support and brace, and the strained ligaments yield, the head of the astragalus, and with it of course the entire astragalus, gradually inclines more and more in the direction downwards, inwards, and forwards, the sustentaculum tali and the scaphoid bone are separated and descend, and the tarsal arch is lowered and bowed inwards. Further—and this is a very important change in a mechanical point of view—the trochlear or weight-receiving surface of the astragalus, instead of being in the plane of action of the calf-muscle and tendo Achillis—viz., in a line between the point of the heel and the interval between the inner two metatarsal bones—comes to occupy a position internal to that plane.[1] The dropping of the arch, being attended with a distancing of the two points of support, will cause slight lengthening of the foot, which will be somewhat lessened by the bowing of the arch inwards. Here let it be remarked that this change is peculiarly likely to occur during the growing period, when the structures are imperfectly shaped and formed, and when, inasmuch as shape is continually altering, they are ill fitted to bear any one position if prolonged, and especially if they are weighted in that position. The free-and-easy movements, the restlessness or fidgetiness, indeed, of the young is a provision against this source of deformity in the several parts of the body. Unfortunately, owing to the long-continued sitting posture enforced by the usages of civilisation, this provision is too often lost to the spine of the school-girl; and in the enforced standing of young persons in service or shops it is too often lost to the foot of growing boys and girls, to say nothing of the additional trials by weight-carrying and fatigue to which this ill-used part is subjected in errand-boys and many others. No wonder that not simply do the ligaments yield, but that the bones of the foot become deformed, as we find to be the case in the spine in lateral curvature and in the femur, if not in the tibia, in knock-knee.

If now we examine the specimen before us, we see that the middle part of the arch is lowered and bowed inwards. The whole of the key-bone, or astragalus, and the adjacent parts of the pillars—viz., the fore part of the os calcis and the scaphoid with the cuneiform bones—are below their proper level, and form a marked convexity on the inner side of the foot. The heel-bone slants from behind, not, as in the normal condition, obliquely upwards and a little *out*wards, but *in*wards and only slightly upwards. Hence the sustentaculum tali, the head of the astragalus, and the scaphoid tubercle, which should be scarcely seen from behind, form marked prominences on the inner side. The os calcis is moreover inclined over to the inner side—that is to say, has undergone a certain amount of super-pronation,—so that the outer tubercle at the heel is at some distance from the ground. The extremity of the fibula is nearly in contact with the upper surface of the os calcis, but does not actually touch it; and the calcaneo-cuboid joint is in a state of forced extension. With regard to ligaments, the fibres that have undergone most change are those that form the inner part of the calcaneo-scaphoid with the adjacent or continous portion of the deltoid. These are much stretched over the bulging head of the astragalus in the enlarged space between the inner malleolus and the sustentaculum tali behind and the scaphoid tubercle in front. The under and outer part of the calcaneo-scaphoid ligament is somewhat stretched and thinned, but otherwise little altered. The remainder of the deltoid ligament, the three parts of the external lateral ligament, the interosseous ligament between the os calcis and the astragalus, and the calcaneo-cuboid ligaments are all rather thin, but not much altered.

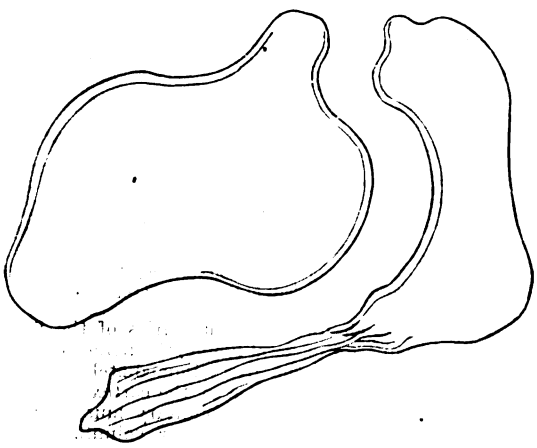
Removing the tibia and fibula, we notice that the trochlear surface of the astragalus, the facet for the internal malleolus, and that for the external malleolus, are all somewhat restricted from before backwards, indicating that the movements of the ankle-joint, which consist only of flexion and extension, were rather limited. This is particularly marked in the case of the facet for the fibula, which is devoid of cartilage in its anterior third. It is also observable that the outer margin of the trochlea does not rise so high as usual, which explains the circumstance, before difficult to understand, that the vertical line of the leg-bones upon the astragalus and the foot was maintained, although the heel-bone was, as just stated, rolled over to the inner side, or super-pronated. This subsidence of the outer edge of the trochlea appears to be due to a hyper-rotation of the astragalus upon the os calcis, an excess of that movement upon a vertical axis, or rather upon a slightly oblique backward and downward axis, whereby, as I have mentioned, the astragalus and the os calcis are accommodated to one another during the variations of the plantar arches. The effect of this hyper-rotation has been to turn the hinder margin of the astragalus slightly outwards, the anterior part or ball a little inwards, and the outer process—"processus fibularis," as it has been called—somewhat downwards and forwards upon the upper surface of the os calcis, or rather upon the outer part of the interosseous ligament, which normally intervenes between the os calcis and this process. In other words, there is a persistent condition, in an excessive degree, of the position which the astragalus assumes towards the os calcis when the foot is placed upon the ground and the plantar arches yield under the superincumbent weight. I say *persistent* condition, because the rotation in the opposite direction (that which in the normal state occurs when the foot is taken off the ground or is relieved of weight) was in this case abnormally restricted, the proper form of the part not having been resumable for a long time, probably for years. There is a well-marked articular facet upon the fore part of the processus fibularis, where it came into contact with the os calcis and the interosseous ligament. A facet in this situation is, however, not uncommonly present in the natural state of the parts. The articular surfaces between the astragalus and the os calcis presented nothing obviously abnormal. The greatest changes, however, are in the articular surfaces of the astragalo-scaphoid joint, in the ball or convex fore part and neck of the astragalus, and in the socket or concave part of the scaphoid bone. This joint had long been maintained in an over-extended position, and very little movement could be effected in it. The uppermost part of the convex surface of the astragalus, which is usually very pronounced, has been thrown back—pressed back—towards the trochlea, and raised into an eminence by some heaping up of bone on the adjacent portion of the neck; and it presents in front a small flat, or slightly concave, articular surface, upon which a corresponding facet on the upper part of the scaphoid impinged. The convex anterior part of the astragalus below this rested in a preternaturally deep concavity of the scaphoid; and the inferior and inner part, thinly and unevenly covered with cartilage, was in contact with the expanded calcaneo-scaphoid and deltoid ligaments. By these changes in the form of the articular surfaces the ball-and-socket between the astragalus and scaphoid is deepened and lessened in area, and is surmounted by and continued into a flat or arthrodial portion, which restricts, and indeed almost prevents, movement between the two bones. This is the only deviation from the natural conformation in the bones of the foot which is worthy of notice; and I think there can be little doubt that it is a

[1] On this and other points relating to the subject see a valuable paper on "Acquired Flat-foot," by J. Symington, M.B., in the Journal of Anatomy and Physiology, xix., 53.

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consequence, and not a cause, of the deformity, being due to an alteration in the direction of pressure induced by the lowering of the plantar arch which resulted from a yielding of the ligaments. It may be observed, indeed, that the alteration in the bones is of such a kind as to prevent rather than favour a further increase of the deformity. At the same time it would have been an obstacle to the return to the natural position, which in so advanced and long-standing a case, and with such alteration in the articular surfaces, could not have been effected without osteotomy, if at all.

Flat-foot is sometimes spoken of as a condition of *hyper-pronation*, but not quite correctly, for it is not that necessarily, or indeed essentially; at least, that is not the main feature of the deformity, the inner edge of the foot and the great toe not being usually turned down as they would be in hyper-pronation. It really consists, as I have shown you, and as you may judge for yourselves in almost any case, in a persistent, over-extended, and incurved condition of the middle and chief joint of the tarsus; and it is due to a wearying of the muscles, more particularly the tibialis posticus, and a stretching of the ligaments, more particularly of the inner part of the calcaneo-scaphoid, with the confluent fore part of the deltoid and the calcaneo-cuboid. The altered direction of the pillars of the tarsus and the pronation of the heel-bone are, as we have seen, necessary sequences, or rather accompaniments; and the lowering and incurvation of the arch, together with the passage of the astragalus internal to the plane of action of the calf-muscle, seriously weaken the foot, and



Vertical section of the astragalus and scaphoid bone, with part of the calcaneo-scaphoid and deltoid ligaments, in a case of flat-foot.

lessen the ability to complete that important stage of the step which consists in using the ball of the great toe as a fulcrum for the action of muscles whose function it is to raise the heel and the ankle. Alteration in the form of the bones may follow from continued undue pressure upon certain parts, as in the upper part of the ball of the astragalus in the specimen before us. (See engraving.) But this cannot, usually at least, be an early feature; for in incipient stages of the condition the parts readily assume their natural relations when the weight is removed, which could not be the case if the bones had undergone a change of form. In the early stages relief from weight and muscular exercise of the foot will effect a cure. In the later stages, especially if such bone-deformity as we have witnessed have taken place, nothing short of an osteotomy will do good.

There is another point in the pathology of flat-foot I would mention. It has relation to the muscles which fall into opposite conditions on the two aspects of the foot, both of which conditions add to the difficulty of relieving the deformity; and the one is apparently, to a considerable extent if not entirely, induced by the other. The muscles on the tibial and flexor aspect of the foot become relaxed and enfeebled, so that they fail to exert their proper contractile power and cease to afford their proper support and to effect the normal movements of flexion and incurvation. Hence the antagonistic muscles—the extensors and the peronei,—not being duly stretched or extended, fall into a contracted and irritable condition, which in no small degree aggravates the deformity and the discomfort arising from it; and the condition is further increased, or it may in some cases be excited, by the demand made on them to steady and brace the tarsus when the foot is placed on the ground and the weight of the body is thrown over it. Their state is similar to that of the muscles on the outer side of the knee in cases of knock-knee, and of those occupying the concavities of the spine in cases of lateral curvature; and it is analogous to that of the flexor muscles in cases of disease of the knee and other joints. This state is relieved by rest, especially if the rest is combined with extension by means of a well-applied splint; but it soon returns unless the treatment is continued for a sufficient period.

Gulstonian Lectures

ON

SPASM IN CHRONIC NERVE DISEASE.

Delivered at the Royal College of Physicians of London, March, 1886.

BY SEYMOUR J. SHARKEY, M.B., F.R.C.P.,

ASSISTANT-PHYSICIAN AND JOINT-LECTURER ON PATHOLOGY AT ST. THOMAS'S HOSPITAL.

LECTURE I.

MR. PRESIDENT AND GENTLEMEN,—When I was informed that I had been nominated to fill the honourable position of Gulstonian lecturer for 1886 I consulted the records of the College in order that I might acquaint myself with the conditions attaching to the lectureship. I found that they were few in number, and that the main object which Dr. Gulston had in view was to secure, not only an annual dissertation on certain diseases, but also a practical demonstration of their pathological anatomy. It seemed to be incumbent, therefore, upon the lecturer to choose a subject which he could illustrate, however imperfectly, from his own experience, and I selected that class of chronic diseases which have this at least in common, that they are associated with muscular spasm. To you, who know the wide range of knowledge and the ample experience which would be required to treat such a subject exhaustively, this proposal must appear pretentious to the last degree. I am fully aware, however, that the limited time at my disposal, and still more the limited knowledge I possess, make an exhaustive consideration of it impossible. I merely propose to take a general view of chronic nerve disease in its association with muscular spasm, and to consider how far our present knowledge of pathology enables us to understand the phenomena which present themselves.[1]

By spasm is meant excessive muscular contraction; and, if we confine our attention to those muscles which are under the control of the will, excessive contraction is that which occurs in defiance of the will, or which, although commencing as a voluntary act, transgresses the limits which the will would impose upon it.

There is great variety in the spasmodic affections which have been observed in man, and to which descriptive names have been given. Thus, "tonic" spasm indicates persistent muscular contraction, a tetanic condition of a muscle or of groups of muscles, in which the individual waves of contraction overtake each other and are fused into one. "Clonic" spasm is a term applied to conditions in which the individual waves succeed each other less rapidly and often quite irregularly, giving rise to a great variety of intermittent spasms. The "coördinated spasms" form another class, in which groups of muscles are the seat of clonic contractions, which are coördinated in such a manner as to produce some regularly recurring though involuntary movement. It is unnecessary to proceed further in explanation of the many forms of pathological contraction of muscle which are embraced under the term "spasm"; they will be referred to again in connexion with the diseases which they accompany.

[1] I am indebted to my friend, Dr. Theodore Acland, for many of the microscopic preparations from which drawings have been made, and Mr. Shattock, Mr. Burgess, and Mr. Lapidge for most of the drawi

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In health, as a rule, contraction of striated muscles depends on impulses transmitted to them through the nervous system and travelling down motor nerves; and the same may be said of that which is the product of disease; so that the motor nervous mechanisms afford a suitable basis, in connexion with which we may survey our present knowledge of the conditions which give rise to spasm. It is convenient, and I might almost venture to say scientific, to divide the motor mechanisms into a cerebral system and a spinal system; the latter forming a groundwork on which the former is superposed, comparatively late in the history of the development of the individual, and probably of the species. It might be thought that, considering the importance of the cortical centres of the hemispheres, of the central ganglia, and of the cerebellum, the term "cerebral systems" would be more appropriate than "cerebral system." But it is better, at any rate in considering spasmodic diseases, to embrace them all under one head; for our present knowledge of anatomy, physiology, and pathology does not justify us in concluding that there is any efferent motor connexion between the brain and the spinal cord except the pyramidal tract, direct and crossed, diseases of which give rise to muscular chronic spasm. Evidence in support of this view will appear in the course of these lectures.

The terms "cerebral system" and "spinal system" are intended to be anatomically exhaustive, and to comprehend all possible nerve mechanisms by which spasm is produced. There should be no room for any further division of the subject. But our ignorance, especially of the finer molecular changes which accompany not only abnormal but normal neuro-muscular conditions, during action and inaction, necessitates some reference to those spasms which are called functional, and which will, we may hope, with advancing knowledge, become amenable to a more accurate classification. The divisions of the subject, then, as now proposed are—(1) spasm in connexion with cerebral motor mechanisms; (2) in connexion with spinal mechanisms; (3) functional spasm.

1. SPASM IN CONNEXION WITH CEREBRAL MOTOR MECHANISMS.

The nerve fibres, which bring the voluntary muscles of the body under the control of the will, originate, so far as we know, in the central portions of the cortex. Experiments on living animals first yielded the clue to this discovery in man, and pathological evidence has abundantly corroborated

FIG. 1.

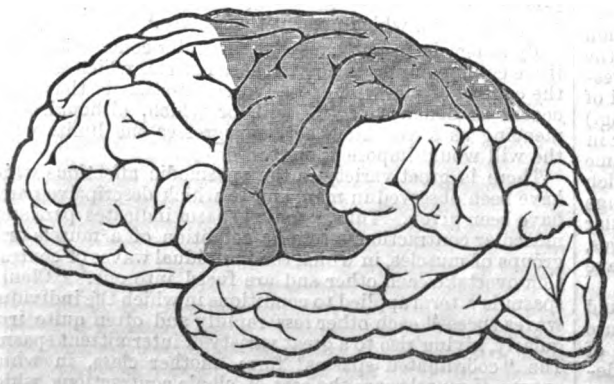
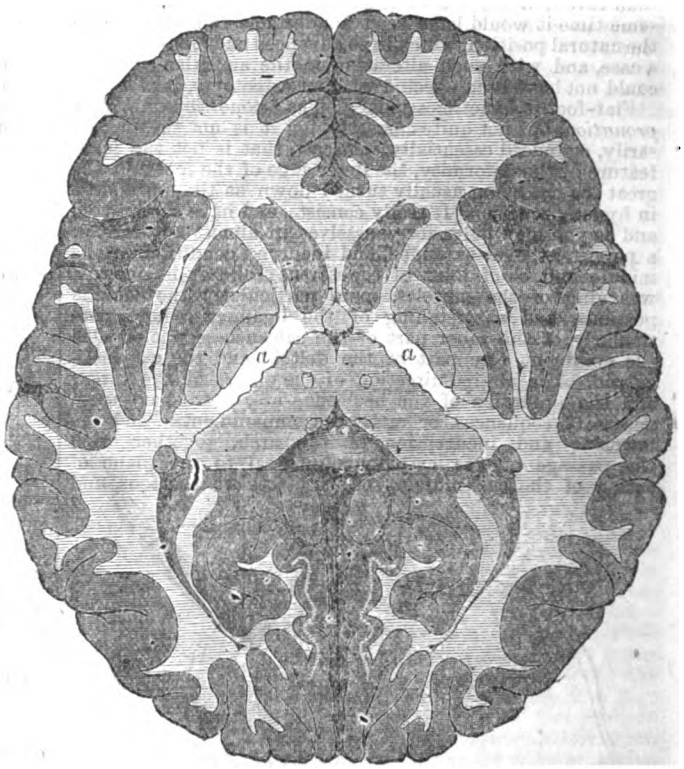


Diagram showing the position of the motor area of the cortex on the external surface of the brain.

the facts derived from this source. On an occasion like the present, it will not be thought a presumption if I refer to my own observations upon this point. In a paper published in THE LANCET of Sept. 29th and Oct. 6th and 13th, 1883, I recorded six cases of cortical lesions, all occupying the region in question, and all accompanied by motor paralysis, which occupied the face, arm, and leg, according to the localisation of the disease. It is unnecessary at present to enter into much detail on this subject. The two ascending convolutions which form the boundaries of the fissure of Rolando, the superior parietal lobule, the paracentral lobule, and probably some of the parts immediately adjacent to these, constitute the motor area of the cortex (Fig. 1). All we know about it, as regards voluntary muscular acts, is that the "way out" of the cortex for voluntary impulses passes through it. Some of the motor fibres are connected with processes of large ganglionic cells, which form a very striking feature of this region of the brain, and which resemble the cells of the anterior cornua of the spinal cord. The centres which are in connexion with the leg occupy the upper part, those which are in connexion with the arm the middle, while the lower portions, near the fissure of Sylvius, preside over the muscles of the face and tongue. During a part of the very long course which the fibres coming from the motor area pursue, the bundles on their way to the spinal centres for the face, arm, and leg remain distinct. Thus, passing from the cortex through the white substance of the hemispheres, they converge to the internal capsule, and occupy the knee and anterior two-thirds of its posterior segment, which lie between the optic thalamus and the lenticular nucleus (Fig. 2). In the capsule, the nerves for the face and tongue centres occupy the knee, the fibres for the arm come next, and those for the leg lie posteriorly. The knowledge of their relative positions in the internal capsule, which is a somewhat recent acquirement, is of great interest, because it probably affords at least part of the explanation of a long-observed clinical fact—namely, that in hemiplegia in connexion with disease of the central ganglia the arm is usually more paralysed than the leg. For hæmorrhages from the branches of the lenticulo-striate and lenticulo-optic arteries would from their position press more upon the anterior than upon the posterior division of the motor segment of the capsule.

Leaving the internal capsule, the fibres under consideration pass to the superficial part (basis) of the crus (Fig. 3), and there occupy its median portion, and are so placed that

FIG. 2.



Horizontal section of brain (Flechsig). Diagram showing the position of the motor strands (*a a*, unshaded) in the internal capsule.

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the fibres presiding over the face are situated internally, those over the leg externally, and those in connexion with the arm centrally.

Arrived at the pyramids in the medulla oblongata, the fibres going to the spinal motor centres for the body and limbs decussate, those for the face and tongue having already done so a little higher up. It has been estimated that about 91 to 97 per cent. decussate; but the number probably varies within wide limits, so much so that there is good reason for thinking that in some cases complete decussation, in others none at all, takes place. Flechsig has also shown that in the same spinal cord the two sides may

FIG. 3.

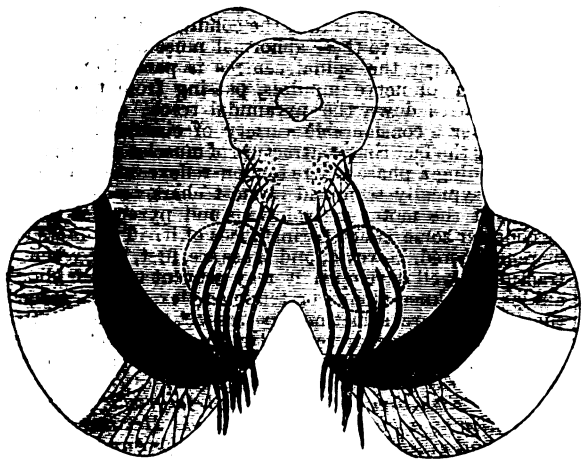


Diagram representing a vertical section through the crura cerebri. *a a* (unshaded area) show the position of the motor fibres from the motor area of the cortex.

be unsymmetrical in this respect. Some observers suppose that decussation of fibres of the pyramidal tract occurs in the cord, but nothing is known for certain with reference to this point. That part of the pyramidal tract which crosses at the decussation of the pyramids (the crossed pyramidal tract) occupies the posterior part of the opposite lateral column in the cord, being separated from the surface of the latter by the direct cerebellar tract. The fibres which do not decussate (direct pyramidal tract) pass down the cord on the same side, occupying a narrow strip along the margin of the anterior fissure (Fig. 4). The fibres of the

FIG. 4.

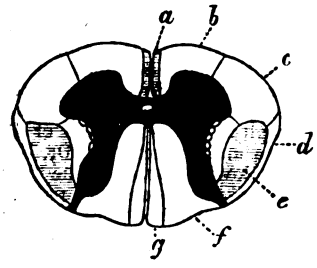


Diagram of a section of the spinal cord in the cervical region (Flechsig). *a*, Direct pyramidal tract. *b c*, Antero-lateral column. *d*, Direct cerebellar tract. *e*, Crossed pyramidal tract. *f*, Columns of Burdach. *g*, Columns of Goll.

pyramidal tract finally form connexions with the multipolar cells in the anterior cornua of the cord, either directly or through the intermediation of other nerve cells.

It is a well-known fact that nerve fibres in general depend for their integrity upon connexions with ganglionic cells, and that when these are severed the fibres degenerate. Thus, the motor fibres of the cord depend upon the cells in the anterior cornua; the sensory fibres upon cells in the ganglia on the posterior spinal roots; while the healthy nutrition of the fibres of the pyramidal tract is dependent upon the cells in the motor convolutions. If their connexion with the latter be anywhere interrupted, or if the cells themselves be destroyed, degeneration occurs in the whole tract below. When this has taken place, tonic spasm supervenes in the muscles, which are, in health, under the control of these fibres. But between fully developed spasm and the earlier slighter indications of its presence there are many gradations. Taking, for instance, what is perhaps the commonest condition which gives rise to these events—namely, destruction by a sudden hæmorrhage of the motor portion of the internal capsule—it is often some months before well-marked spasm is observed; but in the meantime there are phenomena which foretell its coming. The most striking and frequent of these is the increased knee-jerk which a tap on the patellar tendon elicits. The knee-jerk may be diminished for some time after the apoplectic attack; but, if the fibres of the pyramidal tract have been interrupted, it soon becomes exaggerated. What are termed ankle-clonus and knee-clonus (phenomena which it is unnecessary to describe before an assembly like the present) soon appear, or may do so; for they are not necessarily present where the disease is slight. Charcot reports a case where ankle-clonus appeared eight days after the hemiplegic attack, and late rigidity began within three weeks; and another, in which it set in in one month, and late rigidity in two. Pitres gives cases in which clonus was observed in from eleven to fifteen hours. But in any case it may be said that increased tendon-reflexes and clonus precede rigidity; and, in many cases of chronic disease of the lateral columns of the cord, they are to be found a very long time before rigidity, or the latter may not set in at all before death occurs. Sometimes one tap on the patellar tendon gives rise to a succession of knee-jerks, and like phenomena may appear in the other limb, or in muscles still further removed. Brissaud asserts that even the non-paralysed side is not healthy, but presents in a certain degree these phenomena, which he terms "latent contracture." To what cause are these increased tendon reflexes to be referred?

Muscular tone is that condition of tension in healthy muscle which is, no doubt, due to nerve impulses proceeding from the cells in the anterior cornua of the spinal cord. A certain number of observers have come to the conclusion that the knee-jerk and other tendon contractions are local phenomena, due to direct contraction of the muscle, which is temporarily put upon the stretch by tapping its tendon. Its increase is due to the increased tension which results from severance of the spinal centres from the cerebral motor centres, which exercise a controlling power over those below, this severance producing increased muscular irritability. But for the tendon phenomena to take place at all the reflex arc producing tension must be intact.

Other authorities have convinced themselves, by equally careful observations, that the tendon phenomena are true reflex neuro-muscular acts. The objection to this conclusion, which appears insuperable to their opponents, is that the latent period is much too short for a reflex act. But surely it is not legitimate to bind all reflex acts by the exact laws which appear to govern skin reflexes. It is probable that conduction in nerves does not take place at precisely the same rate in every reflex arc in the body, nor even that the time required to reflect the afferent impulse on to the efferent nerve is uniformly the same. This will depend upon the purpose for which the muscular act is excited, and the speed with which it needs to follow upon the stimulus which evokes it. Now there are, as has been proved, nerve-endings in muscles and tendons; and it is not improbable that the slight stretching of the latter, which is produced by the action of antagonists, gives rise by means of a reflex act to the steadying action, which is always aroused by the contraction of opponents. This would require great sensitiveness on the part of the reflex arc; for, considering the suddenness of many muscular acts, the steadying contraction of the muscles not directly producing the movement would require to be almost equally sudden. If the muscular act which follows a tap on the patellar tendon be a purely local phenomenon, due to "myotatic irritability," it is difficult to explain those cases in which contraction of muscles in the opposite leg, or even in the arm, occurs. Gowers states that the latent interval for the knee-jerk is $\frac{1}{15}$ to $\frac{1}{30}$ sec., and that physiological data require that it should be $\frac{1}{75}$ sec. if it be a true reflex. But what will be said of the following equally legitimate argument? The interval for the knee-jerk is $\frac{1}{75}$ sec. Dr. de Watteville and Dr. Waller have found the interval for the jaw-jerk to be $\frac{1}{30}$ sec., which is only half the interval required for the knee-jerk. Therefore, the phenomena are not produced in a similar manner. Dr. de Watteville says

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that Dr. Waller has determined the latency of the closure of the eyelids to the stimulus of a strong light to be $\frac{1}{20}$ sec., the shortest true reflex known. This differs much less from the interval for the knee-jerk ($\frac{1}{15}$ to $\frac{1}{10}$ sec.) than the latter differs from the jaw-jerk ($\frac{1}{10}$ sec.).

We know too little about the various reflexes which occur in the body to consider it as proved whether tendon phenomena are reflex or not; but it is at any rate satisfactory to feel that, for all practical purposes at the bedside, either theory is equally applicable; for the keynote to both is integrity of the reflex arc, and changes in the latter are necessarily accompanied by changes in the tendon phenomena.

Let us assume, provisionally, that the knee-jerk and other allied contractions are reflex. Why are they increased in disease which interrupts the continuity of the pyramidal tract, or destroys the motor cells in which its fibres originate? Probably the reason is, not that the descending sclerosis produces irritability of the cells in the anterior cornu, but, as Hughlings Jackson says, that the suppression of the functions of the pyramidal tract gives rise to "permitted hyperphysiological activity," the spinal centres being "let go." This view is strongly supported by those cases of congenital absence of the whole or a part of the motor centres in the brain which are accompanied by contracture of the limbs similar to that which occurs in lesions of the pyramidal tract resulting from disease, for in these cases the pyramidal tract has been proved to be deficient. This was the condition found by me in a case which I shall relate presently. The pyramidal tract is not developed until very late, and is not even complete at birth; and in the cases of congenital disease referred to it is not developed at all, or only in part. Even in disease which occurs in adult life and produces descending sclerosis, if the cord be examined after many years, the process of atrophy has long been completed, the nerve-fibres have disappeared, and nothing remains but a quiescent cicatrix. This was so in another case which I shall relate. In such conditions, no active process is going on to produce contracture; there is merely destruction of the pyramidal strands. Again, the exhaustion following upon the motor discharge in epilepsy may give rise to temporary increase in the knee-jerk or to ankle-clonus; and the same may be said of that suppression of function produced by the slighter degrees of chloroform narcosis. In short, the excessive tendon reflexes and contractions which result from descending sclerosis are merely evidences of abolition of the function of the cerebellar motor tract, which in health controls the action of the spinal ganglia.

Objections have been made to this view on the ground that sudden disease, such as cerebral hæmorrhage, which destroys the fibres of the internal capsule, does not give rise to the phenomena in question immediately, but only after the lapse of a certain time. The cases recorded by Pitres, in which ankle-clonus was observed to supervene in a few hours, prove that this delay is not an invariable rule; and even if it were, it would not be unreasonable to suppose that cells which have long been under the control of others should require a certain time before they learn to exert a power to which they have hitherto been unaccustomed. We may therefore look upon increased tendon reflexes, clonus, and contracture as degrees of independent neuro-muscular action, originating in the spinal centres, which have run riot owing to the diminution or annihilation of the inhibitory functions of the pyramidal tract.

But it may be further asked, Does the appearance of one or all of these phenomena prove that there is gross and tangible disease of the cerebral motor cells or fibres? The answer is, Decidedly not. In THE LANCET of Nov. 7th, 1885, Dr. Angel Money records his experience of "Reflex Actions, Knee-jerks, and Muscular Irritability in Typhoid Fever, Phthisis, and other Continuous Fevers"; and he shows that all the phenomena, except tonic spasms, are found in these conditions. But even contracture may occur in fevers. I have myself seen it in typhoid fever, and Dr. Murchison mentions its occurrence in typhus and relapsing fevers as well. Speaking of the former, he remarks: "Contraction and rigidity of certain muscles are observed more rarely, and only in severe cases. The fingers may be tightly clenched, or the forearm flexed, or, in rare cases, there is trismus or strabismus. In twelve cases I have observed tonic spasms of many different muscles. Twice I have seen the legs and thighs so bent that the knees almost touched the chin." A man, suffering from extreme debility and anæmia, came lately to my out-patient room, and the house-physician called my attention to the fact that he had not only very excessive knee-jerks, but as marked knee- and ankle-clonus as I ever saw. He was sent into the hospital, and after two days' rest in bed I was unable to elicit even the slightest clonus. Such cases as these, together with others in which recovery has occurred, justify the verdict which Dr. Donkin gives in *Brain* (October, 1885). "It seems clear," he says, "at present that we must bear in mind that we have not done with spastic paraplegia by calling it lateral sclerosis, remembering the cases which recover, whether they are quite obviously functional or not, but must believe with Friedreich, Wilks, and others, that the symptoms may occur under various forms of disorder or disease of the nervous system."

My own impression is that the condition which most frequently gives rise to these abnormal muscular conditions in connexion with the spinal centres is partial or complete suppression of nerve impulses, passing from the cerebral motor centres down the pyramidal tract; and this may occur under a considerable variety of circumstances. But accepting the fact that contracture of muscles accompanying or succeeding a phase where tendon-reflexes are exaggerated is most typically seen and is most characteristic in gross disease of the motor convolutions and pyramidal tract, let us consider some concrete instances of it. Two facts must be remembered, however, and these are, first, that when contracture is well developed it may prevent us from eliciting ankle- and knee-clonus or tendon-reflexes; and, secondly, that contracture sometimes passes off, the muscles at the same time undergoing rapid atrophy and the reflexes being abolished. This occurs when disease of the lateral column extends to the cells of the anterior cornu.

Case of Embolism of the Sylvian Artery, which resulted in Absorption of a large part of the Right Hemisphere of the Brain, and which was followed by Paralysis and Rigidity of Limbs.—The complete history of the patient's illness and of the post-mortem examination is recorded in the Transactions of the Royal Medical and Chirurgical Society for 1884, and I shall not enter into much detail now. The case is an instance of extensive destruction of the cortex and central ganglia on one side, producing descending degeneration in the cord, together with the symptoms which are characteristic of that condition. E. J——, aged thirty-four, was admitted into Guy's Hospital on March 8th, 1876, under the care of Dr. Pavy. She had never had any serious illness, and, though married ten years, had had no children. Suddenly she was attacked with giddiness, faintness, and sickness, and had an epileptiform seizure. After four days she recovered consciousness, and found that she was paralysed on the left side, and had no sensation on that side of her body. On admission she was found to have ordinary complete hemiplegia and hemianæsthesia on the left side. She had, in addition, a systolic murmur, audible all over the cardiac area. About four months after the commencement of her illness she left Guy's Hospital with the left arm almost useless, but with very fair power in the leg. She had completely recovered from the hemianæsthesia. Seven years later, on March 7th, 1883, the patient, aged forty-one, was admitted into St. Thomas's Hospital, under the care of Dr. John Harley, with aortic disease and bronchitis. Dr. Hadden, the registrar, made the following note. "The fingers of the left hand are partially flexed on the palm, and decidedly stiff. The skin over the backs of the fingers is whiter and more glistening than it is on the right hand. The grasp on the left is feeble, and there is rigidity of the flexors of the forearm and arm. The tendon-reflexes are very brisk in the left, but are hardly obtainable in the right arm. The left leg is somewhat rigid, the patellar-tendon reflex brisk, and there is slight ankle-clonus. The tongue is protruded straight. Slight paresis is observed in the muscles on the left side of the face. There is no loss of sensation. On casual examination at the bedside, the left eye appears to be sound, and there is no hemianopia or colour-blindness. Tested with a watch, hearing is found to be sharp, and equal on the two sides." The patient died somewhat suddenly on May 17th. The husband informed me that from the period of her attack, seven years before her death, she had been weak-minded and queer, doing unaccountable things, such as she had never done before, but that she remained a good-tempered, hard-working, and affectionate wife. On post-mortem examination, marked aortic disease (ulcerative endocarditis) was found, and there was great cardiac hypertrophy, the heart weighing 17½ oz. The lungs were hyper-

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semic and œdematous at the base, and the lower portion of the right was semi-solid. The liver showed slight congestion in the centres of the lobules ("nutmeg"). The kidneys weighed 11 oz.; the capsule was thick and adherent, the substance very firm, and the surface granular. The spleen was hard and its capsule thick. In the right hemisphere of the brain the parts supplied by the middle cerebral artery were extremely wasted, and many of the convolutions had entirely disappeared. The central ganglia, too, were so much affected that the measurement from their intra-ventricular aspect to the outer surface of the convolutions of the island of Reil on the right, was not much more than one-third of that on the left. Descending degeneration of the lateral column, and also of the column of Türck, could be seen in the spinal cord; and the alteration in both these strands of fibres was situated on the side opposite the diseased hemisphere.

This case, the brain of which is now shown, together with drawings of microscopic sections of the spinal cord (Figs. 5, 6, 7), is of interest, not only because of the long time the patient lived after such extensive destruction of one hemisphere, but also because it is an instance of total decussation of the pyramidal tract. It will be seen on examination of the sections of the cord that the left half is very much smaller than the right, and that the white substance bordering on the anterior fissure, the column of Türck, is decidedly smaller on the left than on the right; that is to say, there is no direct pyramidal tract, but the whole of the fibres from the right hemisphere appear to have crossed, and to have gone, some into the left lateral column, some into the left column of Türck. On microscopic examination of the sclerosed tracts, there is seen simply diminution in the number of white fibres, and increase in the density of the neuroglia in the affected lateral column. Apart from the irregularity which exists in the columns of Türck, there is very little structural difference to be made out in them. The softening, which produced hemiplegia and subsequent rigidity in this instance, involved the cortex, central ganglia, and internal capsule.

Lesions need not, however, be so extensive in order to give rise to paralysis with rigidity. Destruction of a portion of the motor convolutions, or of the subcortical fibres connected with them, or of that part of the internal capsule through which the motor strands pass, produces the same phenomena. Cases of softening of portions of the cerebral cortex of long standing do not often come under the observation of pathologists in the post-mortem rooms of general hospitals; or, if they do, I have been singularly unfortunate in not meeting with them. A girl about eleven years of age, who was under my care as an out-patient at St. Thomas's Hospital, had had a very severe burn on the right side of the head when she was two years old. The scar occupied the greater part of the parietal region, and it was perfectly destitute of hair. I got no very clear details of the symptoms which succeeded this accident, except that she lost power all down the left side, a condition from which she had never recovered. Since then she had been subject to epileptic fits, in which the left side was convulsed; but she did not lose consciousness. The arm when I saw her was rigidly contracted, the leg being much less affected, and the deep reflexes were excessive all down the left side. Now, although the actual state of things was not demonstrated by a post-mortem examination, it is pretty certain that the burn caused superficial disease of the parts situated immediately below and within the cranium, and destruction of a portion of the motor cortex, with descending degeneration of the pyramid of the tract, was the result.

Case of Perforating Tuberculosis of the Skull, with Cerebral Symptoms.—In *Brain* (April, 1885) Dr. Edmunds describes a case which affords a good instance of descending degeneration and rigidity from a limited cortical lesion. The patient was a boy of fourteen, of a delicate family. Eighteen months before admission into St. Thomas's Home he had suffered from what was supposed to be tubercular peritonitis, and at the same time an abscess, accompanied by much headache, formed in the region of the left parietal bone. About six months later he complained occasionally of numbness in the right arm and hand, and two days before admission he had his first fit. He felt giddy, fell, became unconscious, foamed at the mouth, bit his tongue, and passed urine involuntarily. Both legs were convulsed, the right arm flexed, and the right hand clenched. He was admitted into St. Thomas's Home on Sept. 3rd, 1884. An abscess was found situated over the left parietal bone. The grasp of the right hand was much weaker than that of the left, and there was very slightly deficient power in the right leg and right side of the face. Sensation was everywhere normal, but double optic neuritis was present. I saw the patient with Dr. Edmunds at this time, and subsequently the abscess was laid freely open and a piece of dead bone removed, so that the dura mater was exposed and the pulsations of the brain could be seen. After this he had two fits, much like the one already mentioned. The discharge from the opening in the skull gradually diminished and the scalp covered over the edges of the wound, so that when he left the hospital there was a defect in the skull and scalp, through which the dura mater could be seen. A silver plate was made to protect this. On Feb. 4th, 1885, he left the Home, the chief symptom of disease which he presented being partial paralysis of the right arm and hand; when tested with the dynamometer, the right hand only marked twenty, the left seventy.

(To be concluded.)

ON SOME

MODERN REMEDIES IN HEART DISEASE.[1]

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THE purpose of this communication is distinctly practical. It is not to discuss the probable therapeutic position of agents of quite recent introduction, but to apply the test of practical experience to some remedies which have not come into general employment in the treatment of diseases of the heart but which have been, in my opinion, sufficiently investigated for the formulation of some valuable lessons. I propose to consider the two agents caffeine and convallaria majalis, and to place on record as succinctly as possible my experience of their effects in cases of mitral disease. We all know that it is dangerous in therapeutics to be too positive, and that in investigation it is impossible to be too careful. We cannot have mathematical precision, because it is impracticable to group similars. I have, however, distinctly divided the cases of mitral stenosis from those of mitral regurgitation, and the importance of such separation will presently be seen.

I.—MITRAL REGURGITATION.

We will first consider the conditions and the nature of the cases with which we have had to deal. We must all be convinced that though structural disease has rendered the closure of the mitral orifice in systole imperfect, such a state of things may be quite harmless and unattended with symptoms. It is true that an extra strain is put upon all the muscular chambers of the heart, but we know from cases which have been quiescent and symptomless for many years that the lesion can be balanced by an increased development and some enhanced energy of the cardiac muscle. The cases do not present themselves till compensation is disturbed or some new phenomena have arisen. Such disturbance is manifested in different modes in different patients. In one there will be palpitation, irregularities of heart's action, oppression at præcordium, heaving impulse or troubles directly referred to the heart itself; in another difficulties of breathing, variable, but increased by exertion; in another dyspeptic ailments and the results of venous congestion of viscera; in a third the gradual oncome of dropsy. Or the failure of compensation may be first evidenced by an acute attack of inflammation of the lung. We find in such a patient pyrexia, dyspnœa, and the physical signs of a limited pneumonia. On examining the heart we obtain evidence of mitral regurgitation. Then the clinical history teaches us that the pneumonia presents characters which differentiate it from the forms which we observe in those who are not the subjects of cardiac disease. The outline of percussion dulness is clearly defined, often wedge-shaped; the signs indicate the density of a lung affected with croupous pneumonia, but not the extent of area involved in such a case. The sputum differs from the rusty viscid

[1] Read before the Harveian Society, February 18th.

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material of ordinary pneumonia; it is frothy, and in many cases, having continued thus for a day or two, is suddenly found to be bright with florid blood. These signs indicate infarction of a branch of the pulmonary artery, and they may be the first sign which demonstrates to us the failure of compensation in cases of mitral regurgitation. In the enfeebled right heart coagula have formed, which, projected into the pulmonic arterioles, have given rise to the symptoms I have mentioned and to the appearances which, when discovered at the necropsy, have been in some cases designated pulmonary apoplexy. These, then, are among the signs which, when met with in a given case, announce to us that compensation is disturbed. We may have opportunities of watching the downward course: how the left ventricle becomes more and more dilated, how the right chambers yield also, and the venous system becomes engorged—a lesson, perhaps, pointed by the increasing size of the liver, as well as by distressing signs of dyspepsia; and then, how the over-dilated right ventricle permits regurgitation through the tricuspid orifice. This is a slight sketch of the occurrences when a heart affected with an imperfect mitral valve, permitting regurgitation through the mitral orifice, begins and continues to fail on account of the inadequacy of its muscle to overcome the difficulties. But these are by no means all the circumstances with which we may have to deal in any given case. There may be engrafted difficulties: the fires of the old endocarditis may be relighted, pericarditis may be manifested, and in both these conditions, I consider, myocarditis, which of course tends extremely to enfeeble the muscle, is in some degree an almost constant concomitant; or pleurisy, a frequent association with cardiac cases, may occur; or affections of other organs, especially the kidneys, may increase the dangers. Such are the difficulties which we are called upon to endeavour to overcome by treatment. Now, leaving all questions of general management, what are the special drugs on which we can rely?

1. *Digitalis.*—This is our first resource, and nearly all our patients are treated by it when faults of compensation are announced to us. There is yet some lingering of the old timidity which, regarding digitalis as a sedative and depressant of the heart, would withhold it when the heart is weak. Accurate investigation has shown that digitalis increases the force of the cardiac muscle and tends to cause the arterioles to contract, by a combination of these actions raising the blood-pressure within the arteries.[2] In a large majority of cases the careful administration of digitalis, combined with measures to promote a good general nutrition, when the early signs of imperfect compensation present themselves in cases of mitral regurgitation, is followed by such good results that it is unnecessary to seek for another agent. After a short period compensation may be restored, and then only general tonics and good dietary and management may suffice to maintain it. In a very considerable number of cases of mitral regurgitation, however, small doses of digitalis may be continued for long periods. My experience quite agrees with that of Dr. Broadbent, who says: "In mitral incompetence digitalis may be given almost indefinitely, and patients often take it for years with obvious advantage."[3] It is quite otherwise in mitral stenosis, as we shall see hereafter. What, then, are the drawbacks to digitalis? They are manifest even in the early stages of failing compensation in a minority of the cases of mitral regurgitation. With some patients the drug does not agree and cannot be made to agree. It may induce faintness and sickness. In children sometimes vomiting is induced, and it cannot be persevered with. In other cases, though these symptoms be not manifested, the drug, instead of increasing the force and decreasing the rate of the pulse, actually increases the feebleness and the rapidity. In some the drug, instead of acting as a diuretic, diminishes the quantity of urine excreted, and in a few instances there may be insomnia, restlessness, and nervous disturbance. These signs of intolerance of digitalis in cases of mitral regurgitation are rare, but they are sufficient to make us cautious. It is, I think, a good rule, and one that I always adopt, never to give an adult a larger dose than five minims of the tincture (or its equivalent in infusion or the powdered leaves) three times a day for a longer period than a week without my observation. Then, if tolerance is assured, the patient may continue to take the drug, or the dose may be continuously increased. It is to be remembered that the effects of digitalis may last longer than the period of its administration. Mr. Raven of Broadstairs has recorded the case of a woman aged sixty-seven, with dilatation of the left ventricle and anasarca, in whom fifteen minims of tincture of digitalis administered every four hours for five days induced diuresis and the relief of the anasarca, but symptoms of intolerance (nausea and vomiting) showing themselves, it was omitted, effervescing salines being substituted. The pulse, which had been quick, weak, and irregular, became slower, and ten days after the suspension of the digitalis it had fallen to 40 per minute.[4] It is in the later stages, however, that the failure of digitalis is most marked. Its power of increasing the force of the left ventricle seems to be gone; the right cavities continue to dilate, dropsy may be manifestly increasing, and yet the agent in all combinations with ordinary diuretics fails to increase the outflow of urine. Then we turn perforce to other agents, such as

2. *Caffeine.*—This is the highly nitrogenised crystalline principle, occurring in colourless silky needles, obtained from coffee, tea, or guarana, and existing in other vegetable products—e.g., the kola-nut. Caffeine is said to be a stimulant of the medulla and cardiac centres, to quicken the pulse and respiration, and to raise the blood-pressure when given in moderate doses. It may induce irregularity and intermittency of pulse; it is classed as a stimulant of the cardiac muscle. It acts as a diuretic, though not invariably so.[5] A large number of observers have testified to the beneficial effects of caffeine in various forms of cardiac disease, but there has been by no means a consensus as to its value and as to its mode of action. Francotte found that whilst caffeine increased neither the water nor the urea excreted in the urine in health, it had a pronounced diuretic action in cases of cardiac disease. Riegel of Giessen concluded that it produces the best effects of digitalis upon the circulation, that it is more rapid than digitalis in its action, is not cumulative, and may be administered to the feeblest person.[6] The following is the recent utterance of Professor Jaccoud. The effects of caffeine "are identical with those of digitalis; slowing of the heart pulsations; augmentation of its force of contraction; diuresis; no nauseous effects; no cumulative action. This drug, therefore, does not necessitate an incessant watchfulness. You can employ it in cardiac cases where the kidneys are affected."[7]

As to mode of administration. Pure caffeine is soluble in from 80 to 100 parts of water: its solubility is increased by acids. I have generally employed the citrate, which is freely soluble. It has been objected that this is a doubtful salt, but this objection is of small importance if the proportions of caffeine and citric acid used in its manufacture are definite, the only important function of the acid being to render the salt easy of solution. I employ it in from three-grain to five-grain doses, dissolved in the ordinary saline mixture—diluted liq. ammoniæ acetatis. The dose is generally administered three times in the day, but in some cases once only. Instead of the citrate, the pure caffeine may be employed, dissolved in solutions of benzoate or salicylate of sodium; in these it dissolves freely, and thus a concentrated solution may be made for hypodermic injection. The following is a good formula for internal administration: Pure caffeine and benzoate of sodium, of each one drachm; distilled water, six fluid ounces. Half an ounce contains five grains of pure caffeine.

(To be continued.)

[2] Brunton: Text-book of Pharmacology, Therapeutics, &c., pp. 225, 235, and 913 (Macmillan and Co., London, 1885).
[3] International Journal of the Medical Sciences, Jan. 1886, p. 85.
[4] British Medical Journal, Nov. 24th, 1883, p. 1015.
[5] Brunton, loc. cit., p. 800.
[6] Vide Cassell's Year-book of Treatment for 1884, Dr. Mitchell Bruce's summary, p. 3.
[7] Cardiopathies. Semaine Médicale, Jan. 13th, 1886, p. 10.

LEEDS GENERAL INFIRMARY.—The annual meeting of the governors of and subscribers to this institution was held on the 1st inst. The number of in-patients admitted during the year was 4154, against 3807 in the preceding year, showing an increase of 347. The daily number of beds occupied was 250, against 230 in the preceding year, and the average duration of treatment of each patient was twenty-one days. The rate of mortality was 4·93 per cent., but, deducting forty-seven patients who died within forty-eight hours after admission, the percentage is reduced to 3·90. During the previous year the rates were 5·34 and 4·18 respectively. The number of out-patients admitted was 19,106, against 16,730 in the preceding year, showing an increase of 2376. The total amount of expenditure was £16,510.

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SAVING CONDEMNED LIMBS.

BY SAMPSON GAMGEE, F.R.S.E.,
PRESIDENT OF THE BIRMINGHAM MEDICAL INSTITUTE.

A SURGEON'S responsibilities are probably never more delicate and weighty than when he is called upon to review a decision to amputate a limb. To the cases elsewhere published,[1] in which, from inability to coincide with proposed amputations, I have successfully adopted measures to save limbs, brief notes of a more recent case may be added preliminary to comment.

In compliance with an urgent call into the country I visited a patient whose leg was to be amputated next day. I gathered from the medical attendant that a fracture through the right ankle had occurred about a fortnight previously; great swelling having supervened, a considerable number of leeches were applied, and then padded wooden splints. When these were removed, after four or five days' intense suffering, a large wound was exposed on the inner aspect of the limb, which was much swollen. Splints were then discontinued, carbolic acid lotion applied, and amputation advised after consultation with a hospital surgeon.

I found the limb from foot to knee greatly swollen and tense, of deep red colour, and exquisitely sensitive to the slightest touch. The skin, to the extent of several square inches over the tendo Achillis and on the outer part of the leg, threatened disorganisation; and on the inner side of the ankle was an irregularly shaped deeply excavated wound, measuring from side to side five inches and five-eighths, from above downwards three inches and seven-eighths, and seemingly penetrating in its depressed centre into the ankle-joint. The patient's constitutional state was sound, but pain and want of sleep had produced considerable exhaustion. Unable to concur in the proposed amputation, I advised twenty-four hours' delay to test the effect of the treatment which I proceeded to carry out. Carefully supporting the limb, I raised the foot and placed on the outer side, from the lower third of the thigh downwards, a double millboard splint, gummed, and padded three inches thick with dry absorbent gauze and cotton tissue. The splint embraced the sole of the foot which, as well as the whole inner side of the limb, was padded with equally thick and perfectly smooth folds of the tissue. The whole was now smoothly bandaged with long spirals and without reverses, and with equable but decided pressure. Four six yard bandages were used. The limb was then placed on the outer side in a swing, and I visited the patient with the medical attendant the next day. Pain had been much less, and the loosened bandages denoted great subsidence in the swelling. Taking the limb out of the swing, the bandages on the inner aspect were cut, and the absorbent tissue, soaked with a great quantity of matter, removed; but the millboard splint on the *outer* side was not touched for some days. The skin was paler and much less sensitive and tense. The same dressing was repeated on the following three days. The improvement locally and constitutionally was then so marked that the question of amputation was not reopened; and henceforward the dressing was only renewed every other day. A considerable slough separated from over the tendo Achillis and the outer part of the leg, and the absorbent tissue before application was lightly sprinkled with some of the following lotion: Four grains of sulphate of zinc, half an ounce of methylated spirits of wine, one ounce of glycerine, and one ounce of water. The wound surface was occasionally touched with solid sulphate of copper. The dense deposit in the leg above the wound softened and gave evidence of subcutaneous pus, which was carried off by drainage-tubes, one of which was passed several inches up the inner side of the leg, by corkscrew movement, from beneath the upper edge of the wound. Another tube was introduced through a small incision just outside the middle of the tibia. The outer ends of the drainage-tubes were made to project out of the dressings into a tin tray containing dry earth, which could be changed whenever necessary. The more perfectly to immobilise the foot and ankle, a bracket millboard splint was secured on the outer side, so as to embrace the leg just below the calf, and also the outer edge of the foot. Later on, gummed millboard splints were placed on the inner and posterior aspects; and it may give some idea of the amount of padding to state that at each dressing half a pound of the absorbent gauze and cotton tissue was used. For the first six weeks the dressing was renewed every other day, after that on Mondays and Thursdays. The patient left her bed for the couch at the end of two months; in another fortnight she removed downstairs, and then the wound on the inner side of the ankle was solidly healed, with fair and steadily improving movement in the joint.

The recovery of the limb was due to a variety of agencies, chief amongst which were immobility, position, pressure, infrequent and dry dressings, with drainage by absorbent tissue glycerine and tubes. It was remarkable how the very tender limb, which at first could scarcely bear the lightest touch, became comfortable under equable elastic pressure, physiological position, and absolute rest. I have elsewhere[2] recorded a case in which a patient with a tender swollen leg, similarly treated, spontaneously expressed himself in these words: "It is wonderful how I can bear the limb handled now, and I could not stand a feather touching it last night." Glycerine in such cases acts as an antiputrescent, and by its great affinity for water powerfully aids absorbent tissues in securing perfect surface drainage, and keeping parts clean and sweet without the use of water. The plan of wound treatment, based on physiological principles, which I have enjoyed the frequent privilege of illustrating in these columns, was strikingly exemplified in the case above related. The limb was in such a condition that it was impossible to foretell its recovery with certainty, and it was only by the utmost care at every dressing that the result was attained. But I was from the first hopeful. In a large proportion of cases in hospital and private practice in which I have been called upon to amputate, I have not touched the knife and have spared the limb. A clear conception of physical and physiological principles, unprejudiced application and combination of therapeutic resources according to the circumstances of particular cases, gentle yet firm, painstaking yet not meddlesome, manipulation, are very powerful agencies in saving condemned limbs.

Birmingham.

[1] Case 49, p. 139. Case 51, p. 137. Case 63, p. 171. Case 84, p. 228, in Treatment of Wounds and Fractures, by the author, second edition. Churchills.

ON A CAUSE OF UTERINE DISPLACEMENT, NOT HITHERTO MENTIONED, CONTRA-INDICATING THE USE OF PESSARIES.

BY J. BRAXTON HICKS, M.D. LOND., F.R.S., F.R.C.P.,
CONSULTING OBSTETRIC PHYSICIAN TO GUY'S HOSPITAL, ETC.

I WRITE subject to correction, but I believe the cause about to be mentioned of uterine displacement and flexion has not been remarked upon, and yet it is not so very rare. Briefly stated, the concavity of the abdominal walls, noticeable in many spare women, will not permit the uterus to take its proper position in the pelvis, but, acting chiefly through the agency of the bladder more or less upon its fundus, pushes this portion back towards the promontory of the sacrum in a much more marked manner than occurs in a normal state, ending in flexion if the uterus be soft and its attachments to the front of the pelvis fairly firm. Again, if the uterus be tied by adhesions, or be already anteverted more than usual, then this condition is still more increased, and the bladder, unable wholly to rise above the uterus, expands by one arm of its Y-shaped cavity in its empty state above it, thus pressing the fundus down, and the other arm distending beneath the uterus tends to increase the anteversion, pushing up the lower end, thus increasing in two ways the anteversion. So that if the catheter be passed the fundus will be found projecting into the back of the bladder and closely opposite to the sphincter, preventing it easily entering, while it readily passes above and below to the full extent, and thus the functions of the bladder are materially interfered with. As most of these cases occur in single women, the uterus is generally held to the pubic segment of the pelvic floor

[2] Wounds and Fractures, p. 187.

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fairly firmly; but in those who have been delivered the laxity of these front attachments permits the bladder to push the uterus backwards and downwards, so as to bring the back of the uterus in close contact with the anterior wall of the rectum.

In books of anatomy and obstetrics it is stated that the fundus of the uterus reaches to the level of the upper edge of the pubes. This may be taken as generally correct, though from clinical observation I should be inclined to say that it not infrequently rises a little above the plane of the conjugate. The abdominal walls, springing from the edge of the pubes, curve rather forward, and thus do not interfere with the distension of the bladder, at least not to any great extent; nor in the empty state of the bladder with the position of the uterus of normal anteversion; though when the bladder is full it retroposes the uterus towards the sacral promontory. In the condition, however, of the abdomen walls above alluded to, and described in my paper on Abdominal Tension[1]—namely, of extreme retraction,—the walls become concave and are in close contact with the brim nearly throughout, in some cases resting nearly closely on the anterior surface of the iliacus and psoas, pressing to a not unimportant extent the viscera, &c. And thus it will readily be understood how that, as the bladder is being distended, unable to rise upwards, it pushes the uterus back to a degree to be measured by the difference of distance between the present incurved line of the inner surface of the walls and their former normal state. The uterus thus in course of time assumes a position with its axis approaching that of the conjugate of the middle of the pelvic cavity, the os in the retroposed position being somewhat apparently elevated, but pointing forwards, except when, to a certain extent, it becomes flexed. There is not much space between the rectum and the back of the uterus, and when fæces accumulate, as they are apt to do in this starved state of the system, they are more or less closely in contact. As I have pointed out, the pressure the walls exert is considerable—some of it due, as it appears to me, to a kind of permanent contraction of the muscles. This retraction of the walls could not take place without the absence of gas in the intestines; possibly the more solid contact of the inner face of the walls against the firm structures behind sets up a kind of chronic spasmodic state.

I am inclined to think that the uterine dartoid-like attachments are in a state of irritability also. That they are at times capable of this action I have no doubt, and this serves to explain the varying opinions of those who have seen the same case at different times, and it has its parallel in the action of the homologous dartoid tissue which causes retraction of the testicle. That all this can occur without some sort of uneasiness would be wonderful, and this it is which leads the patient to seek medical aid. Generally the patient is of a neurotic temperament, ill nourished, badly feeding, and much complaining; nor is this perhaps to be wondered at, seeing that owing to this incurved state and pressure the abdominal viscera are displaced and interfered with in their movements and functions, thus producing uneasiness, often visible on the face. Accordingly the medical attendant necessarily finds it a difficult task to determine whether the ailment had originated in the uterus, as a cause of reflex bad appetite and nausea, or not. If the pelvic region is much complained of, or if the medical man is over-intent on uterine maladies, he would very possibly be led to examine the uterus, and, finding the organ out of place, might be led to think this the prime cause, and to attempt to correct the displacements by mechanical means. Again, if the digestive organs were most complained of, the cause of the pelvic distress might be overlooked, or attributed to ovarian irritation, or to the constipation, to neuroses, or to fancy. Supposing, then, that in the course of treatment attempts are made by the medical man to correct the position of the uterus by pessaries, the same forces which pushed the uterus into that position he will find now to resist his efforts, and although he may be able to restore the organ in part and get the pessary into place, he will find it will not—as it cannot, indeed—properly act, and that the patient, instead of being relieved, is more uncomfortable.

The same remarks apply to both conditions whether retroversion or anteversion: so long as the abdominal walls remain in the same incurved state above described, it is difficult in most cases to elevate permanently the fundus; indeed, all attempts generally increase the distress, and the uterus shortly regains its former position.[2] In this retracted condition of the walls, the ovaries also along with the uterus suffer from the pressure and restraint of free movement, without which none of the viscera can work painlessly and perfectly; but when pessaries are employed, these are almost certain to be brought in contact with the ovaries, and consequently much distress is felt; and this is naturally most severe when rigid pessaries are used, such as are made of vulcanite, coralline, or metal—the kinds most likely to be used in these difficult cases. In some of these cases, it is probable that the uterus was already retroposed or anteposed—i.e., before the retracted state of the walls occurred; but the clinical aspect of the case is the same whatever the order of arrival. From a survey of this state of things I think it will be conceded that the uterus has assumed the position of neutrality to the forces existing about it, and that the treatment should rather be directed to remove these abnormal forces than to drive the uterus in antagonism to them, and thus place it, as it were, between the upper and nether millstone.

[1] Medical Society's Proceedings, 1884.

SEPARATION OF THE EPIPHYSIS OF THE CAPUT FEMORIS.

BY NOBLE SMITH, F.R.C.S. EDIN.,
SURGEON TO THE ALL SAINTS CHILDREN'S HOSPITAL.

THIS accident is doubtless extremely rare; in fact, the symptoms that were present in the few supposed cases that have been recorded were not sufficiently characteristic to be accepted as absolute proof of the nature of the cases. The subject is referred to in the third edition of Holmes's System of Surgery thus:—"Several supposed examples of this accident," writes Mr. Henry Morris, "have been recorded, but I agree with Mr. Holmes in thinking that they are not conclusive as to the real existence of this lesion." Mr. Morris refers to two cases.[3] Hamilton describes these and two other supposed cases, but does not consider any of them as proved.[4] The following, I believe, will be considered a clear instance of this lesion.

A delicate young lady, aged seventeen, nearly fell while walking on wet board boards, the right leg slipping outwards and forwards. She recovered herself, but felt severe pain, chiefly in the knee, but also in the region of the hip-joint. There was intense pain at the back of the knee-joint, which afterwards became more general. The pain in the hip soon decreased. A provincial surgeon of considerable experience, who saw the case, could detect no shortening of the limb, but the toes inclined outwards at about 30° from the vertical. The pain was referred to a spot just below Poupart's ligament. With perfect rest in bed the pain continued to lessen, and the patient was able to make some voluntary movements of the limb. The surgeon diagnosed "severe strain" of the femoral muscles from violent external rotation of the limb, with probably some rupture of the capsular ligament. About five weeks before this accident, the patient strained the right knee in walking quickly. With rest, this strain had apparently been recovered from, but it had probably left the muscles weak, and had thus contributed to the second and more severe accident.

When I saw the case on October 9th, 1885, eleven weeks had elapsed since the second accident. She had remained at rest in bed for three weeks, when, as the pain had ceased, she endeavoured to get up, but it was found that the right leg was quite useless. I found the leg measured in its length an inch and a quarter shorter than the other. Measured from the top of the trochanter to Bryant's line (a plan more convenient than Nélaton's for such a purpose), the same difference existed between the two sides. The right trochanter was slightly prominent laterally to an extent not greater than a quarter of an inch. The foot was rotated outwards to the extent of 50°; whilst in the recumbent position she could flex the thigh to an angle of 45° with the straight line of the body, without moving the pelvis. The leg was utterly useless to her for standing.

[2] It may be wise in some cases of anteversion to try if any benefit may be derived from retroposing the uterus; but this should be done by a sound rather than by a pessary.

[3] South's "Chelius," vol. i., p. 505; and Post, New York Journal of Medicine, vol. iii., p. 190.

[4] Fractures and Dislocations, 4th edition.

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as it would support no weight in this position. When the patient was placed on her side she could extend the thigh almost completely. When I attempted to rotate the thigh inwards, the toes could be turned an inch towards the vertical, but no further rotation could be effected without moving the pelvis. There was complete absence of pain in the hip when these movements were made.

The opinion which I formed of the case was as follows:—The first slight accident caused a sprain of the muscles surrounding the hip-joint, leaving them somewhat weak and favouring injury to the joint. At the time of the second accident, when the patient stumbled, the leg slipped outwards and forwards. Upon this latter occasion I believe the epiphysis was separated from the shaft, but was kept in position by the capsule, as occurs in intra-capsular fracture, and subsequently the bone became displaced by muscular action. It will not, I think, be doubted that the head of the bone was separated from the shaft. The trochanter being an inch and a quarter higher than that of the opposite limb, and the two trochanters on the same level with the front of the body, although the right one was rotated out while the left was held with the foot vertical, indicated one of two conditions: either the head of the femur must have been dislocated from the acetabulum, or, if it remained in its place, it must have been separated from the shaft. If it had been dislocated the head must have been discovered in the displaced position. In rotation outwards of a thigh the trochanter is naturally carried backwards, but here the trochanter was level with the other, and therefore the head of the bone would have been very prominent had there been dislocation. There was no sign of it. Assuming that the head of the bone was separated from the shaft, its production by disease of the joint was contra-indicated by the history, the symptoms, and the result of treatment.

Treatment.—The patient being placed under the influence of ether, I was able to flex the thigh upon the body nearly to a right angle. The movement of the joint in all directions was more free than before. While in a flexed position I applied manual traction to the thigh, rotated inwards, and brought the limb down to a straight line with the body. Very moderate force was required; a cartilaginous grating was felt to occur in the joint as the leg was brought down. It was thus placed in a position which was perfectly natural, except a very slight degree of shortening, certainly less than a quarter of an inch. The limb was fixed with a Liston's long splint, and kept so for six weeks. The joint was then found to be firm, but very restricted in movement—one may, in fact, call it anchylosed. The patient was allowed to move about with crutches for twenty-five days, using the foot slightly. She then discarded the crutches, and has since walked about comfortably. A mechanical support from the boot to the thigh and pelvis has been worn, and will be continued for a few months longer. The fixation of the joint might probably be relieved by forced movements; but I have thought it prudent to defer any such attempt until ample time has been allowed for repair to take place.

As an example of a rare if not unique accident, this case must be of interest. The result of treatment will also probably be considered fortunate, for the leg had been a useless appendage for eleven weeks before the reduction was effected.

Queen Anne-street, W.

A CASE OF PROLONGED RIGOR IN AN EPILEPTIC.

WITH REMARKS.

BY J. HARRINGTON DOUTY,

DEPUTY MEDICAL SUPERINTENDENT, WORCESTER COUNTY ASYLUM.

H. B——, aged seventy-five; epileptic since an apoplexy two years and a half ago; dementia. I was called the other day to see this patient, who was said by the charge nurse of the hospital ward to be in a rigor. The following note describes briefly the symptoms which presented themselves:—She was shivering from head to foot, like one who was in the early stage of an acute febrile illness; her teeth chattered violently; the skin was pale and in a state of "cutis anserina"; her face wore an expression of distress and anxiety; she groaned at times and complained of violent pain "down the back," and said now and then in a stammering way, "Oh, so cold, so cold!" It was impossible to count her pulse or hear her heart-sounds. Respirations were 36. As each breath was drawn the shivering became more violent up to the end of inspiration; the inspiration was noisy, and ended prematurely with a jerky closure of the vocal cords; during each expiration there was a slight but distinct quieting down of the convulsions. The temperature, taken carefully in the axilla, was 98·4°. She was as conscious as she ever is, and, though in a slow stammering way, answered one's questions pretty well. The rigor went on without intermission, the spasmodic muscular contractions which constituted the shivering becoming gradually more severe, and the skin colder and of a blue tint. Twenty-five minutes from the onset of the rigor the patient became unconscious, and a violent epileptic "fit" occurred, the tonic stage of which was absent; a comatose condition followed lasting for twenty minutes, after which the patient resumed her usual state, though of course she was much prostrated. The temperature throughout was at the normal.

Remarks.—Amongst the almost innumerable phenomena which usher in epileptic seizures, an aura such as this, presenting all the subjective and objective symptoms (excepting pyrexia) of an ordinary rigor would seem to be rare. In this case the stage of "contraction of the facial," which usually precedes that of the "cerebral vessels," seems to have been exaggerated; the spasm spread over the whole cutaneous vascular system, and hence the subjective "cold" and the complete rigor. It was interesting to note that the tonic stage of the fit was absent; probably the muscles were too much exhausted by the twenty-five minutes' duration of the rigor to develop any strong tonic spasm. The "fit," however, was distinctly separable from the rigor, the patient suddenly becoming unconscious, and the spasms of the rigor developing into clonic convulsions of a very severe type. The case is of some interest, too, when viewed in the light of a further testimony to the close pathological analogy between the two phenomena ordinarily distinguished by the names "rigor" and "convulsion."

Powick.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum allorum tum proprias collec as habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

WESTMINSTER HOSPITAL.

SMALL-CELLED SARCOMA OF THE FEMUR; AMPUTATION AT THE HIP-JOINT; RECOVERY.

(Under the care of Mr. G. COWELL.)

THE following case would appear to be one in which a sarcoma of the femur developed after, and apparently as the result of, a slight injury to the thigh, forming an example of what has been described as "acute traumatic malignancy." In THE LANCET for 1885, vol. ii., p. 1035, there is an excellent paper by Mr. Pearce Gould on "Sarcoma of Bone rapidly following Injury," and we would refer our readers to that for information on the subject, which is ably discussed. It would hardly be possible to get a better result than was obtained in this case by the employment of Davy's lever, the amount of blood lost during the operation being excessively small. The author of the paper to which we have referred prefers a modification of Furneaux Jordau's operation in such cases, performing a circular amputation of the thigh, securing the vessels, and then completing the operation by an incision along the outer side, through which the bone is disarticulated.

The following notes are furnished by Mr. Walter Arthur, surgical registrar.

H. H——, aged ten years, a schoolboy, was admitted on Oct. 21st, 1885, into Northumberland ward. The patient was a well-nourished boy, but of strumous appearance. He had had no previous illness. Both his grandparents are living and healthy; his father, who is a painter, is suffering

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from lead palsy; his mother is in good health. The boy has two brothers and one sister living, all of whom are strong and well; two brothers died young, but the cause of their death cannot be ascertained. On May 25th last the patient was sliding down some steps, when he fell down the last two, hurting the outer side of his left leg, about the middle, the skin being abraded. The following week a swelling was noticed at the lower and inner part of the left thigh. It became hot and painful, and rapidly increased in size.

On admission, a large tumour was found occupying the lower third of the inner side of the left thigh. It was rounded, smooth, and semi-elastic, and the skin covering it was tense. It was quite immovable, and seemed firmly attached to the bone, and was hot and at times painful. The knee-joint was not involved, and contained no effusion. There was no enlargement of the lymphatic glands.

On October 27th the patient was put under the influence of chloroform, and amputation at the hip-joint performed. The vessels were ligatured, and the well-rounded anterior and posterior flaps were brought together with silver wire sutures. The operation was strictly antiseptic. The external iliac artery was controlled by Mr. Richard Davy with his rectal lever, the patient losing only three ounces of blood.

Oct 28th.—The patient passed a fairly good night after the operation. There is some pain in the stump and slight headache. Pulse 110; temperature 101°.

29th.—The stump was dressed, on account of some signs of the discharge having come through. The wound looked quite healthy. The patient's general condition was good. The temperature ranged between 98·4° and 102°.

Nov. 4th.—The wound is healthy and healing, and there is little discharge. The drainage-tube was removed on the 2nd. The patient's appetite is good, and he is otherwise progressing favourably. Since the last note the temperature has ranged between 98·4° and 101·4°.

7th.—The boy is improving and the wound healing; there is rather more discharge to-day, but it is quite sweet. The temperature is normal.

16th.—The wound has nearly healed, and the patient is convalescent.

Mr. Cowell described the case as one of rapidly-growing sarcoma of the femur after injury, and called attention to the frequency with which this disease occurs in children from apparently trivial injuries. Removal of the whole of the implicated bone was necessary for the eradication of the disease. On subsequently examining the growth, it was found to be firmly attached to the bone and encapsuled by the periosteum. Nodules of the disease were found in the medulla of the bone through the whole of the diaphysis; the epiphyses were not involved. The microscopic examination showed a small-celled sarcoma.

ROYAL ALBERT EDWARD INFIRMARY, WIGAN.

TRAUMATIC RUPTURE OF URETHRA; PERINEAL SECTION; COMPLETE RECOVERY; REMARKS.

(Under the care of Mr. W. C. BARNISH.)

FOR the following notes we are indebted to Mr. John Buchanan, house-surgeon.

Patrick C—— was admitted into this hospital at 7 A.M. on Sunday morning, Sept. 20th, 1885. At 7 P.M. the previous evening, while standing with his legs extended between two halves of a counter in a public-house, he was caught on the foot by one of his comrades causing him to come down straddle on the counter door. He had much pain immediately after the accident; no blood came by the urethra, but an hour afterwards he found himself unable to pass urine. He returned home and went to bed, and in a few hours became so ill, with inability to micturate and intense pain, that he called in one of the medical men of the town at 4 A.M. Some blood had come from the urethra by this time. Unsuccessful attempts were made to pass a catheter, and blood poured freely from the urethra at each trial. Aspiration above the pubes was performed, with consequent relief, and his removal to hospital ordered.

On admission, attempts were again made to pass a catheter, but as profuse hæmorrhage was easily set up they were not persisted in. The point could be felt grating in the tissues. A hot bath was of no avail. A hypodermic injection of morphia was administered, and the man lay quiet and comfortable during the day. Towards evening the bladder became distended, and at 7 P.M. dulness was within an inch of the umbilicus. Temperature 98·8°. Man feeling very ill. An enema of soap and turpentine was ordered, which acted copiously immediately, but gave no relief. Considerable hæmorrhage continuing from urethra. At 9 P.M. the patient was put on the operating table, chloroform administered, and perineal section performed by Mr. Barnish. A grooved staff was passed down the urethra to the seat of obstruction, and the point could be felt in the perineum just behind the scrotum, with the left forefinger in the rectum, Mr. Barnish plunged his knife in the middle line immediately in front of it, and cut towards the centre of the perineum. With the finger in the wound the point of the staff could be felt, covered with tissue, and with a little dissection it was cleared. With some difficulty the opening of the urethra towards the bladder was found, and a celluloid catheter passed in. The staff was now removed, and a gum-elastic catheter with boule point passed down the urethra from the meatus and out at the wound. It was then curved on itself and passed in from the wound to the bladder, the celluloid catheter being first removed. The catheter was now tied in position, the wound plugged with oiled lint, and the patient removed to a separate ward.

Sept. 21st.—9 A.M.: Patient comfortable; slept most of the night without any narcotic. Only a little bleeding from the wound; plug removed. Urine passing freely by catheter. No sickness. Temperature 101·2°. A pad was applied to the wound.

22nd.—Spent a good night; no pain; no hæmorrhage. Communication through catheter free. On introducing the finger gently into the wound the catheter can be felt exposed for about an inch.

23rd.—A drop of pus at the wound and at the meatus. Bowels rather relaxed.—7 P.M.: Patient very ill; tube blocked. Temperature 102·8°, and a blush over the scrotum. A large water dressing applied.

24th.—Blush gone; patient feels well.

28th.—Tube blocked; patient very ill in a short time. Cleared, and the patient felt well in a few hours. Urine very gritty; acid mixture injected into bladder. Much pus per urethram. Tube again blocked and cleared; urine much the same.

30th.—Urine much clearer than two days ago.

Oct. 2nd.—Up to this time only a little urine had come by the wound at intervals, and at 10 A.M. to-day the catheter was removed. The removal caused considerable pain, as the bulbous point was thickly coated with phosphates. An ordinary metal catheter (No. 10) was now passed regularly three times in the twenty-four hours for a few days.

6th.—Passed urine himself, and in a good stream.

8th.—A double-barrelled catheter (No. 11) was now passed twice daily, and the bladder washed out with an acid solution. From this time the patient made an uninterrupted recovery.

19th to 29th.—No urine came by the wound. He passes a good stream. Catheter passed daily. Patient regarded as convalescent; sits up most of day; greatly weakened by the process, and has lost much flesh.

30th.—Patient discharged.

Nov. 5th.—From Oct. 29th till to-day a little urine has come each day by the wound, but none since, and patient has resumed work.

20th.—Attends twice a week to have a No. 12 catheter passed, which is accomplished without the slightest difficulty; he is now to attend once a week.

Dec. 14th.—Wound remains perfectly closed, and patient feels very much the same as before the accident.

Remarks by Mr. BARNISH.—This is another of those cases which show the necessity of decided measures being taken early in instances of this serious accident—traumatic rupture of the urethra; and the completeness of the cure in the comparatively short space of time in this case shows the confidence with which perineal section may be adopted. There is the question whether, when the urethra is opened from the perineum, it is better to pass a catheter in from the wound into the bladder and let the urine drain by the perineum, or to pass it down from the meatus, as was done in this case. In this case the latter method acted so well that we may safely adopt it again in a similar one. The ease with which the soft flexible catheter *à boule* (Weiss's best) was borne was very noticeable, compared to what is the general experi-

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ence of keeping in a metal instrument. The method secures the patency of both ends of the urethra towards the wound, and the opening of the prostatic portion of the urethra into the wound is probably much more easily found with the point of a flexible instrument curved upon itself than with the point of a solid instrument which has passed through the penile portion. The necessity of keeping the catheter from becoming blocked by passing a stilette every day, or every second day, cannot be too much insisted on, as was seen by the rapidity with which the man became seriously ill when this occurred, and that this was the sole cause was evident from the equal rapidity with which he was restored to comfort as soon as it was cleared. In the twelve days in which this catheter was retained it had not corroded or altered in structure so as to obstruct its patency (it became blocked with the gritty matter from the bladder), or to cause any fear of danger from the end dropping off into the bladder. In another case, however, I should not be disposed to leave it so long, as the deposit of phosphates on the boule caused considerable pain on extraction, probably even adding somewhat to the laceration of the urethra.

ROYAL UNITED HOSPITAL, BATH.

A CASE OF EXCISION OF THE RECTUM FOR SCIRRHOUS CANCER; RECOVERY; REMARKS.

(Under the care of Mr. H. W. FREEMAN.)

THE notes of this man's history were supplied by Mr. G. Helps, house-surgeon.

J. H——, aged forty-seven, a warehouseman, applied at the hospital on Aug. 26th, 1885, to get relief from piles. He stated that some small piles externally had troubled him a little for three years, but that he was in his usual good health, passing daily solid full-sized motions until three months since, when he began to get uneasy "about his seat," passed slimy stools with some blood, his bladder also became irritable, and he lost his appetite and became visibly thinner. No family history of malignant disease could be made out. He was one of five children, all healthy; and both parents were alive and well. Had always lived a steady life, and had never had syphilis.

On digital examination of the rectum, a hard, nodular, ulcerating growth was felt, commencing half an inch above, but *not* involving the sphincter, and extending for two inches and three-quarters vertically upwards along the long axis of the gut. It seemed to encircle the bowel annularly, except for an inch anteriorly, contiguous to the prostate, and this was smooth and quite free of disease; the bulk of the growth was felt to be placed chiefly posteriorly, and on the right lateral aspect, where it was very thickened and markedly adherent to the deeper structures. The growth, however, moved freely enough elsewhere, and the tip of the index-finger could be carried well beyond the upper margin. The case was thought to be an excellent one for excision, and the patient declared for the operation. Accordingly, on Sept. 2nd he was placed under ether, and a No. 10 silver catheter passed into the bladder and held there. Mr. Freeman then passed a curved, sharp-pointed bistoury, guided by the finger, well above the upper margin of the growth in the posterior wall of the bowel, plunged it backwards, bringing out the point at the tip of the coccyx in the middle line, thus making the triangular incision of Denonvilliers. Then with a small pair of Gardiner's straight, probe-pointed scissors he cut through the marginal union of skin and mucous membrane all round the sphincter, except for an inch in front, and with the finger and scissors the bowel was gradually separated from the levator ani and deep fascia, from behind forwards, until that portion of the bowel was reached adjacent to the prostate, where about one inch was found smooth and free. This was not separated, but was cut out and left *in situ*. A strong clamp was placed on the highest part of the growth when well drawn down and cut through with scissors. Portions of remaining growth were well searched for, and all suspicious particles removed. The peritoneum was not seen. All vessels were tied or twisted, but the hæmorrhage was of a trifling character throughout. Hot water was injected, and carbolised sponges soaked in Friar's balsam plugged the wound completely. An eight-inch gum-elastic vaginal tube was passed between these sponges into the cut orifice of the bowel above and retained. No attempt to bring the bowel and edges of the wound together was made, and a T-bandage was applied to make secure.

The patient was considerably collapsed for three or four hours after the operation; but he rallied during the evening and took brandy-and-water, had one-sixth of a grain of morphia injected hypodermically, and passed a fair night. The sponges were all removed on the following morning, the tube retained, and the huge ischio-rectal cavity was washed out with Condy's fluid lotion, repeated every four hours, with a couple of ounces of eucalyptus oil (1 in 10) injected subsequently to keep sweet. His bladder was troublesome for four or five days, but it subsided without treatment and gave no trouble afterwards. He passed enormous quantities of flatus through the tube, with great relief, and the first fæcal evacuation took place on the fourth day. The seventh day after the operation his temperature, which had never been above 101° at night, fell to normal, and, complaining of sweating, he was given Schacht's cinchona for his apparent exhaustion and cascara sagrada to keep his stools soft. He seemed to be doing well in every way, the wound suppurating freely and healthily, until the twenty-first day after the operation, when he felt chilly, his temperature rose to 104·6°, followed by a rigor, and the following morning a blush was seen about the margin of the wound and cellulitis spreading upwards into the ischio-rectal cavity. This condition gave rise to considerable anxiety, but the washings of the wound were more frequently repeated, large doses of quinine and perchloride of iron being given periodically, and in ten days the temperature became again normal, the healthy discharge supervened, and he progressed towards recovery without any further drawbacks. The tube was withdrawn on the eighteenth day after the operation, and by the aid of a Trouvé's electric light it was interesting to see, from time to time, how the healthy margin of intestine seemed to be growing downwards towards the external orifice, which contracted rapidly. He was kept in hospital for observation until Dec. 19th, when he desired to be discharged, looked well and putting on flesh. The cicatrised external orifice at this time was cartilaginous, gristly to the touch, and admitted the index-finger, and he had some considerable control over his fæces. He came again in three weeks after his discharge, and his condition was satisfactory. The microscope showed undoubted scirrhus.

Remarks by Mr. FREEMAN.—The case on careful examination was thought to be one specially adapted for excision, because the upper margin of the growth could be easily reached with the finger. It was readily movable; the adhesions were partial, and chiefly to the levator ani of the right side. The growth also was in its infancy, and but little constitutional effect was apparent. The key of the operation seemed to hinge on the free posterior incision as practised by Denonvilliers, as we get immediate control over the bowel and but little hæmorrhage, and this man did not lose more than a couple of ounces of blood from beginning to end. The separation of the gut from the surrounding tissues seemed easy enough in this early stage, and although at the time it seemed right to leave the healthy portion of bowel anteriorly, I regret it now, notwithstanding its freedom from disease. To do excision at all, I believe it should be done completely, and the whole calibre of the bowel removed, and to this course I see Volkmann assents. The touch does not seem to me sufficient to guarantee the absolute immunity of a part, and time will show here how far the remaining portion of bowel should or should not have been removed. The disease did not reach within a full half-inch of the sphincter, and extended upwards two inches and three-quarters, its longest diameter being annular, as usually found. It is interesting to speculate how far embryonic development will explain the locality of malignant disease of the rectum. The tucking in of the anal invagination of the epiblast for about two inches to two inches and three-quarters extends upwards to meet the hypoblastic part of the hind gut, and goes to form the so-called "proctodæum," and here a faint white line can be sometimes discerned, and here the disease is usually found to begin spreading out mostly in a circle. Much the same thing is found in cancer of the throat; the stricture is usually at the white line there—the so-called "stomodæum." Free granulations probably absorb, and the cellulitis that ensued was the result of contagion conveyed by the hands of the nurse who washed out the parts, as she was known to have daily dressed a phlegmonous case of erysipelas in another

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ward. The patient derived great comfort from the tube in the rectum, as it conveyed off collected flatus, and it was useful to wash out high up the chasm. His stools were kept soft with cascara sagrada and glycerine. The purulent discharge was enormous, but after the septicæmic intoxication had passed away he took his food and stimulants well, and he did not again look behind him. He has been desired to come up for inspection from time to time so as to keep a good look out on the cartilaginous contracted anus.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Trabeculated Skull in Infants.—Diffused Symmetrical Pulmonary Cirrhosis.—Lympho-sarcoma of Stomach.—Cylindroma of Palate.—Ante-mortem Digestion (?) of Stomach.—Congenital Adeno-sarcoma of Kidney.

AN ordinary meeting of this Society was held on Tuesday last, Dr. J. S. Bristowe, F.R.S., President, in the chair.

Dr. GOODHART showed a Trabeculated Skull from an infant aged six months, who had also a spina bifida. It died as the result of injection of Morton's fluid. On the inner aspect the calvaria presented a number of ridges or arches of bone with membranous opercula or thin plates of bone between. The relation of this condition to cranio-tabes was mooted. There was no evidence of congenital syphilis or rickets. It was probably better to regard it as a malformation, another condition of skull to that of cranio-tabes.—Dr. HALE WHITE gave an account of a trabeculated skull in an infant. The patient, a child three months old, was admitted into Guy's Hospital for a large congenital tumour projecting upwards from the anterior half of the head. It was tapped and cerebro-spinal fluid drawn off, but the child gradually sank and died. At the necropsy the following condition was observed:—There was a transverse depression across the skull from ear to ear; the frontal bones were widely separated; their opposite borders were indented; the interval was filled up by membrane. The other bones of the skull were so firmly united that in some places the sutures could hardly be made out. The two parietal bones were close together. The bones of the base were normal, but all the bones of the vertex were remarkably thin, being about the thickness of egg-shell. The parietal and that part of the occipital in front of the foramen magnum for the most part retained their membranous condition, but going across the membrane in all directions were trabeculæ of osseous tissue; the average width of these was one-sixth of an inch, and they formed sharp prominent ridges on the interior of the skull. The smallest trabeculæ were the merest sprinkling of osseous substance in the membrane, which was thus cut up into a number of areas, some rounded, some polygonal, and varying in size from a mere point to a threepenny-piece. The dura mater followed these ridges accurately. Seen from the exterior, the transparent membranous areæ bounded by trabeculæ were very evident, but there were no ridges. On the petrous portion of the temporal bone the superior and posterior semicircular canals were most evident. There was no flattening of the convolutions of the brain, the ventricles were not dilated, and it was impossible to say whence the fluid which was drawn off came, and also to say what was the cause of this peculiar condition of skull.—Mr. SHATTOCK had seen similar specimens. In one instance there was spina bifida, followed by hydrocephalus. He explained the appearance as a result of atrophy resulting from internal pressure; the bone between the convolutions being left.—Dr. DYCE DUCKWORTH related a case of chronic hydrocephalus which presented a typical example of cranio-tabes.—Mr. R. W. PARKER said that Bednär had described congenital membranous holes in the skull. He had seen cranio-tabetic conditions in cases of hydrocephalus. With the original opinion of Elsässer he agreed, that rickets in suckling infants gave rise to cranio-tabes.—Dr. J. S. BRISTOWE believed that the fluid must have been in the ventricles.—Dr. GOODHART, in reply, said in his case there was no hydrocephalus. In hydrocephalus he had seen something like it, but not the same condition. It appeared to him as though the bone were forming in the membrane and making its way inwards.—Dr. HALE WHITE could not admit that internal pressure would give rise to this special condition.

Dr. PERCY KIDD read notes of a case of Diffused Symmetrical Cirrhosis of Lungs, which occurred in a woman aged thirty-seven, in whom expectoration, short breath, cough, anasarca, pains in the chest and back, loss of appetite, enlargement of the right side of the heart, and dulness about the right apex and both sides behind, with albuminuria and scanty urine, were the chief clinical features. The heart was hypertrophied, and weighed seventeen ounces and a half. On section of the lungs, dry, deep-red, branching fibroid strands, perfectly symmetrical, pervaded all parts; irregular nodular patches were also to be seen, probably the transverse sections of the branching bands; there was no special thickening of the interlobar septa. In the left upper lobe a mortary mass was discovered, and elsewhere a few caseous nodules. The mediastinal glands were large, tough, and pigmented. In some places the microscope revealed thickening of the alveolar walls. The branching bands appeared to be of peribronchial situation, and microscopically showed all degrees between a cellular and fibrous structure. The perivascular changes were, however, purely fibrous. There were many hæmorrhages that probably resulted from the wide thin-walled capillary vessels. The kidneys and spleen were indurated. In places there was some intra-alveolar fibrosis, and but a slight degree of pleuritic thickening. No tubercle bacilli were to be discovered anywhere. The new growth of fibrous tissue was of bronchial or peribronchial origin, and, pathologically, might be described with some German authors as peribronchitis fibrosa. The caseous nodules were possibly gummatous.—Dr. GOODHART considered that the presence of general arterial sclerosis lent support to the view that the case was one of syphilitic phthisis, of which disease he had seen several examples.—Dr. GREEN regarded the specimen as one of great rarity, and did not look upon it as syphilitic.—Dr. PERCY KIDD thought the condition might possibly be syphilitic.

Dr. HADDEN showed a specimen of Lympho-sarcoma of the Stomach which came from a woman aged fifty-three, in whom weakness, pallor, loss of flesh, and pleuro-pneumonia of the left lower lobe were the chief clinical features. During life also a tumour in the hypogastrium, which turned out to be a uterine fibroid with an elongated pedicle, was detected. There was some degree of leucocythæmia. The specimen shown was a globular tumour on the anterior wall of the stomach projecting forwards midway between the orifices and near the lesser curvature; on the inner aspect of the organ was to be seen a triangular ulcer that led an inch and a half into the tumour; a second ulcer, smaller, was situate on the left of the first. Fatty degeneration of the heart also existed. Microscopically the tumour exhibited small, rounded, nucleated cells lying in a reticular structure having a papillary or alveolar arrangement. Necrosis had probably produced the ulceration and the prolongation inwards. Allusion was made to a specimen of malignant lymphoma of the mesentery shown by Mr. Silcock last session.

Sir WILLIAM MAC CORMAC exhibited a Tumour of the Palate taken from a woman, aged thirty, in whom the voice had become thick, and difficulty in swallowing existed. About two months before admission a swelling was noticed by the patient in the mouth. The tumour, nearly the size and shape of a Tangerine orange, occupied the left half of the palate, and reached nearly to the teeth in front; it had a firm elastic consistence, and was very vascular on the surface. The lymphatic glands at the angle of the jaw were enlarged. A preliminary tracheotomy was done to prevent suffocation from hæmorrhage, which was very free, but stopped by pressure and thermo-cautery. The cheek was incised before the tumour was enucleated. The hole in the hard palate was closed by an obturator. The microscope showed a hyaline connective tissue, traversed by groups of cells having a branching form; Mr. Shattock pronounced it to be a cylindroma of the palate. Reference was made to specimens exhibited by Mr. Treves, and also to others that had occurred in the practice of Verneuil and other continental surgeons.—Mr. A. A. BOWLBY agreed as to the tumour being a genuine cylindroma. It reminded him of a specimen shown by Mr. Butlin from the popliteal space; this was also encapsuled, but still very malignant, and led to amputation of the thigh. The clinical history of cylindroma was not a benignant one; the tumour was, indeed, but one form of round-celled sarcoma.—Mr. BUTLIN agreed with the remarks of the previous speaker.—Mr. F. T. PAUL had seen similar

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tumours in the tonsil, cheek, and lip, which he regarded as of adeno-myxomatous nature, like the tumours of the parotid gland.—Dr. F. SEMON said that, judged by the number of cases that had been recorded, he had come to the conclusion that both benign and malignant tumours of the palate were very rare.—Mr. SHATTOCK could not agree with Mr. Paul that the cylindroma of the palate was like the parotid tumours.—Mr. ROGER WILLIAMS had seen two similar tumours in the upper lip.

Dr. HANDFORD exhibited a specimen of Ante-mortem Digestion of Stomach. The patient was a man aged twenty-three, who had had an attack of hæmatemesis and melæna two years before his final illness, which began last year on July 20th, when he was walking by the side of the Trent. The man felt dizzy, had pain in the abdomen, and fell down. On admission to the Nottingham Infirmary he was pale, and had severe pain, which was relieved by pressure in the epigastrium. The abdomen was flat; there was difficulty in swallowing; a slough was noticed on the margin of the soft palate. He was fed by milk and ice, and given a hypodermic injection of morphia. His condition was unaltered from July 21st to 23rd. On the 24th he vomited one pint of blood. He was moribund on the 27th, and died on the 28th. The necropsy was made five hours after death. A blood-clot covered the left lobe of the liver, and weighed 1 lb. 13½ oz. There was a cavity, with friable, rough, irregular walls, occupying the region of the stomach; the liver projected into the cavity. There were no signs of general peritonitis, but the cavity was shut off by adhesions. A softened discoloured patch was found in the diaphragm, and another in the omentum. Poisoning was suspected, and Taylor on Forensic Medicine referred to cases of corrosive poisoning that lasted a few days. There were fermentative changes in the blood-clot; he had submitted the specimen to Mr. V. Horsley, who said there was no trace of thrombosis of the gastric vessels.—Dr. BRISTOWE asked for information as to the adhesions; was the hæmorrhage into the stomach? In reply it was stated that the adhesions were recent, but the stomach had been so much destroyed that it was difficult to say where the hæmorrhage had occurred, the only recognisable parts of the stomach being the pyloric and cardiac orifices. The kidneys were healthy.—Dr. F. PAYNE asked whether an analysis were made as to poisoning. If the case were one of ante-mortem digestion it would be unique in medical literature.—Dr. HALE WHITE pointed out that the cavity described corresponded exactly with the lesser cavity of the peritoneum, and considered that post-mortem digestion might account for some of the appearances.—Dr. HANDFORD was inclined to regard the case as one of corrosive poisoning in the first instance, but believed that considerable ante-mortem digestion of the stomach had also occurred.

Mr. F. T. PAUL (Liverpool) showed specimens and drawings of Congenital Adeno-sarcoma of Kidney taken from a girl aged two years. The clinical history had already been published in the *Liverpool Medico-Chirurgical Journal* of 1885. The tumours were situate between the pelvic membrane and the substance of the kidneys. Microscopically broad trabeculæ of rounded cells were to be seen, and also tubes with considerable lumen; the complex nature of the tumour, having round cells, spindle cells, white fibrous tissue and elastic tissue, with young striated muscular fibres, was referred to. There was no doubt that much of the tumour was composed of newly formed renal tissue. The specimen was congenital not only in origin but also in growth. He also read a brief paper on Calcification of Arteries, alluding only to that of the muscular coat of the smaller arteries as met with in senility. The process was associated with a genuine process of ossification, although it commenced as a calcification. After the calcification the hard plates became fractured in various directions. This led to irritation and the deposition of inflammatory products. In the calcareous plates a fibrous structure, the remains of the muscular fibres, and also sometimes laminated spherical deposits, could be discovered. The plastic inflammatory products developed into bone. The changes were well seen in the posterior tibial artery; here the fractures in the calcareous plates were mended with patches of bone, even sometimes having the appearance of Haversian systems. The change could be seen in a thrombus also. The order of change was calcification, followed by irritation and exudation of lymph, while ossification took place.

The following card specimens were exhibited:—Dr. Payne (for Dr. Jacob, of Leeds): Tumour of Finger (referred to Morbid Growths Committee). Dr. Hadden: Single Cyst of Liver. Dr. Handford: (1) Right-sided Ulcerative Endocarditis; (2) Acute Intestinal Obstruction, due to a band; (3) Thrombosis of Left Posterior Cerebral Artery; (4) (for Mr. E. Powell) Congenital (?) Atrophy of Right Kidney. Dr. Pasteur: Aortic Aneurysm with Mitral Stenosis. Mr. E. H. Fenwick: Post-trigonal Pouch of Bladder, containing Stone, Kidneys Hydronephrotic. Mr. Shattock: Lumbo-sacral Meningo-myelocele cured by Morton's Treatment.

CLINICAL SOCIETY OF LONDON.

Hernia Cerebri treated by Silver Plate closing the Opening in Skull.—Nervous Sequelæ of Small-pox, especially as affecting the Speech.—Baruria in a Woman.—Phosphorus Necrosis of Lower Jaw.

AN ordinary meeting of this Society was held on the 12th inst., Mr. T. Bryant, F.R.C.S., President in the chair.

Dr. MACLAREN read an account of a case of Hernia Cerebri successfully treated by closing the Opening in the Skull with a Silver Plate. A man, aged twenty-six, was admitted to the Cumberland Infirmary on March 25th, 1885, with a compound fracture of the skull inflicted three days before. For six days after his admission his condition grew progressively worse. He became deeply comatose, passed motions involuntarily, and had frequent convulsive attacks. The scalp wound was then enlarged, and all fragments of bone removed; they were ten in number, and some deep in the brain substance. The aperture left in the skull was three inches long, and varied in breadth from one inch above to half an inch below; it was three-quarters of an inch in front of, and parallel to, the left temporal ridge, and its lower end was at the supra-orbital ridge. Some brain which had protruded was removed and some diffluent brain gently syringed away. While being put under chloroform it was noticed that the right side was paralysed. An unsuccessful attempt was made to make the wound aseptic. From this time his condition improved; he gradually became less comatose, convulsions ceased, and in about a fortnight he understood what was said to him, though he did not speak. By this time hernia cerebri had again occurred, and Dr. Maclaren removed it on April 14th placing a silver plate (a rolled out florin) inside the skull, so as to block the opening. On May 3rd the hernia cerebri again existed, owing to the plate slipping to one side within the skull. The protrusion was cut off, and this time the plate so secured with wire that it could not be thrust to one side. The scalp was liberated by two incisions parallel to the wound and sutured over the plate. The plate was left in for two months, no protrusion occurring, when it was removed, and the wound soon healed. He was discharged from the hospital on Sept. 5th, when there was slight dragging of the right leg, absolute paralysis of the right arm, and slight want of expression on the right side of the face. He was sometimes at a loss for a word, and much given to repeat the same expressions. During the latter part of his stay in the hospital he had two fits, and he has had several since mostly at night, and always with an aura. The paper pointed out the very small amount of local irritation caused by the plate, which did not exercise any pressure on the brain, but merely replaced the normal covering. The result was a substantial reason for trying it again in a similar condition.—Mr. BRYANT congratulated Dr. Maclaren on the success of his case; the treatment was novel, but he doubted whether it would replace persistent external pressure—say, with thick sheet-lead,—by which method he (Mr. Bryant) had obtained considerable success; he deprecated removal of cerebral hernial substance. He asked why external portions of the hernia were sliced off.—Mr. GOLDING BIRD related three cases of hernia cerebri. Tannic acid was found to be a useful application in the first case, which recovered completely. In the second case tannic acid was employed, but extensive sloughing and fatal cerebritis ensued. In a third case simple antiseptic dressings were used, with ultimate success. He ventured to think that external pressure would prove equally satisfactory with internal pressure.—Mr. A. PEARCE GOULD spoke of a case of hernia cerebri the size of a Barcelona nut; external pressure by means of a pad of lint failed to repress the growth; there were no symptoms till convulsions set in, which being repeated, Mr. Gould shaved the hernia off, and opened and drained an abscess;

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some paralysis occurred after this, but passed away, and the boy recovered completely. He considered that the tendency to the development of cerebral hernia depended on the intracranial condition, such as inflammation.—Dr. MACLAREN, in reply, said that external pressure was tried in every form. Lawrence had pointed out that in fungus testis there was a mixture of granulation tissue and the proper tissue of the organ; so it was in hernia cerebri.

Drs. WHIPHAM and A. T. MYERS read a paper on some Chronic Nervous Sequelæ of Small-pox, especially as affecting the speech, and narrated the particulars of two cases. They had been unable to find any reference among English writers, although doubtless such cases occasionally occur in this country, seeing that several instances are on record in Germany and in France. The patients were married women, aged forty-five and forty-two respectively; one had small-pox in 1879, the other in 1881, and both recovered incompletely with some paralytic and ataxic symptoms, the chief peculiarity being an affection of the speech, in which the syllables were scanned or "squeezed out." In the first case the patient had enjoyed excellent health until she fell sick of small-pox, three weeks after confinement. The disease was of the confluent variety. She was delirious for twelve days, and on recovering her senses it was found that she was unable to make herself understood for the next few days. There was much muscular weakness in her hands and legs. Her temper became very irritable. Her tongue was protruded to the right at first, with the tip pointing downwards, and as protrusion was completed, it gradually assumed the normal position, and this symptom lasted for three years. The right azygos uvulæ acted more powerfully than the left. Her power of writing left her in the earlier stages of the disease, but was subsequently recovered to a great extent; she could not button her clothes, and if she held a cup in her hand she was liable to drop it; the left hand was more affected; the grasp of both was feeble. Sensation was perfect, and her intelligence when under observation at St. George's Hospital was remarkably acute. The legs were affected at first, and her gait was extremely awkward and unsteady. With the exception of the affection of the speech, she recovered from all these symptoms. She first came under observation in Jan. 1880, and on Nov. 15th, 1885, the peculiarities of speech remained—viz., her inability to pronounce correctly such words as "Clara," which became "Nai-dee"; "Richard," which was pronounced "Nit-erd"; each syllable was forcibly jerked or "squeezed" out. When she attempted conversation it was almost impossible to understand her. The second case was that of a woman aged forty-two, who had enjoyed good health until July, 1881, when she caught small-pox. The disease was modified by vaccination, but for the first few days she was in a state bordering on mania, and unable to articulate. She bit and tore the bedclothes with her teeth, and grasped objects firmly with her hands, although she had nearly lost the power of moving her upper and lower extremities. Stools were passed voluntarily. Her pupils were unequal. In this state she remained for a week. She then partially recovered her senses and her power of articulation. Her speech very closely resembled that of the former case, being slow, nasal, and monotonous; each syllable was jerked out in a semi-explosive fashion, but she did not, as in the former case, experience difficulty with special letters or words. She was liable to outbreaks of temper, and her gait showed some incoördination, though there were no symptoms of locomotor ataxy or disseminated sclerosis; the deep reflexes in the legs and arms were slightly in excess. She could not perform the movement of the shake on the piano, nor could she plait her hair; she could not nurse her child lest she should drop it. During the four years she was under observation she regained control over her limbs, and her speech at the last examination (Nov. 15th, 1885) showed slight improvement. Inquiry at some of the chief small-pox hospitals did not furnish any similar instances, except at Deptford, where Mr. Struthers had met with two cases in which speech became unintelligible, one of which recovered in three weeks and the other died. It was remarked by the authors of this paper that the clinical picture in these was not that of disseminated sclerosis. There was sudden onset, but no increase of tremor on motion, and no nystagmus, and the "squeezing out" of the syllables was different from the ordinary form of speech in disseminated sclerosis, and what was more important, the prognosis was better. It was suggested in explanation of the symptoms in these cases that minute scattered hæmorrhages, chiefly cerebral, had occurred, and that such lesions might be more common in small-pox than in other fevers. This hypothesis appeared probable from the fact that out of eight closely analogous cases tabulated by the authors, this peculiar scanned speech had been a sequela in six cases in which the patients had suffered from small-pox. Since this communication was sent into the Society, Professor Jaccoud's clinical lectures ("Leçons de Clin. Med.," 1886) have been published, in which he gives two similar cases from his own practice, one after pneumonia, the other after small-pox.—Dr. HUGHLINGS JACKSON considered the paper one of great interest. He referred to the case of a man aged forty, whom he showed to the Society, in whom the delirium had been very marked and prolonged. There was the same peculiarity of articulation, and also a want of coördination of the hand, especially for finer movements. He believed that similar groups of symptoms occurred without febrile disease. The suggestion that seemed to him best to meet the pathological necessities of the cases was a thrombosis occurring in a minute vessel of the medulla oblongata.—Dr. STEPHEN MACKENZIE had seen several cases of the kind having the same characters in the monosyllabic nasal articulation. Severe malarial poisoning could also give rise to the same phenomena, but there was then generally tremor also. He had related a case in *Brain*, that occurred after variola, of anterior poliomyelitis, and suggested that a similar condition of the motor cells of the medulla might give rise to the same phenomena as those met with in the cases in question; the pathological nature of the lesion might also be thrombosis.—Dr. T. BARLOW spoke of a case in which the articulatory symptoms were not so definitely marked as in the author's cases, but which probably belonged to the same category. The patient was a woman aged twenty-five, who was first seen within a week of leaving the small-pox hospital. There was ataxy of the lower and upper limbs; the articulation was altered, but not in the scanned way, though the enunciation was slow and the voice high pitched. Double optic neuritis and deafness, with mental obtuseness, were other phenomena observed. He had seen the case of a man with paralysis of the serratus magnus occurring after small-pox; but peripheral neuritis might have been the lesion here. Dr. Barlow also related a case of fatal myelitis occurring during measles. It was that of a policeman, healthy and young. About four days after the appearance of the rash paraplegia and retention of urine appeared, and the paralysis ascended, but did not affect the brain; death ensued in three days. There was microscopic evidence of myelitis, and most marked in the anterior cornua. He considered that a distinction would have to be drawn between true sequelæ due to a kind of chronic starvation and nervous phenomena occurring during the exanthematic period. It appeared in the last case as though the measles eruption were coming out in the nervous centres. It would be important to note the exact period of supervention of the nervous phenomena in any future cases.—Dr. SEYMOUR TAYLOR referred to a case of amnesia occurring after small-pox, which he thought resembled in some respects those related by the authors of the paper.

Dr. SAMUEL WEST read notes of a case of Baruria in a woman. The patient, aged thirty-nine, complained after catching cold of pains and aching in her limbs, which became severe enough after a week to keep her in bed. When admitted, these pains continued, but there was swelling of joints. The temperature was 100°, and she perspired freely, but the sweat did not smell sour. The urine had a specific gravity of 1040, and yielded copious crystals of nitrate of urea, with nitric acid. Her appetite had been for some days almost absent, and in the hospital she took but little milk or beef-tea. For two days the condition of the urine was the same, and the percentage of urea 5·1. This percentage gradually fell to normal, and as it did so all the patient's symptoms disappeared. The case was regarded as one of baruria. The account of the cases given by Prout was summarised and compared with the present case, and reference was made to other authors, by some of whom the existence of the affection was questioned, while by others it was not referred to. A somewhat similar case, the result of over-feeding and constipation, was described, in which like symptoms were associated with a high urea percentage, and disappeared when the percentage returned to normal.

Mr. HUTCHINSON read a case of Necrosis of the Lower Jaw from the Medicinal Use of Phosphorus. The patient was a lady aged sixty-five, who was seen by Mr. Hutchinson in November last, when the lower half of the face

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was enlarged, and several sinuses opened externally; bare discoloured bone was exposed in the mouth along the whole length of the alveolus; discharge profuse and fetid in the extreme. In explanation of the origin of the necrosis, it was elicited from the patient that she had "been taking phosphorus for the last two years," and had "quite renovated her brain" thereby, the truth being that, save for a few intervals, she had during the time named been taking three Kirby's pills per diem, each containing the thirty-third of a grain of phosphorus. The condition of the patient being much reduced, operation was deferred pending improvement in her general health, until the present month, when, after consultation with Sir J. Paget, Mr. Hutchinson removed about four inches of dead bone without having to resort to cutting instruments for its separation, although he feared at first this would be necessary. The patient made an excellent recovery. Mr. Hutchinson remarked that Kirby's phosphorus pills were in very extensive use, but that this was the only case in which, to his knowledge, jaw disease could be traced to their employment. The patient had carious teeth at the time, and inflammation of the jaw had begun in connexion with one of them, and probably about six or nine months after the taking of the pills commenced.—Mr. BRYANT said that he had no doubt that osteitis and necrosis of the jaw could come on without any definite cause being ascertained. The cases simulate in their clinical appearances those which we regard as examples of phosphorus necrosis. He referred to two cases—one died of pneumonia, and the other occurred in a pregnant woman. In reply to Mr. Hutchinson, he said the possibility of phosphorus being operative was negatived by careful inquiry.—Dr. BRISTOWE did not doubt the possibility of the occurrence of necrosis from the internal administration of one-thirtieth of a grain of phosphorus three times a day.—Dr. COUPLAND inquired if there were albuminuria; for in phosphorus poisoning fatty degeneration of the kidney occurred.—Mr. HUTCHINSON said there was certainly no albuminuria whilst the case was under his observation.

Dr. EWART exhibited a modification of the Binaural Stethoscope suited for differential observations.

The following living specimens were shown:—Mr. Victor Horsley: Congenital Tract in the Raphe of the Scrotum. Dr. Hughlings Jackson: Affection of Articulation; a sequel to small-pox. Mr. T. Cooke: (1) Primary Epithelioma of the Tonsil; (2) Cyst on Back of Wrist (Ganglion). Mr. Bernard Roth: (1) A patient with Extreme Lateral Curvature of the Spine after three months' treatment; (2) Sister of above case with Lateral Curvature of Spine in earliest stage.

MEDICAL SOCIETY OF LONDON.

Furneaux Jordan's Amputation.—Excision at Hip-joint.—Mediastinal Tumour.—Anæsthetic Leprosy.—Xanthelasma.—Scleroderma.

A CLINICAL meeting of this Society was held on Monday last, Mr. Brudenell Carter, F.R.C.S., President, in the chair.

Mr. EDMUND OWEN read notes of a case of Amputation at the Hip-joint by Furneaux Jordan's method in a boy aged six. The disease began in May, 1885; an abscess formed in the hip and knee-joints; pyæmic abscesses developed in other parts; in August amputation was performed through the lower third of the thigh, but fresh mischief ensued, and amputation by Furneaux Jordan's method was performed in December last. There was considerable enlargement of the liver, and the urine contained a quarter of albumen. After going away to the seaside the boy returned with a stump that evidently contained a thick core of bone; the albuminuria and hepatic enlargement had considerably diminished. Mr. Shuter's case, reported in the Clinical Society Transactions, was alluded to. In Mr. Owen's case this new bone was synostosed to the acetabulum. Jordan's method greatly diminished the risk of amputation at the hip-joint, and he believed it had given the death blow to the old method of transfixion.—Mr. B. CARTER asked whether there was any increase in the secretion of urea.—Mr. B. JESSETT considered that the diminution in the size of the liver in Mr. Owen's case was a point of great importance. He narrated a case showing the same circumstance.—Mr. R. DAVY also bore testimony to the disappearance of a large liver after surgical interference. In Mr. Shuter's case there was some doubt whether the hard formation in the stump was bone or fibrous tissue. In Mr. Owen's case there could be no doubt of the presence of bone.—Mr. B. CARTER referred to the first case of amputation of the hip-joint, in which the femoral artery was ligatured as a preliminary; the patient followed the country surgeon to the grave fifty years after the operation.—Mr. E. OWEN considered that albuminuria from scrofulous disease and crepitations at the apex of a lung were indications for operation.

Mr. WALTER PYE showed the boy on whom he had three years previously performed excision of the hip-joint for acute destructive arthritis; the result was and is still highly satisfactory, considerable movement being possible between the femur and hip-bone.—Mr. E. OWEN had expressed his desire to Mr. Pye to have the time test; the success, he admitted, was perfect.

Dr. WILLIAMS communicated a case of Mediastinal Tumour, causing unusual compression of the neighbouring organs. The patient, a male aged forty-three, was admitted into the Brompton Hospital in December, 1884, complaining of increasing dyspnœa, slight cough, wasting, but principally of intense pain on deep breathing in the left side of the chest, extending over the left side of the head and down the left arm. The physical signs indicated the presence of a tumour growing from the root of the left lung, and compressing that organ, so as to prevent the entry of air. A fortnight later the pain had increased, the cough had become violent, and the expectoration tinged with blood; there was dysphagia, the left pupil was larger than the right, and the left vocal cord was fixed. As the growth increased, the symptoms of pressure became more marked, dyspnœa became severe and paroxysmal, the dysphagia rendered all swallowing impossible, and the patient was fed by nutritive injections. The cough assumed a metallic character, and the voice became stridulous. The left radial pulse was markedly weaker than the right. A systolic murmur was heard under the right clavicle, and each pulsation of the heart was transmitted with such force to the parietes of the left chest, owing to its contents being solid and practically airless, that the presence of aneurysm was at one time suspected. The obstruction to the vascular system was shown in œdema of the right upper extremity, and the patient died of syncope two months after admission. The post-mortem examination showed the presence of a growth occupying the anterior mediastinum, extending from the apex to the sixth rib anteriorly, and crossing the median line to the extent of two inches. The heart was pushed aside, but had been invaded by the growth, the pericardium containing similar tumours, and the left pulmonary artery and the second and third portions of the aorta being considerably constricted. The tumour had encroached on the left lung, infiltrating and destroying its substance, leaving the lower lobe collapsed. The left bronchus was reduced in calibre and the tumour invaded the root of the right lung, occluding the œsophagus and causing the formation on its anterior wall of an ulcer about the size of a shilling. Microscopic examination showed the growth to be lympho-sarcoma. Dr. Williams drew attention to the gradual evolution of the symptoms of compression from the growing tumour, which appears to have extended at the same time in several directions. It was rare to find a lung so completely solid as to transmit the heart's vibrations so faithfully as to give rise to a suspicion of aneurysm—a suspicion which was, however, at once set at rest by the large extent of dulness.—Dr. DE HAVILLAND HALL considered that the audibility of the heart-sounds over the tumour was rather favourable to the diagnosis of aneurysm. He asked what the position of the vocal cord was in Dr. Williams's case.—Dr. S. WEST agreed that there was difficulty in diagnosing pleural effusion from mediastinal tumour, and *vice versâ*. Experience showed that pulsation was not confined to aneurysm. A distinction was drawn between tumours commencing in the mediastinal glands and those beginning in the tissue around the root of the lung and spreading along the bronchi.—Dr. FINLAY and Dr. ANGEL MONEY considered that the employment of the exploring syringe was most valuable, and ought to be more frequently practised than it was.—The PRESIDENT suggested that the pupil might vary according as there was complete or incomplete paralysis of the muscular fibres.—Dr. WILLIAMS, in reply, believed the left vocal cord was in the cadaveric position.

Dr. RADCLIFFE CROCKER read notes of a case of Anæsthetic Leprosy. The patient was a man aged twenty-two, in whom the disease began in October, 1879, with swelling in

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the leg and severe shooting pains down the limbs. Exacerbations had occurred from time to time; there were the signs of a pulmonary cavity; patches of anæsthesia were present on the thighs, legs, feet, forearms, and arms. The symptoms simulated ague at their onset. Bacilli from pus of broken-down tubercles were shown. Chaulmoolgra oil and Gurgun oil were used in treatment; the tubercles either get absorbed or ulcerate.

Mr. JAMES STARTIN exhibited a case of extensive Xanthelasma in an adult German. The disease began ten months ago on the backs of the hands; the palms, elbows, and knees were successively affected. He had had jaundice three years ago. A case of diffuse Scleroderma in a girl aged thirteen was also shown: it began in the scalp and spread down the face. A man aged fifty, suffering from Angioma of the Left Cheek, was also exhibited.

OPHTHALMOLOGICAL SOCIETY.

Deposit of Quinine in Cornea.—Biniodide of Mercury Solution.—Report on Sympathetic Ophthalmia.—Cerebral Hæmorrhage and Optic Neuritis.—Glaucoma.—Central Blepharoraphy.

AN ordinary meeting of this Society was held on the 11th inst., Mr. Jonathan Hutchinson, F.R.C.S., President, in the chair. It was announced that at the meeting on May 6th a discussion would take place on the subject of Exophthalmic Goitre.

Mr. LANG showed a case of Deposit of Quinine in both Corneæ, with retention of good vision. The quinine had been given internally; eserine was used locally. The original disease was perforating ulcer of the cornea, and an anterior synechia remained in one eye. The deposit was of a very peculiar nature, and gave a fluorescent appearance on focal illumination.—Mr. J. TWEEDY had employed solutions of quinine locally for more than ten years, the solution being frequently applied, and often for weeks together. He had never seen any deposit in the cornea, though he had watched the effect of quinine very carefully. There was a very great difference between English- and German-made quinine; he always used the former.—Mr. NETTLESHIP said the deposit in the cornea was very peculiar, unlike any deposit he had ever seen.—Mr. MCHARDY had not observed any deposit, though he had frequently employed quinine and eserine.

Mr. EDGAR BROWNE spoke of the possibility of obtaining a solution of biniodide of mercury, to which Mr. Brudenell Carter had drawn attention at the last meeting of the Society. The chemist, acting under Mr. Browne's instruction, had succeeded in obtaining a solution, or rather suspension in minutely subdivided form, of biniodide of mercury by using alcohol at 90° as recommended by M. Panas. Chemical reaction showed that mercury was present in the fluid.

Mr. NETTLESHIP read the report of the committee on Sympathetic Ophthalmitis. It was based on a detailed analysis of about 200 cases of sympathetic ophthalmitis collected by the committee as bearing upon certain points in its nature and treatment. About eighty of these were contributed by members of the Society, to whom a circular had been sent; the rest were from published sources. In respect to excision of the exciting eye, the conclusion arrived at was that whilst its removal, soon after the onset of the sympathetic inflammation, had not been proved to have any marked effect on the progress of the sympathetic disease, it certainly did not increase the severity of it; comparing equal numbers of cases in which the exciting eye was, and was not, removed (soon after the onset of the sympathetic disease), the proportion in which the disease was fatal to sight was much greater in the latter group than in the former; the apparent value of this evidence in favour of early excision, however, was somewhat diminished by evidence of another kind, which tended to show that the excess of recoveries after excision was partly due to the natural mildness of the disease in that group, and the excess of losses when excision was not performed, to its natural severity. In respect to mercury, the conclusion was tentatively arrived at that the drug had probably [illegible] if any, effect; of fifty cases which recovered com[illegible] treated locally in much the same way, [illegible] The effect of [illegible] eye, performed [illegible] unfavourable than is commonly held. In a small series of cases, an iridectomy had been performed on the exciting eye soon after the sympathetic inflammation had set in, and in nearly all with a favourable result to both eyes. The important question was next considered whether sympathetic ophthalmitis could be set up by an eye in which no perforation had ever taken place. After a very careful and thorough examination of cases, the committee had come to the conclusion that the occurrence of the disease without perforation of the exciter, if known at all, was, at any rate, extremely rare. In reply to questions as to the longest and shortest intervals respectively between the lesion of the exciting eye and the onset of sympathetic disease, only about a dozen cases were found in which an interval of more than a year occurred, unbroken by recurrences of inflammation in the exciting eye; and only eighteen in which the interval was a month or less. The longest interval where the exciter had been wounded was twenty years, the shortest nine days. There seemed to be reason for believing that the length of the interval was not without influence on the severity of the sympathetic ophthalmitis; the proportion of cases in which blindness ensued being considerably greater when the disease had set in after a long, than after a short, interval. Consideration was then given to all the cases (about thirty) in which sympathetic ophthalmitis was known to set in after excision of the exciting eye, in five cases in from four to eight weeks after; in all cases the exciting eye had been wounded, and had been left long enough to undergo changes capable of setting up the disease; and the conclusion was drawn that, in these cases, the sympathetic attack was due to the influence of the wounded eye, and not to the operation for its removal. The prognosis in these cases was shown to be much better than in ordinary cases, as more than half recovered entirely. After reference to certain anomalous cases happening many years after excision, and to others where iritis followed the removal of the exciter within a day or two of the injury, the Report concluded with a notice of the cases of so-called uncomplicated sympathetic neuritis. It had been found that these cases of sympathetic neuritis differed much amongst themselves, and probably could not all be ascribed to the same cause, nor be taken as pointing to transmission along the optic nerves; whilst the papillitis, which often occurred early and remained late in ordinary cases of sympathetic ophthalmitis, was far from proving that mode of transmission, since the same papillitis was commonly seen in cases of idiopathic serous iritis, even when only one eye suffered. The Report was illustrated by cases.—The PRESIDENT considered that the report of the committee showed evidence of great judgment as well as great labour, and there could be no doubt that the report would form a most valuable section of the Annual Transactions of the Society. A vote of thanks was unanimously offered to the members of the committee, and the President hoped that the supplementary report alluded to in the report would also be forthcoming.

Dr. BRISTOWE read a paper on a case of Cerebral Hæmorrhage with Double Optic Neuritis. A musician, aged fifty-five, was first seen on Jan. 19th. It appeared that he had suffered from headache for one year, and dimness of sight for six months; but there had been no paralysis, double vision, or fits. At 10.30 P.M. after supper on last Boxing Day loss of consciousness and right hemiplegia suddenly supervened. The patient remained drowsy and stupid, took but little notice of his surroundings, and passed his evacuations into the bed. The arm and leg were absolutely paralysed; the plantar reflex on the right side somewhat diminished. There was no clonus, and the knee-jerks were not exaggerated. Complete hemi-analgesia and anæsthesia were also observed; the special senses could not be investigated. The temperature was 97·4°; the pulse 90 and strong; no albuminuria. For ten days the patient remained the same, then became more drowsy and absolutely speechless. Some stiffness of the right arm came on. The head and eyes were turned to the left, but the patient could move the head and eyes to the right. Mr. Nettleship examined the eyes on Jan. 30th, and found both discs swollen and reddish-grey—a papillo-retinitis with hæmorrhages. Dr. Bristowe then considered the case to be one of cerebral tumour. The patient gradually got worse, and died comatose on Feb. 12th. At the necropsy the spinal cord and membranes of the brain were healthy. The arteries were atheromatous. A blood-stained area, the size of a threepenny-piece, was seen on the surface of the posterior part of the left optic thalamus; this was the

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external evidence of a large cavity, the size of a pigeon's egg, containing partly decolourised clot, in the optic thalamus. The hæmorrhage had also ruptured the posterior limb of the internal capsule, and extended into the white matter of the temporo-sphenoidal lobe. The lenticular nucleus was also damaged at its posterior part. The heart weighed 17½ ounces, being much hypertrophied; the kidneys were healthy. Dr. Bristowe remarked on the unusual position of the hæmorrhage and the rarity of the association of such optic neuritis with simple cerebral hæmorrhage.—Dr. HUGHLINGS JACKSON considered that the case was one of great rarity, and he did not think he had seen one like it. Hæmorrhage from cerebral tumour might lead to a mistake. A large blood-clot might be regarded as a foreign body. The fact that there was conjugate deviation of the eyes and head for from five to six weeks was remarkable, for this symptom was usually transitory. — Dr. S. SHARKEY said there was no evidence of glioma in the tissue around the clot. He could not say what the cause of the hypertrophy of the heart was. There was no doubt of the extreme rarity of optic neuritis associated with ordinary cases of hæmorrhage, which usually occurred in the anterior portions of the internal capsule. In the present case there was rupture, and not mere pressure on the posterior third of the posterior segment of the internal capsule, and the lesion had damaged also the optic radiations of Gratiolet. He suggested that an explanation of the occurrence of optic neuritis might be found in the unusual position of the hæmorrhage, damaging at the same time both sensory and motor paths.

Mr. PRIESTLEY SMITH read a paper on Primary Glaucoma in relation to Age. With the help of members of the Society he had collected 1000 cases of primary glaucoma, and had classified them according to the age at which the disease began, the sex of the patient, and the type of the glaucoma. From these actual cases calculations had been made with the help of life-tables to show what the distribution would be if persons of both sexes and all ages were equally numerous. These statistics represented the relative liability of persons of different ages and the two sexes. The results were shown in a series of tables and charts. The following facts appeared:—1. Primary glaucoma is extremely rare in childhood and youth. 2. Its frequency increases, slowly at first, then more rapidly up to the sixth decade; between sixty and seventy it is about as frequent as between fifty and sixty; after seventy its frequency declines. 3. Cases beginning after fifty are about twice as numerous as cases beginning before fifty. 4. Females suffer in rather larger number than males. 5. The non-congestive form is commoner in males than in females. 6. The congestive forms are much commoner in females than in males. 7. The liability is extremely slight in childhood and youth; at least 100 times less in the second decade than in the seventh. 8. It continually increases up to the seventh decade; between sixty and seventy it is at least twice as great as between forty and fifty. 9. After seventy years of age the liability appears to diminish, but the statistics cannot be relied upon, for very old people are less able to come up for treatment than those who are younger. Figures were quoted from the Manchester Eye Hospital Reports in proof of this assertion. 10. The liability of females is rather greater than that of males. 11. The extra liability of females pertains to the whole of life, except perhaps to the periods before thirty and after seventy, concerning which the data are insufficient for generalisation. 12. The extra liability of females relates to the congestive forms of the disease, not to the non-congestive. These results were applied by the writer as a test of the theory of glaucoma arrived at by other means. This first investigation, eight years ago, had led to the inference that change of form in the crystalline lens was concerned in producing glaucoma. A further inquiry arising therefrom had shown that the lens continues to increase in size throughout life. The present inquiry was undertaken to ascertain whether the liability at different periods of life was such as to confirm the supposed influence of the lens. The pathological theory to be tested was, briefly, as follows. As age advances the lens steadily encroaches on the space in which it lies, for the structures which surround it attain their full dimensions early in life. This brings its margin into closer and broader relation with the ciliary processes and lessens the depth of the anterior chamber—changes which, though ordinarily compatible with the integrity of the eye, involve an increasing liability to glaucoma. The highly vascular processes vary much in size according to the quantity of blood in their vessels, and if the space available for such variations be unduly encroached on, they are restricted in the direction inwards, and are forced to expand forwards; in so doing they press forward the base of the iris and narrow the angle of the anterior chamber, causing obstruction of the filtration channels—i.e., glaucoma. Evidence on these points had been published by the author in previous papers. He then proceeded to discuss the several predisposing and exciting causes of the disease, and showed that the analysis of his statistics gave strong support to the theory connecting the increasing liability to glaucoma with the continuous growth of the lens. He concluded by drawing an analogy between an acute glaucoma and a strangulated hernia. In the displacement of the bowel we have a condition, mechanical in its origin, which for a long period of time may have no serious consequence, but which may at its very outset, or at any later time, under a slight constriction, be transformed into one of acute and dangerous strangulation, with intense engorgement of vessels and outpouring of serum in the directions of least resistance. In the eye threatened by glaucoma we have an unfortunate relation of parts, which, though not itself a disease, may lead, through a little further encroachment upon the already narrowed space, to one of the most formidable of ocular disorders, involving stoppage of the intra-ocular currents, throttling of the circulation, and escape of serum into the transparent medium and the conjunctiva. Just as the taxis will occasionally remedy the displacement and terminate the danger in the one case, so, in a few instances, will eserine reopen the outlets and relieve the tension in the other; but just as in strangulated hernia it is generally necessary to at once relieve the constriction with the knife, so in most cases of acute glaucoma our only means of cure is to promptly unlock the eye by iridectomy.

Dr. ARGYLL ROBERTSON read a paper on the Operation of Central Blepharoraphy after enucleation. Many patients were unable to afford the expense of an artificial eye, or were unable to replace artificial eyes, or else the resulting conjunctival cavity was unfitted for the adaptation of an artificial eye. In these cases considerable deformity and discomfort were liable to arise in connexion with the conjunctival sac; papillomatous growths might arise, or the upper lid fall in and the lower one gravitate downward, leaving the conjunctival sac exposed to various irritations. To prevent these consequences, Mr. Streatfeild about twelve years ago recommended the removal of the conjunctival sac by dissection and caustics after enucleation had been done. Dr. Argyll Robertson considered that a central blepharoraphy would prove simpler and quite as effective in preventing the evil consequences of enucleation. The lower lid is grasped with a pair of stout forceps held parallel to the edge of the lid, and the conjunctival covering of the free edge of the lid is dissected off with a cataract knife to the extent of five or six millimetres, corresponding to the centre of the lid, care being taken not to damage the roots of the eyelashes. The upper lid is treated in the same way. Both are brought together by means of a horse-hair ligature. No drainage is needed. Healing takes place readily by first intention, and on the fourth or fifth day the ligature may be removed. The operation could also be employed for long-standing spasmodic ectropion of the upper eyelid. In this affection the tarsal cartilage has a faulty curvature imparted to it. After the eyelid has been kept by the central blepharoraphy in its natural position for some time, the tarsal cartilage regains its normal curvature, and the adhesions may be divided. Dr. Robertson had operated on two such cases with very successful results.—Dr. BRAILEY said the operation had been performed for some years past at Guy's in cases of corneal opacity.—Mr. J. TWEEDY had employed a kind of peripheral blepharoraphy, leaving a central fissure through which vision was possible, in cases of painful ulcers of the cornea and in ectropion of the lower eyelid due to caries about the orbit. He mentioned the case of a lady who had had this peripheral operation performed five years ago, and who refused to have the adhesions broken down because she felt so comfortable in her present state.

Mr. ADAMS FROST exhibited a model demonstrating the Movements of the Eyes. The eyes were represented by two wooden spheres, each movable in all directions round its centre by means of a double gimble-joint. The muscles were represented by cords, having points of attachment and lines of traction exactly similar to those of the natural muscles. The cords were acted upon by rotating three

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drums, upon which they were wound. The upper of these controlled the lateral recti rotation in one direction, producing conjugate movement to the right, and in the other to the left. This drum was divided in its centre, so that if the halves were rotated in opposite directions, convergence or divergence was produced. The second drum acted upon both superior or both inferior recti, according to the direction in which it was turned, while the lowest acted upon the superior or inferior obliqui in the same way. Any of the natural movements could be produced by combinations of these movements. The ingenious suggestion to divide the uppermost drum to produce convergence or divergence was due to Mr. Paxton, of Messrs. Pickard, Curry, and Paxton.

The following card specimens were shown:—Dr. E. Clarke: Rare form of Vitreous Opacities in a case of High Myopia. Mr. Hartridge: (1) Double Glaucoma in a girl aged fifteen; (2) Congenital Small Lenses in a girl whose sister also had the same peculiarity. Mr. Brudenell Carter: a Spiral Perimeter.

The Council of the Society wishes to collect facts in reference to the symptoms, pathology, and treatment of exophthalmic goitre. The meeting to be held on May 6th will be specially devoted to this purpose. Communications, whether written or *vivâ voce*, which bear upon any or all of the following topics, will be acceptable.

1. Cases in which a necropsy was obtained. 2. Cases in which any definite cause could be assigned for the affection. 3. Abortive cases, that is, cases in which the usual symptoms were present for a short time, and in a slight form, and then disappeared. Are such cases common? 4. Cases which have ended in recovery. 5. Cases which have been kept under observation for long periods. 6. Cases which appeared to be definitely benefited by treatment. Do many cases get well when untreated, and if so, what is the duration of the disease in them? 7. Cases in which the exophthalmos was such as to threaten the safety of the eye, or to destroy it. What are the best measures of treatment with regard to this special danger? 8. Cases in which symmetrical exophthalmos has been observed without the other symptoms of Grave's disease. 9. In what order do the following symptoms usually appear and disappear:—(*a*) Palpitation and throbbing of carotids; (*b*) enlargement of the thyroid; (*c*) proptosis; (*d*) Graefe's lid sign? 10. Does Graefe's lid sign occur when there is no proptosis? Is it equally developed on the two sides? Does it ever accompany prominence of the eyeball due to other causes? Does it occur in hypermetropia, or myopia, or in healthy persons? Do such drugs as cocaine, eserine, and atropine produce anything like Graefe's sign? 11. Is the enlargement of the thyroid usually equal on the two sides? 12. In conjunction with what other diseases is exophthalmic goitre found? Does it occur often in several members of the same family? 13. This disease occurring most frequently in women, is any relation between it and derangement of the reproductive system observable? 14. Family histories of cases of the disease. 15. Has any similar condition been observed in any of the lower animals? Those who make oral communications will be restricted to a quarter of an hour, and will be expected to supply a written report of their remarks. Those who make oral communication of facts will not thereby be debarred from subsequently taking part in the discussion.

OBSTETRICAL SOCIETY OF LONDON.

Anatomy of Labour.—Sarcoma of Vagina and Uterus.

A MEETING of this Society was held on Wednesday, March 3rd, Dr. Potter, President, in the chair.

The following specimens were shown:—Dr. W. S. A. Griffith: Tubercular Disease of the Fallopian Tubes. Dr. Champneys for Dr. Fly Smith: Pellets of Corrosive Sublimate. Dr. Lewers: Cancerous Uterus extirpated by the Vagina. Dr. Playfair: A Calculating Ruler for fixing the Precise Date of Labour. Dr. Godson: A Double Monster of the Syncephalic ineops variety.

Dr. BARBOUR of Edinburgh showed a most interesting series of frozen sections, drawings, and diagrams illustrating the anatomy of the first stage of labour, of the third stage of labour from four cases of Porro's operation, and of the condition at the close of the labour from two cases of death post partum. He drew attention to the value of frozen sections, but did that allowance must be made for post-mortem changes and to those due to the posture in which the cadaver was frozen. The points of chief interest in the first group were the remarkable thickness of the lower segment of the uterus, the course of the ureters, and the disposition of the peritoneum and cellular tissue. The Porro preparations showed the contraction of the uterine wall and diminished placental area. The membranes are crumpled and partially detached, but the placenta is not separated. The placental site may therefore be diminished without the placenta being separated. He concluded that it was separated by detrusion. The absence of space into which it could bulge, the absence of hæmorrhage between the placenta and uterine wall, are against the mode of separation described by Baudeloque, Schultze, and Ahlfeld. These sections bore out the description of the method of expulsion so lucidly described years ago by Dr. Matthews Duncan. The chief point of interest demonstrated by the third group was the large amount of cellular tissue between the cervix and bladder.—Dr. MATTHEWS DUNCAN was astonished at the amount of good and original work which Dr. Barbour had laid before the Society. He referred to the length of time which had elapsed since William Hunter published his work on the gravid uterus, which was supposed to finish the subject. Frozen sections or homolographic anatomy had since done much to increase our knowledge, and now Dr. Barbour had passed from the anatomy of pregnancy to the anatomy of labour—a new field. Frozen sections could not be entirely depended upon to display the conditions during life, but they were of great value. Braune's plate of the anatomy of the second stage was of great value, but was notably misleading in some points, such as the position of the bowels, uterus, and peritoneum. Similar errors had been referred to by Dr. Barbour in his own sections. Dr. Duncan was reluctant to adopt Barbour's theory of the detrusion of the placenta. He had a strong liking for the shrinking site theory, because it combined separation and arrest of hæmorrhage. Everything connected with flooding was of great importance, and therefore he hoped to see Dr. Barbour's views thoroughly sifted. One great fact he had given, that with the site reduced to four inches in diameter the placenta might remain attached. — Dr. CHAMPNEYS, while greatly admiring Dr. Barbour's work and beautiful specimens, dissented from some of the conclusions drawn from the Porro specimens. Illustrations drawn from them as to the physiology of the third stage of labour could only be accepted when consonant with its clinical course. The flattened form of the uterus with the entirely adherent placenta seen in these preparations was contrary to the condition observed in nature, as where women had been examined by the introduction of the whole hand immediately after the birth of the child the placenta had been found entirely detached. Again, he could not agree with Dr. Barbour that these preparations prove that at the beginning of the third stage of labour there is no uterine cavity; its shape proves that it does not alone contain the placenta lying flat against the uterine walls, as in these preparations. Lemser advocated the "detrusion" theory from experiments on pregnant rabbits, but it must be accepted with caution, as the similarity between them and the human female is only slight. Dr. Barbour did not appear to rest on Lemser's observations, but arrived at his conclusions by a process of elimination of the other theories. The mode in which the placenta presents at the os uteri is an indispensable test as to the correctness of views as to its mode of separation.—The PRESIDENT tendered the thanks of the Society to Dr. Barbour for his demonstration, which were very cordially given, and Dr. Barbour replied.

A paper by Dr. LEWERS, describing a case of Circumscribed Sarcoma of the Vagina and Uterus, was then read. The patient was a married woman of fifty, with eight children, and was admitted into the London Hospital on June 27th, 1885. She had had three attacks of flooding, unattended by pain, but each followed by fainting and vomiting; was losing flesh, and had a dirty-coloured vaginal discharge. A lump now protruded from the vulva. She had had an attack of flooding nine years ago, then was regular for six years, and had another attack. The mass on examination was seen to be trilobed, and it was attached to the posterior vaginal wall by a broad pedicle. There was a second mass on the right side as large as a walnut. The uterus felt heavy, but was mobile. The growths were removed on July 2nd, and the patient died of septicæmia on the 7th. At the post-mortem three circumscribed growths were found in the uterus, and there were numerous small secondary growths in both lungs, but none elsewhere. Microscopic examination showed

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the growths to be mixed, round, and spindle-cell sarcomata. Dr. Lewers thought that the uterine growths were probably the primary ones. There were no lung symptoms during life.—Dr. GERVIS gave details of a case of vaginal sarcoma upon which he had operated three times at lessening intervals, and which now again required operation. It was a small round-celled sarcoma.—Dr. W. DUNCAN was doubtful whether cases of sarcoma of the uterus and vagina should be operated on at all, as a radical cure was improbable.—Dr. M. HANDFIELD JONES mentioned the case of a girl aged sixteen upon whom he had operated a year ago, who still remained in good health. He thought if the growths were removed early enough there was a reasonable prospect that they would not recur. — Mr. KNOWSLEY THORNTON pointed out that it was often necessary to operate for the comfort of the patient, and could not think that the chance of recurrence was a ground for leaving the patient in misery, and each operation would give her at any rate a period of health and hope. The recurrence at lessening intervals was familiar to surgeons in all sarcomata, and hence the old name given by Sir James Paget to these growths, "recurrent fibroid."—Dr. ROUTH advocated the removal of these growths and the destruction of their site with strong caustics, such as nitric acid and bromine. He mentioned a case in which after a third operation there was no recurrence. — The PRESIDENT and Dr. HORROCKS also spoke, and Dr. LEWERS replied.

At the close of the meeting, the PRESIDENT announced that in future the Transactions would be published in monthly or bi-monthly parts; but those Fellows who preferred it could still have the volume sent to them as heretofore at the end of the session.

HARVEIAN SOCIETY.

Chronic Rheumatic Arthritis of the Hip-joint.

A MEETING of this Society was held on Thursday, March 4th, J. Hughlings Jackson, M.D., F.R.S., President, in the chair.

Mr. W. ADAMS read a paper on Chronic Rheumatic Arthritis of the Hip-joint. He described at length the structural changes occurring in the later stages of the affection, and suggested that all the old museum specimens showed that the cases might be arranged in three classes. 1. In which the bones are increased in density and weight; the femur in these cases showing no depression of the head or any absorption or alteration in the angle of the neck. Ring-like masses of bone were thrown out; the articular cartilages were eroded, but the surface of exposed bone was not absorbed. Eburnation took place in the direction in which motion had been preserved. The outgrowths of bone were produced by ossification in the articular cartilage, as proved by the author in a paper read in 1851 (Path. Soc. Trans., vol. iii.), by ossification of the synovial fringes, and by outgrowths from the periosteum. 2. In which atrophic changes predominated, producing in the hip-joint a smaller head and depressed neck of the femur, the nodular outgrowths being less marked. 3. In which the atrophic and hypertrophic conditions were combined. After expressing his belief in the causative influence of rheumatism and gout, the author proceeded to discuss the relation of these joint affections to locomotor ataxy and other nerve diseases, and to contrast rheumatic arthritis with Charcot's disease.

Rheumatic Arthritis.	*Charcot's Disease.*
1. Changes chiefly hypertrophic.	1. Changes chiefly atrophic.
2. Commences in the soft tissues.	2. Commences in the bones.
3. Painful throughout its course.	3. Generally painless.
4. Pain confined to the joint.	4. Pains shoot through the limbs.
5. No febrile disturbance; no gastric or ocular symptoms.	5. All these symptoms are present.
6. Reflex symptoms present.	6. Reflex symptoms absent.
7. Limited mobility.	7. Flail-like mobility.
8. Progress slow and chronic.	8. Progress rapid and acute.
9. Patients often reach old age.	9. Patients seldom reach old age.

The influence of injury in the production of the disease was then discussed, and the paper was concluded with remarks upon treatment, the value of local sweating by means of hot vapour being insisted on, coupled with shampooing and passive movement. The hot sulphur springs of Luchon, in the Pyrenees, were especially commended. — Dr. BUZZARD observed that the results of ordinary treatment in chronic rheumatic arthritis were eminently unsatisfactory, the disease generally going from bad to worse. In some cases of joint disease associated with locomotor ataxy, however, a remarkable regression of symptoms might take place, the patient recovering full use of a hitherto useless limb. In Charcot's disease, again, there was often a remarkable degree of hydrarthrosis of the joints, frequently extending far beyond the joints themselves; extreme weakness of ligaments and a tendency to atrophy in the bones were also to be noted. He thought it probable that by the study of Charcot's disease means would be found to explain the phenomena of rheumatic arthritis. If the disease were due to a central nerve lesion the tissues of the spinal cord might safely be eliminated. The results of sclerosis of almost every part of the cord were well known. Very many of the symptoms combined to indicate the medulla oblongata as the original seat of the mischief; the gastric and laryngeal crises, the heart symptoms, and the sweating all pointed to the probability that the centres for the vaso-motor system and for the osseous and articular system must be situated close to one another. In rheumatic fever, the acute affection of many joints, the high temperature, cardiac disturbance, and sweating all served to illustrate this in a marked degree. He looked upon rheumatic fever as an acute affection of the medulla oblongata, and suggested that chronic rheumatic arthritis might possibly be due to a chronic form of the same lesion. He regarded Charcot's disease as a chronic affection of a certain part of the medulla, spreading to the vaso-motor centre, and causing changes in the nerves supplying the bones and joints.—Dr. CLEVELAND referred to the connexion between alcoholic intemperance and chronic arthritis, and expressed an opinion that alcoholism played a principal part in its production, especially among women. — Dr. W. H. BLENKINSOP believed that the failure of treatment was often due to want of persistence in it, and related a case to prove the value of continued treatment. He advocated the use of dry vapour to produce sweating, in preference to steam.—Mr. GANT expressed his belief in the efficacy of Scott's dressing, and mentioned a case in which the disease so treated had been kept in check for twenty years.—Mr. SPENCER WATSON referred to the occurrence of acute inflammation of the eye in these cases.—Mr. NOBLE SMITH asked whether the same symptoms had been noted in the affections of the hip-joint in later life as were characteristic of the acute affection in childhood? He had had very good results from treatment by iodide ointment, where other applications had failed. He thought that the influence of alcohol was traceable in many of the joint cases in the British Home for Incurables.—Dr. MORTON inquired as to the use of passive movement in treating cases of chronic joint disease arising from injury.—Mr. J. E. LANE mentioned that the atrophic changes in hip- and shoulder-joints, exactly like those of Charcot's disease, were frequently found in dissecting-rooms. He related a case of excessive effusion into the shoulder-joint, in which complete recovery took place, in the presence of locomotor ataxy. The treatment pursued at Aix was most satisfactory, the shampooing especially being very effectively carried out.—Mr. W. ADAMS, in reply, expressed some doubt whether alcoholism had much to do with the production of the disease. In cases where the joint affection was thought to be due to accident there was generally a history of antecedent rheumatism or gout.

Reviews and Notices of Books.

The Optical Manual, or Handbook of Instructions for the Guidance of Surgeons in Testing the Vision of Recruits, &c. Third Edition. By Surgeon-General T. LONGMORE, C.B. London: Clowes. 1886.

SOME eleven years have elapsed since the appearance from the pen of Professor Longmore, of the Army Medical School, Netley, of the second edition of the "Ophthalmic Manual for Army Surgeons," and, considering the value of the trained soldier to the State, the importance to the officers of the medical service of the army of a thorough knowledge of the subject of which the manual treats, cannot be over-estimated, more especially in regard to the rules laid down for guidance in distinguishing optical defects amongst officers and men already engaged in the military services of Great Britain.

As might be expected, in view of the rapid strides that

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have been made in this branch of medical science within recent years, Professor Longmore has found it necessary to rewrite and enlarge the present edition, so that practically it now appears in the form of a new work. Chapter I. is devoted to the consideration of the eye as an optical instrument; the hygiene of normal vision is explained, the necessity to the soldier of unimpaired binocular vision in judging and in the use of the rifle is dwelt upon, and the various optical appliances are given and described in detail. In the following chapters the functional pathology of the eye is entered into, and the method of conducting the visual examination of recruits, with an account of the qualities of sight which are requisite, or which lead to disqualification or non-efficiency amongst officers and men in the different branches of the army and of the navy; the various errors of refraction are clearly enunciated and explained, together with their treatment and hygiene, also the method of diagnosing them and the disqualifying degree of each. The chapter on the assessment of ocular refraction is carefully written, and brings home to the army surgeon that he will find an acquaintance with the use of the ophthalmoscope, as a means for gauging the sight value of an eye, as necessary as that of the stethoscope in testing the conditions of the respiratory or circulatory system.

We regret to learn from perusal of the manual that, in consequence of complete sets of trial lenses not being supplied for use in the army, medical officers are unable to have recourse to keratoscopy, which is an invaluable aid in the estimation of visual capacity, and trust that the authorities may be induced to supply a full set to the head-quarters of each recruiting district and each large military hospital.

The mechanism of accommodation is fully entered into, as well as the anomalies of binocular and associated vision; also the relationship of strabismus to myopia and hypermetropia. Part of Chapter V. is devoted to colour-blindness and its detection. The possession of correct ideas regarding colour is of great value in a vast number of callings, and inability to distinguish them may be the source of the greatest peril in case of persons placed on watch, as at sea. The distinction between congenital and acquired dyschromatopsia is clearly explained. The subject of hemeralopia is described under the head of amblyopia, and is of extreme interest to the army surgeon, as, apart from being a symptom of organic disease, it is often met with abroad as a transient condition due to hygienic causes solely, and in the case of the soldier is, of course, a serious disqualification. The important condition of asthenopia, so often connected with ametropic states of ocular refraction, myopia, and hypermetropia, is fully discussed. The necessity to the recruit or soldier of having the visual area intact, as well as the requisite central acuity, is dilated upon, the loss of a portion of the field of vision not only unfitting a soldier for military duty, but may be a symptom of serious progressive disease—a fact which should be borne in mind by all who are called upon to test vision, and especially by the army surgeon.

In the third edition of the "Optical Manual" the Professor of Military Surgery at Netley has placed the principles of the more abstruse portion of modern scientific ophthalmology within the reach of all who have to examine persons seeking employment in the various public departments; and, keeping in view the recent advances in optical appliances and manipulation, and such as have been made in respect of length of range and capacity for firing of the weapon at present in use in the army, has applied them to the actual conditions of service, thus supplying the profession at large and the army surgeon with a valuable *aide mémoire*.

Hernia, and its Radical Cure. By JOHN WOOD, F.R.S., F.R.C.S., Vice-President and Hunterian Professor of Surgery and Pathology in the Royal College of Surgeons, &c. Pp. 124. London: Henry Renshaw. 1886.

THIS admirable little work consists of three lectures delivered by the author at the College of Surgeons in 1885, and a lecture on "The Application of Trusses to Hernia" given at King's College Hospital. Every page is stamped with the well-known acumen of the writer, both as a surgeon and a practical anatomist.

The first chapter is devoted to an analysis of the cases operated upon by Mr. Wood, to the Pathology and Causes of Inguinal Hernia, and to the Anatomy, general and applied, of the Inguinal Region. From this we learn that the author has, in all, operated upon 391 cases: 370 inguinal, 16 crural, and 5 umbilical. "In 11 cases the hernia was double, and both sides were operated on; in 12 cases, operations which at first failed were repeated (in 2 cases three times); making a grand total of 414 operations." In a subsequent chapter we find that out of 339 operations for reducible inguinal hernia 248 operations were successful, and the number of ascertained failures 59; thus giving 73 per cent. of successful cases. Out of 273 cases of the wire operation alone there were only 4 deaths—about 1¼ per cent.,—none of which could be strictly attributed to the special conditions and results of he operation. Of the whole 339 operations by varioust methods there were 7 deaths, or about 2 per cent. In 28 cases, where the sac was tied with catgut and removed and the sides of the canal and rings drawn together, 3 died, or about 11 per cent.—a mortality, as Mr. Wood observes, too great, if maintained, to justify an operation of expediency.

The third chapter embraces the Anatomy and the Operation for Radical Cure of Crural and Umbilical Herniæ, Choice of Cases for Operation, Review of the various Methods of attempting a Radical Cure of Hernia in Ancient and Modern Times, and a Classification of Cases for Selection of Operation. The closing chapter on the Application of Trusses will be read with interest and profit both by hospital surgeons and general practitioners.

The entire work is a closely reasoned argument and critical review of facts; in short, it must be carefully studied by those who would duly appreciate its merits. It shows, if indeed this were needed, that Mr. Wood is *facile princeps* in all that pertains to the curative treatment, of the application of which his recent monograph treats.

"MR. HORSLEY'S CRITICISM OF PROF. SCHIFF."

To the Editor of THE LANCET.

SIR,—There is one little point a trifle weak in Mr. Horsley's wit. The Brown Professor is facetious, not about what Schiff did say, but about what he did *not* say. Professor Schiff, as quoted by me (THE LANCET, Feb. 20th), says: "Now I understand what Mr. Horsley means by the motor tract. He believes that the posterior part of the lateral columns near the posterior horns of the grey substance is motor. This is a very general opinion, against which I shall publish a series of experiments." According to Professor Horsley, however (THE LANCET, March 6th), "Dr. Huggard quotes Professor Schiff (*verbatim*) as saying that although the opinion that the crossed lateral (pyramidal) tract is motor is a very general one, he (Professor Schiff) is going to prove that it has no such function." To find an identity of meaning between what Professor Schiff did say and what Professor Horsley says he said would puzzle anyone.

The experience of Professors Ptthmllnsprts and Horsley is evidently to be trusted. The aforesaid variety of breakfast appears to aid a person considerably in proving a thing "at least to his own satisfaction."

I am, Sir, your obedient servant,

Davos Platz, March 9th, 1886. WILLIAM R. HUGGARD.

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THE LANCET.

LONDON: SATURDAY, MARCH 20, 1886.

THE long-expected Report of the Committee on the mode of obtaining the Fellowship of the College has at last been presented to and adopted by the Council, and made public. It is satisfactory to find not only that the rumour of making Fellows wholesale without examination has proved false, but also that some very reasonable changes are proposed instead.

The Council recommend two methods, by the first of which every year a certain number, not exceeding ten, of the Members of the College, of not less than twenty years' standing, who are distinguished by scientific or professional ability, or by good service rendered to the profession or the public, shall be elected to the Fellowship. To such a proposal there can be no valid objection, provided always the recipients are really distinguished for special surgical knowledge, and that not necessarily *ten* are elected *every* year. Such a rule as this will have to be very judiciously carried out, otherwise it will be capable of being used for party purposes, and made to serve other ends than the promotion of the study of the art and science of surgery.

By the second method proposed, Members of not less than fifteen years' standing are to be exempted from the first Professional Examination for the Fellowship—that, viz., in Anatomy and Physiology,—and would be required to pass only the Second Examination, as defined by the present regulations. We think this plan much preferable to the former, and one likely to further the purposes for which the Fellowship was instituted. There are many other causes, over and above want of ability, which may interfere with a student's passing the Primary Examination in Anatomy and Physiology, and it has always appeared to us regrettable that an examination in subjects of minor importance to the practitioner, and which can only be properly studied in the schools, should prove the chief barrier to the acquirement of this highly prized surgical qualification by those engaged in practice. This proposed change in the rules for admission to the Fellowship will be welcome to many provincial surgeons, and afford them the opportunity of acquiring the diploma which their line of practice and their surgical attainments will permit them to wear, without either detracting from its dignity or subverting the purposes its founders had in view when instituting it.

The Council, furthermore, propose to make a new class of Fellows—viz., Honorary Fellows, to consist of persons, whether Members of the College or not, who have rendered distinguished service in the advancement of surgery or the sciences allied to surgery. We hail this last proposal as a most important step forward, as one which will bring the College into something like keeping with other scientific corporations, almost all of which have the power of affiliating to themselves eminent men of any and every nationality. We could wish to see the proposal somewhat enlarged. It would be desirable to fix the *total* of Honorary Fellows rather than limit the number to be elected every year. *Forty* suggests itself as a possible maximum after the manner of some other distinguished bodies. This number would easily be attained, even should the highest standard be insisted on, provided other countries than England were duly honoured and represented. The number once completed, the Council would then fill up vacancies as they occurred.

It is expressly stated that the Honorary Fellows are to be exempted from the payment of fees. This is as it should be. It is something humiliating that the Royal College of Surgeons of England should not only have had to wait until a man like HUXLEY, for instance, had been a Member for twenty years before being able to confer the Fellowship, but also that it should be obliged to demand a fee for admitting the most eminent biologist of the day to a diploma which becomes enhanced in value by being accepted by such a man. Nothing is said concerning the payment of fees by those who become Fellows under the other proposed new rules. It must be taken for granted, however, that, in accordance with the recommendations of the Committee on Charters and Bye-laws (presented to the meeting of Fellows and Members on Oct. 29th, 1885), Members *elected* to the Fellowship will be exempted from the payment of any fees; on the other hand, those Members of fifteen years' standing who decide to offer themselves for examination and pass, will be called upon to pay a fee—an obvious injustice. For both sets of Members will gain about the same by becoming Fellows, while those who pass the examination will deserve even more consideration than those who simply drift in by election. Clearly this question of fees will require reconsideration; a fee ought to be exacted from all who are in practice on becoming Fellows, whether by election or examination.

While we cordially approve the latest proposed changes in the mode of conferring the Fellowship, we cannot refrain from again pointing out how these proposals stultify some previous official utterances concerning these same questions which the Council have promulgated. For example, in the last report presented at the October meeting of Fellows and Members, the Council, in answer to the repeated and persistent recommendation of the Association of Fellows that an order of Honorary Fellows should be instituted, said it could "not recommend the institution of a class of Honorary Fellows." This answer was repeated in December, and yet in March the Council adopts the recommendation, but apparently without acknowledgment of the Association of Fellows. Nor can we forget that, notwithstanding the representation of the Association of Fellows and the views expressed at the meetings of the Fellows and Members, the Council a few months ago publicly announced their determination to take steps to secure the necessary powers for giving effect to proposals which they now tacitly admit to be faulty. Even on so obvious a question as that of Honorary Fellows, the Council have several times decided in the negative. We ought not to reproach the Council for at last deciding to do what is right, and what we have so often advocated in these pages. Nor do we. What we lament is the absence—which this weathercock policy implies—of any political capacity in the Council. There is no intelligent grasp of the situation, nor appreciation of the changes required in the management of the College, and in its

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relations with the Members at large in order to place the College *en meilleur rapport* with the natural aspirations of its highly educated constituency and with the altered spirit of the times. The Council appears unable to draw up any adequate and complete scheme of reform, and refuses to accept the help of those who are equally interested with themselves in doing everything possible to strengthen and uphold the position and dignity of the College.

NOT many months ago the profession and the public were startled by the announcement that M. PASTEUR had carried the scientific speculation on the possibility of preventing hydrophobia in the human subject within the range of practical pathology and medicine. There were few then who added expectation to hope that the learned experimentalist would in so short a time make headway against the apparently insuperable difficulties of the situation. To-day, however, it may be truly said that the four corners of the earth are ringing with the record of his brilliant exploits and triumphal progress. People who have had the misfortune to suffer from the bite of dogs, cats, and wolves —mad or otherwise—are crowding to the metropolis of sunny France to undergo inoculation with the attenuated virus of rabies, prepared from the nerve centres of animals recent victims of the deadly scourge. England, Russia, America, Hungary, and other countries, by the aid of State and private enterprise, are sending patients to M. PASTEUR'S laboratory for the purpose of testing the value of his "specific" treatment. Contrary to the dogmas of metaphysicians, who assert that there is always a hostility to new experience, we find votaries ready and numerous to stake the chances of failure, and even of danger, against the possible attainment of immunity from the consequences of an anticipated disease. Nor, considering the horribly grim event which none can contemplate with complacency or foretell with certainty, and the final result of which, when developed, it is doubtful if anyone has hitherto been able to avert, is it surprising that men should hasten to avail themselves of an antidote, be it rational or empirical, of merely vaunted repute or proved efficacy. There is something more, however, than humanitarian sentimentality involved in the consideration of M. PASTEUR'S enterprise—an enterprise destined to lead to one of the greatest achievements of the age, or to end at least in a splendid scientific failure. It must not be supposed, because the author of all this wonderment and admiration stands, as it might appear, upon the fitful tenure of the sufferance of those who look for much and hope for more, yet may nevertheless be as ready to condemn anon, as they are now prepared implicitly to trust, that he has been led to deeds of daring by purely fortuitous circumstances. M. PASTEUR'S reputation, acquired as it has been by years of laborious research and keen logical inference, is a sufficient answer to such an assumption. Moreover, the past history of medicine furnishes analogical grounds for regarding the investigations now in progress as likely to succeed in the long run. Hydrophobia, like small-pox, is a disease arising from the action of a specific poison, and we know what untold good has accrued from the discovery of our own JENNER. Vaccination, or in other words, inoculation with what is practically an attenuated virus, has established itself so firmly in the world's confidence that in most civilised nations it has become a State institution, and that too in spite of long-continued and strenuous opposition. Then there are "many who believe that vaccinia is identical in its nature with variola, only modified by its occurrence in another animal, and there have been many observations and experiments which seem to support this notion" (ROBERTS). It is also known that if "an unvaccinated person inhale the germ of small-pox on a Monday and be vaccinated as late as on the following Wednesday, the vaccination will be in time to prevent small-pox being developed." This is exactly the principle which M. PASTEUR is carrying out, and fortunately the long period of incubation of hydrophobia gives a wider limit to the chances of success from inoculation. Again, hydrophobia is only conveyed by direct contagion, so that the date of introduction of the poison into the system can be fixed with precision—an argument in favour of delaying the inoculation with attenuated virus until infection with the more deadly "cause" has become an accomplished fact. On the other hand, small-pox is almost invariably communicated through the atmosphere, and as there are no immediate effects, the all-important period is not known, and the opportunity of saving the patient from the consequences of the infection is lost. In process of time it may become the fashion to inoculate with the mitigated virus in order to give protection against the possible bites of mad dogs, but at present there seems little likelihood of this practice being established, nor, on the whole, is it desirable. That inoculation for rabies is founded on a scientific basis there seems no shadow of a doubt. It only remains to be seen whether M. PASTEUR can establish as an art what appears as a very plausible theory. Of this we may be sure that, guided by the light of his experiences with inoculation as a preventive against splenic fever in cattle, he will avail himself of every assistance that is likely to bring his task to a successful issue. The public and the profession must be prepared for failures, and not expect more than can reasonably be demanded. For the present we trust that M. PASTEUR will receive every encouragement that the State and individuals can render. The enterprise in the interests of humanity is worthy the man, and M. PASTEUR is perhaps of all men most fitted to carry it out.

THE scheme of the Metropolitan Board of Works for the disposal of the sewage of London was produced at the meeting held on the 12th inst., and an abstract of it appeared in *The Times* the following day. It was contained in a report prepared by the Works and General Purposes Committee, which we trust will be published without delay, in order that impartial criticism may be brought to bear upon it. At present we have only *The Times* abstract, and an interesting, although of course non-official, article which appeared two days later in the *Daily News*, to assist our judgment. The utmost publicity should be given to all the proceedings in this difficult and most important matter, for although they are assisted by distinguished scientific advisers, the members of the Board have no right to affect omniscience. It has frequently happened that other scientific men of no less eminence have differed from those who advise them, and it is clearly right that the public should hear both sides of the question.

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We admit at once, and with pleasure, that the Board has been by no means idle. Many interesting experiments have evidently been made, which will be of permanent value, and of which we should be glad to hear more details. A course of action has, moreover, been decided on which will undoubtedly improve matters, even though it does not promise a permanent solution of the difficulty. We urged a short time ago that alternative schemes should be prepared, and to a certain extent this has been done, for it would seem that several modifications are possible in carrying out the system recommended to the Board by their committee, which has therefore to some extent the elasticity which is so desirable. Probably it will be adopted, and we are inclined, on the whole, to hope that it will.

The scheme which it is proposed to apply to the whole of the London sewage may be divided into three operations—namely, precipitation, separation of sludge by filter-presses, and purification of effluent. This is substantially in accord with the recommendation of the Royal Commissioners, and as such we heartily commend it. Each of these operations must be described briefly in order to render our comments intelligible. First, then, the precipitation. This is to be effected by the addition of 3·7 grains of lime, and 1 grain of proto-sulphate of iron to each gallon of sewage, with subsidence for from one to two hours. The chemists consulted by the Board, Sir F. ABEL, and Messrs. ODLING, WILLIAMS, and DUPRÉ, report that the effluent so obtained "would be a very great gain over the discharge of untreated sewage"—a safe enough statement; and that according to their "present impression, little if any additional advantage would accrue either from an increase in the proportions of the chemicals specified, or from a resort to other chemicals which would act merely as precipitants." They add, however, that the effluent should not be discharged into the river "during warm weather at all states of the tide." The treatment of the sludge is the next point. It is to be reduced to the smallest possible bulk by filter-presses, and the cake given away if anyone will take it, and if not carried by steamer to sea and there discharged. Finally, the effluent water is to be deodorised by the method which has found favour in the eyes of the Board—namely, by mixture with manganate of soda and sulphuric acid. We understand that the quantity of crude manganate is to vary from 0·5 to 1·5 grain per gallon, but *The Times* summary is somewhat indistinct on this point. This is the quantity recommended by the above-named chemists, who, however, are doubtful whether any disinfection is necessary in cold weather. Another precaution has already been taken, and it is proposed to continue it under the new system. At thirteen stations on the lines of the great sewers manganate of soda and sulphuric acid are added with a view to prevent the formation of sewer gas. If this really averts this dangerous source of mischief the expense is well warranted, but we confess to considerable incredulity on the point. If, on the other hand, it is not effectual, there is great danger that a false sense of security will be engendered.

Such is an outline of the methods by which, in all probability, the sewage of London will before long be treated. That they would effect a vast improvement in the condition of the Thames is certain, and we by no means assert that any better system is for the present forthcoming. It is, therefore, in no unfavourable spirit that we approach the task of criticism. To begin with, we are rejoiced to find that precipitation and sludge-filtration are to be the basis of the system. They have given satisfactory results wherever they have been properly tried. As to the chemicals selected we are not so certain, and have no evidence before us that the committee have sufficiently considered the rival claims of the many mixtures which have been proposed. The well-known A B C process, for example, gives an excellent effluent, and it would be interesting to know on what grounds it had been rejected. The process has been worked for many years at Aylesbury, apparently with success, and the experiments made so many years ago at Crossness do not warrant its contemptuous dismissal. The disposal of the pressed sludge is another important point. It is, we suppose, unlikely that farmers will take it, even as a gift, in such enormous quantities as the Board will produce it, and so it must go to sea. The important argument of Sir J. B. LAWES, however, suggests that even in this case it is not necessarily lost, for it may, if well distributed, improve the fisheries along the coast, by supplying the phosphates which go to form the fishes' bones. The Board propose to provide large ships for this purpose—a purpose which at first sight appears wasteful.

As to the disposal of the effluent, we quite agree that it must be disinfected somehow before it goes into the river. At present the sewage must be treated at the existing outfalls, for the danger of the present system is urgent, and some chemical disinfectant must therefore be used. Whether permanganic acid is the best we cannot say; possibly it is. But although it is inapplicable at Barking and Crossness, land-irrigation is a better means of purifying sewage-effluent than any chemical disinfection; and when the sewage goes down to Sea Reach, as we trust it will before many years are past, the final purification will probably be done by the soil, and an almost perfectly pure effluent thrown into the river. The committee are, indeed, so enamoured of their permanganate disinfection, that they have quite given up the idea of moving from their present outfalls. They say, on the authority of the chemists who advise them, that "the necessity for land-filtration no longer exists, and thus the great objection to the treatment of the sewage and the discharge of the effluent at the present outfalls is overcome." To this we most strongly demur. We are more than ever convinced that the sewage of all London ought not, even after chemical treatment, to be thrown into the river at Barking and Crossness; and we decline to receive on this point the assurance of certainty from chemists who three years ago were equally sure that no important injury was done to the river by the raw sewage. We are sorry that the Board persists in this obstinate resistance to the recommendations of the Royal Commission. They have been forced into their present action, after a hard fight, by the pressure of scientific and public opinion, and now, instead of giving in gracefully and obeying the wish of the nation, they contest every inch of ground in their retreat.

THE modifications which, after about a year's experience, it has been found necessary to introduce into the First Examination of the Examining Board in England constitute

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another step towards the improvement of the medical curriculum, the need for which we have several times pointed out. This examination, as originally framed, comprised two parts—namely, Medical Botany, Chemistry and Chemical Physics (meaning thereby Heat, Light, and Electricity), Materia Medica and Pharmacy forming the first part, for which it was not obligatory on the candidate to have received instruction at a medical school; and Elementary Anatomy and Physiology, for which a six months' study at a medical school was requisite. The changes advised by the Committee of Management, and adopted by the Colleges, include (*a*) the entire omission of Botany from the subjects of examination and the medical curriculum; (*b*) the option allowed to the candidate of taking Materia Medica and Pharmacy either with his Second Examination or with his First, and (*c*) the subdivision of the First Examination into three parts—namely, (1) Chemistry, including Chemical Physics; (2) Materia Medica and Pharmacy; and (3) Elementary Anatomy and Physiology. Since these alterations are to come into force at once, it may be useful to point out their bearings upon medical education.

The disappearance of Botany from the medical curriculum is the inevitable result of the growth of this science and of other more important subjects. As a part of the examination in question it had shrunk to ridiculously small proportions, but its elimination will be felt as a relief by the medical schools as well as by the medical student. The amount of botanical knowledge which the average medical student has hitherto gained is so small as to be practically valueless. Still we trust that this exclusion from the curriculum does not mean the entire banishment of the subject, and once more we would urge that both branches of Biology should be included in the subjects of Preliminary Examination. A lad who intends to study medicine ought to enter the medical school with some previous knowledge of science, and there is no hardship in requiring evidence that he has passed through a period of scientific training, whether at school or after, but at all events previous to his being eligible for a place on the Medical Council's Register of medical students. One argument for the retention of Botany in the curriculum is its practical advantage in the recognition of poisonous plants, but plainly such instruction as is needed for this purpose should find a place in the course of Toxicology. Botanical science cannot be taught any longer within the walls of medical schools, and the curriculum must not be overweighted by it; but as a subject of preliminary education it finds its appropriate place. It must be confessed that the same arguments apply to the study of Physics and Inorganic Chemistry. Although the Colleges do not demand evidence that the student has received his instruction in these subjects at a medical school, the fact that they include them in their First Professional Examination will tend to perpetuate the system of instruction so long in vogue. We are of opinion that both Physics and Chemistry, being subjects which require special laboratory instruction and a very complete training, are not in themselves necessary portions of strictly medical education. Their relegation to purely preliminary education would do much to develop that higher and more specialised chemistry which is termed Animal Chemistry, physiological and pathological. It is notorious that at the present day attendance upon the classes of Physics and Chemistry is regarded by the medical student, unless he have really a bent in their direction, as irksome and unprofitable. It is regrettable that this should be so; for a knowledge of these subjects is essential to a proper understanding of physiology and medicine. Very differently would these instructions be received were they so framed as to be directly applicable to purely medical work; and, therefore, in once again advocating their removal to preliminary education, we are sure that we are advising what is best in the cause of medical study. We venture, then, to urge upon the Committee of Management the serious consideration of the propriety of instituting a Preliminary Scientific Examination *before* registration; and the only reason that we can imagine why this step has not hitherto been taken, is the dread lest by making the entrance into the profession more difficult the number of entries will be much diminished. Such fears are groundless, for a year spent in scientific education is the best preparation for the student's subsequent career,—whilst the present plan, by which, to all but a few, the pursuit of these sciences compels interference with the natural course of professional study, is obviously detrimental from the scientific as well as the medical point of view.

The retention of Materia Medica and Pharmacy as part of the First Examination would matter little if the Natural Sciences were excluded; but it is quite plain that the grace allowed to candidates to defer these subjects to their Second Examination has been forced upon the Colleges by the disastrous issue of the original scheme. The examiners have found that the knowledge of Materia Medica exhibited by candidates has been very defective; with every latitude the rejections have been very high, and the derangement of the student's curriculum proportionately extensive. Since, however, the synopsis includes some knowledge of the medicinal action of the drugs, it would seem more appropriate to allow this subject to be taken with the subjects of the Second Professional Examination, as is the case in the universities; and doubtless the student who enters the schools without any previous knowledge of pharmacy will be advised to defer his attendance upon these classes until his second summer session. By that time he will be prepared to receive instruction upon the medicinal properties—or rather, we should say, the natural action—of drugs with reference to the normal functions of the body; he will study the subject with intelligence, and not by the method of cram. In conclusion, we believe that by these revised regulations the Colleges have taken one step towards a rational system in respect of the earlier education of the medical student; but that these changes must only be regarded as foreshadowing a bolder and wiser policy is to be hoped, and indeed expected, from such esteemed authorities on medical education as Sir H. PITMAN, Professor MARSHALL, and the other members of the Committee of Management.

THE answer which the President of the Local Government Board gave last week in the House of Commons to a question by Mr. GIBB, concerning the influence of the small-pox Hospitals at Hampstead and Highgate, is not calculated to satisfy those persons who reside in the neighbourhood of these or other small-pox hospitals in the metropolis. Mr.

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CHAMBERLAIN began by pointing out that his Board had no control over the Highgate Hospital, which was maintained by voluntary contributions; and his answer reads as if this were held to be a sufficient reason for the non-interference with an institution which there is too much reason to fear is a cause of loss of life in the north of London. Again, concerning the Hampstead Hospital, he refers to the "expensive litigation" to which it has given rise; as if this were evidence that the effects of the institution upon the public health had not been entirely overlooked. It might not unreasonably be argued that if due regard had been had for these effects, expensive litigation would never have resulted, and certainly, from the ratepayers' point of view, the expenditure of a large sum of money in a contention from which the public derived no benefit might have been conveniently replaced by the expenditure of a much smaller sum in an investigation into the effects of aggregation of cases of small-pox. Mr. CHAMBERLAIN'S answer is, indeed, only useful in one sense. It serves to show Londoners the hopeless condition in which they are placed for want of a central sanitary authority competent to consider these hospitals in their relation to the public health, and not as mere houses for the accommodation of certain sick persons; and it serves to show in its worst light the effect of government by boards which fail to see that the mere carrying out of Acts of Parliament in their legal sense is not the only duty which should be undertaken by authorities claiming to be enlightened.

There is no manner of doubt that a very serious responsibility rests upon the Local Government Board. This Board has had under their notice the expensive litigation in connexion with the Hampstead Hospital, and all the evidence that was forthcoming at the hands of the lawyers who conducted the inquiry. They have had before them the report of their own inspector, Mr. W. H. POWER, as to the mischief done by the Fulham Hospital. They have had the results of an inquiry by a Royal Commission, and a further report from Mr. POWER, showing, as regards Fulham, that, notwithstanding the adoption of some of the Commission's recommendations, the Fulham Hospital has still been mischievous in its effects. But this is not all. Their own medical officer has, in his report for the year 1884, pointedly directed their attention to the fact that "there are not a few indications subsequent to the report of the Commission of 1881 tending to the conclusion that the asylums hospitals in their present shape continue to cause an increase of small-pox in their several neighbourhoods." Nevertheless, the President does not hesitate to tell the House of Commons that since the termination of legal proceedings "the managers have secured an additional area of land in connexion with the site," as if this fact were reason for hoping that the further use of the hospital would not be detrimental to the health interests of the inhabitants of its neighbourhood!

This method of dealing with a subject which is related to the very existence of many people is emphasised by the action of the Metropolitan Asylums Board. A few weeks ago a special committee of this Board, appointed to consider the subject of hospital provision for small-pox, presented their report. This report contains a considerable amount of argument upon the question whether it is more economical to erect a completely new building at Darenth, or whether certain existing structures can be utilised; but from beginning to end there is not a single line upon the all-important question whether the hospitals at Hampstead, Fulham, Deptford, Homerton, and Stockwell are a cause of loss of life to the inhabitants of these districts, notwithstanding the fact that the several medical officers of health of the parishes in which or near which these institutions are situated have definitely shown that there is reason for believing this to have occurred.

There has indeed been too much delay in dealing with this matter. If the issues involved were merely the unwise expenditure of public money, we should be slow to concern ourselves further with it, but the squandering of human life which results from the adoption of a policy which can serve no good end is too serious a consequence to be passed by. Mr. GIBB'S question and Mr. CHAMBERLAIN'S answer in the House of Commons will, we hope, be the means of forcing this subject upon public attention; we trust it may not again be forgotten before it has received a satisfactory settlement.

THE Council of the Hospital Sunday Fund has determined that the question of sectarian nursing is not one for them to settle. Not only by the rules of the Fund, but by its very nature and constitution, there is no room for the discussion of such a question. It is the very glory of the Council to consist of men of every variety of creed, who have agreed, for the sake of helping the hospitals, to sink all sectarian differences and give way to the common religious instinct to befriend the poor and heal them of their sickness. It is an Old Testament representation of the Almighty that "He gives strength to the languishing and makes all his bed in his sickness." Hence it happens that the Bishop of LONDON and Professor MARKS equally feel the desire and the duty to co-operate in this great work. It is gratifying to find that the churches of London generally agree with the Council in this view of their duty to subordinate sectarian questions for the sake of discharging the urgent duties of catering for the sick poor. Many of the dissenting churches feel keenly the exclusion of their members from the nursing staff because of their non-conformity. But, to their great credit, they will adopt other means of removing this disability than by withholding their collections from the great Hospital Fund of June. One of these means is by fair and frank discussion of the question in proper places; and one of those proper places is in the rooms of the Hospitals Association. Accordingly, on Wednesday last, with Sir ANDREW CLARK fitly in the chair, Dr. GEORGE W. POTTER discussed this matter by answering this question, "Is the nursing at the London hospitals sectarian?" Dr. HARE, it may be remembered, justified the exclusive system of nursing by a sisterhood in the University College Hospital by arguing that in most of the other large hospitals the nursing was more or less sectarian, though in only one other is it by a sisterhood. Dr. POTTER contests this representation and adduces tables and facts to show that there is much more freedom than Dr. HARE'S statements implied. He has inquired of sixty hospitals and

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has received fifty answers, of which the following may be accepted as a summary:—

"1. Those hospitals at which the nursing is undertaken by a religious sisterhood. To this class only three metropolitan hospitals belong. 2. Hospitals having no special religious services of any kind. Of these there are seven. 3. Hospitals at which family prayers are conducted by the matron, or ward-sister, or a nurse—fourteen. 4. Hospitals where services are conducted by an honorary or paid chaplain, who is a clergyman of the Church of England—fifteen. 5. Hospitals where the nurses attend a neighbouring parish church—one. 6. Hospitals where the nurses attend a place of worship of their own choosing—one. 7. Hospitals where prayers are read night and morning by the inmates, and a short service is conducted on Sunday afternoons by a layman—one. This classification accounts for forty-two of the fifty replies given. Of the eight unaccounted for, four may be placed in one or other of these classes, though the replies were received too late for more definite classification. The other four are University College, the German Hospital, the Lock Hospital, and the French Hospital, Leicester-square. The table at the end of the paper gives full information concerning all the fifty."

Dr. POTTER'S tables do not include St. Bartholomew's. But this lack was well supplied in the discussion of the paper by Miss MANSON, the matron of St. Bartholomew's, who spoke on the invitation of Sir ANDREW CLARK. She showed that the nursing of St. Bartholomew's was quite satisfactory, though unsectarian, and that the supply of candidates was far more than the demand. The facts elicited by Dr. POTTER are satisfactory. In all the hospitals but four—the German Hospital, the French Hospital, University College, and the Lock—the nursing appointments are open to suitable persons of all religious denominations. We do not judge those of other nationalities. But our own countrymen who cultivate sectarianism in nursing may well consider whether they serve their hospitals by keeping up an exclusiveness which offends, and without which other institutions are as well nursed as their own. University College Hospital is now almost the only London hospital in which nursing by an exclusive sisterhood remains.

Other speakers took part in the debate. All expressed satisfaction with the fact, demonstrated by Dr. POTTER'S tables, that the rules generally were of an unsectarian character. Mr. NIXON and Mr. HOLMES defended the arrangements of University College Hospital on the ground of their success, and maintained that the question was one of no public importance so long as persons of all creeds were admitted. Dr. GLOVER admitted that the nursing was well done in University College Hospital, but not better than in other hospitals where a different system obtained. He argued that it was of great moment to remove every prejudice against hospitals from the public mind, though he quite believed that the authorities of University College were actuated by consideration for the welfare of the patients. Sir ANDREW CLARK thought much good would result from Dr. POTTER'S inquiries. He deprecated too much "individualism" in estimating the claims and work of hospitals. He admitted the necessity to guard against any appearance of sectarianism, but thought that the least sectarian arrangement in English hospitals was the moderate ascendancy of the services of the English Church.

Annotations.

"Ne quid nimis."

THE DEATH OF DR. AUSTIN FLINT.

IT is with deep regret that we have learnt of the death of America's most distinguished physician, Dr. Austin Flint, which occurred on Saturday last, from cerebral apoplexy. Dr. Flint was so widely known in this country, and so highly esteemed both for his personal qualities and his excellent work, that there will be many on this side of the Atlantic who will join very really in the sorrow of those among whom he has lived and toiled. Dr. Flint was an indefatigable worker. We believe that he commenced practice and lecturing in Buffalo, but promotion soon came to him, and he was called to the Bellevue Hospital and Medical School, where for many years, and up to the time of his death, he was Physician and Professor of Medicine and Clinical Medicine. In both of these capacities he toiled hard and successfully; his class was always crowded, and up to the last he prepared for it most carefully, to keep both himself and his hearers thoroughly abreast of the ever-progressing science and art which he loved. In addition he had a very large private practice, for his great experience, his sound judgment, and his kindly manly nature, made him the chosen consultant of a very wide circle. As a writer Dr. Flint exhibited great diligence. His treatise on the Principles and Practice of Medicine has passed through five editions, and is a worthy memorial of the man. It is a faithful indication of the care with which he set about all his work that, when he had to prepare the last edition, he sought the aid of a special pathologist, Dr. Welch, and committed to him the whole of the sections dealing with pathology. This work has been very popular, and is remarkable for the great amount of information condensed into a comparatively small compass, and for its accuracy. It was in diseases of the chest that Dr. Flint took the greatest interest, and he was the author of a very valuable work founded on the notes of 670 cases of phthisis observed by himself: he also wrote a Manual of Auscultation and Percussion, and published some lectures on the same subject which he delivered in Philadelphia in 1882. He did more than any other physician to develop this department of practical medicine in America, and he never wearied of demonstrating, writing, or lecturing upon his favourite theme. He was an ardent advocate of the binaural stethoscope, but among his choice treasures he kept a simple wooden stethoscope made by Laennec's own hands. Dr. Flint was the President elect of the International Medical Congress, which is to meet next year in Washington. The preparation for such a meeting necessarily devolved much work upon him, and the unfortunate division of opinion, which at one time assumed somewhat alarming proportions and imperilled the success of the Congress, not only increased the work very greatly, but added to it an element of pain, which pressed with crushing weight upon the sympathetic and generous nature of Dr. Flint. His friends cannot but fear that his valued life has been shortened by this strain, and a special bitterness is imparted to their sorrow by the reflection that he has not been permitted to realise his brightest hopes in connexion with the Congress, or to conduct to a successful issue the project in which he took so keen an interest. Dr. Flint was a frequent visitor to Europe, and his handsome presence was well known in London and many of our chief medical centres. He had arranged to deliver the Address in Medicine at the forthcoming meeting of the British Medical Association. As a physician Dr. Flint represented all that is best in the

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American character, his influence for good was very wide, and his loss is correspondingly severe. But only those who have enjoyed the high privilege of his friendship, and have experienced his unfailing courtesy and generosity and his tender manliness of heart, can rightly appreciate the gap his death causes.

ASSIMILATION OF NITROGEN IN DEBOVE'S "CRAMMING" METHOD.

DR. M. G. KURLOFF of St. Petersburg has published a series of observations undertaken with the view of discovering the chemical changes consequent upon the employment of Debove's "cramming" or "forced feeding" system in phthisical patients. He made six experiments on five patients, who previously to the "cramming" were losing weight, with bad appetites, diarrhœa, pyrexia, and cough, with sputum containing Koch's bacilli. The "cramming" (which in some cases was carried out by means of a stomach tube, as practised by Debove, and in some without, as has been recently recommended by Peiper) lasted for from three to eleven days, during which period careful estimations were made of the nitrogen excreted in the urine and fæces, similar determinations being made during the three days preceding and the three days following the treatment. The quantity and nature of the food were also noted; and from these data and from various analyses of food made on purpose the quantity of nitrogen ingested and excreted was determined and the amount assimilated calculated by subtracting the latter from the former. The material used in the "cramming" process consisted of pulverised meat, from which all the liquid portion had been previously expressed in the manufacture of meat juice, mixed with milk so as to form a drink of somewhat greater consistence than ordinary chocolate. Of this mixture 700 cubic centimetres were given at a time, some 400 grammes of the meat powder being thus introduced into the stomach during the day. It was calculated that this contained as much nitrogen as 3½ lb. of fresh meat. The patients were, however, not confined to the mixture, but were encouraged to supplement it with milk, bread, and biscuits. The mean daily nitrogen ingested was about 54 grammes, which is as much as is contained in 1600 grammes (3½ lb.), the maximum being as much as 80 grammes, corresponding to 2400 grammes (5⅓ lb.) of fresh meat. The effect of this huge quantity of nitrogen was to increase the breaking down of the albuminous constituents of the body, as shown by the increased excretion of nitrogen in the urine, which averaged about 34 grammes, the maximum being 56 grammes, whereas, previous to the "cramming," it had only ranged from 9 to 16 grammes. An increase also occurred in the percentage of ingested nitrogen which was assimilated, and a much more marked increase in the assimilated nitrogen relatively to the body weight. Taking one instance, the percentage assimilation was before, during, and after the "cramming" 84·9, 92·7, and 82·6 respectively, and the mean assimilation, expressed in grammes per kilogramme of body weight, was for the same three periods 0·24, 0·89, and 0·29. Thus during the "cramming" the nitrogen assimilated increased more than threefold, and was slightly more afterwards than previously. Even after the short period during which the treatment was continued, which was undertaken more for experimental than for curative purposes, the patients' appetites increased remarkably: they not only ate the whole of the ordinary hospital ration, but asked for more, though previously they had left a considerable portion of their food. The body weight also increased nearly 1 lb. a day, the increase continuing even after the special feeding was discontinued. Altogether Dr. Kurloff fully confirms the results Dr. Debove and others have obtained by this method of treating consumptives. The cough and expectoration diminished, the diarrhœa and night sweats ceased, and the patients felt a great deal better, so that some of them left the hospital and returned to their respective employments.

KING'S COLLEGE HOSPITAL.

ON Friday, the 12th inst., at the invitation of the Lord Mayor, a meeting was held at the Mansion House in aid of the funds of this hospital. There is an annual deficit of about £5000 over the annual income. Donations and subscriptions have kept up to the average amount, but during the past five years legacies have fallen from £6000 to £1000 a year, and this has necessitated the forced sale of much of the invested capital. It would be a very severe blow to a most important school, associated with names like Todd, Budd, Bowman, Farre, Priestley, and Fergusson in the past—not to mention the present staff—if retrenchment should have to be carried much further, and the beds fall below 150, the limits of the qualifying bodies. At present 170 are in daily occupation, and are filled with absolutely clinical cases, for distress in the Seven Dials and adjoining districts is too severe to permit of any but the most urgent cases being admitted. The claims of the hospital and of the medical school were well put forward by the Duke of Cambridge, the Archbishop of Canterbury, the Bishop of London, Lord Grimthorpe, Messrs. W. H. Smith, Hubbard, Alderman Sir R. N. Fowler, and others, and we would advise the authorities of the hospital to publish their speeches as a special appeal. We cannot doubt that when the charitable public are really aware of the urgent needs of this hospital, the teachers of which are in the front rank of our profession, a cordial response will be accorded, even in these times of severe commercial depression.

THE SHOP HOURS' REGULATION BILL.

A SELECT COMMITTEE of the House of Commons have already met to discuss the clauses of the proposed Shop Hours' Regulation Bill. Notwithstanding some difference of opinion, there seems to be a general agreement on the part of the promoters of the Bill, as well as of employers and employed, to whom it is intended to apply, that this measure is called for, and that it can best be carried out by definitely fixing a closing hour. A general allotment of twelve hours daily as working time, it is said, would prove a less satisfactory arrangement. There is also a strong desire on the part of tradesmen that on Saturdays and market-days late hours should continue to be the rule, as much business is done in the evening on these days. The evidence of Mr. Redgrave, chief inspector of factories, on this subject is instructive. Besides supporting the propositions to which we have referred, he is further of opinion that licensed houses and refreshment-rooms (as under the Factories Acts), and also the shops of butchers, bakers and chemists, should be excepted from the proposed new legislation. The poor, he maintains, have some advantage in the cost of food by shopping late. We should be sorry to lessen their profit in this particular; at the same time, the interests of assistants must also be considered; and there seems to be much force in the suggestion made by Mr. Fry, that to leave licensed houses open long after other shops had closed might almost amount to an advertisement in favour of the former. The cry that restriction of time would hurt the interests of junior assistants, since only persons under eighteen years of age are to be affected by it, has not, according to Mr. Redgrave, been justified by events in the case of factories and workshops. We are pleased to find that the same gentleman is in favour of some form of official inspection. We have always inclined to the belief that with this, as with any

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other enactment bearing on the conduct of trade, inspection is a logical and needful part of the legal process, and that it should not imply an offensive closeness of supervision. The fact that shopkeepers generally hail the expected regulation of their business hours may in itself, we think, indicate a readiness on their part to accept a certain degree of official oversight. Wholesale houses, it is to be noted, do not take kindly to the present wording of the Bill. They complain that their work is very irregular in its duration from day to day, and varies between the wide limits of nine and fifteen hours in the twenty-four, and they would therefore prefer a weekly or monthly rather than a daily regulation. They prophesy dismissal of apprentices and damage to trade should the Bill become law. On the other hand, a letter lately published informs us that the figures above stated do not, in one such house at least, represent the true state of matters. There the assistants work during slack times for twelve hours daily, and in the busy season for fourteen or fifteen. It does not, therefore, seem very clear that wholesale houses deserve the discretionary power as to daily working time which they seek. If we look at the Bill as a whole, we cannot but feel, while admitting its value, that it goes hardly far enough. Thus there seems no good reason why adults as well as youths should not be included within its range. Overtime work may sometimes be allowable for such, but if so, it should not on that ground be considered as acquitted from possible restriction, otherwise the exception may become the rule, and adults have to make good the leisure granted to their juniors. We miss also some arrangement which will concede to shopmen the weekly half holiday now common in many callings. If we turn again to the proposed exceptions, there seems no great necessity for most of them. Let refreshment bars at places of entertainment be allowed to close late, and enough will probably have been done for public convenience. Because a shop is closed it need not follow that it is barred against emergencies. The messenger of an invalid, for example, may be served by a chemist even after he has retired for the night, but in order to meet such urgent cases it is not necessary to attract custom of every kind by keeping open shop. For these various reasons we would hope that further evidence may assist the committee in framing a measure somewhat wider even than that which now lies before them.

THE UNDOING OF A DEED OF GOODNESS.

THE pity of it! After opening up a way of return and providing a place of repentance for the most pitiable lost class of our great mixed community, and extending the blessings of the healing art to those who have perhaps the very least claims on the sympathy and help of their fellows, a rampant spirit of that self-righteousness which affects to find an excuse for refusing to do good lest evil should come has succeeded in undoing all that mercy has achieved. The crazy and fatuous agitators against the Contagious Diseases Acts have clamoured at the office doors of a weak Government and profited by the impressibility of a sentimental majority in a scratch House of Commons. Henceforward, forsooth, that we may not run the risk of seeming to countenance vice by dealing kindly with the vicious, disease and immorality in their most revolting forms are to riot in the midst of our army, navy, and the civil population of garrison towns! When will the weak-minded sentimentalists of this nineteenth century cease to worry the life out of humanity with their whimperings? It is too late to treat this subject as involving a question for serious argument. It has been conclusively demonstrated that the Contagious Diseases Acts were of marked value to the interest of health and morals. It remains only to bemoan the fatuity which has allowed them to be set aside.

M. JULES VERNE.

THE many admirers of M. Jules Verne were distressed to hear last week that he had been attacked by his nephew, and had received a serious bullet wound of the leg. The ball has buried itself in the tibia, and we learn that a prolonged but unsuccessful attempt to remove it has been made, and that the wound has been left open in the hope that the ball may be spontaneously discharged. Probably in this there is some error. It is a common popular notion that the safe extraction of a bullet removes the chief danger of a gunshot injury. This is, of course, not the case. The main element of danger arises from the injury inflicted by the bullet in its path through the tissues, injuries which are only rarely benefited by the extraction of the offending missile. Then follow secondary, and scarcely less formidable, perils arising from inflammation in the track of the ball, occasioned in part perhaps by the direct injury of the tissues, but to a much greater extent by irritating and poisonous materials finding access to the wound or generated therein. The removal of the bullet does not directly lessen the danger from this source. Still the extraction of a ball is important; it is often essential to the proper treatment of the deeper parts of the wound; and even when no acute mischief follows the injury the mere presence of the ball may cause such a degree of chronic inflammation as will prevent the closure of the wound. The two cases of bullets long imprisoned in the lower end of the femur which were lately recorded in our columns by Sir W. Mac Cormac aptly illustrate this, and the excellent results which followed extraction in those cases will, we hope, be attained in the case of M. Jules Verne. For we hope soon to hear that he has submitted to a second and successful operation.

LOCAL DISTRIBUTION OF SUICIDE IN ENGLAND AND WALES.

IN the discussion that followed the reading of Dr. Ogle's recent paper on "Suicides in England and Wales" before the Statistical Society, it was pointed out that the local distribution of suicide was a subject not devoid of interest, although this branch of the subject was not dealt with in the paper under discussion. Dr. Ogle, in his reply, called attention to the difficulty of obtaining a sufficient basis of facts to yield figures trustworthy for comparative purposes for such populations as inhabited many of the English counties. Whilst fully admitting the validity of this objection to suicide-rates for small populations, some available figures may be referred to which are useful in throwing light upon the varying death-rates from suicide in different parts of England and Wales. It appears from the Decennial Supplement recently issued by the Registrar-General that the annual death-rate from suicide in the ten years 1871-80, which was equal to 71 per 1,000,000 persons living in England, did not exceed 41 in Wales. With reference to this low rate from suicide in Wales, it may be pointed out that in Cornwall, where the population shows affinities in race to that of Wales, the suicide-rate was almost identically the same, 40 per 1,000,000. On the other hand, the rates in the counties on the borders of Scotland exceeded the general English rate. Apart from the low suicide-rates prevailing in Wales and in Cornwall, it would appear that the death-rate from this cause is governed to a large extent by the proportion of the urban element in the population. In the eleven registration divisions the rate from suicide in the ten years 1871-80, without correction for differences of age and sex distribution, was highest, 85 per 1,000,000, in London, and 81 per 1,000,000 in the south-eastern division, containing the counties of Surrey, Kent, and Sussex, which contain a large proportion of the metropolitan suburban population. The high rate in Sussex is mainly due to the exceptionally

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large proportion of suicides in Brighton, Hastings, and other seaside holiday resorts, which are practically seaside suburbs of London. The next highest rate from suicide in the registration divisions prevails in the north-western division, consisting of the counties of Lancashire and Cheshire, which next to London includes the largest proportion of urban population. At the other end of the scale are the Welsh and the south-western registration divisions, with suicide-rates of 41 and 58 per 1,000,000 respectively. Whether the low rate in Wales be due to race characteristics, or to the fact that the population of the greater part of the principality is mainly rural, further investigation would alone determine, although the facts now available decidedly point to the more marked influence of race upon the suicide-rate. The south-western division contains the counties of Wiltshire, Dorsetshire, Devonshire, Cornwall, and Somersetshire; and although the rate from suicide was only 50 in Dorsetshire, 51 in Wiltshire, and, as has before been stated, 40 in Cornwall, it was 65 in Somersetshire and 69 in Devonshire, the two latter counties containing larger proportions of urban population. It should be pointed out, however, that in several essentially rural counties the rate from suicide was scarcely below, while in some it was above, the general average; for instance, the rate was 69 in Norfolk, and 81 in Suffolk and in Lincolnshire. One of the most remarkable exceptions, however, to the usual relation between the proportion of the urban element in the population is the county of Durham, where the rate from suicide was only 49. This low suicide-rate in Durham appears to be due to the fact that miners show, in comparison with other occupations, a most remarkable freedom from suicidal tendency.

SNAKE-POISON AND HYDROPHOBIA.

MEDICINE is one of those subjects about which it is never safe to predicate any absolute statement. Anyone may make an assertion in medicine which at first sight appears to be as preposterous as anything can well be; and yet the nature of medicine is such that second thoughts may render the assertion not altogether so absurd as at first appeared. Some correspondence has been in progress in our columns on the alleged antidotal effects of snake-poison and the virus of rabies. In the month of January Dr. G. C. Roy contributed an original article to THE LANCET, in which he contrasted the physiological actions of snake-poison and the symptoms of rabies, and suggested that the venom of the cobra should be employed to counteract the morbid phenomena of rabies. The suggestion is by no means an original one. But it is not the claim of originality that subsequent correspondents—chief amongst whom is Mr. Vincent Richards—have so much interested themselves. The matter appears to them in a somewhat ridiculous light. Confessedly the suggestion cannot be said to rest on any scientific basis, for even the physiological contrast instituted by Dr. Roy hardly lends support to his well-meant proposal. A valuable small work by Mr. Vincent Richards, entitled "The Landmarks of Snake-poison Literature," collects together a large number of facts concerning snake-poisons,[1] and reviews the more important researches into their nature. To those who wish in the compass of 150 pages to become acquainted with the anecdotes, fallacies, opinions, original researches, mode of treatment, and in fact every phase of snake-poisoning, we heartily commend this little book; it is written in a cheerful vein, albeit it is occasionally warlike and severe in its method of dealing with opposite views. It is far better, in the interest of everybody and everything, that the truth should be plainly told. We have no antidote to snake-poison when once this has fully entered the system. If the venom can be confined to a part by means of a ligature, then permanganate of potash in a 5 per cent. solution is an efficient destroyer of its power. Halford's advocacy of ammonia in the treatment of snake-bite is conclusively shown to be a fallacy. Fontana in the last century had also discovered the inefficacy of ammonia. The truth appears to be that if an insufficient dose of the venom be administered, the animal lives whether stimulants, alcohol, or ammonia be given or not. Mr. Richards goes further than this, and shows experimentally that ammonia, if anything, increases the rapidity of action of a fatal dose. In the controversy at Melbourne doubt seemed to exist amongst some as to the symptoms of snake-poisoning. Mr. Richards asserted that in the cases of recovery from snake-bite the symptoms observed were the effects of alcohol administered in large doses. That the intellect in snake-poisoning remains unclouded to the last is the testimony of the most competent observers. The physiological researches of Weir Mitchell, Reichert, and Wolffenden are justly esteemed as of the highest value, whilst at the same time forming a new departure in our knowledge concerning the nature of powerful poisons. Snake-poison, from the cobra at all events, contains three kinds of albumen—a proteid, a globulin, and a peptone. Differences still exist as to the precise chemistry, but the globulin appears to be the most powerful poison, and acts by paralysing the respiratory centre of the medulla.

[1] Calcutta: D. M. Traill, British Indian-street. 1885.

THE EAST WIND.

THAT the "east wind" has from the earliest times been credited with evil influence is apparent in the fact that Ephraim was described in one of the most ancient of the Jewish traditions as feeding upon it. What a repast! Modern science has determined that what we call the east wind is really a current of air from the north, its direction being modified by the rotatory movement of the earth. This is not difficult to understand. The avidity with which the dry cold wind from the north takes moisture, and particularly the secretion of the mucous membrane lining the air-passages, inspissating the mucus, and, as it were, gluing together the cilia of the epithelium, is the real cause of the malignancy of the "east wind." We have repeatedly explained this fact, and pointed to the use of a succulent jujube or something which will give off moisture in the mouth to be carried into the air-passages with the inspired air as the best of practicable measures of protection. We believe that if only the habit of keeping a morsel that gives off aqueous vapour—not one that dissolves by taking up moisture—in the mouth during the time of exposure to the east wind were formed, there would be very few colds from that cause.

"MEMORY, NATURAL AND ARTIFICIAL."

WE have received an interesting little pamphlet on "Memory, Natural and Artificial," by Mr. F. W. Edridge Green. The paper was originally read before the Abernethian Society in St. Bartholomew's Hospital. It treats in a suggestive manner of the nervous action concerned in the repetition of muscular movements, and of sensory impressions, as due to the development of a function akin to intellectual memory in the corpus striatum and optic thalamus respectively. Reflex automatism in which the basal ganglia participate is fairly regarded as an expression of the completed stage of this form of memory. Passing on to the higher manifestations of the same faculty in its relation to mental operations, Mr. Green finds, in common with other observers, that decisive localisation is as yet an unaccomplished possibility. He quotes numerous cases of loss or excellence of special forms of memory, however, which may hold out a dim prophecy of greater exactness

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in the future map of cerebral structure with regard to function. The paper closes with some valuable hints on the cultivation of memory. These are briefly given as follows:—"Concentrate your attention, classify and condense, make associations, substitute letters for figures, and localise your ideas."

THE EDINBURGH MEDICAL MISSIONARY SOCIETY.

WE have read the annual report—the forty-second—of this Society with much gratification. We have the conviction—very beautifully expressed by the late Professor Alison of Edinburgh, in an essay on medical missions—that the science and art of medicine are to be greatly used by Christian men in their efforts to extend Christianity and civilisation among the less favoured nations of the earth. This conviction is confirmed by every report of the work done by medical missions, whether in China, India, or Africa. Of all missionary societies having claims on medical men or on the public, none has stronger claims than the Edinburgh Medical Missionary Society, as the oldest one of the kind, and the most efficient. It has a training school for medical missionaries, in which students learn the nature of medical missionary work among the poor. It has mission stations in India, Nazareth, and Damascus. The institution in Agra incorporated with this Society serves as a training school for native medical missionaries, who, by the kindness of Sir William Muir when Lieutenant-Governor of the North-West Provinces of India, receive their medical education free at the Government Medical College. The encouragement of the medical education of natives is evidently one great means by which we can confer enormous benefits on Eastern nations. A kind friend of medical missions has offered to bear one half of the expense for three years of establishing a Christian medical school in Japan, where the Government now gives licences to practise only to those who pass an examination in Western science. The Edinburgh Medical Missionary Society is not connected with any one Church, but supplies legally qualified missionaries to the various missionary societies. It is a great credit to the Edinburgh school, which may have its parties and even its differences, but has, too, its practical Christianity, which is felt through this Society in every part of the world.

DEATH FROM ETHER, OR NOT?

WILL some of our older surgeons tell us the frequency with which death occurred in ante-anæsthetic days, just before the operation began, from the shock of fear added to the exhaustion produced by previous agony. A case—that of Mr. George Harling, of Lockwood, near Leeds—has just occurred, in which a patient suffering from cancerous obstruction of the bowels and peritonitis begged for the only operation that could give any relief—that of colotomy,—though Mr. Teale expressed his opinion that it could only be of temporary benefit. In deference to the importunity of the patient the operation was about to be performed. He had not taken more than three or four inhalations of ether when he threw himself back, breathed once or twice, the pulse suddenly ceased, and the patient died. Mr. Hall, the practitioner in attendance, gave it as his opinion that the death was not caused by ether. At the post-mortem, besides the appearances of peritonitis and malignant disease, a fibrinous clot was found in the right ventricle attached to the tricuspid valve. The jury returned a verdict of "Death from natural causes." We concur fully in the justice of this verdict. Possibly the slight agitation incident to the operation and the administration of the ether, with a fibrinous clot already in the heart, might contribute to the fatal issue, which could not, however, have been deferred many hours.

PROPOSED AMALGAMATION OF THE SANITARY INSTITUTE AND THE PARKES MUSEUM.

THE Councils of the Sanitary Institute of Great Britain and the Parkes Museum have mutually agreed to a proposal to amalgamate and reconstitute the two institutions into a new body, to be incorporated by a Royal Charter under the title of the Sanitary Institute and Parkes Museum. The matter is now in the hands of the Fellows, Members, and Associates of the respective institutions. A decision will probably be definitely arrived at on March 25th. It is pointed out that the aims and scope of the two Societies are in many respects the same, though each possesses functions peculiar to itself, but which might, the Councils think, with advantage be shared by both. The institutions were each started exactly ten years ago; they already possess one and the same secretary and place of abode, and their respective numbers of members are pretty much alike. It is urged that by amalgamation the prosperity as well as the utility of the Societies would be largely promoted. If the union is definitely decided upon, an application will be made to the proper quarters for a Royal Charter to found the new institution.

THE POISONS ACT.

WE understand that it is the intention of the Government to propose a revision of the regulations affecting the sale of poisons. It is generally admitted that the Act as at present administered is unsatisfactory, inasmuch as the list of articles included in the Schedule of Poisons is singularly incomplete, whilst the formalities connected with the retailing of certain popular poisons, which it would be superfluous to name, are practically inoperative. The question of including nitro-glycerine in the list of prohibited articles has for some time past occupied the attention of the Crown. It is universally recognised that it is a most valuable medicinal agent, but it must be admitted that its introduction into the British Pharmacopœia in the form of a sweetmeat was an egregious blunder. Either the 1 per cent. alcoholic solution, which is in constant use by medical men, will have to be substituted for the objectionable and dangerous chocolate drop now so commonly advertised as a popular remedy for neuralgia and sea-sickness, or its indiscriminate sale to the general public will have to be restricted. The other articles proposed to be added to the list are lobelia, nitro-benzol, savin, and their preparations, together with the soluble oxalates. It is a remarkable fact, in view of certain recent legal proceedings, that chloroform is not mentioned. On the other hand, the frequent fatalities following the unrestricted use of carbolic acid as a disinfectant have not escaped notice, and the necessity for including it in the second part of the schedule is again being forced on the attention of the Privy Council.

THE PARENTAL "DON'T."

SOME parents are continually checking their children. Others, again, seem to have hardly will enough to chide or deny them anything. A little work which has reached us, and which bears the above title, seeks to instruct fathers and mothers how to steer a middle course between these difficulties and to ensure a successful future to their offspring. Success, in the words of the author, implies more than financial distinction. There must be true and equal development of the physical, mental, moral, spiritual, and commercial side of life in order to deserve the term. His advice to this purpose is on the whole very sensible, and is given in a terse but interesting style, which renders the paper agreeably readable as well as instructive. We note with satisfaction that he dissents from the present high-pressure

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system of school education, and would rather train the mind of childhood than fill it. Physical exercise receives due attention. Practical hints on the teaching of morals and religion are not wanting. A somewhat lengthy section is devoted to home hygiene and the rearing of infants. The observations contained in this chapter are well considered and accurate. We could wish that all parents were equally clear in their understanding of the value of milk alone as an article of infant diet, on the injurious effects of close, hot rooms, long and heavy clothing, empirical sedative remedies, overcrowding, and drainage deficiencies. We do not doubt that readers of this pamphlet will learn from it some points of use in the training of children which they don't know at present.

THE LATE PROFESSOR MARCOVICI.

THE Roumanian medical journal, *Spitalul*, announces the death, at the age of fifty, of Dr. Al. Marcovici, Professor of Clinical Medicine and Dermatology in the Faculty of Medicine of Bucharest. The deceased professor received his early education in various schools in Roumania, whence he went in 1853 to Paris, where he took the degree of Bachelor of Science two years later. He then entered as a medical student, and distinguished himself by gaining medals and by obtaining a post as interne in the Bicêtre. He worked under Sée, Robin, and Grisolle, and greatly distinguished himself in his thesis for the doctorate, which was on the different kinds of pleuritic effusions and their medical and surgical treatment. He afterwards returned to his own country, where he was appointed professor in the University of Bucharest. He wrote various works and papers on Quinine in Malaria, Acute Granular Phthisis, Diabetes, Cholera, &c. He also took part in several important international medical congresses, where he represented his country, in those of Brussels and Amsterdam being nominated honorary president. He was also present in a representative capacity in the congress held in London in 1881.

DR. CLOUSTON ON CHANGES IN THE FORM OF INSANITY.

DR. CLOUSTON advances some opinion on the variations of type in mental disease which, while admitting the authority of his opinion, we are not disposed to accept without further evidence. They are the views of an able superintendent of an asylum, but they cannot, in the nature of things, express the result of more than a limited series of observations. We think Dr. Clouston lays too much stress on alcoholism as a cause of insanity, and we venture to doubt whether general paralysis is actually decreasing. On the contrary, it seems to be more common than heretofore. The recognition of "mental disease," so-called, in the aged is very much an affair of economic policy even in Scotland.

MEDICAL HEROISM IN RUSSIA.

A CASE of heroic self-sacrifice of medical men has just occurred at Kharkoff. A patient was brought into the lunatic asylum with hydrophobia, who was so violent that he had to be put into a sack and carried along by gens d'armes. All the attendants refused to touch the unfortunate man, declaring that they would rather lose their situations; thereupon two of the medical officers, Drs. Gutnikoff and Davidoff, themselves undertook to wash him and attend to him, though he was in the filthiest condition and covered with vermin. They managed after some time to get him somewhat cleaner and calmer. However, in one of his paroxysms, he bit Dr. Gutnikoff in the finger, and bespattered Dr. Davidoff's hand and eye with his saliva. The man did not live through the night. The two doctors are considered to be in great danger, and the principal, Professor Kovlefski, has written to Pasteur about them. It seems, however, that they have no funds to enable them to undertake such a long and expensive journey. Perhaps, however, public or private generosity may step in, or, as they are Government officials, it is conceivable that the Imperial treasury may be opened for the purpose.

HEALTH OF THE PRINCESS OF WALES.

WE have authority for stating that the health of her Royal Highness the Princess of Wales is not such as to cause anxiety. After her Royal Highness's late illness at Sandringham, Torquay was proposed for change and fine air at this season. The Princess has lately had a common cold, which, together with the inclemency of the weather, has prevented the usual carriage exercise.

AMPUTATION OF THE THIGH UNDER COCAINE.

DR. VARICK of New Jersey records in the *New York Medical Journal* of Feb. 20th a case in which he employed cocaine as a local anæsthetic for amputation of the thigh. The patient was a man aged thirty-nine, who was admitted to hospital with a compound fracture of the leg. An attempt to administer ether caused such alarming symptoms that it had to be abandoned, and Dr. Corning was requested to employ his method of confined injections of weak cocaine solutions while the limb was removed above the knee-joint. The result is stated to have been most successful; the division of the skin and deeper soft parts occasioned no pain, but during the sawing of the bone the man complained loudly of pain. A solution of 1 per cent. was used for the skin, and a solution of half this strength for the deeper parts: the report does not state the exact amount of the solutions that was injected. Such a case as this shows us that in cocaine we have a local anæsthetic of extreme value, and which, under certain circumstances, can successfully replace general anæsthesia even in the gravest surgical operations.

MERCURIAL DISINFECTION OF ROOMS.

PROFESSOR ROUIG recommends that in epidemics of cholera, typhoid, small-pox, &c., the chambers which have been occupied by the patients should be disinfected by means of fumes of corrosive sublimate in the following manner. The room is closed and a vessel of live coals placed in the middle. Upon this fire about two ounces of sublimate are thrown, and the room is not opened for three or four hours. The most careful covering up of mouth and nose is necessary on entering to open the windows. After free ventilation has been continued for several hours, the remaining traces of mercury may be rendered innocuous by fumigating with sulphur.

CHOLERA IN BRISTOL IN 1835.

IT will be remembered that during the past year it was alleged that a case of cholera found its way into Bristol. We have Mr. Davies's annual report for 1885 now before us, and it supplies us with authentic details as to the occurrence. A sailor from on board a vessel infected with cholera in Marseilles harbour travelled direct to Bristol and died there very soon after his arrival, the coroner's jury finding that he died of symptoms resembling those of Asiatic cholera. Mr. Davies, whose experience of cholera in a former epidemic enables him to speak with very considerable authority on the subject, expresses his firm conviction that the disease of which this man died was "true Asiatic cholera" contracted at Marseilles, and, so far as preventive measures are concerned, he acted according to this conviction. The body was covered with disinfectants and imme-

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diately buried, articles that could have become infected were destroyed, and possible pollution of the local well-water was dealt with by removing the handle of the pump which was in the room where the corpse lay. The incident supplies two lessons:—Firstly, the uselessness of the quarantine measures resorted to by the French authorities at Marseilles in preventing the diffusion of cholera by human intercourse; and secondly, the immense advantage of trust in sanitary measures such as have for years past been in progress in what was formerly a cholera locality, and of the immediate adoption of measures of sanitary precaution, which cannot be secured in a moment of panic, but which are the natural outcome of a properly organised system of sanitary organisation.

THE LATE DR. ALFRED C. POST OF NEW YORK.

THERE is a wonderful harmony in the tribute paid by all the New York medical papers to the late Dr. Alfred C. Post, who died at the ripe age of eighty-one, but who was expected to have lived and worked much longer, and would have done so but for a sudden and sharp sickness. He had performed a very successful ovariotomy only four months before his death. He was the nephew of the celebrated Dr. Wright Post, the friend of Percival Pott, Cooper, Abernethy, &c., and the father of Dr. George E. Post, the able surgeon and devoted missionary of Beirut. He was happy, too, in his early education, in which piety and culture were combined. He was a good classical scholar, but his chief delights were in religion and surgery, and he once said, in no irreverent spirit, that the two things he enjoyed most were a surgical operation and a prayer meeting. Dr. Post of Beirut was in London last summer. Eager to be back at his Syrian work, and assured of his father's health, whom he had not seen for eighteen years, he resolved to defer the pleasure of visiting him to another year. The father has been translated sooner than either expected, but in the exercise of the same beneficent art and with the same religious spirit Dr. Post will find consolation.

NERVOUS SEQUELÆ OF SMALL-POX.

WE would draw special attention to the interesting paper contributed by Drs. Whipham and Myers to the last meeting of the Clinical Society. The interest of the subject lies simply in the fact of the occurrence of disorders of articulation after the small-pox has disappeared. Small-pox, like other acute specific fevers, is liable to be followed by various nervous sequelæ, either of cerebral, spinal, or peripheral origin. Dr. Barlow and Dr. S. Mackenzie contributed some interesting cases occurring after small-pox and during measles. We have much yet to learn concerning the disorder of articulation of which living specimens were exhibited the other night. Dr. Hughlings Jackson was inclined to locate the lesion in the medulla oblongata, and to regard its nature as of thrombotic order. However, at present there is but little to be said that is definite.

SUBJECTS FOR DISSECTION IN RUSSIA.

DIFFICULTIES are frequently experienced by medical schools in this country in obtaining sufficient subjects for dissection, and we are apt to envy continental schools which appear to us always to enjoy a profusion. This is not, however, invariably the case. The University of Dorpat is at present considerably agitated by an order which has been made stopping the supply which had hitherto been obtained from the hospitals and prisons of St. Petersburg. Subjects from these sources are in future to be monopolised by the Military Medical Academy of St. Petersburg, and as the towns in the Baltic provinces where Dorpat is situated are of very moderate dimensions, considerable difficulty will be experienced in satisfying the needs of the constantly increasing number of students.

AMENDMENT OF THE MEDICAL ACT.

IT is announced in the middle of an almost unprecedented political crisis that a Medical Bill will be introduced. Of course, whenever such a Bill appears, it will receive from us fair and even favourable consideration. In the meantime it seems to us scarcely credible that any Bill can be passed just now pretending to meet the recommendations of the Royal Commission or the reasonable wishes of the profession.

PROFESSOR TYNDALL.

SIR WILLIAM GULL informs us that Professor Tyndall has for a long time suffered from sleeplessness, which at length, with hard scientific work, has much prostrated the nervous system. It is to be hoped that he will now take a long rest, which is so much needed for his restoration.

THE SUNDAY CLOSING BILL.

WE regret the miscarriage of this measure. No one who has medical knowledge can doubt that a great curtailment of drinking and the hours for drinking would be for the advantage of this country, and that work on Monday would be infinitely better resumed if there were less drinking on Saturday nights and Sundays. The Bill has the support of the people, but the forms of Parliament are capable of abuse, and of enabling it to prevent good being done.

REFORM OF THE UNIVERSITIES OF SCOTLAND.

NINE HUNDRED of the graduates and members of the Council of the University of Glasgow have memorialised the Secretary of State for Scotland in favour of amending the constitution of the Universities of Scotland, so as to give more power to the general body of graduates, and to break down the monopoly of university teaching. There is much to be said for careful changes in this direction.

A NEW ELEMENT: GERMANIUM.

MR. CLEMENS WINKLER writes to the Chemical Society from Freiburg, Saxony, under date Feb. 21st, that he has discovered in the mineral argyrodite a non-metallic element closely related to arsenic and antimony, and that he has named it germanium. Argyrodite is a new mineral discovered at Freiburg by A. Weisbach, consisting of silver, sulphur, and germanium.

FOREIGN MEDICAL APPOINTMENTS.

DR. A. BOICESU has been appointed to the Professorship of Zoology, and Dr. Maldarescu to that of Clinical Medicine, in the University of Bucharest; also Dr. Rizu to the Chair of Therapeutics in the other Roumanian University, Jassy. Dr. L. Turnas, of St. Petersburg, has been appointed Professor of Pharmacology in Warsaw. Dr. G. Albertotti has been appointed Professor of Ophthalmology in Modena.

THE Museum and Lecture-rooms Syndicate of the University of Cambridge have issued a report containing earnest appeals from Professor Foster and his assistant lecturers for more space, which is sadly needed for the proper teaching of physiology. The plans already approved for the new buildings provide for more accommodation for the physiologists, but they are not yet taken in hand, and the object of the report is to hasten their commencement.

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THE late Mrs. Curwen, who recently died at Brighton, has left, in the event of her daughter dying without issue, £40,000 to St. George's Hospital, on condition that one of the wards be named the Ewing Ward, and that the money be kept as a separate fund. The testatrix also bequeaths £5000 each to the Great Northern Hospital, St. Mary's Hospital, and All Saints' Seaside Convalescent Hospital, Eastbourne; £2500 each to Westminster Hospital, Charing-cross Hospital, the London Fever Hospital, the Royal Free Hospital, the London Hospital, the Cancer Hospital, Middlesex Hospital, Queen Charlotte Lying-in Hospital, the General Lying-in Hospital, the City of London Lying-in Hospital, the National Hospital for the Paralysed and Epileptic, the Royal Westminster Ophthalmic Hospital, the Hospital for Sick Children, Great Ormond-street, and the North-Eastern Hospital for Children, Hackney-road; and £500 each to the Victoria Hospital for Children, and the Belgrave Hospital for Children.

WE regret to learn of the serious illness, from pneumonia, of Dr. Imlach. The Medical Institution have resolved to postpone their meeting for the discussion of certain letters on the action of the Society in regard to the frequent performance of laparotomy. Whatever may be thought of this operation and of the circumstances calling for its performance, there can be but one opinion as to the propriety of the resolution of the Medical Institution. We sincerely trust that Dr. Imlach's recovery will be prompt and complete, for his own sake and for the sake of a right judgment on this important question in surgery. The profession will certainly feel that the proper thing is to suspend judgment.

A MEETING of the Governors of Wellington College was held at Marlborough House on Monday, the 15th inst., with the Prince of Wales as President. It is to be hoped that, among other matters, the present condition of the health of the boys was considered, owing to the number excluded from classes through illness. We have before called attention to grave and preventable illness among the boys, masters, and servants in the past, and again direct attention to the necessity for a full and impartial inquiry into the sanitary state of the institution.

THE number of physicians in Germany averages 1 to 3025 inhabitants. Their distribution, however, is very uneven, the cities and watering-places being especially well supplied. In Bonn there is 1 medical man to 440 inhabitants, in Weisbaden 1 to 558, in Berlin 1 to 1063.

SOME of the proprietors and licensees of houses for the reception of lunatics are not satisfied with the Lunacy Acts Amendment Bill of the Lord Chancellor, and have petitioned that the measure may be referred to a Select Committee, where they may be heard by counsel.

THE Prince of Oldenburg, Commander of the Russian Imperial Guards, intends to found an establishment at St. Petersburg for the treatment of hydrophobia by inoculation, and preliminary experiments are now being made.

DR. HERBERT TYRRELL GRIFFITHS, Medical Registrar of St. George's Hospital, was on the 12th inst. appointed Visiting Physician to the Seamen's Hospital, Greenwich, vice Dr. Carrington, resigned.

A REMARKABLE case of total ablation of the arm and scapula, followed by recovery, is fully reported in the *Journal de Médecine de Bordeaux* by Dr. Loumeau.

ELEVEN cases of cholera, seven of them terminating fatally, are reported to have occurred in the neighbourhood of Padua, and three cases, resulting in two deaths, near Rovigno, in Istria. Elaborate quarantine precautions are to be taken previous to the landing at Toulon of the French troops from Tonquin.

PROFESSOR VON FRISCH, of Vienna, a pupil of Dr. Koch, has been appointed to go to Paris and study M. Pasteur's system, at the expense of the committee which has been formed in that city to found an institution for the cure of rabies.

AT a meeting of the Senatus of Aberdeen University, on the 6th inst., the degree of LL.D. was conferred upon Patrick Manson, M.D., Hong-Kong, China, and Sir Samuel Rowe, M.B., C.M. Aberd., K.C.M.G., Governor-General of Sierra Leone.

A NEW publication devoted to the subject of pharmacy has been published at Melbourne, entitled the *Australian Journal of Pharmacy*.

ON the 16th inst. the French Academy of Medicine voted 10,000 francs to the Pasteur Institution.

DR. GERVIS has been appointed Consulting Physician to the Royal Maternity Charity.

THE CEREMONY ON THE EMBANKMENT.

ON Wednesday next, the 24th inst., Her Majesty the Queen, as already announced, will graciously lay the foundation-stone of the Examination Hall to be erected by the Royal Colleges of Physicians and Surgeons conjointly on the Thames Embankment. The site chosen, which belongs to the Duchy of Lancaster, is situated just to the west of Waterloo-bridge, between Savoy-street and Savoy-hill. The building, which will be square in form, has a frontage of 150 ft., and will, including the basement, contain five floors. The ground floor will be occupied by clerks' offices, the smaller examination-rooms, and private rooms for the examiners. The first and second floors will be identical, each comprising a large examination-room 100 ft. by 30 ft., capable of division into two apartments should this be necessary, and two rooms, one at either end, measuring 60 ft. by 21 ft. An apartment for chemical examinations will be provided on the third or top storey, with every requirement for technical work, and here also will be found rooms for anatomical and various purposes. With regard to the exterior, the main front will be in Savoy-place, overlooking the Thames. There will be three entrances, from Savoy-place, Savoy-street, and Savoy-hill, each being furnished with staircases leading up to the top storey. The materials used in the façades are to be principally red brick and Portland stone, and the style will be Italian. Mr. Stephen Salter, of Woburn-place, is the architect, and Messrs. Higgs and Hill the contractors. Although the space at the disposal of the authorities is necessarily extremely limited, we are glad to see that every possible effort has been made to accommodate all grades of diplomás of the two Colleges. The College of Surgeons, owing to the great number of its Fellows and Members, has had to have recourse to the "hazard of the die," the number of available tickets having been divided between the two Colleges. The College of Physicians has thus allotted their share—viz., Fellows 140, Members 130, and Licentiates (taken we believe in order of seniority) 200. We are gratified to see that the suggestion we made last week with regard to the latter has been thus liberally responded to. The result of

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drawing lots at the College of Surgeons will probably give room, over and above those holding office in the College, for about 260 Fellows and 130 Members. The deans of the medical schools of the eleven metropolitan hospitals have been asked to nominate a member of each of their schools to act as a steward on the occasion. A guard of honour will be formed by the Volunteer Medical Staff Corps and the field officers' guard of the Artists' Volunteer Corps (mainly consisting of medical students). Considering the small space at their disposal, the authorities must be congratulated on their excellent endeavours to accommodate all who have a just claim to be present on an occasion which will ever be a memorable one in the history of British medicine. We append the programme of the details of the ceremony.

PROGRAMME.

All visitors are requested to be in their places by 12 o'clock.

The band of the Scots Guards will play a selection of music at intervals until Her Majesty the Queen arrives.

At 12.15, the President and the two Vice-Presidents of the Royal College of Surgeons of England and their officials will enter in the following order:

An Usher with the College Staff.

The Assistant-Secretary, Frederic Greville Hallett, Esq., bearing the Charter and Bye-laws of the College.

The four Senior Members of Council:

Sir James Paget, Bart., F.R.C.S., D.C.L. Oxon., LL.D. Cant.
Sir T. Spencer Wells, Bart., F.R.C.S., F.K.Q.C.P. Ireland.
John Marshall, Esq., F.R.C.S., F.R.S., LL.D.
Edward Lund. Esq., F.R.C.S.

The Secretary, Edward Trimmer, Esq., M.A., bearing the College Seal.

The Conservator of the Hunterian Museum:
Professor Charles Stewart.

The Porter, carrying the Mace.

The President of the Royal College of Surgeons of England—William Scovell Savory, Esq., M.B. Lond., F.R.C.S., F.R.S.

The Senior Vice-President—John Wood, Esq., F.R.C.S., F.R.S.

The Junior Vice-President—Henry Power, Esq., M.B. Lond., F.R.C.S.

Their Insignia of Office having been deposited on a table prepared for them, the President and the two Vice-Presidents will take their appointed places in the arena, and the others will retire to their seats.

At 12.20 the President and the two Vice-Presidents of the Royal College of Physicians of London and their officials will enter in the following order:

The Porter of the College with his Staff.

The Assistant-Registrar, William Henry Allchin, Esq., M.B.Lond., F.R.C.P., bearing the Charter and Statutes of the College, bound in crimson velvet adorned with silver. (This copy was presented by Dr. Caius, President of the College in 1555.)

The Four Censors:

Senior Censor—Samuel Osborne Habershon, Esq., M.D. Lond., F.R.C.P.

Second Censor—William Henry Stone, Esq., M.B. Lond., F.R.C.P.

Third Censor—James Edward Pollock, Esq., M.D. Aberd., F.R.C.P.

Fourth Censor—William Howship Dickinson, Esq., M.D., Cant., F.R.C.P.

The Treasurer, Dyce Duckworth, Esq., M.D. Edin., F.R.C.P., bearing the Keys of the Chest.

The Registrar, Sir Henry Alfred Pitman, M.D.Cant., F.R.C.P. bearing the Seal of the Corporation.

The Bedell, Mr. William Garner, carrying the Mace.

The President of the Royal College of Physicians of London, Sir William Jenner, Bart., K.C.B., M.D.Lond, F.R.C.P., D.C.L. Oxon., LL.D. Cant. and Edin., F.R.S.

The Senior Vice-President, Edmund Lloyd Birkett, Esq., M.D.Cant., F.R.C.P.

The Junior Vice-President, John William Ogle, Esq., M.D. Oxon., F.R.C.P.

Their insignia of office having been deposited on a table prepared for them, the President and the two Vice-Presidents will take their appointed places in the arena, and the others will retire to their seats.

At 12.25 the President of the Royal College of Physicians and the President of the Royal College of Surgeons will retire to receive Her Majesty the Queen at the entrance.

On the Queen's arrival the band will play the National Anthem, and the guard of honour formed by the Volunteer Medical Staff Corps and a field officers' guard of the Artists' Volunteer Corps will receive Her Majesty with a Royal salute. The Queen will be met by the Secretary of State for the Home Department, the Chancellor of the Duchy of Lancaster, the President of the Royal College of Physicians, and the President of the Royal College of Surgeons. Two verses of the National Anthem will be sung by the Savoy Choir. Prayer will be offered by his Grace the Archbishop of Canterbury.

Then will follow the presentation of the Address, to which Her Majesty the Queen will graciously reply.

The President of the Royal College of Physicians and the President of the Royal College of Surgeons will each deposit below the stone to be laid a sealed glass vessel containing coins of the present year, some daily papers, and a copy of their respective College lists.

The Queen will then proceed to lay the Stone, the trowel being delivered to Her Majesty by Stephen Salter, Esq., architect of the building.

Presentations will be made to Her Majesty the Queen by Sir William Jenner, Bart., K.C.B. The Archbishop will then pronounce the Benediction and the Queen will leave, the band playing the National Anthem and the guard of honour giving a Royal salute.

DECREASE OF GENERAL PARALYSIS IN EDINBURGH.

THE following passage of general medical interest occurred in Dr. Clouston's annual report of the Royal Edinburgh Asylum at Morningside for 1885, read at the annual meeting of that corporation, held in the Council Chambers, Edinbugh, on Feb. 22nd, 1886, the Lord Provost presiding.

"In addition to this economical cause (increase of rates of board) of decrease of our pauper lunacy (fifty new cases a year), I have reason to think that in the past five years there has been a real diminution of mental disease. In my last year's report I pointed out that the proportion of cases of the disease due to alcoholic excess did not appear to have been greater in the five years of plenty 1873-77 than in the five lean years 1880-84, and this year contributes the usual alcoholic quota of over 15 per cent. But instead of taking a prominent cause of insanity like alcohol, if we take a more definite test—viz., the most marked of all forms of insanity, general paralysis, a form perfectly distinct from every other—we get a result that undoubtedly points to a real diminution of brain disease with mental symptoms in the past five years. General paralysis is more commonly than any other form directly produced by wrong habits and modes of life. Its causes appear most vividly by the fact that it is the form of insanity that comprises one-sixth of all the mental disease among the Durham miners in prosperous times. It is, in fact, that form that is least dependent for its production on hereditary and unpreventable influences, and most dependent on controllable causes operating during the life of the individual. Now, in the first five years of my occupancy of my present office, 1873-1877, mostly years of plenty and inflation of wages, we had 115 cases of general paralysis sent here out of 1580 of total admissions, or 7·3 per cent. of the whole; in the last five years, 1881-1885, years of dull trade and little money to squander, we had only 75 cases out of a total of 1667 admissions, or 4½ per cent. Such a fall in the prevalence of any important and typical disease, comparing one period of five years with another, is a most striking fact from a medical point of view. And whether this has resulted from lessened opportunity of drink and dissipation, or greater exercise of self-control, or a lessened excitement in the modes of life, it is a most suggestive social fact. I think the prevalence of general paralysis may fairly be taken as the index of the prevalence of preventable insanity. While there is a greater proportion of insane persons to the general population of the same years between fifty and sixty (1 to every 160), the largest proportionate number of the newly occurring cases of insanity every year is found between the ages of forty and fifty. During the last thirty years the average age of the new cases (the admissions to asylums) has steadily increased. The conclusion from this

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would seem to be that the older parts of the general population are getting more subject to mental disease than they were. I think this would be fallacious. I believe the fact to be simply that more people in their restless and troublesome dotage and after paralytic shocks are now sent to asylums, and so come under the category of technical insanity than formerly. There is, however, a variety of mental disease connected with advanced years which it is my impression is becoming more common of late. It is not the typical senile break-down in mind occurring after seventy, but a very sudden break-down soon after sixty, or even before that, in men who have worked hard and continuously, their work perhaps accompanied by excitement, strain, worry, or too high living. It is, in reality, climacteric insanity in the male sex, rather than senile insanity proper."

MEDICAL ORGANISATION IN THE FIELD.

SURGEON-MAJOR EVATT, medical staff, delivered a lecture at the Medical School, Queen's College, Birmingham, on Wednesday, the 10th inst., on the Medical Arrangements of an English Army Corps in the Field. He explained by means of diagrams the organisation of an army corps, and then detailed the medical system. Beginning at the front line in battle, he explained the journey of an ideal soldier of the Warwickshire Regiment, struck down on the field, through various stages, until he finally returned to Birmingham. He illustrated by sketches the battalion aid, the bearer companies of the division, the *personnel*, equipment, and system of the field hospitals, the working of sick convoys, of stationary hospitals on the communication line, of the base hospital with its heavy pressure of work, the journey to England in the hospital ships, and finally the home landing. Turning now to the volunteer service, Dr. Evatt pointed out its complete inefficiency from the medical, commissariat, and transport points of view, and then he dwelt on the methods by which the medical service could be made more efficient. He proposed that every county should have an extension of the existing battalion aid, a definite bearer company, and a field hospital manned by the volunteer medical staff corps. Such companies should be grouped into an administrative battalion for the military district, with an officer of the medical staff of the army as adjutant, and a brigade surgeon of volunteers as commandant. The whole to be under the command of the military principal medical officer of the district, in the same way that the volunteer engineers are under the district commanding engineer. Surgeon-Major Evatt then suggested that with the view of training officers for this volunteer medical corps, the students, while students, should receive the drill and discipline of the medical staff corps, as volunteers, so as to be fit for the position of officers when they have passed their medical and surgical examinations. These may be gone through with honour by a junior, who, for want of special training, might be of comparatively little use in charge of men in the field. It is a singular fact that while Birmingham and the surrounding populous district is a fertile recruiting-ground for the army and navy, only a comparatively very small number of the local medical students enter the public service. This point was specially dwelt upon by Professor Bennett May in seconding a vote of thanks to Dr. Evatt, which was proposed in eloquent and flattering terms by Professor Oliver Pemberton.

THE BOYLSTON PRIZE.—The Boylston Medical Committee, appointed by the President and Fellows of Harvard University, have selected the following as subjects for the essays for this prize in 1887:—The Identification of Human Blood in Suspected Stains, and Original Investigations on the Pathology of so-called Uræmic Symptoms. The author of a dissertation on either of the above subjects considered worthy of a prize will be entitled to a premium of $200.

BOSTON INFIRMARY.—At the annual meeting of the subscribers to and friends of this institution on the 11th inst., it was reported that during the past year there had been a large increase in the number of in-patients, which amounted to 687, being 187 in excess of the previous year. The expenditure amounted to £4199, a sum which exceeded the income by £541.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Hastings Urban District.—This district experienced last year the lowest death-rate for a period of eleven years—namely, 14·2 per 1000 living; the death-rate under one year of age reached only 9·9 per cent. of the registered births; and the zymotic rate of 1·27 per 1000 was also exceptionally low. Small-pox had to be dealt with at the sanatorium, and just as the epidemic appeared to be decreasing it broke out again, chiefly, however, in the rural district. This, as Mr. Knox Shaw says, is not within the jurisdiction of the urban authority, but if, as he seems to imply, the disease was due to spread from the urban hospital, it behoves the town authorities, although they received patients from the rural district, to deal with the matter even more than if the disease had solely extended to their own district. We fear, from the character of the so-called sanatorium that was in use at the time, that the complaint which has been made as to this is very likely to have some foundation, and we should advocate its abandonment. Already a temporary structure has been provided, and it is to be hoped that no further attempt will be made to repeat the experience of the past year as regards the isolation of small-pox in the old sanatorium. From the working of a sunshine recorder, it would appear that 1885 exhibited a marked improvement on the previous year in the number of hours of bright sunshine recorded.

Halifax Combined Districts.—Dr. Britton, in drawing attention to the action taken with a view of preparing this combined district against cholera importation, very properly reminds the authorities that all such preparations fortunately tend, quite irrespective of cholera, to the benefit, both present and future, of the district where they are adopted, and that hence none of the trouble and expense taken and incurred are thrown away. This is essentially true; and some of the sanitary work which has saved most life in this country has resulted from improvements intended primarily to cope with impending importations of disease, which were fortunately warded off. The separate reports addressed to the several constituent authorities contain information as to disease and death, and as to the sanitary circumstances which prevail and need remedy. At Brighouse, for example, the authority are commencing excellent work with a view of improving the existing methods of privy accommodation; they have also very properly relieved the occupiers of the duty of cleansing and emptying receptacles for filth and refuse, but it has been done by contract, and this system is obviously one which can never be expected to work as efficiently as when the authority themselves undertake the task. Another point adverted to, and which is of practical importance, is that of the drainage of cellars. Dr. Britton points out that, apart from very exceptional circumstances, cellars should not be drained, since the traps, even when efficiently constructed, are apt to get dry, and then they favour the admission of foul drain-air direct into the houses. Cellars should be under-drained, so as to keep the subsoil dry; but they need have no means of drainage for their surface, for such water as is used in cleansing them can easily be taken up by cloths or otherwise during the process. The details of the report are of much local interest, and they are sufficiently complete to supply a good deal of useful information. In his general report Dr. Britton adverts to the fact that his third term of office closes with this month. We trust that nothing will occur to break the continuity of the excellent work which he has now for so long a period supervised with judgment and ability.

Withington Urban District.—The death-rate for this district is low. In 1884 it was 13·5 per 1000, and last year it was 13·9 on a population now estimated at 18,000; the zymotic death-rate is also a satisfactory one. In his report Dr. Railton gives an account of the several diseases which have been prevalent, and of the action taken with regard to them, including isolation in the Monsall Infectious Hospital; and he then describes the sanitary circumstances of the district at the end of the year. The information given under the various headings in which the several conditions are

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dealt with goes to show that good supervision is maintained, and that improvements are steadily in progress. A special report is also appended on the pollution of the streams which flow through the district. Withington itself has dealt with its sewage with a view to prevent pollution of the Chorlton brook, which joins the Mersey, but the latter stream remains largely fouled by other means. So also the Chorlton brook itself is still polluted, and in anticipation of action, which will doubtless be taken by the Manchester Ship Canal Company, investigation has been made of the various sources of pollution which reach the several streams flowing through the Withington district. The pollutions in question all appear to arise in neighbouring sanitary districts, and the Withington authority are advised to commence at once by taking proceedings against offenders under the Rivers Pollution Act.

Bristol Urban and Port Districts.—Mr. Davies, the veteran medical officer of health for Bristol, takes leave of his authority in this his last annual report, and he will carry with him in his retirement the gratitude of all who are capable of appreciating the eminent services he has rendered. The city of Bristol had a death-rate of 19·6 per 1000 during 1885. But though this exhibits a slight increase on the rate for 1884, Mr. Davies believes that his district will stand, as heretofore, at the head of the large towns and cities in point of healthiness. Amongst the local conditions which, according to Mr. Davies, account for this enviable pre-eminence are the following:—1. An excellent system of sewers, designed and carried out in 1851. Mr. Davies regards it as fortunate that Bristol has brick sewers of large capacity—some being 8 ft. in diameter—as opposed to small pipe sewers. This may be fortunate under the circumstances of Bristol; but as a general rule it is not advisable to make sewers larger than is necessary for the purposes of rapidly carrying away the contents they are likely to receive. 2. Bristol has an admirable water-supply from the Mendip hills, and it is a matter of congratulation to hear from Mr. Davies that during his twenty-one years' service as medical officer of health he has never known a case of disease attributed to this water. 3. The great axiom that cleanliness is next to godliness has influenced the sanitary department of Bristol in all its dealings; the result being that dirt in all its forms and shapes has been regarded as an enemy to public health, which must at all hazards be put down. The child-mortality of Bristol is on the increase, and Mr. Davies reminds the Corporation of his prophetic utterance, to the effect that with the extension of factories, and the consequent greater occupation of females as breadwinners, such an increase would take place. The deaths under one year of every 1000 registered births were 133·9 in 1883; they were 145·3 in 1884; and last year they had risen to 155. Mr. Davies again urges the view that any social arrangement, or even philanthropic charity, that removes woman from one of the chief duties of her sex has for a result an increase of infant mortality. Of 61 cases of small-pox that came under notice 44 were isolated in hospital, 18 being removed to the Corporation small-pox hospital. On the other hand, although there were 21 deaths from scarlet fever, 25 from diphtheria, and 16 from "fever," it was only found necessary to isolate 8 cases in the fever hospital belonging to the authority. Some of the fatal attacks set down as due to enteric fever were not properly so designated, according to Mr. Davies, who states that there has been much loose teaching in this respect.

Bristol Port District.—The report on this district is accompanied by a very useful map, showing the boundaries of the port and the relation which it bears to neighbouring places. The inspection of ships was carried out most methodically during 1885 with the aid of Dr. Heaven, assistant port medical officer, and, where needed, the cleansing and disinfection of vessels were thoroughly enforced. The new sanitary hospital at Avonmouth was completed during the year, and it was found invaluable in dealing with small-pox imported from Montreal. It was also kept in readiness for the purposes of any cholera that might have been imported, but fortunately the port of Bristol escaped.

ON the 15th inst., the House of Lords gave judgment in the case of Abrath *v.* the North-Eastern Railway Company, which was an action for malicious prosecution. The courts below decided against the plaintiff, and this decision was upheld by the House of Lords.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 6195 births and 4873 deaths were registered during the week ending March 13th. The annual death-rate in these towns, which had increased in the six preceding weeks, from 22·1 to 26·6, further rose last week to 28·0, and exceeded the rate recorded in any week since February, 1882. During the first ten weeks of the current quarter the death-rate in these towns averaged 28·9 per 1000, which was 0·5 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 19·3 in Brighton, 19·6 in Sheffield, and 19·9 in Derby. The rates in the other towns ranged upwards to 33·8 in Liverpool, 34·3 in Salford, 35·4 in Plymouth, and 35·7 in Manchester. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 384 and 404 in the preceding two weeks, further rose last week to 430; they included 191 from whooping-cough, 122 from measles, 36 from diarrhœa, 31 from "fever" (principally enteric), 30 from scarlet fever, 18 from diphtheria, and 2 from small-pox. No death from any of these zymotic diseases was recorded last week in Huddersfield; whereas they caused the highest death-rates in Portsmouth, Nottingham, Bolton, and Blackburn. Whooping-cough caused the greatest mortality in Sunderland, Portsmouth, and Bolton; measles in Preston, Oldham, Nottingham, Plymouth, and Blackburn; scarlet fever in Salford; and "fever" in Wolverhampton. The 18 deaths from diphtheria in the twenty-eight towns included 14 in London. Small-pox caused 2 deaths in Liverpool, and not one either in London or in any of the twenty-six other large provincial towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had been 15 and 7 on the preceding two Saturdays, were again 7 at the end of last week; one case was admitted to these hospitals during the week, against 7 and 0 in the preceding two weeks. The Highgate Small-pox Hospital contained 3 patients on Saturday last, one case having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had increased in the preceding seven weeks from 477 to 745, further rose last week to 855, and exceeded the corrected weekly average by 385. The causes of 143, or 3·0 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Plymouth, Birkenhead, and Huddersfield. The largest proportions of uncertified deaths were registered in Halifax, Oldham, Hull, and Sunderland.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 22·3, 23·5, and 24·9 per 1000 in the preceding three weeks, further rose to 27·5 in the week ending March 13th, but was 0·5 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 14·8 in Perth and 21·4 in Edinburgh, to 30·4 in Paisley and 33·6 in Glasgow. The 678 deaths in the eight towns showed a further increase of 64 upon the numbers in recent weeks, and included 20 which were referred to whooping-cough, 11 to diarrhœa, 6 to measles, 5 to scarlet fever, 5 to diphtheria, 4 to "fever" (typhus, enteric, or simple), and not one to small-pox; in all, 51 deaths resulted from these zymotic diseases, against 51 and 43 in the preceding two weeks. These 51 deaths were equal to an annual rate of 2·1 per 1000, which was 0·5 below the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 19 in each of the previous two weeks, were 20 last week, all of which occurred in Glasgow. The 11 deaths attributed to diarrhœa showed an increase of 4 upon the low number in the previous week, but were 6 below those returned in the corresponding week of last year. All the 6 fatal cases of measles were returned in Edinburgh; and 4 of the 5 deaths both from scarlet fever and from diphtheria occurred in Glasgow. The deaths referred to "fever," which have been 6 and 7 in the preceding two weeks, declined last week to 4, including 3 in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had increased in the preceding five

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weeks from 135 to 170, further rose last week to 191, and exceeded the number in the corresponding week of last year by 69. The causes of 91, or 18 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had declined in the preceding four weeks from 38·6 to 30·1 per 1000, rose again to 38·3 in the week ending March 13th. During the first ten weeks of the current quarter the death-rate in the city averaged, no less than 32·7 per 1000; the mean rate during the same period did not exceed 24·4 in London and 19·2 in Edinburgh. The 259 deaths in Dublin last week showed an increase of 55 upon the number returned in the previous week and included 19 which were referred to the principal zymotic diseases, against numbers declining from 26 to 15 in the previous four weeks; 11 resulted from whooping-cough, 6 from "fever" (typhus, enteric, or simple), 1 from scarlet fever, 1 from diarrhœa, and not one either from small-pox, measles, or diphtheria. These 19 deaths were equal to an annual rate of 2·8 per 1000; the rates from the same diseases being 2·6 in London and 1·6 in Edinburgh. The fatal cases of whooping-cough, which had been 18 and 10 in the previous two weeks, were 11 last week. The 6 deaths from "fever" showed a further increase of 2 upon the low numbers in recent weeks. Seven inquest cases and 6 deaths from violence were registered, and 68, or considerably more than a quarter of the deaths were recorded in public institutions. The deaths of infants showed an increase upon recent weekly numbers, while those of elderly persons had somewhat declined. The causes of 38, or nearly 15 per cent., of the deaths registered during the week were not certified.

Correspondence.

"Audi alteram partem."

AMBIGUOUS ILLNESS AND DEATH.

To the Editor of THE LANCET.

SIR,—The ambiguous illness and death of a member of the profession so well known and so much esteemed as Mr. Cooper Forster, who appeared but a short time before to be in the fulness of health and exceptional constitutional vigour, cannot fail to have attracted the attention of the profession through the clear and candid accounts published in your last number by Dr. Wilks and Mr. Jonathan Hutchinson, together with the note of the post-mortem made by Dr. Anderson and Mr. Hutchinson, jun. This case will be sure to call to the memory of most men of clinical experience, both in hospital and private practice, instances of illness in which the most thorough investigation fails to justify a name being given to an unusual and ambiguous set of grave symptoms. Disease is not an entity, but the expression of variable and complex deviations from health usually presented with regularity and order sufficient to admit of being classed or grouped and named as a disease; but sometimes these complex and variable deviations from natural functions and structure are presented in such irregular and rare forms as to give no one individual, nor indeed the whole profession, such knowledge and experience of them as to justify their classification so as to enable them to be named. Of this kind was the illness of Mr. Cooper Forster, as well as that of "unusual rash" on which you annotated in your issue of March 13th (see THE LANCET for 1876, page 113, for cases of Lichen Planus, by Tilbury Fox), which does not appear so fatal as Mr. Hutchinson represents. These two cases of illness attended by indefinable rash and other unusual symptoms, and neither admitting of a diagnosis in accordance with the accepted classification of disease, even when seen in one case by Dr. Julius Pollock, Dr. Samuel Gee, and Mr. Pollock, and in the other by Dr. Habershon, Dr. Wilks, Sir James Paget, and Mr. Jonathan Hutchinson, all men of the largest professional knowledge and experience, point to fields for research as yet unexplored. When cases such as these fall to the lot of the isolated practitioner he must indeed feel a weight of responsibility; and if this be accompanied by some mistrust of his powers, he may derive consolation from the fact that there are illnesses going on to a fatal issue which the greatest combination of learning and skill in consultation is not able either to name or diagnose. Viewed in retrospect through the published accounts, the points to note in Mr. Cooper Forster's illness are:—1. That there was a rash resembling lichen planus before he left London for the Riviera on Jan. 21st, but there was no other deviation from his accustomed good health. 2. It was not till he had left London and sojourned in the Riviera for a week or so that he first felt unwell; the first appearance of the rash and first indisposition were thus not coincident, and apparently not intimately connected. 3. Loss of appetite and strength after the first week in the Riviera was the first constitutional symptom, but there was no quickening of pulse; yet the condition on his reaching London, after touring about in the Riviera for from three weeks to a month, was that of a distinct fever, suspected to be typhoid, with an afternoon temperature of from 102° to 103°, but still with no quickening of pulse beyond 80 beats, except just preceding death. 4. The fever was proved at the post-mortem not to be typhoid; yet the blood and bile-stained organs left no doubt that there had been a blood disease of the nature of fever. 5. The lung congestion and pleuritic effusion were secondary and insufficient to have caused death, and Sir James Paget was clear upon the point that the case was not pyæmic. 6. The rise and fall of morning and afternoon temperature was periodic and regular in height at these respective times, and not accompanied by a corresponding rise in the pulse-rate. 7. The illness commenced while touring in a locality known to be visited from time to time by malaria, and the spleen was enlarged as if from malarial infection. Malarial fever resembling typhoid has been the subject of much comment in your columns of late.

The question naturally arises, Was not Mr. Cooper Forster's illness an instance of malarial fever resembling typhoid brought to a climax by chill, excessive fatigue, and abstinence from nourishment? The initial rigor, so conspicuous by its absence in his illness, is often absent in malarial fevers, while active development is well known to be coincident with chill, fatigue, or abstinence from nourishment in persons previously exposed to the poison. Two years ago I had a patient come straight from Monte Carlo with symptoms very like those in Mr. Cooper Forster. Dr. Bennett in his work on the Riviera asserts that for two summers many cases of malaria occurred even at Mentone, and that malarial fevers may be generated there by mere chills.

I am, Sir, yours obediently,

March 15th, 1886. A GENERAL PRACTITIONER.

To the Editor of THE LANCET.

SIR,—The account published in your last issue of the fatal illness of Mr. Cooper Forster forcibly reminds me of some cases met with last year at Suakim, and recently brought before the Medico-Chirurgical Society. The resemblance to one of these cases in particular is, excepting as to diarrhœa, remarkably close. During life less cerebral oppression and increased tendency to vomiting alone distinguished these cases from typhoid, for at Suakim the prevalent diarrhœa was present in all cases, and prevented a clear diagnosis. Diarrhœa is, however, not a constant symptom in such cases (see THE LANCET, Sept. 19th, 1885, p. 518). A similar form of fever is found, I believe, at Malta, Naples, Sicily, and Rome; but this, as far as I know, is the first recorded instance of its being met with so far north as the Riviera.

I am, Sir, yours obediently,

J. EDWARD SQUIRE, M.D.

Orchard-street, W., March 16th, 1886.

To the Editor of THE LANCET.

SIR,—There is evidently much doubt as to the nature of the disease of which Mr. Cooper Forster died, and the account of the necropsy, as reported in last week's LANCET, does not clear it away. In looking over the notes of the necropsy, I find no mention is made as to the condition of the supra-renal bodies. Is it possible that the patient died of Addison's disease, and that the eruption stated to be a prominent symptom was partial bronzing of the skin? The statement that Mr. Forster was in full health when he started on his continental tour is of course against this view of the case; but the nausea, the loathing of food, and the great and sudden prostration are in favour of it. Some

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five or six years ago we admitted a man into the West Norfolk and Lynn Hospital whose history was simply that of a few weeks' gradually increasing debility and more or less bronzing of the skin. The patient was brought into the hospital in a state of utter prostration, death taking place in a week or ten days, and whilst under observation there was no sickness and no pain. Addison's disease was diagnosed on examination after death, and the supra-renal bodies were typically diseased.

I remain, Sir, yours obediently,

WILLIAM DALE, M.D. Lond.

King's Lynn, Norfolk, March 16th, 1886.

CYCLICAL ALBUMINURIA.

To the Editor of THE LANCET.

SIR,—Dr. Pavy appears to wish to give this name to the condition called by Dr. Moxon the albuminuria of adolescents, on the ground that in this form of albuminuria the maximum albumen of the twenty-four hours is found during the after-breakfast period.

In the *British Medical Journal* for June 5th, 1880, p. 841, there is a paper of mine which was read at the meeting the previous year at Bath, in which this periodical excretion of albuminuria is fully described and compared with the diurnal variations in the urea, pulse, and respiration to which Dr. Edward Smith first drew attention. But my cases were cases of Bright's disease, and if Dr. Pavy means to assert that this diurnal variation is absent in Bright's disease, and present in these cases only, he is, according to my observation, wrong. My paper has been quite accessible; but as no one has remembered it, I may be pardoned for quoting one of my tables.

Diet: Breakfast, 5 A.M., two slices of bread-and-butter, with tea; lunch, 10 A.M., two slices of bread-and-butter, one pint of milk; dinner, 1 P.M., four ounces of cooked meat, eight ounces of potatoes, bread and water; tea, 6 P.M., same as breakfast; supper, 7 P.M., half a pint of milk. Exercise: walking twice daily for half an hour, at 12.30 and 2.30 P.M.

Date.	Period.	Total urine.	Albumen in 40 cubic centimetres.	Total albumen.
		Cub. cent.	Gramme.	Gramme.
March 10th	7 P.M. to 5 A.M.	1630	·008	·1296
	5 A.M. to 1 P.M.	150	·016	·06
	1 P.M. to 5 P.M.	180	·01	·045
	5 P.M. to 7 P.M.	120	·008	·021
March 12th	7 P.M. to 5 A.M.	870	·0069	·1479
	5 A.M. to 1 P.M.	180	·017	·0756
	1 P.M. to 5 P.M.	180	·0141	·0630
	5 P.M. to 7 P.M.	150	·009	·0330
March 13th	7 P.M. to 5 A.M.	1410	·0155	·5358
	5 A.M. to 1 P.M.	180	·020	·090
	1 P.M. to 5 P.M.	180	·0166	·0738
	5 P.M. to 7 P.M.	120	·015	·0444

This was a case of Bright's disease, and he was put on this diet for the purposes of this experiment. It is interesting to note that the nitrogenous diet, while not having the immediate effect of increasing the albumen passed during the corresponding periods, yet showed a very decided power of increasing the total albumen, which rose by the third day to three times what it was on the first.

I am, Sir, yours obediently,

Birmingham, March 9th, 1886. ROBERT SAUNDBY, M.D.

A CASE OF APOPLEXY, WITH COMPLETE HEMIPLEGIA, AT THE AGE OF TWENTY-FIVE.

To the Editor of THE LANCET.

SIR,—The following case may be interesting to your readers.

Miss G. W——, aged twenty-five, a schoolmistress, consulted me early last October for shortness of breath and difficulty of getting up-hill. She was anæmic, of slight build, and with auburn hair; the catamenia were regular, though of small quantity. She felt well, and her appetite was good. On examination the heart was working away with a great thrill all over the left breast, and continued up the subclavian and carotids, but more so on the right side—in fact the anæmic bruit. There was no valvular disease. On iron and digitalis she improved, which was afterwards changed to compound iron mixture. I saw her now and then, she continuing well and able to go on with her duties, when on Sunday, Dec. 13th, at about 7.30 P.M., I was called out of church to go to her (she living about five miles away), the messenger saying she was speechless and had great pain in her right arm. On arrival I found her unconscious, unable to speak, mouth slightly drawn to the right side, both pupils dilated and unanswerable to light, face swollen, unable to protrude the tongue, right arm and leg paralysed but warm, no involuntary evacuation of bladder or bowel, with her hand pressed against the left side of the head. Her friends told me that she had been "out of sorts" for the last two days, and that while sitting before the fire during the evening she got up to put on some coals and fell back into her chair, in which position I found her. I ordered mustard to be applied to the neck &c., also calomel and a mixture.—Dec. 14th: Unconscious, the same as last night; passed no urine; bowels not moved. I passed a catheter, ordered a turpentine injection, and a blister to the left side of the head.—15th: Bowels open; passed a little urine in bed.—16th: Bowels open with injection; passed urine, and she knew when she wished to do so. More conscious; knows me; pupils answer to light, though not quite enough: swelling of face reduced; tongue can be protruded, but goes to right side; no pain.—19th: Has been going on favourably: quite conscious for the last few days; able to eat with a relish; bowels and bladder act regularly and naturally; paralysed parts keep warm, but are useless. I ordered her absorbents and nerve tonics, also galvanism.—22nd: Got her up in the arm-chair; cannot speak, though she can make her friends understand what she wants.—28th: Has said "No," "Yes"; objects a good deal to the battery; is progressing in strength.—31st: Is able, while standing, to lift her paralysed leg about two inches and a half from the ground; the arm remaining the same; can read a verse in the Bible.—Feb. 6th: The patient has been steadily mending; her speech is slow, but stronger; able now to walk downstairs step by step; can lift her arm towards her head: all functions regular; is looking very well, but inclined to laugh at a trifle. The patient now passed out of my hands into the Cottage Hospital, where I trust she will make as good a progress as at her humble home.

Query, is it sanguineous or serous effusion or hysteria? I am inclined to serous effusion. I heard since that she was troubled about her school not passing, whereby she lost her certificate.

I am, Sir, yours truly,

WILLIAM FRASER, M.B. Univ. Dub.

Ashburton, Devon, Feb. 9th, 1886.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

THE NEWCASTLE CHILDREN'S HOSPITAL.

THE munificent offer of Mr. Fleming, of this city, to build and furnish a new children's hospital for Newcastle and its vicinity, at a probable cost of £15,000, has caused the charity to become a subject of conversation of late in medical and general circles. The gift of Mr. Fleming has also created some difficulty in the minds of the friends of the institution. By the terms of the gift the hospital is to be removed to the outskirts of the city, at least two miles from the parts of the town most in need of out-patient relief; and as this latter has always contributed the most important part of the children's hospital work, it must needs follow that unless some adequate provision is made for carrying on the work of the out-patient department in the centre of the town, the removal of the hospital will do a great deal of harm, and even if this provision is made it is feared the division of labour in the medical departments will not be found to work well. Many old friends of the institution think that a good central hospital with a limited number of beds, and a small convalescent hospital (a want generally admitted) in the suburbs, would offer most benefit for the sick poor. Then, again, the subject of the endowment or support of a large hospital as proposed will require most anxious consideration when most of our medical charities show a diminishing income. Mr. Fleming's offer is a handsome one no doubt, but the considerations just alluded to ought to be well weighed by

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the governors. I should have mentioned, when speaking of the medical founders of the hospital in my last letter, that Mrs. Sedman of Leeds, Sir William and Lady Armstrong, Miss Jane Mather, and the late Mr. Joseph Mather of this city greatly aided Dr. William Murray and Mr. J. B. Fife in establishing the hospital, and that Dr. Murray is consulting physician and Mr. Fife consulting surgeon to the institution.

NEWCASTLE DISPENSARY.

The annual meeting of this dispensary, a very old charity, was lately held in this city, and the report (the 108th) was on the whole very satisfactory. The medical officer resident in the institution stated that the number of patients admitted to the benefits of the charity showed an increase of 967 as compared with the previous twelve months. There was also an increase of 1287 in the number of casual patients. Dr. Beatley states that during the early part of last year a severe epidemic of measles caused a great strain to be thrown on the medical staff and the resources of the institution. The number of patients admitted by letter during the year had been 7027, in addition to 550 under treatment at the beginning of the year, making a total of 7577. Of these 6318 had been cured or relieved, 94 sent to the Infirmary Fever House &c., 654 died, and 511 remain under treatment. The casual patients admitted with letters during the year numbered 13,426, making a total of 21,003 cases treated. It is pointed out in his report that the 7027 letter patients constituted the largest number of this class treated in any one year, and that it was among the home patients that the largest increase was apparent. The percentage of deaths was higher than in 1884; this is accounted for by the severe epidemic of measles and the distress amongst the poor of the city. It is pointed out that there has been no death certified amongst the casuals; children are occasionally brought to the dispensary at the last moment, but the medical officer has adopted the practice of referring such cases to the coroner. Dr. Beatley bears testimony to the good work done in conjunction with the medical officers to the sick poor by the Cathedral Nurse and Loan Society, by skilful nursing, and the supply of nourishment and appliances in many difficult cases. In reference to a clause in the report, showing the mortality from measles treated at the dispensary to have been 108 fatal cases in a total of 1062 affected, or 10 per cent., a governor said that the question arose whether the time had not arrived when such cases should at once be reported to the medical officer of health, with a view to steps being taken to stop the spread of the disease.

BEQUESTS TO CARLISLE CHARITIES.

The late Miss Frances Barnes of Carlisle has left several legacies to the charities of that city, including the following:—Border Counties Home for Incurables, £500; Cumberland Infirmary, £500; Asylum for Idiots, £500; Silloth Convalescent Institution, £500; Carlisle Dispensary, £300.

Newcastle-on-Tyne, March 16th.

EDINBURGH.

(From our own Correspondent.)

PROFESSOR SIR WILLIAM TURNER.

THE honour of knighthood has been proffered to and accepted by Professor Turner, who has now for nearly twenty years occupied the Chair of Anatomy in the University of Edinburgh. The honour which has thus been conferred was one thoroughly merited by the distinguished career achieved by our professor of anatomy, who, by the thoroughness of his teaching, as well as by his great organising and administrative powers, has done so much to extend the fame and to enhance the welfare of the University of Edinburgh. The intimation of the honour which has been done him has been greeted in Edinburgh with universal approbation, a sentiment which will be united in by numbers of his old students now scattered over the country, who have become acquainted with his sterling qualities whilst studying in his department during their medical curriculum. On Wednesday week at 1 o'clock, the usual hour for the lecture on anatomy, Sir William Turner was welcomed by an enthusiastic crowd of students who had assembled to congratulate him upon his newly conferred honour. A congratulory address from the members of the anatomy class was presented to him, in which the students expressed their esteem for him as a teacher and their sense of the distinguished career in the pursuit of anatomical science which has so well merited the honour now conferred. In reply to the address, Sir William referred to the numerous expressions of goodwill of which he has been the recipient during the thirty-two years of his connexion with the University of Edinburgh, but stated that he had never dreamed of being a party to such an overpowering demonstration as they had given him that day. As a member of the teaching staff of the University he had accepted the distinction of a knighthood as a recognition of the work being done by the University, and as no mere personal compliment. He concluded by announcing a holiday for that day. The proceedings, which were throughout very enthusiastic, terminated amidst prolonged and reiterated cheering.

THE LATE DR. JOHN BISHOP.

The death of Dr. Bishop, which took place a few days ago at Cannes, has been heard of with deep regret by a wide circle of friends in Edinburgh. Till about two years ago Dr. Bishop was resident in Edinburgh, where he engaged in practice as a surgeon, and where he held the post of assistant-surgeon to the Royal Infirmary. About that time his health became impaired in consequence of an erysipelatous attack contracted whilst carrying on his hospital duties. This illness he never fully recovered from, for it was followed closely by the onset of an attack of profound anæmia, which, after running a prolonged course, has terminated fatally. Dr. Bishop's career as a student was a distinguished one; he was known to be intimately acquainted with philosophical and logical literature, and he brought all the trained acumen of a well-balanced mind to bear upon his medical studies. He was an authority upon antiseptic surgery, and the subjects connected with it, and he obtained a gold medal for his M.D. thesis upon this subject. By his personal characteristics he attracted a large circle of acquaintance, amongst whom he was valued as a true-hearted and generous friend. About five years ago he married Miss Bird, the authoress of several widely known books of travel, by whom he is survived.

IRELAND.

(From our own Correspondent.)

ROYAL COLLEGE OF SURGEONS IN IRELAND.

As previously announced in these columns, there were three candidates in the field for the Vice-Presidency for the ensuing year, the election for which takes place early in June. The three candidates, Messrs. Frazer, Fitzgibbon, and Corley, appeared resolved to contest the matter, but I am glad to state that Mr. Fitzgibbon has, on reconsidering the matter, determined to resign in favour of Mr. Corley, believing that gentleman to have a prior claim on the electors. Mr. Fitzgibbon, however, I am informed, will be a candidate for the Vice-Presidency in 1887. Sir James Paget, Bart, one of the new Honorary Fellows, has intimated his intention to be present at the banquet to be given at the College, on the 28th April, by Sir Charles Cameron, and during his stay in Dublin will be the guest of the President.

ROYAL UNIVERSITY OF IRELAND.

The fourth annual report is of a favourable character, and the progress shown during the past three years gives good ground for the belief that the success of the University is assured. At the various academic examinations last year 2534 students presented themselves, being an increase of 433 as compared with the previous year. Lord Emly, whose work the report is, states, in reference to the women students, that they have on the whole been so successful that it is plain greater facilities and an improved character of education would bring about most satisfactory results.

DEATH OF MR. THOMAS DARBY, F.R.C.S.I.

This well-known gentleman died at his residence in Bray on the 10th inst. from an attack of bronchitis, at the advanced age of seventy-eight years, and his somewhat sudden decease will be regretted by a large number of friends. Some years since he was attached as visiting surgeon to Rathdown Workhouse, which post he resigned in order to devote himself entirely to private practice, of which he possessed the lion's share in the fashionable seaside resort in which he resided. At one time he was a candidate for a seat on the

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council of the College of Surgeons, and lost it by the casting vote of the chairman, which result prevented him ever coming forward again for this office. He was an ex-president of the Irish Medical Association and of the Dublin Obstetrical Society, and filled other positions with credit and efficiency.

ST. JOHN AMBULANCE ASSOCIATION.

The annual meeting of the Dublin Centre of this Association was held on Saturday last in the Senate Hall of the Royal University of Ireland, when the Countess of Aberdeen distributed the awards of the Society. The St. John Medal was bestowed on Dr. E. Charles Thompson for having risked his life in order to save a child suffering from diphtheria. Dr. Thompson is the first on whom this distinction has been conferred in Ireland, and he is also the recipient of the Albert Medal for the same act of heroism.

CITY OF DUBLIN HOSPITAL.

By the bazaar recently held, this institution, which is one of the best-managed hospitals in Dublin, has obtained a sum of £2000 towards the funds of the charity.

Robert Anderson, A.M., M.D., Professor of Natural History, Queen's College, Galway, has been placed on the commission of the peace for the county of Down.

Dublin, March 16th.

PARIS.

(From our own Correspondent.)

THE PARIS FACULTY OF MEDICINE.

THE summer session of the Paris Faculty of Medicine began to-day, the 16th inst., and will be continued in the following order:—Medical Natural History, Professor Baillon; Physiology, Professor Béclard; Surgical Pathology, Professor Guyom; Medical Jurisprudence, Professor Brouardel; Pharmacology, Professor Regnauld; Pathology and General Therapeutics, Professor Bouchard; Medical Pathology, Professor Damaschino; Experimental and Comparative Pathology, Professor Vulpian; Obstetrics, Professor Tarnier; Hygiene, Professor Proust; Materia Medica and Therapeutics, Professor Hayem. Clinics: Medicine—Professor G. Sée, at the Hôtel Dieu; Professor Hardy, La Charité; Professor Potain, Necker Hospital; Professor Jaccoud, La Pitié. Surgery—Professor Richet, Hôtel Dieu; Professor Verneuil, La Pitié; Professor Trélat, La Charité; Professor Le Fort, Necker Hospital. Mental Pathology and Diseases of the Encephalon—Professor Ball, at the St. Anne Asylum. Diseases of Children—Professor Grancher. Syphilitic and Cutaneous Affections—Professor Fournier, at the St. Louis Hospital. Diseases of the Nervous System—Professor Charcot, at the Salpétrière. Ophthalmology—Professor Panas, at the Hôtel Dieu. Clinical Obstetrics—Professor Pajot.

PROPHYLACTIC MEASURES AGAINST COLD.

At a recent meeting of the Société de Biologie, Professor Brown-Séquard read a paper on the Prophylactic Means to be adopted against Accidents resulting from Cold, which he founded on the following theory:—"The neck is one of the regions of the body the most sensitive to cold; there is no doubt that a great number of accidents, such as coryza, laryngitis, bronchitis, cystitis, enteritis, &c., which are reflex phenomena, result from the impression of cold on the nerves of the skin of the neck." To avoid these accidents, M. Brown-Séquard recommends the blowing on the neck with the bellows of warm air, which should be gradually cooled, by which means the neck is rendered less sensitive to the action of cold. The Professor found that ten sittings were sufficient to produce effect.

A VISIT TO M. PASTEUR'S LABORATORY.

I paid a visit this morning to M. Pasteur's laboratory in the Rue d'Ulm, where he performs his anti-rabic inoculations. The sight to be there witnessed is most interesting and curious, for one meets persons of both sexes, of all ages and conditions of life, the poorer classes being in greater number, even people from different parts of the world—Italians, English, Americans, Russians, Poles, &c.,—who were there assembled to submit themselves to M. Pasteur's treatment. The inoculations are performed by Dr. Grancher with a hypodermic syringe in presence of M. Pasteur, and he does from sixty to eighty every morning. The instrument, which is two-thirds full of the inoculating liquid for adults and one-third for youths and children, is thrust into one or other flank, and this operation is repeated every day for ten consecutive mornings. The composition, or rather the constitution, of the liquid employed is known only to M. Pasteur, who manufactures it in his own laboratory. Dr. Grancher told me that as yet no accidents had occurred in the way of abscesses &c., and that the patients go through the process without any constitutional disturbance. It struck me, however, that many of the applicants had been driven there, more from fright than necessity, as in many cases they did not wait to ascertain whether the dogs that bit them were really rabid. In some cases they were not even bitten. For instance, I saw a young English lady who submitted to the operation simply because she had been licked in the mouth by her dog, which had no signs of madness. I met there also Dr. Hime of Bradford, who came over with his party of seven persons, consisting of four little boys, a little girl, a youth, and a man, who Dr. Hime told me were bitten on Jan. 24th by a dog which was ascertained to have been indubitably rabid, as another person who was bitten at the same time by the same dog died soon after from hydrophobia. M. Pasteur had just received a telegram from Berlin to say that nineteen persons bitten by a rabid wolf were forwarded to Paris to undergo his treatment. Subscriptions for a suitable building are pouring in from all quarters, and the Paris Municipal Conseil has under its consideration a proposition for the immediate construction of the Pasteur Institute.

APPOINTMENTS AT THE VETERINARY SCHOOLS.

M. Chauveau, Director of the Veterinary School of Lyons has been appointed Inspector-General of the Veterinary Schools of France, in lieu of M. Henri Bouley, deceased; Professor Arloing is appointed Director of the Veterinary School of Lyons in succession to M. Chauveau.

Paris, March 16th.

MEDICAL NOTES IN PARLIAMENT.

Inoculation for Hydrophobia.

IN the House of Commons, on the 11th inst., in reply to Sir H. Roscoe, Mr. Chamberlain stated that his attention had been called to the reported discovery by M. Pasteur of a cure for hydrophobia. The recognised eminence of M. Pasteur as a scientific investigator, and the great interest and importance which attach to the subject of his recent inquiries, seemed to justify a careful and impartial examination of the results obtained. At present the information on the matter in the possession of the Local Government Board was too vague and incomplete to afford materials for a full appreciation of M. Pasteur's process. He would consider how such an investigation as might enable a just estimate to be formed as to the reliability of M. Pasteur's method and its applicability to this country could be most satisfactorily conducted, and would confer with the Chancellor of the Exchequer with reference to the question of the expense.

Fever at Port Royal.

In reply to Sir J. Goldsmid, Mr. Hibbert stated that he regretted to have to say that since October, 1885, nineteen cases of yellow fever had been admitted into Jamaica Hospital from the *Urgent*, of which number four had terminated fatally. Besides these, an officer who was on board waiting to join the *Wye* was attacked and died. There had been one other case—from the *Tyne*. There was no "sanatorium or hill station" attached to Jamaica Hospital; nor was it thought by the medical advisers of the Government that any such establishment was necessary for such cases of infectious disease, as Port Royal was so swept by the sea breezes that it was considered more healthy than a hill station.

The Hampstead and Homerton Hospitals.

On the 12th inst., in answer to Mr. Gibb, Mr. Chamberlain said that the Hampstead Hospital had not been used for any small-pox patients since July of last year, and if in the event of any epidemic it should be necessary again to use it for small-pox patients it would only be for a very limited number, and in the cases only of patients who, from the acute nature of the disease, could not be removed to any hospital at a distance. The report of Mr. Shirley Murphy had not yet been officially considered by the managers, and consequently no steps had been taken to test the conclusions

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at which he had arrived. With regard to the Homerton Hospital, the managers had made such arrangements as would, it was believed, prevent the occurrence in the future of such abuses as formed the subject of the recent inquiry, and it did not appear to the Local Goverment Board that there would be any sufficient advantage in a further inquiry by a Royal Commission or a Select Committee.

The Indian Medical Service.

In reply to Sir G. Hunter, Sir W. Kay-Shuttleworth stated that the option of attending the Aldershot course of instruction, which in August, 1882, had been given to Indian medical officers passing through Netley, was inadvertently withdrawn in April, 1884, on the introduction at Netley of a course of bearer company drill. This, however, would now be corrected; and as the Aldershot course must be optional for Indian officers, a reference would be made to the Government of India as to the instruction in that country of those officers who have not passed the Aldershot course.

Contagious Diseases Acts.

On the 16th inst. Mr. Stansfeld moved that the Contagious Diseases Acts, 1866-69, ought to be repealed. The whole subject had been worn threadbare long ago, and no new arguments were adduced either for or against this class of legislation. Mr. Puleston, as representing a garrison town in which the compulsory treatment had been enforced, spoke of the value of the Acts as a repressive and reclamatory agency, and he read a letter from the Town Clerk of Devonport urging that the supporters of the Acts had wavered not a jot in their opinion as to the usefulness in the interests of health and morality of the measure Mr. Stansfeld sought to annul. Sir John Kennaway tried to effect a compromise; but it was admitted on both sides of the House that the feeling of the country was adverse to the Acts, and when the matter came to a division the amendment was negatived by a considerable majority—245 to 131. The motion was then agreed to without a division.

On the 17th inst. Mr. Stansfeld moved for leave to bring in a Bill to repeal the Acts, but Mr. Bentinck objected, and as it was past the hour at which opposed business could be taken the motion dropped.

The Medical Act of 1858.

On the 16th inst., in answer to Dr. Foster, Sir L. Playfair stated that a Bill was being drafted, and would, he hoped, be shortly introduced, to amend the Medical Act of 1858. It will contain provisions to give direct representation to the medical profession on the General Medical Council.

Rags from Spain.

In answer to Mr. Hunter, Mr. Trevelyan said that he had recently approved of an order issued by the Board of Supervision prohibiting the importation of rags from Spain for some months, and had received various recommendations as to the necessity of further legislation, which would have his careful consideration.

THE SERVICES

INDIA OFFICE.—The Queen has approved of the restoration of the undermentioned officer from the half-pay list to the effective list:—Surgeon George Augustus Cones, of the Bengal Army.

The Queen has approved of the following promotion made by the Governments in India:—Surgeon-Major Benjamin Thomas Saffrein, of the Madras Medical Establishment, to be Brigade Surgeon.

ADMIRALTY.—The following appointments have been made:—Surgeon William E. Breton, M.D., to the *Revenge;* Surgeon Hugh W. Macnamara, to the *Asia;* Surgeon Robert M'Ivor, to Plymouth Hospital; Surgeon John A. M'Adam, to the *Indus;* Surgeon A. H. Miller, to Royal Marine Depôt, Walmer; Surgeon James H. Beattie, to the *Vernon:* Surgeon Richard A. Fitch, to the *Cambridge;* and Surgeon W. Spry, to the *Boscawen.*

ARTILLERY VOLUNTEERS.—1st Cheshire and Carnarvonshire: Arthur Montfort Archer, Gent., M.B., to be Acting-Surgeon.

A SUM of 120,000 marks (£6000) has been left to the University of Rostock, for the erection of an ophthalmic hospital.

Obituary.

JOHN STORRAR, M.D. LOND.

DR. STORRAR was so well known to everyone connected with the University of London as its oldest surviving medical graduate, and for twenty-one years its chairman of Convocation, that his death on the 10th inst. at Blackheath will be felt by most of the graduates as a personal loss. He was born in 1811, and was educated at University College. He took his M.D. degree in 1839, with the late Dr. John Taylor, and they were the first medical graduates of the University. Without a qualification from either of the Royal Colleges he practised for several years in Brook-street, and was largely instrumental in securing the passing of the Medical Graduates Act of 1858, by which the members of the University of London were given the same privileges to practise medicine as were enjoyed by the graduates of Oxford and Cambridge, without becoming Members of the Royal College of Physicians. Dr. Storrar's position in this matter was really made a test case. He was for many years secretary to Dr. Somerville, a former inspector of anatomy. The General Medical Council was first constituted in 1858, and on its formation Dr. Storrar was appointed on that body as the representative of the University of London, and had continued as such up to the present time. He was an ardent enthusiast in improving medical education, on the general and scientific lines adopted by his University, and could always be relied on to oppose firmly but courteously any proposition tending to lower medical standards, or to depreciate university influences in favour of the corporations. If he erred in these matters, it was from a thorough belief that nearly all recent advantages in medical education were due to the initiative and example of the University of London. He was also one of the early reformers of that University, who, after a ten years' struggle with the Senate, obtained a new charter from the Crown by which the members of Convocation were allowed to return Fellows to the Senate, and thus have a voice in the management of its affairs. Dr. Storrar was one of the first members of the Senate elected by the votes of the graduates in Convocation, and he always referred to this as one of the greatest honours in his life. His attendance at the meetings of the Senate was a model of regularity, and his knowledge of the details of its business was most minute and accurate, perhaps only surpassed by that of Dr. Carpenter, the late registrar. On the retirement of Dr. Foster, in 1864, he was appointed chairman of Convocation, and filled the post until last year, when he retired in consequence of his increasing deafness, and a liability to bronchitic attacks, which unfitted him for duties involving evening sittings in severe weather. He was also chairman of the Annual Committee, and rarely missed a meeting. The views of Convocation were always urged by him in the Senate, and members were quite sure that they would be pressed, even if personally he was not in entire sympathy with them. He was always, as he expressed it, the "devoted" servant of the graduates in Convocation. Dr. Storrar also served on the Endowed Schools Inquiry Commission, to which so many of our educational reforms are due, was a life governor of University College, and a governor of the Harpur Trust at Bedford, as the representative of the University of London. He was a man of fine presence and dignified manners; he entered zealously into all questions connected with the University, and fought for his views with all honesty and public spirit, and was always ready to hold out to his opponents the hand of friendship when the question was decided. His death has caused a void in the University ranks which will be long felt.

MR. C. LE VESCONTE GODFRAY.

THE island of Jersey has sustained a severe loss by the death of Mr. C. le V. Godfray, which took place on the 12th inst. Mr. Godfray was the son of a distinguished lawyer. He received his medical education at St. Bartholomew's Hospital, and became M.R.C.S. in 1859, and L.S.A. in 1860. Soon after he qualified he was appointed surgeon to the Jersey General Hospital, succeeding the late Mr. Jones, who achieved a European celebrity as one of the first advocates of excision of the knee-joint. Mr. Godfray had a very large general practice, but surgery was his favourite branch, and, with the only good surgical field in

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the island at his command, he soon acquired the high reputation to which his experience and talents entitled him. He was a man of untiring energy, and worked hard at his profession—as hard as a man can work. If he had thought more of himself and less of others during the last year or two, possibly we might not have had so soon to deplore our loss. He was a man of quick, keen insight, seeming to seize the points of a case by instinct, and he had a promptitude and decision of manner and action which gained brusque, but this roughness of manner was often simply a confidence at once. His goodness and kindness of heart were over and over again felt by those to whom he not only gave advice, but often food and comforts. He shunned thanks; he was the sort of man who "did good by stealth, and blushed to find it fame." He will be greatly missed by his professional brethren, who were glad to avail themselves of his surgical skill and experience, as well as by his large circle of patients, and by the poor, who looked upon him as an unfailing resource in the hour of need.

Medical News.

UNIVERSITY OF OXFORD.—At a congregation held on the 11th inst., the degree of M.D. was conferred on

George Coates, Balliol.

UNIVERSITY OF CAMBRIDGE. — At a congregation held on the 11th inst., the degree of M.B. was conferred on

E. Collingwood Andrews and G. Darby Haviland, St. John's.

UNIVERSITY OF DUBLIN.—At a meeting of the Senate held last week the following degrees were conferred:—

BACHELOR IN MEDICINE.—P. S. Abraham, Alexander M'Neil D'Evelyn, Henry Cecil Earl, George Farls, Richard Bolton McCausland, Alfred Joseph McNally, George Burbidge Wite.

BACHELOR IN SURGERY.—Richard C. Bolton, Alexander McNeill D'Evelyn, Benjamin D. Dickson, William Ireland Donaldson, Henry Cecil Earl, Alexander Findlater, Robert Travers Lewis, Ross Vincent Beatty Smyth, James Christopher Weir.

DOCTOR IN MEDICINE.—P. Simon Abraham, Alexander Findlater, Thomas N. Flood, Thomas Richard Gillespie, H. Falconer Oldham, Ross Beatty Smyth.

COLLEGE OF PHYSICIANS IN IRELAND.—At the March examinations the following obtained the licences in Medicine and Midwifery of the College:—

MEDICINE.—Louis Aloysius Byrne, William Robert Hall Harris, Alfred Lees Halkyard, Ernest Robert Howe, William Arthur Johnston, James Henry Maguire, Herbert Charles Mooney, Henry D'Arcy Power, Thomas Redmond, W. James Robinson, Frederick Osborne Smith, Augustus Tabuteau

MIDWIFERY.—Alfred Lees Halkyard, Ernest Robert Howe, Walter Kiddle, Herbert Charles Mooney, Thomas Redmond, William James Robinson, Frederick Smith, Augustus J. Tabuteau, Samuel Wilson.

SOCIETY OF APOTHECARIES.—The following gentlemen passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on the 11th inst.:—

Benson, Henry Thomas, Aberynant, Llanidloes.
Clarke, William, St. Paul's-square, Burton-on-Trent.
Kearney, James, Clapham.
Swyer, Robert, Brick-lane, Bethnal-green.

PROFESSOR M. LEVI, Director of the Clinic for Children's Diseases in Florence, has died from apoplexy.

SANITARY INSTITUTE OF GREAT BRITAIN. — The Autumn Congress and Health Exhibition of this institute will be held in the city of York in September next.

THE *Spitalul* states that at the recent *concours* in Paris two Roumanian students gained posts as internes and six as externes.

AT a meeting of medical practitioners belonging to Ayrshire, on the 5th inst., it was resolved to form an Ayrshire Medical Club.

THE death is announced of Dr. Kazakivich, who had charge of one of the Red Cross hospitals in the Russo-Turkish war. He had written much on medical subjects and had translated Ludwig's Physiology into Russian.

AT the Wolverhampton police-court two county court bailiffs were fined 20*s.* and costs, or in default a month's imprisonment, for having seized, under a warrant of distraint, a quantity of bedding on which two children suffering from scarlet fever were lying. In spite of warnings they removed the bed to a neighbouring public-house, where it remained some days without being disinfected, and was then sold.

ON the 17th inst., Surgeon-Major Evatt, of the Army Medical Staff, delivered an address at Owens College on Ambulance Work and the Formation of a Volunteer Medical Staff Corps for the Manchester district.

SEVENTEEN persons, amongst whom was a clergyman, were fined ten shillings with the alternative of seven days imprisonment, at Leicester on the 15th inst., for failing to comply with the Vaccination Act. The number of defaulters in the town is reported to be 7000.

NEW HOSPITAL IN MEXICO.—*El Observador Médico* states that a new hospital has just been finished and opened in the Calle de Regina, Mexico, the cost of which has been defrayed by a legacy left by Señora de Beistigui. The medical officers appointed are Dr. Joaquin Vertiz and Dr. Ismael Prieto.

AT the annual court of trustees and governors of the York County Hospital on the 16th inst., it was unanimously resolved that Dr. Matterson, who had signified his intention to resign his position as physician to the institution, be requested to accept the office of honorary consulting physician.

ASSOCIATION OF MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.—At a meeting of the Central Committee of the Association of Members of the Royal College of Surgeons, held on the 13th inst., a sub-committee was empowered to communicate with the Association of Fellows, upon the subjects of the Reform and the Charters of the College. At the same meeting a vote of condolence with Mrs. Cooper Forster was passed unanimously, in memory of the courteous manner in which the late President of the College received a deputation from the Association in January of last year.

THE DENBIGHSHIRE INFIRMARY.—Dr. Arthur E. Turnour, senior hon. medical officer to this institution, has given a munificent donation of £700 to the charity, "as a thank-offering to Almighty God for the recovery of his only daughter from a dangerous illness." The fund is to be applied to provide two free beds, the want of which in this hospital has been long felt. Dr. Turnour has rendered invaluable services to the infirmary for nearly forty years, and it was mainly through his instrumentality that the place has lately been reconstructed and a new wing added to it, at considerable cost.

CITY OF LONDON TRUSS SOCIETY.—The seventy-ninth annual festival dinner of this Society was held recently, upwards of 200 guests being present. The Lord Mayor, who presided, in proposing the toast of the evening referred to the increasing prosperity of the Society, and stated that the income from all sources for the past year amounted to upwards of £5000. In the course of the year the Society has been enabled to relieve upwards of 9000 sufferers, men, women, and children, this bringing up the total number relieved by the charity, since its foundation in 1807, to 413,316. During the evening subscriptions amounting to £500 were announced.

THE LEVEE.—At the levée held at St. James's Palace on the 15th inst. by H.R.H. the Prince of Wales on behalf of Her Majesty, presentations of the following members of the medical profession were made: Surgeon Henry M. Adamson, Brigade Surgeon J. E. T. Aitchison, Surgeon-Major Joseph A'Hearne, Surgeon J. B. Buchanan, Surgeon H. Herbert Brown, Dr. Robert Barnes, Surgeon Waller C. Beevor, Dr. R. W. Burnet, Surgeon-Command. James Cantlie, Surgeon William A. Carte, Surgeon T. Herbert Corkery, Surgeon W. R. Crooke, Surgeon Horace Cocks, Surgeon A. Rea Edwards, Surgeon E. H. Fenn, Surgeon Richard E. George, Brigade Surgeon G. C. Gribbon, Surgeon J. P. S. Hayes, Surgeon F. W. Hennessy, Surgeon Stanley J. W. Hayman, Surgeon John Kearney, Surgeon Arthur Kennedy, Surgeon H. W. M. Kendall, Surgeon E. H. Locker, Surgeon W. J. Lee, Surgeon-Major A. B. R. Myers, Surgeon C. H. Melville, Surgeon Bernard L. Mills, Surgeon Langton G. Mumby, Surgeon-Major James Magill, Surgeon H. M. Ramsay, Surgeon C. Alan Renny, Surgeon Hugh Rayner, Dr. Argyll Robertson, Surgeon W. E. Raw, Surgeon J. E. Squire, Surgeon F. L. Stephenson, Surgeon Whitley Stokes, Surgeon Frederick Skerrett, Surgeon Francis A. Saw, Surgeon Walter Squire, Surgeon Herman Thiele, Dr. John Tanner, Surgeon J. B. Wilson, Surgeon H. R. Woolbert, Surgeon C. L. Walsh, and Surgeon M. T. Yarr. The following, amongst others, attended the levée: Sir William Bowman, Bart., Sir Guyer Hunter, and Surgeon-Major R. Boustead.

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Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ALLINSON, H. CALTHORP, M.R.C.S., L.S.A.Lond., has been appointed Honorary Surgeon to the West Norfolk and Lynn Hospital, vice Wilson, resigned.

CUMBERBATCH, A. E., F.R.C.S., has been appointed Aural Surgeon to the National Hospital for the Paralysed and Epileptic.

ELLISON, WILLIAM A., M.A., M.B.Oxon., L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer for the Eton District of the Eton Union

EWART, CHARLES, M.B., C.M., has been appointed House-Surgeon to the Royal Hants County Hospital, Winchester.

FORSTER, T. F., M.R.C.S., L.R.C.P.Lond., L.S.A.Lond., has been appointed Senior House-Surgeon to the Carlisle Dispensary, vice J. Macdonald, M.B., resigned.

GOULD, ERNEST E., L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer for the First District of the Hailsham Union.

HARRIES, ARTHUR J., M.D., M.R.C.S. (late Senior Assistant-Physician), has been elected Physician to St. John's Hospital for Diseases of the Skin, vice James Startin.

HEYWOOD, T. WALMSLEY, M.R.C.S., L.K.Q.C.P.I., has been appointed House-Surgeon to the District Infirmary, Ashton-under-Lyne, vice H. Payne, M.D., resigned.

LAWTON, HERBERT A., L.R.C.P.Lond., M.R.C.S., M. and L.S.A.Lond., has been appointed Medical Officer of Health for the Borough and Port of Poole.

MACDONALD, JAMES, M.A., M.B., C.M.Ed., has been appointed Medical Officer for the Stanwix District of the Carlisle Union.

MARSH, N. PERCY, M.B.Lond., M.R.C.S., has been appointed Assistant Honorary Medical Officer to the Infirmary for Children, Liverpool.

MAYNARD, FREDERIC P., M.B., M.R.C.S., L.R.C.P.Lond., has been appointed House-Surgeon to the Infirmary, Newcastle-upon-Tyne, vice J. W. Bidley, M.B., M.R.C.S., resigned.

PAIN, TERTIUS D'OYLEY, L.S.A.Lond., has been appointed Medical Officer for the Kentchurch District and the Workhouse of the Dore Union.

SCHOFIELD, GERALD, M.R.C.S., L.R.C.P.Lond., has been appointed House-Surgeon to the Yarmouth Hospital.

SEARLE, R. BURFORD, L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer for the Second District of the Penzance Union.

Births, Marriages, and Deaths.

BIRTHS.

BATTISCOMBE.—On the 8th inst., at St. Mary Cray, Kent, the wife of C. G. Battiscombe, M.B., C.M., of a son.

BROWN.—On the 13th inst., at Bartholomew-road, N.W., the wife of Andrew Brown, M.D., M.R.C.P.E., of a son.

COLTART.—On the 9th inst., at Ashbourne House, Epsom, the wife of William Wilson Coltart, L.R.C.P.Lond., M.R.C.S., of a daughter.

HARRISON.—On the 16th inst., at Sandringham-gardens, Ealing, W., the wife of R. Charlton Harrison, L.R.C.P.Lond., M.R.C.S., L.S.A.Lond., of a daughter.

MURRAY.—On the 12th inst., at Gloucester-place, Portman-square, the wife of Charles Stormont Murray, L.R.C.S., of a son.

STEPHENS.—On the 10th inst., at Brook-street, W., the wife of S. Sanders Stephens, M.R.C.S., of a daughter.

WHITE.—On the 11th inst., at Sliema, Malta, the wife of Staff-Surgeon W. R. White, R.N., H.M.S. *Sylvia*, of a son.

WOOD.—On January 22nd, at Leighton House, Stanmore, Sydney, the wife of W. B. Ramsden Wood, M.D., of a son.

MARRIAGES.

CLATWORTHY — HOPE.—On the 9th inst., at Holy Trinity Church, Dartford, Herbert Clatworthy, M.R.C.S., L.S.A.Lond., son of E. Clatworthy, Esq., late of H.M. Dockyard, Chatham, to Alice, daughter of the late Frederick Hope, of Kensington.

HANKINS—FULLERTON.—On January 20th, at Sydney, N.S.W., George Thomas Hankins, M.R.C.S., of Sydney, formerly of Clapham, London, elder son of the late Thomas Hankins, M.R.C.S., of Clapham, to Janet Christina, third daughter of the Rev. James Fullerton, LL.D., of Sydney, N.S.W.

DEATHS.

COURTENAY.—On the 15th inst., at Chandos-street, Cavendish-square, Francis Burdett Courtenay, M.R.C.S., in his 76th year.

FALWASSER.—On the 4th ult., at Neemuch, Central India, Francis Falwasser, F.R.C.S., Surgeon-Major, A.M.D.

JOHNSTONE.—On the 11th inst. (after four days' illness, of Bright's disease, pyæmia, and peritonitis), at Calcutta, George Hastings Johnstone, F.R.C.S.Eng., aged 48.

MAGENISS.—On the 1st inst., at the Bolton Hotel, Peter Mageniss, M.D., Consulting Physician to the Italian Hospital, aged 73.

SMART.—On the 16th inst., at Argyll Lodge, Amhurst-park, London, N., James Smart, F.R.C.S., aged 66.

WEBER.—On the 10th inst., at 44, Green-street, Grosvenor-square, Frederic Weber, M.D., F.R.C.P., in his 78th year.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

Medical Diary for the ensuing Week.

Monday, March 22.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 3 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Wm. Arthur Brailey: The Muscles and Fasciæ of the Orbit.

SOCIETY OF ARTS.—8 P.M. Mr. Boverton Redwood; Petroleum and its Products (Cantor Lecture).

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Bowreman Jessett: Two cases of Amputation of the Penis by Mr. Pearce Gould's Modification of Thiersch's Operation for Epithelioma.—Mr. A. Pearce Gould: Notes of a case of Alveolar Abscess, causing Death.

Tuesday, March 23.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Arthur Gamgee: The Function of Circulation.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Mr. S. J. Sharkey: On Spasm in Chronic Nerve Disease (Gulstonian Lecture).

SOCIETY OF ARTS.—8 P.M. Mr. Alexander Begg: Canada and its National Highway.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Dr. Hebb: Case of Tuberculosis of the Skin.—Dr. Theodore Williams and Mr. Godlee: Two cases of Bronchiectasis treated by Paracentesis, with Remarks on the Mode of Operation.

ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8.30 P.M. Capt. C. R. Conder: Present Condition of the Bechuana, Koranna, and Matabele Tribes.

Wednesday, March 24.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.; and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Wm. Arthur Brailey: The Muscles and Fasciæ of the Orbit.

HUNTERIAN SOCIETY.—8 P.M. Dr. Lewers: The Operative Treatment of Malignant Disease of the Cervix Uteri.—Mr. Toulmin: A case of Recurrent Vomiting.

SOCIETY OF ARTS.—8 P.M. Mr. W. H. Preece: Domestic Electric Lighting.

NEUROLOGICAL SOCIETY OF LONDON.—8.30 P.M. Inaugural Address by the President (Dr. Hughlings Jackson).

BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens will be shown by Drs. Macnaughton Jones, Blake, Fancourt Barnes, and others.—Dr. Bedford Fenwick: Intra-abdominal Tumours as a Cause of Cardiac Degeneration.—Dr. Blake: Hamamelis in Venous Stasis.

Thursday, March 25.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Dewar: Electro-Chemistry.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Mr. S. J. Sharkey: On Spasm in Chronic Nerve Disease (Gulstonian Lecture).

SOCIETY OF ARTS.—8 P.M. Mr. Walter G. McMillan: Certain Appliances for the Utilisation of Refuse and Dust Fuels.

Friday, March 26.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Wm. Arthur Brailey: The Muscles and Fasciæ of the Orbit.

QUEKETT MICROSCOPICAL CLUB.—8 P.M. Papers by Messrs. Michael, Morland, and Nelson.

CLINICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Clutton: A case of Tubercular Ulceration of the Palate.—Dr. Longhurst: A case of Popliteal Aneurysm in a Patient the subject of Locomotor Ataxy, cured by Pressure.—Dr. Stephen Mackenzie: On the Connexion between Erythema Nodosum and Rheumatism.—Mr. Meredith: A case of Acute Intestinal Obstruction following upon Ovariotomy.—Dr. Handford (Nottingham): Myxœdema (?) in a Boy of fourteen years (living specimen).

ROYAL INSTITUTION OF GREAT BRITAIN.—9 P.M. Mr. W. Chandler Roberts-Austen: On Certain Properties common to Fluids and Solid Metals.

Saturday, March 27.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Mr. Howard Grubb: The Astronomical Telescope.

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, March 18th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Mar. 12	30·32	E.	31	Froz.	...	37	30	...	Overcast
,, 13	30·37	N.E.	32	...	...	36	30	...	Overcast
,, 14	30·27	E.	34	33	...	36	31	...	Overcast
,, 15	30·05	E.	34	33	...	38	32	...	Overcast
,, 16	29·84	N.	31	...	...	39	27	...	Overcast
,, 17	29·89	S.E.	31	...	...	43	27	...	Foggy
,, 18	29·94	S.E.	37	35	...	47	30	...	Overcast

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

A RUSSIAN PRACTITIONER PUNISHED FOR REFUSAL TO ATTEND.

A FOREIGN correspondent, referring to an annotation which appeared in our columns on the 6th ult. on the subject of a practitioner being punished for refusal to attend a patient, calls attention to the consequences of such a condemnation to the defendant. Until the termination of the process he was prevented from leaving his dwelling-house; and as the lawsuit has lasted fifteen months (and, it appears, is not likely to be speedily concluded), all professional occupation, excepting in the cases of patients who are well enough to visit him, is impossible. He has also been prevented from going to a watering-place to which he has of late years been in the habit of repairing for his health's sake, and this prohibition will endure until the suit is ended. Refusal to attend a patient in Russia evidently means ruin to the luckless practitioner.

Edina.—Cocaine has been favourably reported on as a remedy in sea-sickness. But its efficacy is, we believe, not invariable.

"THE USE OF COCAINE IN OPERATIONS FOR PILES."

To the Editor of THE LANCET.

SIR,—Will you permit me to inform Dr. Pritchard, who wrote on the above subject in your last issue (p. 527), that I have for some time past used cocaine as a local anæsthetic for the removal of piles in suitable cases, having performed two operations prior to the appearance of the annotation in your issue of Jan. 31st, 1885 (p. 220), on Mr. Swinford Edwards' case. I make use of the words "suitable cases" advisedly, as I have found that the operation can only be performed painlessly by the use of cocaine when the pile is situated close to the margin of the anus, and not involving too great an extent of skin. I apply a 20 per cent. solution first around the mass, and afterwards inject hypodermically a few drops into its substance.

May I also be allowed to inform your correspondent that I claim to be the inventor of the clamp with which he has associated Mr. Downes' name (see correspondence between Mr. Downes and myself in the *British Medical Journal*, vol. i., 1885, pp. 703, 974).

I am, Sir, yours truly,

Baron's-court, S.W., March 15th, 1886. R. FITZROY BENHAM.

WRY-NECK.

To the Editor of THE LANCET.

SIR,—I should be glad if any of your readers could give me a hint on the treatment of a case of wry-neck. I have already tried hypodermic injections of morphia, liniments of iodine, belladonna, aconite, turpentine and soap, blisters, massage, together with the internal administration of iodide of potash, iron, quinine, nux vomica, and belladonna; but all without avail. Indeed, the case seems to be getting worse.

I am, Sir, your obedient servant,

Elgin-road, W., Feb. 23rd, 1886. JOHN BEATTIE CROZIER, M.B.

THE INSANE POPULATION OF VICTORIA.

FROM the report of Dr. T. T. Dick, Inspector of Lunatic Asylums in Victoria, for the year 1884, which has just been published, it appears that during the year the number of persons officially recognised as insane increased by 19, or from 3209 to 3228. During the past five years the average annual increase has been 45, as compared with 129 per annum during the preceding ten years. Of the 3228, 1749 were males and 1479 females. In the thirty-seven years ending with 1884, 9251 males and 6478 females, or 15,729 in all, have been admitted into the public lunatic asylums, 914 of these being readmissions. The percentage of deaths on the average numbers resident seems to be decreasing. In the three years 1882-4 inclusive it was in each year under 7; but in the preceding fourteen years there were only four years in which the percentage was under 7. The total receipts of the department during 1884 amounted to £6744, the expenditure being £96,225. Of the receipts, £5667 was collected by the Master in Lunacy for the maintenance of patients from their relatives and representatives.

A Junior.—Wilson Fox, Pavy.

"COLOUR-BLINDNESS AMONG MEDICAL MEN."

To the Editor of THE LANCET.

SIR,—The question raised by your correspondent, Mr. Piesse, in your last issue is a somewhat difficult one to answer. There can be no doubt that in medico-legal practice colour-blindness would form an obstacle which might prove insuperable. It is not the lot of every practitioner, however, to find himself in the witness-box, and the mere possibility of his being dragged into a court of law should, I think, weigh but lightly in considering whether a colour-blind man is justified in adopting medicine as his profession. As regards general practice, I cannot imagine that colour-blindness would really be a serious bar to success. Pitting a physically sound man against a physically unsound one, the advantage would, of course, appear to be, *ceteris paribus*, in favour of the sound one. The examples given by Mr. Piesse as possible points of difficulty need not, I think, be made much of. The diagnosis of iritis certainly does not rest so much on the colour of the iris as on the concomitant symptoms, such as ciliary injection, thickening of pupillary margin, contraction of pupil, and, under atropine, irregular dilatation, to say nothing of synechiæ, if they exist. Glaucoma is not diagnosed simply by the greenish colour to which the disease owes its name, but rather to the tension of the globe, the condition of the disc and vessels, the appearance of the capsule of Tenon, the acuteness of vision, the well-known rainbow colours seen by the patient, the pain and the contracting field of vision, &c. Again, in the exanthems the colour of the rash is not so important a feature in diagnosis as the history of the attack, the period of incubation, the temperature of the patient, and the form and situation of the eruption. Have we not "scarlatina sine eruptione"? Nevertheless, there are drawbacks resulting from colour-blindness which cannot be disguised. Whenever the safety or well-being of a number of persons depends on the perfect vision of one individual, it should be ascertained beyond doubt that the individual in question is not colour-blind. This may be the case with those who enter the army and navy. From what I know of the tests to which candidates for the services are subjected, I am of opinion that the vision is not examined sufficiently carefully, and many men are passed whose sight is far from satisfactory. The ordinary coloured wools would, I feel sure, reveal many cases of colour-blindness in military and naval men, if carefully used. The commonest confusion colours are reds and greens. These happen to be the very colours used for signals in the navy and elsewhere. The uniforms of most of our soldiers are scarlet; and yet many men in our ranks might say they were green! It has been my lot to meet with two railway officials, practically concerned with traffic management, who confused reds with greens. The danger to which passengers are exposed if colour-blindness be overlooked in railway *employés* is painfully obvious. Considering all things, therefore, it seems to me that a general practitioner may get on very comfortably under ordinary circumstances notwithstanding colour-blindness, whilst a medical officer carrying out special duties requiring more perfect vision may fail to succeed.—I am, Sir, yours truly,

A. ST. CLAIR BUXTON, F.R.C.S.,
Assistant-Surgeon to the Western Ophthalmic Hospital.

Orchard-street, W., March 15th, 1886.

ON A METHOD OF CONTROLLING BLEEDING DURING COMPLETE OR PARTIAL EXCISION OF THE TONGUE.

To the Editor of THE LANCET.

SIR,—Would you allow me to make a suggestion which may be of use to Mr. Jordan Lloyd and others who may adopt his method of removing the tongue, as described by him in a recent number of your valuable journal. By Mr. Lloyd's alternative way of introducing the needle the second time, directly through the skin, there is, as he says, danger of causing sloughing. This danger may be obviated by placing the half of an ordinary cork, split in its long diameter, upon the skin between the punctures, and then tying the ligature over it. In this manner an elastic pad is produced, which will effectually protect the skin from the pressure of the whipcord ligature, and will furnish a very convenient support against which to compress the lingual vessels.

I am, Sir, yours truly,

Larnaca, Cyprus, Feb. 15th, 1886. J. G. LAFFAN, Colonial Surgeon.

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CHRONIC URTICARIA.

DR. J. BRISBANE, of 21, Park-road, Regent's-park, writes to thank the many gentlemen who have so kindly communicated with him regarding his case of chronic urticaria. It would be too great a task to reply to each individually; he therefore trusts that they will all accept this acknowledgment. Dr. Brisbane adds that the rash had spread over the whole body, and the irritation had become agonising, the patient saying that the pain he suffered during the continuance of the rheumatism was more tolerable than the fearful itching and burning of this rash. Under the use of Donovan's solution the patient improved for a time, the rash nearly disappearing; but it soon returned, and has since been rebellious to all treatment. Dr. Colcott Fox kindly saw the case, and expressed the opinion, as had Dr. Crocker, that it was one of "dermatitis herpetiformis," as described by Dr. Duhring of Philadelphia. At his suggestion, the patient was brought before the Dermatological Society on March 10th, when those present concurred in this diagnosis. Dr. Brisbane himself has no doubt that the case is one identical with those described by Dr. Duhring under the title "dermatitis herpetiformis (erythematosa)," but regrets that Dr. Duhring does not give a single suggestion as to treatment.

T. S. H.—Office of the Crown Agents for the Colonies, Downing-street.

LONDON HOSPITAL MEDICAL COLLEGE.

To the Editor of THE LANCET.

SIR,—The account of the ceremony of laying the corner-stone of the new buildings in connexion with the London Hospital Medical College contained in THE LANCET last week assigns so subordinate a position to the staff of the hospital that it might be thought that the medical school is entirely under lay management, that the College is being enlarged at the sole cost of the governors of the hospital, and that the staff were present merely as spectators of a function with which they had no particular concern. For this reason, and for the sake of an accurate record, some amplification of the account is rendered desirable.

It had been appropriately arranged in the authorised programme that the ceremony should be opened by an address to the visitors by Sir Andrew Clark, as the representative of the staff. He was unable to attend, and at the last moment the duty of inaugurating the proceedings suddenly devolved upon myself, as the senior member of the staff actually present. In the course of my remarks I pointed out that the original medical school buildings at the east end of the hospital were erected in 1783–85 by the medical staff, assisted to some extent by subscriptions from individual governors and friends of the hospital. In 1854 the fabric which is now in great measure disappearing, to be replaced by an enlarged college, was erected, at a cost of more than £10,000, by the governors, who required the old school buildings for absorption into an expanding hospital. Since then two enlargements, one in 1871 and the other in 1879, have taken place, and in each instance by means of money borrowed by the medical council of the school from the governors, and repaid out of the students' fees. A certain amount of the sum required for the first of these two enlargements was handsomely remitted by the house committee. The present enlargement is being carried out in a similar manner. The sum of £15,000 has been lent to the medical council of the school by the house committee and governors of the hospital, and the interest will be paid in perpetuity by way of rent, and as a first charge on the fees received from students. In every instance the erection of school buildings has resulted from the urgent representations of the staff and lecturers to the governing body of the hospital, and, save in 1854, when a new and more expensive edifice was given in exchange for the old school, the sinews of war have been guaranteed or provided by the staff and lecturers. The school, however, has been greatly benefited by the cordial co-operation and liberality of the members of the house committee. After giving the main details of the new building embodied in your annotation, I alluded to the present government of the school by a conjoint board, consisting of an equal number of representatives of the house committee and the medical council. The happy conjunction of these two bodies, working formerly on parallel lines which do not meet, has ensured a unity of design and action which were unavoidably absent under the old, but by no means inactive or inefficient, management. After a brief service of prayer, conducted by the chaplain, Mr. Valentine, and the laying of the stone by Mrs. Thompson, the meeting was briefly addressed in congratulatory terms by Mr. Thompson (the chairman of the College board), by Mr. Carr-Gomm (the chairman of the house committee), and by Mr. Frederick Treves in response to a call from the students, who were present in force.

I am, Sir, yours faithfully,

Finsbury-square, E.C., March 15th, 1886. WALTER RIVINGTON.

PRACTICE AT THE CAPE.

To the Editor of THE LANCET.

SIR,—I should feel much obliged if any of your readers could give me some information about practice in South Africa. What parts of the colony afford the best openings at present, and what capital would be necessary for the purpose of starting in practice? Are drugs easily obtainable in the colony? Would it be advisable to take out a supply? In what part would the climate be most suitable for a surgeon whose lungs are slightly affected? Any other information will be most thankfully received by

Yours obediently,

March 2nd, 1886. A CONSTANT READER.

PAPAL AND TALMUDICAL OPINIONS ON CRANIOTOMY.

A SHORT time ago it was announced that the question of craniotomy had been carefully discussed by the Inquisitors-General at Rome, who voted unanimously against the practice on the ground that the taking of a human life could not possibly be justifiable, except as a legalised punishment for crime. This finding was formally referred to the Pope, who ratified and promulgated it. Dr. Mielziner, Professor at the Hebrew College, Cincinnati, has, thinking it to be of interest, recently published the Rabbinical view on this question, which is as follows:—"In Mishna *Oholoth*, vii. 6, the undisputed decision is laid down that 'in case of a dangerous parturition it is justifiable to kill the unborn infant in order to save the mother, as her life precedes its life.' Such operation is, however, not permitted after the infant has already been partially born, as in the latter case the maxim applies that one human life must not be set aside on account of another. In his commentary on Tamid. Sanhedrin 72*b*, where this Mishna is quoted, *Rashi* explains the reason of the distinction between these two cases that the unborn infant is not yet a *distinct personality* with an *independent* life, hence the duty of saving the mother's life is to prevail, while in the second case its individuality is established, hence the legal principle must apply that one life must not be destroyed to save another. The authoritative codes of Maimonides (Hilchoth Rotzeach u Shemirath Nephesh I. 9), as well as of R. Joseph Caro (Choshen Mishpat 425, 2), adopted the decision of the Mishna as the rule of Jewish law." It must be conceded that the Rabbinical view in this case is much more in accordance with common sense and with the highest regard for the sanctity of human life than the Papal opinion.

M.D., F.R.C.S.—1. We are not aware of such an instance.—2. No.

"THE NEUROTIC TREATMENT OF CATARRH."

To the Editor of THE LANCET.

SIR,—In reference to Dr. Lees' communication on the neurotic treatment of catarrh, in your issue of Feb. 27th, I would like to emphasise the fact that in many cases the disease may be promptly checked by local remedies; but the one I have found to be the most efficient he has omitted to mention. Personal experience, extending now over several years, has taught me that when the catarrh is the result of an exposure to a cold or east wind (less frequently, perhaps, when due to a general chill), it can always be limited to the nostrils, and cured in a few hours, by the occasional inhalation of a strong solution of ammonia. I have tried many other reputed and well-known remedies, but I have found none of them so useful, convenient, and satisfactory as this. All that is necessary is to sniff from a small bottle containing about a drachm of the liquid and repeat the dose whenever the return of the watery flux indicates that the effect of the former inspiration is passing off. The frequency and number of the inhalations will be, of course, inversely proportionate to the amount and strength of the vapour drawn into the nostrils. As the bottle can easily be carried in the pocket, it is also obvious that such a remedy gives the minimum amount of trouble, and can be used anywhere, even unobserved. I need only add that when prescribing for others I combine the ammonia with compound tincture of benzoin or other aromatics, and that I should always prefer quinine to bromide of potassium for internal administration.

I am, Sir, yours truly,

Tunbridge Wells, March 8th, 1886. G. ABBOTT.

To the Editor of THE LANCET.

SIR,—I read with much interest Dr. Lees' paper in THE LANCET of Feb. 27th, more particularly as I have been in the habit of using one of the drugs which he recommends—viz., belladonna—for the treatment of catarrh in my own person for more than five years, having been led to do so by the perusal of a letter in your columns in which its virtues as a remedy for catarrh were extolled. My object in troubling you with this communication is to point out that, as far as the writer's personal experience goes, belladonna is a sure and certain remedy for catarrh when taken in the initial stage—i.e., when a general chilliness of the surface and a dryness of the nasal mucous membrane are felt. Taken thus promptly, a dose of from twenty-five to thirty minims of tincture of belladonna has never yet failed to check an attack, and consequently to anticipate and prevent the sneezing, nose-weeping, and other disagreeable concomitants of "a cold in the head."

I am, Sir, yours truly,

Watton, March 3rd, 1886. H. MALLINS, M.D.

THE CANTANI TREATMENT OF PHTHISIS.

Æsculapius.—From a culture of what he calls the "bacterium termo" in sterilised broth Dr. Cantani obtains a liquid which he causes to be inhaled before the patient's mouth. In the struggle for existence between the "bacterium termo" and the bacillus of Koch, the latter, he says, succumbs. This, Dr. Cantani avers, he had ascertained experimentally by the commingling of the two cultures, and on applying the principle to the treatment of pulmonary phthisis he has had quite satisfactory results in three cases in his clinique. The cure, he adds, is effected in less than three months. A treatise on the subject, similar to his well-known one on "Hypodermoclysis," is anxiously expected from the brilliant Neapolitan therapeutist.

Dr. N. E. Davies' paper is marked for insertion.

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DIPHTHERIA AND PIGEON-KEEPING.

AT a recent meeting of the Anatomical and Pathological Society of Brussels, M. Destrée called the attention of the members to the fact that cases of croup had been greatly and steadily on the increase in Brussels, so that croup and diphtheria were now endemic there, and he ventured to suggest that there might be some connexion between the keeping of pigeons and the occurrence of these diseases. He pointed out that Emmeriels of Munich had found the microbe of diphtheria in these birds, and he himself had met with three cases of croup in families where pigeons were kept, in all of which cases signs of the disease had appeared in the pigeons. M. Destrée hoped that members would bear this matter in mind, in order that it might be further elucidated.

Mr. R. Jelly.—Fayrer, Tropical Dysentery and Diarrhœa and other Diseases, 1881; Maclean, Articles in Reynolds' System of Medicine, vol. ii.

BATH CHAIRS AT HASTINGS AND ST. LEONARDS.

To the Editor of THE LANCET.

SIR,—The attention of the Hastings Town Council has just been called to a letter on the above subject which appeared in your issue of Jan. 16th last; and as some of the statements made by the writer are calculated to produce a misleading impression in the minds of those who are unacquainted with the facts of the case, I have been directed to ask you to be good enough to insert this explanation in your next issue.

In the first place, the drawing of wheeled carriages of any description whatever on foot pavements, so as to be an obstruction or annoyance to passengers, is prohibited by statute law (the Towns Police Clauses Act, 1847), which is in force in every town in England, and which may be put into operation by "any person aggrieved," as well as by the police authorities; so that it is obvious that neither the Council nor the superintendent of police has any power to give "permission" for Bath chairs to be drawn along the foot pavement. At the same time there is not the slightest probability that any action would be taken by the police authorities in a case in which the foot pavement was being made use of in consequence of the afflicted state, whether owing to a nervous or spinal complaint or otherwise, of the occupant of a Bath chair, unless under very exceptional circumstances, as the crowded condition or narrowness of the foot pavement.

It has been the earnest desire of the Town Council to afford every possible facility and comfort to the numerous invalids who resort to the town for the benefit of their health. They have licensed over 100 Bath chairs, and have had the Parade, for a length of upwards of a mile and a half, paved with asphalte and tar paving, upon which Bath chairs are allowed to be drawn practically without restriction. I may just mention that nearly, if not quite all, the Bath chairs here are provided with indiarubber tyres, which have the effect of materially reducing any jolting motion when they are drawn on the roadway.

I remain, Sir, yours truly,

Hastings, March, 1886. GEO. MEADOWS, Town Clerk.

Student.—Medical etiquette abroad cannot always be made subservient to the strict rules which obtain in the United Kingdom.

"SCARLET HOSIERY."

To the Editor of THE LANCET.

SIR,—In answer to Mr. Holmes' inquiry in your last issue (p. 526), I beg to say that the symptoms in the case of my friend (Mr. Luff of St. Mary's Hospital) were swelling, inflammation, and pain in two or three toes, accompanied a day or two later by swelling, inflammation, and pain in one of the lower vertical inguinal glands.

I am, Sir, yours obediently,

Marylebone-road, N.W., March 16th, 1886. JOHN WOODLAND.

ATROPINE REACTIONS.

MORE than a year ago Mr. Gerrard demonstrated that atropine and other mydriatic alkaloids were so powerfully alkaline as to precipitate mercury from the solution of mercuric chloride. Flückiger has confirmed his results, but has asserted that atropine does not blacken calomel—mercurous chloride. Mr. Gerrard has brought forward, in the *Pharmaceutical Journal*, evidence to show that mercurous chloride is blackened by atropine.

Surgeon-Major Staples.—In an early number.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir Henry Thompson, London; Dr. Julius Pollock, London; Dr. J. Braithwaite, Leeds; Mr. Pollard, London; Dr. Sansom, London; Dr. O'Connell, Chicago; Dr. Collier, Oxford; Dr. Dulles, Philadelphia; Dr. Dale, King's Lynn; Mr. Lindsay; Mr. H. C. Fox, Stoke Newington; Dr. H. Sinclair; Dr. Chunder Roy, Beerbhoom; Dr. H. M. Duncan, London; Mr. Salter, Gisborne; Surg.-Major Boustead; Dr. Kirk, Partick; Mr. J. H. Davies, Denbigh; Dr. Squire, London; Mr. B. Duke; Dr. Herschell, London; Mr. Masterton, Nenthead; Mr. W. M. Jones, Rotherham; Mr. Southam, Manchester; Mr. St. Clair Buxton, London; Mr. Stempel, London; Mr. Canning, London; Mr. Lawson Tait, Birmingham; Dr. Bell Taylor, Nottingham; Mr. G. S. Davis, Detroit; Mr. Walter Rivington, London; Mr. J. Creaghe, Buenos Ayres; Mr. Rankine, Sunderland; Mr. Stokes, Liverpool; Mr. J. Hardie, Manchester; Dr. Brisbane, London; Messrs. Sampson and Price, Manchester; Mr. Dobie, Chester; Dr. Reimann, Kiev; Mr. H. J. Greenish, London; Dr. Wild, London; Messrs. Calvert and Co., Manchester; Mr. Foxwell, Birmingham; Mr. Caufield; Messrs. Savory and Moore, London; Mr. Blenkinsop, London; Mr. Parry, Huddersfield; Mr. Meadows, Hastings; Mr. C. Siewers, London; Mr. Stone, Pontefract; Mr. F. Benham, London; Mr. Piesse, London; Mr. J. Shorten, London; Messrs. Loeflund and Co., London; Messrs. Furse and Co., South Molton; Dr. Adam, West Malling; Messrs. Robertson and Co., London; Mr. Smith, Brighton; Messrs. W. & A. K. Johnston, Edinburgh; Mr. Scott, Manchester; Messrs. Bennett Bros., Salisbury; Mrs. Lloyd, Brighton; Dr. Clark, Dumfries; Messrs. Condy and Co.; Mr. Maw, London; Mr. Miller, Leek; Dr. Fothergill, London; Mr. Percy Dunn, London; Mr. S. Benton, London; A Junior; Dubitans; X. Y. Z.; Medicus; M.D., F.R.C.S.; Vele Bene Facere; Chemicus, Exeter; Justice; Mrs. R.; Medical; W. R., Kingsbridge.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Stair, Pirreus; Miss Robbins; Mr. Montfort, Carlow; Miss Hatton, Langley Mill; Mr. Pattre, Edinburgh; Mr. Logan, Glasgow; Messrs. Goodall and Co., Leeds; Mr. Ker, Halesowen; Mr. Barron; Mr. Mason, Highbury; Mr. Fulton, Toronto; Mr. Kennedy, London; Dr. Frankell, South Africa; Mr. Hamilton; Mr. Stott, Southport; Mr. Gevons, Southport; Dr. Raitt; Dr. Mason, Pontypool; Mr. Ellis, Bishop Auckland; Dr. Eberle, Thirsk; Mr. Brundett, Toronto; Mr. Adams, Ipswich; Dr. Hunter; Mr. Skipworth, Caistor; Mr. Pace, Newcastle-on-Tyne; Mrs. Taplett; Mr. Russell, Birmingham; Mr. Morgan, Islington; Mrs. James, St. John's Wood; Mr. Black; Dr. Steward, Bognor; Mr. Morgan, Oswestry; Dr. Leckie, Pontypridd; Mr. Sers; Mr. Russell, Birmingham; J. S., Bromsgrove; Medicus, Liverpool; Epsilon; Medical; Surgeon, Bristol; H. X., Denbigh; M.B., Southport; H. J. P., Alnwick; Medicus, Sheffield; B. W.; Medical Officer, Orkney; M. C., Loughboro'; F. C. P., Chalford; Matron, Bedford Infirmary; Medicus, Barnsley; M. M.; Surgeon, Ryton-on-Tyne.

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Gulstonian Lectures
ON
SPASM IN CHRONIC NERVE DISEASE.

Delivered at the Royal College of Physicians of London, March, 1886.

By SEYMOUR J. SHARKEY, M.B., F.R.C.P.,
ASSISTANT-PHYSICIAN AND JOINT-LECTURER ON PATHOLOGY AT ST. THOMAS'S HOSPITAL.

LECTURE I.

(*Concluded from page 535.*)

IN THE LANCET of September 27th, 1884, my colleague, Dr. Reid, published his "Observations on the Relation of the Principal Fissures and Convolutions of the Cerebrum to the Outer Surface of the Scalp." Before the patient left the Home Dr. Edmunds got Dr. Reid's assistance in determining the position of the lesion by surface markings. The boy's head was shaved, and the fissures marked upon the smooth surface, and the opening in the skull was found to be half an inch in front of the middle of the fissure of Rolando. But as it was known that the disease extended backwards along the dura mater for a short distance behind the opening, the conclusion drawn was that the middle of the ascending frontal and ascending parietal convolutions was the part affected. The account I am about to give of the post-mortem examination shows how accurate this localisation was. The patient returned to the Home on Sept. 11th, 1885, looking very ill and emaciated, and with a sinus on the right side and back of the neck, connected with an evident angular curvature of the spine. His right

FIG. 8.

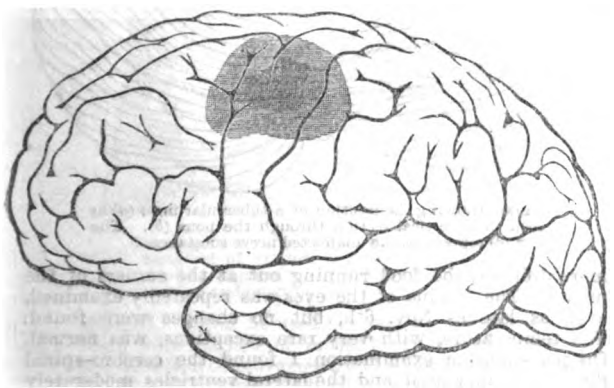


Diagram shewing the position of the cortical lesion. The lighter shading represents the area of adhesion between the dura mater and the arachnoid; the darker area the superficial destruction of the cortex.

arm was flexed at the elbow, and could not be completely extended. He died of exhaustion on Nov. 12th, 1885, the end being accelerated by diarrhœa, which was scarcely controllable. At the post-mortem examination relics of past peritonitis were found, and old and recent tubercular affection of the lungs. There was a chronic abscess in relation with caries of the lower cervical vertebræ, the disease which had produced the angular curvature. There was chronic thickening of the membranes of the cord in this region, but no evident disease of the cord itself. Dr. Edmunds was good enough to hand over to me the brain and spinal cord for careful examination. The following is an account of the condition of things which I found, after hardening the specimens in spirit. The dura mater, which was thickened and adherent over a portion of the left parietal convolutions, was gently peeled off, and that part of the cortex which was so far invaded by disease that it could not be separated from the dura mater, but was torn during its removal, is marked in Fig. 8. The lighter shading represents very slight superficial abrasion, and the darker central part shows where the disease had sunk deeper into the grey matter. The area marked in the figure measured an inch and a half vertically, and the same horizontally. The position which it occupied was the upper half of the middle third of the ascending frontal and parietal convolutions, together with a small portion of the posterior extremity of the middle and of the superior frontal convolutions. On making a horizontal section through the basal ganglia and the internal capsule, a slight discolouration could be seen in the latter just behind its knee. On making a vertical section through the ascending frontal convolution, and traversing the centre of the diseased area, the destruction of cortex was seen to be quite superficial, and no degeneration was made out in the subcortical white matter. The cord was examined high up in the cervical region, above the seat of the chronic meningitis which resulted from the disease of the cervical vertebræ. The sections show that the right half is much smaller than the left, the diminution in size being apparent, not only in the lateral column, but also in the column of Türck. Under the microscope, the connective tissue in the right lateral column is seen to be denser than that in the left, and the nerve fibres appear to be here and there less numerous.

Hospitals where old people congregate afford the best opportunities for post-mortem examination of persons whose brain is the seat of softening originating long before death. Charcot has given his experience at the Salpêtrière, and he says:[1] "In these cases the lesion presented itself under the form of yellow softening (*plaques jaunes*), more or less extensive in area, involving, to a variable depth, the subjacent white matter, and occupying the most diverse regions of the surface of the hemisphere. It is expressly mentioned in all the observations that the softening had not affected the central masses: optic thalami, caudate and lenticular nuclei, and internal capsule. My observations may be divided into two groups. The first includes the cases in which permanent hemiplegia had not existed during life, and in which secondary degeneration was found at the necropsy to be absent. In all, the convolutions supplied by the Sylvian artery, and particularly the ascending frontal and parietal, remained intact. The yellow softening was situated in one of the following regions—namely, some part of the sphenoidal lobes, the lobulus quadratus, the cuneus, one or both occipital lobes in their entirety, some part of the anterior two-thirds of the frontal lobes. In all cases of the second group there had been, on the other hand, permanent hemiplegia and well-marked secondary sclerosis. The feature common to these cases is that the lesions invariably involved, to a greater or less extent, one or other of the ascending frontal and parietal convolutions, principally in their upper half, and often both at the same time. In addition, the regions nearest to the frontal and parietal convolutions were very frequently involved."

In most instances, destruction of a portion of the pyramidal tract on one side gives rise to paralysis and spasm on the opposite side of the body only; but occasionally spasm of the muscles on the same side as the lesion follows later in the history of the case. This is probably due to sclerosis appearing in the opposite lateral column, as Pitres has shown that it often does; and Mr. Sherrington has shown that it occurs in dogs which have had one pyramidal tract experimentally injured. But although this is probably the cause of most cases of bilateral spasm from unilateral lesion, the possibility of the presence of a bilateral lesion must be borne in mind. In the *Revue de Médecine* of May, 1883, Emile Demange records a case of the kind where a bilateral lesion was found in the brain post mortem.

Leaving affections of the cortical and subcortical portions of the pyramidal tract, let us pass to a consideration of the symptoms which accompany diseases of it as it traverses the basal ganglia, crura cerebri, pons Varolii, and medulla oblongata. It is needless, before an audience like the present, to recount cases of hemiplegia followed by rigidity, which result from destruction of the internal capsule by hæmorrhage or softening. Such examples of disease are of common occurrence, and well known to all. I shall rather give an account of a series of cases which are less frequently met with, and which made a considerable impression upon me from two points of view:—1. Because they seem to

[1] Lectures on the Localisation of Cerebral and Spinal Diseases, translated by Walter Baugh Hadden, M.D. 1883. New Sydenham Soc., p. 141.

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throw considerable light on the rigidity and tetanic seizures which are observed in tumours of the cerebellum. 2. Because I failed to recognise the position of the disease in the brain during life, though a reconsideration of the symptoms leads me to think that others might have succeeded.

Case in which a Tubercular Mass occupied both Optic Thalami, producing Paralysis, Tumours, and Rigidity of the Limbs.—F. P——, aged four, was admitted into St. Thomas's Hospital under Mr. Sydney Jones, in August, 1878, and on the 22nd of the following October excision of the left astragalus was performed. The child did very well and was bright and playful until January 28th, 1879, when tremors of the left arm and leg were noticed. They were rhythmical to-and-fro movements, of short excursion, occurring only when the limbs were used voluntarily. There was very little loss of power, no affection of speech, deglutition, or respiration; and the tongue, face, and eyes all moved normally. On March 5th the child was still bright and lively, though pale; and it was noticed that the tremors were more marked on some days than on others. The left side of the face and the right hand had also begun to show similar tremors when used. The patient was sent out of the hospital, but was readmitted under Mr. Sydney Jones on July 8th, 1879, because the ankle and general condition were said to be worse. He had gone gradually downhill, had become very drowsy, passed his evacuations in bed, and was more tremulous. On readmission his face was pale and a large dilated vein coursed transversely across the right upper eyelid. He was always asleep unless roused, and would even fall asleep while eating ravenously. His appetite was good, but he never asked for food. He complained of no pain, but appeared to have general hyperæsthesia of the skin. He was very irritable and peevish, crying out loudly when disturbed or contradicted. There were now rhythmical tremors of the right upper extremity, which were excited by voluntary efforts, and resembled those which used to affect the left side; the latter had ceased and given place to rigid contraction. The elbow was flexed, and the hand clenched so tightly that the finger-nails had produced ulcers in the palm. The hand was pronated, and the rigidity was constant. The mouth appeared natural when at rest, but when the child laughed or cried it was drawn up to the right. There was no squint; the pupils were large and acted to light. The tongue was protruded straight, but was tremulous, and speech was slow. There was no deafness, but the ophthalmoscope revealed double optic neuritis. There was no vomiting or dysphagia; the bowels were very confined, and the evacuations passed in bed. The pulse was 114, respiration 24, and the temperature varied between 99·4° and 101° F. The viscera appeared to be healthy. Until Oct. 8th the symptoms already described became worse. The right hand, arm, and leg trembled violently when used, and the left leg became perfectly rigid. The patient was very drowsy, and seemed to suffer from some headache; but he was never sick, and his appetite was good. His head was slightly retracted. On Oct. 8th he seemed much worse; he vomited three times, took his food badly, and the temperature rose to 103·2°. Subsequently he became more drowsy, his right eyelid drooped, the pupils became unequal, and repeated attacks of general rigidity (sometimes accompanied with foaming at the mouth) supervened, and he died on Oct. 15th. On post-mortem examination, I found an acute recent basilar meningitis. Besides this affection, which was no doubt the immediate cause of death, a large caseous tubercular mass was seen, involving both optic thalami and almost completely obliterating the third ventricle (Fig. 9). The right optic thalamus was the more completely disorganised of the two. The specimen which I now show was hardened in alcohol, and on section it was then seen that on the left side the internal capsule, though pressed upon by the new growth, was clearly defined and looked fairly natural, while that on the right was unrecognisable. The tubercular mass was confined to the optic thalami, and did not involve either nucleus of the corpus striatum. A very small caseous tubercle was also found on the internal aspect of the left occipital lobe, but the rest of the organs were healthy.

It is well known that diseases of the optic thalami and corpora striata are not accompanied by any such symptoms as were present in this case, unless the internal capsule is involved, and the paralysis, tremors, and rigidity of limbs must be attributed to the invasion of this strand of fibres, proceeding from the motor convolutions; while the convulsions of the last week were the result of the recent meningitis. (This case has been already recorded by Dr. Bristowe, in *Brain*, vol. vi., p. 167.)

Case of large Caseous Tubercle of the Pons Varolii, producing Persistent Rigidity of the Neck, Back, Arms, and Legs.—C. C——, aged two, was admitted into St. Thomas's Hospital, under the care of Dr. Ord, on Oct. 4th, and died on Nov. 7th, 1881. The mother was attending Brompton Hospital at the time, and she had lost one of her three children from consumption. The patient was healthy until three months ago, when he began to have diarrhœa and to lose flesh, but had no vomiting. A week before he came in he had two convulsive fits. He had had pain in the head, and had been very fretful and drowsy. On admission, the child lay in a dull and listless condition, taking but little notice of anything, and only crying when disturbed. The head was drawn strongly backwards, and kept stiffly in that position. The back was likewise rigid. The arms were flexed, and the legs and feet extended, all being quite rigid. Patellar reflex was very brisk. There was no loss of sensation; deglutition appeared to be imperfectly performed. The pupils were dilated, but equal; and Mr. Nettleship pronounced the fundus of both eyes to be natural. Pulse 120. Loud rhonchi were heard over both lungs. The urine was free from albumen. During the rest of his life he became more and more drowsy, and had varying degrees of hyperæsthesia, but never loss of sensation. Rigidity of neck, trunk, and limbs continued without intermission, though it varied considerably in degree. Slight left internal strabismus and partial paralysis of the right facial nerve came on; and deglutition was more and more difficult, the food running out at the corners of the mouth. The fundus of the eyes was repeatedly examined, even as late as Nov. 6th, but no changes were found. The temperature, with very rare exceptions, was normal. On post-mortem examination I found the cerebro-spinal fluid much increased, and the lateral ventricles moderately distended with serum. There was slight basal meningitis, but the hemispheres were free from tubercular disease. In the cerebellum and pons were large greenish tubercular masses of rather irregular outline, that in the latter being in the position marked in the figure. It occupied almost the entire extent of that division of the brain (Fig. 10), having only a thin sheet of white matter around it. Longitudinally, it extended the whole length of the pons, but seemed to stop short of the medulla oblongata. Unfortunately, no microscopic examination of the spinal cord was made. The lungs were thickly studded with miliary tubercles, but the other organs appeared to be healthy. The masses in the cerebellum were all situated superficially in the cortex, and did not extend deeply into the substance of the organ.

FIG. 10.

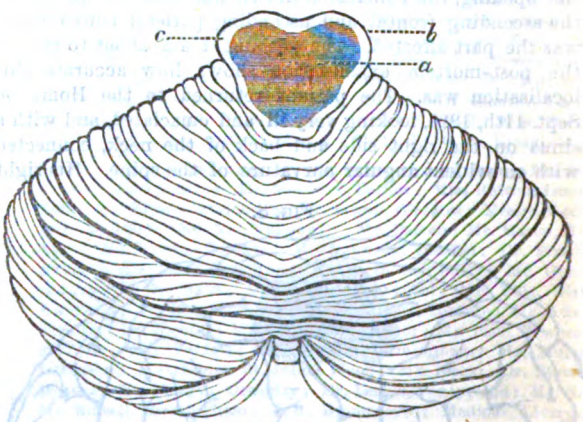


Diagram showing the position of a tubercular mass (*a*) as seen in a vertical section through the pons (*b*). The rim (*c*) represents the unaffected nerve substance.

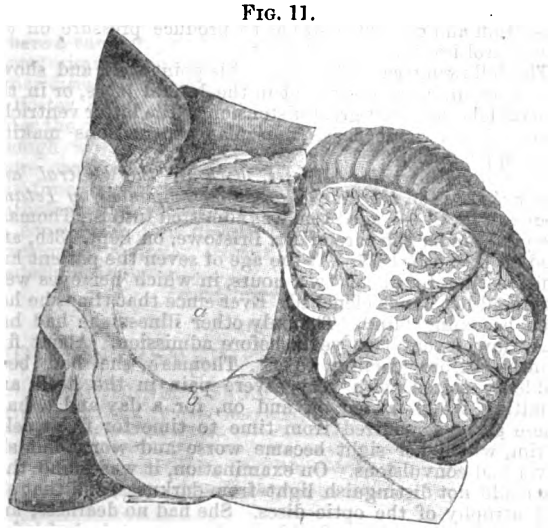
In this instance, again, the muscular rigidity must be referred to pressure exerted by the tumour upon the fibres of the pyramidal tracts in the pons; for tumours situated in the superficial parts of the cerebellar cortex are of pretty frequent occurrence, and are not found to give rise to any such symptoms. I shall presently relate a case in proof of this assertion.

Case in which a Tubercular Mass occupied the Aqueduct of Sylvius, and produced Tremors, Paralysis, and Spasmodic Contraction of Muscles.—E.B.——, aged seven, was admitted

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into St. Thomas's Hospital, under the care of Dr. Bristowe, on August 2nd, 1882, and died on November 30th in the same year. His family history was unimportant, and the child himself had never suffered from fits, or from any serious illness, except from a blow on the head, which he received at the age of four, and which laid him up for a month. From this he perfectly recovered, and it was not until the end of May, 1882, that his present illness began. Having gone to bed quite well one night, he awoke next morning, throwing himself about, and he was found to have lost power in all his limbs, but most markedly in the right arm and leg, and he was unable to walk properly. He was said not to have vomited or lost consciousness. His speech was affected from the beginning, and his eyes about one week after the commencement of his illness. He was becoming weaker and thinner every day, and the tremors in his limbs, which were noticed at first, were becoming steadily worse. His bowels were confined, and he had lost control over his bladder; he was very drowsy, but his memory was good. He had all along been free from headache, vomiting, and convulsions. On admission the child was found to be rather thin and drowsy. He lay apathetically in bed, but could be easily roused if spoken to. He had weakness in the arms and legs, and when he walked his legs seemed to drag. The most striking peculiarity in his condition was, however, the tremor with which all his movements were accompanied. The head, neck, jaws, trunk, arms, and legs were all similarly

FIG. 11.



Drawing of a large tubercular mass (*a*) occupying the aqueduct of Sylvius, and by its pressure producing a cup-like depression in the pons (*b*). The section is vertical and longitudinal.

affected. When he used his hands and arms the tremors in them were marked, of rather short excursion, sometimes in the direction of movement, and sometimes at right angles to it. The jaws trembled when he used them, and speech was slow and drawling. The tongue was protruded straight, and when he smiled the mouth was drawn somewhat to the right; hearing was normal. All the muscles of the eyeballs were more or less weakened. There was ptosis on both sides, and the internal rectus of the right eye was markedly affected. The superior and inferior recti on right were likewise weak, as were the muscles of the left eye, though not so weak as those on the opposite side. Both pupils acted well to light and to accommodation, the right being a little larger than the left; no anæsthesia was present. The patellar and plantar reflexes were normal, and there was no ankle-clonus. The temperature was natural, and all the organs, except the brain, appeared to be healthy. During the rest of his life the tremors gradually increased, paralysis became more marked, and attacks of spasmodic contraction of the muscles of the limbs and trunk occurred from time to time. On some occasions the legs were noticed to remain for a while rigidly extended. The patellar and plantar reflexes became exaggerated. The patient grew more and more drowsy, and passed his evacuations in bed. The temperature presented only occasional slight elevations until November 26th, four days before death, when it rose to 101·2°; and it subsequently reached 103·8° on the 29th, the day before death. Throughout the patient's illness there was a singular absence of headache, vomiting, and optic neuritis. Though frequently examined, the fundus of the eye presented no abnormal appearances until November 26th, when there was thought to be neuritis. After death, Dr. Edmunds found distinct microscopic evidences of this condition. Another curious point was that the tremors were now and then either greatly diminished or absent for a day or two, and then returned with all their former intensity. At the necropsy the body was much emaciated, and rigor mortis was present only in the lower extremities. The spleen and lungs contained a few tubercles, and those in the spleen were caseous. All the other organs were healthy, with the exception of the brain. Its surface was sticky, and the veins were gorged with blood. At the base, in the interpeduncular space, the membranes were opaque and there was fluid in the optic sheath. Miliary tubercles were present in the Sylvian fissures, and the ventricles were moderately distended. There was a large caseous mass in the region of the corpora quadrigemina, which was round in shape and as large as a medium-sized marble, and which is well displayed in the preparation before you (Fig. 11). It lay as if wedged in the aqueduct of Sylvius, which was enormously distended. On the upper surface of the tumour were the thinned and flattened corpora quadrigemina, while its lower rounded margin rested upon the upper surface of the pons and crura cerebri. Here it occupied a cup-like cavity, which its downward pressure had produced. No other important structures were injured by the tumour.

In this case the usual phenomena of pressure upon the fibres of the pyramidal tract are again well represented. Paralysis and tremors occurred first, then attacks of rigidity. Had the child lived longer and the growth of the tubercular mass progressed, the pressure exerted by it upon the pons and crus cerebri would, no doubt, have produced the final stage of persistent rigidity. The recent tubercular meningitis cannot be said to have produced the tetanic seizures, as the latter occurred months before the patient's death. This case and the next which I shall relate have already been published by Dr. Bristowe in *Brain*, vol. vi., p. 167.

Case of Tubercular Mass occupying the Left Lobe of the Cerebellum, and pressing upon and producing Softening of the Pons and Medulla; Persistent Rigidity of Limbs.—A. G. J——, aged four, was admitted into St. Thomas's Hospital, under the care of Dr. Bristowe, on Dec. 30th, 1878, and died on August 6th, 1879. He had been a healthy child until three months previously, when he was ill with measles and whooping-cough. He began to have fits, which occurred about once a day at first, and then twice a day. He had also been suffering from severe pain in his head, occasional vomiting, and for about two months his mother had noticed that he squinted. The father was said to be asthmatic, and the mother had a weak chest, but their two other children were healthy. On admission the patient seemed to be a sensible child, but quite blind. The pupils were widely and equally dilated, and contracted slightly to light. When lying in bed he could move his arms and legs, but the former were tremulous and ataxic. When placed upon the ground, the patient laughed hysterically, but could not stand, though he could move his legs forwards when supported. The limbs appeared to be equally affected on the two sides. The mouth dropped slightly on the right side, and the tongue was protruded to the right. The pulse was 140 and regular; respiration was easy. The patient passed all his evacuations in bed. There was well-marked optic neuritis in both eyes, the outline of the discs being irregular and blurred, the veins large, the arteries small, and the whole presenting a streaky appearance. Between the time of admission and his death the patient had many fits, in which he was unconscious—the legs remaining rigidly extended, and the arms being flexed and then extended several times in succession. A certain amount of left facial paralysis developed, so that the patient could not close the eye of that side, and the left external rectus was partially paralysed. His arms became more tremulous, the right being more affected than the left; his speech was very drawling. He remained for long fairly intelligent, had no deafness, and was not much troubled with headache or vomiting. From February onwards the arms and legs became persistently rigid, although the degree of rigidity varied. Finally, the child became emaciated to the last degree, and lay perfectly still, taking food well when it was offered him, but showing very few signs of life. He died on

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August 6th. At the post-mortem examination there was little evidence of important pathological changes in any of the viscera except the brain. The head was very large, all the sutures were separated, and the bones were movable. There was no subarachnoid fluid, but the ventricles were greatly distended, and the substance of the hemispheres reduced to a thin, soft sheet of nerve substance. The left lobe of the cerebellum was entirely occupied by a firm tumour, of the size of a Tangerine orange, yellowish-green in colour, semi-transparent, and consisting of closely placed, concentric layers. The relics of cerebellar tissue remaining on its surface were soft, as was the neighbouring part of the posterior cerebral lobe. The tumour was adherent to the tentorium cerebelli, and the pons and medulla were pressed upon by it, and somewhat softened. The right lobe of the cerebellum was healthy. Another small tubercular mass was found in the grey matter on the orbital surface of the right frontal lobe. In this case, again, persistent rigidity was the result of pressure which the tumour exercised on the medulla oblongata and the pyramidal tracts which run in it. For it will be shown presently that without such pressure tumours of the cerebellum do not produce such phenomena, and that distension of the ventricles with fluid is not sufficient to explain them.

These four cases appear to me to be of great interest as representing diseases affecting a certain portion of the brain, and capable of being localised during life. The region referred to extends from the basal ganglia to the medulla oblongata, commencing at that spot where the pyramidal tracts begin to converge as they pass between the central ganglia, and occupying further on the pons and medulla oblodgata, where the pyramidal tracts lie in close contact. If the motor tracts be affected simultaneously, or quickly one after the other, in the way about to be mentioned, the disease is likely to be situated between the basal ganglia above and the medulla below, and is in all probability a tumour. The earliest symptoms referable to the pyramidal tract are tremors; then come paralysis and rigid contraction, which is finally permanent; and besides these there may occur from time to time attacks of tetanic spasms, affecting most of the muscles of the body. The phenomena of chronic spasm are due to gradual pressure on the motor tracts, proceeding from the central convolutions of the brain; and the fact that both sides of the body are attacked indicates that the disease is situated at a part where the pyramidal tracts are in close proximity to each other. If the case be seen early, probably all these symptoms, tremors, paralysis, and rigid contraction, will occur before the end; but if the patient do not come under observation until late, only some of them may be observed. Thus, in the case where the optic thalami were gradually invaded, and in the case of cerebellar tumour pressing from above on the medulla, all occurred; whereas, in the case of the large tubercular mass almost completely occupying the pons, only the later stage of persistent rigidity was seen. In determining the exact seat of the tumour, whether in the optic thalami, corpora striata, pons, or cerebellum, we must consider the other symptoms referable to the special nerves involved, which arise at different levels along the base of the brain, and also whether there are, or have been, symptoms which suggest cerebellar disease. Moreover, optic neuritis is very constant, and early in its appearance in cerebellar disease, and often late when the tumour is higher up. I would not have it understood that all tumours in these positions give rise to the phenomena described, for soft succulent ones often do not; but if the symptoms I have pictured be present, the disease is probably a hard slowly growing tumour in the area mentioned. In all the cases just related the tumour was a large tubercular mass; and the early stage of such tumours is shown in a specimen on the table, which was taken from the body of a baby who presented no obvious symptoms of cerebral disease. A caseous nodule can be seen (Fig. 12) occupying the lower third of the external segment of the lenticular nucleus. In a drawing of a microscopic section of this mass a large vessel is seen, and close by the vessel [illegible] of well-stained tubercule bacilli (Fig. 13). [illegible] as this series of cases is from the point [illegible] considered, they are still more so in their bearing upon the question of the functions of the cerebellum and its relation to muscular spasm. In THE LANCET of 1880, vol. i., p. 122, Dr. Hughlings Jackson has written "On Tumours of the Cerebellum," and speaks of "cerebellar rigidity." "I suppose," says he, "the cerebellar rigidity to be owing to unantagonised cerebral influx (rigidity in hemiplegia being owing to unantagonised cerebellar influx), and the tetanus-like seizures to be owing to cerebellar discharges analogous to those cerebral discharges which produce unilaterally beginning (epileptiform) convulsions. But there is the obvious objection that the two symptoms, with the cerebellar disease, may be owing to interference with the corpora quadrigemina (electrical excitation of which produces tetanus-like states), or to interference with the medulla oblongata." Further on in the same volume of THE LANCET, p. 522, Stephen Mackenzie has a paper on the same subject, in which he expresses the opinion that "the reeling gait and tonic spasms are both expressions of disorder of the locomotory apparatus, of which the cerebellum is the governing centre." In comparing the tetanus-like seizures with tetanus, he goes so far as to say, "the range of the two is so much alike as to afford the strongest reasons for the belief that tetanus is an affection of the cerebellum." Now, if the same rigid contractions and the same tetanic seizures occur in disease of other parts at the base of the brain, they cannot be held to be characteristic of cerebellar disease. Hughlings Jackson says: "This universal rigidity, as a condition arising from cerebellar disease, I have seen only when the tumour has been in the middle lobe," and again: "In the case of extensive rigidity and tetanus-like seizures, the tumour has been of the middle lobe, and has been large." These remarks really furnish a clue to the matter. I would put the case thus: a tumour of the cerebellum does not produce contractures and tetanic seizures, unless it be in such a position and of such a size as to produce pressure on the pons Varolii or medulla oblongata.

The following case illustrates this point well, and shows that tumours may be present in the lateral lobes, or in the central lobe, and that great distension of the latter ventricles may exist without these muscular contractions making their appearance.

Case of Tubercular Masses, both in the Central and Lateral Lobes of the Cerebellum, unaccompanied by Tetanic Spasms.—E. C——, aged ten, was admitted into St. Thomas's Hospital, under the care of Dr. Bristowe, on Sept. 13th, and died on Dec. 5th, 1877. At the age of seven the patient had a fit, lasting for about two hours, in which her eyes were fixed and her hands clenched. Ever since that time she had been becoming blind. The only other illness she had had was "low fever," two years before admission. About five months before coming to St. Thomas's she had been suddenly seized with very severe pain in the head and vomiting, which lasted, off and on, for a day and a half. These attacks recurred from time to time for five weeks, during which her sight became worse and worse, but she never had convulsions. On examination, it was found that she could not distinguish light from darkness, and that she had atrophy of the optic discs. She had no deafness, and was very intelligent, and able to give a great deal of information about her illness. Her head was somewhat hydrocephalic in shape, and the forehead prominent. She kept it fixed, and said it hurt her to let it drop backwards. When seated the legs appeared to be quite strong, and it was impossible to detect any weakness in them when one tried to flex or extend them against her will. When held by the hands she could walk pretty well, but when she was left to stand alone she quickly lost her balance. The same occurred when she tried to walk, and she seemed to have considerable incoördination of the legs. There was a tendency to fall to the right side, though she was said previously to have usually fallen to the left. When standing up and made to lean a little backwards she did not fall, but ran backwards. During the rest of her life she had frequent attacks of severe pain in the head, accompanied by vomiting and a feeling of great giddiness. Her temperature remained normal, and she had no tetanic spasms or contractures. She was found dead in bed on the morning of December 5th. At the necropsy, there was no evidence of meningitis, but the ventricles of the brain were distended with clear fluid, twelve ounces being removed and measured. The convolutions were flattened, and the whole extent of them collapsed when the ventricles were emptied. The optic nerves were markedly atrophied. The lateral lobes of the cerebellum were both very soft and swollen, and the left was adherent to the dura mater. There were several tumours, both in the central and in the left lobe, which appeared to be tubercular masses with the centres broken down. Their size varied from that of a pea to that of a medium-sized marble; their circumference consisted of a pale, rosy-grey, semi-translucent,

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hard tissue, and their centres of a puriform fluid. The other organs were healthy.

In the class of cases which I have been discussing, tremors and paralysis are probably due to slight interference with the functions of the fibres of the pyramidal tracts, persistent rigidity to still greater interference, while the attacks of tetanic spasms may resemble the convulsions which are observed in connexion with cortical tumours of the brain. In the case of cerebral tumours, the pressure is exerted upon the cortical grey matter; in the cerebellar cases, upon the grey matter in the floor of the fourth ventricle, and not upon that of the cerebellum itself, for I have seen cases in which the central lobe of the cerebellum has been completely destroyed by tumours, but in which no pressure was exerted upon the medulla oblongata, and no rigidity was observed during life. It is interesting to note, in relation to this question, that Nothnagel has found that irritation of these parts is particularly liable to produce convulsions; so much so that he has supposed a special convulsive centre (Krampfcantrum) to exist in the pons, which is readily brought into action, either directly or reflexly, by stimulation of a spot in the fourth ventricle. I have said that the tetanic spasms "may" be due to pressure on the grey matter of the floor of the fourth ventricle, because they are capable of another explanation; they may, in fact, be the result of varying pressure upon the pyramidal tracts. In the next lecture I shall relate a case where a tumour, pressing upon the cord from without, produced similar spasmodic attacks; and they are also seen in other diseases affecting the lateral columns of the cord.

Foster, in his work on Physiology, says: "We must consider the cerebellum as an important organ of coördination, though we are unable at present to define its functions more exactly." This probably represents our knowledge of the functions of the cerebellum, and it is in keeping with pathological experience; and I do not think we are justified in considering that disease of it produces spasmodic contraction of muscles, except indirectly, by pressure upon underlying structures.

ON SOME

MODERN REMEDIES IN HEART DISEASE.

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(*Continued from p. 536.*)

I NOW turn to the evidence, in cases under my own care, of mitral regurgitation in which caffeine citrate was administered. It is to be borne in mind that all these were cases of great gravity, in which the resources of ordinary treatment had been for the most part exhausted.

1. *Effects on the excretion of urine.*—In the following table insignificant variations have not been recorded. The signs < and > indicate a gradual daily increase to or a gradual daily decrease from the amounts stated.

TABLE I.—*Showing the daily amounts of Urine, in ounces, in cases of Mitral Regurgitation, treated by Caffeine Citrate.*

Case.	Before caffeine.	During administration of caffeine.	After caffeine.
1	12	36, 40, 114	180, 172, 114, 68, 57
2	—	24, 42, 47, 52	40, 32, 28
3	—	32, 64, 112, 117	
4	10, varying to 20	20, 30, 36	48, 20, 32>15
4a*	—	16<27, 65>36, 10	—
5	15, 20, 17	25, 20, 10, 25	—
6	50, 18, 15	30, 34, 20, 25>15<26	18, 14, 20>10<15, 20
6a*	—	20, 18, 15	—
7	17	35>12<30, 25	10
8	25, varying to 36>24	30, 29>11>6	—

* Readministration.

It must be accorded that the evidence of these cases proves the citrate of caffeine to be, in cases of mitral regurgitation, a powerful diuretic. It is shown that the amount of urine passed during a considerable portion of the period when the drug was administered was generally in excess of the diurnal amount passed previously. In some cases the effect is very striking; for instance, in Cases 1 and 3, in which the daily amount ran up in the one case from 12 oz. to 114 oz., and in the other from 32 oz. to 117 oz. In both these cases ten-minim doses of tincture of digitalis were administered with the caffeine citrate, in the first case in three-grain, in the second in five-grain, doses three times a day. It is also, in my opinion, indicated that the influence of the drug as a diuretic may be prolonged beyond the time of its actual administration. Cases 1 and 4 tend to show this, and to indicate that the dictum that caffeine is not cumulative in action must be reconsidered. The cases, however, abundantly prove another proposition—that the diuresis produced by the drug is not invariably salutary, and that the free outflow of urine is not an index of rehabilitation of the general vital powers. In Case 1 the effects were remarkably favourable; there existed extreme ascites and œdema in a woman of fifty-three, the left ventricle being much dilated and hypertrophied; then occurred amelioration and disappearance of all the symptoms, and the patient left the hospital feeling well. There can be no doubt that here the effects were rapidly beneficial. A like result was manifested in Case 2, in which there was evidence of aortic obstruction as well as mitral regurgitation. This case was subsequently treated by convallaria, but the maximum of diuresis was markedly during the *caffeine* period. This patient recovered from all her very distressing symptoms, and went out feeling well. In Case 3, however, one of extreme severity, in which pericarditis, signs of embolism, and renal complication occurred, the patient died at the very time that the amount of urine passed in the day had reached the high figure of 117 oz. May prolonged administration tend to diminish or exhaust the diuretic effect? In Case 4 the second administration was followed by a steady and gradual increase to a maximum daily excretion of 65 oz., but the administration being continued the outflow fell to 36 oz., and then to 10 oz. In this case aortic disease coexisted; the patient died. In Case 6 there was a slight diminution under the protracted influence, but here there were very severe complications—viz., empyema and renal disease; this patient died, death being, one might say, inevitable. In Case 8, in which death occurred, there was a steady diminution of the urinary outflow during the administration; but here, in a woman of sixty-four, there existed great ascites and œdema, with advanced granular disease of the kidneys. Considering that in all these cases the great severity of the complications might in themselves constitute a constant and progressive cause of enfeeblement of cardiac muscle, we should not conclude that the urinary inadequacy was due to any action of the drug itself; it might with so much probability be due to a gradual extinction of the powers.

2. *Effects on pulse and respiration.*—The following table indicates the results:—

TABLE II.—*Showing rates of Pulse and Respiration in cases of Mitral Regurgitation treated by Caffeine Citrate.*

Case.	Before caffeine.	During administration of caffeine.	After caffeine.
1	Pulse 117	100, 94, 96	95
	Respiration	30>20	—
2	Pulse	92>56	74>57, 70, 72
	Respiration	30>23	21
3	Pulse	120, 144, 132	—
	Respiration	32, 36, 30, 28	—
4	Pulse 72, var. to 84	96, 112	—
7	Pulse 78 ,, 90	96	120
	Resp. 48 ,, 36	36	54
8	Pulse 100 ,, 114	*	—

* Became quick, small, and weak. Insomnia. Became worse, and died.

It will be noted that the data in two of the cases have been omitted; this has been because they were variable or doubtful. There is evidence, however, as regards some of the cases, that the rates both of pulse and respiration were reduced under treatment by caffeine. In Cases 1 and 2 the influence was very decided. The sphygmogram taken shortly after admission (Fig. 1) shows with insufficient volume a great irregularity with interpolated systoles. After five days of treatment the second sphygmogram was taken, and it is seen that the pulse has become nearly regular

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(Fig. 2). In Case 2 the combined effect of convallaria and caffeine is well shown. The pulse, which at commencement

FIG. 1.



Sphygmogram in a case of mitral regurgitation, with œdema and ascites.

of treatment was 92, had now, after six days of treatment, not only become reduced in frequency to 52, but had

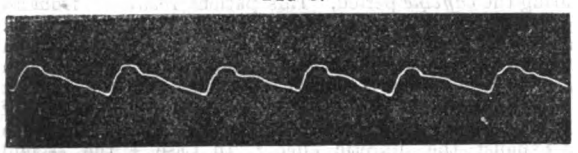
FIG. 2.



Sphygmogram in the same case after five days' treatment with caffeine citrate.

acquired marked evidence of tension, as shown by the sphygmogram (Fig. 3). In the other cases, complicated as

FIG 3.



Sphygmogram in a case of mitral regurgitation treated by caffeine and convallaria in combination.

I have stated them to be, there was no such favourable reaction, though in Case 7 it is shown that on the omission of the caffeine the rate of pulse and respiration rose in very considerable degree.

3. *Effects on the temperature of the body.*—In Case 1 the temperature was nearly normal throughout. In only one case (3) was there a rise of temperature under caffeine; then it was from subnormal to 100° F. In the other cases the reduction was from a subfebrile temperature to normal or subnormal. In Case 7 the temperature previously to the administration varied between 99° and 102°, and during the administration between 98° and 100°. It may therefore be concluded that in such cases as we have been considering, caffeine tends to depress the temperature. I think we are justified in concluding that caffeine, in the treatment of cases of mitral regurgitation in which failure of compensation has occurred, is a valuable agent; that it is a powerful diuretic, and is therefore very valuable in cases manifesting dropsy; that it tends to increase the force of the heart, to calm the respiration, and reduce the temperature; but that it fails in some cases to be of benefit, even though it may manifest its diuretic effect. Like other heart-tonics, it fails especially in pericarditis, where probably the direct enfeebling agency of the disease upon the myocardium is a cause which operates against it.

I now turn to another remedy of comparatively modern introduction—

Convallaria majalis.—This plant, the well-known lily of the valley, has long been used for the treatment of dropsy in Russia, in the form of an infusion of the flowers and leaves. M. Germain Sée of Paris, made a careful study of it as a therapeutic agent, and I called attention to its use in my Lettsomian lectures for 1883. In those lectures I said that I looked hopefully to the drug in the treatment of failure of the right heart in cases of mitral stenosis. Its therapeutic efficiency resides in the principle convallamarin, a glucoside, which may be administered in doses of from half a grain to two grains daily: on account of its cumulative tendency only one dose of convallamarin should be administered each four hours. The following are its preparations and administration:—1. Extractum convallariæ is an aqueous extract of the flowers and stems (two parts) and roots and leaves (one part), the dose being from two to eight grains. 2. Extractum convallariæ fluidum, dose from two to ten minims. 3. Tinctura convallariæ, dose five to thirty minims. Convallaria is classed with digitalis as a stimulant of the muscular fibre of the heart, and is said to act more slowly and more persistently than the latter. Within the last two years convallaria has been extensively used in the treatment of various forms of cardiac disease. The experience of various observers in regard to it is very contradictory; so great is the discrepancy that it has been suggested that the activity of the plant varies with the locality in which it is grown. If this be a difficulty, of course it can be obviated by the employment of the active principle—convallamarin. According to many observers—e.g., Germain Sée, Bochefontaine, A. H. Smith, Labbée, Frederick Roberts, Ott, and others—very valuable results are produced by the drug in cardiac diseases. On the other hand, Leubuscher has declared that it has proved in his hands worse than useless as a remedy. Heller has also given an unfavourable report.[1] Professor Jaccoud says concerning it:—"It is a very untrustworthy medicament, and many cases are quite refractory in regard to it. You must not count upon it, and in cases of urgency you would be wrong to fill up by its administration the intervals of a digitalis course; these you should rather confide to caffeine. If this latter is not well borne, we have no other resource than convallaria; but, I repeat, do not count too much upon it."[2] In estimating the value of such a drug, it is most important, in my opinion, to group the cases. Those on which the conclusions of the various observers have been based were very different forms of heart disease and heart disturbance. I now proceed in the same manner, as in the case of caffeine, to inquire concerning the influence of convallaria in mitral regurgitation. In the cases compressed in the following table convallaria was administered in doses of five grains of the extract or twenty minims of the tincture three times in the day.

TABLE III.—*Showing the daily amounts of Urine, in ounces in cases of Mitral Regurgitation, treated by Convallaria.*

Case.	Before convallaria.	During administration of convallaria.	After convallaria.
1	20	21, 25, 30 > 16 < 30 > 20	30 > 20 < 30, 26
2	20, 30	35, 17, 22, 20, 27, 22	35, 22, 27, 30, 25
3	—	45, 48, 40 < 60, 69, 60 > 52 < 60	—
4	20, 40	45, 64 > 10	—
5	13 < 35 > 10 < 80 > 35	20, 28 > 15	—
6	—	17	35, 30 > 10

If we took the evidence of these cases as indicating the action of convallaria in cardiac disease generally, we should conclude that it is a feeble diuretic. I must ask that judgment be withheld until after consideration of its action in mitral stenosis. It is seen that in four of the cases a slight diuretic action was soon manifest; the maximum diuresis was attained in one, two, four, and eight days; except in Case 3, there was on continuation of administration a tendency to a diminished excretion. In Case 6 the drug was only given for two days; and then, as urine was very scanty, digitalis and caffeine were substituted, with the result of a very decided but temporary increase. So far as these cases show, the influence of convallaria as a diuretic in cases of mitral regurgitation is far inferior to that of caffeine.

The effects of convallaria on pulse and respiration in cases of mitral regurgitation are indicated in the following table

TABLE IV.—*Showing rates of Pulse and Respiration in cases of Mitral Regurgitation treated by Convallaria Majalis.*

Case.	Before convallaria.	During convallaria.	After convallaria.
1	Pulse	120 > 104 < 120	120 > 108
2	Pulse 114	112 > 108	104 < 124
	Respiration 36	34 > 24	34 > 20
3	Pulse	72	—
	Respiration	20	—
5	Pulse 134, 140 > 104 > 76	70	—
	Respiration 28 < 36 > 24	No imprt. of dyspnœa	—
6	Pulse	Varying betw. 78 & 90	Var. betw. 96 & 120
	Respiration	,, ,, 36 & 48	Increased to 54
7	Pulse	96, 120 > 108	—
	Respiration	22 < 40 > 20	Much imprvt. foll.
8	Pulse 120, 98, 88	108 > 84, 90	84 < 108 > 72
	Respiration 27	36 > 30	28, 24, 20

It is seen that, as a general rule, the rates of pulse and breathing are reduced under the influence of convallaria.

[1] See Dr. Mitchell Bruce's Summary in Cassell's Year-book of Treatment for 1884, p. 5, *et seq.* [2] Semaine Médicale, Jan. 13th, 1886, p. 10.

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That the force of the heart and tension of the pulse coincidently with a good regularity of rhythm *may* be brought about I have graphic evidence to prove. Case 5, however, shows that, even though the pulse-rate be very greatly reduced, there may be no relief from the embarrassment of respiration. This case was one in which there was much cardiac dilatation, and it was complicated by embolism of the right axillary artery. The pulse-trace manifested much irregularity and pronounced dicrotism. Case 7 was complicated with aortic obstruction and regurgitation. Three grains (a smaller dose than that administered in all the other cases) of the extract of convallaria were given three times a day; here, though there was during treatment a temporary increase of the rates of both pulse and respiration, the rate of the latter became notably reduced. This patient was discharged after having manifested much improvement.

Effects on temperature.—In only two cases was there a rise of temperature under the treatment by convallaria; in neither did it rise above 102°, and in one it fell to 99° at the end of the period of treatment. Generally there was after commencement of treatment a slight fall of temperature, and this sometimes occurred suddenly. The lower temperature persisted for some days after the cessation of convallaria, and then as a rule the temperature rose again or became irregular.

General effects.—Cases 1, 4, 5, and 6 manifested no signs which seemed to me to indicate that the drug exerted any marked influence for good, or that it was in any way superior to digitalis. Two of these cases died, one of them being complicated with pericarditis, pleuritis, and pulmonary infarction; the others tided over their difficulties, and were ultimately discharged from hospital. In Case 2, where aortic disease was combined with mitral, much general improvement was manifested two days after the termination of the treatment by convallaria; one week afterwards there was relapse with extreme dyspnœa and death. Case 3, which was also complicated with aortic disease, manifested great improvement; Case 7, with a like complication, also; and in Case 8, which was of the hopeless form of post-partum endocarditis, manifested improvement during the period of convallaria treatment, the temperature then being notably subdued, to manifest irregular rise and fall subsequently.

My general conclusion is that in convallaria we have a drug which may be occasionally used with advantage in cases of mitral regurgitation; that it should be continued for no longer than weekly periods without interruption; that in cases manifesting dropsy it should be accompanied with caffeine; but that for general and systematic administration in mitral regurgitation it will not (except at intervals) usefully supplant digitalis.

(To be concluded.)

THE

ANTISEPTIC TREATMENT OF WOUNDS.

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THE following account of my experiences in the pursuit of antiseptic surgery in the wards of the Jamsetjee Jejeebhoy Hospital will, I trust, prove of interest to those who may be engaged in similar investigations. To render it of real value the failures as well as the successes will be described; there is as much to be learned from the one as from the other. The experiments I am about to record were instituted with the object of devising an antiseptic method of dressing wounds which should be not only effective but cheap and easily and quickly applied. The various modifications of treatment were at first employed with amputation and other operation wounds, and latterly with wounds of all kinds. It is only with amputations, however, that I shall deal at any length for the present. The series of cases consists of forty-two amputations successively treated from Nov. 1882 to Dec. 1884, and of these I shall give a short account, either singly or in groups, according to the mode of treatment adopted, and its results. To save time, it will be understood that each patient was in the best condition possible under the circumstances, and that extreme cleanliness of the part to be operated on, of the instruments, assistants, and materials of all sorts used, was insisted upon, and ensured by personal supervision. In fact, to be certain that everything was perfectly clean I always attended to this part of the work myself. The dressings, ligatures, and lotions I kept in my own custody. Mistrusting, as a rule, the purity or quality of the hospital supplies, I usually purchased the first two, the best I could procure, and made the third myself. In this way I possessed an intimate personal knowledge of the materials employed, and in case of failure was in a better position to lay my finger on the weak point of the procedure than if I had to trust to the knowledge or conscientiousness of others. I may also mention that carbolised catgut ligatures, rubber drainage-tubes, and silver sutures were invariably used. I now proceed to detail the cases.

CASE 1.—Female, aged eighteen. Syme's amputation of right foot for sarcoma involving the toes and anterior part of foot. Operation performed on Nov. 3rd, 1882. The stump was washed with a 5 per cent. solution of boro-glyceride, then covered with strips of lint wrung out of the same solution; over this a thick layer of cotton was placed, next a layer of oakum, and the whole was enveloped in a sheet of oiled paper fixed on with adhesive plaster. In this case the temperature remained normal throughout. The dressings were removed for the first time on the twelfth day after operation, when firm union was found to have taken place. The sutures and drainage-tube were withdrawn, a little light dressing applied, and the patient was discharged well on Nov. 24th. On inspection of the first dressing at the time of removal it was found to be perfectly sweet; not a drop of pus had formed, but the cotton and oakum were more or less moist, obviously from retention of the cutaneous exhalation by the waterproof.

CASE 2.—Male, aged thirty. Flap amputation at the middle of the right leg for disease of the ankle-joint. Operation, Jan. 16th, 1883. Dressing as in the preceding case. Temperature remained normal. The stump was opened for the first time on the ninth day. Union firm. After-treatment as before. Patient discharged cured on Feb. 12th.

CASE 3.—Male, aged twenty-five. Flap amputation of right thigh, at lower third, for knee-joint disease. Operation, Jan. 24th. Dressings as before. On the second day the temperature rose to 100·2°; and on the fifth day, it being evident that suppuration had occurred, the dressings were taken off and the stump treated as an open wound. Patient discharged well on April 5th. The failure here was doubtless due to a small portion of diseased tissue, part of a sinus wall having been left behind.

CASE 4.—Male, aged thirty-five. Flap amputation of right thigh, about the middle, for disease of the knee-joint. Operation, Feb. 19th. Parts much diseased. Dressings as before. Temperature rose, as in Case 3, and, suppuration setting in, the dressings were removed. The patient, however, being much reduced and enfeebled from long-continued joint disease, died of exhaustion on March 5th.

CASE 5.—Male, aged sixty. Amputation through right knee-joint for machinery smash of the leg. Operation, March 31st. Dressings as already described, except that dry lint was substituted for cotton, and gutta-percha tissue used instead of oiled paper. Temperature 102° next day, and, continuing at and above 100°, the dressings were taken off on the fourth day. A considerable quantity of pus had already formed. The stump was treated as an open wound, and the patient left hospital well on July 3rd.

CASE 6.—Male, aged thirteen. Amputation at middle of left forearm for machinery smash. Operation, April 1st. Dressings as in the preceding case. Temperature rising, the stump was exposed on the seventh day, when putrefaction to a slight degree was seen to have occurred. The wound was now treated by the open method, and the patient was discharged cured on May 6th.

In the last two cases I am probably nearest the truth in attributing failure to imperfect disinfection of the wound and surrounding parts before applying the dressing. I have observed a greater proportion of failures in accident cases where the flaps include more or less of the injured, though sometimes apparently sound, tissues, especially where there is loose skin or dragged tendons. This injured tissue is often dirty, or it may fail to recover vitality.

CASE 7.—Female, aged twenty-five. Amputation at lower third of right leg for disease of the ankle-joint. Operation,

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April 15th. Boro-glyceride dressing. Temperature remaining normal, the stump was not exposed till the ninth day, when firm union was found. Patient discharged well on May 28th.

CASE 8.—Male, aged thirty-six. Amputation just below the left knee for extensive syphilitic necrosis of the tibia. Operation, May 13th. Iodine water was used in this case instead of boro-glyceride, the latter being discarded as too expensive. The covering of oakum was made thicker, and was kept on with a bandage firmly applied. By way of making the dressing air-tight the upper edge of the bandage was secured with a broad strip of elastic. Temperature remaining normal, the dressings were left untouched till the next day, and on removal the stump was seen to be healed. The patient, however, for other reasons, was not discharged from hospital till Aug. 13th.

CASE 9.—Male, aged twenty-five. Amputation at middle of right leg for smash of its lower part. Operation, May 14th.

CASE 10.—Male, aged twenty-five. Amputation through left wrist for machinery crush of the hand. Operation, May 14th.

CASE 11.—Male, aged fifty. Amputation through right knee for railway smash. Operation, May 17th.

CASE 12.—Male, aged thirty. Amputation at lower third of left leg for smash of the foot and ankle. Operation, May 17th.

The dressing in each of these four cases was iodine water, lint wrung out of the same solution, oakum, waterproof, and bandage. Cases 9, 11, and 12 were successful, uniting by first intention; but Case 10 was a failure, and the stump had to be treated from the fifth day as an open wound. The patients were discharged well on June 29th, June 13th, June 9th, and June 29th respectively. Case 11 was a drunkard, and a fat, flabby subject, yet he made the best recovery.

CASE 13.—Male, aged forty. Amputation at middle of left leg for disease of the ankle-joint. Operation, May 21st. Iodine water dressing as before. Death on ninth day from tetanus. The dressing, however, was so far perfectly successful; union had taken place, and there was no sign of suppuration.

CASE 14.—Male, aged nineteen. Amputation below right knee for advanced disease of the ankle-joint. Operation, July 3rd. Patient phthisical. Stump washed with 1 in 1000 solution of corrosive sublimate; it was then covered with two layers of lint wrung out of the solution; over this a thick pad of boric cotton, oakum, waterproof, bandage, and elastic. The result was excellent. Dressings removed on the ninth day, and stump found healed. Patient discharged well on July 23rd.

CASE 15.—Male, aged thirty. Amputation through right knee-joint for mycetoma. Operation, Aug. 16th. Dressings and results as in the foregoing case. Discharged cured on Sept. 7th.

CASE 16.—Male, aged twenty-five. Syme's amputation for spontaneous gangrene of the right foot of one month's duration. Operation, Aug. 19th. Dressings as before. Temperature rose to 101° on the second day and remained so. The stump was exposed three days later, when sloughing of the flap was seen to have taken place. This was undoubtedly due to deficient vitality of the part. A more favourable result would probably have occurred had amputation been allowed higher up. Patient discharged at his own request on Nov. 11th, the stump not even then being entirely healed.

CASE 17.—Male, aged twenty-five. Amputation at right shoulder-joint for railway crush of arm. Operation, Sept. 5th. In this case the old-fashioned open dressing (lint wrung out of carbolised oil) was used. The skin on the side of the chest and over the shoulder was badly bruised, had lost its vitality, and consequently sloughed. The patient, however, made a good though slow recovery, and was discharged well on Dec. 5th.

CASE 18.—Male, aged forty. Syme's amputation for railway crush of the left foot. Operation, Sept. 19th. Dressings as before. Temperature rising beyond 100°, the stump was opened up on the sixth day, when a large portion of the flap was found to have sloughed. Treated from this time as an open wound. Discharged well on Dec. 20th.

CASE 19.—Male, aged thirty. Amputation at the upper third of the right arm for machinery smash. Operation, Nov. 10th. Dressings as before. Removed on the eighth day. Firm union. Discharged cured on December 4th.

CASE 20.—Male, aged forty. Secondary amputation at the middle of the right thigh for tramcar crush. Operation, Nov. 22nd. The parts being more or less inflamed and infiltrated, open dressing was used. Patient died exhausted on Dec. 2nd.

CASE 21.—Female, aged fifty. Syme's amputation of the right foot for disease of the tarsus. Operation, Nov. 27th. Patient a feeble old woman. Dressing, corrosive sublimate solution and boric cotton. Temperature rising, the stump was exposed on the fourth day, when commencing suppuration was seen. Treated from this time by the open method. Patient discharged cured on Jan. 29th, 1884.

CASE 22.—Male, aged thirty. Syme's amputation for railway smash of left foot. Operation, Dec. 14th. Dressings as before. Temperature rising, they were removed on the third day, when a portion of the skin over the inner ankle, which had been separated by the injury from the structures beneath, was found to have sloughed. Stump now treated as an open wound. Final results good, however. Patient discharged well on Feb. 7th, 1884.

It will be noticed that out of five cases of Syme's amputation dressed antiseptically, as detailed above, only one healed without suppuration. In Case 16 the obviously deficient vitality of the parts led me to anticipate the unfavourable result, but as regards three at least of the remaining cases I am unable for the present to explain satisfactorily the failure of the dressing.

(To be concluded.)

ON THE TREATMENT OF SYPHILIS.[1]

BY JAMES WILSON, M.D.

THAT the general treatment of acquired, and particularly that of advanced, syphilis in this country is far behind that of the Continent cannot be denied, otherwise why should we be compelled to send cases there so frequently for treatment, and why should an English-speaking race so largely contribute to the support of those places where this specialty is so largely carried out, if our treatment in this country were what it ought to be, certainly what it might be if we more closely followed out the continental principles of treatment, and recognised that syphilis, like other diseases of a blood nature, must be thoroughly and systematically treated if we hope to effect a cure, to say nothing of preventing the terrible relapses so frequent in this disease. The remedies are all right—no fault is to be found with them; mercury and the salts of potassium, particularly the iodide, with their adjuncts, hold good in all countries where the disease is understood and rationally treated. But it is to their mode of application that we must look, and it is entirely, in my opinion, the mode of application that has made Aix-la-Chapelle so famous throughout the whole world for the treatment of syphilis. No doubt it has climatic and other surroundings, such as baths and waters, which in this country we shall never probably possess in a similar degree. Still, there is no reason why the treatment cannot be efficiently carried out in England, and that it should become the exception, and not the rule as it now is, to send bad cases there; and this opinion is not expressed by me without having carefully considered all the means at our disposal, as also from a long sojourn in Aix devoted to the study of the German treatment; and the marvellous results met with there have led me to this conclusion, and impressed me with the desire that it should be more fully carried out in this country than it is.

For a long time before going to Aix I had come to the conclusion that in this country we were far too fond of giving mercury by the mouth, which is the worst of all forms of giving the drug—certainly the most uncertain in its results, the most ineffectual in its operation, and the one most frequently followed by relapses; indeed, these are the cases that later on in life find their way to Aix, then the subjects of advanced syphilis, and that pass from the surgeon to the physician as legacies in our hospitals; and, indeed, I think the physicians here might reasonably complain that a disease in two of its stages essentially belonging to the surgeon, and when so much could be done by efficient treatment,

[1] An address introductory to a discussion at the Medical Society of Liverpool, Nov. 19th, 1885.

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should be allowed to pass on to his department, when a much longer time for cure will be required, and when he has no other course to pursue than that of being compelled to deal with the shortcomings of his predecessors. One of the gravest mistakes made in the treatment of this disease is unquestionably the inefficient mercurial course in the first and second stages. Now, I cannot say I was greatly surprised to find my views as to the giving of mercury by the mouth confirmed by the German doctors, but I was struck by the fact that nearly all the cases coming to Aix for treatment had been those in which the drug had been administered by the mouth, and that it was rare to find cases there in which the treatment I am about to describe had been successfully carried out—namely, *inunction*.

Of all forms of giving mercury, that by inunction is the best; not the so-called inunction treatment of this country, however, in which a little mercury is applied, most frequently by the patient himself, to the inside of the thigh or armpit, for, say, a few days, and then discontinued altogether; or the wearing of a belt on which a little mercurial ointment has been spread; this may, and sometimes will, answer in children, but in adults it is totally inefficient and inoperative. For mercurial inunction to be successful the ointment must cover a large surface of the integuments, must be thoroughly and systematically carried out, and the skin must be prepared for the anointing by a bath daily, and, above all, must not, if possible, be performed by the patient himself. When, therefore, a case of syphilis presents itself to our notice in which this treatment can be carried out (for of course it could not be done during the stage of efflorescence), it is pre-eminently the best of all forms of giving mercury. Ample experience has proved the correctness of these views. For the successful treatment by inunction, however, three precautions are necessary:—Firstly, the skin must always be prepared for the absorption of the mercury, and the grey ointment (preferable in many ways to the oleate) must always be administered carefully, and in sufficient quantity; secondly, the system during the treatment must be maintained sound both as regards diet and hygienic surroundings; and thirdly, the inunction treatment must be carried out long enough.

With regard to the first point, that of the preparation of the skin for the absorption of the mercury, in general it is sufficient if the patient take a warm bath of from twenty minutes to half an hour's duration, at a temperature of about 95° or 96°. The body is to be well cleansed with soap, so that the skin is in a fitting state for the reception of the grey ointment. After the bath the patient is to be well rubbed, and a drachm of the ointment is then carefully rubbed in (by an experienced rubber if possible). I very much object to patients rubbing themselves, till I have satisfied myself that they have adequate skill and perseverance for the task, and know how to rub, and I absolutely forbid patients who are weak or have insufficient strength for the purpose. The ointment must be rubbed in with the entire surface of the hand, and with both hands conjointly. So that when, for example, the legs are subjected to the rubbing, the surfaces of the hands glide up and down simultaneously. Gloves, or a pad covered with leather are absolutely to be forbidden, otherwise much of the ointment, instead of penetrating the skin, is lost on the surface of the glove or pad. The accuracy of this fact is easily demonstrated by weighing such gloves after a few rubbings. The mercury is but slightly, if at all, absorbed by the surface of the hands, and absolute prevention is obtained by smearing the hands with soap or lard before the inunction. If due precautions are paid to these points the rubber need have no fear of evil consequences following to himself. The rubbers in Aix, who are in the habit of rubbing some dozen or more cases daily, seldom meet with any inconvenience in their daily vocation, being careful as to these matters of cleanliness and the anointing of the hands with soap. The rubbing should last twenty minutes—ten minutes for the one half of the member rubbed, and ten for the other; and the ointment is to be rubbed in with considerable pressure. I should have said that it is well to divide the ointment into two portions—one half, as above mentioned, for one leg, and the other half for the other. Supposing the legs to be the portions of the body on which the mercurial ointment is being applied, and on which it is always best to commence, the systematic treatment by inunction, sometimes less than a drachm of the grey ointment is sufficient to commence with—viz., two scruples (40 grs.). Twenty minutes is quite long enough for the arms and extremities; less for the trunk. Some patients cannot endure the breasts and abdomen being rubbed; in such cases the sides of the body and nates should be selected. It is of great importance that the rubbing be systematic, the different parts of the body being taken in order. For this purpose it is best to commence with the legs on the first day; on the second, both thighs; on the third, the abdomen and breast; on the fourth, the back; and on the fifth, both arms; reverting again to the legs on the sixth day. After the rubbing the patient should lie down or rest quietly for, say, one hour, after which he may go out and walk if the weather permit, or go about his occupation if not too laborious. I always direct my patients to drink a tumbler of Harrogate or Aix water once a day, if not twice; one tumbler in the morning before breakfast, and another about 12 o'clock or a little earlier. Sometimes in people whose skin is sensitive, or who are unduly hairy, the irritation caused by the rubbing and ointment occasionally sets up a little suppuration of the hair follicles, and painful pustules appear. This may be entirely prevented by first shaving the part, and as this condition usually occurs when it does take place on the thighs and legs there need be no difficulty in performing this slight operation. Well cleansing the parts with soap and water while in the bath is generally sufficient to prevent this condition of things taking place. It therefore becomes of the utmost importance that the parts anointed on the previous day should be well cleansed before a second rubbing, while it is always advisable to have recourse to a bath daily for the purpose above indicated, as well as to prepare the skin for the subsequent rubbing. Some people complain that a daily warm bath weakens and prostrates them. I do not think so myself if taken at the temperature indicated—viz., about 95°. Should it appear, however, to do so, then a bath every other day may be taken, though in such cases I would advise a little later on that a vapour-bath be had recourse to once or twice a week.

The second point indicated during a mercurial course is that the system be maintained by a proper and sufficient diet, and due regard paid to clothing and other hygienic surroundings. It is of the utmost importance during the treatment that the patient breathe fresh and pure air; and as the skin and not the lungs is entrusted with the absorption of the mercury, it becomes necessary that the patient should occupy large and airy rooms, and, so far as his strength will permit, take adequate out-door exercise and avoid the risk of catching cold. Most persons of ordinary intelligence may be trusted to guard themselves against this evil, though it is astonishing the difficulty that sometimes occurs to convince people of the importance of this, and further to make them carry it out by clothing suitably and properly adjusted. Then, as to diet, the food must be simple and nourishing, the patients living well, but not overtaxing the powers of the stomach, with absolute abstention from such articles as salmon, eels, mackerel, Finnon haddock, and salt kinds of fish, cheese, salads, and raw fruit. Stewed fruits may be taken, and a moderate use of wine or beer may be allowed in cases where patients are accustomed to their use. The drinking daily of one or two glasses of milk is to be strongly encouraged; indeed, I feel sure that in this country, no matter what form of mercurial administration is employed, whether internal or external, we do not give sufficient milk; in Aix the doctors insist upon milk forming a substantial portion of the daily food, and they have been fortunate enough to obtain a milk as nearly identical to human or mother's milk as it seems possible to get, obtained by a dry-feeding process, the cows never touching green food, but living on a preparation of corn, barley, and wheat-meal with bran, to which a little salt is added; with this mixture the cows are fed twice a day, the intervals being filled up by hay, which is placed in their mangers, of the best quality, and always at their use; they are further allowed to drink as much water as they like,—the result being that a milk highly nutritious and easy of digestion is obtained, which is, I think, at the present moment the nearest approach to human milk that has been produced. Patients from all parts of the world come to drink this milk, and all syphilitic patients are directed to drink as much as they possibly can fresh from the cow, three and four glasses being easily consumed at a sitting, and generally in the afternoon.

Another point to be attended to during the inunction, and indeed all forms of mercurial treatment, whether external or internal, is the state of the mouth. Scrupulous cleansing of the teeth and rinsing of the mouth with a wash made from the

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acetate of alumina prepared by mixing alum with acetate of lead in adequate proportions, to which a little aromatic water may be added, is advisable. The formula I am in the habit of using is—acetate of lead, 240 gr.; powdered alum, 330 gr.; distilled water, 16 oz.; aromatic or peppermint water, 8 oz. Dissolve the lead and alum salts separately in the water; mix and stir well together; either filter or let the precipitate settle, and decant the clear solution, to which add the aromatic or peppermint water. It may be used diluted with water if necessary, and the mouth is to be regularly rinsed out from the beginning of the treatment to the end ten or twelve times a day, or even more, and in urgent cases during the night. By so doing salivation is prevented, and if by any means it should occur its ill effects are counterbalanced by the use of the mouth-wash. I might here say that preparatory to any mercurial treatment, whether external or internal, it is always well for any old stumps of teeth to be extracted, particularly if they are in the habit of giving trouble.

(To be concluded.)

CASE OF LYMPHO-SARCOMA IN THE GROIN.

OPERATION; RETURN OF THE GROWTH.

BY F. R. FAIRBANK, M.D., L.R.C.P. LOND.,
SURGEON, DONCASTER INFIRMARY;
AND
F. WALLIS, M.R.C.S. ENG.

THE case reported in THE LANCET of December 19th, 1885, from Westminster Hospital, as having been operated upon for recurrent lympho-sarcoma, is of sufficient interest to warrant a more detailed report of its earlier history.

For several years the patient had suffered from a small tumour in the right groin, below Poupart's ligament. This had given him no trouble, and he was advised by his then medical attendant to leave it alone. As it began to increase in size in the early part of the summer of last year, he sought Mr. Wallis's advice, who requested a consultation with Dr. Fairbank. On July 17th they together saw him. He was an emaciated young man, having an anxious look. He stated that during the last two months the tumour had increased rapidly in size. He had consulted a surgeon in the town where he had been staying, who offered the opinion that the tumour consisted of a hernia with a suppurating gland over it. Poultices were applied and an incision made, which gave vent to hæmorrhage, but nothing else. He then came under Mr. Wallis's care, who ordered ice to be applied locally until the consultation had been held. On examination a tumour was found in the right Scarpa's triangle, measuring about six inches in length by four inches in breadth. It was of the shape of the figure 8—two portions joined by a neck. The upper and deeper-seated portion was soft; the lower portion was firm and implicated the skin, which was of a deep red colour over it. The tumour was movable, and, with the exception of the skin over a part of it, was felt to be distinct from the surrounding tissues. The diagnosis was sarcoma, and immediate removal was recommended.

On July 21st, at his own home, in the presence of Mr. Wallis, Mr. J. Gelston, house-surgeon to the Doncaster Infirmary, and Mr. W. Nicholls, Dr. Fairbank removed the growth. Mr. Gelston administered the anæsthetic known by the letters A. C. E. A lozenge-shaped incision was made round the tumour, which enclosed the whole of the skin implicated. The tumour was found in the subcutaneous tissue, and entirely separate from the surrounding tissues, and external to the deep fascia. There was only one artery supplying it, and this was readily secured. The removal was very carefully and thoroughly carried out. The tumour weighed over 2 lb. When the operation was completed the patient fell into an alarming condition: breathing ceased, and the pulse was imperceptible at the wrist. Artificial respiration and faradisation were kept up for about two hours before he appeared out of danger.

The wound healed rapidly and well up to a certain point. In the centre, where there was the greatest tension, a part about the size of a florin remained open. The patient improved rapidly in general health, and was able to go away from home fourteen days after the operation. There was then no increase in the size of the wound, or any sign of other tumour. About Aug. 22nd, while at Ripon, he noticed a fresh lump in the lower part of his body on the right side, and in consequence came home to see Mr. Wallis. When Mr. Wallis then saw him the wound was about the size of a crown-piece, with the edges irregular, thickened, and hardened. A small tumour, about the size of a pheasant's egg, was noticed above Poupart's ligament. The wound increased rapidly in size. On Oct. 1st another consultation was held. There was then an open wound over Scarpa's triangle, the size of the palm. The edges were indurated and undermined. The floor of the wound was clean and glazed. The femoral vessels were only thinly covered. There was a tumour above Poupart's ligament, the size of a small hen's egg. His general health was then good. Subsequently to this he went to Westminster Hospital, and the case terminated as reported in THE LANCET of Dec. 19th.

Portions of the tumour from Scarpa's triangle were forwarded to Dr. Ernest H. Jacob of Leeds, who has supplied the following report of his examination: "The growth was of varying consistency, from that of a normal lymph-gland to that of encephaloid softness. One portion was adherent to the skin. Microscopically, in some parts the growth was ordinary-looking lymphoid tissue, but there was a large amount in which the cell element was in excess, and presented the appearances of lympho-sarcoma rather than lymphoma simple. There were also signs of caseation and breaking down in the softer parts."

Mr. A. A. Bowlby, of St. Bartholomew's Hospital, also has sent the following report:—"Microscopic description of tumour: It is composed mainly of cells, which are larger, more irregular in outline, and more granular than ordinary lymphoid cells or leucocytes. Here and there a little fibrous stroma may be seen and a few bloodvessels. It is evidently a round-celled lympho-sarcoma."

The report of Mr. Walter Arthur deals chiefly with the condition of the nervous and circulatory systems. It would be very interesting to read what was the condition microscopically of the soft parts removed from Scarpa's triangle, and what was also the condition at the time of death. This case is interesting specially as showing that a comparatively innocent enlarged lymph gland may assume malignant characters of most virulent description.

Doncaster.

INHALATION IN PULMONARY DISEASES.[1]

BY W. H. BLENKINSOP, M.D., M.K.Q.C.P.

IN the treatment of pulmonary diseases our efforts, as I need only in passing observe, are directed more or less to a threefold method of cure—(1) by the administration of internal remedies, (2) by the employment of various external agents, and (3) by the introduction of medicated vapours into the air-passages by the process of inhalation. I am desirous here of drawing attention more particularly to the last-named method, the importance of which was recognised by the older physicians, and was developed early in the present century by Scudamore and others, who severally recommended the use of iodine, chlorine, and tar vapours. In whatever way we regard the action of this special mode of treatment, the fact remains that it is by far the most rational, possessing many obvious advantages over others, particularly in phthisis, and being capable of much further development. Notwithstanding the generally encouraging results, however, of this aid to our other methods, there are certain details connected with its employment which are somewhat indefinite at present, and upon which I think we require a distinctly pronounced expression of opinion. Let me for convenience' sake place my observations under the following headings.

First, I find it of service in speaking of inhalation—which will be further discussed as we proceed—to include within it two allied processes—viz., vaporisation, where hot air or steam is generated, and fumigation, where drugs or scents are volatilised. As regards the last-named process, we are sufficiently conscious of its potency in destroying noxious odours and germs in a sick room; but as to its effect upon the air-tubes of invalids suffering from pulmonary mischief, there is little aid that we can hope to gain from it. For example, if a specific action is required upon the lungs,

[1] Paper read before the Harveian Society, Jan. 7th, 1886.

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the continuous saturation of the room with a *powerful* strength of vapour tends to produce headache and other nervous conditions in many patients, with derangements of the digestive organs; whilst the attendants also, whether nurses or relatives, are much inconvenienced by the surcharged atmosphere. Few can be found to tolerate this, notwithstanding there are some amongst us who are much in favour of the plan. If, on the other hand, the strength of a vapour is minimised, to prevent unfavourable consequences, we should find the process of cure somewhat indefinitely prolonged, if it ever occurred at all. In one word, therefore, fumigation may be regarded as a serviceable accessory, when reasonably employed, through its purifying action on the surrounding atmosphere, and possibly also by its invigorating effect upon the patient. Vaporisation of *dry air*, to which I shall again allude, is that method which proves so strikingly useful, and offers the greater advantage over steam, in acute cases, where the system is also undergoing other treatment.

Secondly, our subject leads us to inquire what affections of the respiratory organs have been found to be benefited by these auxiliary modes of treatment. Amongst the more acute may be named bronchitis, pneumonia, laryngitis, and croup; of chronic cases, phthisis in its various stages, chronic bronchitis, and pneumonia, and circumscribed gangrene of the lung; whilst of a somewhat mixed variety are to be reckoned whooping-cough, asthma, influenza, hay fever, and many throat affections, including diphtheria.

Thirdly, the point has been much argued, although it still appears to remain an open question, as to whether dry or moist vapours, medicated or otherwise, should be used, either in the usual process of inhalation or where a warm atmosphere is needed around a patient in an acute attack of illness. In speaking of *dry* medicated vapour in connexion with the former, I refer to that which results by volatilising powders or tinctures, or by burning medicinal herbs in a suitable apparatus and without the aid of steam. During a somewhat lengthened experience I have noticed the evil effects of moist vaporisation, excepting only, perhaps, in cases of laryngeal phthisis. The air-passages by this method are charged with an undue amount of aqueous vapour, which renders the mucous membrane so sodden that the calibre of the air-tubes is lessened and much urgent dyspnœa is the result. The tissues also become relaxed, the respiratory function is interfered with, and suppuration is encouraged. I am borne out in this opinion by two very able authorities among others—Mr. Hamilton of Liverpool and Dr. Coghill of Ventnor,—whose views upon the subject correspond very nearly with my own.

In croup and other acute cases, where the process of steaming is now for the most part adopted, for the purpose of warming the atmosphere, many of the drawbacks already referred to present themselves, recovery being in consequence retarded. The use of heated air, therefore, as I have already stated, is of far greater service and more to be depended upon. And here let me recommend a modification of Messrs. Allen and Son's portable hot-air bath, which has been very ably carried out under my directions. At the bottom of the dome of the apparatus a plate of talc is inserted and made completely air-tight—a hot-air chamber being thus constructed, to the entire exclusion of any products of combustion. On the front of the dome is a socket, into which a tube with a ventilator at the end fits. This inlet tube is sufficiently long to prevent any indraught of combustible material from the lamp through the perforations required for the circulation of air around the latter. The air, passing through the chamber referred to and funnel head and tubes attached, heats the atmosphere within a bed tent with dry vapour, and thus aids in relieving feverish symptoms, dyspnœa, and cough, both directly through the air-passages, and indirectly through the skin. The dry or Turkish bath has for years been recommended on these grounds for the relief of phthisis; cough, expectoration, and blood-spitting having been materially influenced by its use.

I have, next, much to say in connexion with the various inhalers which have hitherto been employed in the administration of medicated vapours. Many are based on wrong principles, none are entirely faultless, and a large number are positively useless. The majority demand forced instead of easy inspiration—a function not readily performed in health, much less in disease. The natural mode of respiration, moreover, solely through the nostrils, is perverted, and in a manner reversed; and patients are directed to go through the not very easy performance—which, happily for themselves, they are as a rule unable to attempt—of drawing the medication into the mouth by a deep inspiration, and expiring it through the nostrils! Some of these inhalers generate moist vapour, to which I have already alluded. It is scarcely possible to determine in any what quantity of the prescribed material is absorbed, either on account of its dilution or loss into the surrounding air when used with steam, or in many instances by reason of its slight volatility when used on a sponge and attempted to be snuffed or gulped into the air-passages. In certain forms the medicated vapour is merely drawn into the mouth and puffed out again, as in smoking, without a particle ever finding its way even to the larger air-tubes. It is necessary that an inhaler should be as convenient and easy in its action as it is possible to contrive it for those whose respiratory functions have been enfeebled by illness; and that dry medicated vapour of known strength should at stated intervals be taken into the system, without any effort on the patient's part whatsoever, and in accordance with the natural method of respiration. For lack of an apparatus which should more or less fulfil the above requirements, and in the absence of sufficiently distinct ideas as to the most suitable remedies to be employed, we find that treatment by inhalation has in reality not advanced at the rate it should have done; whilst in many hands it has resulted altogether in failure. Dr. Burney Yeo, who recommends the *continuous* use of a special oro-nasal respirator inhaler, says, "we must not ask more of this method, or expect better results from it than it can possibly give." Now, as this has been less than I myself consider the system perfectly capable of performing, I find one more reason for repeating that it is still very imperfectly understood.

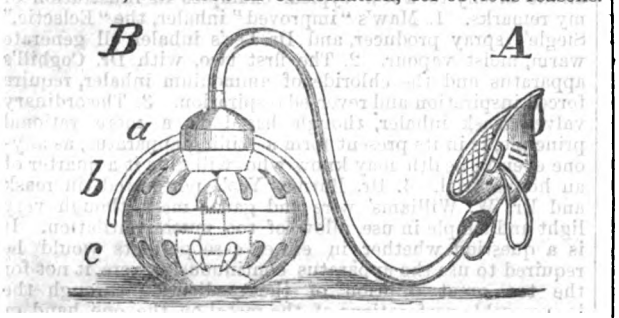
Of the various forms of inhalers in use it is necessary to allude briefly to a few typical examples in illustration of my remarks. 1. Maw's "improved" inhaler, the "Eclectic," Siegle's spray producer, and Dr. Lee's inhaler all generate warm, moist vapour. 2. The first two, with Dr. Coghill's apparatus and the chloride of ammonium inhaler, require forced inspiration and reversed respiration. 3. The ordinary valved mask inhaler, though based on a more rational principle, is in its present form a stifling apparatus, as anyone even in health may know who will give it a quarter of an hour's trial. 4. Dr. Burney Yeo's perforated-tin mask and Dr. W. Williams' wire and gauze mask, though very light and simple in use, allow of too much ventilation. It is a question whether in either case patients would be required to use the apparatus continuously, were it not for the too great dilution of the medication through the innumerable perforations of the metal on the one hand or the gauze on the other. 5. Siegle's spray producer requires much exertion in keeping the mouth continuously open, and is really more intended for throat cases. 6. In the chloride of ammonium inhalers the vapour which is drawn into the mouth practically seldom reaches the air-passages. Lastly, in all, the quantity of the remedy absorbed is quite uncertain, either in consequence of the dilution or the feebly volatile nature of many of the drugs prescribed for use. I may perhaps just add here that Dr. Yeo, in noticing Dr. Coghill's description of his respirator inhaler, remarks that the latter "does not cover the nose, but only the mouth, which is unadvisable, as the majority of persons breathe through the nose; and indeed it is desirable that they should do so. Dr. Coghill lays great stress on inspiring through the mouth and expiring through the nose, in order to secure a complete circulation of the medicated air. But this process would prove very tiring if attempted continuously." After a variety of experiments, I am able myself to offer an inhaler to the notice of the profession, which will, I trust, be found to remedy most of the drawbacks to which I have referred in connexion with those at present in use.

Briefly, my apparatus consists of two portions, connected by a flexible piece of tubing, as shown in the accompanying figure. A is an ordinary mask, with a communicating chamber beneath, containing sponge or felt. On each side are slits, in place of valved openings, and along the crest perforations for the escape of expired air. Elastic tapes worn round the ears or neck help to keep the mask over the nose and mouth. The vaporiser, B, about five inches in width, is in three sections, the lowest of which, *c*, contains a spirit lamp. Over this is the cover, *b*, surmounted by a chamber, which is used either as a receptacle for powders or for generating hot air, and is fitted at its base with a disc of talc. The two main segments are perforated for the admission of air in connexion with the lamp, whilst two curved

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air-tubes communicate with the above-mentioned chamber.[2] Tinctures, when prescribed for inhalation, will be poured over the felt at the base of the mask. These will become volatilised by the hot vapour passing from the air-chamber of the vaporiser. When powders are used they will be placed in the hot air receptacle of the latter, to be there vaporised, the fumes being inhaled with ether, chloroform, or any tincture, if so desired. This apparatus is easily handled, and can be conveniently used in any position either on the table or on the lap.

Lastly, in reference to treatment, I have already said that in *acute* pulmonary affections the diffusion of heated air around the patient was all-sufficient when other methods of cure were being at the same time adopted. Fumigation may be had recourse to if it should be considered to be of any service; but inhalation proper would, I need scarcely observe, be inadmissible from the dyspnœa already present. Among *chronic* cases, phthisis, gangrene of the lung, and chronic bronchitis and pneumonia are all, under their various conditions, benefited by antiseptics, astringents, antispasmodics, sedatives, or stimulants, of which we have a long array. In the *mixed* varieties also many of the above are found to be extremely serviceable, particularly when used in combination with a heated dry atmosphere. Our object in general is to reduce inflammatory symptoms and allay irritation of the air-passages; to destroy or arrest activity in the specific organism present, as in phthisis; to promote a healthy condition of cavities; and prevent absorption of putrid secretions which are constantly exercising their baneful influence on the blood. These several conditions are readily met by suitable remedies taken directly into the respiratory organs, as well as by constitutional treatment. Inhalants are, like remedies administered by the mouth, best used in combination, for obvious reasons.



Many patients complain of a greater difficulty in coughing up phlegm after inhaling. This may be due to their continuing a habit which has become needless, or from a preternaturally dry condition of the air-tubes during convalescence, which soon, however, passes off. Most drugs in the Pharmacopœia can, with due precautions and a suitable apparatus, be inhaled with advantage. I am myself carrying on a series of experiments with the view of determining the exact doses to be used in all cases, and the time each inhalation should last with dry medicated vapour.

In Squire's fourth edition of the Pharmacopœias of the London Hospitals, upwards of fifty combinations may be found of drugs recommended for purposes of inhalation. The majority are used with *steam*, but although the quantity to be mixed with the latter is given, it is impossible to say how much is taken into the lungs. (This last could only be done by directing that inhalation should continue for a certain length of time, with a medium strength of solution at a given temperature.) It is necessary in every case, at starting, to begin with small doses, particularly when a drug is volatilised by dry heat. Thus, for instance, a strength of seven minims of dilute hydrocyanic acid would scarcely be prescribed in the latter case, although a teaspoonful, of a drachm to an ounce in strength, to a pint of water at 80° F., is recommended in the Pharmacopœia for each inhalation—whatever this may mean. It would be a long and suffocating process, for one thing, to attempt to take into the lungs the vapour of a whole pint of water. About one-half the dose administered by the mouth is generally a fair one to start with. Dr. Wagner, of Buda-Pesth, allows his patients to inhale until a burning sensation is produced in the chest, but I think it better to watch the effects in each case at starting, and then to prescribe accordingly. It is useful for patients to inhale soon after rising, and also just before retiring to rest, as well as two or three times in the day, and at night if awake. Even with the dry process some substances take longer volatilising than others; it is needful, therefore, after prescribing a given strength of a drug, to regulate the heat of the vaporiser. Dr. Carrick Murray, of the Northern Counties Hospital for Diseases of the Chest, considers half an hour twice a day sufficient for the use of the inhaler, and also that twenty minims dropped on at once is sufficient for two days' use. How are we to reconcile this with the instructions of other authorities, say Dr. Coghill and Dr. B. Yeo—the former of whose respirator inhaler Dr. Murray was adopting—for the continuous use of their apparatus?

It would be impossible to enter into details here regarding every remedy found to be useful in pulmonary diseases; let it suffice therefore, in conclusion, to name merely a few. Carbolic acid, creasote, terebene, eucalyptus, thymol, pine oil, as well as iodine and iodoform, are amongst those most frequently used, either in combination with each other, or with antispasmodics, sedatives, &c. In Germany rabbits inoculated with tubercular matter were considered to have been kept free from tuberculosis by breathing an atmosphere saturated in benzoic acid. According to Dr. Cottereaux of Paris, chlorine gas is a specific for every form of phthisis. There are many cases in which sulphur medication has proved of great value, those engaged in the manufacture of sulphuric acid being also stated to be protected against phthisis. Dr. Jaccoud of Paris believes much in the curative effects of the pure creasote of the beech, and gives details of cases. Terebene and carbolic acid are also advantageously employed by the mouth to check intestinal infection from the sputa swallowed so frequently by patients, the lymph follicles of the intestines being so very prone to tubercular infection. Lastly, iodine proves most useful in the second stage of phthisis, and, with carbolic acid, in the purulent expectoration accompanying pneumonia; it has also a soothing effect when combined with ether.

[2] Further details will be provided later on by the manufacturers.

CASE OF THORACIC ANEURYSM RELIEVED WITHOUT OPERATION.

BY EVERARD HOME SAUNDERS, M.R.C.S., &c.,
SURGEON, ROYAL NAVY.

CASES of thoracic aneurysm so seldom being relieved by constitutional treatment or operative interference, the following, under observation here since January, 1885, which by the kind permission of Fleet-Surgeon D. O'Connor, M.D., R.N., I am able to forward, will doubtless prove of interest to the profession and worthy of record.

William F——, aged fifty-three; a naval pensioner, twenty-four years' service, the larger part of which was passed on foreign service; a widower; fair complexion, healthy appearance, of abstemious habits; good family history; has always enjoyed good health; no history of syphilis, gout, or rheumatism. Three years ago the man received the following injuries by a cart on which he was standing overturning, throwing its contents (a ton of copper sheeting) on him, and severely contusing the left hip, right shoulder, and chest, and fracturing the left tibia and fibula at the lower third. In January, 1885, he first commenced to complain of pain affecting the right lung at its apex, together with slight cough and bronchitic expectoration. These symptoms soon subsided, and he returned to duty, that of a labourer. In the following May he presented himself, suffering from laryngeal cough, giddiness in the head, and pain of a gnawing character through the right chest to the scapula, over the right shoulder-joint, and extending up the side of the neck, face, and right temple. He was unable to lie down or sleep on account of the pain, together with a feeling of impending suffocation, nor was he able to undergo the slightest exertion without discomfort. There was no complaint of dysphagia, no numbness or tingling sensations in the limb, no swelling or œdema of the right arm. He had never spat blood.

On examination there was found undue prominence over the right sterno-clavicular articulation; also dulness on percussion extending from the clavicle downwards to the upper border of the third rib, laterally from the left border of the sternum for a distance of two and a half inches

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towards the right shoulder-joint; visible pulsation in the right subclavicular region, and a pulsating tumour of a rounded form situated behind the right sterno-clavicular articulation. The right pupil more dilated than the left; the right radial pulse less marked and feebler than that of the left side. There existed a patch of cutaneous congestion over the most prominent part of the tumour. No bruit; heart-sounds normal; no distension of superficial veins.

The symptoms becoming aggravated, the patient unable to assume the recumbent posture, pain increasing in severity, and not being able to obtain sleep, he was sent to the Royal Albert Hospital, and admitted under the care of Mr. Leah. Rest in bed, starvation diet, or, in more pleasing words, a modified Valsalva's treatment, subcutaneous injections of morphia to relieve the agonising pain and procure sleep, and the internal administration of the iodide of potassium up to fifteen grains three times a day, formed the treatment. As the patient was unwilling to undergo an operation (which was merely suggested to him), and his bed was required, he was discharged on June 30th, 1883. Although no appreciable alteration took place as regards the tumour and the symptoms whilst an inmate of the above institution, he from the time of his discharge steadily improved. The treatment with the iodide has been continued. There appears to be no doubt as to the present condition of the tumour, which is decreasing in size, and presumably undergoing spontaneous cure.

On reference to several works on the subject of aneurysm, I find but few recorded cases where such marked benefit has taken place in so brief an interval under constitutional treatment—viz., those of Bouillaud, Tuke, Andral, Nélaton, and a more recent one recorded by Dr. Roberts of Manchester. Whether the commencing lamination (primary) took place during the patient's sojourn in hospital, whether entirely or in part due to the restricted regimen, to the iodide of potassium (which, I believe, is now credited with the power of increasing the coagulating powers of the blood), or to all these circumstances combined, it would be hard to form an exact opinion; but the case teaches us that in favourable subjects we may expect now and again to derive marked benefit, if not permanent cure, without operative interference, which is only done in desperate cases as the last resort, and almost invariably proves fatal.

H.M. Dockyard, Devonport.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

PERINEPHRITIC ABSCESS DUE TO RENAL CALCULUS; NEPHROLITHOTOMY; CURE.

(Under the care of Dr. STONE and Mr. JOHN CROFT.)

THE following case is well worthy of record. For years a patient who had been suffering from the symptoms of renal calculus, but without hæmaturia, had refused operation, only giving her consent after the evacuation of a large perinephritic abscess. How long the calculus had been forming it is not possible to say, but the evidence of its presence extended over a period of several years, during which she had frequently been incapacitated from the active duties of life and subjected to much pain and impaired health. It is somewhat strange that there had not been greater change in the structure of the kidney as the result of inflammation, but recovery with a useful kidney appears to have been complete.

E. G——, aged thirty-eight, married, was admitted into Christian ward, under the care of Dr. Stone, on Sept. 18th, 1885, and left Feb. 16th, 1886. Family history: Parents dead, causes of death unknown. A brother is said to suffer from stone in the bladder; a sister complains of pain in the region of the bladder, and a son of the patient is said to be "disposed to stone," being troubled to pass his urine. The patient has had trouble ever since she was a child in passing urine, with pain in the loins; but the symptoms did not thoroughly manifest themselves until 1871, when she came under the care of Dr. Stone, and was afterwards twice admitted into the hospital with the same symptoms, but refused operation. Her present trouble commenced at Christmas, 1884, when she had a slight miscarriage, a feeling of something in the bladder when walking, pain in the region of the right kidney, with pain and difficulty in passing her urine, which has been thick and very high coloured. No history of hæmaturia.

On admission she was a fairly well nourished, rather sallow woman, complaining, in a peevish tone of voice, of pain in the abdomen. This pain begins in the right lumbar region and passes through the groin to the right labium; it also passes down the front of the right leg as far as half-way down the shin. There is always some pain present, but she is liable to exacerbations of a cutting character. The right lumbar region is fuller than the left, and a soft round swelling in the region of the kidney can be indistinctly felt; in this position and in the right hypochondrium there is great tenderness. The rest of the abdomen appears normal. No enlargement of liver or spleen. Heart and lungs normal; pulse 80; tongue clean; appetite fair; bowels regular; skin normal. Temperature 99°. Urine acid; only a small trace of albumen; under the microscope there is a large quantity of pus cells, but no blood; deposit of urates and phosphates; sp. gr. 1030.

Sept. 21st.—Feels better for the rest, but does not sleep well. Complains of nausea, and is thirsty. Passes urine about three times in the day; complains of scalding; there is some difficulty in micturition, but when it has once commenced there is no further difficulty. Evening temperature has varied from 99·2° to 100·4°.

On the 26th the swelling in the abdomen had extended to the umbilicus; the abdominal muscles were very tense. She had a sharp attack of pain on the 23rd, and on the 24th there was no evidence of any pus in the urine. From this time until Nov. 4th there was no improvement, the temperature was usually normal in the morning, and two or three degrees higher in the evening. Her tongue became red and sore, the appetite failed, and there were slight attacks of looseness of the bowels. Several times there were attacks of pain in the right groin, and it was noticed that the swelling continued to increase until the above date, when fluctuation was found above the crest of the ilium, about two inches behind the anterior superior spine. The patient was placed under chloroform, and Mr. Battle opened the abscess at the point at which it was presenting. A large quantity of thick creamy pus escaped from the incision, and the finger when passed into the abscess cavity could be moved freely in all directions without touching the wall of the cavity, excepting on its outer aspect. Its full extent upwards could not be ascertained; downwards it extended to Poupart's ligament, and inwards to the mesial line. Antiseptic dressings were applied after syringing the cavity and the insertion of a drainage-tube. The bladder was also carefully explored with a sound, but no evidence of disease discovered. After this, until the 12th, the temperature was normal. An attempt was made on that day to reach the calculus by means of long probes and catheters, but the position of the opening and its distance rendered the attempt unsuccessful. In the evening the temperature rose to 100°. The discharge continued free, though lessening in quantity, and the temperature normal, but there was little improvement in the general symptoms, and she was losing flesh.

On Nov. 21st Mr. Croft operated. The patient having been placed under ether, the opening was enlarged upwards and the sinus examined. It extended downwards towards Poupart's ligament, and upwards towards the kidney; the muscles and fasciæ over it, which were much matted, were incised upwards, and another incision made at right angles to this. When the kidney had been bared fluctuation was felt in it, and the insertion of an exploratory needle gave exit to some thick pus. A longitudinal incision was made down to the pelvis of the kidney, in which a calculus of somewhat dumb-bell shape was found and extracted in two pieces. The wound was then thoroughly syringed with chloride of zinc, the kidney packed with iodoform gauze, and a large drainage-tube passed to the bottom of the sinus. Silk sutures were inserted, and iodoform, salicylic wool, and a pinewood-wool bag applied. This dressing was to be

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changed every four hours. After the operation the temperature was 95°, gradually rising to normal at the end of twelve hours, when the pulse was 100, weak, and compressible. Vomiting lasted until the next day. She slept after the administration of morphia. Nutrient enemata were given every two hours until 2 P.M. of the day following, and then every four hours.

Nov. 24th: The urine was very smoky, and the temperature subnormal, so the dressing was changed to chlorinated soda lotion. From this date there is little to record, beyond occasional slight attacks of pain in the wound and gradual diminution in quantity of discharge. The temperature rose to 101° on the day after the operation, but became normal next day, and remained so throughout with one or two unimportant exceptions. The albumen (which had never exceeded one-tenth in amount) and the pus disappeared from the urine. Her general condition rapidly improved, and when she left the hospital she was better in health than she could remember to have been before. The calculus consisted of two parts—the larger, oval in shape, measuring one inch by two-thirds of an inch, joined by a narrow neck three-fourths of an inch long to a smaller part, also of somewhat oval shape, and measuring three-fifths by one-third of an inch; when dried it weighed about fifteen grains and a half. On section it was found laminated without evident nucleus. Chemical analysis showed the central portion to consist mainly of uric acid, with oxalate and phosphate of lime. The outer part was composed to the extent of nearly one-half of phosphate and oxalate.

NOTTINGHAM GENERAL HOSPITAL.

PUNCTURED WOUND OF BUTTOCK, FOLLOWED BY TRAUMATIC ANEURYSM; OPERATION; CURE.

(Under the care of Mr. JOSEPH LITTLEWOOD.)

G. H ——, aged fifteen, was admitted on the afternoon of May 8th, 1885, with a punctured wound in the left buttock, which was thus inflicted: He was seated on a form at school with some other boys. The one on his left hand was engaged in sharpening a pencil with a pocket-knife, and he was "playing" with the one on his right, who took up a ruler to strike him. To avoid the blow, he made a sudden movement towards the left, and received the blade of the knife in his buttock. The blade measured two inches and a half long. He was said to have lost a great quantity of blood at the time, which was stopped by a pad of lint and perchloride of iron, and he was then brought to the hospital.

On admission, a small incised wound barely half an inch long was found, its long axis lying across the position of Nélaton's line, posterior to the great trochanter. Another measurement was taken in order to determine its position with respect to other anatomical landmarks. Thus, a line drawn vertically downwards from the anterior superior spine of the ilium, with the limb in a straight line with the body, met one drawn horizontally round the outside of the buttock from the wound, exactly three inches below the anterior superior spine; and the length of the horizontal one between its point of junction with the vertical one and the wound was five inches and a half. The boy had not suffered much from the loss of blood, and the hæmorrhage had absolutely ceased, not a drop of blood now issuing from the wound. A pad and bandage were applied.

May 9th.—He complained of a good deal of tensive pain, so the wound was dressed. There was some hardness and swelling in the situation of it, which was quite dry and almost healed. A piece of dry lint kept on by strapping was applied.

11th.—The wound was completely healed; the swelling was larger and harder, and much ecchymosis had appeared over it.

12th.—Pulsation was noticed in the swelling for the first time.

13th.—There was now a large, hard, ill-defined swelling, the size of a cocoanut, occupying as nearly as possible the centre of the left buttock. It pulsated distinctly with an expansile beat, and on auscultation a bruit could be clearly heard. Most of the pulsation and by far the most marked area of it lay above—i.e., nearer the crest of the ilium than the wound. Much discolouration of the skin was now apparent, and it was curious that it hardly extended at all towards the thigh, but seemed to have spread almost entirely in an upward direction.

14th.—The size of the swelling, its pulsation, and bruit had all increased, and an operation was decided on.

15th.—Chloroform having been administered, Mr. Littlewood proceeded to perform the operation of laying open the aneurysmal sac and tying both ends of the artery in the wound. A short incision was made through the skin and fat over the most prominent part of the tumour down to the gluteus maximus, which on being reached was seen to pulsate and bulge through the edges of the wound. An incision large enough to admit three fingers was then made through the muscle, which was followed at once by a rush of arterial blood. With the fingers in the wound, which somewhat checked the flow of blood, an endeavour was made to find and compress the proximal end of the artery so as to arrest the hæmorrhage before completely laying open the sac. This, however, could not be done. The wound was then rapidly enlarged in an upward and downward direction to the extent of six inches, and the contents of the sac turned out. Rapidly as this was done, the quantity of blood lost was excessive and the patient became faint. An abdominal tourniquet was then applied, which completely arrested the bleeding. The distal end of the vessel was found without difficulty and ligatured, but the proximal end was only discovered after a long search. It was lying just within the great sciatic notch, and after some difficulty was tied. There was a considerable separation between the divided ends of the artery. After both ends had been secured (catgut ligature being used) and portions of loose coagula removed, the wound was closed with wire sutures and a drainage-tube put in. The operation was performed under the spray and carbolic gauze dressings used.

16th.—Had rallied fairly from the shock, and was taking fluid food well. Wound dressed; distended with blood-clot. No sign of hæmorrhage. Some of the sutures were removed.

17th.—Wound dressed again. There was a quantity of dark-brown-coloured discharge and small lumps of breaking-down blood-clot issuing from it. The remainder of the sutures were taken out and the wound thoroughly syringed with a 1 in 40 solution of carbolic acid. The temperature this morning was 102·8°. He complained of no pain; he was delirious during the night, but took fluid food well.

18th.—The wound was gaping widely, and had a by no means healthy appearance; still much dark-brownish clot in it, with an offensive discharge. Syringed out as before, and iodoform sprinkled into the bottom of the wound. Carbolised gauze dressing and spray continued.

The wound gradually discharged the remnants of clot, and began to granulate feebly. The spray and gauze dressing were discontinued, as they did not appear to promote its healing. Various dressings were used, as sulphate of zinc lotion, dry boracic lint, and perchloride of mercury wool. A generous diet with wine was given, but the progress in the direction of healing was of the slowest kind, and when he left the hospital in the middle of July a wound of considerable size still remained. There being scarcely any improvement during the last five weeks, and his parents being well to do, Mr. Littlewood felt no hesitation in sending him to his home, which was a few miles out of Nottingham, and when he saw him the first time afterwards a marked change had taken place, the wound being more healthy in appearance, and the large gap in the gluteus muscle, which had shown no signs of healing in the hospital, was rapidly filling up. He was seen six or seven times, and each time the improvement was marked and his general health improved—so much so that he was quite well at the beginning of September, with the exception of some stiffening about the hip; this, however, had quite gone when he called at the hospital a short time ago.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, CITY-ROAD.—On the 15th inst. a new wing to this institution was opened by H.R.H. Princess Beatrice, with great ceremony, and in the presence of a large number of the friends of the hospital. The annual meeting was subsequently held, when the report for 1885 was submitted. It showed that 7567 out-patients had been treated, and that the year's subscriptions had amounted to £5026. The four wards in the new wing are to be named as follows: the Victoria, the Princess Beatrice, the Princess of Wales, and the Shaftesbury. The hospital was founded by the Duke of Kent in 1814.

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Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuberculosis of the Skin.—Paracentesis for Bronchiectasis.

AN ordinary meeting of this Society was held on Tuesday last, Mr. G. D. Pollock, F.R.C.S., President, in the chair. A very good discussion took place on the second paper, the meeting being prolonged till 10.40 P.M.

Dr. HEBB contributed a paper on a case of Tuberculosis of the Skin, which was communicated by Mr. G. Cowell. A strumous boy, under treatment in Westminster Hospital with supposed Barbadoes leg, was seen by many visitors to the International Medical Congress, and no exception was taken to the diagnosis. The boy had never been beyond the environs of London. He died two years later (aged eighteen) of a bronchial affection, and a portion of the thickened skin was secured for microscopical examination, with the following result:—General hypertrophy of skin; dermis thickened from overgrowth of its connective tissue and the presence of collections of lymphoid cells; in many places there are aggregations of both large and small lymphoid cells, and among them numerous giant-cells, the spheroidal masses thus formed being practically indistinguishable from tubercles such as are found in the liver and kidney; in the lymphatics a red staining shows the presence of small bacilli in great numbers, colonies being also found around the aggregations of lymphoid cells. The case is compared with one reported by the late Dr. Tilbury FOX, where the appearances and history were similar, but the microscopical specimens showed no trace of tubercle.—Dr. RADCLIFFE CROCKER said the question was whether this was a unique case or not. Lupus, scrofuloderma, and true tubercular ulceration were three conditions with which the case described might be compared. With the last mentioned it had no resemblance. But it was known that lupus of the legs did lead to elephantiasis of the limb affected; the elephantoid condition was probably the pathological result of obstruction of the lymphatics. Kaposi alluded to cases of elephantiasis following lupus in which the secondary changes masked the lupoid characters; the present case might have been an illustration.—Dr. THIN related the case of a lady suffering from a peculiar limited swelling of the back of the hand that looked something like Barbadoes leg; it was certainly not elephantiasis, and was limited to the carpus and knuckles. He thought it might have been similar to that described by Dr. Hebb. The "anatomical" tubercle resulting from post-mortem wounds had been shown by investigators in Paris and Berlin to be sometimes associated with the growth of tubercle bacilli. He was also struck with the remarkable fact that conditions clinically widely different from one another should be due to one and the same cause. The different clinical pictures caused by trichophyton tonsurans bore some analogy to this.—Dr. HEBB replied that, although many observers saw the case, no one suggested lupus as the nature of the disease; and Kaposi asserted that there was no difference between lupus of the leg and face.

Dr. THEODORE WILLIAMS and Mr. RICKMAN J. GODLEE communicated a conjoint paper on two cases of Bronchiectasis treated by Paracentesis, with remarks on the mode of operation. The first case was that of a gentleman aged sixty-seven, who had suffered for two years from chronic bronchitis and emphysema, and six months later had dry pleurisy of the left lung. After the pleurisy the expectoration, before moderate, became profuse and somewhat fetid, the cough more and more harassing, and although Malvern and Bournemouth were visited and a great variety of antiseptic treatment was tried, he obtained no relief. On Feb. 3rd he was seen by Dr. Williams, who noted the existence of a bronchiectasis in the lower lobe of the left lung, the pleura of which was adherent. Tubular sounds were heard over two small areas, neither exceeding a half-crown in circumference, in the eighth interspace. At the request of Dr. Williams, a puncture was made by Mr. Godlee into the first area with an aspirating trocar and cannula. Under antiseptic precautions the cavity was opened and a drainage-tube inserted. The result of the operation was that the cough nearly ceased, the expectoration, which was for a few days pneumonic, diminished from one pint a day to a few pellets and became free from odour, and the patient gained flesh rapidly. At the end of six weeks the discharge ceased, the channel closed, and the wound healed up. Examination of the chest showed complete disappearance of tubular sound from the second area as well as from the first, and further shrinking of the chest wall. The patient at the close of nine months after the operation remained free from cough and expectoration, and was able to walk four miles at a stretch. The second case was that of a girl aged twenty-one, who, ever since an attack of typhoid fever, had had troublesome cough and copious expectoration, gradually increasing in quantity and becoming more and more fetid. She had had hæmoptysis three times; on one occasion amounting to a pint. Examination of the chest showed several bronchiectases, two of which gave rise to very coarse râles over areas about the size of a half-crown in the sixth and seventh interspaces in the axilla; a third area was detected in the eighth space below the scapular angle. At first the patient improved under antiseptic treatment, the expectoration diminishing and becoming less fetid, but after a while these measures ceased to give relief, and an operation was decided on. On June 29th, at Dr. Williams' request, Mr. Godlee passed a small exploratory trocar successively into each of the three marked spots and, obtaining no result, inserted a large-sized aspirating trocar and cannula into the seat of the first puncture in the sixth interspace. But an attempt to cut down on the cavity failed. A second operation was performed on July 16th, and after some exploratory punctures Mr. Godlee, with antiseptic precautions, cut down on and laid bare the eighth rib, and excised about an inch of it in order to approach nearer to the bronchi before attempting to open them. The trocar and cannula were then passed to a depth of five inches, and Mr. Godlee cut down along the cannula and inserted a drainage-tube. The wound gradually healed up and the patient left the hospital at the beginning of September considerably improved, the cough slight, the sputum having diminished to about three ounces a day, and being only occasionally fetid. The presence of bronchiectases in other parts of the left lung, and possibly also in the right lung, precluded such complete success as was obtained in the first case. A short account was then given of four other cases of bronchiectasis treated by tapping, in all of which the position of the cavities had been recognised and successfully punctured, but owing to the presence of other bronchial dilatations the success was only partial in these cases. The arguments in favour of the operation are: 1. The tendency to death by septicæmia in some form, unless proper drainage is effected. 2. The reduction in the amount of expectoration, this being due, not only to the removal of the matter, but to the disappearance of the effects of its irritation on the healthy bronchi. 3. The invulnerability of the lung tissue, it being proved that punctures of this tissue give rise to little or no disturbance to the part or to the system generally. The difficulties of the operation are principally those of diagnosis of the exact positions of the bronchiectases: (1) from the presence of emphysema; (2) from the reverberatory character of their auscultatory sounds, which renders exact localisation very difficult. Paracentesis of bronchiectases seems to be indicated under the following circumstances: 1. In cases where antiseptic treatment of all kinds has failed to correct the fetor of expectoration, and to allay the harassing nature of the cough, where death by septic pneumonia seems imminent. 2. Where the evidence goes to prove that the bronchiectases are confined to one lung, are situated in the lower lobe, and have overlying them an adherent pleura. It is not indicated where multiple bronchiectases exist in both lungs, where they are surrounded by emphysema, and where the pleura is non-adherent.—Dr. GOODHART showed two recent specimens of bronchiectasis, which he considered lent force to the remarks in the paper on the difficulty of diagnosis. One of the specimens came from a boy aged twelve, at the base of whose right lung physical signs of pleuritic effusion were detected during life, but nothing was done owing to the signs of cerebral mischief. At the necropsy a cerebral abscess was discovered, and a pea was found in the bronchus of the diseased lung, which was in a state of consolidation, but riddled through with abscesses. The other specimen came from a woman who had all the signs of an acute pneumonia. At the right apex there were signs of consolidation; at the angle of the left scapula were sharp râles and harsh inspiratory murmur, which was regarded as probably indicative of pneumonia. At the necropsy pneumonia of the right upper lobe was found,

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but in the left lower lobe a sacculated condition of the bronchial tubes was discovered. The symptoms and signs were of equivocal character in many cases of bronchiectasis. He had seen four or five of such cases in the course of the past ten years. He agreed that the presence of emphysema was a bar to the operation, for it masked the condition of things altogether. To diagnose adhesion of the pleura was almost impossible. The best cases for operation were those of bronchiectasis associated with chronic pneumonia or fibrosis of the lung. Many cases of bronchiectasis were never associated with fetor from first to last. Fetor was, in his opinion, always a question of some disintegration of the lung.—Dr. PERCY KIDD said that in the second case related in the paper the hæmoptysis was very alarming, and did not cease until the tube had been taken out. In some cases of bronchiectasis the development of fetor was associated with the onset of the signs of pleurisy; this might be explained in various ways; one explanation was the spread by contiguity of inflammation. In a case that had been under his care the illness began with "congestion of lung" eighteen months before; chronic bronchitis had existed ever since, but at the angle of the right scapula there were marked signs of a cavity; later on septic infection appeared, and was complicated with phlegmonous erysipelas. At the necropsy the case was seen to have been one of chronic pneumonia with cavities—none, however, larger than a blackbird's egg. Operation in this case was proposed but not carried out, and it could not have been of much good. Referring to the difficulties of diagnosis of bronchiectasis, he mentioned a case in which the bronchial dilatations were supposed to exist on one side, and post-mortem examination showed that the other side was also affected, though it had yielded no corresponding physical signs. The diagnosis of adhesions of the pleura was also exceedingly difficult, and he had found adhesions to be absent even where there was retraction of the parietes. He had seen three fatal cases of abscess of the brain resulting from suppuration in the lung. As to the diagnostic importance of membranous shreds in the expectoration, he could not bear out Dr. Williams' experience. Operative interference would prove unsatisfactory in intense cases of bronchiectasis. In other cases, where operation seemed favourable, the patient often made a good recovery with mere antiseptic non-surgical treatment. A case of a pulmonary abscess occurring after childbirth illustrated this forcibly.—Dr. CAYLEY believed that operation was most likely to prove successful when the bronchiectasis was surrounded by solid lung, and the pleura was then most probably adherent. Operation, in his opinion, was dangerous when bronchial dilatation was not so associated. The mode of death by abscess of the brain was very frequent in these cases; the abscess was solitary and chronic, and therefore peculiar. Next to ear disease, suppuration in the lung was by far the most frequent cause of cerebral abscess.—Dr. C. Y. BISS considered that suppuration in the lung should be treated in the same way as purulent collections elsewhere in the body. Speaking of the danger of septicæmia, which was real, he showed how in cases of bronchiectasis, by virtue of the tubes being constantly bathed with offensive material, there was a degree of immunity from septicæmia. Brain abscess might occur without operation in these cases. From his experience he would say that the danger from hæmorrhage could not be great, for the hæmorrhage had been small in all the cases he had seen. It had been said that the cut ends of ribs afforded an ingress for septic matter; there was no ground for that assertion, for the removal of portions of ribs in empyemata was now of very frequent occurrence, and yet septic infection was rare in such cases. He thought that inversion to get rid of an excessive amount of secretion threatening suffocation was a valuable mode of treatment if the emergency arose. The liability to recurrence of bronchiectatic cavities should be borne in mind when conferring with patients about operation.—Dr. T. BARLOW spoke of the extreme difficulty of diagnosis in some cases of bronchiectasis. He referred to a case which was almost a reproduction of one of the specimens shown by Dr. Goodhart. There had been impaction of a pea in one bronchus; the lung was riddled with cavities. During life there was almost no breath sound and very considerable dulness. In some cases of aneurysm, too, he had observed the same physical signs, and post-mortem examination had revealed bronchial dilatations.—Dr. COUPLAND also spoke of the difficulty of diagnosing bronchiectasis, and mentioned two cases in which pleural effusion was diagnosed, but bronchiectasis was found after death. The expectoration of a piece of bone in another case showed that what had been diagnosed as pleural effusion was really a solid lung in which a cavity had formed below the obstruction of a bronchus by the bone; this patient recovered without operation. Suppuration and gangrene of the lung might be induced by a suppurating bronchial gland, which opened, on the one hand, into a bronchus, and, on the other, into the œsophagus. Particles of food passing from the food-passage into the lung was no doubt the cause of the gangrene.—Mr. A. PEARCE GOULD said the conclusions of Mr. Godlee would secure the support of all surgeons. If physicians were unable to diagnose with certainty, there was also a corresponding difficulty for the surgeon. It was exceedingly difficult to estimate the distance from the surface of any cavity; the conductivity of sound between the cavity and the site selected for puncture must vary considerably with the nature of the interposed tissue. He recommended Dieulafoy's aspirator as an exploring instrument, the surgeon making a vacuum as soon as the needle has passed through the parietes. He could not agree with Dr. Biss that there was no danger of hæmorrhage.—Dr. BISS explained that, considering the theoretical danger of hæmorrhage, he had been surprised that hæmorrhage had been so slight; he did not assert that there was no danger.—Sir ANDREW CLARK congratulated the authors on their success in the first case especially, which had been under his own treatment a good many years ago. The patient was a dyspeptic, who developed general bronchitis about three or four years since, supervening on which there came a dry pleurisy of the left side, which persisted, but was unaccompanied by effusion; the base of the left lung became consolidated; the bronchiectatic condition of the right lung remained. The patient became subject to convulsive paroxysms of cough, during which he expectorated large quantities of mucopurulent material. For a time he got neither better nor worse, and then was lost sight of. He was glad that Dr. Williams had in the paper given the further course of the case. As to the value of surgical treatment of cases of bronchiectasis, he considered that the cases of operation were not sufficiently numerous to afford a definite judgment, but there could be no question that operation often affords great relief, and sometimes even a possibility of complete cure. With regard to the difficulty of making a diagnosis of adhesions, he was of opinion that the presence of dulness, diminished vocal fremitus, diminished vocal sounds, and resonance were almost certain evidence that adhesion had taken place. As to the diagnosis of bronchiectasis, he thought the difficulties were not so great as had been made to appear. If there were abundant expectoration with severe fever, with the presence of cords or leashes of elastic tissue in the sputa, and the absence of areolar elastic tissue, he would have no doubt that he was dealing with a case of bronchial dilatation. With regard to hæmorrhage, the fact that in fibroid tissue the arteries participated in the sclerosis, diminishing their calibre, was sufficient explanation of the slight tendency to hæmorrhage. Speaking of the scientific side of the paper, he remarked on the absence of tubercle bacilli in the cases narrated, and said that if all consolidations were characterised alike as of tubercular origin, it was a very odd sort of phthisis which could be cured by a simple operation like that to which the authors had drawn attention in the first case. The author's observations on the absence of bacilli in some cases of fibroid phthisis confirmed his own.—Dr. C. T. WILLIAMS, in reply, did not consider that operative treatment should be confined to cases associated with fibrosis and adherent pleura; there were mixed cases, and he would be sorry to shut out all other cases. As to the diagnosis of bronchiectasis, no doubt there was much uncertainty with total obstruction of a large bronchus, but he agreed with Sir Andrew Clark that there was some, but not always unsurmountable, difficulty in diagnosis. In his paper he had laid great stress on the presence of membranous shreds as of diagnostic value. Whether these were due to exudation or not he could not say, but as he believed they were not found in any other cases he regarded them as of much importance.—Mr. R. J. GODLEE, in reply, alluded to the question of hæmorrhage; in the neighbourhood of large bronchi he considered that hæmorrhage might be a very serious danger. In some cases of paracentesis in which the patient's mouth became full of blood he thought that a bronchial vessel must have been opened, and if such a patient were deeply anæsthetised the danger from suffocation would be very serious. In his experience of cases of pulmonary surgery he had always found

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plugging sufficient to arrest any hæmorrhage. On the diagnosis of adhesions all he would say was that often when operating he had detected no adhesions, even after the asseveration to the contrary of some of the Brompton physicians. When soft adhesions were present the lung was easily pushed away from the parietes, and puncture was therefore difficult. In a case of what was regarded as loculated pleuritic effusion, it turned out, on operating, that but a few weak adhesions were present, and these being unavoidably broken down some fluid escaped into the general pleural cavity, with the development of septic pleurisy. The aspirator was certainly the best instrument to use in exploration; during the withdrawal of the cannula it was possible to ascertain whether a cavity had been traversed. In his paper he had referred only to cavities the result of bronchiectasis.

MEDICAL SOCIETY OF LONDON.

Amputation of Penis.—Alveolar Abscess with Thrombosis of Cavernous Sinus.

AN ordinary meeting of this Society was held on Monday last, Mr. R. Brudenell Carter, F.R.C.S., President, in the chair. An important ethico-physiological question arose in the discussion of the first paper.

Mr. F. BOWREMAN JESSETT read a paper on Amputation of the Penis by Pearce Gould's method, which will appear in full in an early number of THE LANCET.—The PRESIDENT considered that for certain individuals in the active sexual period it was proper to remove the testes in order to prevent the occurrence of repeated discomfort and chagrin from inability to satisfy the physiological desires.—Mr. PEARCE GOULD related another case of amputation of the penis by his own method, which occurred in his practice about two years ago. The patient was a man aged fifty-four, in whom the inguinal glands were involved; in the operation he removed also these affected glands. An ordinary glass syringe was a very convenient instrument to permit of micturition in the standing posture. He was not convinced of the necessity of removing the testicles in such cases, for in his opinion a chaste life was consistent with perfect health.—Mr. J. H. MORGAN spoke of the question of heredity in cancer, which varied according to the tissue in which the new growth occurred. He thought removal of the testes inexpedient, unless there were signs of disease of one or both organs, for mere castration caused considerable temporary depression in parts controlled by the sympathetic system.—Mr. W. PYE considered that mere castration was not an operation dangerous in itself. A perfectly chaste life was, he held, possible without deterioration of the general health; if the testicles were removed he should expect rather that important changes would occur in the body at large.—Mr. DAVIES-COLLEY referred to two cases of cancer of the body of the penis on which he had operated; he removed the organ at the root, and then opened the urethra in the perineum. This method was advocated by Thiersch in 1871, but Professor Humphry of Cambridge had performed a similar operation many years before this. He did not think that removal of the testes was called for.—Dr. W. M. ORD asked whether any trustworthy information existed as to the fatality of the operation that produced eunuchs in the East.—The PRESIDENT said that the operation was done at a very early age in the East, the patients being buried in sand to check the hæmorrhage and heal the wound; there was a certain percentage of deaths.

Mr. PEARCE GOULD read notes of a case of Alveolar Abscess causing death from thrombosis of the cavernous sinus. A widow, aged fifty-seven, was admitted into the Temperance Hospital with the mouth and teeth in a foul state; a sloughy opening was seen in the centre of the right cheek. An incision was made into the tissues over the jaw from the outside, where fluctuation was detected over the lower part of the masseter; the swelling of the face subsided a little after this, but the patient's general condition was very unsatisfactory. Six molar teeth were extracted on the right side on Feb. 22nd. A probe passed into the external wound detected bare bone; the trismus lessened, but there still remained continued fever and the mouth was very foul-smelling. Some œdema of the right temple had also appeared. Four days after the removal of the teeth, an abscess above the external angular process of the orbit and another in the posterior triangle of the neck were observed, but the external jugular was not thrombosed. The general state did not improve; the pulse was 126, small, and weak; the temperature 103·8°; respiration stertorous, and crops of herpes about the lips. The patient was very drowsy; there was great œdema of the orbit and chemosis, with some proptosis of the right eye and less of the left; the eyeball could be moved a little from side to side. The patient had some rigors on March 1st. The general asthenia increased, and on March 2nd the conjunctivæ were yellow and motions colourless. Death occurred in a state of coma. At the necropsy several globular abscesses were found in the lungs with very dense walls, and no signs of adjacent inflammation. The liver was fatty and enlarged; the kidneys healthy. There was necrosis of the outer part of the right side of the lower jaw; the temporal muscle was discoloured, but not actually purulent. Some lymph was detected along the basilar process of the occipital bone and sella turcica. The blood was more fluid than usual. The right cavernous sinus was greatly distended, and contained greyish-yellow broken-down pus and clots; the right ophthalmic vein was similarly affected, and the circular sinus with the superior petrosal on the right side. The inferior petrosal and lateral sinuses were healthy. The left cavernous sinus contained a clot, of which the inner part was yellow. The case appeared to be an example of a rare condition. The thrombosis had probably spread through the pterygoid veins on the right side to the cavernous sinus, and thence to the left side by the circular sinus. Sir William Bowman's case was mentioned in which there was pulsation in the orbit, which led to ligature of the common carotid on the idea of aneurysm.—Mr. B. CARTER referred to two cases of orbital cellulitis in which there was proptosis; both recovered.—Dr. SIDNEY COUPLAND had met with thrombosis of the cavernous sinus after death, when it had never been expected during life. In Mr. Gould's case we had a parallel to thrombosis of the lateral sinus occurring after ear disease. He related a case of basic meningitis in which there was total ophthalmoplegia and loss of sensation in the ocular tissues; at the necropsy there was ancient plugging of both cavernous sinuses. During life there were no signs of papillitis; there was no "choked disc," showing that V. Graefe's explanation was incorrect, as had now been generally accepted.—Mr. DAVIES-COLLEY related three cases of thrombosis of the cavernous sinus occurring in cases of malignant facial carbuncle.—Mr. ALLINGHAM, jun., spoke of the case of a girl, aged twenty-one, who died with thrombosis of the facial vein and cavernous thrombosis; there was extreme chlorosis.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

On Suction of Sewer Gases into Service-pipes conveying Drinking-water—a fertile causation of Enteric Fever.

A MEETING of this Society was held on Friday, Jan. 15th, Dr. Corfield, President, in the chair.

The objects to which the author of the above paper, Dr. HORACE SWETE, alluded, was to show an insidious danger that existed where a vacuum was formed by water-pipes being suddenly turned off from the main, and the means he had devised to prevent such an occurrence. He first pointed out the danger attending the intermittent water-supply, and very often also the constant service supply, as various occasions arise for shutting off portions of the water-supply for making repairs, flushing, &c.; it is when this happens that a vacuum is formed and sewer gases admitted into the water-pipes. This was illustrated, first, in Dr. Blaxall's report to the Local Government Board of enteric fever occurring at Sherborne; secondly, in that notable case of typhoid fever at Caius College, Cambridge, where Dr. Buchanan in a most masterly way discovered the source of sewer gas in the one watercloset which was attached to the room of one of the Fellows, in which during his absence the dry weather caused the small syphon of the weeping pipe to dry up, and gases freely came from the town sewers, and were sucked into the pipes supplying the students with water. Dr. Swete then referred to his own personal knowledge, how he found coal-gas at Droitwich in the drinking-water sucked in from an adjoining gas main; and again at Kidderminster, the water-supply falling short, the main was turned off daily for several hours, the cause of the outbreak here being not in the well water, but in that which passed through the pipes, which, being constantly milky when drawn, showed that air—viz., sewer gas—had

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found its way by suction into the vacuum formed by the water having been turned off. He then went on to point out the means of preventing this danger, and came to the conclusion that the only true protection would be to admit air into the highest point of house service pipes whenever the water was turned off, thus effectively to prevent suction either by syphon action or by the formation of a vacuum in the service-pipes. To effect this he constructed a dome-shaped valve, inside which a float surmounted by an elastic disc presses against a metallic diaphragm; above the diaphragm are holes to admit air, so that when the water falls the float falls with it, and air is admitted; when the water is again turned on, the float rises and seals the valve; the greater the pressure the more closely the valve is sealed. The objections that have been raised against these valves are: 1. It is a sanitary fad, and there are plenty of others in the market. There are certainly some traps, and also an automatic valve, which entirely failed at Caius College, Cambridge. 2. Why not simply bore a hole in the top of the service-pipe and so admit air. Truly, such a hole will admit air, but what a splendid fountain would be made with a head, say, of 250 feet of water! 3. What is the necessity of such valves when we have separate cisterns for the waterclosets? These often fail, as was the case in the typhoid outbreak at Kidderminster. 4. The fear that, unless care is taken to place the valve where foul air cannot touch it, it would not be of much use. To this objection the author stated that it was not intended to place the valve under any watercloset, but to keep it at the highest point outside any such place; even were it placed inside, the air could only act on a very small film of water and without any pressure; whereas in suction, air, conveying with it organic matter, passes through a considerable quantity of water in the pipes, and all organic impurity is washed from the air-bubbles into the air.

NORFOLK AND NORWICH MEDICO-CHIRURGICAL SOCIETY.

Suture of the Ulnar Nerve.—At the March meeting of the Norfolk and Norwich Medico-Chirurgical Society, Dr. MICHAEL BEVERLEY showed a patient whose ulnar nerve he had sutured in November last. H. G. ——, aged sixteen, received a severe wound above the left wrist by the bursting of a ginger-beer bottle on August 19th, 1885. When first seen by Dr. Beverley, ten weeks afterwards, the cicatrix was extremely painful, especially if the fingers were extended; there was complete loss of sensation in the little finger and half of the ring finger, both of which drooped, and wasting of the muscles on the outer side of the hand, where the skin was cold and clammy. On November 12th (twelve weeks after the injury) Dr. Beverley made an incision along the course of the ulnar nerve one inch above and below the cicatrix; it was found to be severed; the proximal end was bulbous, and attached by its sheath to the tendon of the flexor carpi ulnaris, which was itself lacerated by the original injury; hence the pain which was produced by any movement which extended this tendon, and thus stretched the sheath by which it was connected to the upper segment of the divided nerve. The distal end of the nerve was retracted and separated from the proximal by nearly half an inch. A fresh section was made through the ends of the divided nerve, and they were brought into accurate opposition by two fine chromicised catgut sutures. There was very little tension when the hand was semi-flexed, in which position it was retained by an angular metal splint. The operation was performed under carbolic spray and with strict antiseptic precautions. The wound healed by first intention. On the third day after the operation there was slight tingling in the little finger, on the sixth day slight sensation to the touch, and on the ninth day decidedly returning sensation. On the fourteenth day the hand and arm were thoroughly examined, and it was found that sensation was partially recovered in all the parts from which it had been absent before the operation. A fortnight later the splint was removed, and the patient was directed to use his hand gently; there was a very decided return of sensation, and the drooping fingers could be slightly raised. The subsequent progress of the case has been very satisfactory. He can now (March 1st) move the fingers extremely well. Sensation has completely returned, and the hand is of nearly as much use as it was before the accident. In his comments on the case, Dr. Beverley referred to instances of successful nerve-suturing recorded by Langenbeck, Esmarch, Virchow, Hulke, Heath, and Langton.

Reviews and Notices of Books.

Handbook of Geographical and Historical Pathology. By Dr. AUGUST HIRSCH. Vol. 2: Chronic, Infective, Toxic, Parasitic, Septic, and Constitutional Diseases. Translated from the Second German Edition by CHARLES CREIGHTON, M.D. London: The New Sydenham Society. 1885.

THE subjects contained in this volume of Professor Hirsch's classical treatise include many diseases of great interest from the historical and geographical standpoint. Leprosy, syphilis, goitre, puerperal fever, and scurvy are amongst the number which are subjected to the penetrating analysis of the learned author, whose researches have done so much to complete our knowledge of disease. The scope of the volume will, however, be best gathered by a summary of the chapters, as follows:—*Chronic Infective Diseases:* (1) Leprosy; (2) Syphilis; (3) Yaws, Button Scurvy, and Verruga Peruviana; (4) Endemic Goitre and Cretinism. *Toxic Diseases:* (5) Ergotism; (6) Pellagra and allied diseases; (7) Milk-sickness and the Trembles; (8) Endemic Colic. *Parasitic Diseases:* (9) Animal Parasites; (10) Parasitic Fungi. *Infective Traumatic Diseases:* (11) Erysipelas; (12) Puerperal Fever; (13) Hospital Gangrene. *Chronic Disorders of Nutrition:* (14) Chlorosis and Anæmia; (15) Scurvy; (16) Beri-beri; (17) Scrofula; (18) Diabetes; (19) Gout. Although under the term "leprosy" there has no doubt been included a great variety of skin affections, which add to the difficulties of the historian to assign a proper value to old chronicles, there appears to be sufficient evidence of its occurrence in Egypt, India, and Japan in very remote periods. Professor Hirsch thinks that the biblical term "sâraat" (Leviticus xiii.) probably includes leprosy as well as other affections, as psoriasis, scabies, eczema, and perhaps also syphilis. The same confusion explains, he thinks, the vast number of leper houses in Europe in the middle ages, for although true leprosy was probably then endemic, it is hardly conceivable that it should have prevailed so largely, especially as we have in syphilis a far more probable explanation of the vast increase in cutaneous disease which coincided with the Crusades. At the present day endemic leprosy is very circumscribed in Europe; it occurs in parts of Spain and Portugal, in Italy, on the Gulf of Genoa and the Adriatic, in Sicily (where it has been on the increase), in Greece, and especially in Crete; whilst it has died out in Roumania, Hungary, and Southern Russia, and has gradually decreased in Sweden, but prevails, as is well known, in Norway and in Iceland. Its distribution in other parts of the globe is too diffuse to summarise, but there is ample evidence that climatic and soil conditions are not the sole factors favouring it. The influence of a diet of fish, especially of putrid fish, which has been so staunchly maintained by Hutchinson, is discussed by Hirsch, who concludes that the theory is one-sided and untenable. The proofs in favour of a specific infective virus which have accumulated within the past ten years give all such speculations as to the operation of dietetic, hygienic, and climatic influences a subsidiary importance. The question of the contagiousness of leprosy is met by Hirsch with many facts showing how little there is to support it, whilst the transmission of an inherited predisposition is thoroughly established. That the disease can be acquired by Europeans who reside in leprous localities abroad is also established, and it is remarkable that a few cases have so arisen in "regions where leprosy as an endemic had been extinct for centuries." As with leprosy, so with syphilis; ancient writings afford evidence enough of its existence in the earliest times, but there is no question that about the end of the fifteenth century a great epidemic overran Europe. Some curious facts respecting

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immunity from syphilis are to be found in the section dealing with its present geographical distribution. Thus it is comparatively rare among the Hottentots, and the pure African negro seems quite exempt; whilst in Madagascar and the adjoining island, Ste. Marie, the Malagasys enjoy an immunity which is not shared by the Hovas. Syphilis, indeed, has been spread over the globe by the advance of colonisation, and there are regions where it has not yet penetrated. Yaws or frambœsia, at one time thought to be syphilitic, is a specific highly contagious disorder of strictly tropical distribution; allied to it is the button scurvy of the south of Ireland and the Peruvian wart (verruga). Endemic goitre and cretinism are very fully dealt with; but the result of Professor Hirsch's inquiries tends to weaken the prevalent notion that these diseases depend upon a special character of soil or the impregnation of water by magnesia; and after refuting the various theories proffered in this connexion, he inclines to the view that there must be a specific morbid poison at the root of these closely related conditions. We must be contented with a mere reference to the articles on Ergotism, Pellagra, and Acrodynia—an interesting group of toxic affections attributable to the consumption of diseased grain. "Endemic colic" is proved to be nothing else than lead colic. The various parasitic diseases receive full notice, and their geographical distribution, known to be so markedly defined, is admirably sketched. Particularly may be cited the articles upon Trichina spiralis, Anchylostoma duodenale, Filaria sanguinis hominis, and the Guinea-worm. Since the publication of this volume a great deal has been added to our knowledge of anchylostoma. Of the remaining articles those on Puerperal Fever abound in facts of its infective nature; but the question of the various morbid conditions undoubtedly grouped under this head is not considered. The articles on Scurvy and Beri-beri are also full of information, and of much interest. But, in truth, the whole work shows the master's hand; and we cannot be too grateful to the New Sydenham Society for presenting us with a translation of it, and especially for having assigned the labour of translation to so excellent a scholar as Dr. Creighton. Professor Hirsch's work is one of those which will be of permanent value, and one which no writer on medicine should fail to consult. It is thus of great advantage to have it rendered into English in so worthy a manner.

The Rotifera or Wheel Animalcules. By C. T. HUDSON, LL.D.Cantab., assisted by P. H. GOSSE, F.R.S. Parts I, and II. London: Longmans, Green, and Co.

A MANUAL of the Rotifera has long been a desideratum in our language, and we cannot suggest the names of any naturalists by whom an exhaustive description of this interesting group could be better given than by Messrs. Gosse and Hudson. Mr. Gosse's writings on this very subject date back, if we mistake not, some thirty years, and Mr. Hudson is well known to have devoted much attention to it. Part I. contains an introduction in which the anatomy of a typical species, the Brachionus rubens, is given, with numerous figures of the several parts of the body. The second chapter contains the history of the literature concerning the rotifera, from which it appears that the first vague description of a rotiferon was given by Mr. John Harris, the rector of Winchelsea, nearly 200 years ago. In 1703 Leeuwenhoek published an account of some animalcules in the Philosophical Transactions, which the authors of the present work consider can be identified with Limnias ceratophylli. Eichhorn, after whom one species, the Stephanoceros eichornii, has been named, published a little book in 1781, in which he gives figures and descriptions of about a dozen rotifera that can be identified. Since that time about twelve or fifteen observers have published essays of importance, and their results will, we have no doubt, be gathered up in the work before us. The third and fourth chapters deal with the classification and the haunts and habits of the rotifera. There are five plates, which are really beautifully executed. The figures are so large that there is no confusion in the outlines of the several organs and the parts are drawn with great precision. The genera—if that word is permissible—which are illustrated are the Floscularia, Stephanoceros, and Melicerta. Part II. of this charmingly got up book contains an account of the Floscullariadæ and of a part of the Melicertadæ. It is illustrated by seven double plates and one single one. The descriptions of the animals are distinct and clear, and the drawings leave nothing to be desired. We can recommend the work to all lovers of nature, and to any of the members of our profession who possess a microscope, and who can find time in the evening to examine the beautiful animals which a chance dip in a wayside pool may present to their notice.

Psychiatry. By T. MEYNERT. Translated by R. SACHS. Part I. New York and London: G. P. Putnam's Sons. 1885.

THIS is an American edition of Professor Meynert's Psychiatry, and will be welcomed by English readers who are unable to translate the German text. The translator acknowledges his shortcomings, but craves the indulgence of his readers. We must confess that he has not presented a readable book to the medical public, but we own that difficulties of translating a German work on the anatomy, physiology, and chemistry of the brain are great, though hardly insurmountable. The structure and architecture of the brain, the minute anatomy of the brain, anatomical corollaries and physiology of cerebral architecture, the nutrition of the brain, and an appendix on the mechanism of expression, are the chief headings of the work before us.

We cannot enter into a review of Meynert's anatomy, and must confine ourselves to a limited allowance of his physiology. "Sensitiveness is the only specific property of brain cells," we are told, and, viewed in the light of one's own interpretation, no doubt this statement may be regarded as true. Nerve cells are the most irritable and we suppose the most sensitive structures evolved from the primordial ovum, but they "discharge" energy in the manifestation of their only specific property. "In the fore-brain sensitiveness is converted into actual sensation." The meaning of this statement is not altogether clear. Actual sensation is no doubt impossible in the absence of the fore-brain—i.e., the cerebral cortex, It is not right to speak of unconscious sensations; we cannot have a sensation merely as the result of the action of sensory end organs, or the paths leading from and to centres situate below the cerebral cortex. When a frog deprived of his cerebral hemispheres survives, he does so by the aid of sensory impressions, which must not be regarded as sensations. Except for convenience of language, surely such a distinction of sensory impressions is not essential, and certainly not scientific. Viewed in the light of evolution, it is only those recently acquired functions that are perfectly conscious; repetition of functions leads to their unconscious performance. Consciousness is purely a question of degree. Are we sure that the brainless frog does not feel consciously the impressions that give rise to reflex actions? But the subject is endless. Meynert says that the volitional acts are nothing more than the perception or memory of the sensations of innervation. We cannot accept such a definition of a volitional act; nor are we certain that such acts differ much from so-called reflex actions. The deliberation that we presume must take place in the sensori-motor centres may be greater when volitional acts are concerned, but can we know whether a certain amount of deliberation does not occur in the simplest action?

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THE LANCET.

LONDON: SATURDAY, MARCH 27, 1886.

THE striking and impressive ceremonial of Wednesday last may at first sight appear to have been more than commensurate with either the magnitude or public importance of the work it inaugurated. A little consideration will, however, show that the occasion was one which was well worthy the gratifying recognition which it received at the hands of Royalty. The readiness with which Her Majesty the QUEEN consented, or rather, if report speak truly, expressly desired, to take part in the proceedings of the day, was doubtless in large measure due to the personal regard which our Sovereign and the members of her family entertain for those eminent and sagacious counsellors of whom the justly venerated President of the College of Physicians stands foremost. Her Majesty gave expression to this feeling in her own well-chosen language, and the members of our profession will receive with satisfaction her graceful allusion to the physician who has served his QUEEN and his profession so well.

Although such personal considerations may have had some influence in ensuring the presence of Royalty upon this occasion, the profession must feel that the honour was conferred upon it as a body as much as upon the two Colleges directly concerned. It was evidence of the keen interest which Her Majesty takes in the labours of medical men, as well as of her appreciation of all they are doing for the good of humanity. In the course of her long reign she has witnessed many improvements in the social and material condition of her people which have been due to the increased knowledge and practical application of the principles of medicine. The Victorian era will stand out in history as the period in which science made its greatest advances; and what is true of science in general is quite as true of medical science, whereby so much has been done to solve the problems of disease, to mitigate its ravages, and to check its spread. It has been the era of sanitation — of disease prevention even more than of its cure. Within a generation how great and incalculable have been the gains derived from the wider observance of the laws of public and personal hygiene! The men who have done so much to diffuse a knowledge of the laws of health constitute that profession whose office it is to minister to the sick, with the result that there are some diseases which have almost been banished from the nosology, whilst there are others which are in a fair way to extinction. The world at large is apt to forget how much has been added to the sum of human happiness by such methods as directly arise from the knowledge of the causes of disease and of the conditions that promote health; and we are disposed to fear that as a rule the medical profession receive but little gratitude for the share they have taken in this work. Therefore we gladly and gratefully acknowledge this expression of Her Majesty's goodwill, for the welfare of her subjects has ever been her concern, and her discrimination of the part played by medicine in promoting that welfare is just and discerning.

The ceremony of Wednesday had a further significance. It was concerned more directly with the cause of medical education in this country. It is well known how this has improved during the past decade, for every advance in medical science is reflected in the student's curriculum. The great licensing bodies have the responsibility of prescribing and regulating this curriculum. Upon them depend all changes which, by improving and widening it, raise the character of medical education, and proportionately strengthen the resources of the medical art. As regards the two Royal Colleges, they have hitherto been separated in this important work, kept apart doubtless by the traditions of ancient rivalry. We live in a more liberal age; and just as in its higher functions the College of Physicians has got rid of much of its exclusiveness, so in its more important duty of granting licences to practise the barriers between the Colleges have been swept away. The co-operation of the Colleges in this work has its outward and visible sign in the building in the Savoy, which in future will form the connecting link between Pall-mall and Lincoln's-inn-fields. The result of this union will act in a most salutary manner upon the course of medical study, and will probably have still wider issues. For it must have occurred to many who witnessed the great gathering of physicians and surgeons that the stone laid by Her Majesty was not merely the foundation of an Examination Hall, but was the first step towards the realisation of a real University for London. All the elements of a medical faculty which might form the nucleus of such a University were present; the two Colleges are engaged in considering how best to solve the problem of giving to London students facilities for taking medical degrees; and it seems but to need one slight advance in their natural evolution to supply this want. Since all the teaching bodies are represented in the Colleges, the assumption by the latter of a control over teaching more direct than the formulation of a code of examinations should not be difficult or unreasonable. We may well regard the Royal recognition of the work done by the Colleges in the cause of medical education hitherto as an encouragement to them to pursue their combined efforts to the benefit of the profession, and through it of the community at large.

As to the ceremony itself, it could not have passed off with greater success; and those who have done so much in assiduous preparation for it as the Presidents (Sir W. JENNER and Mr. SAVORY), Dr. BIRKETT, Dr. OGLE, Mr. WOOD, Mr. H. POWER, Sir H. PITMAN, Dr. DUCKWORTH (Chairman of the Building Committee), Mr. TRIMMER, and Mr. SALTER (the architect of the Examination Hall)—to name only a few—are much to be congratulated. To these must be added the name of Professor JOHN MARSHALL, whose influence in the College of Surgeons has had so much to do in bringing about the union of the two Royal Colleges. Everything aided in making it successful. The bright and balmy day of early spring was all that could be desired in point of weather. The vast gathering of medical men was thoroughly representative of every branch of the profession and of every department of the two Colleges. The warmth with which they greeted Her Majesty, the Heir-Apparent, and those other members of the Royal Family who graced the proceedings by their presence, testified to the manner in which the honour bestowed on the profession was appreciated.

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Her Majesty, who appeared in excellent health, performed the duties of the day with a genial cordiality which proved how thoroughly she entered into the spirit of the occasion, which was further shown in the reply she made to the address read by Mr. SAVORY. On behalf of the medical profession, we may echo the sentiments expressed by Her Majesty, and confidently trust that the undertaking commenced that day "may largely contribute to the further advancement of medical and surgical education." The day will be a memorable one in the annals of our profession, and it will be our own fault if the work so brilliantly inaugurated be not pursued to a great and worthy fulfilment.

ON the 16th inst. the Rivers Pollution Bill was rejected by the House of Commons, and the country has now simply to depend upon the legislation of 1876 as the only means for controlling the pollution of rivers and streams. This Act has been found to be altogether inadequate to prevent a growing nuisance and a growing danger to health. It was anticipated that it would control pollution by sewage and pollution resulting from manufacturing processes, but it may be said without exaggeration to have failed generally to prevent either the one or the other. This failure is due chiefly to the absence of any power to move local authorities, who can alone take proceedings under the Act. The local authorities upon whom this duty devolves are the sanitary authorities through whose districts or by whose districts a stream passes, and, as Sir CHARLES RUSSELL recently pointed out, it is these authorities who are themselves the chief offenders. To remedy this obvious defect, the Bill of this session proposed to confer on private individuals who were aggrieved by the pollution the right to institute proceedings at the cost of an authority which neglected themselves to take the initiative. This right is obviously so much open to abuse that it did not commend itself to the good sense of the House of Commons, but the fact remains that local sanitary authorities cannot be trusted to carry out the duty, and further machinery is required to prevent the Act from being a dead letter.

The real opposition to the Bill, however, probably came from those who feared interference with the manufacturing industries of the country. Under the Act of 1876 no authority can institute proceedings concerning pollution from manufacturing processes without the consent of the Local Government Board; but in the Bill of the present session it was proposed to confer the power upon any authority or person interested to take proceedings in a County Court without such consent. The Bill has now been rejected, but it is sure to make its appearance in a modified form during another session. There ought to be no difficulty in the way of amending it without injury to its usefulness, and so as to make it acceptable to a majority of the members of both legislative bodies; but it is perfectly obvious some course must be adopted which will neither leave the institution of proceedings in the hands of authorities who are indisposed to move, nor confer this right upon private individuals to protect their own interests at the public expense. There is indeed necessity for the creation of some other authority, upon whom should devolve the duty of investigating complaints and of taking proceedings where these are upon inquiry shown to be well founded. The existence of such an authority would render unnecessary the adoption by Parliament of definite standards of impurity, such as those incorporated in the Bill. Chemistry must doubtless play an important part in determining any decisions which are come to in any case under consideration; but it is at least open to doubt whether it is desirable for a standard to be incorporated in any Act which is based upon the estimation of the amount of carbon and nitrogen in any liquid. Mr. CHAMBERLAIN'S belief in local government leads him to argue that the main remedy is to be found in improved local bodies for dealing with this and other questions; but we fear it is doubtful if this much-desired change, even supposing it were brought about, would enable any effectual action to be taken. The pollution which results from the negligence of one of these bodies constitutes so great a danger to other districts that the subject can only be dealt with seriously when it is regarded as a matter of national rather than local concern.

The promoters of the Bill will evidently have sufficient work before them to create an interest in the question sufficient to overcome the opposition which they will meet. They have not lessened their difficulties by omitting to deal separately with pollution due to sewage and pollution caused by manufactures. The danger to health of these two conditions is different, and there is a likelihood that they will succeed earlier with the former than with the latter. Although they have met with a temporary defeat, their labours have not been altogether thrown away, and they will doubtless at a later date bring forward a measure which will deserve and meet with a better fate than that which attended the rejected Bill.

DR. ROBERT F. WEIR recently read a paper before the Medical Society of the State of New York, in which he related seven cases in which he had treated chronic effusions in the knee-joint by antiseptic irrigation. As Dr. WEIR is careful to point out, this treatment was introduced by SCHEDE in 1875, and since then has been practised by many surgeons, especially in Germany; but, judging from the teaching of English surgical text-books and periodical literature, it has not won its way in this country, and Dr. WEIR says the same for America. It may therefore be well to draw attention to this plan of treating an obstinate and serious affection. The cases for which it is suggested are those of subacute and chronic serous synovitis, which resist the usual methods of treatment — rest, counter-irritation, absorbents, and pressure. It is not proposed that all cases of synovitis should be treated in this manner, but that a careful selection should be made. The treatment consists in tapping the joint with a trocar about the size generally used for hydrocele, and then, when all the fluid has escaped through the tube, a quantity of carbolic acid solution (5 per cent.) is injected through the cannula, and allowed to flow out. This is repeated until the fluid returns from the joint quite clear and free from flakes, and then the cannula is withdrawn, and the puncture closed by a pledget of boric lint, over which an abundant antiseptic dressing is fixed. In performing this simple operation it is well not to admit air to the joint; this can usually be prevented by carefully adjusting the pressure of the hand; an antiseptic spray may be employed to play over the cannula

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as an additional safeguard. After the operation the limb should be fixed upon a back splint or in a plaster-of-Paris case. As a rule the pain and reaction afterwards are slight, and quickly subside, and all dressings can be removed in the second week, and the patient gradually bring his joint into use again. The synovial membrane can usually be felt to be markedly thickened, but the joint is otherwise sound. Dr. WEIR reports seven cases which he had treated in this way, and refers to thirty-two others which he has found recorded by other surgeons. VOLKMANN is stated to have treated hundreds of cases by this method, without a serious complication in any case. Such a sweeping and vague statement is, however, of little scientific value, and will certainly fail to recommend the method to judicious surgeons.

Putting aside such statements as this of VOLKMANN'S, the evidence before us certainly warrants a careful trial of this method in suitable cases. Our resources in such cases have not hitherto been great. Where rest, counter-irritation, compression, and the use of absorbents have all failed, three courses have been chiefly practised—aspiration, injection, and drainage. Aspiration is sometimes successful, but is by no means reliable; often it fails to remove the whole secretion, and, whether from this cause or not, reaccumulation of the fluid only too commonly follows. Injection of the joint with iodine—as for the radical cure of hydrocele—has long been advocated, but is not now largely used in this country; experience has shown that it is not free from risk, and that suppuration may ensue. Antiseptic drainage of the joint, on the other hand, has been attended with good results, but it must be regarded as a severe measure. Should the precautions taken fail in their aim, a violent suppurative inflammation may be lighted up, imperilling the joint, the limb, and the patient's life itself. Compared with it, antiseptic irrigation of the joint is certainly a milder measure, is attended with less danger, does not require such complete acquaintance with the details of aseptic surgery, and when successful restores the patient to activity in a much shorter time than antiseptic drainage. On many grounds it commends itself, and if further experience corroborates the opinions already expressed upon it we shall have acquired a very useful addition to our means of dealing with a very troublesome affection.

THERE is a distinction to be drawn between suicide *from* fear and suicide *for* fear. There is not probably any large proportion of cases in which self-murder is committed for fear of evil. The fear of detection in crime very seldom induces a wrong-doer to kill himself. The chances of concealment generally appear to outnumber those of discovery. When once suspicion threatens to ripen into conviction the outlook darkens and the probability of suicide increases, but still the blunted moral sense seeks refuge in hope, and few criminals incline to self-murder for fear of conviction. After they have been convicted, suicide instead of death by the hand of the executioner is a matter of sentiment, and the traditional belief or impression that self-murder will entail evil after death is generally sufficient to determine the condemned to die on the scaffold rather than by their own hands. Suicide for fear of ills less than the death-penalty are probably even fewer. There is generally as much courage latent in the mind [illegible] will enable a man to face adverse fortune, however formidable it may seem. The very aggressiveness of the evil rouses a spirit of opposition. As a rule, few men, and scarcely any women, are craven enough to seek death as a way of avoiding adversity, or even extreme poverty, if it be not disgraceful. The suicides of women, fearful of shame, are, with rare exceptions, the indirect effect of mind-weakening or prolonged agony from fear, rather than cases of self-murder prompted by fear acting directly.

This is the distinction we are desirous of drawing between the two forms of self-slaughter: on the one hand, suicide because the offender is afraid of something, and prefers death to it; on the other hand, suicide which is the result of demoralisation or depreciation of the strength of self-control by the accumulation and wearing pressure of a terror which is not so much a particular fear as a general fearfulness. Even those who are least well acquainted with the clinical characteristics of mental disease are aware that *suspicion* is one of the salient symptoms of those varieties of mind derangement which in their development produce suicidal or homicidal propensities. There is at first a vague feeling of being in peril of some sort, a sense of impending evil; then comes the idea of being too much noticed by others; presently the sufferer feels that he or she is watched; and at length there comes the horror of being pursued or haunted by physical, or it may be spiritual, beings. In its making this madness has fearfulness rather than fear for a principal factor; and in cases of suicide occurring without previous symptoms of insanity there is, generally speaking, an inordinately rapid and, as it were, premature development of the same terror which in ordinary and more typical cases of mental disease culminating in suicide or a suicidal tendency, undermines the judgment or overpowers the will more slowly. Suicide *from* fear is familiar enough. It is commonly preceded by secrecy or shyness, with a fitful, moody state of mind, and an aspect of distrust or concealment. There is not unfrequently a tendency to seek relief in religious exercises, in prayer, Bible-reading, or the services of a church or society, although the subject of this impending trouble is seldom more than a quiet member, with retiring manners and an almost preternatural docility. When a man or woman who has been at least moderately, perhaps somewhat excessively, demonstrative and self-assertive, suddenly becomes subdued, retiring, or even diffident; when there is a tendency to repeat the smaller actions of common life—such, e.g., as shutting doors and drawers, turning off gas-taps, and the like,—as though to make assurance doubly sure; when there are noticeable sly glances or an air of fearfulness,—that person, however rational and even exceptionally calm and forbearing may be the general demeanour, is in peril of passing into such a state of mind as may readily express itself in suicide. We often hear of resignation, and great sorrows bravely borne in secret; there is far more of danger in the practice of these virtues than in the loudest and most aggressive complainings. Because the destructive operation of persistent fearfulness is carried on in secret and elaborately disguised by the victim of its evil influence, cases of this suicidal tendency are too commonly overlooked, with the result that deaths by self-murder from fear are very numerous; although in the great majority of

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instances the morbid mental state is one which, if promptly and wisely treated, will prove susceptible of remedy. "Am I my brother's keeper?" is too conventional an expression of the prevailing sentiment in social life. If only there were more real friendliness in families and among men and women generally, there would be fewer suicides, not so much because the troubles of life would be relieved, as because that morbid sense of apprehension which does its most deadly work in secret would be checked in its development.

As practitioners of the art of healing, our duty is not limited to the feeling of pulses and the looking at tongues. If we would do our very utmost for those with whom we come in contact, it should be our aim to engender in the minds of our patients such a feeling of confidence in our honour and wisdom, that, without prying into their secret affairs, there may grow up in their minds a consciousness that there is always counsel and help to be had for the seeking. A mind struggling with the growing sense of fear will not always need to unbosom itself to secure relief. We all know how, in crossing a narrow plank bridge, the consciousness that there is a handrail will often give the pedestrian steadiness without the need to grip it. If he should require to grasp it, he knows it is there, and can find it. So is it with moral aid and guidance; the fact that it can be obtained when needed is in itself a source of strength and comfort, without actually confiding the trouble in words to a stranger. In this most terrible ordeal of *fear* the mind will often pass unscathed through the fire if only it can feel that there exists a trusty friend and protector at hand, and suicide from fear may thus be avoided. It is the noble and happy mission of the medical adviser—not the specialist, but the general practitioner—to minister thus lovingly to minds diseased, and there is no more worthy aim than to qualify oneself for the discharge of this most important function.

THE meeting of the Council of the Hospital Sunday Fund at the Mansion House on Tuesday was a very satisfactory one. It was called to consider certain suggestions by Dr. WAKLEY for increasing the public interest in the Fund and developing the collection to proportions more commensurate with the needs and merits of the hospitals of the metropolis. In the unavoidable absence of Dr. WAKLEY, these suggestions were introduced to the notice of the meeting by Mr. HENRY C. BURDETT. They are briefly as follows. 1. That a list of the wealthier workers and landowners in London who are non-resident be prepared in anticipation of Hospital Sunday. 2. That a week before the date of Hospital Sunday a letter by the Lord Mayor be sent to each of the non-residents. 3. That arrangements be made for a public meeting to be held in different parts of London on each day of the week preceding Hospital Sunday. 4. That the committee of every hospital in London shall be urged to prepare statements showing the work which it accomplishes: (*a*) for the whole of London; (*b*) for people outside of London; (*c*) especially for the inhabitants of the district in which it is situated; and that the hospitals in each district be asked to combine to canvass ministers of religion and the influential residents in the district, with a view to excite local as apart from metropolitan interest in the hospitals, to promote attendance at the public meetings and increased contributions to the Fund. 5. Two special supplements of THE LANCET will be published, one in the week preceding and another in the week following the collection, the first giving a description of the claims and needs of the hospitals, the second a record of special sermons on Hospital Sunday. 6. The hospitals or portions of hospitals might be usefully thrown open to the public under certain regulations, and an attempt might be made to induce the wealthy to visit these institutions, while special facilities might be afforded to the clergy to make themselves personally acquainted with the working and management of one or more of the hospitals.

The meeting of the Council was one of the largest and most representative which has been held. The suggestions, though not discussed in detail, were very cordially received, and in the end, on the motion of Sir SYDNEY WATERLOW, seconded by Sir EDMUND CURRIE, were referred for consideration to a Special Committee. This Committee was empowered to spend on its investigations not more than £150. It is the pride of the Council of the Hospital Sunday Fund to be very economical in its methods, and to spend all the money it gets, save something like 3 per cent., on the sick poor. Sir SYDNEY WATERLOW therefore was quite right in stipulating that the Committee should not exceed a certain limited amount without further appeal to the Council. But, obviously, statistical and clerical work and the holding of public meetings cannot be carried out without some outlay. This will be well justified if it brings a few more thousands into the coffers of the Fund. Sir EDMUND CURRIE in his speech showed that while the hospitals were very grateful for what was done, the amount raised was quite inadequate to the want, and that in some cases small contributions to the Fund were used as excuses for not giving proper annual subscriptions. Mr. BURDETT replied to the latter objection pretty effectually by showing that in places where Hospital Sunday was established subscriptions increased rather than diminished, and that the sermons of Hospital Sunday were a great means of diffusing knowledge of the work and claims of hospitals. The public will look forward to the work of the Committee with interest. There must be thousands of gentlemen who find their work and wealth in London who leave the town from Saturday to Monday, and so miss the powerful appeal which is made to the residents in London. Such gentlemen will not be ungrateful to the Lord Mayor for reminding them of the claims of those institutions, in which their servants and poorer neighbours find the highest medical and nursing skill, and their medical attendants the education which makes them so efficient in those emergencies of disease which arise even in the country.

A SPECIAL meeting of the Royal Medical and Chirurgical Society will be held on Tuesday, the 30th inst., at 8.30 P.M., when the subject of Supra-pubic Lithotomy will be discussed. Papers will be read by Mr. Barwell, Mr. Walter Rivington, and Mr. W. H. A. Jacobson, and an interesting debate may be anticipated.

NEXT May a Medical Congress under the auspices of the Scientific Athenæum of Valencia is to meet in that city for the "calm and dispassionate discussion" of Dr. Ferrán's anti-cholera inoculations, with the hope of arriving at an unbiased view on that much-debated subject.

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Annotations.

"Ne quid nimis."

SIR WILLIAM JENNER, BART., K.C.B.

AT the present time it may be interesting to briefly recall the circumstances which led to the appointment of Sir William Jenner as Physician to the Queen, and many of our readers will still remember the accident by which the talented and respected physician who, had he lived, would in all human probability have obtained the coveted post—we allude to the late Dr. Baly—lost his life. The late Dr. Parkes had been spoken of as the probable successor of Sir James Clark, but his failing health rendered such an appointment undesirable. Sir James had long had the intention of introducing Dr. Baly to Her Majesty, and of recommending him as successor to himself in the post of Physician in Ordinary to the Queen; and there is little doubt that this design would have been carried out had it not been for the accident resulting in Dr. Baly's death, which occurred on the South-Western Railway whilst he was travelling to Guildford to see a child suffering from diphtheria. The carriage in which Dr. Baly was seated, asleep, with his handkerchief over his face, was turned completely over; the door near him flew open, and he was tilted out, receiving in the fall injuries which killed him immediately. Although there were other passengers in the same compartment, they escaped with slight or no injury, and it was thought at the time that Dr. Baly came by his death owing to his being asleep when the accident occurred, and consequently unable to make any effort for his safety. It is a curious coincidence that the local practitioner under whose care the child at Guildford was had mentioned to its parents the names of three physicians, Dr. Baly, Dr. Jenner, and another whose name at this moment has escaped our memory, as being suitable to be summoned in consultation, Dr. Jenner going to see the little patient the next day, when he also identified the body of Dr. Baly. Some time afterwards Sir James Clark introduced Sir William to the Queen, and his appointment was soon gazetted as Physician in Ordinary to Her Majesty, of which onerous and responsible post he has now discharged the duties and enjoyed the honours for over twenty-five years. It is worthy of mention that Her Majesty has during her lifetime been under the care of only two physicians—Sir James Clark during, roughly speaking, the first forty years, and Sir William Jenner during the remainder. The Queen is, we understand, a model patient, and her confidence in her medical attendant, when once vouchsafed, is implicit. In this respect, as in many other aspects of her life, she affords an exemple which many of those over whom she reigns could follow with advantage. For five consecutive years Sir William Jenner has been President of the Royal College of Physicians, and although we believe that he will be invited to retain his office, we understand that he will decline to take upon himself the duties of this important position for another year. The interesting ceremony, of which we give a detailed account elsewhere, seems to be the climax of a life's work of no ordinary value to the profession which he so much adorns, and by the members of which he is so universally and deservedly respected. It is well known that it is mainly through Sir William's influence that the Colleges of Physicians and Surgeons have been brought to act in concert in building the new Examination Hall, and it is also certain that Her Majesty has consented to lay the foundation-stone of the building entirely through his mediation. To her appreciation of Sir William's successful care of her may be attributed her words of graceful praise, "The President of the Royal College of Physicians, with whom I have been long personally acquainted, and whose eminent abilities and far-seeing knowledge have justly placed him in the foremost rank of those who have benefited mankind."

THE GOVERNMENT COMMISSION ON HYDROPHOBIA.

WE have reason to believe that the eminent pathologists, Sir James Paget, Professor Burdon Sanderson, and Dr. Lauder Brunton, have, together with Sir H. Roscoe, who initiated the matter, consented to serve on the Commission to inquire into M. Pasteur's method of inoculation for hydrophobia; and that the Government intend to seek in addition the services of a few distinguished physicians, including Sir W. Jenner. As soon as the details are arranged the Commission are expected to proceed to Paris, personally to investigate M. Pasteur's proceedings and their results.

MILK ADULTERATION.

WE have lately drawn attention to a form of milk adulteration somewhat different from the time-honoured skimming and watering. The new offence consists in the addition to pure milk of the skim-milk obtained from the "cream separator." We commented, not for the first time, on the defective state of our law, which compels the public analyst to adopt as his standard of purity the poorest of cow's milk. There can be no doubt that genuine milk is sometimes found which contains as little as 11 per cent. of solids—viz., 2·5 per cent. of butter-fat and 8·5 per cent. of sugar, albuminoids, and ash. It is admitted by all that such milk is abnormally poor, and the selling of it a serious danger to the public health, and yet the public analyst is unable to stop its public sale, for the law most absurdly compels him in his certificate to state in figures the extent of the adulteration which has been practised, the quantity of water which has been added to, or the quantity of cream which has been removed from, the milk. If milk were a substance of constant composition, like sugar, this would be easy enough, for, thanks mainly to the labours of English analysts, the methods of analysis are now singularly accurate. But milk is a very variable mixture, and an analyst is therefore obliged to take as his standard of purity the very poorest milk he can find. Even then he is not quite safe, for it is asserted by many that milk may be drawn from a cow's udder which is even poorer than this standard. What the law ought to do is evidently to fix a limit of strength as regards fat and total solids, below which milk shall be deemed to be adulterated for the purposes of the Act. This would render the work easy and satisfactory, and would leave to the vendor no serious difficulty. We are glad to find from a report which has just reached us that this simple and satisfactory solution of the problem has already been attained by at least one enlightened board, which, however, is unfortunately in America, and not in England. It appears that in the State of Massachusetts an "inspector of milk" has long been a recognised official, but it was only at the commencement of the last official year that a new law gave him the power of attacking the evil efficiently. Mr. James F. Babcock, the present officer, is entitled the "Inspector of Milk and Vinegar," and his report for 1885, addressed to the Mayor and Board of Aldermen of the city of Boston, is an interesting and important document. Under the new law every carrier of milk must be licensed, and every vendor of milk in a "store, booth stand, or market-place" must be registered, the fee in each case being fifty cents. The inspector has power to enter and take samples of milk, butter, oleomargarine, and vinegar, and to lodge complaints, followed by legal proceedings when the law is deemed to have been violated. From April to December last 9853 inspections were made

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and 110 complaints lodged, of which only five were dismissed. Under this vigorous action the percentage of adulterated samples of milk sank from 38·60 in April and May to 16·19 in November and December, and it can hardly be doubted that a still further improvement will be effected. A well-furnished city laboratory has been provided, and the report describes in detail the apparatus it contains, its cost, and the methods of analysis employed. The latter will be interesting to many of our readers, and may be briefly described. In the preliminary examination the specific gravity is first determined by a Piles's hydrometer, correction being made for temperature by means of a table given in the text. The standard temperature is 15° C. (59° F.), but the standard specific gravity is not given. We presume further analysis would be required if it fell below 1·033. The approximate percentage of fat is also in every case estimated by means of Feser's lactoscope, in which four cubic centimetres of the milk are diluted with water in a glass cylinder until black lines on a vertical white glass rod in the centre are visible. Graduations on the outer glass then give the result. If these two preliminary tests give doubtful results a more complete analysis is made, pretty much in the usual way, the fat being removed by boiling petroleum "benzine"—spirit we presume—and the sugar by the polariscope. This system is of course imperfect, but it is calculated to give concordant and tolerably trustworthy results. The chief fault seems to be that the fat is not directly weighed, and that, as we understand, the total solids and the solids not fat are not carried to constant weight. The milk standard is, as we have before mentioned, fixed by law. Milk is considered adulterated unless it contains 13 per cent. of total solids—namely, 3·7 of fat and 9·3 solids not fat. This is a somewhat severe standard, and possibly in England 3 per cent. of fat and 9 per cent. of solids not fat would be high enough. But, on the other hand, there is force in Mr. Babcock's remark, with which we may conclude: "The public have a right to demand that the milk supplied to them shall be of good *average* quality; and it is asserted that the present standard in Massachusetts is precisely this, and no more."

THE USE OF ANÆSTHETICS.

WE have deemed it necessary from time to time to call the attention of our readers to the subject of anæsthetic agents as employed in surgical operations, and more especially to the dangers which attend upon the use of chloroform when employed alone. The frequent occurrence of a fatal result from this agent, as recorded in our columns, has rendered it necessary for us to draw attention to the matter and seriously put the question to our surgical brethren as to whether they are justified in using chloroform as an anæsthetic, seeing that a considerable risk is of necessity associated with it, however carefully it may be employed. This question assumes much greater seriousness when it is remembered that large experience and careful investigation have proved beyond a doubt that the use of other agents which produce insensibility to pain is not accompanied with so much risk as attends the employment of chloroform alone. If no other anæsthetic were obtainable, we should have to balance the good results against the evil and be content with the former; but this is not the case. Although there are some drawbacks to the use of ether, inasmuch as it is not so manageable as chloroform, and, in the case of persons liable to emphysematous or bronchitic attacks, is attended with inconvenience and some risk, yet for the majority of adult patients this agent may be employed with comparative safety. Then, again, extensive experience with the safe and effective anæsthetic composed of one part of alcohol, two parts of chloroform, and three parts of ether, has demonstrated that it is not only as powerful in producing insensibility to pain, but that it is in a great degree less dangerous than chloroform. This form of anæsthetic is now used largely, both in hospital and in private practice, and a fatal accident from its use has rarely been recorded, whereas the announcement of a death from the use of chloroform alone is a matter now of almost weekly occurrence. We think it our duty to state that a surgeon is not justified in recommending the employment of chloroform as an anæsthetic whilst he has it in his power to make use of agents which are capable of producing the same effect in annulling pain without anything like the danger which results from chloroform when used alone. It is only fair towards a patient who is ignorant in these matters, and who places his confidence in his medical adviser, that if he is to undergo a surgical operation those methods which are the least dangerous as well as the most efficient should be adopted. No surgeon would at the present day recommend a patient with aneurysm of the popliteal artery to undergo ligature of the femoral before trying the less dangerous method of pressure, and no surgeon would think of performing the formidable operation of lithotomy in a case where a stone could be crushed. In either of these cases he is guided in his conduct towards his patient by the knowledge of the fact that one operation is as effectual and much less perilous than the other. In like manner we conceive it to be the duty of a surgeon about to perform an operation to employ the form of anæsthetic which is proved by experience to be attended with the least amount of risk. Chloroform is by far the most dangerous agent to employ; as a rule it should be discarded except in particular instances, such as in operations on children who bear it well, or on old persons who are afflicted with pulmonary complaints, to whom the use of ether is decidedly objectionable.

THE CONTAMINATION OF BRITISH UNIFORMS.

A MEETING of workwomen engaged at the Army Clothing Depôt at Pimlico, held last week at Portcullis Hall, Westminster, revealed the fact that the sanitary precautions taken some years since have of late been entirely abandoned. Eight years ago we clearly demonstrated how uniforms made in the private dwellings of the workers were often brought in contact with small-pox and scarlet fever patients. The Secretary for War at that time, Mr. Hardy, acknowledged that of the three viewers who examined the clothing brought from outside one had contracted small-pox during the course of the previous five years. Another viewer and his daughter suffered from small-pox just before the five years in question (1872-77). In 1878, when our revelations on the subject were published, a great alteration was made in the management of the Army Clothing Depôt, which we were assured was based on the following principles:—A slight reduction in the rate of wages, so that the Government might with greater facility compete with private contractors, the latter being even more likely to neglect the necessary sanitary precautions. All out-door work was in principle to be abolished. No new hand should be allowed to take work home, and it would only be continued with respect to some soldiers' widows and others to whom the State was morally indebted and who had no better means of subsistence; there were but very few such cases, and these would gradually die out. Thus the uniforms would ultimately be entirely manufactured within the walls of the factory, where the workpeople would enjoy healthy quarters, ample ventilation, and where the cloth could not be brought into contact with persons suffering from infectious disease. These promises have, however, been wholly forgotten. The workwomen say that their wages have fallen so low that their patience and powers of endurance are exhausted. Questioned in the House of Commons, Mr. Woodhall replied that the

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average wages in 1884 amounted to 15*s.* 8*d.* per week, and in 1885 to 15*s.* 8½*d.* It seemed therefore as if there had been no reduction, and that is certainly the case so far as the amount of money paid is concerned; but the quantity of clothing made for this sum according to the present piece-work tariff is considerably in excess of what was formerly required. To earn this the women have to work long hours in the night. Overtime, however, is contrary to the stipulations of the Factory Act, and therefore the women take the work home. As a matter of form, it is said this is not allowed; as a matter of fact, it is the general custom. But for this, the average wages paid could never have been maintained at their former figure. About 500 women were present at the meeting in Portcullis Hall. They greeted with laughter the suggestion that they were not allowed to take work home. When those who were in the habit of taking work home from the factory were asked to hold up their hands, every hand was uplifted. Then, to make sure of the test, the workwomen who had not taken work home were called upon to hold up their hands, and not a single hand was raised. Hence it seems clear that the sanitary precautions deemed necessary and the Factory Act are both openly violated at the Army Clothing Depôt. Home work, with its attendant danger of infection, instead of being restricted to a few exceptional cases, is now, on the contrary, the universal practice. The Factory Act, stipulating that women shall work only ten hours, is flagrantly defied by their continuing at night, and in unhealthy, overcrowded homes, identically the same task which was begun during the day in the healthy and well-ordered State factory. How can we hope to suppress the sanitary defects and the illegal practices of the "sweater" in the East-end when in the West-end the managers of this model Government establishment contrive to evade the law? Economy may be a virtue, but it becomes the worst form of extravagance when it compromises public health. Nor is it fair to the public, who are anxious that those who work for the State should at least earn enough to afford means of living. We feel convinced that public opinion will support us in demanding that the Factory Act shall be duly observed, home work strictly suppressed, and the scale of prices so revised that the average of 15*s.* 8*d.* can be earned within the walls of the Government factory and within the working hours prescribed by the law.

LONDON DUST.

MR. MILLAR, the Vestry Clerk to St. George the Martyr, Southwark, has proposed to Sir Robert Rawlinson a comprehensive scheme for dealing with the dust and refuse of the metropolis. His suggestion is to reclaim the useless land from Tilbury to Southend by removing to it all the refuse of London. The Government for this purpose would have to engage wharves along the river which would be used as shoots by the various vestries and district boards, whence the dust would be conveyed to its destination by small tugs and barges. The cost of conveyance to Tilbury he proposes should be paid by a metropolitan rate, and the cost of reclaiming the land by the Government. Mr. Millar's scheme will certainly commend itself to those who regard this subject from the public health point of view, but it could not be carried out without interference with certain industries. Brickmakers would argue that the present system which is carried on in London dust-yards is necessary for the purpose of enabling them to manufacture bricks for the growth of London. Farmers have learnt to depend upon London road-sweepings and "soft core" for manure; and last, but not least, contractors have learnt to make sufficient profits out of London dust to make their influence felt by local authorities. But this industry is less remunerative than formerly, and as a result there is often a tendency on the part of the contractor to leave the dust in dust-bins rather than devote it to the uses we have indicated. Hence there has for some time been a growing feeling that some radical change was necessary in the method of dealing with the waste material of this large city. Efforts have been made by more than one métropolitan medical officer of health to bring to the notice of his sanitary authority the advantages of burning house refuse in some such manner as that practised in the north of England. Vestries have been taught continually that they must learn to think of dust-removal in its health rather than its economic relations. But the influence of the contractor and the force of custom have always stood in the way of any alteration of procedure. Mr. Millar's scheme will, we hope, revive the whole subject. Subject to regular removal from houses the money cost of dealing with refuse is an important consideration, and it is obvious that every effort would be made to utilise the material in some way that would make as much return as possible for the money expended in its collection. Mr. Millar calculates that the metropolis now pays £120,000 annually for this purpose. If his scheme be such as to cost no more than this, it is even then worthy of consideration, for the removal from houses would not then be dependent, as now, upon the requirements of the brickmaker or the farmer.

RUPTURE OF PREGNANT UTERUS; PORRO'S OPERATION; RECOVERY.

A COMMUNICATION by Professor Slawjansky to the Surgical Society of St. Petersburg, on a case in which he successfully performed Porro's operation for rupture of the gravid uterus, is published in the February number of the Paris *Annales de Gynécologie et d'Obstétrique*. Slawjansky states that he has collected 175 cases of the operation which was first practised by Porro at Pavia in 1876. It was performed by Dr. Prévot at Moscow in 1878, ten hours after rupture of the uterus, but the patient died the fifth day in consequence of hæmorrhage from the pedicle. C. E——, aged thirty-seven, within one week of full term, was knocked down by a tramcar while crossing one of the streets of Vassili-Ostroff. Considerable hæmorrhage ensued from the genitals, and the patient lost consciousness while being carried to her home. She was first seen in the clinique of the Imperial Academy of Medicine by Professor Slawjansky twenty-six hours after the accident. The patient was then quite conscious; skin pale; mucous membranes slightly cyanosed; ecchymoses on the inner side of the left eye and on the buttocks; abdomen very tender on pressure. Temperature 38·1° C.; pulse 138. Objective examination of the enlarged abdomen, conducted under chloroform, in consultation with Professor Bider, gave the following results: Immediately under the abdominal wall, and towards the left iliac fossa, could be felt the sutures in the fœtal head. Upwards and a little to the right the trunk of the fœtus and some of the ribs could be distinguished. The breech was above and a little to the right of the median line. On the right of the fœtus, over an extent equal to two hands' breadth, was experienced a sensation of decided resistance, but without defined outline. The fœtus was movable, heart sounds not audible. By vaginal examination the cervix could be felt with easily dilatable orifice admitting two fingers. Beyond the internal orifice the uterine wall was reached on the right side, and the edge of the placenta easily touched; but on the left the uterine wall could not be discovered, and, on practising bimanual touch, the fingers of the two hands could be approached until they were only separated by the abdominal wall. Penetrating more deeply and upwards, a fœtal foot could be felt, and, between it and the exploring fingers, the presence of the fœtal membranes. But nowhere could the edges of the uterine rupture be detected. All circumstances con-

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sidered, *traumatic rupture of the gravid uterus* was diagnosed, and the necessity recognised for immediate delivery. Exploratory laparotomy having been decided upon, three hours after the patient's admission Dr. Matveef administered chloroform. The temperature was then 38·6° C.; pulse 138; respiration 25. The operation was performed under the strictest antiseptic precautions, and Dr. Fisher was the principal assistant. Immediately over the fœtal head an incision of two centimetres was made into the abdominal wall, and one of two millimetres into the peritoneum, giving issue to a mixture of bloody serosity, meconium, and cheesy flocculi. The hairy scalp of the fœtal head could then be felt in the abdominal cavity, and the parietes and peritoneum were divided with scissors to the extent of twelve centimetres, the dead fœtus seized by the head and extracted gently.. On introducing the hand into the peritoneal cavity with a view to extract the placenta, this was found firmly adherent, apparently to the outer surface of the womb, and it was thought preferable to withdraw that organ through the abdominal wound. It then became evident that the uterus, torn from side to side in its upper third, was completely everted. The placenta and membranes were completely adherent throughout their whole extent. The internal orifice was not visible, being bridged over by the membranes. The womb had thus the appearance of a mushroom, round the top of which the Fallopian tubes proceeded to their insertion. An elastic ligature having been placed on the cervix, the placenta and membranes were detached; the mushroom-like shape of the everted uterus was then still more perceptible. The cervix was now more firmly secured with a second elastic ligature, and the uterus and appendages removed with the bistoury. The pedicle was divided into two, and each portion secured by separate elastic ligature. While performing careful peritoneal toilette, evidences of general peritonitis became manifest, with deep redness of the intestinal coils and a dull velvety appearance of their surface. The pedicle was fixed in the lower part of the wound, the ligatures projecting through it and its edges closed with nine deep silken sutures. Powdering its surface freely with iodoform, covering it with two layers of iodoform gauze, a thin layer of sublimated wadding, and a hypogastric bandage, constituted all the dressing. The operation lasted forty-five minutes. The patient was removed into an isolated room, and on waking said she felt better, and the pains had left her. The pedicle stump dried up rapidly and separated on the twenty-third day. The sutures were removed on the fourteenth day, with the exception of the two near and beneath the pedicle, which were removed on the twentieth day. On the fifth day copious diarrhœa set in and lasted four days. The maximum of temperature was 39·1° C., of pulse 126. From the third day after the operation the urine contained some albumen, and occasionally a considerable number of red and white globules. The nephritic affection disappeared on the twentieth day, and on the thirty-sixth the temperature was normal.

CHOLERA AND WATER.

IN an address delivered before the South Indian Branch of the British Medical Association, Surgeon-General Furnell draws attention to the relation which exists between the water-supply and the prevalence of cholera in India, and at the outset he declares that the remedy against the recurring epidemics of this disease lies in the hands of the authorities if they will but have the courage to use it—namely, to provide the people with an uncontaminated water. Speaking generally of Southern India, and more or less of the whole of the immense continent, it is said that every hamlet, village, and town has a water-supply open, and easily open, to the foulest contamination. Detailing the special means by which water is fouled by the inhabitants of our Eastern Empire, Dr. Furnell asks two questions—namely, first, have we any proof that water contaminated with cholera dejecta will spread cholera? and secondly, have we any proof that a people supplied with a pure and uncontaminated water supply escape cholera? Proceeding to give instances which in India supply an affirmative answer to the first question, and of the crucial evidence obtained as to it, he states that as regards the second question the evidence procurable is circumstantial only. Indeed, improvements in water-supply have so generally gone hand in hand with other sanitary reforms that it becomes, as a rule, next to impossible to eliminate all other conditions, and to declare that immunity from cholera is the result of one improvement only. But in reference to the town of Pondicherry, there does appear to be reason, according to Dr. Furnell, to attribute the singular immunity from cholera which that place has experienced, at a time when such neighbouring towns as Cuddalore were severely infected, essentially to an improved water; and it is added that in so far as such sanitary improvements as are involved in securing cleanliness are concerned, Pondicherry is no better off than Cuddalore. Indeed, taking into consideration all other reasons alleged for the difference in the behaviour of cholera in these two towns, Dr. Furnell arrives at the conclusion that the unique water-supply of Pondicherry, free as it is from sources of contamination, supplies the only explanation. The effect of the paper is to leave a strong impression of the need of the improvement of the water-supplies for the populations of India, and as such it will receive the support of all interested in the prevention of cholera, irrespective of their views as to the nature of the contagium to be dealt with.

THE CHEAP DINNER MOVEMENT.

THE movement for supplying wholesome food and dinners to the people at a cheap rate has received a further development from the able and interesting paper read by Captain Wolff on Thursday week last at the Parkes Museum of Hygiene. The audience, consisting of the Fellows and Members of the Sanitary Institute, and presided over by Dr. Richardson, listened with great interest to the essay, and carried out afterwards a very useful discussion. Captain Wolff, who has personally traversed the greater part of the metropolis in order to determine where the wants of the people are most pressing, displayed the results on what may be called a food map of the metropolis. In some of the quarters thus delineated it may truly be said that there is not only deficiency of provisions at a moderate cost, but that the means for the preparation of food of any kind in a wholesome form are completely absent. There are neither kitchens, nor fires, nor cooks. In the wildest parts of the world it would be possible to find better provision than here in the midst of civilisation; and how it can be expected that men under such conditions should live a law-abiding, civilised existence? If a man drinks beer he thinks beer, said Samuel Johnson; and equally true is it that, if a man is forced to feed as wolves feed, he will grow wolfish and out of the ordinary rules of human government, however wisely those rules may have been framed for the common good. The design now suggested proposes to meet the dangers and the difficulties incident and consequent on starved revolt by sensible prevention of danger. It asks for no charity which, as the chairman insisted, cannot be a permanent aid; but it opens to all thoughtful persons a mode of applying their time and their money in a way that shall yield a return for both, and confer a national service, which it were well to render while times are still peaceful and the masses loyal. The subject is not technically one which concerns the profession

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of medicine more than other professions or callings; yet we are glad to see that medicine is taking the lead in the practical working of it. If Dr. Richardson and those who are striving with him can but succeed in establishing half a dozen kitchens on a model scale, the success will, we seriously believe, be quickly assured. The movement would rapidly grow, and in a few months the metropolis, in every part of it, would have comfortable dining quarters at which the poorest would be fed wholesomely, rationally, and comfortably. A public kitchen and dining-room in rivalry to every public-house would be the grandest counterblast to public intemperance that was ever set up.

HYDROPHOBIA AND THE DOG REGULATIONS.

WE are glad to see that police notices have been extensively advertised to the effect that the order of Dec. 4th, 1885, which requires that all dogs while in the streets of the metropolis (within six miles from Charing-cross) not being led by some person are to be muzzled is still to remain in force. There can be no doubt that these regulations, and the consequent wholesale destruction of dangerous, ownerless, and useless curs have been successful in reducing the number of cases of rabies and hydrophobia. Indeed, if proof be needed, it is furnished by a return, moved for by Sir Richard Cross, and issued on Wednesday last, which shows that since the order for muzzling was put in force on Dec. 10th the decrease in the number of cases of rabies reported has been marked. In December last forty-six cases were reported, in January twenty-seven, and in February fourteen. The number of deaths from hydrophobia reported in the metropolitan district was twenty-six in 1885, and one in January, 1886. Considering this great increase in the usual annual number of cases, it is no wonder that we have been passing through what is generally called a "hydrophobia scare"; for once in a way, however, a "scare" has made its influence widely and, let us trust, permanently felt, and has so far had good results. It is to be hoped that when the present epidemic has died away and this terrible disease is again almost lost sight of by the public, the authorities will still continue to exercise some sort of control over wandering and ownerless dogs.

NEW FRENCH MILITARY SANATORIUM.

THE arrival at Toulon of a transport with two hundred invalids from Tonquin has caused no small sensation and alarm. The evidence collected shows that the cholera was not imported from Tonquin; and, indeed, there had been cases of cholera at Marseilles some ten months before the *Sarthe*, the incriminated vessel, reached the port of Toulon. Nevertheless an unpleasant impression prevails, and when it was announced that the sick men were to be located at the island of Porquerolles a perfect outcry was raised. The clamour was so loud that the Minister of Commerce, M. E. Lockroy, has been compelled to visit Marseilles, Toulon, and Porquerolles. The latter place is the largest of the Golden Islands, or Isles d'Hyères. It is situated six miles out at sea and nine miles from the well-known winter station of Hyères. As a healthy and beautiful spot nothing better could be desired. The island is divided into seven ranges of small hills, with innumerable nooks and sheltered corners where the sea air may be enjoyed without disturbance. The rich vegetation, the pine-trees, thyme, myrtle, and tamarisk, perfume the atmosphere with balsamic exhalations. For a sanatorium it would be difficult to find a better position, but for the fact that it is already used for a convalescent hospital for soldiers coming from Africa. There are also small local interests that might be injured by the presence of dangerous and contagious forms of disease imported from the colonies. The sanitary condition, it must be added, of the existing hospital is most unfavourable. It is a wretched old building, with no sanitary contrivances whatever, and very insufficient means of ventilation. Under all these circumstances it would be much wiser to select the neighbouring island of Portcros. As may be gathered from its name (a derivation of *port-creux*), it has a better harbour, and has the advantage of being further out at sea. Also there are barely fifty inhabitants in the island, and, like Porquerolles, it possesses rich balsamic vegetation with hills affording good shelter from the winds. Here tent or field ambulances could be established which would be far safer than the malodorous and old structure called the hospital of Porquerolles. We understand that M. Lockroy himself favours this solution of the difficulty, and trusts it will be acted upon without further loss of time. With so many beautiful sites and the exceptional climatic advantages of the Riviera, the French Government should be able to provide its soldiers with all that is needful for their restoration to health.

DOCKED FEES.

A CORRESPONDENT writes:—"The practice of giving sovereigns instead of guineas to medical men is one which, I think, is worthy of notice on account of the great destruction of good feeling which it occasions. Its origin is obscure; possibly it dates from the replacement of the guinea as a coin by the sovereign. The practice is almost confined (curiously enough) to the aristocracy and to those who, being perhaps distantly related to some member of that body, seek to emphasise the fact by the adoption of their defects—in the same way as parasites of Royalty have from time to time imitated the physical imperfections of a Sovereign—both, possibly, on the principle that 'imitation is the sincerest flattery.' I do not mean to say that this habit is universal among the aristocracy, many of whom discharge their debts not only with exactness, but with generosity. Now, after the authentic history of the two knights who fought about the colour of a shield, and found on looking at both sides of it that it was, after all, both gold and silver (the shield was, without any doubt whatever, in reality a guinea), I feel that no other method can be so conveniently adopted as that which led to the resumption of harmonious relations in the case above recorded. First, from the point of view of the "upper ten." The guinea is an obsolete coin; small change is a nuisance. What follows? To dock the fee and give a sovereign? Nay; if the airs of a grand seigneur are to be adopted, by all means give another sovereign, or at least gold. Now, the practice is *not* kept up from inadvertence; for it is not unfrequently the subject of animated discussion among members of the aristocracy themselves. From the point of view of the medical man, it means, first, pecuniarily (a consideration of the least importance on this occasion), a tax of 5 per cent., a loss on an income of 2000 guineas of £100. On each occasion on which a sovereign is tendered singly, it means that the good nature, forbearance, and good manners of the medical man are presumed upon. If a lump sum is paid in this manner, it means that the patient deliberately withholds part of his debt. Let each person in the habit of acting in this way think what he would say to a tax of 5 per cent. being levied on all his income by each private individual through whose hands it passed; what would he or she say to such a proceeding in the case of such a commonplace matter as the price of a horse or the payment of a bet? But this is the least part of the matter. The fee tendered by a patient is not *only* a payment. It should be rather the outward and visible sign of gratitude for benefits received, which can never be entirely paid for by money. There are many little kindnesses constantly rendered by us for which we neither ask, nor expect, nor would receive money payment; our only reward is the gratitude and friendly regard of our patient; and it is just this, the dew on the grass, the bloom on the

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grape, which is by this act necessarily destroyed. I will go further, and say that most of us would willingly provide the shilling rather than lose the sentiment. As concerns the conduct of our profession, I am far from hinting or advising that they should on all occasions call the attention of a patient to a 'docked fee,' but opportunities arise on which it is possible to correct erroneous ideas without giving offence or disturbing friendly relations. Such opportunities should not be missed for the want of a little moral courage; but medical men should remember that they owe it to their brethren to do what they can to prevent the establishment of wrong precedents, and be ready to give themselves a little trouble for the good of their profession."

FEMALE LABOUR IN COLLIERIES.

THE movement in favour of the abolition of female labour in collieries does not, it would seem, give general satisfaction among the class which will be chiefly affected by it. At a recent meeting near Wigan a considerable number of persons discussed the changes proposed and entered a protest against them. Among them were 100 pit girls in working dress. This is described as consisting of a closely-fitting black padded bonnet, blue flannel loose jacket with sleeves, dark-blue flannel trousers, dark-blue short skirt with rough apron, and clogs. The subject of female labour was considered at length by the speakers present, and the condition of the pit women reviewed in various aspects. Their muscular development and physique generally were said to be of a superior order, and the advantages of occupation in the open air favourably contrasted with the evils engendered by ill-ventilated workrooms. Domestic life, it was stated, did not suffer from the long daily absence of the women from their homes. On the contrary, this very fact gave an additional charm to household duties in the evening. The use of a modified masculine dress was considered to be decent in itself, and to be justified by necessity. The colliery work was admittedly hard, even harder than was usual or suitable for women, but the want of it would deprive thousands of women of their livelihood: and the agitation which aimed at this result was, the speakers believed, the work of interested trades unionists, and intended solely to increase the wages of pitmen. That this is a one-sided statement of the case is manifest, but it must also be admitted that the arguments used in support of it are not merely specious. It is not to be denied that occupation in the open air is good for women as well as men, and it is only to be expected that muscular strength should be the effect of hard work in such conditions on those who can stand it. The strain encountered in colliery work by women is, however, allowed, even by the advocates for their continued employment, to be unduly severe, and the attendant circumstances are certainly better avoided if possible. The dress cannot, indeed, be blamed as conspicuously indecent, but few persons would regard it as becoming or womanly. This is, no doubt, to some extent a matter of sentiment, and we have therefore no wish to magnify its importance in the face of direct advantages with regard to warmth and ease of movement. It is, however, only one of many circumstances in a masculine calling which must tend to obliterate the right and natural degree of character-distinction between the sexes, to the injury of home life. Women in the northern coal districts do not seem to feel the want of work at the pit mouth. There is no reason to suppose that their Lancashire sisters will ultimately suffer if deprived of it. At the same time it is only fair that custom and the state of trade should be considered by the authorities in making this change, and that the transference of the women's work to men should be a gradual process.

THE ISLINGTON MEDICAL SOCIETY: MULTIPLE PHLEBITIS.

AT the Islington Medical Society on Tuesday, Dr. Morison gave the details of an interesting case of multiple phlebitis, or, as he properly suggested, multiple thrombosis. The patient was a gentleman of temperate habits, with no history of ague or syphilis, gout, or other constitutional disease. There was no other permanent disease to be detected, though in the course of his illness, which extended over two years, he had two attacks of pleurisy. No post-mortem examination was allowed. The urine was of ordinary specific gravity, and free from albumen and sugar. The affection occurred in both legs and arms, and finally gave rise to striking varicosity of the veins of the abdomen. Two or three curious symptoms deserve special notice. One was a swelling of the uvula, with considerable oozing hæmorrhage from it. Another was deep melancholia, produced by the long and, as it proved, incurable persistence of the disease in spite of all sorts of remedies, which led to an almost suicidal refusal of food. Not the least striking feature of the case was the constantly subnormal temperature of the patient. Generally his temperature was 97°; but for two or three days before death Dr. Morison found it much lower. He was careful in his observations of this point. On Aug. 5th, 1882, the patient starving, it was 94°. On the 6th he took some food, and it rose to 96°. On the 7th the breath was cold, and the temperature in the rectum 91°; the intellect clear; pupils normal or slightly contracted: heart's action regular. On the 8th, at 8 P.M., death took place. The pulse, too, was slow (under 70), and there was but little tenderness in the affected veins. Such facts confirm the justice of the view that regards thrombosis as not a mere inflammatory affection of the veins, but rather a blood disease. Even when the patient had his attacks of pleurisy his temperature was only 100°. At the same meeting Dr. Stokes gave particulars of a case of scirrhus of the left chest in a girl of eighteen, which simulated pleurisy so closely that she was twice tapped, without much relief.

SURGICAL TREATMENT OF BRONCHIECTASIS.

THE valuable paper contributed by Dr. C. T. Williams and Mr. Rickman Godlee to the Royal Medical and Chirurgical Society provoked considerable discussion, and may be regarded as marking a decided step in advance in the surgical treatment of suppurative disease of the lung. From our report it will be seen that the following features were the main topics of discussion. All the speakers commented on the difficulty of diagnosing bronchiectasis, and special stress was laid by Drs. Goodhart, Barlow, and Coupland on the difficulty that offered when a bronchus was totally obstructed. Under these circumstances the absence of breath sound, loss of vocal fremitus, and almost absolute dulness gave a decided clinical resemblance to effusion into the pleura; and in most of the illustrative cases the diagnosis was only made at the post-mortem examination. Most speakers concurred in the difficulty of forming any positive conclusion as to the existence of pleural adhesions. The majority of those who joined in the discussion argued that the most favourable cases for operation were not those of simple bronchiectasis, but those in which there was added a fibrosis or chronic pneumonia around the bronchial dilatation. Indeed the authors of the paper considered that simple multiple bronchiectasis was not likely to be relieved by paracentesis. Other centres of interest were the question of danger from hæmorrhage and the best method of exploring to discover the site of the bronchial dilatation. Sir Andrew Clark believed that the reason why hæmorrhage was slight in operations in such cases was because fibrosis being generally present, the arteries were also sclerosed and their

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calibre diminished. The argument is perhaps supported by the freedom from hæmorrhage in some cases, but it might be urged that a sclerosed vessel would be more likely to remain patent, contraction of the middle coats being prevented. That danger may arise from hæmorrhage was testified to by Mr. Godlee and Mr. Gould, who also spoke on the value of an aspirator in the detection of the situation of cavities.

FOOTBALL.

IT is pleasant to have to chronicle under this heading some items less sombre than the usual ones of contusions, fractures, and deaths. The Rugby Union and the Football Association—who differ much, at least so far as the game of football is concerned—on Saturday last entered into praiseworthy combination in the cause of charity. During the afternoon representative matches were played at the Oval in the presence of the Prince of Wales and many thousand spectators. In the evening a smoking concert was held in the principal room of the Holborn Restaurant, a varied and capital entertainment being provided and enthusiastically received by a crowded audience. This "charity festival" will probably result in a substantial sum being left at the disposal of the promoters, who announced that the festival was to be held "on behalf of the London charities." This is comprehensive, if a little vague. We heard it rumoured, however, that the greater part of the sum raised was likely to go to King's College Hospital in response to the recent appeal. Be that as it may, we trust that the hospitals, which are very noticeable "London charities," and just now sadly in want of funds, will not be forgotten. We are glad to see that the president of the Football Association, Major Marindin, was at the recent general meeting of that body successful in passing the following new rule: "No player shall wear any kind of projection on the soles or heels of his boots, with the exception of flat leather bars, to be arranged in accordance with patterns approved by the committee." Any measure calculated to diminish the present painfully frequent occurrence of accidents must be warmly welcomed. It is interesting to note that the representatives of Guy's have this year been successful in both the Rugby Union and Association inter-hospital cups.

AMENDMENT OF SANITARY LAW.

THE Association of Public Sanitary Inspectors have issued a report emanating from their council, in which they plead for greater power, greater responsibility, and increased emoluments. They point out that the sanitary inspector should initiate proceedings on behalf of the local authority for the abatement of nuisances, and should not await the instructions of the authority for this purpose. As a matter of fact, in some districts this course is already adopted, and is found to work well; in others, where there is closer adherence to the formality of the law, a preliminary or informal notice is served by the inspector, and this, in cases where the first notice is disregarded, is followed by a legal notice signed by the clerk to the authority. This is perhaps the most satisfactory method of overcoming the difficulty created by the law requiring that the local authority should institute proceedings. Sanitary authorities rarely meet more often than once a fortnight or once a month, and it is distinctly prejudicial to the public health if no notices are served until after instructions have been given for this purpose by the authority to its officer. Under the Food and Drugs Act the authority appoints its officer to act as purchaser, and upon the purchaser devolves the duty of instituting proceedings where food or drugs submitted to the analyst are found to be adulterated. It was obviously not the intention of those who drafted the Act that the authority should interfere with the officer so long as he performed his duties faithfully, but in practice authorities often decide in every case whether offenders shall be prosecuted. We fear, therefore, that the Association of Public Sanitary Inspectors, even if the law put them in the same position as the purchaser under the Food and Drugs Act, would not be materially benefited by this change. Local authorities have it in their power, and frequently exercise that power, to deprive the sanitary inspector of all freedom of action, and would doubtless continue to do so were the law amended in the manner indicated; but if local authorities were improved, much good would come from an alteration in the position of sanitary inspectors. Another desirable modification of existing law is pointed out in the report: it is of frequent occurrence that when proceedings are instituted with regard to neglect to carry out an order of a local authority, either a nominal fine is inflicted or no punishment whatever is awarded. The report recommends that the minimum penalty should be specified in every Act, and that it should thus be rendered impossible for magistrates to permit offenders who have been convicted to escape without punishment. We are glad to see the sanitary inspectors showing in so marked a way a proper appreciation of the value of their work.

IMPORTANT DISCOVERY OF RARE METALS.

THE necessity for minute accuracy in chemical analysis has just been illustrated in an important discovery by Dr. Strohecker of Frankfort. Somewhat extensive diluvial deposits of brick clay exist at Hainstadt, near Seeligenstadt. The bricks made from this clay vary considerably in colour, according to the temperature at which they are burnt, but the cause of the variation has never before been suspected. It now appears that the layers of this clay are singularly rich in several metals hitherto very scarce, particularly cerium, glucinum, lanthanum, didymium, and yttrium. The first two of these metals are present in such quantities that a more abundant supply may be expected. Ceria, in the form of hydrate, constituted 9·4 and 13·4 per cent. of the clay in two layers analysed, and the colour of the bricks seems to be mainly determined by its presence, for the quantity of iron present was very small. The discovery is therefore of immediate value, and will doubtless lead to further researches on the elements, which may prove to have much more importance in the economy of nature than has been supposed. It is evident that we must not neglect these little-known elements, for, apart from their scientific interest, we cannot tell what undiscovered uses may lie in them. We do not know, indeed, whether they are really as scarce as has been supposed.

VEXATIOUS LITIGATION IN THE UNITED STATES.

A MEDICAL MAN in New York has been mulcted in the sum of 500 dollars for erroneously reporting a case of small-pox, and thus "starting the machinery" by which it was sent to the small-pox hospital; and two Philadelphia medical men have recently been successfully sued for damages by a patient whom they certified, negligently as it was asserted, to be insane, and so were the means of placing in confinement. Such facilities for vexatious litigation exist in the United States that, according to the *Medical News*, "there is much hesitation on the part of physicians to furnish a certificate of insanity, even in cases in which in their judgment it clearly exists. Some positively decline, while others do not act until the disease is so manifest that an average juryman may come to a conclusion. A procedure ostensibly intended to protect the sane may in its practical operation become the means of doing injustice to that class of the insane whose only hope of recovery is

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treatment in the early stage, and before decided changes and chronic conditions have become permanently established." An opinion is further expressed, which is as applicable to the existing state of things here as across the Atlantic, that some further legislation is required to protect medical men from vexatious litigation, or that the courts should clearly define and determine their rights, privileges, and exemption from responsibility.

GUSTAVE FLAUBERT.

THE publication by M. French Sheldon of an English version of Salammbô has once again opened the question of Flaubert's professional status. It has been assumed from internal evidence afforded both by this realistic work and by the fragments of the "Temptation of St. Anthony" that Flaubert was a medical man; but this common belief is, we are convinced, founded on a misconception. Both his father and brother were well-known surgeons—a circumstance which probably suggested the remark made by Sainte Beuve, in criticising the works of Gustave Flaubert, that the author handled his pen with as much facility as "the others" handled the scalpel. The father was for nearly thirty years one of the surgeons of the Hôtel Dieu at Rouen, and was the author of a well-known text-book on Surgery, besides several papers on the Treatment of Wounds. Gustave, who had a passionate admiration both for his father and his elder brother, commenced the study of medicine, and so acquired some knowledge both of anatomy and physiology; but he soon abandoned his scientific studies, and devoted his attention to literature and the production of those realistic works of art with which his name will always be associated.

THE ACADEMICAL COSTUME OF MEDICAL MEN.

IT may have occurred to many, as it undoubtedly occurred to some, of our readers who were present at the Royal ceremony on the Embankment on Wednesday last, that the occasions on which medical men appear in public in academical or any other characteristic costume are remarkably few. The clergy display their hoods every Sunday, and as a matter of fact are popularly held to be almost monopolists of academic distinction. We are not of those who attach very great importance to the setting of a good picture, but it certainly is possible that the throwing aside of all class and professional marks of distinction has the drawback that a profession which in fact, even more than in name, is emphatically a "learned" one, has ceased to command that respect in the eyes of the community at large to which it is unquestionably entitled.

TUBERCULOSA VERRUCOSA CUTIS.

THE well-known intractable inflammatory patches on the hands of those engaged in making examinations of dead bodies is attracting considerable attention at the present time. Dr. Wilks described them in 1862 under the name Verruca necrogenica, and attributed them to the constant irritation of the skin from the acridity of the morbid fluids of the dead body, but he did not notice any systemic infection. In France, where this condition is known as the "tubercule anatomique," some of the Hôpital St. Louis physicians, such as Besnier and Vidal, have long suspected their tubercular nature; and Tscherning, Merklen, Karg, and others have reported cases where subcutaneous nodosities developed up the arm with implication of the glands, followed by tubercular infiltration of the lungs. In the discussion of Verneuil's case it was related that Laennec carried one of these warty patches for some years, and eventually died of tuberculosis. In the last issue of the *Vierteljahreschrift für Dermatologie und Syphilis*, a number of cases of these patches are collected by Drs. Gustav Riehl and Richard Paltauf under the title of Tuberculosis verrucosa cutis. Some beautiful plates are appended showing their histological structure, resembling lupus, though more superficial and containing more numerous bacilli. It does not appear that any of Riehl's cases were followed by tuberculosis of the lungs.

"THE LAW AND THE LUNATIC."

THERE have been digests and commentaries without number called forth by the long-persisting agitation for reform of the Lunacy Laws; but a paper read before the Statistical and Social Inquiry Society of Ireland on Jan. 19th last, and since issued in the form of a pamphlet, seems to us to have the strongest claims on the attention of the profession and the Legislature. The *résumé* is admirably done, and the suggestion with a view to the provision of Observation hospitals, or, better still, Observation wards, in connexion with general hospitals, is on the same lines with the scheme we propounded in these columns in 1875-6, and which was submitted by our commissioner, Dr. Mortimer Granville, to the Select Committee of that date. We commend Dr. George Sigerson's *brochure*, "The Law and the Lunatic," to the attention of our readers.

AMENDMENT OF THE MEDICAL ACTS.

IT is still the intention of the Government to introduce a Bill to Amend the Medical Acts, in the sense of requiring full qualification in the three branches of the profession as a condition of registration; of giving direct representation to the profession, &c. It would of course be altogether premature to discuss the question now. But if Parliament survives the rocks ahead we may hope soon for the introduction of the Bill, and we shall then offer such criticisms on it as it may seem to require.

NEUROLOGICAL SOCIETY OF LONDON.

DR. HUGHLINGS JACKSON delivered, in the capacity of President of the new Society, an inaugural address at the National Hospital for the Paralysed and Epileptic on Wednesday last. The chief object of the address was to show the wide extent of neurology as it is to be studied by the Society. The address teems with most valuable suggestions in the various departments of neurology. A vote of thanks to the President for his address was proposed by Dr. Burdon Sanderson and seconded by Dr. Bristowe.

ARTIFICIAL COCAINE.

MERCK is said to have prepared cocaine by synthesis. Cocaine is benzoic methylecgonine. Benzoic ecgonine is treated with iodide of methyle in slight excess, in the presence of methylic alcohol at 100° C.; the excess of iodide and methylic alcohol is driven off by heat; from the resulting syrupy liquid cocaine is extracted. This artificial cocaine melts at 98° like its prototype, and it possesses all the reactions of the natural product.

ROUGH PITCHING IN LONDON STREETS.

IT is strange that, notwithstanding the improvements which have been effected in the paving of roadways generally throughout the metropolis, street-crossings and the little carriage-ways leading to private houses should have been almost uniformly neglected. In walking down the right side of Piccadilly from the circus—that was—to Hyde-park-corner, the pedestrian has to cross some thirty of these agonising bits of rough pitching, and if he happen to wear thin boots or to labour under the miserable disadvantage of tender feet he will not fail to execrate the perversity of the

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public or private authorities by whose neglect he is tortured. There surely need be no great difficulty in finding a remedy for this nuisance.

A MOST DISGRACEFUL HOAX.

A LETTER appeared in the *Daily Telegraph* of Thursday, from Mr. C. L. Todd, Secretary to St. George's Hospital, saying that a cheque for £1000, the receipt of which had been acknowledged in that paper on the previous day, had been returned unpaid, marked, "No account." We do not envy the practical joker whose sense of humour is gratified by such unfeeling and very foolish conduct.

ON the 18th inst. the death occurred, after a short illness from acute pneumonia, of Mr. John Fremlyn Streatfeild, F.R.C.S., senior surgeon to the Royal London Ophthalmic Hospital, ophthalmic surgeon to University College Hospital, and Professor of Clinical Ophthalmic Surgery in the College. Mr. Streatfeild received his professional education at the London Hospital, and became a member of the Royal College of Surgeons in 1852. He was employed during the Crimean War as an assistant-surgeon to the British Hospital at Smyrna; but on his return to England devoted himself entirely to ophthalmic surgery, in which he attained a considerable reputation. He obtained the Fellowship of the College of Surgeons in 1862, and made various contributions to the literature of his department of practice. We hope in an early number to give a more detailed account of his life and work.

WE are requested by the Registrar of the Royal College of Physicians to state that he desires to express his regret should any letters addressed to him on the subject of the ceremony which took place on the 24th inst. not have been answered, his excuse for such apparent want of courtesy being the great increase of correspondence which that ceremony occasioned.

AN election for a curator of the museums of the Royal College of Surgeons in Ireland was held on Thursday, the 18th inst., when the Council appointed Dr. Alexander Baillie McKee to the post, at a salary of £250 a year. Dr. McKee is a graduate in Arts and Medicine of the University of Dublin.

THE Dublin Hospitals Inquiry Commission, having completed the task of receiving evidence, has, we learn, commenced to prepare its report, which will probably be ready for presentation to Parliament in the course of three or four weeks.

PROFESSOR GERHARDT, of Berlin, has had the misfortune to break his arm through his foot slipping when getting out of a railway carriage at the Central Railway Station in Berlin.

MR. PETER C. LITTLE, F.R.C.S.I., died last week at his residence in Amiens-street, Dublin, after a lingering illness, aged fifty-three years.

NATIONAL HEALTH SOCIETY.—The success attending the comprehensive course of Health Lectures recently delivered at Bayswater by Dr. Schofield has encouraged the National Health Society to commence a similar course at the Town Hall, Kensington, to be inaugurated by H.R.H. Princess Christian on Wednesday, March 31st. The subjects of general health, causes of diseases, dress, food, and home nursing will be treated in turn. The Health Lectures will be followed by ambulance classes, in which practical instruction will be given in nursing, first aid in accidents, bandaging, and stretcher drill.

OPENING OF THE NEW MEDICAL EXAMINATION HALL BY THE QUEEN.

ON the 24th inst. the Queen gave evidence of the interest which she has ever taken in the progress in her realms of the medical profession—a profession on which the prosperity, as gauged by the health, of her subjects is so largely dependent, by attending in semi-state to lay the foundation-stone of the new building upon the Embankment, which the ancient Corporations of Physicians and Surgeons are erecting for the purpose of a conjoint Examination Hall. Encouraged by the bright and warm sunshine weather, in such glaring contrast to that experienced during the last few weeks by residents in the metropolis, spectators began to line the route of Her Majesty's progress at an early hour of the morning, although the ceremony was not arranged to take place until after noon.

The site of the proposed building lies within the precincts of the Savoy, and at this place the band of the Scots Guards were stationed and played at intervals whilst the guests were arriving, amongst whom were the Duke of Northumberland, Earl Spencer, the Lord Chancellor, Lord Granville, Sir Lyon Playfair, the Lord Mayor, the Deans of St. Paul and Westminster, Sir John Lubbock, and Canon Duckworth. The site was covered with a marquee, which was very handsomely and effectively decorated for the occasion. The Embankment front was lined out to the full extent of the frontage of the new building with Venetian masts bearing floating banners and tasteful trophies of flags, triplicate. The Royal entrance, which was at the eastern end of the marquee, was made charming with flowering plants and Indian tapestry artistically disposed; while above it was a flagstaff, from which, in due course, the Royal Standard was displayed. In the interior was a handsome arcade in crimson and gold, supported by columns clothed with ferns, which led to the Royal seat and the foundation-stone. Around this special scene of the ceremony a horseshoe-shaped enclosure, slightly rising in the rear, covered with crimson cloth, bore a number of chairs for the high officials of the two Colleges. Behind this enclosure the remaining area of the marquee was laid out as an amphitheatre rising in tiers of benches, each numbered, for the reception of the general visitors, and the interest shown in the ceremony was evidenced by the fact that by 11.30 almost every one of these seats was occupied. Soon after the arrival of the guard of honour, which consisted of a company of the 3rd Battalion of the Grenadier Guards, a company of the Medical Staff Corps, and a company of the Artists' Volunteer Corps, at noon the officials of the two Colleges arrived upon the scene in accordance with the programme given in our last issue. Shortly afterwards the Prince of Wales, the Duke of Cambridge, the Princess Louise, the Marquis of Lorne, the Duke of Abercorn, the Archbishop of Canterbury, the Prince and Princess Christian, and the Duke of Connaught arrived, and waited the arrival of the Queen. At 12.30 a burst of cheering from the crowd outside announced the approach of Her Majesty, who, attired as usual in black, was met at the entrance of the marquee by the Royal group, the Chancellor of the Exchequer, the Chancellor of the Duchy of Lancaster, and by the Presidents of the two Colleges. Sir William Jenner and his colleague, Mr. Savory, led the way to the dais, where Mr. Childers and Mr. Engleheart, the Clerk of the Council of the Duchy, were waiting to receive Her Majesty, and lead her to her chair of state. Directly this duty had been performed, and the cheering had subsided, the choir of the Chapel Royal, Savoy, sang the National Anthem, the assembly joining in unison with admirable effect. A prayer, taken chiefly from the prayers of Francis Lord Bacon, a circumstance which accounted for the quaint-

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ness of the language, was then offered by the Archbishop of Canterbury, and the choir afterwards intoned the Lord's Prayer and sang a hymn.

Mr. Savory, with Sir William Jenner standing by his side, then read the following joint address of the two Colleges:—

"We, the Royal College of Physicians of London and the Royal College of Surgeons of England, who owe our foundation to Royal favour, and to whom for many years the responsible duty of granting diplomas in Medicine and Surgery has by Royal Charter been entrusted, with a view to the further advancement of medical and surgical education, have recently combined for the purpose of establishing joint examinations in Medicine and Surgery and the science on which they are founded. We hope by this means not only to remove many of the existing difficulties in the way of students, but also to render the examinations more complete and satisfactory. And in order to promote the convenience and efficiency of this important step, we have undertaken to erect this hall, in which the examinations will be conducted, and which will be entirely devoted to that purpose. We cannot but regard it as a happy omen of the future success of this undertaking that your Majesty has been graciously pleased to inaugurate this good work by your Majesty's presence here to-day. And we desire to express to your Majesty our grateful sense of the distinction which has been thereby conferred on the two Colleges and the profession. In witness hereof we, your Majesty's loyal and dutiful subjects, have caused our common seals to be hereunto affixed this 24th day of March, 1886."

To this Her Majesty, in a clear but low voice, replied:—

"I thank you for your loyal address. It is with sincere pleasure that I lay the foundation-stone of the building which you propose to erect. I cordially concur in the hope which you have expressed, that this undertaking—in which I take a deep and personal interest—may largely contribute to the further advancement of medical and surgical education. The establishment of this hall is mainly due to the efforts you have made in conjunction with the President of the Royal College of Physicians, with whom I have been long personally acquainted, and whose eminent abilities and far-seeing knowledge have justly placed him in the foremost rank of those who have benefited mankind." (Great cheering).

Her Majesty then placed with her own hands a number of documents relating to the Colleges of Physicians and Surgeons, copies of THE LANCET, *The Times*, and *Morning Post*, and some coins and medals, in two glass jars, which were fitted into a cavity in the bed of the stone. An enamel photograph of Her Majesty, by Mr. A. L. Henderson, was, with her approval, also deposited in one of the jars. An elegant silver gilt trowel, appropriately inscribed, designed, and manufactured by Messrs. Hancock and Co., of New Bond-street, was then handed to Her Majesty by Mr. Stephen Salter, and the stone, which bore the following inscription, was lowered to its bed:—

VICTORIA,
Queen of Great Britain and Ireland,
Empress of India,
Laid with her own hand
This Stone.
24th March, 1886.

Her Majesty then gave the stone three taps with a black ebony mallet, which was handed to her for the purpose, and declared it well and truly laid, amid the loudest and most enthusiastic cheering.

The following gentlemen were then presented to Her Majesty by Sir William Jenner, Bart.:—The President of the Royal College of Surgeons, William Scovell Savory, Esq., M.B. Lond., F.R.C.S., F.R.S.; the Senior Vice-President of the Royal College of Physicians, Edmund Lloyd Birkett, Esq., M.D. Cant., F.R.C.P.; the Senior Vice-President of the Royal College of Surgeons, John Wood, Esq., F.R.C.S., F.R.S.; the Junior Vice-President of the Royal College of Physicians, John William Ogle, Esq., M.D. Oxon., F.R.C.P.; the Junior Vice-President of the Royal College of Surgeons, Henry Power, Esq., M.B. Lond., F.R.C.S.; the Treasurer of the Royal College of Physicians and Chairman of the Building Committee, Dyce Duckworth, Esq., M.D. Edin., F.R.C.P.; the Registrar of the Royal College of Physicians, Sir Henry A. Pitman, M.D. Cant., F.R.C.P.; the Architect of the Examination Hall, Stephen Salter, Esq., F.R.I.B.A.

The Archbishop of Canterbury then pronounced the benediction, and Sir W. Jenner having had the honour of kissing Her Majesty's hand, the Royal party retired.

Seldom, if ever, has her Majesty's appearance in public been more auspicious, and rarely has she performed a more gracious act, and one which we are sure will endear her more to the hearts of an appreciative people.

PASTEUR'S METHOD IN HYDROPHOBIA.

MANY of our readers are unacquainted with the method adopted by Pasteur for the prevention of the development of hydrophobia; to meet their requirements we publish the following information. If a piece of spinal cord from a rabid street dog be placed under the dura mater of a rabbit, by trephining, rabies will develop in the rabbit after an average period of incubation of about fifteen days. If the virus from this first rabbit be transmitted to a second, and from the second to a third, and so on by the same method of inoculation, it is soon found that the rabies becomes more and more pronounced, and the period of incubation becomes shorter and shorter. After the transmission through twenty or twenty-five rabbits the period of incubation is eight days, and at this point it remains for a fresh period of twenty-five transmissions. Then at the end of the fiftieth inoculation the incubation period is seven days. These results were found to be perfectly invariable, and the experiments begun in 1882 have been continued ever since. Consequently nothing is more easy than for the operator to have constantly by him during intervals of considerable duration a virus of rabies of perfect purity, and always perfectly identical, or as nearly so as possible. This is the practical point in the method. The spinal cords of these rabbits are "rabid" throughout their extent with a constant degree of virulence. If from one of these cords a certain length be removed with all proper antiseptic precautions and be suspended in dry air, the virulence slowly disappears in the spinal cord until it is extinguished. The time that elapses before extinction varies a little with the thickness of the pieces of cord, but more especially with the temperature of the environment. The lower the temperature, the longer is the virulence preserved. These facts constitute the scientific point in the method. It is interesting also to observe that if the rabid spinal cord be kept in carbonic acid gas in a moist state, its virulence is preserved, at least for many months, without any variation, provided it is kept free from foreign microbic alteration. These facts being understood, the following is the method of rendering a dog refractory to the development of rabies. In a series of flasks, in which the air is kept dry by means of fragments of potash deposited on the bottom of the vase, is suspended every day a portion of a rabid cord fresh from a rabbit dead of rabies—of rabies developed after seven days' period of incubation. Every day a syringeful of sterilised bouillon is injected under the skin of the dog—of bouillon which has been mixed with a small fragment of one of the spinal cords undergoing desiccation, a cord being commenced with which is not in a too virulent state, and therefore one which has been suspended a few days before being used. Previous experiments of course enable these details to be ascertained. The following days still more recent cords are used, separated by an interval of two days, until a time is reached when a very virulent cord is used—one that has been placed only a day or two in the flask of dry air. The dog is then completely protected. "You may then inoculate it with the most powerful virus,

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either under the skin or, by trephining, on the surface of the brain without its ever getting rabid." By the application of this method Pasteur was able to obtain fifty dogs of all ages and all varieties perfectly refractory to rabies, without a single failure, when unexpectedly there presented themselves at his laboratory on Monday, July 6th, 1885, three individuals from Alsace—Theodore Vone, Joseph Meister, and his mother. At Pasteur's invitation M. Vulpian and M. Grancher paid a visit to the boy Joseph Meister, on whom they found fourteen wounds that had been inflicted by a dog which was regarded as incontestably rabid. The life of Joseph Meister was despaired of, and so it was agreed that he should be made the subject of an experiment similar to those by which Pasteur's dogs were rendered refractory to the virus of rabies. On July 6th, at 8 P.M., sixty hours after the infliction of the bites by the rabid dog, in the presence of MM. Vulpian and Grancher, under a fold of skin of the right hypochondrium M. Pasteur inoculated half a syringeful (Pravaz) of bouillon containing a fragment of a spinal cord of a rabbit, dead on June 21st, and preserved in a flask of dry air, consequently a cord that had had its virulence diminished by fourteen days' subjection to the necessary influences. The following days fresh inoculations were made, always in the hypochondriac regions:—

July	7th, at	9 A.M.,	half a syringeful	of a cord kept	14 days
"	7th "	6 P.M.	"	" 12	"
"	8th "	9 A.M.	"	" 11	"
"	8th "	6 P.M.	"	" 9	"
"	9th "	11 A.M.	"	" 8	"
"	10th "	"	"	" 7	"
"	11th "	"	"	" 6	"
"	12th "	"	"	" 5	"
"	13th "	"	"	" 4	"
"	14th "	"	"	" 3	"
"	15th "	"	"	" 2	"
"	16th "	"	"	" 1	"

Corresponding experiments were made on rabbits by trephining so as to gauge accurately the degree of virulence of the cords used. It appeared that the cords used on July 6th, 7th, 8th, 9th and 10th were not virulent, for the rabbits inoculated with them remained free from rabies; but the cords of the 11th, 12th, 14th, 15th and 16th were all virulent and increasingly so, the rabies in the rabbits appearing after a period of seven days' incubation with the cords used on the 15th and 16th. When the condition of immunity is attained the virulent virus may be inoculated and in any quantity without any result.

MORTALITY AND VITAL STATISTICS OF THE UNITED STATES.

THE Census Office of the United States has recently issued the eleventh volume of the Report upon the Census of the United States in 1880. It is a quarto volume of nearly 800 pages, constituting Part I. of a special report on the Mortality and Vital Statistics of the United States in 1880, by Dr. John S. Billings. The United States "has no system of registration of vital statistics such as is relied upon by all other civilised nations," and in default of such a system attempts have been made at each of the last five national censuses to collect, through the agency of the enumerators, data with regard to the births and deaths that occurred during the year preceding the date of each census. Such attempts have been made in Ireland and in other countries prior to the establishment of civil registration. The result of such attempts has invariably been to prove the impossibility of collecting complete or trustworthy data by such a method. Dr. Billings freely admits that "the experience of the United States census furnishes no exception to this rule." It is acknowledged that the enumerators do not ascertain and record more than from 60 to 70 per cent. of the actual number of deaths. With such a preliminary admission as to the nature of the facts dealt with, it may well be doubted whether the elaboration of the bulky volume of tables under notice can be statistically justified. Dr. Billings' introductory remarks, however, which occupy nearly forty pages of the volume, call for notice, and are valuable for the results he has been able to deduce from these imperfect census data bearing upon the comparative healthiness of the United States, and the relative mortality from different forms of disease in different parts of the States. In the concluding paragraph of his introductory and explanatory remarks Dr. Billings says:—"As a general rule, it may be said that the figures given in these volumes are more valuable for suggesting inquiries than for answering them, yet the more I compare them with those of other countries the more I have become satisfied that they are valuable for both purposes if properly used."

The deaths recorded and tabulated for the year of observation preceding each of the last three censuses were equal to a death-rate of 12·54 per 1000 in 1860, 12·77 in 1870, and to 15·09 in 1880. This apparent increase in the death-rate in 1880 is attributed to the success of efforts made in the last census to obtain more complete returns of the deaths than had been the case at the two preceding enumerations.

In order to measure the extent of deficiency in the number of deaths returned by the enumerators at the last census, their returns for the State of Massachusetts (excluding the city of Boston), and for the whole State of New Jersey, were compared with the records furnished from the State registration offices, the total deficiency in which is considered not to exceed 2 per cent. The result of this comparison is to show that the deficiency in the enumerators' returns was 26·6 per cent. in Massachusetts (excluding Boston), and 36·5 per cent. in New Jersey. "The deficiency was greatest among the deaths of infants, of females, and of foreigners, and increases in a tolerably uniform ratio for each month of the year, going backward in time from the date of the census, and was greatest in the thinly settled sections of the country."

With a view to correct this important deficiency in the number of deaths reported by the enumerators, a register form was sent early in the census year (which ended on May 31st, 1880), with a stamped envelope for its return at the end of the year, to everyone in the United States who was reported by his or her postmaster to be a physician, or to be addressed as such. It was requested that the particulars of all deaths occurring during the year under observation within the knowledge of the medical practitioner might be entered in these registers before they were returned. The number of these registers sent out was 70,299, of which only 25,809, or 37 per cent., were returned. The registers' report returned to the census office contained records of 166,896 deaths, of which 61,020, or 36·6 per cent., were found not to have been reported by the enumerators. Even after the correction of the enumerators' returns for Massachusetts and New Jersey by the addition of the cases obtained from the physicians' registers, the new numbers, compared with the numbers furnished by the State registration offices, still showed a deficiency of 13·3 per cent. for Massachusetts, and of 20·1 per cent. for New Jersey. Dr. Billings assumes that after the addition of the deaths proved by the physicians' registers that came to hand to have been omitted, the returns of the enumerators were "still deficient as much as 30 per cent.," which is believed to be the maximum. The result of this rough estimate is stated to be to raise the average annual mortality for the whole country from 15·09, as shown by the uncorrected enumerators' returns, to 18·08 per 1000. It may be noted, however, that if the uncorrected rate (15·09) be raised by 30 per cent., the corrected rate would be 19·62. Dr. Billings on this point concludes that "it seems safe to assume that the death-rate was not less than 17 nor more than 19 per 1000 of the living population, and I shall assume the mean of these—viz., 18 per 1000—as the mortality rate of the United States during the census year."

The grounds upon which Dr. Billings concludes that the maximum deficiency of the corrected death returns is 30 per cent. should be referred to. The recorded mortality during the census year in thirty-one American cities in which the registration records of death is "presumed to be fairly accurate" gave a death-rate of 22·28 per 1000; and as the mortality of such cities is "usually between 4 and 5 per 1000 greater than the average mortality of a large country, including cities, towns, and rural districts," this is said to increase the probability that the rate in the whole of the United States is not far from 18 per 1000. This argument involves so much assumption that it is of doubtful value. Its validity mainly depends upon the accuracy of the presumption that the death records of these thirty-one cities are "fairly accurate." This may be doubted when it is considered that the death-rate of females in Cincinnati is stated

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to be 18·97, in St. Louis 18·23, in San Francisco 17·02, and in Newark 16·49. A further ground for the belief that the deficiency of recorded deaths in the United States did not exceed 30 per cent. is that the deaths of infants under one year in Massachusetts during the census year were equal to 17·05 per 100 births; "if this be taken," says Dr. Billings, "as the true average proportion for the United States, the deficiency in the number of deaths of children under one year would be a little over 34 per cent.," and as the deficiency at this age is known to be greater than at subsequent ages, it is assumed that the total deficiency cannot have been much more or less than 30 per cent., at which Dr. Billings places it. With reference to this line of argument, it is worth pointing out that the recorded facts for the United States show a rate of infant mortality of only 11·10 per cent. of the births, against the 17·05 shown in Massachusetts, and that the value of the comparison depends in great measure upon the approximate accuracy of the record of deaths of infants in the latter State.

Full consideration, therefore, of the various elements of doubt that envelop all the bases of facts upon which Dr. Billings has had to deal, and upon which he has attempted to construct trustworthy mortality statistics, makes it exceedingly difficult to accept his final conclusion that "it will be *seen* that the death-rate in the United States compares favourably with that of all other civilised countries." It may readily be admitted that "since poverty and overcrowding are the chief causes of excessive mortality, and in the United States there is a more general and equable distribution of the means of supporting life, including especially a food-supply of good quality, and more room than in European countries," the death-rate might be expected to be lower than in most of the countries of the old world. We cannot, however, accept Dr. Billings' figures and deductions as affording satisfactory evidence that the death-rate in the United States in the census for 1879–80 did not exceed 18·0 per 1000, although they abundantly prove that any conclusions based upon the recorded deaths, except in a very small section of the States, including mainly a certain number of registration cities, are entirely untrustworthy.

It is matter for international regret that in such essential departments of vital statistics as the registration of births and deaths the United States should be so far behind most other civilised countries. Until, however, some tolerably uniform system for such registration be adopted throughout the States, we much doubt whether, either from a public health or a statistical point of view, the comparison of American and European mortality statistics can yield any useful result.

IRISH MEDICAL SCHOOLS AND GRADUATES' ASSOCIATION.

THE ninth annual meeting of the above Association was held on the 17th inst. (St. Patrick's Day), at 49, Berners-street, the President, Dr. H. Macnaughton Jones, F.R.C.S.I., in the chair. There was a large attendance of members. The report, which extended over a period of less than eight months, was of a most satisfactory character. The number of members had increased since July 29th last—when the eighth annual meeting was held at Cardiff—from 272 to 355. Two members had died during that period—viz., Drs. F. Helen Prideaux and J. J. Jennett. There had been no resignations. The Council hoped that, their senior Vice-President, Dr. Balthazar Foster, being now an M.P., there would be no delay in getting power for the King and Queen's College of Physicians to register its membership and the Royal University of Ireland its degree of M.A.O. No steps had yet been taken to secure rooms for the Association in London, the Council thinking it better to wait till the numbers on the roll had reached at least 500. The balance in the hands of the treasurer was declared to be over £40. On the motion of Professor G. F. Yeo, M.D., Dr. Jones was re-elected President in consideration of his services in connexion with the reorganisation and rapid development of the Association, and also because of the curtailment by the new constitution of the period during which he had held office. Brigade Surgeon W. Alexander, M.D., and W. H. White were elected to the two vacancies on the Council. Dr. James Thompson was re-elected Hon. Treasurer.

The annual dinner took place the same evening at the Holborn Restaurant. Ninety-two members and their friends (the latter including several ladies) sat down. The chair was occupied by the President, who was supported by Sir Spencer Wells, Bart., F.R.S., Sir Joseph Fayrer, K.C.S.I. (Hon. Physician to the Queen), Professor Humphry, F.R.S. (Cambridge), and other guests of the Association. Among the members present were Sir William Mac Cormac (Vice-President), Professor Gerald F. Yeo (Chairman of Council), Brigade Surgeons T. Wright and W. Alexander, Staff Surgeon O'Sullivan, R.N., Dr. S. J. Flood, A.M.S., Dr. Carte (Coldstream Guards), Dr. James Thompson (Hon. Treasurer), and Drs. Daniell and Stewart (Hon. Secretaries).

WILLS OF MEDICAL MEN.

THE Irish Probate, sealed at Dublin, of the will and codicil or scheme of Barnewall Peter White, M.D., late of St. Columbs, co. Londonderry, who died on December 3rd last, granted to Mr. Michael King, one of the surviving executors, was resealed in London on the 2nd inst., the aggregate value of the personal estate in England and Ireland amounting to upwards of £31,000. The testator gives annuities to his wife and his two sisters charged on his Tamlaght estate, in the county of Londonderry; and there are a few other bequests. The Tamlaght estate he devises to the use of his half-brother, Richard White, for life, with remainder to his son, Thomas Earle White, for life, with remainder to his first born and other sons successively according to seniority in tail male. Certain plate, furniture, books, and effects are made heirlooms to go with the estate. His waterside estate in the city of Londonderry, he settles on his half-brother, Thomas White, for life, then on his son, and in default of a son on the said Thomas Earle White. He appoints as his residuary legatee the person who shall succeed to the Tamlaght estate. Should the remainders to the said estates fail, the testator gives them to the Superioress-General of the Sisters of Charity, Dublin, to found an asylum for the families of professional and commercial men, small proprietors and agriculturists afflicted with insanity, whose relatives have insufficient means to pay the usual pension for them in private asylums.

The will of Murdoch Kelburne King, M.D., late of Kingston-upon-Hull, who died on January 2nd last, was proved at the York District Registry on the 22nd ult. by Mrs. Mary King, the widow, the executrix, the value of the personal estate amounting to over £14,000. The testator bequeaths the marble bust of himself to his wife for life, and then to the General Infirmary, Hull; the oil painting of himself, in his mayor's robes, to his wife for life, and then to the Mayor, Aldermen and Burgesses of the Borough of Kingston-upon-Hull in their corporate capacity, and a few other legacies. The residue of his property he leaves as his wife shall appoint.

The will and codicil of Gavin Milroy, M.D., formerly of 30, Fitzroy-square, late of 21, Church-road, Richmond, Surrey, who died on January 11th last, were proved on January 23rd by Mr. Edward Hawes and George Blundell Longstaff, M.B., the executors, the value of the personal estate amounting to over £10,000. The testator bequeaths £1000 each to the National Refuges for Homeless and Destitute Children, and the Asylum for Idiots, Earlswood; £100 each to the British Medical Benevolent Fund and the Medical Missionary Society of Edinburgh; £1743, being the amount received by him in 1872 from the Colonial Office as remuneration for his tour to the West Indies, and a further sum from his estate to make up £2000 in all, to the President and Council of the Royal College of Physicians, to found and continue a yearly lectureship of three lectures on State Medicine and Public Hygiene; the silver cup presented to him by the College for acting as honorary secretary of the Leprosy Committee, and certain papers and books, to the said College; and many other legacies. The residue of his property he leaves to some nieces, the wife of a nephew, and the infant son of a deceased niece.

The will of Edward Christopher Holland, M.D., late of 15, Catherine-place, Bath, who died on January 5th last, was proved on the 10th inst. by Mrs. Anna Holland, the widow, and Mrs. Eliza Henrietta Hartnell, the daughter, the executrixes, the value of the personal estate exceeding

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£4000. The only legatees under the will are testator's wife and said daughter.

The will of Joseph Wyatt Crane, M.D., late of Leicester, who died on September 30th last, was proved at the Leicester District Registry on the 19th ult., by Charles Albert Crane, M.D., and Alfred Wyatt Crane, the sons, two of the surviving executors, the value of the personal estate being under £2000. The only legatees under the will are testator's children and his granddaughter, Ethel Crane.

The will and codicil of Frederic Gilder Julius, M.D., late of 4, Portland-terrace, Richmond, who died on January 4th last, were proved on the 8th ult. by Mr. Arthur Onslow Julius, the son, and Mr. William Adolphus Frederick Bateman, the executors, the value of the personal estate exceeding £6000. The testator gives legacies to his sons, the Ven. Archdeacon Julius and Arthur Onslow Julius, and to his daughters, Mrs. Annie Bateman and Miss Mary Caroline Julius; and the residue of his property to all his children in equal shares.

The will of John McGrigor Augustus Thomas Croft, M.D., M.R.C.P., late of 15, Abbey-road, St. John's Wood, who died on Jan. 1st last, was proved on the 22nd ult., by Mr. Harry Smith Styan and Mr. William Henry Biss, the executors, the value of the personal estate amounting to over £2000. The testator leaves all his property, real and personal, to his son, John Bonham Croft.

The following legacies have recently been left to hospitals and other medical institutions:—Mr. George Redford, of Portland-street, Southport, Lancashire, the residue of his real and personal estate to the Southport Infirmary, the Oldham Infirmary, and the Southport Convalescent Hospital, in equal shares.—Mr. William Beale, of Manor House, Stoke Newington, 100 guineas to the Stoke Newington Dispensary, and 50 guineas to the Invalid Asylum at Stoke Newington.—Mrs. Jemima Steuart Barclay, of 1, Gordon Villas, Snells-park, Edmonton, £200 each to the Tottenham Hospital, near High-cross, and the Tottenham and Edmonton General Dispensary, Lower Edmonton; and £100 each to the British Home for Incurables, Clapham, the City of London Hospital for Diseases of the Chest, Victoria-park, the National Hospital for the Paralysed and Epileptic, Queen's-square, Bloomsbury, and the Royal Hospital for Incurables, Putney-heath.—Miss Hannah Domager, of 11, St. James's-square, Bath, £200 each to the Bath Royal United Hospital and the Bath Mineral Water Hospital.—Miss Henrietta Hannah Bult, of 1, Houghton-place, Ampthill-square, £30 each to the Royal Hospital for Incurables, West-hill, Putney, the Royal Free Hospital, Gray's-inn-road, the North London Consumption Hospital, Hampstead, and the National Hospital for the Paralysed and Epileptic, Queen's-square, Bloomsbury.—Mr. James Dorman, of Sandwich, Kent, £100 towards the repairs of the chapel of St. Bartholomew's Hospital, Sandwich, and £15 to the Kent and Canterbury Hospital.—Mr. Richard Towne, of 8, Ormonde-terrace, Regent's-park, £1000 to the National Orthopædic Hospital, Bolsover-street; £300 to the Hospital for Incurables; £200 each to the Cancer Hospital, Brompton, the Hospital for Paralysed and Epileptic, Albert-road, Regent's-park, and the North London Consumption Hospital, Hampstead; and £100 to the Hospital for Sick Children.—Mr. Alexander Bell, of Park-hill, Upper Tooting, £50 to the Hospital for Paralysis and Epilepsy.—Mrs. Mary Gatley Litler, of Wallerscote, near Leamington, Warwickshire, £1000 each to the National Hospital for the Paralysed and Epileptic, Queen's-square, Bloomsbury, and the Royal Hospital for Incurables, West-hill, Putney-heath; £500 to the Warneford Hospital, Leamington; £300 to the British Home for Incurables, Clapham; and £200 to the Convalescent Home, Kenilworth.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 6004 births and 5101 deaths were registered during the week ending March 20th. The annual death-rate in these towns, which had steadily increased in the seven preceding weeks from 22·1 to 28·0, further rose last week to 29·3, and exceeded the rate recorded in these towns in any week since February, 1882. During the first eleven weeks of the current quarter the death-rate in these towns averaged 24·4 per 1000, and exceeded by 0·2 the mean rate in the corresponding periods of the ten years 1876–85. The lowest rates in these towns last week were 18·7 in Norwich, 20·9 in Leeds, 21·0 in Bristol, and 21·3 in Leicester. The rates in the other towns ranged upwards to 35·7 in Manchester, 36·0 in Liverpool, 39·2 in Bolton, and 39·6 in Blackburn. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 384, 403, and 430 in the previous three weeks, were 427 last week; they included 195 from whooping-cough, 103 from measles, 44 from diarrhœa, 32 from scarlet fever, 32 from "fever" (principally enteric), 20 from diphtheria, and 1 from small-pox. No death from any of these zymotic diseases was recorded last week in Sunderland, Norwich, or Huddersfield; whereas they caused the highest death-rates in Brighton, Portsmouth, Bolton, and Blackburn. Whooping-cough caused the highest death-rates in Bolton, Portsmouth, and Brighton; measles in Birmingham, Portsmouth, Bolton, and Blackburn; and scarlet fever in Leeds. The 20 deaths from diphtheria in the twenty-eight towns included 14 in London and 2 in Birmingham. Small-pox caused 1 death in Blackburn, and not one in London or in any of the twenty-six other large English towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had been 7 on each of the preceding two Saturdays, was again 7 at the end of last week; 2 new cases were admitted to these hospitals during the week, against 0 and 1 in the previous two weeks. The Highgate Small-pox Hospital contained 4 patients on Saturday last, one case having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had increased in the preceding eight weeks from 477 to 855, further rose last week to 917, and exceeded the corrected weekly average by 436. The causes of 137, or 2·7 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth and Derby; and the largest proportions of uncertified deaths were registered in Halifax, Plymouth Bolton, and Oldham.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had increased from 22·3 to 27·5 per 1000 in the preceding four weeks, further rose to 27·9 in the week ending March 20th, but was 1·4 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 17·8 and 19·4 in Leith and Dundee, to 33·0 in Paisley, 33·4 in Greenock, and 33·9 in Glasgow. The 690 deaths in the eight towns showed a further increase of 12 upon the numbers returned in recent weeks, and included 14 which were referred to whooping-cough, 11 to diarrhœa, 10 to measles, 6 to "fever" (typhus, enteric, or simple), 1 to diphtheria, and not one to small-pox; in all, 46 deaths resulted from these principal zymotic diseases, against 43 and 51 in the preceding two weeks. These 46 deaths were equal to an annual rate of 1·9 per 1000, which was 0·5 below the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 19 and 20 in the previous two weeks, declined last week to 14, of which 13 occurred in Glasgow. The 11 deaths attributed to diarrhœa corresponded with the number in the previous week, and included 4 in Glasgow and 3 in Edinburgh. The 10 deaths from measles showed a further increase upon the numbers in recent weeks, and included 8 in Edinburgh and 2 in Leith. The deaths referred to "fever," which had been 7 and 4 in the previous two weeks, were 6 last week, of which 2 occurred in Glasgow and 2 in Greenock. Three of the 4 fatal cases of scarlet fever were returned in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had steadily increased in the preceding six weeks from 135 to 191, further rose last week to 204, and exceeded the number in the corresponding week of last year by no fewer than 80. The causes of 85, or more than 12 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 30·1 and 38·3 per 1000 in the preceding two weeks, further rose to 40·5 in the week ending March 20th. During the first eleven weeks of the current quarter the death-rate in the city averaged no less than 33·4 per

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1000; the mean rate during the same period did not exceed 24·9 in London and 19·6 in Edinburgh. The 274 deaths in Dublin last week showed a further increase of 15 upon the number returned in the previous week, and included 13 which were referred to the principal zymotic diseases, against 15 and 19 in the previous two weeks; 6 resulted from whooping-cough, 6 from "fever" 1 from diarrhœa, and not one either from small-pox, measles, scarlet fever, or diphtheria. These 13 deaths were equal to an annual rate of 1·9 per 1000; the rates from the same diseases being 2·7 in London and 2·9 in Edinburgh. The fatal cases of whooping-cough, which had been 18, 10, and 11 in the preceding three weeks, further declined last week to 6. The 6 deaths referred to "fever," on the other hand, corresponded with the number in the previous week. Eight inquest cases and 6 deaths from violence were registered; and 84, or considerably more than a quarter of the deaths, were recorded in public institutions. The deaths of infants and of elderly persons showed a further increase upon recent weekly numbers. The causes of 45, or 16 per cent., of the deaths registered during the week were not certified.

Correspondence.

"Audi alteram partem."

CYCLIC ALBUMINURIA.

To the Editor of THE LANCET.

SIR,—I consider Dr. Saundby does not render himself justice in saying that no one has remembered his communication on albuminuria published in the *British Medical Journal* in June, 1880. I for one am familiar with what he has written, and even referred to it only a few weeks ago. The observations to which he has directed attention are almost identical in nature with some I conducted on two cases of Bright's disease eighteen years previously. They were brought forward in my Gulstonian Lectures delivered in 1862 and published in THE LANCET for 1863 (vol. i., p. 575).

Dr. Saundby contends that I am wrong if I assert that the diurnal variation to which I have drawn attention is absent in Bright's disease and present only in my cases, and he speaks of my having classified the cases as "cyclic" on the ground that the maximum amount of albumen of the twenty-four hours is found during the after-breakfast period. This is not, however, a correct way of putting it. The term "maximum" is out of place. What is observed is the presence of albumen for a certain period only, the urine during the remainder of the twenty-four hours being entirely free from albumen, instead of, as in ordinary Bright's disease, albumen being continuously present. This constitutes an important difference. I am quite prepared to consider that in Bright's disease there may be causes, apart from the renal conditions, to determine a fluctuation in the amount of albumen; indeed, in the lectures to which I have referred I expressed the opinion that it might be increased by food. Curiously enough, Dr. Saundby's table, if read by the amount of albumen voided per hour, stands in a striking manner diametrically opposed to what he has argued for. It is true that the percentage of albumen in the urine passed between 5 A.M. and 1 P.M. is higher than at other periods, but with this the urine is relatively considerably less in amount; and if the calculation be made so as to represent the amount of albumen eliminated per hour, it comes out in a marked manner less than at any other time, and otherwise the quantities present an irregularly fluctuating character.

I am, Sir, your obedient servant,

Grosvenor-street, March 24th, 1886. F. W. PAVY.

TREATMENT OF CHRONIC INVERSION OF THE UTERUS.

To the Editor of THE LANCET.

SIR,—Dr. Neale's letter in THE LANCET of March 13th is calculated to lead to a misconception of the point for which I contend—namely, that, as far as I yet know, I am the first person to have practised the operation for dividing the cervix uteri to facilitate reduction of chronic inversion of the uterus. In reply to this claim Dr. Neale again quotes Dr. Pratt as writing in March, 1868: "This mode of treatment is not new, although not mentioned by Murphy, &c..... but Dr. Wasseige of Liege says that it is the only legitimate, as it is the most effective, plan." "This," Dr. Neale says, "I think proves that the operation must have had an established reputation abroad before 1868, the date of Dr. Barnes' first operation."

This inference of Dr. Neale's is a glaring *non sequitur*. To help to clear up the question I wrote to Dr. Wasseige, asking him if he had ever performed this operation. The distinguished rector of the University of Liège refers me to his "Opérations Obstétricales," p. 429, for the following: "Lorsqu'on ne peut réduire par les moyens indiqués plus haut, et que le col est rétracté, le Docteur Aran a proposé le débridement multiple du col. Cette opération n'offre pas de grands dangers, et peut donner de bons résultats." The Professor in his letter to me (dated March 17th, 1886) goes on to say: "Pour mon compte je n'ai aucune expérience personelle; je n'ai jamais vu qu'un seul cas d'inversion ancienne, et *cela à une époque où l'on ne tentait aucune opération sérieuse, c'est-à-dire en 1862 ou 1863.*"

From this it will be seen that Dr. Wasseige cannot be held to have referred to the operation as one that had been practised. I myself quoted Aran, and pointed out that he did not describe the operation as having been done by himself or by anyone else.

If Gibbon's aphorism, "He alone discovers who proves," be true, Dr. Arbuckle was not wrong in describing the proceeding as "Barnes' operation."

I am sure Dr. Neale will now "digest" my claim to have been the first to demonstrate by practice the value of the proposal to facilitate reduction of chronic inversion of the uterus by incision of the constricting neck in aid of sustained elastic pressure.

P.S.—The recent news of the sad death of Professor Courty caused me to examine his work on the Diseases of the Uterus published in 1872. The lamented author describes the operation of incising the neck of the uterus as a means of enabling rapid reduction to be made by taxis. He calls it his method, and says he has practised it with success, the subject soon becoming pregnant. He does not specify the date of his case. Possibly it was earlier than my first case in 1868. But his account clearly proves that it was not in 1872 even one of established reputation. He does not refer to my memoir of 1868. And his proceeding differs from mine in that he makes incision the preliminary to forcible taxis, whereas I make it preliminary to sustained elastic pressure.

I am, Sir, yours truly,

March 20th, 1886. ROBERT BARNES.

MANCHESTER.

(*From our own Correspondent.*)

SMALL-POX AND SCARLATINA.

THE neighbouring township of Hyde is passing through a smart outbreak of small-pox, and finds itself sadly wanting in the necessary accommodation for isolating the sufferers. Fortunately for the town, most of the patients have been received into the fever hospitals at Stockport and Monsall, though the latter institution is situate some eight or nine miles from the homes of the patients. It is by no means satisfactory that Manchester, which is at present free from this disease, should thus have brought within its boundaries a number of cases simply because of the neglect of other health authorities to make proper provision for themselves. In the adjoining township of Crumpsall quite an epidemic of scarlatina has lately prevailed. The Local Board of this district, after communicating with the Local Government Board, have decided to pay a fee of 2*s.* 6*d.* for certificates furnished by medical men of the existence of infectious disease, though apparently no steps are to be taken to render the furnishing of these compulsory.

ASSOCIATESHIP OF OWENS COLLEGE.

A very interesting report upon the Associateship of Owens College has lately been published by the principal. He traces its history from the foundation in 1859 to the present time, during which period this distinction has been conferred upon 250 students. The changes which have been made in the regulations for its attainment have been uniformly in the direction of increased stringency, notwithstanding which

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the numbers have been in much greater proportion during the past few years, no less than eighty having been elected during the past three years. At present the necessary qualifications are three years' *bonâ-fide* study in the College, and the obtaining either a university degree or the membership of the Royal College of Physicians or fellowship of the Royal College of Surgeons. Of the associates elected in the last three years, forty-one out of the eighty were graduates in arts, thus equalling the number of associates in medicine and science added together, showing that equal activity is displayed in the faculty of arts as of science.

VOLUNTEER WORK.

A meeting of medical men and students interested in the work of the Volunteers, presided over by Professor Lund, was held last week at Owens College to hear an address by Surgeon-Major Evatt on the desirability of forming a medical staff corps for the district on the lines carried out in the metropolis. Some of the officers and surgeons of the corps present were apprehensive that the connexion of the present regimental surgeons with their respective regiments would be interfered with, and as many of these have at the expense of much time and labour given ambulance courses to selected numbers of privates, this fear was allayed by Dr. Evatt pointing out that the status of Volunteer medical officers would in nowise be interfered with.

HORSEFLESH AS HUMAN FOOD.

Periodically we are made uneasy by rumours, or rather insinuations, that the sale of horseflesh as butcher's meat prevails very widely in the city and suburbs, especially amongst the poorer classes. Last year an official inquiry was held at the Town Hall, and at a recent meeting of the Executive Committee of the Manchester and Salford Butchers' Association the matter was again under discussion, though no very strong evidence appears to have been forthcoming as to the truth of the allegations. Surely if the butchers themselves know of such practices, it should not be difficult to put the proper officials on the track of the offenders and bring them to punishment. It is contemplated by the Association to decide upon some definite line of action in conjunction with similar bodies in other parts of the country. There can be no doubt that if horseflesh is sold as beef, it must be horseflesh of a very inferior quality.

HOSPITAL SATURDAY AND SUNDAY.

The Hospital Saturday and Sunday Fund has now reached a total of £7160, and it is not probable that much will be added to this sum. Possibly the fact that adjoining towns and districts have funds of their own may be one cause of the diminution this year, for at the annual meeting of the Bolton Infirmary it was stated that the Hospital Saturday and Sunday contributions had increased this year to £1230, against £1061 for the previous year.

Manchester, March 22nd.

LIVERPOOL.

(From our own Correspondent.)

THE RECENT SEVERE WEATHER AND THE HIGH DEATH-RATE.

THE recent severe weather has, as might have been expected, had its influence on the death-rate, especially of the young and aged. At the last meeting of the Health Committee the medical officer of health reported that the death-rate was equal to 29·5 per 1000 of the estimated population. The deaths of children below five years of age number 113, and of persons above sixty, 67. There were 115 deaths returned as due to diseases of the lungs. In the City Hospital for Infectious Diseases there were fifty-five patients, eleven having been admitted during the week; nine were discharged convalescent, and two cases of small-pox, both unvaccinated, died. In the Liverpool Workhouse there were during the week ending the 11th inst., a total of fifty-six deaths, eleven from bronchitis, and thirteen from phthisis.

INTERMENT IN CITY CHURCHYARDS.

Some of our intra-mural churchyards are still open to interment permissively, it being required that, if a grave is to be opened, there shall be sufficient depth to allow of five feet of earth being left above the coffin which it is proposed to inter. In a recent case this was not so, the last deposited coffin being too near the surface to permit of the above very wholesome requirement being ensured. The sexton had opened the grave without the permission of the medical officer of health, who, on hearing of the proposed burial, promptly interfered and stopped it.

THE LOCK HOSPITAL.

There is at present in Dr. Bernard's male ward an interesting case of skin affection which was admitted a month ago. The whole surface of the body, with the exception of the face and the soles of the feet, was covered by an extensive desquamation. The diagnosis was a matter of some difficulty. The history of the case pointed to a syphilitic origin, but the appearance of the scales, which in some situations were very large and of silvery whiteness, afforded strong presumption that a part of the eruption was of the simple kind. The scales in some parts were fully six inches in diameter, especially those found on the extensor surface of the knee and elbow. On the legs and dorsum of the feet copper-coloured papules were noticed. The palms of the hands presented scaling appearances which were absent on the plantar surface. The conclusion arrived at was that the case was of a mixed variety, which was justified by the treatment adopted. This consisted in applying to the surface a mixture of olive oil and oil of cade, together with mercurial vapour baths. The patient's condition has greatly improved, the desquamation has disappeared, and the eruption is satisfactorily waning.

THE DEPRESSION OF TRADE AND OVERCROWDING.

The prevailing depression of trade is evidenced by the largely increasing practice of subletting houses. Large numbers of families, formerly able to rent small houses, are now reduced to taking rooms in houses let off in tenements. Upwards of 19,000 sublet houses (exclusive of common lodging-houses) are now on the register, and incessant care is exercised by the sanitary staff to minimise the evils of the tendency to overcrowd, and at the same time to avoid harassing the poorer classes by a too strict carrying out of the letter of the law. Yet, with every leaning towards leniency, it becomes necessary to issue summons notices against some forty or fifty tenants in chief every week for permitting excessive overcrowding in their houses.

CHARITY ORGANISATION IN LIVERPOOL.

An old and valued charity, the Central Relief Society, was some years ago reconstructed as the Central Relief and Charitable Organisation Society. By its means a large number of the unemployed are provided with work, and others with food. Great care is taken to relieve distress without encouraging mendicancy or idleness.

Liverpool, March 17th.

EDINBURGH.

(From our own Correspondent.)

THE LORD RECTORSHIP OF THE UNIVERSITY.

THE Rosebery Club, consisting of members of the Students' Liberal Association, has commenced the usual triennial campaign in connexion with the election of a Lord Rector, and has selected as a candidate the Right Hon. Sir Lyon Playfair, till recently the Parliamentary representative of Edinburgh University. There are already two candidates in the field, Lord Iddesleigh and Professor Edward Freeman, the former supported by the Conservative students, the latter by the Independent Party. This really means a division of the Liberal interest, which, if undivided, would carry the election; and experience has shown that in three-cornered elections the Conservatives have an advantage from the absolute discipline they are able to maintain; this gives a solidarity to their vote unattainable by their opponents whose strength is almost hopelessly divided. The election does not take place until November; possibly before that date one of the candidates may retire, but this is a remote possibility, and it is to be feared that the Liberals will not be more successful than at the last election, when an independent candidate caused division in their ranks and made way for Lord Iddesleigh's success.

THE WATER OF LEITH BILL.

A Bill for carrying out sanitary measures for the improvement of the water of Leith, the stream which runs through an important district of this city, is before the

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House of Lords this week. An influential deputation of Edinburgh citizens has been charged with the duty of lending it all possible support in London. Amongst those acting as general members of the committee are the Lord Provost of Edinburgh, Mr. Clark, and several members of the City Council; whilst Professor Douglas Maclagan and Dr. Littlejohn have joined the deputation, prepared with evidence as specialists on the matter. In Edinburgh there is a strong desire that the Bill may become law, as it is felt to be urgently necessary that some system of purification should be adopted which will obviate the present insanitary condition of the stream, which renders it absolutely dangerous to the part of the city it intersects, as well as making its vicinity extremely unwholesome during the summer months.

PROFESSOR SIR WILLIAM TURNER.

A congratulatory address, on his acceptance of the honour of knighthood, has been presented to Professor Sir W. Turner, F.R.S., by the Executive Committee of the Students' Representative Council, a body which represents the undergraduates in all the faculties in the University. In the address, which is couched in very flattering terms, special notice is taken of the close manner in which Sir W. Turner has been associated with the representation of the University interests, as a member of the Royal Commission on the Medical Acts, and as the University representative upon the General Medical Council. In these and other positions his successful efforts to conserve and further the prosperity of this school are commented on, and thankfully acknowledged. The completion of the splendidly equipped Anatomical Museum, which the Professor has so indefatigably laboured for, is also made the subject of congratulation. The address is expressly stated to be an expression of the feeling of the whole constituency which the Council represents, and is the more flattering from the very large numbers of students, over 3000 in all, whose congratulations and good wishes it incorporates.

THE CITY FEVER HOSPITAL.

At a recent meeting of the Town Council, Dr. Russell, convener of the hospital committee, reported that it had been found difficult to obtain the services of a visiting physician for this institution, there being no salary attached to the post. A difficulty also existed as to what body or official had the legal right to confer the post upon any candidates who may yet be forthcoming. The former point was left unsettled, but the meeting decided to obtain counsel's opinion upon the legal question before proceeding further in the matter. In giving a report of the present state of the hospital, Dr. Russell said that there were just now sixty-nine inmates, that the hospital arrangements are most efficiently carried out, and that the patients express themselves well satisfied with the treatment and care which they receive. There are over thirty children in the wards at present, on whose behalf Dr. Russell appealed to the general public, as the hospital is not provided with either toys or pictures.

ROYAL HOSPITAL FOR SICK CHILDREN.

A vacancy has occurred on the staff of this hospital owing to the resignation of Dr. Dyce Fraser, who held the post of extra-physician in charge of the out-patient department. There are several candidates in the field in connexion with the appointment, which is a very important one, from the fact that this hospital is now largely laid under requisition for teaching purposes, and affords opportunities of clinical instruction in a branch essentially necessary to the completeness of the course of study in the Edinburgh School.

Drs. Berry Hart and A. H. Barbour have been appointed to the posts of Assistant-Physicians to the Royal Infirmary in the Department of Gynæcology.

Edinburgh, March 23rd.

ABERDEEN.

(From our own Correspondent.)

TESTIMONIAL AND FAREWELL DINNER TO DR. SIMPSON.

THE members of the medical profession in Aberdeen have presented Dr. Simpson with a handsome gold watch and chain, as a tangible proof of their appreciation of his services as medical officer of health for the city, and of the pleasant relations that have always existed between them and him in the execution of his duties. The presentation of the testimonial took place on Wednesday, the 17th inst., in the presence of a large number of the profession, in the Aberdeen Medico-Chirurgical Society's Hall. Dr. Struthers, President of the Society, occupied the chair; and Dr. Beveridge, who has done so much for sanitary science in Aberdeen, acted as spokesman for his medical brethren. On the following evening a public dinner was given in the Palace Hotel, and a large number of prominent citizens, as well as the majority of the profession, were present to wish Dr. Simpson god-speed and success in his new sphere of labour. In the unavoidable absence of Lord Provost Matthews, Professor Struthers presided, and Baillie Kinghorn was croupier. Dr. Simpson has always taken a lively interest in physical education, and a year ago he was elected chairman of the Aberdeen Gymnastic and Rowing Club. The members of the Club met on Saturday to bid their chairman good-bye, and at the same time presented him with an excellent dressing-case and desk.

THE DUTIES OF THE MEDICAL OFFICER.

Universal regret is felt at the retrograde step the Town Council have taken in deciding that the medical officer should no longer be head of the sanitary department. The various officials are to be responsible to the Public Health Committee, and not to the medical officer, as was the case during Dr. Simpson's term of office. Till the vacancy has been filled up, Dr. MacGregor will act as medical officer of health for the city.

Aberdeen, March 23rd.

PARIS.

(From our own Correspondent.)

VISIT TO M. PASTEUR'S LABORATORY.

I PAID another visit to M. Pasteur's laboratory on Saturday last, where I saw almost all the same persons that I had met there on the previous Tuesday awaiting their turn for inoculation. Dr. Hime, with his party of seven, were also present, and he informed me that another person, who is said to have been bitten by the same dog, had just arrived from Bradford. The nineteen persons concerning whom M. Pasteur had received a telegram from Berlin, referred to in my letter of last week, have also arrived. They are all Russians, and were bitten on Feb. 28th last by a rabid wolf at Beloi, near Smolensk; they were all severely bitten, and five of them so badly that they had to be conveyed to the Hôtel Dieu to have their wounds attended to, where M. Pasteur inoculated them. The other fourteen are lodged in an hotel near the laboratory, and are under the immediate care of the Russian physician who brought the party over, and who accompanies them each morning to the laboratory. The condition of the five patients at the Hôtel Dieu is considered most serious, not only from the severity of the bites, but more particularly from their situation, being inflicted on the face, which M. Pasteur regards as the most dangerous part. Instead of inoculating as usual once a day, M. Pasteur performs the operation twice daily with these Russians for the same number of days—viz., ten,—as he believes the bite of a wolf to be much more terrible than the bite of a dog, which the Russian physician testifies to by the statement that, according to his experience, of twenty persons bitten by a mad wolf, eighteen succumbed to rabies. At my visit on Saturday I saw a woman who said that she had been bitten by her donkey, which had previously been bitten by a mad dog.

To my letter of last week I may add the following note concerning M. Pasteur's laboratory, which I have since had an opportunity of looking over. The rabbits for experiment, which are of all sizes and colours, are kept in iron cages, divided off in compartments, so that each rabbit has its separate box. After the death of a rabbit from rabies after inoculation it serves as a subject for another, from which M. Pasteur extracts the virus, and which in its turn, after death, also becomes a subject, and so on one after the other. This process was begun three years ago, and has been continued ever since without interruption. The portion of the spinal marrow containing the virus is preserved in bottles, being suspended in the interior from the cork

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without touching the sides; at the bottom of the bottle are placed some fragments of potash which keep the air within in a dry state. When he is about to inoculate, M. Pasteur withdraws with great care the marrow from the bottle, which he passes rapidly through the flame of a spirit-lamp, already prepared, in order to destroy the germs which might have been deposited on the surface of the marrow. With a pair of scissors, which have also been heated by the flame, he cuts two or three small bits of the marrow of about the length of half a centimetre, which he again cuts up into small fine pieces, and which he drops into a small glass. On the table are placed small glass balloons hermetically closed by the heat of a lamp, and which have been previously filled with sterilised broth. The assistant breaks the point of a balloon, and draws up with his mouth, through a glass tube, a little of the liquid, which he drops into the glass. This broth serves as a vehicle for the rabic marrow. With a glass rod he presses and triturates the marrow in the broth; a sort of emulsion is thus formed, which, when precipitated, leaves a yellowish liquid, with which the inoculations are performed. As stated in my last, these are executed by Dr. Grancher, and the question may be asked why M. Pasteur does not do them himself. In the first place, he would not have time, as he attends to the applicants, whose names he calls out himself, and presents them for the operation. In the next place, not being a medical man, he would be guilty, according to French law, of illegal practice. The applicants are divided into groups, and as the inoculating virus becomes altered in strength daily, the new comers are first inoculated with the weakest virus, and the older ones with the fresh virus. The assistant fills the syringe, which contains a little less than a cubic centimetre, which he hands to Dr. Grancher, who performs the operation as described in my last. I may here observe that the same needle serves for several persons on the same day without undergoing any antiseptic preparation or even being wasted, which rather surprised me, particularly in these days of microbophobia. Dr. Grancher informed me that of every ten applicants for the inoculation eight belonged to the male sex. In a conversation with M. Pasteur, he told me that the subscriptions for the establishment of a suitable place for the carrying out of his method are flowing in from all quarters, and that the amount already far exceeds his expectations. At the last meeting of the Council of Public Hygiene of the department of the Seine the sum of 1300 francs was subscribed for the undertaking. M. Pasteur who was present, thanked the Council for the interest it took in the creation of an institution which is to bear his name, and added that it would find itself thus associated with a work which will perhaps become something more than an institution for anti-rabic inoculation, and which may form a centre for the study of virulent and infectious maladies. M. Pasteur is a man of ordinary size, about sixty years of age, rather thick-set, and somewhat brusque in his manner. About ten years ago he had an attack of apoplexy, which resulted in hemiplegia of the left side, from which, however, he has in a great measure recovered, and he seems not to have lost any of his former energy and intelligence.

One of the Russian patients who was bitten by a mad wolf, and who was sent to the Hôtel Dieu owing to the severity of his wounds, died on Monday at that hospital from hydrophobia, the symptoms of which manifested themselves on the previous Saturday, after the eighth inoculation—that is to say, when, according to M. Pasteur's method, the treatment had not been completed.

Dr. Triboulet died suddenly on Sunday night, the 21st inst. He took his degree in 1853, and was at his death physician to the Trousseau Hospital.

Paris, March 23rd.

THE SERVICES

THE Queen has been pleased to allow Henry Pottinger Keatinge, Surgeon-Major in the Egyptian Army, to accept and wear the insignia of the Fourth Class of the Order of the Osmanieh, which His Highness the Khedive of Egypt, authorised by His Imperial Majesty the Sultan, has been pleased to confer upon him, in recognition of his services whilst actually and entirely employed beyond Her Majesty's dominions in the Egyptian Army.

ADMIRALTY.—Deputy Inspector-General of Hospitals and Fleets Timothæus John Haran has been promoted to the rank of Inspector-General of Hospitals and Fleets in Her Majesty's Fleet. Fleet Surgeon William James Eames has been promoted to the rank of Deputy Inspector-General of Hospitals and Fleets in Her Majesty's Fleet.

The following appointments have been made:—Deputy Inspector-General Doyle M. Shaw, C.B., to Malta Hospital; Deputy Inspector-General Adam B. Messer, M.D., to Plymouth Hospital; Surgeon Cyril J. Mansfield, to Haslar Hospital; Surgeon Horace Elliott, to the *Duke of Wellington*, for service at Haslar Hospital; Surgeon Percy Edmund Maitland, to the *Impregnable*, for service in the *Canopus*; Surgeon Matthew Digan, to Haulbowline Hospital; Surgeon George William F. Armstrong, to the *Monarch*; Surgeon Charles Albert Macaulay, to the *Belleisle*; and Surgeon John Nicholas Corbett, to the *Coquette*.

MILITIA MEDICAL STAFF.—Surgeon Alexander Skipton, 9th Brigade, North Irish Division, Royal Artillery, to be Surgeon-Major.

VOLUNTEER MEDICAL STAFF CORPS.—Richard Lake Gent., to be Surgeon.

Obituary.

T. SPENCER COBBOLD, M.D., F.R.S., F.L.S.

WE deeply regret to announce the death of this esteemed and well-known member of the profession, which took place at his residence in Portsdown-road, Maida-hill, on the 20th inst. To many of his friends the news came with a shock of surprise, for it was not widely known that his health had been broken for some months past. The first symptoms of his ailment were manifested by a syncopal attack which occurred after speaking by request at the soirée held at the Middlesex Hospital last summer. It appeared that he was suffering from aortic disease with cardiac hypertrophy, and, notwithstanding cessation of work and enforced quietude, he became subject to anginal attacks and cardiac dyspnœa. He died in one of these paroxysms.

Dr. Cobbold was one of the well-known family of that name in Suffolk. He went to Edinburgh to study medicine, and was a fellow-student and friend of several distinguished men there. He was a devoted pupil of John Goodsir and Edward Forbes. In 1851 he took his M.D. degree, and was, with Charles Murchison, Burdon Sanderson, and four others, a gold medalist of his year. He became subsequently Curator of the Anatomical Museum in the University, and was elected Senior President of the Royal Medical Society in 1851-52, Dr. Dobie of Chester being junior president the same year. He remained for some years in Edinburgh working diligently at comparative anatomy under Goodsir. Subsequently he came to London, and was appointed Lecturer on Botany, Zoology, and Comparative Anatomy at the Middlesex Hospital School. For some time he lectured there on Parasitic Diseases. He was also lecturer at the Veterinary College. He did not practise for some years after settling in London, and about twenty years ago he devoted himself to a limited sphere of work as a consultant in cases of parasitic disease, helminthology being a very special and favourite line of pursuit with him. He was without doubt one of the first British authorities on this subject, and made several original and valuable investigations in it, many of the results of which were from time to time contributed to our columns. He was elected into the Royal Society about 1865. His work was always carefully done, and pursued with persistency and enthusiasm. He was clear and dogmatic as a teacher, and had always the courage of his opinions.

The social side of his character was well marked. He was kind and affectionate in disposition, and thus won and kept many friendships. He was devoted to music, and possessed a remarkable voice, a high pure alto, which none who ever heard it can forget. At the dinner of the Edinburgh Club, which he regularly attended, he was often a contributor to the subsequent musical entertainment. He published several works on the Entozoa, one of which is a classical treatise on the subject. Many foreign scientific societies enrolled him as honorary and corresponding member. He held the Swiney Lectureship on Geology at the British

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Museum for the allotted term of two years, this post being open only to graduates in medicine of Edinburgh. He never joined the College of Physicians of London, or took any diploma other than that of his degree. All who knew him in any capacity must find cause for lament at his decease at the comparatively early age of fifty-seven. He leaves a wife and several children, having married early in life. It is not too much to affirm that his peculiar place in the profession can hardly be filled up. The study of helminthology is not a very attractive one, and few are found to devote laborious attention to the abstruse and difficult problems involved in it, especially in its etiological and developmental relations. It is still less likely that anyone will take up the subject with a view to attain position as a consultant in so limited a specialty. His success in treatment, after failure on the part of others, appeared to depend on careful method and timing of the dosage of anthelmintics, and he laid great stress on the importance of procuring only good and trustworthy drugs as vermifuges. He had never the manner or habits of a physician, and was perhaps chiefly esteemed as a man of science and a votary of biological studies. He himself did not cultivate practice. Not that he was quite independent of it, but he loved nature more. His love of nature was keen, and he delighted in being face to face with every aspect of it. Amongst his last regrets was this—that he felt unequal to arrange his accumulation of facts for publication, and his greater longing was to live on to see the charms of another spring and summer after the long and bitter winter which so cruelly tried him. He has left us, and has entered now on that fuller life which must bring to him such joys as his busy and contemplative career here so well prepared him for. *Quando ullum inveniemus parem?*

DANIEL ELIAS, M.D.

SOUTHPORT has lately sustained the loss of a highly popular and much respected medical man. Dr. Daniel Elias began his professional career as assistant to the late Dr. Scowcroft, with whom he afterwards entered into partnership. On the death of Dr. Scowcroft he commenced practice on his own account, and became rapidly known and liked in the town. Some years later he took his brother, Dr. Tom Elias, into partnership, and the two brothers enjoyed a very extensive practice—so large, indeed, that it completely occupied the whole of Dr. Elias's time. He acted for many years as honorary medical officer to the infirmary, and was very active in his endeavours to ameliorate the condition of the poor; it was mainly due to him that the Southport Infirmary attained its present efficiency. In all matters concerning the welfare of the town Dr. Elias took an active part, and was esteemed for his business capacities as well as his professional ones. He was most popular with all classes of society, and owed a great portion of his success to his untiring energy and great power of sympathy. His death, at the age of forty-eight, took place on March 1st, from nervous prostration, general debility, and atrophy of the heart. He had been suffering from great weakness for some six months previously, and had in a measure retired from active practice. His funeral was attended by a large number of his professional brethren, as well as by an immense concourse of friends and patients.

MEDICAL NOTES IN PARLIAMENT.

The Lunacy Laws.

ON the 18th inst. the House of Lords went into Committee on the Lunacy Laws Amendment Bill, when, after some discussion, in which the Earl of Selborne, the Lord Chancellor, Viscount Cranbrook, and other peers took part, the Lord Chancellor withdrew all the clauses relating to idiots and imbeciles as distinguished from lunatics; and announced his intention of at once introducing a Bill dealing with idiocy. Numerous amendments having been agreed to, the clauses of a controversial character were postponed.

Burgh Police and Health (Scotland) Bill.

On the 23rd inst. the Earl of Elgin moved the second reading of this Bill.—Lord Balfour of Burleigh said he understood there were points in the Bill which, in the opinion of some critics, were open to grave objection; but those who were best entitled to speak for the inhabitants of the burghs affected by it were perfectly unanimous that some such measure was required. He hoped, however, that an interval of ten days or a fortnight would be given before the committee stage of the Bill was taken, in order that a reasonable time might be afforded for its consideration.—The Earl of Galloway suggested that it would be well if the Government would consider whether the time had not now come when there ought to be established one general police force of an Imperial nature.—The Earl of Elgin having spoken, the Bill was read a second time.

Imbeciles.

The Lord Chancellor presented a Bill to give facilities for the care, education, and training of idiots and imbeciles.

Ventilation of the House of Commons.

In the House of Commons on the 23rd inst., on the motion of Mr. Leveson-Gower, a Select Committee was appointed to inquire into the ventilation of the House, as follows:—Dr. Farquharson, Sir H. Roscoe, Mr. Lyell, Sir G. Hunter Mr. Isaacs, and Mr. R. Power.

Medical News.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a recent meeting of the Board of Examiners the undermentioned was admitted a Fellow of the College:—

Henry Plunket Ermonde-White, Surgeon-Major, A.M.D.

SOCIETY OF APOTHECARIES.—The following gentlemen passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on the 18th inst.:—

Adie, Alexander James, Leonard-street.
Halsted, Harold Cecil, M.R.C.S., Slindon, Arundel, Sussex.
Lister, Joseph Jackson, M.R.C.S., Wimpole-street.
Pope, Henry Alex. Lepthairia, Donegal, Ireland.
Priestley, Percy, M.R.C.S., Norfolk-street, Sheffield.

ROYAL HOSPITAL, BELFAST.—A portrait of Mr. Lyons, D.L., has been presented to this institution in recognition of his services to the hospital.

ON the 22nd inst. a meeting, presided over by the Lord Mayor, was held at Stratford, to further the formation of a cottage hospital for West Ham.

DOUBLE CATARACT EXTRACTION AT AN ADVANCED AGE.—An old Russian tailor whose age is 101 has just had cataract extraction performed successfully on both eyes.

A HAMBURG merchant has left 450,000 marks (£22,500) for the erection of a sea-bathing infirmary at Cuxhaven at the mouth of the Elbe.

THE Dutch Ministry has undertaken to introduce into the Chamber a measure for preventing the adulteration of food, and especially the sale of artificial butter, the so-called "margarine."

THE Chemical Laboratory of the Liverpool University College was opened on Saturday, when Lord Derby, the president, was expected to be present, but was prevented through indisposition. Sir Lyon Playfair addressed a large and influential company in the lecture hall.

MEDICAL MAGISTRATES.—Professor R. J. Anderson, of the Queen's College, Galway, and Beechill House, co. Down, has been appointed a Justice of the Peace for the latter county. Frederic Orton, M.D., Crouch-end, N., and F. H. Daly, have been appointed Justices of the Peace for the county of Middlesex. Mr. Marshall Weir, M.R.C.S., the medical officer of Dromore Dispensary, has been placed on the Commission of the Peace for the county of Down.

BRISTOL ROYAL INFIRMARY.—At the annual general board meeting of the trustees of this institution on the 23rd inst., it was reported that the total income during the past year had amounted to £16,000, including a legacy of £5000, and that the total expenditure was £12,000. The number of in-patients, as compared with those received during 1884, showed a diminution, which may be accounted for by the fact that during 1885 the triennial cleaning of the house took place, which necessitated the closing in succession of all the wards. The committee desire it to be known that ladies can now be received as probationers, for training as nurses, upon the same system as in the London hospitals.

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POISON IN CABBAGE-SOUP.—A number of Russian peasants have been poisoned by *kohl*- or cabbage-soup, made from vegetables preserved in vessels which, on examination, proved to be coated internally with a very appreciable quantity of arsenic. The victims were treated with milk, and though for a time they were apparently in great danger, all recovered. No clue has been discovered as to the manner in which the arsenic found its way into the barrel of "*kohl*."

HEALTH EXHIBITION, YORK.—A meeting was held at York on the 17th inst., to consider the arrangements to be made for the Sanitary Congress and Health Exhibition to be held in the city in September next, by the Sanitary Institute of Great Britain. An influential deputation from the institute attended and spoke of the satisfactory results which had followed previous congresses. It was decided that the meetings should commence on September 21st, and that the exhibition shall remain open one month.

THE NOMENCLATURE OF BRAIN DISEASES.—In pursuance of a resolution passed at the Medical Congress on Brain Diseases, held during last summer at Antwerp, by which it was suggested that local conferences should be held to draw up trustworthy international tables of statistics on insanity, a conference of Austro-Hungarian specialists is to be held at Vienna with the object of revising and extending the nomenclature of mental disorders. Invitations to the conference have been issued by four leading medical men of Vienna.

A FRIVOLOUS OBJECTION.—The Paris Civil Tribunal has just decided a case in which Dr. Peyrol, head surgeon at the Hôtel Dieu, claimed 800 francs for extracting a bullet from a young lady who had accidentally shot herself. The claim was disputed on the ground that the plaintiff stated erroneously that the bullet was lodged in the right thigh. The tribunal overruled the plea, believing that it mattered very little whether the bullet was on the right or the left side so long as the patient's sufferings had been relieved, and judgment was consequently given for the plaintiff.

THE LONDON HOSPITAL.—The increased accommodation recently provided for nurses at the London Hospital, Whitechapel-road, E., now enables that institution to supply thoroughly trained nurses to private families. Nurses trained in the busy wards of this large hospital must have exceptional opportunities for gaining experience of a nature likely to render them specially efficient, and it is satisfactory to learn that the constantly increasing demands of the public for skilled home nursing are to be met by fresh efforts to maintain an adequate supply.

THE BLANE MEDALS.—The two gold medals founded by the late Sir Gilbert Blane, Bart., to be conferred, once in two years, on two medical officers of the Royal Navy who shall have delivered into office journals evincing the most distinguished proofs of skill, diligence, humanity and learning in the exercise of their professional duties while in medical charge of ships, have been awarded, by the Director-General of the Medical Department of the Navy, jointly with the Presidents of the Royal Colleges of Physicians and Surgeons, to Fleet-Surgeon Henry Scott Lauder and Surgeon Myles O'Connell McSwiny.

NORTH-WESTERN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—The annual meeting of the members of this Association was held on the 11th inst. In the eleventh annual report, which was read and adopted, the committee congratulated the members on the increased usefulness of the Association, which continues to render good service to the public and to the profession. There are now thirty-seven members, twenty-seven associates, and four honorary members. Dr. G. H. Gornall (Warrington) was elected President for the year; Dr. W. H. Barr (Bury), Vice-President; Dr. Pettinger, Treasurer; and Mr. Vacher, Honorary Secretary.

A CHILD POISONED BY THE NURSE'S COSMETIC.—A German practitioner being called to see a child of five weeks old who was continually crying and suffering from colic, and whose skin was of a dull bluish tint, was somewhat puzzled as to diagnosis, until looking at the nurse's face, and seeing it of a brilliant white and red tint, he touched the surface, which left a greasy stain on his finger of a cosmetic rich in lead. This poisonous substance the nurse had long been in the habit of using for the purpose of improving her complexion. The cause of the child's colic being removed, and appropriate treatment adopted, a cure was effected in a few days.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BROWNE, DANBY, L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer for the Clunbury and Hopesay District of the Clun Union.

CLAPP, ROBERT, L.R.C.P.Lond., M.R.C.S., has been appointed Senior Assistant Medical Officer to the Devon County Asylum.

COOPER, AUSTIN N., F.R.C.S.I., has been appointed Medical Superintendent to the British Hospital, Buenos Ayres.

CULLIN, RICHARD B., L.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Tiverton District of the Tiverton Union.

DODSON, ARTHUR E., M.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Workhouse, Garratt-lane, of the Wandsworth and Clapham Union.

ERSKINE, ROBERT, M.D., has been appointed Medical Officer for the Camborne District of the Redruth Union.

GOODRIDGE, WILLIAM P. B., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Surgeon-Superintendent in the Queensland Government Emigration Service.

HOARE, WILLIAM, M.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Titchfield District of the Fareham Union.

MAGGS, WILLIAM ADOLPHUS, L.R.C.P.Lond., M.R.C.S., L.S.A.Lond., L.D.S.Eng., has been appointed Dental Surgeon to the North-West London Hospital, vice F. Newland Pedley, F.R.C.S.Eng., L.D.S., resigned.

MAILE, C. E. DRAYSON, M.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Seventh District of the Lexden and Winstree Union.

MORTIMER, JOHN, M.B.Lond., has been appointed Surgeon-Administrator of Anæsthetics to the Dental Hospital of Exeter.

PERRY, F. F., Bengal Medical Service, has been appointed Professor of Surgery and Anatomy to the Lahore Medical School, Punjab.

PLATT, HENRY T., M.B., has been appointed Assistant House-Surgeon to the Preston Royal Infirmary, vice F. P. Maynard, M.B., M.R.C.S., L.R.C.P.Lond., resigned.

PRENDERGAST, J. M., M.D. Royal Univ., M.R.C.P.Lond., M.R.C.S., has been appointed Resident Physician to the Hertford British Hospital, Paris.

ROPER, ARTHUR C., M.R.C.S., has been appointed Surgeon-Administrator of Anæsthetics to the Dental Hospital of Exeter.

TISDALL, JOHN J., L.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the South Municipal District of the West Derby Union.

WALKER, LAWRENCE NEWMAN, L.F.P.S. & L.M.Glas., L.S.A.Lond., has been appointed by the Cape Government District Surgeon and Public Vaccinator for Calvinia of the District of Clanwilliam, Western Province, South Africa.

Births, Marriages, and Deaths.

BIRTHS.

HENDERSON.—On the 21st inst., at 6, Hampstead-lane, Highgate, London, the wife of A. Milne Henderson, M.D., of a daughter. Australian papers please copy.

HOLMES.—On the 20th inst., at Priory House, Kew, the wife of Gordon Holmes, M.D., of a son.

LUCAS.—On the 14th inst., at Bury St. Edmunds, the wife of R. H. Lucas, M.R.C.S., of twin boys.

MAXWELL.—On the 23rd inst., at Lasswade, the wife of C. M. Maxwell, M.B., of a son.

MORSE.—On the 16th inst., at Prince of Wales-road, Norwich, the wife of Thomas H. Morse, F.R.C.S.Eng., of a son.

SHORE.—On the 22nd inst., at Hill Side, Crouch-hill, N., the wife of T. W. Shore, M.D., B.Sc., of a daughter (stillborn).

MARRIAGES.

BREMNER—CLIFTON.—On the 17th inst., at Victoria-street Congregational Church, Derby, Alex. T. Bremner, L.R.C.S., L.R.C.P., of Leicester, to Constance Annie, second daughter of Frederick Clifton, of Derby.

HARWOOD—ROBINSON.—On the 18th inst., at St. James's, Pokesdown, Bournemouth, Sweitzer Soutter Harwood, M.D. Univ. of Pennsyl., L.K.Q.C.P. & L.M.Irel., of Gordon House, Pokesdown, to Josepha, widow of John Mundell Robinson, of Edinburgh.

SMART—WATSON.—On the 17th inst., at Ballaneleroch, Stirlingshire, Robert Smart, M.D., of Glasgow, to Mary Anne Matilda, youngest daughter of the late William Leckie Ewing, of Arngomery, and widow of James Francis Watson, of Pitcairns, Perthshire.

DEATHS.

BRONNER.—On the 19th inst., at Manor-row, Bradford, Yorks, Edward Bronner, M.R.C.S., L.S.A.Lond., in his 64th year.

COBBOLD.—On the 20th inst., at Portsdown-road, W., Thomas Spencer Cobbold, M.D., F.R.S., F.L.S., aged 57.

GODFRAY.—On the 12th inst., at St. Helier's, Jersey, C. Le Vesconte Godfray, M.R.C.S., L.M., L.S.A.Lond., Surgeon to the General Hospital and Prison, son of the late Francis Godfray, Esq., Barrister-at-law and Advocate of the Royal Court of Jersey.

PARKIN.—On the 18th inst., at his residence, Codrington-place, Brighton, John Parkin, M.D., F.R.C.S., formerly H.M.'s Medical Inspector for Cholera in the West Indies, in his 86th year.

WILLIAMSON.—On the 16th inst., at Rothesay-road, St. Leonards-on-Sea Francis Williamson, L.R.C.P., M.R.C.S., late Surgeon, Royal Navy, aged 39.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

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BOOKS ETC. RECEIVED.

Baillière, Tindall, & Cox, King William-street, Strand, London.

The Science and Practice of Surgery. By F. J. Gant, F.R.C.S. In 2 vols. Third Edition, revised and much enlarged throughout. pp. 1089—1183, profusely illustrated.

Mind your Eyes! Advice to the Short-sighted by their Fellow-sufferer, Francisque Sarcy. Translated by R. E. Dudgeon, M.D. pp. 87.

Bell & Sons, York-street, Covent-garden.

Westgarth Prize Essays on the Street-Re-alignment, Reconstruction, and Sanitation of Central London, and on the Re-housing of the Poorer Classes. pp. 276, with Maps.

Cassell & Co., London, Paris, New York, and Melbourne.

A Manual of Surgery. In Treatises by various Authors. Edited by Frederick Treves, F.R.C.S. In 3 vols. pp. 576—620—648, with numerous Illustrations, 7s. 6d. each volume.

"Unicode": the Universal Telegraphic Phrasebook.

Churchill, J. & A., New Burlington-street, London.

A Manual of Midwifery. By A. L. Galabin, M.A., M.D., &c. pp. 807, with 227 Illustrations.

Davis, G. S., Detroit, Michigan.

Select Extra-Tropical Plants readily eligible for industrial Culture or Naturalisation. By Baron F. von Mueller. pp. 449. New Victorian Edition of the same, revised and enlarged. pp. 466.

Griffin, C., & Co., Exeter-street, Strand, London.

A Short Manual of Chemistry. By A. Dupré, Ph.D. &c., and H. Wilson Hake, Ph.D. &c. Vol. I.: Inorganic Chemistry. pp. 365, with a coloured Plate.

Johnston, W. & A. K., Edinburgh & London.

A Practical Treatise on the Sputum. By G. Hunter Mackenzie, M.D.Edin. pp. 104, with Coloured Plates.

Kegan Paul, Trench, & Co., Paternoster-square, London.

"All But": a Chronicle of Laxenford Life. By Pen Oliver, F.R.C.S. pp. 325, with 21 Illustrations by the Author. 6s.

Lewis, H. K., Gower-street, London.

Contributions to the Physiology and Pathology of the Breast and its Lymphatic Glands. By Chas. Creighton, M.D. pp. 222, with Illustrations.

Coca, Cocaine, and its Salts. By William Martindale, F.C.S. pp. 69.

Longmans, Green, & Co., Paternoster-row, London.

Savouries à la Mode. By Mrs. de Salis. pp. 52.

Putnam's Sons, New York & London.

How we treat Wounds to-day. By R. T. Morris, M.D. pp. 162.

Saxon & Co., Bouverie-street, London.

Salammbô of Gustave Flaubert. Englished by M. French Sheldon. pp. 421.

Smith, Elder, & Co., Waterloo-place, London.

Dictionary of National Biography. Edited by Leslie Stephen. Vol. VI.: Bottomley—Browell. pp. 471.

Thom & Co., Dublin.

Calendar of the Royal University of Ireland for 1886.

Wood, William, & Co., New York.

Practical Human Anatomy. By F. D. Wiesse, M.D. pp. 456, with 222 lettered Plates.

Transactions of the Michigan State Medical Society, 1885.—The Influence of Sex of Fœtus in Utero on length of Inter-gestation Period immediately following its Birth; by J. Stockton-Hough, M.D. (Wood, New York.)—Four Cases of Abdominal Surgery; by J. Eastman, M.D.—The Parental Don't, or Warnings to Parents; by Serious Senior.—Sborník Lékarsky; rediguji Dr. Jaroslav Hlava and Dr. Josef Thomayer.—A Mad World: a Vision; by Ouida.—Goitre in the Himalayas; by Brigade-Surgeon William Curran.—The Protective Value of Anthrax Vaccination; by John H. Clarke, M.D.—Scientific Memoirs by Medical Officers of the Indian Army; edited by B. Simpson, M.D. Part I. (Calcutta.)—Cholera and Water; by Surg.-Gen. M. C. Furnell, M.D.—Comments on Pasteur's Method of Treating Hydrophobia; by C. W. Dulles, M.D.—On the Origin, Habits, and Diffusion of Cholera; by Sir J. Fayrer, K.C.S.I., M.D., F.R.S.—Cocaine in Hay Fever; by S. S. Bishop, M.D.—Ireland and Home Rule; by Joseph Cowen, M.P.—Official Register of Physicians and Midwives now in Practice to whom Certificates have been issued by the State Board of Health of Illinois.—Diseases of the Rectum; by Samuel Benton, L.R.C.P.L., M.R.C.S., &c. (Renshaw.)—A Discourse on the Principles of Domestic Fireplace Construction; by T. P. Teale, M.A., F.R.C.S.—What is Medicine? by A. L. Gihon, M.D.—The Law and the Lunatic; by G. Sigerson, M.D. &c. (Hodges, Figgis, and Co., Dublin.)—Note on Peritoneoclysis, Hypodermoclysis, and Vesicoclysis in Cholera; by Brigade-Surgeon C. Macdowall.—Loss of Life and Property by Lightning at Home and Abroad; by W. MacGregor.—Some Pathological Bearings of Darwinism; by D. A. Gresswell.—Our Young Ladies; by Lillie Harris. (Walter Scott, London.)—A Controversy on Cholera between F. Contillo Vargas-Machuca and Joseph Bagetto, Ph.B., M.B. (Renshaw.)—Electricity and Metallo-Therapeutics in their Application to Medicine; by Cresswell Hewett, M.D. (Baillière, Tindall, & Cox.)

Medical Diary for the ensuing Week.

Monday, March 29.

Royal London Ophthalmic Hospital, Moorfields.—Operations, 10.30 A.M., and each day at the same hour.

Royal Westminster Ophthalmic Hospital.—Operations, 1.30 P.M., and each day at the same hour.

St. Mark's Hospital.—Operations, 2 P.M.; Tuesdays, same hour.

Chelsea Hospital for Women.—Operations, 2.30 P.M.; Thursday, 2 P.M.

Hospital for Women, Soho-square.—Operations, 2 P.M., and on Thursday at the same hour.

Metropolitan Free Hospital.—Operations, 2 P.M.

Royal Orthopædic Hospital.—Operations, 2 P.M.

Central London Ophthalmic Hospitals.—Operations, 2 P.M., and each day in the week at the same hour.

Society of Arts.—8 P.M. Mr. Boverton Redwood; Petroleum and its Products (Cantor Lecture).

Medical Society of London.—8.30 P.M. Dr. Day: Irritable Brain and Congestion of the Brain in Children.

Tuesday, March 30.

Guy's Hospital.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

St. Thomas's Hospital.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

Cancer Hospital, Brompton.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

Westminster Hospital.—Operations, 2 P.M.

West London Hospital.—Operations, 2.30 P.M.

Royal Institution of Great Britain.—3 P.M. Prof. Arthur Gamgee: The Function of Circulation.

Royal College of Physicians of London.—5 P.M. Dr. P. W. Latham: On some Points in the Pathology of Rheumatism, Gout, and Diabetes.

Royal Medical and Chirurgical Society.—8.30 P.M. Mr. Barwell: On Supra-pubic Lithotomy.—Mr. Rivington: A case of Vesical Calculus of unusually large size removed by Supra-pubic Cystotomy.—Mr. Jacobson: A case of Supra-pubic Lithotomy.

Wednesday, March 31.

National Orthopædic Hospital.—Operations, 10 A.M.

Middlesex Hospital.—Operations, 1 P.M.

St. Bartholomew's Hospital.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.

St. Mary's Hospital.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.

St. Thomas's Hospital.—Operations, 1.30 P.M.; Saturday, same hour.

London Hospital.—Operations, 2 P.M.; Thursday & Saturday, same hour.

Great Northern Central Hospital.—Operations, 2 P.M.

Samaritan Free Hospital for Women and Children.—Operations, 2.30 P.M.

University College Hospital.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

Royal Free Hospital.—Operations, 2 P.M., and on Saturday.

King's College Hospital.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.

Society of Arts.—8 P.M. Dr. T. R. Armitage: Methods for Rendering the Blind Self-supporting.

Thursday, April 1.

St. George's Hospital.—Operations, 1 P.M.

St. Bartholomew's Hospital.—Surgical Consultations, 1.30 P.M.

Charing-cross Hospital.—Operations, 2 P.M.

North-West London Hospital.—Operations, 2.30 P.M.

Royal Institution of Great Britain.—3 P.M. Prof. Dewar: Electro-Chemistry.

Royal College of Physicians of London.—5 P.M. Dr. P. W. Latham: On some Points in the Pathology of Rheumatism, Gout, and Diabetes.

Parkes Museum of Hygiene.—8 P.M. Dr. Louis Parkes: London Vestries and the Administration of Sanitary Law in the Metropolis.

Harveian Society of London.—8.30 P.M. On the Treatment of Obscure Forms of Uterine Metrorrhagia.

Friday, April 2.

St. George's Hospital.—Ophthalmic Operations, 1.30 P.M.

Royal South London Ophthalmic Hospital.—Operations, 2 P.M.

West London Medico-Chirurgical Society.—8 P.M. Mr. Percy Dunn: (1) Scirrhus Growth of Breast; (2) Sac and Contents of large Femoral Hernia, with Gangrene of Walls; (3) Stomach from case of Carbolic Acid Poisoning.—Brigade-Surgeon Curran: Photographs of Elephantiasis and Oriental Boil, Native Indian Eye Probes, and Gall-stones.—Mr. R. F. Benham; On Epileptiform Seizures due to Sudden Anæmia of the Brain.—Dr. Campbell Pope: Case of Epileptiform Seizure due to Irregular Cardiac Action.—Dr. G. N. Pitt: On Cardiac Dilatation at Puberty.

Society of Arts.—8 P.M. Mr. James Gibbs: The History of Archæology in India.

Royal Institution of Great Britain.—9 P.M. Mr. Howard Grubb: Telescope Objectives and Mirrors, their Preparation and Testing.

Saturday, April 3.

Middlesex Hospital.—Operations, 2 P.M.

Royal Institution of Great Britain.—3 P.M. Mr. Howard Grubb: The Astronomical Telescope.

Society of Arts.—3 P.M. Prof. George Forbes: Electricity.

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, March 25th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Mar. 19	30·02	E.	46	45	...	61	36	·01	Overcast
,, 20	30·00	S.W.	51	49	...	58	45	·15	Cloudy
,, 21	30·04	S.W.	54	52	...	59	49	·22	Cloudy
,, 22	30·11	W.	49	48	...	56	44	...	Overcast
,, 23	30·16	S.	55	52	...	62	49	·06	Overcast
,, 24	30·05	S.W.	47	46	...	63	45	...	Foggy
,, 25	29·97	S.W.	53	51	...	59	46	...	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

THE POISONS ACT.

THE remarks in our last issue were exemplified last week in Wigan. A shoemaker poisoned himself with bisulphide of carbon, a drug which he was enabled to readily obtain owing to its not being scheduled in the present Poisons Act. Bisulphide of carbon is a substance which is used in the course of trade by shoemakers for making cement, and it was difficult to ascertain in this case the quantity of poison taken, no account of the sale having been kept by the chemist.

M.R.C.S.Eng. & L.S.A.—By the 35th Section of the Medical Act every registered medical practitioner has exemption, if he so desire, from serving all corporate, parochial, and township offices.

DISINFECTION AFTER EPIDEMICS.

To the Editor of THE LANCET.

SIR,—I shall feel greatly obliged to any medical officers of health who will kindly inform me if it is their practice to employ disinfection in houses after all the seven principal diseases of the epidemic class (as contained in the Registrar-General's returns), or what exception they make, if any. I have always hitherto required the employment of disinfection after all these diseases, in accordance with the 22nd Section of the Sanitary Act, 1866; but lately I have met with some opposition to such procedure, as being wholly unnecessary as regards whooping-cough and measles. Your opinion also, Sir, on this matter would be of the greatest value to Your obedient servant,

March 22nd, 1886. A MEDICAL OFFICER OF HEALTH.

*** The usual practice is not to enforce disinfection after measles and whooping-cough.—ED. L.

M.R.C.S.—The War Office has published a manual, to be obtained of Messrs. Clowes and Son, Charing-cross, which contains the information our correspondent probably requires.

Dr. Pitt is thanked.

FUNIS ACCIDENTS.

To the Editor of THE LANCET.

SIR,—The following cases may be deemed of sufficient interest to warrant insertion in your columns.

A short time ago, finding the cord around the neck of a child whose head had just passed the vulva, I proceeded in the usual way to relieve it; just as I had passed it half over the scalp, a sharp pain came on, which snapped it off short at the navel, making the application of the ligature exceedingly difficult. No ill effects followed.

In a case of forceps at the brim, after delivering the head and taking off the forceps under the clothes, the cord was found to be around the neck. After the birth of the body, the cord was found to be half severed and bleeding profusely. I presume a coil of the cord had been caught by the forceps. I am, Sir, yours faithfully,

March, 1886. M.

THE CULMINATION OF QUACKERY.

THIS interesting phenomenon has been reached, according to *El Genio Medico Quirurgico*, at an establishment which has been opened in Barcelona, called the "Medico-cellular Institute," where "every disease without exception" is stated to be treated by "a remedy specific to it, which destroys it and cures it."

Student.—We have no information on the subject beyond what has appeared in our columns.

"NOTES ON THE DIGESTIVE FERMENTS."

To the Editor of THE LANCET.

SIR,—In your issue of Feb. 27th you publish, as the first of a series of "Notes on the Digestive Ferments," a paper by Dr. Murrell on "Pepsin as a Digestive Agent." This paper contains statements which cannot be allowed to pass unnoticed and unchallenged.

After comparing the test for pepsin adopted in the British Pharmacopœia of 1885 with that official in 1867, Dr. Murrell sums up the difference between them is follows:—"In the new Pharmacopœia the time is decreased to one-eighth, while the temperature is raised 32°. This elevation in temperature represents an increase of 16 per cent. in digestive power, so that we lose 87·5 per cent. as regards time and gain 16 per cent. on the temperature, the net result being that our standard is raised 71·5 per cent., for which too much gratitude cannot be shown." Dr. Murrell, then, apparently considers that the solution of the albumen by the pepsin takes place uniformly—that is, that the same amount of albumen is dissolved during equal fractions of the time of duration of the experiment, hence if the time is reduced from four hours to half an hour, or by seven-eighths, the activity of the pepsin must be greater by seven-eighths (87·5 per cent.) to accomplish the same amount of work. The fallacy in this reasoning is equalled only by the inaccuracy of the fundamental proposition upon which it is based. It is a well-known fact that the solution of the albumen does not take place uniformly; indeed, a moment's consideration must have convinced Dr. Murrell to this effect. But, granted for argument's sake that it did, even then to accomplish the same amount of work in one-eighth of the time the activity of the pepsin must be eight times as great, instead of greater by 87·5 per cent. That the elevation of the temperature from 98° to 130° F. represents an increase of 16 per cent. in the activity of the pepsin is to me a new and incomprehensible statement. Authorities on pepsin-testing agree in stating that pepsin is about four times more active at the higher than it is at the lower temperature. But apart from these considerations, the difference in the state of division of the albumen required by the two Pharmacopœias precludes the possibility of any other method of drawing a comparison between the two tests than by actual experiment.

Dr. Murrell decides upon a mode of procedure (that of weighing the residual albumen) which, though it has its advocates, has been generally abandoned, and which leads him into serious manipulative errors. To cut the white of an egg into thin slices instead of pressing it through wire gauze is a decidedly retrograde step, and the manner in which the undissolved albumen is dried and weighed would send a shudder through the frame of an analytical chemist. "Out of thirteen specimens examined," says Dr. Murrell, "only four would have come up to the standard of the new British Pharmacopœia." From any data that may have been ascertained by the test detailed in his paper, Dr. Murrell is not justified in drawing the slightest inference as to the activity of a pepsin when examined by the official method. Whether a sample of pepsin does or does not come up to the standard of the new British Pharmacopœia can be ascertained solely by actual experiment, in which the conditions enjoined by that Pharmacopœia are rigidly adhered to; should it prove deficient, then, and then only, can its condemnation be accepted by pharmacists.

To take for his experiments ten grains of liquid preparations, wines, essences, &c., of which the minimum dose is usually a teaspoonful, is manifestly unfair to the respective manufacturers.

Several other points of minor importance might be alluded to, but for my object the foregoing will suffice. If Dr. Murrell requires a very active pepsin, there is no reason why he should not have it. There is no difficulty in obtaining pepsin of far greater activity than is required by the British Pharmacopœia. I am, Sir, yours truly,

New-street, N.W., March 15th, 1886. HENRY G. GREENISH.

"THE USE OF COCAINE IN OPERATIONS FOR PILES."

To the Editor of THE LANCET.

SIR,—I notice in your issue of the 13th inst. that Dr. Owen Pritchard extols the use of cocaine in operations for piles. Dr. Pritchard describes an operation he has lately performed on one pile. After the application of cocaine he appears to have first crushed the pile, cut it off, and then cauterised it. Dr. Pritchard does not say whether he stretched the sphincter ani muscle. I presume not; for if he had, it probably would not then have been a "painless" operation. I write this to put surgeons on their guard against partial operations on the rectum, either for the cure of prolapsus, fistula, or any other disease, as the operation under these circumstances has to be done over again. I have lately seen several cases of rectal ulcer at the Western Hospital for Fistula, Piles, and other Diseases of the Rectum which had been treated previously. Unfortunately in each case a horseshoe fistula had been overlooked.

I congratulate Dr. Owen Pritchard on the success of his operation; but I still think that cocaine requires to be very cautiously used in rectal surgery. I am, Sir, yours faithfully,

Bennett-street, March 18th, 1886. SAMUEL BENTON.

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THE BEST ANTISEPTIC.

ACCORDING to a leader in the *Medical Bulletin*, the best—indeed, the ideal—antiseptic has now been discovered, and is—common salt.

Dr. Hermann Weber.—A short notice would be acceptable.

Dr. Sturges' paper is marked for early insertion.

PROSECUTION UNDER THE INFECTIOUS DISEASES ACT IN SUNDERLAND.

To the Editor of THE LANCET.

SIR,—The following case may be of interest to the profession, as it was made a case of prosecution under the Infectious Diseases Act of the Borough of Sunderland, 1885, where I was last week mulcted, between fine and costs, in a sum of about £4. I shall now lay a faithful account of the case before the profession, leaving them to judge of the justice of it.

On Jan. 6th a message was left for me to call to see a Mrs. L——. On the following day I saw Mrs. L——, and found her in bed. From answers to my questions I gathered that she had been indisposed for more than a month, but able to be out of bed during the greater part of the day. Upon examination, I found a sort of papular eruption over the back and chest, which had, she stated, been present some time. The papules were in general less than the size of a threepenny-piece, slightly raised in the middle, and thinning towards the edges, some of them considerably larger than others, even as large as a halfpenny, and of a brownish colour. The temperature in the axilla was 102°; the tongue was foul and coated. The patient complained of headache, but the mind seemed clear (I may here state that she is of a nervous disposition, and not a strong person at best). The pulse was 90 and weak. I saw her again on the 12th (my assistant saw her on the 11th). The tongue was clean and rather red, as well as the sides of the mouth; temperature, 101°. The patient expressed herself as feeling a little better. My assistant saw her on the 14th, and I again saw her on the 15th. The temperature was 103°; the tongue dry, but clean. She complained of being worse, the head being slighty affected. I suspected fever or blood-poisoning; and as the patient was in a house where there were offices, I resolved to draw the attention of the medical officer of health to the house, although I was by no means satisfied that it was a real case of fever. As the house was close to the health office and a considerable distance from my house, I made out the certificate of notification that night (Jan. 15th), and as the case was very obscure, I took it with me next morning, with the intention of delivering it myself at the health office, and giving an explanation of the case. But while visiting the patient, the husband being at home, and as it was a little out of my way, I gave him the certificate of notification, requesting him to take it to the health office at once, which I believe he did. This method I deemed better and quicker than sending by post, as any explanation that might be required could at once be given, and the necessary disinfectants supplied. The temperature on the 16th was 103°. On the 17th the patient seemed rather better, and the tongue was moist; temperature, 102°.—18th: Temperature, 102°. Tongue moist. The patient had been out of bed, and as she appeared to be improving I did not see her the following day.—20th: Temperature, 101°. She seemed improved, but weak, and complained of headache. On the 24th she was still improving; temperature, 100°. I saw her now and again up till the beginning of February, when I ceased visiting her, as my list during that time was rather heavy, and she seemed so far improved, although by no means strong. It appears that I have reported more cases of infectious disease than any other practitioner in the borough of Sunderland. Your readers may judge of my surprise when I was summoned and mulcted in the sum mentioned, besides the disgrace of having to sit in the police-court from 12 till 2 o'clock. In this case I did my best to bring it under notice, as it was in a house where others were, although I am not yet satisfied as to its infectious nature. In the same room as the patient were sleeping a daughter, eight years of age, and the husband. Neither of them has been affected. The notification was typhoid fever.

I am, Sir, yours obediently,

Sunderland, March, 1886. JOHN RANKINE, M.R.C.P., &c.

A CASE FOR GENERAL SYMPATHY.

To the Editor of THE LANCET.

SIR,—It may be within the remembrance of your readers that in 1883-84 I brought under their notice the distressing case of the wife and two small children of Dr. Cedric H. Harford, B.A., a member of the Medical Department in British Guiana, and that some £500 was collected and invested for their benefit. Dr. Harford's residence in a very unhealthy district (La Retraite) brought on a serious illness, which produced such an effect on his nervous system that he lost his reason and has since died. The interest on the sum raised only produces £35 a year, and Mrs. Harford is striving to maintain herself and her children by giving lessons in singing, for which she is exceptionally well qualified. No doubt people who want their children to sing well would be glad to avail themselves of an opportunity of having them taught from the commencement by one of Signor Randegger's pupils, which Mrs. Harford is. Her terms are 5*s.* a lesson, and all further particulars may be obtained by applying direct to Mrs. Harford, 43, Mimosa-street, Fulham-road, S.W. I desire to thank you once more on Mrs. Harford's behalf and my own for the great assistance you have so kindly rendered in this matter, and I hope that those who have children of a suitable age will give Mrs. Harford a trial in their own interests as well as from feeling of sympathy.

I am, Sir, yours truly,

HENRY C. BURDETT.

The Lodge, Porchester-square, W., March 23rd, 1886.

SECTARIANISM IN HOSPITALS.

THE REV. ARTHUR BRENCHLEY writes: "The Hospitals Association have by no means got to the bottom of this matter yet. Let the Association move the authorities of the various hospitals to issue a strict order that nurses may worship wherever they choose on Sundays. I have known matrons dismiss a nurse for declining to leave off attending the services at All Saints', Margaret-street, and giving leave to Roman Catholic nurses to go out to an early service, refusing the Church of England nurses asking for a similar permission."

Mr. M. H. Miller.—A seven-months' child is much less likely to live than an eight-months' child. There is a fair chance of rearing a child of thirty-two weeks, and every week added to the thirty-two weeks greatly increases the chance.

"COLOUR-BLINDNESS AMONG MEDICAL MEN."

To the Editor of THE LANCET.

SIR,—That there is great diversity, of kind and of degree, in the impressions experienced by different persons in the exercise of the organs of sight, touch, hearing, and taste, is in the knowledge of most medical men. Some of these impressions deviate so largely from a recognised standard as to be serious defects, of which colour blindness and the inability to distinguish acute from grave sounds (as the sharpness or flatness of a musical note compared with a known pitch), to determine the difference between a smooth and a villous surface (as that of satin from that of velvet), and to differentiate the taste of various substances (as of beef and mutton), are some of the most familiar instances. Is the sense of smell exceptionally free from like defects? I think not. In his evidence relating to the case of alleged poisoning by chloroform at Pimlico, as reported in the papers of yesterday, Dr. Stevenson likens the smell of chloral hydrate to that of lemon. Having always felt that the odour of the former was accurately represented by that of the water-melon, and having vainly endeavoured to trace the faintest resemblance in it to that of lemon, I have asked myself whether I am suffering from a defect of the olfactory sense, which, in the absence of a name for it, I venture to call anosphresis (*ανα-οσφρησις*). Perhaps some of your readers, including the eminent analyst referred to, will kindly put me right in this matter, the subject being, as it seems to me, one of great importance in medico-legal investigations.—I remain, Sir, your obedient servant,

G. E. NICHOLAS, M.D.,

March 23rd, 1886. Medical Officer of Health for Wandsworth.

PAINFUL DEFECATION.

PAINFUL defecation due to various causes, including fissure and piles, may, according to a New Orleans physician, Dr. Logan, be relieved at once by applying a few drops of oleate of cocaine to the anus.

Dr. Purcell.—Very soon.

PRACTICE AT THE CAPE.

To the Editor of THE LANCET.

SIR,—In reply to the inquiries of "A Constant Reader" in your last issue (p. 575), I beg to say that after many years' residence in the Cape Colony as a medical man I cannot recommend it at the present time as a field for practice. The Colony is in very low water and crowded with doctors. I know of several well-qualified young men who have been travelling from town to town and find it impossible to earn a livelihood. It was not so formerly. The cause of the change is not far to seek. Many of the better-to-do colonists have of late brought up their sons to medicine, and their example has been followed until the profession has been altogether overdone. These colonists have a great advantage over a stranger: they speak the Dutch language (which is necessary to success), understand local customs, and have family influence. Drugs are easily obtained in Cape Town, price from 100 to 150 per cent. over English prices; bottles 200 per cent. or more, besides inland carriage. A few hundred pounds would be necessary to start with, as money flies while travelling in search of an opening, and while learning the language. I would add, it would be wise to keep a reserve with which to beat a retreat should it be found necessary.

I am, Sir, yours truly,

March 23rd, 1886. CAPE COLONIST.

To the Editor of THE LANCET.

SIR,—If "Constant Reader" will send his address to J. B., 412, Battersea-park-road, S.W., he may get full details of Cape practice and the information he needs.—I am, Sir, yours obediently,

March 23rd, 1886. A COLONIST AND PRACTITIONER.

DERIVATION OF THE WORD "GLAUCOMA."

To the Editor of THE LANCET.

SIR,—I have always seen the word γλαυκος, sea-green, given as the derivation of "glaucoma," and Mr. St. Clair Buxton, who is an ophthalmic surgeon and ought to be an authority, repeats that derivation in your issue of to-day. It has, however, always appeared to me that a more probable source is the word γλαυξ, γλαυκος, an owl; and I should like to submit this origin to the profession. Considering the number of needless hybrid words which are yearly admitted to the English language, we doctors ought to struggle to keep our terminology accurate.

I am, Sir, yours truly,

March 20th, 1886. M.D. Durh.

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NITRO-GLYCERINE TABLETS.

To the Editor of THE LANCET.

SIR,—By way of correction of an annotation in THE LANCET of to-day (p. 560), headed the "Poisons Act," as the inventor and advertiser of the above, I beg to say: (1) They are not "commonly advertised as a popular remedy." They are only advertised in THE LANCET, the medical and pharmaceutical journals, and in a circular issued solely to the medical profession and the drug trade (one enclosed). (2) As to their being "objectionable and dangerous chocolate drops," their portability and palatability, and the relief they have afforded to late members of the Medical Council and patients of all grades, dispose of the first. With regard to the second, in my large experience of them I have not met with a single case of danger from their use, nor am I aware of any case recorded. I believe they have afforded more relief to painful human sufferin than any medicinal preparation introduced during the last twenty years. Should they be placed in the poisons schedule I should be compelled to label them "Legally Poison, but not Poisonous." (3) The 1 per cent. alcoholic solution of nitro-glycerine evaporates and leaves a residue uncertain in strength. The tablets are always stable, safe, and in divided doses. They contain $\frac{1}{100}$ gr. in each, but can be made to contain any dose. They are quick in action, not like the pills which I first prepared; these require time to dissolve and are slow in giving relief to acute pain. I prepared the tablets in the first instance at the request of a medical writer on nitro-glycerine who had found this exceedingly useful in angina pectoris. He wished to have it in a portable form for patients who were attacked when away from home. The Home Office refused me leave to buy nitro-glycerine in any form. I always make the mass for my tablets personally with my life in my hands. They represent an achievement in pharmacy second to none during the last century. The most dangerous and unstable explosive of modern times, by my process I prepare for medical use in a perfectly safe, stable, palatable, and portable condition in divided doses, and supply them at the rate of seven doses for a penny to hospitals buying a pound for the use of their patients. As to the "egregious blunder" of inserting them in the British Pharmacopœia, I pass this over. Pharmacists have no voice in compiling our national pharmacopœia; but I may say if a 1 per cent. alcoholic solution be preferred, there is nothing to prevent physicians prescribing as much as they please of it, as every respectable pharmacist has it in stock; but it is uncertain in strength. A 1 per cent. oily solution, as I have suggested, is much more uniform; but neither is portable. Nearly one-half the tablets I sell are exported, principally to Greater Britain, where no shipment of alcoholic solution of nitro-glycerine can be made as ordinary cargo, and where suffering patients would have to continue their sufferings unless the tablets could be obtained. The writer of the annotation referred to overlooks the fact that chloroform is in Part II. of the Poisons Schedule of the Pharmacy Act, 1868.—Yours truly,

March 20th, 1886. W. MARTINDALE.

*** Mr. Martindale forgets that he is not the only maker and advertiser of nitro-glycerine tablets. As a matter of fact, they are commonly sold to patients without a prescription or order of any kind from a doctor. We are assured on good authority that the chocolate lozenges are not so prompt in their action as the 1 per cent. alcoholic solution, and that in several cases their injudicious use has been attended with untoward results.—ED. L.

E.C.L.C.—The question is one we do not see our way usefully to discuss at the present time.

A CORRECTION.

To the Editor of THE LANCET.

SIR,—In my article on the "Medical History of the Suakim Expeditionary Force," inserted in your issue of the 20th ult., from "the treatment adopted" to "two to three ounces with iced water" (lines thirty-four to fifty-four of the second column), should have been inserted after "from 9 to 12 P.M." (line twenty).—Yours obediently,

Suakim, March 10th, 1886. J. ROCHEID FORREST, Surgeon, Army Medical Staff.

THE DISPOSAL OF THE SEWAGE OF LONDON.

IN an article which appeared in our columns on the 20th inst., upon the scheme of the Metropolitan Board of Works for the disposal of the sewage of London, we omitted to state that a full text of the report as submitted to the Board appeared in the *Metropolitan* of the 13th inst., as well as in *The Times* of that date, to whose report we referred.

C. H. W.—The Royal Medical Benevolent College, Epsom.

OWING to pressure on our space we are compelled to hold over many articles and communications, already in type.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. E. A. Sansom, London; Mr. C. S. Jeaffreson, Newcastle-on-Tyne; Dr. Jas. Wilson, Liverpool; Dr. Pavy, London; Mr. Ransford, London; Dr. R. Lee, London; Mr. G. Cowell, London; Dr. Kirby, Beckenham; Mr. J. Cooper, Middlesborough; Mr. W. Thomas, Birmingham; Dr. Lycett; Mr. Abbott, Tunbridge Wells; Dr. Kirk, Partick; Mr. C. F. Smith, Carlisle; Rev. A. Brinckman, London; Dr. Barnes, London; Mr. J. Johnson, Clare; Dr. Latham, Cambridge; Major Allsop; Mr. H. C. Gillies, Brockley; Mr. J. Odling, London; Mr. W. MacGregor, Bedford; Dr. W. Curran, London; Mr. Jennings, London; Mr. Jessett, London; Surg.-Major Evatt; Dr. Blenkinsop, London; Dr. Fenwick, London; Mr. J. McCulloch, London; Mr. Auld, Wick; Dr. Hermann Weber, London; Dr. Abrath, Sunderland; Mr. Reginald Harrison, Liverpool; Mr. S. J. Samuel, London; Mr, Abbs; Mr. Woodland, London; Mr. J. R. Forrest, Suakim; Messrs. Oliver and Boyd, Edinburgh; Dr. Roche, Kingstown; Dr. McCrarth, Smyrna; Mr. Radford, Newhaven; Mr. Raven, Broadstairs; Mr. Giles, London; Mr. Mivart, London; Mr. Crasswèller, Highbury; Messrs. Knight and Co., Rotherham; Messrs. Beal and Sons, Brighton; Dr. Reed, Samand, West Indies; Mrs. Piggott, Preston; Dr. Anderson, Glasgow; Mr. Hughes, Brompton; Messrs. Roberts and Co., London; Messrs. Squire and Sons, London; Dr. Beveridge, Leith; Mr. Ceckerill; Mr. Tanner, Newport; Mr. Somerville, Edinburgh; Dr. Nisbet; Messrs. Clark and Co., Glasgow; Dr. Chersall, Hawley; Mrs. Watson, Regent's-park; Mr. Hastings, London; Rev. W. Bell; Dr. MacGregor, Aberdeen; Mr. Polenz, London; Mrs. Mothers, Clevedon; Mr. Holtby, York; Mr. Kelsey; Mr. J. Stewart, Clifton; Dr. D. W. Williams, Truro; Mr. J. H. Potter, Sheffield; Dr. Menzies, Paris; Mr. E. H. Saunders, Devonport; Dr. Nicholas, Wandsworth; Mr. H. Addison, Holloway; Mr. O'Hanlan, Spennymoor; Mr. Cooper, Hull; Mr. E. C. Wickham, Wokingham; Mr. Ensor, Port Elizabeth; Mr. Parks, London; Mr. Holmes, London; Mr. Blandford, Stockton-on-Tees; Surg.-Major Pringle; M.D., Durh.; E. C. L. C.; Student; M. J.; R., Finsbury; A. E. J., Haden Bridge; M.D. Upper Edmonton.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Shaw, Crouch Hill; Miss Carson, Burton-on-Trent; Mr. Moullin; Mr. Ellis, Bishop Auckland; Dr. Heelas, Bonchurch; Mr. Salter, Gisborne, Victoria; Mr. Watkins, Layton; Mr. Young, Hawkhurst; Mr. Thomas Cook, London; Mrs. Stevenson, Brighton; Messrs. Henderson and Co., London; Mr. Page, Sheffield; Mr. Watters; Mr. Sanders, South Molton; Mr. Hill, Beeralston; Mrs. Rendall, Norwich; Mr. Cocking, Gainsboro'; Dr. Harvey, London; Miss South, Hastings; Dr. Eberle, Thirsk; Mr. Robertson, Bayswater; Mr. Merryweather; Mr. Adie, Shoreditch; Mr. Lyle, Shacklewell; Dr. Taylor, Cardiff; Mr. Stone, Lasswade; Mr. Somerville, Edinburgh; Mr. Armistead, Manchester; Mrs. Griffiths, Southport; Matron, Bridgwater Infirmary; Medicus, Brighton; Alpha; Surgeon, Hull; L., Bayswater; Senior; Medicus, Southport; A. B.; F. N. W., Grantham; Remo; L.R.C.P., Southampton; M.R.C.S., York; Delta, Darlington.

Liverpool Courier, Hertfordshire Mercury, Windsor and Eton Express, City Press, Newcastle Weekly Chronicle, Sanitary Engineering, Southend-on-Sea Observer, Brisbane Telegraph, &c., have been received.

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Gulstonian Lectures

ON

SPASM IN CHRONIC NERVE DISEASE.

Delivered at the Royal College of Physicians of London, March, 1886.

BY SEYMOUR J. SHARKEY, M.B., F.R.C.P.,

ASSISTANT-PHYSICIAN AND JOINT-LECTURER ON PATHOLOGY AT ST. THOMAS'S HOSPITAL.

LECTURE II.

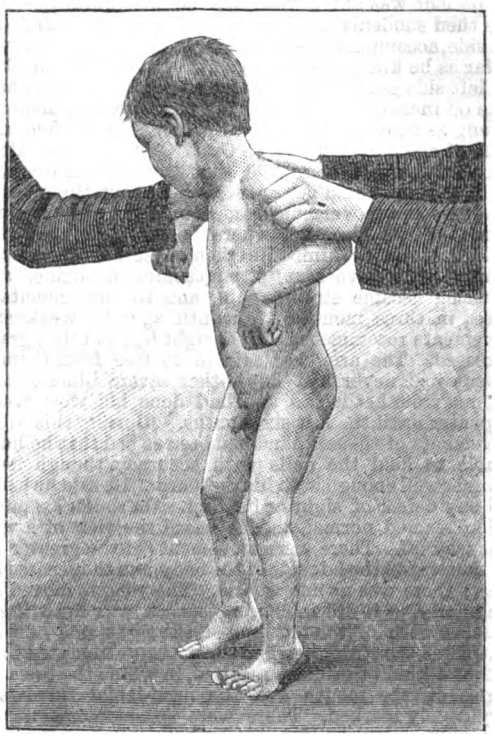
MR. PRESIDENT AND GENTLEMEN,—In my first lecture I considered the part played by chronic diseases, which injure the intracranial portion of the pyramidal tract, in the production of spasm. It was pointed out that the results are similar, whether the lesion is situated in the motor area of the cortex, in the central ganglia, in the crus, pons, or medulla, provided that the function of the fibres of the pyramidal tract be interrupted. A point which is of great importance, and which will be again referred to when we come to a consideration of functional spasm, is this, that congenital defects of portions of the central nervous system are as capable as destructive diseases of producing paralysis of limbs, accompanied by spasm.

Case of Congenital Spastic Hemiplegia.—In the Med.-Chir. Trans. (vol. lxvi., 1883) I published a case of Asymmetry of the Brain, and discussed the bearing of the anatomical peculiarities of the specimen on the question of the connexion between the optic nerves and certain definite areas of the cerebral cortex. But the case is also a good example of the disease called congenital spastic hemiplegia, and for this reason I refer to it here. E. A—— was admitted into St. Thomas's Hospital, under the care of Mr. Mason, owing to injuries received by the fall of a house; and she died of the results of the accident. I never saw her until I performed the post-mortem examination upon her; and no account was obtained during her lifetime of the abnormality in her right arm and leg, nor of the state of her mind and special senses. After death, her father informed me that his daughter had always been healthy up to the time of the accident, which proved fatal in a few weeks; that she had never suffered from fits or other nervous affections; that from her very birth she had had a small and stiff right arm; and that she had always been left-handed and a little lame. He had never noticed any mental deficiency; and she had never complained of her sight, hearing, or other senses. No peculiarity in her eyes, speech, or aspect was noticed during her stay in the hospital; but the sister of the ward said that she struck her as being intellectually dull, even for a person in her position in life. At the necropsy both the right arm and leg were seen to be smaller than their fellows, though they were otherwise normally formed; and the muscles examined presented the rich brown colour of health. The right wrist measured 4¾ in., the left 5⅜ in.; the right forearm 6½ in., the left 8 in. The circumference of the left leg, round the calf, exceeded that of the right by one inch. The heart, lungs, and other viscera were healthy, with the exception of the kidneys and the bladder, which were in a state of acute inflammation. The skull and the membranes of the brain were normal, as were the intracranial bloodvessels, nor was there any marked inequality of the latter on the two sides.

I need not enter into the minute details given in the paper referred to, but may simply state that both the history of the patient and the anatomical peculiarities of the brain showed that it was a case of malformation of one portion of the left hemisphere, and arrest of development of the remainder. The most striking characteristics of the specimen which is here shown (Figs. 14, 15, 16, 17) were: (1) the general arrest of development of the left hemisphere, including the motor convolutions; (2) the small size of the corresponding crus cerebri and anterior pyramid; (3) the absence of the angular gyrus and superior temporo-sphenoidal convolutions, together with the fusion of some of the other convolutions of the left temporo-sphenoidal lobe; (4) the small size of the optic tract, optic thalamus, and corpora geniculata on the same side. The spinal cord was subsequently examined, and, throughout its whole length, it was seen that the right lateral column was smaller than the left, and the left column of Türck smaller than the right. (Fig. 18.) These differences were most marked in the upper regions of the cord, and became less and less so towards the lumbar enlargement. The microscope showed that in those parts where reduction in size was evident, even to the naked eye, the nerve fibres were fewer in number and the tissues a little denser than in health; and the general impression left upon the observer's mind was that there was an absence of nerve fibres, and consequent undue prominence of the connective tissue. In this case there was clearly congenital absence of part of the motor convolutions and of the corresponding pyramidal tract; and, clinically, paralysis with spasm was observed. Such a combination seems to prove that the mere absence of the controlling impulses which in healthy subjects traverse the pyramidal tract is capable of giving rise to a spastic condition of the limbs.

Congenital defects similar to that which has just been described may be bilateral, and produce a condition about which a good deal has been written, and which is termed "infantile spasmodic paralysis," or "spastic paraplegia of infancy." Dr. Hadden, writing on this disease in *Brain* (vol. vi., 1884), says, "the lower extremities are more or less flexed at the hip- and knee-joints, the thighs are rigid and adducted, the knees in contact, the legs inclined outwards, and the heels often drawn up from the ground by the contraction of the gastrocnemii." Figs. 19 and 20[1] represent a well-marked but not extreme case of the kind, which was under Mr. Clutton's care in St. Thomas's Hospital. The child was an idiot, as many of them are. Dr. Ross has proved, by post-mortem evidence, that defects in the development of the brain can produce this condition. In *Brain* (vol. i., 477), he records a case of the disease in which he found at the necropsy a congenital defect in the motor convolutions on both sides, and absence of the large pyramidal cells normally existing in them. He found the same condition of the spinal cord as was present in my case of congenital spastic hemiplegia—namely, absence of a certain amount of the lateral columns,—but no other

FIG. 20.



From a photograph of a slight case of congenital spastic paralysis

[1] The numbered figures which are referred to in the text were shown when the lectures were delivered, but only a certain number are reproduced here.

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abnormality. Whether all cases of congenital paralysis and spasm of the limbs be due to arrest of development of portions of the brain is at present uncertain, but it is not at all improbable that intra-uterine disease of parts already formed may be the explanation of some. Contracture, or fixed spasm, is a comparatively frequent result of cerebral lesions which interrupt permanently the voluntary impulses proceeding from the cortex. But, in addition, mobile spasms have been observed in great variety, either after hemiplegia or independently of it. Sometimes they attend voluntary movements only; sometimes they are involuntary and continuous; but in all of them the retention of a large amount of voluntary control over the limbs affected is a striking feature. In addition to the mobile spasm, there is often a certain degree of fixed spasm, though a marked degree of the latter would be incompatible with the development of the former. Continuous movements of the hands and toes have been termed "athetosis." The following is a case of the kind which I reported in *Brain* for April, 1885. It is a good example of this condition, though rare because of the number of muscles affected, and because the movements appeared after many years on the opposite side of the body.

G——, aged twenty-four, came under my care as an out-patient at St. Thomas's Hospital on March 26th, 1884. Until the patient was three years old he was quite healthy; he was then suddenly attacked with loss of power all down the left side, accompanied by repeated and prolonged convulsions. As far as he knew, the movements of the limbs and face on the left side gradually followed the loss of power, and had gone on increasing ever since; at any rate, they had done so as long as he could remember. When between four and five years of age he was taken to Great Ormond-street Hospital, where his parents were told that the movements were so slight that he would get over them. About three years ago weakness and movements came on in the right leg, and he went to Guy's Hospital, where he was told that nothing could be done for him. He then consulted a homœopathic chemist, who gave him "strengthening medicine," and his right leg became strong again, and the movements in it ceased in three months. A month ago the weakness and movements recommenced in the right leg, and they gradually increased. The arm was said to be free from them. The patient had never had any other severe illness, had not suffered from headaches, and had done his work well as a carpenter until the last six months. During this time the movements of the left hand had been so bad that he had been unable to hold the nails with accuracy, though he could hammer well enough with his right arm. He said he had never had any defect of sight or hearing. On rough examination, vision seemed normal, and he heard the tick of a watch a long way off. There were movements of the greater part of the muscles on the left side of the body, and they ceased during sleep; there was no anæsthesia. The tongue moved a little irregularly, as it did in chorea; speech was drawling. The muscles, both of the left and of the right side of the face contracted too strongly when the patient attempted to speak, so that a kind of grimace resulted, in which the lines at both angles of the mouth and the naso-labial furrows were very deeply marked. There were spasmodic, more or less regular, movements of the neck to the left, and the shoulder was rhythmically raised, and jerked slightly forwards and backwards. One could see the serrations of the left serratus magnus contracting rhythmically. The abdominal muscles were harder on the left side than on the right, but there were no evident movements in them. There were slight spasmodic movements in the left arm, but they were only slight. The hand, on the contrary, was markedly affected. There was constantly more or less rhythmical flexion and extension of the fingers, mainly at the metacarpo-phalangeal joints, with irregular flexion and extension of the phalangeal joints, and occasional separation of the fingers. In the left leg there were similar slight movements of the muscles, with marked movements of the toes, and most marked of the great toe. There were tremulous flexions and extensions, but the flexor longus pollicis was constantly contracted, so that the great toe was always riding over the others, and its proximal phalanx was usually at right angles to the metatarsal bone. In the right foot the movements were similar, but not so marked. In the right hand only the little finger moved, and that so slightly that the patient had not noticed it. The grasp of the right hand, though stronger than that of the left, appeared to be deficient in power; the patient said, however, that he had never noticed that it was weak. There was neither atrophy nor hypertrophy of the muscles of the limbs. The patellar reflex was unnaturally brisk on both sides, but there was no ankle-clonus. The patient seemed very intelligent, and said that his memory and mental power were very good. The fundus of the eyes and fields of vision were normal. The urine contained no albumen.

The next case is one of fixed combined with mobile spasm, and also differs from that just described in this, that there was no history of hemiplegia or monoplegia preceding the onset of the muscular contraction.

Case of Mobile and Persistent Muscular Spasm of the Upper Extremity.—E. F——, aged eleven, came to St. Thomas's Hospital as an out-patient, under me, in June, 1884. She was a very well made, intelligent, lively child, and in these respects was said to resemble the rest of her family. When she was nine months old the mother noticed that she held her left arm behind her back, and did not use it properly. Ever since the arm had been becoming gradually more distorted and useless. On examination it was found that the left arm was not undersized or atrophied, but that it was the seat of extreme distortion, which rendered it perfectly useless. The forearm was excessively pronated, so that the palm of the hand looked outwards, and the wrist was flexed; the metacarpo-phalangeal joints were extended, the proximal phalangeal joints hyper-extended, and the peripheral flexed. The elbow-joint was flexed, and looked unshapely. The metacarpo-phalangeal joint of the thumb was flexed, and the phalangeal joint hyper-extended; and the thumb, as a whole, was turned inwards towards the palm. All the parts described were rigidly fixed in these positions, apparently by the spasmodic action of the muscles. But the spasm could with difficulty be overcome, and then the limb assumed quite a new appearance. Thus, if pronation were rectified and the elbow bent, the wrist at once became extended, all the fingers flexed, and the thumb was turned into the palm of the hand beneath them. This state of affairs was only retained by keeping the elbow-joint flexed, and forcibly overcoming the tendency to excessive pronation. As soon as the latter was allowed to assert itself the whole limb at once returned to the original position. Sensation was unaffected. Dr. Kilner, who tested the electric condition of the affected parts, reported that the muscles reacted normally to the induced current, and presented very slight reaction of degeneration when the constant current was used. On giving chloroform the distortion almost entirely disappeared, the muscles were flaccid, and the tissues of the elbow-joint appeared very lax. The child had attended the Orthopædic Hospital for one year without deriving any benefit; but electricity had not been tried. Dr. Kilner was good enough to undertake treatment by this means, but though he continued it for weeks the condition underwent no improvement. On August 24th, 1885, I took her to have the abnormality photographed, and I then found that certain alterations had occurred in the condition of the hand and arm. The most marked change was that they were never still; in fact, the case might then have been called one of athetosis of the left upper extremity. The arm, when left alone, usually occupied a position midway between the perpendicular line of the body and a horizontal line drawn through the left shoulder-

FIG. 21A



Case of spastic paralysis of the left arm and hand, showing the position assumed when the wrist was extended.

FIG. 21B.



Showing position assumed when the wrist was flexed.

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joint, and the latter was extended, the forearm pronated, the wrist flexed, and the fingers flexed at the peripheral phalangeal joint, and hyper-extended at the proximal. Such a degree of hyper-extension now existed in the metacarpo-phalangeal joint of the thumb that partial luxation had been produced. The child generally liked to hold the hand across the front of the body, with the fingers a little flexed. Irregular clonic jerks affected the whole arm from the shoulder, and the fingers were in more or less constant movement when left to themselves. There were occasional slight jerks of the left angle of the mouth, but the leg appeared free from any abnormality. The child asserted that she had always had these movements, though I certainly did not notice them when I first saw her. Figs. 21A and 21B represent the condition of things in January, 1886.

Mobile spasms do not always assume the characters which are described under the term "athetosis." Movements resembling more or less those of chorea, disseminated sclerosis, ataxy, and paralysis agitans, likewise occur.

On June 11th, 1885, a woman, aged sixty, came to my out-patient room, complaining of loss of power all down her left side; her face, arm, and leg were all weak, and there was a considerable degree of hemianæsthesia. This condition had slowly developed in the course of three months. Though she had had rheumatic fever twice, there was no apparent disease of her heart or other viscera, but her arteries were somewhat hard. By November moderate hemiplegic rigidity had developed, and, in addition, continuous movements exactly resembling those of paralysis agitans.

It is unnecessary to describe the various forms of mobile spasm which are seen at the bedside. Dr. Gowers has given an account of a considerable number (Trans. Royal Med.-Chir. Society, vol. lix.); and Charcot and others have also recorded cases. What concerns us more on the present occasion is the question of their pathology. Can they be attributed to any lesion constant either in its nature or in its position? The answer to this must be in the negative; but we have to confess at the same time that our knowledge of this class of spasm is very deficient. Gowers, in the paper already referred to, records a case of "post-hemiplegic incoördination," in which he found, at the necropsy, one lesion only, and that was a cicatricial induration confined to the optic thalamus, and unaccompanied by any pathological changes in the spinal cord. Weir Mitchell found the seat of the lesion in two cases in the corpora striata. In the *Revue de Médecine* for May, 1883, Emile Demange records the necropsy in nearly a dozen cases of post-hemiplegic mobile spasm; and among these is a case of hemiathetosis, in which there was extensive softening of the convolutions, but no disease of the central ganglia. In most of the cases the lesion or lesions were in the central ganglia, sometimes involving the internal capsule, and sometimes not. Hence it seems to me that we must agree with Demange when he says that these movements may occur from disease of any part of the motor tract in the brain; and he adds that the variety of movement does not depend upon the seat of the lesion, but rather upon the condition of the motor tract below the lesion.

All the varieties of mobile spasm seem to result from a mixture, in varying proportions, of paralysis, spasm, and irritation; and their development depends upon lesions which interfere with the perfect functions of the motor centres and fibres, but which do not completely interrupt them. That such a condition of incomplete destruction is competent to give rise to movements of the kind under consideration is shown by a case which I published in THE LANCET in a paper on Cerebral Localisation already referred to. The patient was a woman aged forty-six, who was admitted into St. Thomas's Hospital on July 20th, 1878, and died on July 21st, 1879. She was suffering from chronic renal disease, and on Jan. 18th, 1879, she complained of being unable to keep her left arm still. The movements both of the arm and leg soon became violent and disorderly. When asked to put her left hand to her face, she did so hesitatingly, and with a series of jerks which had no constant rhythm or direction. The same occurred on voluntary movement of the leg, while the right arm and leg were moved slowly and naturally. The jerking movements gradually subsided until, on Jan. 30th, the leg was freely and normally moved, while the left arm was almost completely paralysed, and, although it recovered some degree of power, it remained markedly paralysed to the end of her life. After death the middle part of the ascending parietal convolution on the right was softened, shrunken, and of an orange colour. It is clear in this instance that the involuntary movements of the limb occurred at the time when the cortical grey matter was in the early stages of softening, and that they ceased when paralysis resulted from its complete disorganisation.

In concluding the consideration of spasm in connexion with diseases of the intracranial portions of the voluntary motor path, it is necessary to refer to a statement which I made in my first lecture—namely, that "our present knowledge of anatomy, physiology, and pathology does not justify us in concluding that there is any efferent motor connexion between the brain and the spinal cord, except the pyramidal tract, direct and crossed, disease of which gives rise to chronic muscular spasm. Evidence in support of this view will appear in subsequent portions of these lectures." In saying this I wished to exclude the cerebellum and the central ganglia from consideration, since any rigidity or spasmodic contraction of muscles which arises in connexion with diseases of the areas they occupy seems to depend upon involvement of the pyramidal tract, which passes close by them. Evidence has also been supplied in support of this view as far as the cerebellum is concerned. Let me now record a case which shows that destruction of the central ganglia produces no spasm so long as the neighbouring internal capsule is intact.

C. B——, aged thirty-nine, had an attack of right hemiplegia ten years before death and another somewhat later. He died of carcinoma of the cæcum, having long recovered completely from all paralytic symptoms. At the necropsy I found that the hemispheres were free from disease. On exposing the ventricles, it was at once seen that the left caudate nucleus was very much shrunken and of a yellowish hue. Both optic thalami and the right nucleus caudatus looked healthy. The left crus cerebri was small and discoloured along its inner third, and the left side of the pons Varolii was evidently flattened. Nothing abnormal was noticed in the crus cerebelli on either side, and the pyramids in the medulla oblongata were equal and natural. No descending degeneration was to be discovered in the spinal cord with the naked eye. The brain was then set aside to harden in alcohol before any further examination was made. A series of horizontal sections through the hemispheres and central ganglia showed that there was hardly anything left of the nucleus caudatus or of the nucleus lenticularis on the left side, but there were no evident changes in either division of the internal capsule. The optic thalamus was a little smaller than its fellow on the opposite side, while all the central ganglia on the right were healthy. (Fig. 22.) A vertical section through the crura cerebri showed very marked atrophy of the left as compared with the right. A similar diminution in size was observable in the left half of the pons (Fig. 23); but the pyramids and all other divisions of the medulla oblongata were healthy and symmetrical.

This case shows that disease so severe as to result in almost total obliteration of the corpus striatum may produce hemiplegia, which passes off without leaving rigidity, paralysis, or any other symptom behind. And, secondly, it proves, as far as any single case can prove, that the efferent fibres of the corpus striatum do not pass down further than the pons Varolii or medulla oblongata.

The continuous degeneration of the lateral column through the whole length of the spinal cord in cerebral lesions shows that the fibres are not interrupted by entering ganglionic centres, but pass straight to their several destinations in the anterior cornua. It will be readily understood that if disease destroy them at any level in the spinal cord, degeneration will occur in them below, and give rise to symptoms of hyper-physiological activity of the spinal centres with which they are connected, similar to those which occur when the disease is intracranial. In the latter case all the spinal centres which are under voluntary control are affected; in the former, only a certain number, more or less numerous according as the lesion is situated high up or low down in the cord. There is this difference, too, that in cerebral disease the rule is to find the contracture unilateral, in lesions of the cord bilateral. But this is merely because the pyramidal tracts in that part of the brain where they are most liable to be interrupted by disease lie at some distance from each other; whereas in the spinal cord they are so close together as usually to be involved in the same pathological changes. The symptoms, however, of disease of the lateral columns of the cord are the same, whether it follow cerebral or spinal lesions. The affections of these columns are either primary or secondary.

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and the symptoms differ slightly accordingly. Thus, if a primary chronic inflammation attack them, as in primary lateral sclerosis or disseminated sclerosis, paresis of the corresponding muscles is an early symptom, and tremors of the limbs when moved, increased tendon reflexes, and clonus soon follow. In addition to these, transitory involuntary contractions and longer though still intermitting spasms occur, and finally culminate in persistent rigidity. When the latter has fairly set in, the muscles can only be loosed from their slavery by a process which condemns them to perpetual inaction. Their masters, the cells in the anterior cornua, may be attacked and die; but the muscles perish with them, and the tendon reflexes and other signs of their activity disappear for ever. But the lateral columns are more often affected secondarily than primarily, and then the symptoms which culminate in spasm follow those which characterise the original disease. Thus we often see cases of myelitis run their course to destruction of a portion of the spinal cord, and rigid contracture of the limbs then supervenes. Such disease occurs more frequently in parts below the cervical region than in those above it, and consequently the legs are more often the seat of rigidity than the arms. But matters are not always so simple as this, for a lesion of the lateral columns may be combined with that of some other tract of fibres; and a combination of symptoms then presents itself, some being attributable to disease of one tract, and some to disease of the other. If we are to draw correct conclusions with regard to the localisation of diseases of the spinal cord and their progress, we must never lose sight of the phenomena which characterise the healthy action of the nervous system. Physiology is the only safe guide for the diagnosis of the positions occupied by disease. Again, although pressure upon the pyramidal fibres interrupts their functional activity, the symptoms are very different according to the manner in which the pressure is applied, whether from without or from within the cord. As time will not permit me to enter into detail upon all those diseases of the spinal cord which give rise to spasm, I shall try to illustrate from my own experience the two points to which I have specially referred—namely, first, the difference in the results of pressure applied upon the cord from without and from within; and, secondly, the modification which occurs in the symptoms of disease of the lateral columns when it is combined with disease of other parts of the cord. The following case is a good instance of pressure on the spinal cord from without, giving rise to interference with the function of the lateral columns and to extreme contracture of the lower limbs.

Case of Tumour (Myxoma) on a Spinal Nerve, which pressed upon the Cord and produced Paralysis and Spasmodic Contraction of the Lower Limbs. — A. J——, aged twenty-four, blacksmith, was admitted into St. Thomas's Hospital, under the care of Dr. Bristowe, on April 20th, 1876. His family history was unimportant, and until his present illness began he had always enjoyed good health. He had drunk freely both beer and spirits. He was in the habit of lifting heavy weights, and had occasionally "ricked" his back, but had never suffered from any serious injury. In August, 1875, he began to feel a sensation of weakness in the loins, but he had no actual pain. This was followed in November, 1875, by a certain degree of weakness in walking, which slowly increased, so that he became unable to walk at all two months before admission. During this period he suffered from cramp, with slight loss of power in his left arm, and from occasional attacks of sharp shooting pains and cramp in his legs. He had had no loss of sensation or numbness anywhere. On admission, he was found to have marked paraplegia, but no loss of sensation. He suffered from cramps, and his legs at times were flexed involuntarily. He had incomplete control over his evacuations. His left hand and arm were not as powerful as his right. All his organs appeared to be healthy, and he had no albumen or pus in his urine. Somewhat later, painful contraction of the adductor muscles of the thighs used to come on and last for hours; and he had slight numbness as high as the umbilicus. When these attacks of spasm supervened in the muscles of the leg, pain and similar cramps were experienced in the left arm. The remainder of his life was very painful. His legs became gradually more and more permanently and rigidly flexed and adducted, and bedsores developed over the internal aspects of the knees, where they were forced against each other, as well as over the sacrum and trochanters. Sensation, however, rather improved than deteriorated. Finally, incontinence of the evacuations, cystitis, and hectic fever set in; and the patient died on August 17th, four months after admission, and one year from the date of his first symptoms. At the necropsy most of the organs were found to be perfectly healthy, the urinary tract and spinal cord alone presenting evidences of disease. The pelves of the kidneys and the ureters were inflamed, and the kidneys were large and succulent. On one of the anterior spinal nerves, which originated just at the termination of the cervical enlargement, was a tumour about as large as a medium-sized marble. It was firm, pale in colour, and covered with a perfectly smooth fibrous sheath. The nerve was lost in its substance, but the tumour was free from adhesions with the spinal cord and all the surrounding structures. It was wedged in between the bones forming the spinal canal on the one hand and the anterior surface of the spinal cord on the other, so that the latter was flattened by it anteriorly and slightly laterally. The tumour was a myxoma.

The motor phenomena which characterised this patient's history were paralysis, attacks of tetanic spasms, and, finally, persistent rigidity of the legs. Making allowance for the position at which the pressure was applied to the spinal cord—namely, below the origin of the nerves supplying the arms,—the occurrence of tetanic spasms in the legs from time to time reminds us forcibly of similar but more extensive spasms which occur when the disease occupies the base of the brain or the cerebellum, and, I think, gives support to the conclusions which were drawn as to the part played by the cerebellum in their production. A point which should be specially noted in this case is this, that when the pains and tetanic spasms occurred, pain and spasm were likewise felt in parts supplied by the nerve on which the tumour was situated. These attacks of spasm in the legs, which were intermittent, appear then to have been produced by changes occurring in the tumour, which also showed their presence by increased pressure on the nerves for the arm which it involved. The same intermittence was observed in the spasmodic attacks produced by the tumours which occupied the base of the brain, and the same thing occurs when a tumour presses upon the cerebral cortex. We may conclude, therefore, that in all such cases the convulsions are due primarily to alteration in the condition of the tumour, though we cannot say in what the alteration consists.

[ERRATUM.—On page 532, second column, six lines from the bottom, for "lenticulo-striate and lenticulo-optic arteries" read "lenticulo-striate artery."]

(To be concluded.)

Croonian Lectures

ON

SOME POINTS IN THE PATHOLOGY OF RHEUMATISM, GOUT, AND DIABETES.

Delivered at the Royal College of Physicians of London, April, 1886.

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LECTURE I.—ABSTRACT.

THE three disorders of rheumatism, gout, and diabetes are classed together because they seem to possess a certain relationship with each other. Cases occur in which it is difficult to decide whether the disease must be regarded as rheumatic or gouty. Not infrequently transient diabetes appears as the harbinger of a gouty attack; and, on the other hand, gouty, rheumatic, or neuralgic pains are very common accompaniments of diabetes. In all we have changes, differing, however, in character, showing themselves in the blood, the result of abnormal metabolism either in the muscular or glandular tissues. What are the changes that take place in the tissues or in the blood? In attempting to answer these inquiries we meet at the outset with a most serious difficulty. We

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require to know what the constitution of the particular tissue is, its proximate constituents, its structural formula, *not* its ultimate chemical composition. We do not know what are the proximate elements which make up living tissue, nor what are the chemical changes which take place as it performs its function, nor the alteration in the arrangement of its molecules as it passes from an active to an effete state. By chemical investigation it has been shown that various complex bodies which did not exist as such in the living tissue can be extracted from the different tissues after death. This subject was illustrated by a reference to the changes that occur in blood after being shed and to the chemical differences of living and dead muscle. No definite agreement has yet been arrived at as to the constitution of dead proteid, or as to the manner in which the various substances, leucine, tyrosine, &c., are contained in it. Lieberkühn gives its formula as $C_{72}H_{112}N_{18}O_{22}S$; and this, according to Hlasiwetz and Habermann, by hydration, may be split up into aspartic acid, glutamic acid, leucine, tyrosine, and ammonia. Seeing the difficulty of studying the dead tissues, Dr. Latham said it might appear presumptuous and rash on his part to endeavour to assign a molecular structure chemically to living tissue. Still, he would make the attempt and advance a theory which appeared to him to explain many changes in the tissues. It was well known that lactic acid, leucine, glycocine, and other bodies could be prepared in the laboratory from a particular series of cyanogen compounds, the so-called cyanalcohols or cyanhydrins—bodies which may be obtained by oxidising the various alcohols, and so forming the aldehyde, and then combining this with hydrocyanic acid. Thus:

$$\underset{\text{ethylic alcohol.}}{C_2H_5HO} + O = \underset{\text{ethaldehyde.}}{CH_3 . CHO} + H_2O$$

$$\underset{\text{ethaldehyde.}}{CH_3 . CHO} + HCN = \underset{\text{cyanethylic alcohol.}}{CH_3 . CH(CN)OH}$$

These cyanalcohols are very unstable bodies; treated with ammonia they form a series of cyanamides, also very unstable, and easily undergo condensation, being converted into imido-nitriles with elimination of ammonia. It is suggested that these cyanogen compounds possess some properties of living tissue—viz., those of undergoing intra-molecular change, and also condensation. May not albumen itself be regarded simply as a compound made up of these elements, if from these cyanogen compounds we can obtain the various products which result from the disintegration of albumen? Dr. Latham then pointed out some of the animal products that could be obtained from these cyanalcohols: leucine, which could be artificially obtained by oxidising amylic alcohol; then mixing with aqueous ammonia the aldehyde is converted into valeral ammonia, and this digested with hydrocyanic acid and hydrochloric acid is converted into leucine. This is the usual way of obtaining leucine artificially, but Tiemann has shown that the amido-acids both of the fatty and aromatic series may be obtained by converting the aldehydes and ketones into cyanhydrins and then into amido-nitriles, or cyanamides. Leucine prepared in this way is not quite identical with animal leucine. It is suggested that, just as sarcolactic acid is a compound of ethidene and ethene lactic acids, so leucine is a compound of several amido-acids, the molecule C_5H_{10} being made up in different ways. Amido-isovaleric acid or butalanine has been found in the pancreas of the ox, and it can be artificially prepared from the cyanalcohols; it has also been prepared by Schützenberger from albumen. Amido-butyric acid can be formed from cyanalcohols, and has been separated from albumen. By oxidation oxy-isobutyric acid is resolved into carbonic acid and acetone, a substance that sometimes appears in diabetic urine. Ethidene and ethene cyanalcohols may be prepared (1) by oxidising ethylic alcohol and treating the aldehyde so obtained with hydrocyanic acid; (2) by converting ethene alcohol or glycol into a cyanalcohol. From these cyanalcohols the corresponding amido-acids or alanines may be obtained. Alanine or amido-propionic acid was also among the products Schützenberger obtained from albumen.

The lecturer then proceeded to show how from the various alcohols, amylic, ethylic, &c., converted into aldehydes and then into cyanalcohols, the corresponding amido bodies, glycocine, leucine, &c., could be obtained, and all the acids of the acetic series, as well as those of the lactic acid series, which may also be prepared from animal substances. The formation of lactic acid and glycocine were thus referred to:—Lactic acid, again, is an important product of the animal organism. It is developed when a living muscle contracts, and is produced when a muscle dies. The variety of this acid, which is obtained from the disintegration of albuminous compounds, and is formed during the contraction of muscle fibres (sarcolactic acid), may be regarded as a mixture of two kinds of lactic acid, the more abundant being paralactic acid or ethidene lactic acid $CH_2 . CH \begin{cases} OH \\ COOH \end{cases}$, the other ethene lactic acid $CH_2 . CH_2 \begin{cases} OH \\ COOH. \end{cases}$ By treating ethidene cyanalcohol with acids or alkalies, paralactic or ethidene lactic acid is obtained; by treating ethene cyanalcohol in the same way, ethene lactic acid is obtained.

The next point is whether the reverse process can be effected. Can the amido bodies in the system be converted into the cyanalcohols, and can we theoretically build up albumen from such bodies? The first step in this direction is indicated in what follows when amylaceous matter or sugar is introduced into the alimentary canal. A certain accumulation of glycogen takes place in the liver, and, further, a considerable quantity of sugar can be slowly injected into the portal vein without any appearing in the urine. The sugar loses a molecule of water, and becomes glycogen in the liver.

Now, in order to obtain the various amido-acids from albuminous tissue the reverse process must be adopted, the tissue must be hydrated, and a certain amount of water must enter into combination with it. Having shown that leucine and tyrosine, regarded as amido acids, exist in the intestines, and having quoted the evidence from Foster's physiology that leucine and probably tyrosine can become converted by the liver into urea, though there is much difficulty in understanding how this is effected unless we suppose that the amido acids first pass through an ammonia phase, Dr. Latham drew attention to the almost complete disappearance of urea from the urine in cases of acute yellow atrophy of the liver, leucine and tyrosine being abundant. The experiments of Solnikoff, too, show that the urea which passes out of the system by the kidneys enters the circulation with the blood which issues from the liver.

It is hardly intelligible that the nitrogen in the fresh nutritive material should immediately be transformed into urea and pass out of the system. These amido acids or glycines are capable of uniting with each other, and their molecular weights are at least double as great as their formulæ would indicate (Hofmeister). Now as the function of the liver in forming glycogen seems to be dehydration of glucose, the question naturally suggests itself: What compounds would result from the liver acting in the same way on these duplex or triple glycines? What substances would be produced by their dehydration? Can they in any way be converted into a series of cyanalcohols?

In 1828 Wöhler showed that urea $CO \begin{cases} NH_2 \\ NH_2 \end{cases}$ can be produced by molecular transformation of $CNO . NH_4$ (ammonium cyanate) by simply heating a solution of the latter. Pflüger, in calling attention to the great molecular energy of the cyanogen compounds, suggested that the functional metabolism of protoplasm by which energy is set free may be compared to the conversion of the energetic unstable cyanogen compounds into the less energetic and more stable amides. In other words, ammonium cyanate is a type of living and urea of dead nitrogen, and the conversion of the former into the latter is an image of the essential change that takes place when a living proteid dies. Dr. Latham then showed how it was possible chemically to produce an *atomic* combination of the cyanalcohols united to a cyanamide and an acid by making glycocine go through various hydrations and dehydrations. Another glycine—tyrosine—$C_6H_4 \begin{cases} OH \\ C_2H_3(NH_2)\ COOH \end{cases}$ or para-oxyphenyl-amido-propionic acid, could be obtained from proteids. By combining tyrosine with glycocine, H_2O, being eliminated, we should obtain a cyanogen compound. Bearing in mind that some cyanogen compounds by condensation of three molecules form new compounds, such as

$$\underset{\text{cyanic acid}}{3CNOH} = \underset{\text{cyanuric acid,}}{C_3N_3O_3H_3}$$

we may combine the compound of tyrosine and glycocine with three molecules derived from glycocine, and three molecules derived from each of the other glycines in the series including leucine; we should then obtain a very complex com-

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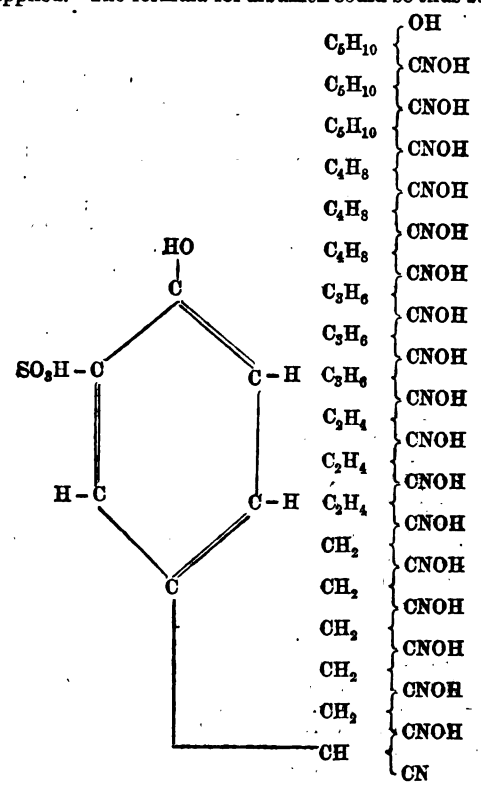
pound of cyanalcohols, the molecule COOH in the one series combining with NH_2 of the other to form CNOH. Then, combining the COOH and NH_2 with other molecules of the same composition, and replacing one of the hydrogen atoms of the benzene nucleus by SO_3H, we should obtain an enormously complex molecule, to which, if the molecule of CNOH be added, we should have a chemical formula almost identical with that given by Lieberkühn for albumen (*vide posted*). Dr. Latham next assumed for the nonce that albumen was built up of the above indicated cyanalcohols united to a benzene nucleus, the molecules being held together by some force vital or otherwise, and considered whether a body so constituted would afford an explanation of the changes that take place in the muscular tissues in its active and quiescent state. If the cyanalcohols were detached separately, they could be converted by hydration into the acids of the lactic acid series, and by combining them with ammonia into the various cyanamides, which, hydrated, are transformed into the glycines—glycocine, tyrosine, &c. The molecules making up these cyanalcohols may be detached in groups varying with the power which holds them together. The following is one change which may take place. By the hydration or decomposition of the separate cyanalcohols lowest in the series, we should have the corresponding acid formed and ammonia liberated; the nascent ammonia may, however, combine with the hydroxyl of the next molecule in the chain to form a cyanamide, which, hydrated, would form the amido acid, ammonia being again liberated and forming a cyanamide with the next molecule higher up, and so on all through the different series. These series were illustrated by showing how creatinine and creatine could be formed from the synthetically constructed molecules. Another mode in which the molecules may become detached was by the ammonia liberated by hydration, combining with the molecule CNOH to form $CNO.NH_4$, which if detached would in the blood as out of the body be converted into urea. In this way we pass from the lower cyanalcohols to the higher with the formation of urea. Here we have not only an explanation of the formation of urea in the tissues, but the reason why the amido acids obtained from the tissues possess different properties from those made in the laboratory. There is another mode in which these molecules may split up, which is interesting from two points of view. It appears to explain the formation of lactic acid and carbonic acid when a muscle contracts or when it dies, and it seems to throw light on the formation of tyrosine. If the molecule $CH_2\{^{OH}_{CNOH}$ $CN_2\{^{CNOH}_{CN}$ were hydrated, forming $CH_2\{^{OH}_{CNOH}$ $CH_2\{^{CNOH}_{COOH}$ and the portion CNOH then detached, the latter would be decomposed at once into CO_2 and NH_3, and we should have lactic acid formed:

$$\underset{\text{lactic acid}}{CH_2-OH\\ |\\ CH_2-COOH} + \underset{\text{carbonic acid}}{CO_2} + \underset{\text{ammonia}}{NH_3}$$

the NH_3 combining with some other cyanalcohol to form a cyanamide.

Changes similar to these offer a very simple explanation of the formation of the cyanalcohols in plants, and as a consideration of these changes would help to explain the metabolic changes in the liver Dr. Latham briefly discussed them. In plants, CO_2 entering by the leaves combines with H_2O sent up from the roots to form methaldehyde H.CHO and oxygen O_2, a volume of oxygen equal to that of the CO_2 absorbed being exhaled by the plant.

MM. Loew and Bokorny and Pringsheim have shown that that there is a substance in living plasma which has the property of reducing silver salts, and for this reason is regarded as an aldehyde which results from the combination in the plant of CO_2 and H_2O. Methylic aldehyde by condensation becomes glucose, and the latter by dehydration starch; but if, instead of undergoing condensation, the aldehyde is oxidised, we get formic acid, which combining with NH_3 absorbed from the roots of the plant becomes ammonium formate, which dehydrated is converted into HCN. The hydrocyanic acid now combines with methylic aldehyde to form the cyanalcohol $CH_2\{^{OH}_{CN}$ and from condensation of these molecules with the separation of CNOH other cyanalcohols are formed. From such considerations, and from what has been said above as to urea, it would appear that when the amido acids are transformed into cyanalcohols and pass into the liver, condensation takes place with the formation of higher cyanalcohols and separation of CNOH, and that this change is constantly taking place all through the albuminous chain, the CNOH either combining with NH_3 to form urea or splitting up into CO_2 and NH_3. In this way the glycocine in the alimentary canal would on passing into the liver be transformed into $C_2H_4\{^{OH}_{CN}$ and CNOH, but we have no explanation of the origin of the lowest cyanalcohol. But if in plants glucose is a condensation product of methylic aldehyde, it is then no violent assumption that in the liver the glycogen after being transformed into glucose is resolved into its elements of six molecules of methylic aldehyde, and that this, by oxidation, combination with NH_3, and dehydration, is transformed, as in plants, into the lowest cyanalcohol of the series, $CH_2\{^{OH}_{CN}$. This view is supported by the experiments of Nägeli, which showed that albumen can be formed by fungi whose nutriment consists exclusively of sugar mixed with ammonia. By reviewing the constitution of tyrosine and deriving it from the cyanalcohol obtained from oxy-benzoin aldehyde, the lecturer showed how the molecule CNOH, which was wanting in his formula for albumen, could be supplied. The formula for albumen could be thus stated:



—a substance whose composition is $C_{72}H_{118}N_{18}O_{22}S$, and differs from Lieberkühn's formula by six atoms of hydrogen. Dr. Latham said he had thus endeavoured to show that albumen is a compound of cyanalcohols united to a benzene nucleus, these being derived from the various aldehydes, glycols, and ketones, or that they may be formed in the living body by the dehydration of the amido acids; that from a body so constituted all the different substances may be obtained which have been extracted from albuminoid tissues; that lactic acid is obtained in two ways, either from $C_2H_4\{^{OH}_{CN}$, or from changes and condensation in $CH_2\{^{OH}_{CN}$, with the simultaneous development of CO_2, a result which is brought about when a muscle contracts or when it dies; and that urea may be obtained from one series of cyanalcohols with the production of a cyanalcohol higher in the series. Such a compound of cyanalcohols could not be far off from the molecular constitution of albumen. Taking this view of the constitution of albumen, the

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following may be given as a summary of the nutritive changes:—

The amido acids, glycocine, leucine, tyrosine, &c., in passing from the alimentary canal to the liver, are dehydrated, forming a series of cyanhydrins or cyanalcohols attached to a benzene nucleus, and then pass into the circulation. In the tissues these cyanalcohols, partly by condensation, partly by hydration and oxidation, give rise to the various effete products which are eliminated from the system chiefly in the form of carbonic acid and urea.

According to Tiemann, the cyanamides are very unstable bodies, and, with the elimination of NH_2, very easily condense into imido-nitriles. If, then, the force holding the cyanalcohols composing living proteid together were suddenly withdrawn, changes would rapidly occur in these unstable bodies with the formation of some acid and different cyanamides. The lowest cyanalcohols would condense to form lactic acid, carbonic acid, and ammonia; the latter combining with the higher cyanalcohols to form cyanamides, which would undergo condensation in the manner described by Tiemann. Some clue to the phenomena of rigor mortis and coagulation of the blood might be afforded by such considerations.

ON SOME

MODERN REMEDIES IN HEART DISEASE.

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(*Concluded from p. 583.*)

II.—MITRAL STENOSIS.

IT is a matter of common experience that in mitral stenosis, just as in mitral regurgitation, compensation may be so effective that the subjects may for years manifest no symptoms to suggest the existence of cardiac disease. One point I must call attention to, as it indicates a discrepancy between different observers. Dr. Broadbent says that in mitral stenosis, according to his experience, "the pulse is almost invariably regular until the heart is obviously failing, unless the obstruction is complicated by regurgitation, or by valvular affection of the right side of the heart, or by intercurrent pulmonary affections." Dr. Broadbent is so good an observer, and my conclusions are so generally in accord with his own, that I should hesitate long before expressing a contrary opinion, but my experience of a large number of cases on this point is very decided. I have found that whilst in the early stages of mitral regurgitation, and until the right heart has become obviously dilated, or unless some complication has occurred, the pulse is regular, in mitral stenosis, though there are some exceptions, it is usual to find irregularities even in the very earliest stages, and when compensation is to all intents perfect. Such irregularity is seen in the sphygmogram as a repeated pulsation recorded in the down-stroke before the base-line is reached. I have so repeatedly seen this phenomenon that I have said, when one observes it in a case in which serious cardiac symptoms do not exist, mitral stenosis should be suspected. Moreover, it seems that such disturbance of rhythm is *primâ facie* probable when one considers the mechanical impediment to the due performance of the function of the left auricle. When in mitral stenosis compensation manifestly fails, the signs and symptoms are even more serious than in mitral regurgitation; the gradual oncome of dropsy is exceptional, but dyspnœa is very severe, pulmonary complications are more violent, and the venous engorgement of viscera, especially of the liver, is more pronounced. It must, moreover, be borne in mind that the physical conditions which result from mitral stenosis differ very considerably from those which attend mitral regurgitation. In mitral stenosis the left ventricle is not dilated, nor hypertrophied, nor of necessity physically altered; the right cavities, on the other hand, are engorged and dilated, and there is an increasing tendency to regurgitation through the tricuspid orifice; the left auricle is over-full on account of the obstruction in front of it, its cavity is dilated, and its muscle either hypertrophied or wasted. I have seen the muscular wall of the left auricle in one case as thick as that of a normal right ventricle, and in another as thin as a visiting card and containing no adequate muscle fibre at all. From these considerations it follows that in mitral stenosis the requisites for a restoration of compensation are an enhanced power of the right ventricle, whereby the blood may be driven through the lung into the left auricle, and a firm-walled and adequately muscular left auricle, allowing sufficient tension within its cavity and sufficient muscular contractility to drive the blood through the obstructed orifice into the ventricle. Whilst, therefore, in regurgitation there is a call upon us to increase the force of the muscles of *both* ventricles, in stenosis the necessity is to increase the force of the *right*. It does not follow that the problem is easier of fulfilment in the latter case; it is sufficient for us at the present that the conditions are not identical. We will now inquire as to the efficiency of special drugs in promoting compensatory action in mitral stenosis.

1. *Digitalis.*—It is a matter of experience with others as well as with myself that digitalis may not be given in mitral stenosis with the same advantage as in mitral regurgitation. It may often do good if given for periods of a week, with intervals of at least equal length, but it should always be used with caution. In many cases, instead of promoting regularity of the heart's action, it notably increases irregularity. On this point I entirely concur with Dr. Broadbent.[1] The search, therefore, for a more satisfactory therapeutic agent in such cases is very desirable. We will proceed to examine the evidence in the cases treated by—

2. *Convallaria Majalis.*—We will consider first the effect on excretion of urine as shown in the following table:—

TABLE V.—*Showing daily amounts of Urine, in ounces, in cases of Mitral Stenosis, treated by Convallaria Majalis.*

Case.	Before convallaria.	During convallaria.	After convallaria.
1	60>30<61>15>30	31<52>28<66>50>30	—
2	—	20, 15<55>40<90>80<115>100>50>4	14<34<42<92
2a	Readministration	85<115>75	85>65
3	—	28<40>25<52>20<28>20	20>16<30>20
4	22<35>25	22, 38>35>25	25<40, 50>25, 30
5	—	20<42>28<60>34	—

It will be observed that in these cases of mitral stenosis convallaria exercised a pronounced diuretic effect. In all cases the quantity of urine was augmented during its administration. The influence is markedly shown in Case 2, wherein the daily amount excreted rose from 20 to 115 ounces, and on readministration from 85 to 115 ounces. After the maximum diuresis in this case there was a very scanty excretion—4 ounces. In most of the cases there was no oliguria at the end of the treatment, but the evidence here, as well as that in the cases of mitral regurgitation, renders it probable that the drug may, after the maintenance of a maximum blood-pressure in the renal arterioles, so constrict these as to impede the blood-supply. It will be well, therefore, with convallaria, as with digitalis, to suspend the administration at intervals. It is a fair conclusion that convallaria is an important diuretic in cases of mitral stenosis, comparable in its effects with caffeine in mitral regurgitation, and that its effects in this direction are more pronounced in the obstructive than in the regurgitant lesion. We will now consider the cases of mitral stenosis in reference to the

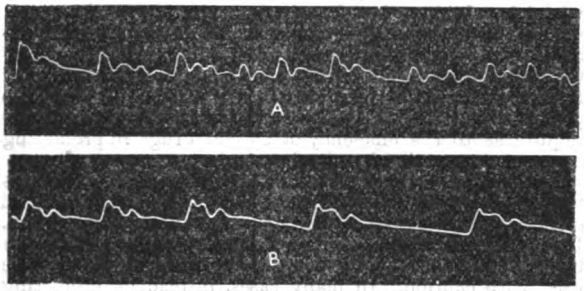
Effects of convallaria on the pulse and respiration.—In one case the pulse-rate progressively fell under ten-grain doses of the convallaria extract from 112 to 80, 76 and 72, and after suspension of the drug rose to 92, to again fall under digitalis to 70. In another case the pulse-rate which under ten-minim doses of tincture of digitalis had increased from 99 to 110, decreased under convallaria to 102 and 64, rising after the suspension of the drug to 72 and 120. The sphygmographic evidence is more valuable and more conclusive than the mere observation of the rate of the pulse. In a third case in which the conditions were very severe,

[1] Cf. "Mitral Stenosis," International Journal of Medical Science, January, 1886, p. 85.

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there being tricuspid regurgitation with pulsating liver, the extreme irregularity of the heart was greatly altered for the better. The sphygmogram taken in the early period shows great irregularity and full dicrotism (Fig. 4, A); the second trace, taken after convallaria extract (ten-minim doses) for thirteen days, and tincture of digitalis for a subsequent thirteen days, shows a slow and almost regular pulse of fair tension (Fig. 4, B). The increase of

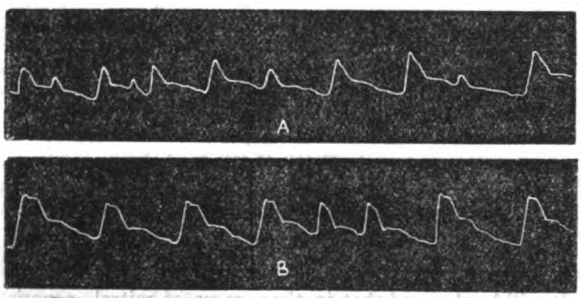
FIG. 4.



Sphygmograms in a case of mitral stenosis and regurgitation, with tricuspid regurgitation, treated by extract of convallaria, and subsequently digitalis. A, Before treatment; B, after treatment.

arterial tension is well shown in another series of sphygmograms. Before the administration of convallaria the trace shows a scarcely perceptible tidal wave; there is great irregularity in time and volume, and there are frequent repetitions of the systole shown in the downward-sloping portions (Fig. 5, A). After six days, tincture of convallaria

FIG. 5.



Sphygmograms in a case of mitral stenosis. A, Before the administration; B, after six days' treatment by twenty minims of tincture of convallaria taken three times a day.

in twenty-minim doses being administered three times a day, the tidal wave is seen to be much more marked, the summit of the trace being broadened, and there is much less irregularity (Fig. 5, B). The breathing was improved under the drug in nearly all the cases; in one case there was severe dyspnœa, which lasted during a fortnight (in this case bronchitis and emphysema existed in marked degree), but afterwards there was gradual improvement, and the patient left the hospital free from all distressing symptoms. It was evident that in these cases the drug acted very favourably. Only one case died in hospital; in this pericarditis and severe pulmonary complications were manifested; the patient improved during the time that convallaria was administered, and the temperature was reduced from 101° to normal, but after the omission of the convallaria the temperature rose to 108°; the patient died suddenly after having for a time considerably improved.

So far as I have been able to judge, convallaria compares favourably with caffeine in the treatment of mitral stenosis. In one case a girl, aged seventeen, in whom there existed tricuspid regurgitation in addition to mitral stenosis and regurgitation, the quantity of urine rose from a maximum of 30 oz. before the administration of caffeine to a maximum of 50 oz. during its administration, and on re-administration from 30 oz. to 54 oz.; but in regard to the pulse and respiration there was no perceptible influence. In another case of stenosis with œdema, the daily urine rose only from 36 oz. to 40 oz., and here also the pulse and respiration were not perceptibly influenced; the patient died. I was not encouraged to repeat the treatment by caffeine in the cases of mitral stenosis whilst I obtained such good results with convallaria; but in cases of this affection manifesting œdema or ascites, where a diuretic effect could not readily be obtained by convallaria, I should administer caffeine in addition.

My general conclusions are that caffeine is an agent of great value in the treatment of cases of mitral regurgitation, especially those in which there is much dropsy; and that convallaria, though manifesting no very favourable influence in cases of mitral regurgitation, except as an occasional substitute for digitalis, is of considerable therapeutic importance in mitral stenosis.

THE ANTISEPTIC TREATMENT OF WOUNDS.

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(*Concluded from page 534.*)

CASE 23.—Male, aged twenty-five. Amputation through left knee-joint for railway smash of the leg. Operation, Jan. 10th, 1884. Dressings as before. No rise of temperature. Stump opened up on the seventh day. Firm union. Patient discharged well on Feb. 9th.

CASE 24.—Male, aged thirty-five. Amputation below right knee for local traumatic gangrene (dry). Operation, Jan. 22nd. Dressed as before, except that several thicknesses of boric lint were used instead of cotton, the first layer being wrung out of the sublimate solution. No rise of temperature. Dressings removed on the seventh day. Good union. Patient discharged well on Feb. 9th.

CASE 25.—Male, aged twenty. Amputation above right wrist for machinery crush of the hand. Operation, Jan. 28th. Dressings as in preceding case. Temperature rising, they were taken off on the fifth day, when suppuration was seen to have occurred. This extended up the limb nearly to the elbow. Patient made a good recovery, however, and was discharged well on March 5th. This amputation was done at night; the injured limb was very dirty and difficult to clean, and the tendons were much "pulled." It is probable therefore that the parts had not been sufficiently purified before applying the dressing; hence its failure.

CASE 26.—Male, aged twenty-two. Amputation at middle of left arm for sarcoma of the forearm. Operation, March 8th.

CASE 27.—Male, aged twenty-two. Amputation at upper third of right forearm for machinery crush. Operation, May 9th.

CASE 28.—Male, aged fifty-two. Amputation just below left knee for mycetoma of foot. Operation, May 9th.

CASE 29.—Male, aged forty. Amputation at middle of left leg for papillomatous growth affecting the stump of a former Syme's amputation, performed for gangrene following snake-bite. Operation, May 16th.

CASE 30.—Male, aged thirty. Amputation at middle of left leg for spontaneous gangrene of the foot. Operation, May 28th.

CASE 31.—Male, aged thirty-five. Secondary amputation just below right elbow for machinery crush. Operation, June 6th.

The dressings in these six cases were alike. The stump was washed with sublimate solution, was then enveloped in a thick layer of dry boric cotton sprinkled with iodoform, over this more cotton, then oakum, and lastly a bandage tightly applied. No waterproof nor elastic band was used, as it was thought possible that some of the failures amongst the earlier cases were due to the retention of so much moisture around the stump. This omission was fully justified by the results, the flaps in every case having united by first intention and the stumps healing without a trace of suppuration. The dressings were quite dry and clean when removed. The patients were respectively discharged well on March 22nd, June 2nd, June 21st, June 3rd, June 13th, and July 2nd.

CASE 32.—Male, aged eighteen. Amputation at middle of left thigh for traumatic gangrene following a tramcar smash of the leg and knee. Operation, June 21st. Dressing as last described. The condition of the tissues, especially part of the anterior flap, was not altogether satisfactory.

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Temperature rising, the dressings were partly taken off on the third day, when some inflammation was seen to be in progress, with considerable serous discharge. The wet dressing was removed, the wound cleansed, and fresh cotton was applied, as at first. This remained undisturbed for six days longer, and on removal the flaps were found fairly well united. A little sweet pus exuded from the drainage-tube. The patient was excessively restless and troublesome, with the result that a day or two later the flaps separated to a slight extent, causing considerable delay in the healing process. He eventually did well, and was discharged cured on Sept. 13th.

CASE 33.—Female, aged thirty-six. Amputation at middle of left arm for advanced disease of elbow-joint. Operation, June 26th.

CASE 34.—Male, aged twenty-eight. Amputation at middle of left forearm for machinery crush of hand and wrist. Operation, July 15th. Dressings as before. Results perfect in each case. Union by first intention.

In the latter case no sublimate solution was used, the face of the stump previous to closure being merely wiped dry with a purified sponge. Patients discharged well on Aug. 7th and July 28th respectively.

CASE 35.—Male, aged thirty. Amputation at middle of left thigh for disease of the knee-joint. Operation, Aug. 24th. Patient very anæmic and emaciated, also phthisical. Dressings as before, including sublimate solution. Removed on the eighth day, when fair union was found. The stump healed well, without suppuration, and the patient left hospital, much improved in general health, on October 10th.

CASE 36.—Male, aged sixty. Amputation at middle of right arm for disease of the elbow-joint. Operation, Sept. 20th. No sublimate solution used in this case. The surface of the flaps was first dusted with iodoform, and the dressing then completed as before. The temperature rising; on the sixth day the stump was exposed, when the flaps were found separated and their tissues distended with blood; no sign of putrefaction, however. The blood was cleared out, additional drainage-tubes were inserted, and the parts were redressed with iodoform and dry wood-wool. Three days later a slight erysipelatous blush was noticed about the shoulder, but it soon disappeared. The swelling of the flaps quickly subsided, and by the fifteenth day union, without suppuration, was complete. Patient discharged well on Oct. 10th.

CASE 37.—Male, aged twenty-two. Amputation at middle of left leg for spontaneous gangrene of the foot. Operation, Oct. 7th. Dressing: sublimate solution, iodoform, and boric cotton. Result perfect; union by first intention. Patient discharged well on Oct. 23rd.

CASE 38.—Male, aged twenty-five. Amputation at middle of right leg for chronic ulcer and deformity. Operation, Oct. 19th. No antiseptic lotion was employed in this case. The dressing consisted of dry absorbent cotton, dusted with salicylic acid, and the usual oakum and bandage. Union, without suppuration, was complete in twelve days. The salicylic acid in the cotton, however, caused severe excoriation of the skin with which it came into contact, and this, together with a subsequent attack of intermittent fever, delayed the patient's discharge from hospital till Dec. 17th.

CASE 39.—Male, aged twenty-eight. Amputation of right index and middle fingers for machinery crush. Operation, Oct. 27th.

CASE 40.—Male, aged fifty. Disarticulation at left knee for senile gangrene of the foot. Operation, Nov. 1st.

CASE 41.—Male, aged thirty. Amputation below left knee for mycetoma. Operation, Dec. 13th.

Dressings as already described, including sublimate lotion. Union by first intention in each case. Patients discharged cured on Nov. 21st, Dec. 8th, and Jan. 3rd, 1885, respectively.

CASE 42.—Male, aged eighteen. Amputation at lower third of right leg for mycetoma. Operation, Dec. 18th. The stump was washed with sublimate lotion, and after being sutured and dried was thrust into a long narrow bag half filled with dry wood-wool sprinkled with iodoform. While the bag was held against the face of the stump the leg was packed round with additional wood-wool, and the whole was then firmly fixed in its place with bandage and adhesive plaster. The result here was quite as successful as in previous cases; the flaps united by first intention, without a trace of suppuration. Patient discharged well on Jan. 22nd, 1885.

It will not fail to be noticed how much larger has been the proportion of successful cases in the latter half of the series, as compared with those of the first, and this greater success appears to coincide substantially with the disuse of the waterproof covering, and with the adoption of drier and thicker absorbent dressing. Accurate adaptation of the flaps I regard as of great importance. I now always mark them out with a scalpel, in order to ensure evenly cut edges, and when the skin has retracted they are completed by transfixion in the usual way. My experience has taught me, too, that antiseptic applications direct to the wound are in many cases unnecessary. I allude especially to those cases where the tissues are perfectly healthy. Still they do no harm, and, by way of making "assurance doubly sure," may be employed in every instance. All I mean to convey, however, is that we can in a certain class of cases obtain as good results without as with them, provided we attend carefully to other precautions. I never under any circumstances use the spray. Moisture in any shape or form I look upon as one of the most fertile sources of failure. Our whole efforts should be directed to preserving both the wound and the dressing in the driest condition possible. The essentials, then, of my present procedure are cleanliness, infrequent dry dressing, free drainage, accurate adaptation of flaps, and rest. Under the last mentioned, pressure by means of bandages may be included. To prevent putrefaction of bloody or serous discharge I prefer to have the dressing medicated with some unirritating stable material. Of all I have tried, boracic acid or iodoform is decidedly the best. The latter is the more expensive, however; hence I have found boric cotton more convenient to use. In order to press the flaps well together, and thus lessen or avoid exudation, I draw the bandage as tight as possible; the thick elastic pad of cotton and oakum underneath will always prevent it from being drawn too tight. So effectually does this answer its purpose that I have on more than one occasion found the original dressing, on first exposing the stump, almost perfectly dry and clean. Oakum, besides being more or less antiseptic, keeps the cotton together, and enables us to save the use of the latter to a certain extent as well. Wood-wool, although a most excellent absorbent dressing in suitable cases, is somewhat unmanageable in amputations. Made into pads, it does not fit closely enough; and employed loose, it is difficult to apply, and is inclined to get lumpy or become displaced. To ensure complete rest of the parts while the healing process goes on, the limb, if it be a lower one, is fixed in a heavy box splint and well packed round with cotton. Should the upper limb be operated on, the stump is securely fastened to the side of the trunk, with plenty of cotton interposed and placed around. The cotton packing, as well as the thick dry dressing, preserves the normal heat of the parts, a matter which I believe is essential to rapid and perfect union. Lowering of the temperature by wet dressing, exposure, or cold applications tends, I am convinced, to delay or prevent union by first intention. During the progress of the case the thermometer is used morning and evening; if the temperature remains normal, or does not rise beyond 99·5° F. occasionally, all is going on well, and the original dressing need not be disturbed sooner than the ninth or tenth day. When removed the flaps will be found firmly united. The drainage-tube may now be withdrawn, its track gently syringed out with carbolic or sublimate lotion, a little iodoform introduced, and the stump redressed with oiled lint or with boric cotton, taking care to sprinkle either with iodoform. Some of the unsoiled boric cotton from the original dressing will do quite well enough. A pad of oakum and a bandage complete the second dressing. This may remain on for four or five days longer, and when removed the track of the drainage-tube will have closed. The sutures may now be taken out, the stump being practically healed. Should the temperature, during the course of the second or third day, rise to 100° or beyond, and remain so, the antiseptic dressing has probably failed and must be removed, the stump being treated in the ordinary way, or, better still, with wood-wool and iodoform. Before doing this I always administer quinine, as the fever may be of malarial origin, and not traumatic. In more than one instance this has proved to be the case. The precaution I note here is, however, scarcely necessary, except in a climate where malaria prevails.

This paper has run on to such a length that I can hardly do more than mention that the treatment, on the same principles, of other surgical and of accidental wounds has met with nearly equal success. In the former class of cases,

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especially where there is much areolar tissue—say, the axilla after removal of a large tumour,—the surface, after bleeding has quite ceased, is well rubbed over with iodoform, closed, and dressed with boric cotton and oakum, as described above, and the result is all that can be desired. In the operation for the radical cure of hernia, or after herniotomy, this treatment of the wound has been attended with remarkable success, union by first intention being the rule. Accidental lacerated and incised wounds are first thoroughly cleansed with carbolic lotion, then washed with sublimate lotion, iodoform is rubbed in, and the dry dressing, either boric cotton or wood-wool, applied. Sutures are not used, no matter how widely the wound may gape. The first dressing may be left on for twelve or fifteen days, or even longer, provided the temperature keeps down. In compound fractures the preliminary cleansing must be very carefully done before the sublimate lotion and iodoform are applied. The latter lotion should be forcibly injected with a syringe into every crevice of the wound. I find that for this purpose a Higginson's enema syringe is the most convenient; a continuous stream of lotion may be easily sent by it up the sheath of a tendon or, in case of amputations, between the flaps after the sutures have been inserted. The dry dressing in compound fractures requires to be very thick and to be bound on firmly; the limb is afterwards fixed on the appropriate splint. Small or clean-cut wounds under this method of treatment will be found closed on removal of the dressing, and larger ones with a healthy granulating surface.

Further experience will doubtless lead to modifications in the mode of dressing wounds I at present employ, and I think the tendency will be towards greater simplicity. When I first began I adopted most elaborate precautions as regards the disinfection of every instrument and material used in the operation; but as time went on I gradually discarded these one after the other; while my results, so far from suffering, became, on the contrary, better and better. I have come to the conclusion, therefore, that very many of the precautions we are advised to follow by writers on antiseptic surgery are wholly unnecessary, and that they are a hindrance rather than a help.

NOTES ON DIGESTIVE FERMENTS.

By WILLIAM MURRELL, M.D., F.R.C.P.,
LECTURER ON PHARMACOLOGY AND THERAPEUTICS AT THE WESTMINSTER HOSPITAL, EXAMINER IN THE UNIVERSITY OF EDINBURGH AND TO THE ROYAL COLLEGE OF PHYSICIANS OF LONDON.

II.—ON EXTRACT OF MALT IN THE TREATMENT OF WASTING DISEASES.

EXTRACT OF MALT is of such inestimable value in the treatment of all wasting diseases, both of adults and children, that any method which will help to secure the employment of good and reliable specimens must of necessity be of interest. There seems to be a general consensus of opinion as to its utility, but few people care to take the trouble to investigate its action or distinguish between good and bad preparations. That some extracts of malt are active whilst others possess little or no diastasic power is generally recognised. In the early part of last year, whilst a member of a Hospital Drug Committee, I had occasion to make some experiments on the subject, and certain results were arrived at which are, I think, of practical importance.

In examining comparatively different extracts of malt, it is of course essential that the investigation should in each case be carried out in exactly the same way. The slightest modification will introduce errors and nullify the result. In these observations I always used the same materials and the same apparatus. The experiments were made at the same time of the day, and as far as possible under identical circumstances. Nothing is more important in an inquiry of this kind than to record every step with the most minute detail. In the first place it should be stated that the specimens were one and all ordinary commercial articles—that is, they were bought at a shop, and were not selected samples obtained at an exhibition or from the manufacturer for the purpose of analysis. Precautions were taken to ascertain that they were not "old stock" which had been lying about exposed to alternations in temperature and other disturbing causes. They were probably all of comparatively recent manufacture, but on this point the evidence is not conclusive, as there is usually no date on the label or other indication as to when they were made. Those manufactured abroad may have been older than those prepared in this country, but I do not think this a point of any importance or could in any way invalidate the result. It is hardly necessary to say that care was taken to see that the bottles had not been tampered with, and that they were in their original wrappers or cases. The starch used in testing was always the same and came from the same stock. It was a pure white starch carefully dried. I purchased it for potato starch, but on examining it under the microscope and measuring the cells, came to the conclusion that it was Maranta arrowroot, an opinion which was confirmed by comparing it with known specimens, and with starch expressly prepared from potatoes. As will be presently seen, Maranta arrowroot is the best adapted for all comparative observations on the activity of extract of malt. The method of making the starch solution is of some importance. Ten grammes of the arrowroot were weighed out and mixed with a little cold water. This was then stirred into ten ounces of boiling water in a beaker over a gas burner. When the mixing was complete the beaker was removed from the flame and placed in a vessel of cold running water until the temperature fell to 40° C. It was kept constantly at this temperature during the remainder of the observation. It is not meant that the temperature was absolutely constant, but by careful watching it was found not difficult to prevent it from falling below 39° or rising above 41°. The quantity of extract of malt used in each experiment was one gramme. It was weighed out in a clean porcelain capsule, and after being mixed with a little water was poured into the starch decoction. The mode of testing was simple enough. Twelve test-tubes were arranged side by side in a rack, and each was filled about two-thirds full with distilled water, to which was added a drop of tincture of iodine, made according to the following formula: iodine, two parts; iodide of potassium, four parts; water, 250 parts. The drop of tincture of iodine falls to the bottom of the tube, leaving the upper part colourless. Every five minutes, and towards the end of the experiment every two minutes, a drop of the starch and malt mixture was taken up by a clean glass pipette and allowed to drop into one of the test-tubes, which was then inverted for a moment and replaced in the rack. At first, of course, a blue colour was produced—the starch reaction. Then, after a time, the time varying with the activity of the malt, the blue gave place to purple and the dextrine reaction was obtained. After a time, again, this ceased to appear, and the solution remained colourless, or, at the most, assumed a faint yellow tinge, indicating that all the starch had been converted into maltose. It is a little difficult to decide at what moment exactly the colour goes, but if the observations are always conducted by the same individual in exactly the same way and by the same light the error of observation cannot be very great. There is another method of judging the colour by throwing a drop of each solution on a white porcelain plate and allowing them to run together. I tried this plan, but do not think it better than the method described. By the test-tube plan one has the advantage of looking down on a column of liquid, so that even a slight tinge is readily appreciated.

There are certain precautions which must be taken to ensure good and reliable results. For example, it must not be supposed that the quality of starch employed in conducting these investigations is a matter of indifference; in fact very much depends on the starch. Starch bought in the shops is commonly adulterated, and is often artificially coloured with indigo, carmine, and other materials. It is obvious that the presence of a chemical substance would interfere with or perhaps even destroy a body so susceptible to the action of external influences as diastase. Even apart from the question of adulteration, the kind of starch makes a great deal of difference. On one occasion I was trying some extract with a new specimen of starch, and was much surprised at getting very little action. I knew the malt was not destitute of activity, for I had previously tested it with the arrowroot starch. I microscoped the new specimen, and found that it was maize starch. This led to a comparative examination of the two kinds of starch, and I found that an extract of malt which would convert into maltose a certain quantity of arrowroot starch in eight minutes took forty minutes to transform the same quantity of maize starch.

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This induced me to try different varieties of arrowroot. I obtained authentic specimens of Bermuda Maranta arrowroot, of Canna arrowroot or tous-les-mois, and of Natal arrowroot, and found that they were all acted on by the extract of malt in exactly the same time, there being no difference between them. The next observation was made with a pure potato starch prepared expressly for the purpose, and it was found that the extract of malt which took eight minutes to convert the arrowroot took ten and a half minutes to convert the potato starch. This same specimen of extract of malt took thirty minutes to convert the same quantity of a very fine and pure wheat starch, the identity of which was confirmed by microscopic examination. Maize starch with the same extract took forty minutes, and rice starch ninety-five minutes. The different starches may be arranged in order as follows—

1. Bermuda Maranta arrowroot ...	8	minutes.
2. Canna arrowroot (tous-les-mois) ...	8	„
3. Natal arrowroot	8	„
4. Potato starch...	10½	„
5. Wheat starch...	30	„
6. Maize starch	40	„
7. Rice starch	95	„

That this difference of solubility in different kinds of starch exists is, I think, not generally known. Its practical importance with regard to the question of infant feeding, especially in the treatment of wasting diseases, cannot be over-estimated. It is possible, too, that it might be utilised as a test to differentiate some forms of starch. The statements made in papers respecting the action of extract of malt on starch are obviously of little value unless the kind of starch employed is mentioned.

The temperature at which the observations are made is of course a matter of the utmost importance. An elevation of a few degrees makes an enormous difference in the results. These observations, as already stated, were made at 40° C. It would, perhaps, have been better to have fixed on 38° as being nearer the temperature of the body, but practically 40° is very convenient. The thermometer was suspended in the fluid, which was frequently agitated. Had the observations been made at, say, 60° C., very different results would have been obtained.

There is a little point in connexion with the iodine test to which it is necessary to pay attention. The water in the test-tube must be cold. On one occasion, by accident, I used warm distilled water as it came from the still, and to my astonishment found that it gave no reaction with the starch. If the blue reaction be obtained with cold water, it disappears on warming the test-tube. Whether it returns on allowing the liquid to cool depends on the quantity of the reagents employed. If a very dark colour were produced, it would return on cooling; but if the colour were a faint blue, it would not reappear, although the addition of a little more iodine would bring it back. The presence of alcohol in any quantity also interferes with the reaction; in fact, iodide of starch is a most unstable body, even if it be a true chemical compound, which is doubtful.

I examined in all eleven specimens of extract of malt, the list including those most commonly used in this country, on the Continent, and in America. Of the eleven specimens there were only two which under the conditions I have indicated would transform *completely* all the starch in less than thirty minutes, and of these two one was more than three times as active as the other. Many of the specimens were of very poor quality and possessed little or no diastasic power. The extracts of malt usually supplied to hospitals are very poor in quality. At one institution I found that the committee was paying cheerfully £50 a year for an article which was not worth as many pence. It had evidently been concentrated in an open pan at a very high temperature. The colour of the extract is often said to be a good test of the quality; but it is not, for one of the best specimens I examined was very dark indeed. The liquid preparations were mostly poor; one, although it bore the name of extract of malt, was simply an ordinary beer and had little or no power of transforming starch. The presence of foreign substances is very common in inferior qualities of extract of malt. It is best to give the extract alone, and the addition of straw, chips, and sand is rarely an advantage. One preparation which was very fluid was examined for glycerine, but none was found; it had probably been taken out of the vacuum pan before the concentration was complete. On allowing it to stand for a few days, it gave off a peculiar odour and was evidently undergoing fermentation. It might be supposed that specimens of extract of malt would deteriorate by keeping, but I do not know that such is the case. Some specimens, on the contrary, seem to improve by keeping—a point which I have determined experimentally. For example, I examined a very good specimen, and found that it transformed a certain quantity of starch in twelve minutes and a half. A fortnight later I examined the same specimen under exactly the same conditions, and found that it accomplished the task in seven minutes. This improvement was probably due to a process of slow fermentation, in which more diastase was produced, or possibly a little lactic acid was formed, the presence of which in minute quantities is said to increase the activity of the ferment. It is a rule with some makers, I am told, to add a small quantity of salicylic acid to each bottle to prevent fermentation; but the custom is a bad one, for it impairs and ultimately arrests the action of the diastase on starch. It was thought well to examine a few specimens of malt-flour by the method already indicated. They were all active, but not equal in activity to the best extracts.

That the method described is not the best possible that could be devised I am quite prepared to admit, but it is the method best adapted to the requirements of busy medical practitioners. With complex apparatus and all the facilities of a chemical laboratory one might arrive at conclusions that might be more absolutely accurate, but for comparative purposes this simple method is reliable. As a proof of this I may mention that my colleague, Dr. Dupré, was kind enough to examine five of the best of these specimens very carefully, and he put them in the same order that I did. The clinical method is so simple and occupies so little time that every doctor should make his own examinations and assure himself that his patients are getting what he prescribes. If he will do this, he will find himself in possession of a powerful therapeutic agent and one of the best remedies for nearly all wasting diseases.

Weymouth-street, W.

ON THE TREATMENT OF SYPHILIS.

BY JAMES WILSON, M.D.

(*Concluded from page 586.*)

THE third and last indication in the treatment is that the inunction be carried out long enough. As our task consists in the healing of symptoms and as much as possible averting relapses, the earlier the syphilitic person is brought under mercurial treatment, the milder will be the course of the illness. The subject, therefore, of an induration should at once be placed under a course of mercury, the best form of which is the inunction, rather than wait for the setting in of secondary symptoms; if this is done the mysterious sting of the disease is broken off, and unquestionably the relapses are less in severity and appearance. In a case, therefore, of primary syphilis at least from forty to fifty rubbings should be given without a break. Nothing is more detrimental to the good effect of the mercury than a break, whether this arise from causes incidental to the mercury—such as mercurial diarrhœa, stomatitis, &c.—or dependent upon the patient himself; and nothing is more to be deprecated than the custom sometimes adopted of giving more ointment if inunction be employed, or calomel if the mercurial bath (of which I shall presently speak) be used, to make up for lost time, the result being that diarrhœa, colic, or some intercurrent mischief happens which may entirely prohibit any form of mercurial treatment being adopted, the very object being defeated that was hoped to have been gained. Generally speaking, after from seven to ten rubbings the good effects of the mercury begin to show themselves; there is now, perhaps, slight puffiness of the gums, which does not materially increase during a full course if the mouth-wash is steadily used, and seldom does the sponginess of the gums amount to more than slight uneasiness if the jaws are quickly snapped together or a hard crust be bitten. The only untoward incident I have noticed during the cure by inunction, where all goes well, is that patients sometimes complain of inability to sleep at night; they are restless, in no pain, but unable to get sleep. In such cases an opiate generally suffices to overcome the evil and effect the desired end. I

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seldom stop the rubbings unless the irritability continue, or diarrhœa or some intercurrent trouble arise to preclude the continuance of the mercury. One of the first indications we have of the good effect of mercury is an increase in the body weight, which begins to show itself during convalescence and while the syphilitic poison is being eliminated through the various excretory organs of the body. This increase in weight is a point never to be lost sight of during a course of mercurial treatment, because when the normal weight of the body has been reached, or when the weight become stationary, there is no good in pushing the drug beyond eight or ten further rubbings if the inunction treatment is being employed, as we have attained all the good we are likely to get from the present use of the drug, and we had better wait for a little time before resorting again to treatment if only an inefficient course of treatment has been obtained.

Another point of importance after mercurial treatment, no matter whether internal or external, is the use of iodide of potassium in small doses, and entirely with the view of keeping up the good effects of the mercury, which it does in no small degree. A patient so treated, who has had an efficient course of rubbings in the manner that I have described, may of course develop subsequent symptoms, but unquestionably they will be less severe than when given by the mouth; and when the patient has had a full course of, say, from ninety to a hundred rubbings, whether taken at once (which is best) or at intervals, it is very exceptional to find him the subject of further relapses, at any rate for a long time, a period of immunity being afforded him for years, and possibly for life. Can we say this of the other forms of treatment? I think not. And I am sure, speaking from a large experience of cases treated in all climates and by all methods, as well as from the recorded testimony of some of the first syphilists in the world, that if the inunction treatment such as I have here advocated, and which I might perhaps, for want of a better term, call the "modern inunction treatment," were more resorted to in this country than it is, bad secondary and tertiary lesions of the viscera, bones, brain, and nervous system would be things almost unknown. I am aware that in private practice difficulties arise in carrying out the treatment efficiently, but difficulties arise in the treatment of all syphilitic patients. One of the greatest is the inherent prejudice (happily dying out, I am glad to say) of the use of mercury in any form; and I find patients readily submit to the inunction when told that it is the least injurious form of giving the drug. And the long-standing complaint against this method that it is dirty entirely dies out if the system I have advocated be carried out, which only allows of one portion of the body being anointed at a time, and this done thoroughly and efficiently.

Another useful form of administering mercury is the calomel bath, not, however, employing ordinary calomel for the purpose. This, where it is necessary (and the inhalation of the vapour is always to be encouraged, if possible, to the extent and manner hereafter described), is far too irritating. Mr. Henry Lee was the first, I believe, who called attention to this point and advocated the use of calomel which has been sublimed, thereby getting rid of any free hydrochloric acid and rendering the calomel vapour non-irritating and capable of inhalation without the least discomfort. Mr. Lee also, I think, was the first to call attention to the amount of water used in the preparation of the bath, and which is of the utmost importance, otherwise a sweating bath (if too much water is used) is produced, and not only is the very object defeated that was hoped to be gained, but a patient so treated is made infinitely worse and more debilitated. Then, again, the external covering to be worn while taking the bath must not only envelop the body and go round the whole apparatus, but must be made of such material that it will form a suitable night-dress for the patient. A most excellent covering for this purpose, made of moleskin, can be obtained from Mr. Lowe, of Stafford-street, Old Bond-street, London, who supplies the whole apparatus complete, including bath, &c., at a small cost. In this cloak there is a slit through which the vapour rises, passing in front of the face, so that a minute's inhalation of the vapour can easily be obtained as the vapour ascends; then by closing the slit in the cloak the further escape is prevented; upon drawing out the cane hoop which goes round the shoulder after the bath is finished, and tying the string round the neck, a complete night-dress is formed which has the additional advantage of allowing the mercury which has been deposited upon its interior being brought into contact with the skin, now rendered moist by the bath, and so perhaps allowing a further portion of the sublimed calomel to be absorbed. In general it is sufficient if the patient inhale for one minute in the five, the vapour thereby making three minutes as the full time for internal inhalation, supposing, as is usual, the bath takes about from fifteen to eighteen minutes for the complete disappearance of the calomel and water. Of course in affections of the mouth and throat longer time may be allowed. Patients can take these baths nightly without inconvenience. I have frequently prescribed from sixty to eighty without a break, and even a hundred; indeed, it is surprising, in this form of mercurial administration, to see the number of baths patients can take without causing the least disturbance to their systems and digestive organs, and with, I need scarcely say, benefit to their disease, provided the precautions above indicated are taken as to water and sublimed calomel. If this bath be used during the stage of efflorescence in a case of syphilis where inunction cannot be employed, and then the latter resorted to on the disappearance of these symptoms, we have, in my opinion, the most perfect form known at present of treating syphilis.

Lastly, there remains the hypodermic use of mercury and the modification of the Zittman treatment, in which no mercury is employed. As to the former, though not much resorted to in this country, it is extensively so on the Continent, and is unquestionably a very valuable form of administering the drug when it is desired to get the system rapidly under the influence of mercury; and I know no better form than one-sixteenth of a grain of the perchloride dissolved in about twenty-five minims of distilled water, and given daily in two injections, to which five minims of glycerine have also been added. Great care must be taken in administering the injection, a sufficiently long needle being employed to allow of its point being well carried into the subcutaneous fat, otherwise what is almost certain to take place will be a troublesome slough, in this respect acting like chloroform &c.; and a part of the body should be chosen, such as the flank, where less pain is felt. As to the modified form of the Zittman treatment, in which no mercury is given, it appears suitable for cases where mercury cannot be given—such, for instance, as albuminuria, not having its origin in syphilis or dependent upon that disease, which, far from precluding, would probably necessitate the use of the drug in a very careful form. However, I cannot say that my experience of this mode of treatment is large, and what I have had is not sufficiently encouraging to say more than that I believe it often acts well as a stop-gap, but seldom effects a cure. Possibly patients may get immunity from further trouble for a little time who have gone through this treatment, but I should entertain grave doubts as to their being cured of the disease; and I should certainly never submit a patient to such a course of treatment if I could possibly employ any form of mercurial administration.

In conclusion, one word as to the use of iodide of potassium. Unquestionably this is a most valuable drug when regarded in its twofold light—viz., that of the employment in small doses to keep up the good effects of the mercury after a course of the latter, and to which I attach the greatest importance, or the use of large doses to procure its own and special action; and strong as are the advocates that it cannot be regarded as a curative agent, but simply remedial and temporary, it cannot but go hand in hand with mercury in the disease, and ought not, I think, be separated from this drug in the successful treatment of syphilis; sooner or later it is almost sure to be required, and there are times and seasons in the progress of this disease when its utility outweighs that of mercury, though I would not regard it as an ultimate curative agent in the same light as mercury. I do not purpose entering upon the heap of vegetable remedies and others advocated and now in use amongst the various tribes of the world. I can only regard them as adjuncts at the best; and even sarsaparilla, except in large doses, I have found useless as an adjunct.

ON the 29th ult. twenty-two persons were fined at Leicester for non-compliance with the Vaccination Acts. There are now in the town about 11,000 defaulters under the Acts not yet proceeded against, in addition to the several thousands who have been already dealt with.

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ANOTHER CASE OF

CONVULSIONS DURING PREGNANCY TREATED SUCCESSFULLY BY SUB-CUTANEOUS INJECTIONS OF PILOCARPINE.

BY P. HORROCKS, M.D. LOND., B.Sc., M.R.C.P.,
ASSISTANT OBSTETRIC PHYSICIAN TO GUY'S HOSPITAL.

ON August 1st, 1885, I was called in consultation with Mr. Ryan (who was acting for Mr. Leftwich of Newcross) to see a patient in convulsions. She was twenty-three years of age, and single. When fifteen years of age she was in Guy's Hospital under Dr. Braxton Hicks, and was operated on for an imperforate hymen. Since then she has menstruated regularly until the end of October, 1884, when the menstrual flow ceased. She has had scarlet fever three times; also fits when a child. Has always suffered from pain and "weight" in the head. Twelve months ago she had a fit, during which she was unconscious two or three hours, and was very violent (hysteria?). She is subject to hysterical attacks. On July 29th she noticed that her legs were much swollen; she had a fit on this day and became unconscious. It was three days later that I saw her, when I found her unconscious and in strong convulsions; face bloated with œdema, and purple from congestion and semi-asphyxia; tongue severely bitten, and bloody foam issuing from the mouth; abdomen enlarged to the size of a nearly full-time pregnancy. On vaginal examination, which the patient struggled against as though she felt the pain, the os was scarcely at all dilated, but the cervix was softened throughout. The child's head could be felt through the anterior vaginal wall. Her night-dress was wet with urine; skin hot and dry. Fœtal heart sounds heard midway between the umbilicus and the left superior iliac spine. I injected the third of a grain of pilocarpine, and placed her in hot blankets. She had a fit at 6 P.M., and another as they were bringing her up to Guy's in a cab, at 9.30 P.M. On arrival she was still unconscious, and the tongue was more swollen.

At 12.30 A.M., on Aug. 2nd, I saw her again, when vaginal examination was resisted more strongly. The os was dilated to the size of a florin. Temperature 100·2°; pulse 120. Fœtal heart heard again in the same place. One-third of a grain of pilocarpine was injected. This did not cause sweating, and so at 1.15 a fresh solution was obtained and one-third of a grain was again injected. This acted well, and in a few minutes she began to sweat and presently was bathed in perspiration.—2.50 A.M.: Can be roused. Does not resist vaginal examination so much. No repetition of fits. Uterus contracting frequently. Cries out sometimes that she has a pain in the back (uterine). Is very restless.—3.45 A.M.: Membranes ruptured spontaneously.—4.15 A.M.: Head nearly touching perineum. Patient speaks rationally, but her tongue is so swollen that it is difficult to make out what she says. Pulse quick.—4.30 A.M.: About four ounces of highly albuminous urine drawn off by catheter.—4.50 A.M.: Child suddenly and rapidly born; quite blue; no effort at respiration; no pulsation in cord; no cardiac beat to be detected. Efforts to induce respiration were of no avail. The child was a small one for full term.—4.55 A.M.: Patient asleep and snoring. 12 noon: Patient rational. She has not the faintest recollection of anything that has occurred since July 29th. Temperature 98·8°. Vaginal douche of carbolic lotion employed. Urine drawn off by catheter; two-thirds albumen; no casts; loaded with urates on cooling.

Aug. 3rd.—During the night she passed urine in bed. Temperature normal. No pain. Takes plenty of milk. Skin moist; tongue very sore; has headache.

4th.—Urine one-third albumen. Temperature 100·4°; headache.

From this time she rapidly got well, and in about ten days was up and about. She left the hospital on Aug. 16th with some albuminuria and headache. I have seen her several times since; the last time on Dec. 7th, when I examined the urine. It still contained a trace of albumen; no casts; sp. gr. 1015. She felt quite well and was again at her work.

In THE LANCET of June 13th, 1885, I published the notes of a case successfully treated by the subcutaneous injection of pilocarpine. The case I now publish is the only one I have had under my care since, and these two cases are the only ones I ever treated with pilocarpine at any time, and both have resulted very satisfactorily so far as the mother was concerned, but fatally to the child. Both these cases were very severe, as will be gathered from the clinical accounts. In both the cessation of the convulsions following the use of the pilocarpine was so quick and complete as to render it highly probable that the result was *propter* rather than merely *post*. An interesting point in the present case was the failure of the first solution used, owing to the fact that it had been made for some months. It not only failed to produce sweating, but the convulsions did not cease. After we had obtained a fresh solution and given an injection, the effect was quick, and there were no more convulsions. Obviously, therefore, in treating these cases by this method, a potent drug must be employed, and fortunately we are able to know whether it be potent or not by the presence or absence of profuse perspiration. If the patient does not begin to sweat within five minutes, the drug may be looked upon as useless, and a fresh solution obtained. Another point was the rapidity of the dilatation of the os, and the quick expulsion of the child after the administration of the pilocarpine. It would appear that pilocarpine must be looked upon as an ecbolic. The child was alive at 12.30, but when born, about four hours later, it was quite dead. Whether this was owing to the pilocarpine, or the convulsions, or the uterine contractions set up by the pilocarpine, or some other cause, must be left to future investigations.

St. Thomas's-street, S.E.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL.

A CASE OF HYDROPHOBIA; DEATH; NECROPSY; REMARKS.

(Under the care of Dr. HALE WHITE.)

THE following case adds another to those in which chloral hydrate in large amount, administered by the rectum, has failed to do more than relieve symptoms. At one time it was hoped that it would prove a valuable remedy, but like other drugs, such as curare, cannabis indica, aconite, &c., it has not fulfilled the high expectations which were formed of it. Pilocarpine is still *sub judice*, and will doubtless undergo a more extended trial. At present the medical world is watching with some anxiety and every wish for success the inoculation of patients with attenuated virus as carried out by M. Pasteur, hoping that a means may be found of curing or preventing the disease.

We are indebted for the following notes to Mr. H. V. Rake.

G. W——, aged sixty-three, was admitted on Sept. 18th, 1885, at 12 noon, for inability to take nourishment, and spasms on attempting to take fluids. The family and previous history are both very good. Three months ago he was bitten on the ulnar side of his right wrist by a dog, a half breed between a spaniel and a collie. Caustic was applied immediately by a chemist, and the wound healed well in a fortnight. On the 17th, at about 11 A.M., he began to feel poorly, and went to a doctor, who gave him some medicine. On the 18th, at 1 P.M., he found, on attempting to take medicine, that the effort threw him into a violent spasm, but he could take bread sop. This difficulty in taking fluids increased, so in the morning the patient called in a doctor, who advised him to go to the hospital.

On admission he could not at first be persuadad to drink, but at last he swallowed some milk and brandy, which action sent him into general spasms. Temperature 101°; pulse 90; respiration 34. He seemed to have read a good deal about hydrophobia. He had a wild look about his face, and was nervous and irritable. He suffered from spasms and shivering fits, apart from any drinking; during

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one of these seizures he huddled himself up and turned away from the light, all the while making a noise not unlike whining. He was especially nervous in speaking, and during the act there was a good deal of hesitation. He could be considerably calmed if one reasoned with him. He spat about a good deal. He was placed in a quiet and darkened room, in which a steam kettle was placed, and was ordered an enema containing brandy, beef-tea, milk, and five drachms of syrup of chloral every four hours; he was also ordered subcutaneous injection of kinate of quinine, and also subcutaneous injections of hydrochlorate of morphia. At 4 P.M. he was quieter, did not have such frequent spasms, and ate a little biscuit with much less trouble than on admission. At 10 P.M. he wandered a little. During the spasms the abdomen became as hard as a board. He was not at all thirsty, and begged not to have drink forced upon him. When Dr. Hale White went to see him the first thing the patient asked was if it was raining.

Sept. 19th.—Has not slept much. He does not notice that it is raining, but he will not allow a damp towel near his face. The nurse says that, excepting from 3 to 4.30 A.M., the spasms have not been either numerous or severe, and that the patient has taken a little rice pudding and custard. During the morning he was fairly quiet, and could be persuaded to take a little food.—2 P.M.: The spasms have not been so frequent as yesterday. He is very hopeful of getting better. When he is talking to anyone he suddenly changes the subject. He takes food with less hesitation; when he attempts to drink there does not seem to be any actual spasm of the glottis. The pupils are not completely contracted by morphia.

20th.—1.30 A.M.: Took almost a saucerful of custard in teaspoonfuls; the act of swallowing is prolonged, and is accompanied by jerky inspirations; he is quite rational, talks well, and is not disturbed by the sound of water from a tap. He said he should like some tea, but the attempt to drink it produced some jerky inspirations, but ultimately he took a little with a spoon. He is very particular that anyone should wait till he is ready, when he will say, "Now we are right." A laryngoscopic examination showed the vocal cords were closed during inspiration.—5 A.M.: Has been sick several times, and has been very restless and talking actively. He thought he should like some tea, but he would not let the cup touch his lips. He tried to take a little in a spoon, but this brought on a violent spasm.—6 A.M.: Has vomited a good deal; his breathing is in short spasmodic gasps: skin covered with a cold sweat; is very restless, frequently moving the whole body.—7.50 A.M.: The patient quietly ceased breathing at this time. There was no special spasm or struggle before death. Has been unconscious for the last hour and a half.

The temperature during the whole of the illness showed a very decided tendency to rise. It was 101·4° on admission; shortly before death it was 101·4°; an hour afterwards, 102·2°; three hours afterwards, 98·2° in the rectum. Only three times was it normal, although it was taken hourly. It averaged about 100°. The pulse at first averaged about 100; for the last twelve hours of his illness it ranged from 108 to 124. The respiration averaged about 32, the highest being 38 and the lowest 26.

Treatment.—The patient had eleven fifty-grain doses of chloral per rectum, or 550 grains in all; twenty-five grains of kinate of quinine subcutaneously; and five grains of morphia. All this was administered during the forty-four hours he was in the hospital.

Necropsy.—The scar of the bite was examined carefully, but did not show anything abnormal. The median nerve was not implicated in it, nor was the ulnar. All the viscera were absolutely normal to the naked eye, except for some old pleural adhesions and some congestion and roughness on the inner surface of the trachea. Microscopically, the changes that have several times been described in the medulla were found here in that situation, and all in the upper part of the cord and in the pons.

Remarks by Dr. HALE WHITE.—The points of especial interest about the case are:—Firstly, the great difficulty of affecting the patient by even powerful drugs. It will be seen that he had enormous doses, but they were quite ineffectual. There was no sign of chloral poisoning from the large quantity of that drug, nor were the pupils contracted by the five grains of morphia given subcutaneously, nor could the temperature be kept normal with twenty-five grains of kinate of quinine administered subcutaneously. Secondly, is the important laryngeal observation, which shows that Dr. Pitt's views, as expressed in a recent number of the Guy's Hospital Reports, are correct. (For this observation I am indebted to Mr. Phillips, who, seizing a favourable opportunity, examined the patient.) Thirdly, there is the important corroboration of the corrections of the recent observations on hæmorrhage in the medulla. Fourthly, there is the redness and injection of the trachea, a feature so frequently seen in dogs that have died from hydrophobia.

NOTTINGHAM GENERAL HOSPITAL.

EXTRA-UTERINE FŒTATION; OPERATION; RECOVERY; REMARKS.

(Under the care of Mr. JOSEPH LITTLEWOOD.)

E. B——, aged thirty-seven, was admitted on May 16th, 1885, complaining of "enlargement of her bowels and flooding." She had been confined three times, and considered that she was nine months pregnant with her fourth child. She had felt fœtal movements up to the eighth month, when she had a severe fall, and since then had felt nothing. She had metrorrhagia of a week or ten days' duration at the end of the second month of gestation (Dr. Mutch states that she had an attack of peritonitis at or about that time), again at the end of the sixth month, and finally during the ninth month. On account of these attacks she consulted Dr. Mutch, and after the last attack was advised to go into the hospital. With the exception of these three attacks she has had no hæmorrhage during the last nine months.

On admission, the distension of the abdomen corresponded in size with an eight months' pregnancy, but was asymmetrical, bulging much more on the right side. In the left iliac region a second much smaller projection was noticed, which was afterwards proved to be the enlarged uterus. The larger swelling occupying the right side and middle of the abdomen, was fluctuating, and contained a solid mass floating in it. No fœtal heart or placental bruit could be heard, the fœtus having apparently died as a result of the fall at the end of the eighth month. On vaginal examination, the cervix uteri was found to be much displaced upwards and to the left; it was patent and admitted the finger as far as the internal os, which was closed, but not tightly. The sound passed without difficulty upwards and to the left a distance of four inches and a half. On bimanual examination, the cervix could be felt to be continuous with the mass in the left iliac region, which was therefore the fundus uteri. The uterus could be freely moved quite independently of the large cyst on the right side. She had not suffered any pain for the last nine months and experienced no inconvenience from the passage of the sound.

The following points were in favour of extra-uterine fœtation:—1. The fact that the woman, who had had several children before, was quite satisfied that she was pregnant, and that she had felt the fœtal movements up to the time of the fall at the end of the eighth month; and though she had been regular up to nine months ago, she had had amenorrhœa since, with the exception of three attacks of metrorrhagia. 2. That the swelling was fluctuating and contained a solid mass floating in it; the fœtal limbs could not, however, be felt through the abdominal wall. 3. The occurrence of uterine hæmorrhage, especially that at the ninth month, and the enlargement of the uterus.

For family reasons the patient left the hospital for two or three weeks and attended as an out-patient, when she was seen in the out-patient room and persuaded to return, and on the afternoon of July 13th the following operation was performed. The patient was put under the influence of bichloride of methylene and an abdominal section was commenced. The incision was made in the middle line and was about five inches long. There was no fluid in the peritoneal cavity, and the outside of the cyst, which was readily reached, was smooth, shining, and free from adhesions in front and at the side, and could not by its appearance be distinguished from an ovarian cystic tumour. It had several large vessels running on its surface. Spencer Wells's ovarian trocar was plunged into it, and a small quantity of coffee-coloured fluid escaped by the side of, but not through, the cannula; this was due to the smallness of the quantity, and possibly also to pushing the end of the cannula against the solid contents of the sac. On incising the walls of the cyst and introducing the hand, the limbs of a fœtus could be felt. It was removed without difficulty; it had evidently

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been dead some weeks, and appeared to have been of about eight months' gestation. The umbilical cord was of a light-brown colour, and did not bleed on section, the circulation through it having evidently ceased for some time. It was not ascertained to what viscera the posterior wall of the cyst was adherent. The placenta was seen attached to the upper and back part of the sac, and was fixed. Slight traction was made on the placenta, but as this was quite fixed it was left *in situ*. The cyst wall, which was rather more than one-sixteenth of an inch thick, was stitched to the margins of the abdominal incision by a dozen or fourteen silk sutures. The cord was cut short and fixed at the lower part of the wound, which was closed up except at the lower part, where an indiarubber drainage-tube was inserted, the thickness of the ring finger. After the injection of one-sixth of a grain of morphia subcutaneously, the patient slept fairly well on the night of the operation, though there was a good deal of vomiting during that night and the succeeding day. No food was given for twenty-four hours following the operation, with the exception of a little ice. Temperature 99°; pulse 96; respiration 28.

July 15th.—Vomiting ceased; no pain; ordered veal broth and milk. Wound dressed; much thick dark-coloured discharge, some of which was got away by suction through the indiarubber drainage-tube.

16th.—Wound dressed again, and cavity syringed out with carbolic lotion (1 in 40).

During the next day or two, as there was carboluria, the lotion was changed from carbolic to Condy; the discharge was sometimes very offensive, and the wound was consequently dressed and the cavity syringed out several times a day. A week after the operation some shreds of what appeared to be the placenta began to come away, and on the seventeenth day from the operation a fairly large sloughing irregular mass was removed. The bowels were first moved by enema eight days after the operation, and continued to be moved in the same way afterwards, though there was some little trouble from old-standing piles. The wound has continued to discharge freely, and became free from fetor after the cord and remains of the placenta had sloughed away. She has had occasional rises of temperature, which have generally been followed by increased discharge for a day or two. She has passed from thirty to forty ounces of urine each day, and after the first week has not needed the catheter. She got up for the first time on August 4th, and, with the exception of a few days when she was not very well, has got up every day since. She now eats well and sleeps well, goes down into the garden every day, and is quite strong. There is still a sinus with a tube in it about two inches long, but the discharge is very scanty and quite sweet. She was kept in hospital for some time longer on account of the sinus which existed in the lower part of the wound, which, from its irregular contraction, kept back the discharge from the interior of the cyst and prevented rapid healing.

Remarks by Mr. LITTLEWOOD.—It will possibly be a matter of interest and speculation, but not of certainty, as to the form of gestation in this case. Tubal gestations generally burst before the third month, and a woman's only chance of recovery in such cases short of an operation, and that very quickly, is that the contents of the sac shall escape between the two layers of the broad ligament by rupture of the Fallopian tube at its lower margin, and little hæmorrhage take place; but these cases are, I believe, rare—i.e., where gestation goes longer than three months. Now, this cannot be said of the tubo-ovarian form; in this, arrest and development of the ovum may take place in the fimbriæ, the sac being formed partly out of the dilated mouth of the tube, and partly by attachments to the ovary and other structures near; in these cases gestation may go on until the full time or thereabouts; the fœtus may then die, and if the sac is a tough one the woman may carry the remains for years without any harm befalling her. Ovarian gestation has been doubted by many authorities, and the same may be said about abdominal gestation, except when it is secondary to tubal or tubo-ovarian, in which case the ovum after rupture of the sac preserves its vitality by retaining part of its original attachments. I am myself inclined to think that the balance of probabilities is in favour of the tubo-ovarian forms. I have reported this case (for the notes of which I am considerably indebted to my colleague, Dr. Handford, and the resident officers, Mr. Anderton and Mr. Ashwell) on account of the prolonged period of gestation, no similar case having occurred in my experience, the nearest approach to such being a case which, I have no doubt, will be remembered by some as occurring in the practice of Mr. Ellam and the late Mr. Thompson. A woman was supposed to be about six months pregnant, when her abdomen got gradually smaller, and she came to the conclusion that she had been mistaken. About eighteen months afterwards she had a good deal of irritability about the bladder. She passed urine frequently, which was found to contain much pus. She passed one day what seemed like a bit of bone, which led her to have her bladder examined, when there existed no doubt as to the cause of her trouble. I gave her chloroform. The urethra was slit up, and the bones of a fœtus, probably of six months' gestation, were removed from the bladder. I saw her a year or two afterwards, when she was in good health, but had difficulty in holding more than a small quantity of urine.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Supra-pubic Lithotomy.

AN additional meeting of this Society was held on Tuesday last, Mr. G. D. Pollock, F.R.C.S., President, in the chair. The whole evening was devoted to the consideration of the subject of Supra-pubic Lithotomy.

Mr. RICHARD BARWELL read a paper on Supra-pubic Lithotomy. A not infrequent sequela of urethro- or vesico-vaginal lithotomy is an intractable form of vesico-vaginal fistula, of which several instances have been under the author's care; hence he rejected those methods in the following two cases:—Case 1: A girl aged nine, admitted into Charing-cross Hospital on Feb. 6th, 1885. She was greatly emaciated, and suffering from dribbling of urine and frequent micturition. A large vesical calculus was detected. On Feb. 12th, 3½oz. of boro-glyceride solution, all that the bladder would hold, were injected, and Mr. Morgan passed a finger per vaginam to steady the stone and to prevent escape of fluid from the bladder by compressing the urethra against the pubes. The skin and linea alba, and then the thin fascia transversalis, were incised. An exceedingly soft layer of fat separated the bladder from the abdominal wall; this was cautiously divided, the bladder opened, and the stone extracted. The peritoneum did not come into view until the escaped fluid allowed the bladder to contract; the wall of that viscus, as also the abdominal wall, was sewn, a drainage-tube being placed between the two. The child suffered nothing after the operation, and by Feb. 26th the wound had closed. The stone measured 2¼ in., 1½ in., and 1¼ in. in its several dimensions, and weighed 2½ oz. Case 2: A man aged sixty, but feeble and looking old, had frequent and copious hæmaturia, which was increased by the most delicate sounding; the prostate was enlarged. On sounding, a stone was found. Measurement in three directions gave 1⅛ in., ⅞ in., and ⅞ in.; but the condition of parts, and the possibility that a papilloma might also be in the bladder, induced Mr. Barwell to prefer supra-pubic lithotomy to either the perineal operation or lithotrity. On April 30th 16 oz. of boro-glyceride solution were injected and retained by tying a tape round the penis. The skin, linea alba, and transversalis fascia being incised, the lower fold of the peritoneum was found to lie about three quarters of an inch above the margin of the pubes. The membrane was pushed without the slightest resistance from the front of the bladder. The man suffered no pain after the operation; the wound healed quickly, save a sinus just above the pubes, from which urine oozed in small quantity, and which did not thoroughly heal till July, the man remaining well in health. The author pointed out that the high operation for stone had been too much neglected, and may well be used in cases other than those of exceptionally large stones. For children it is particularly well adapted, and he contended that for female children no other lithotomy should be practised. There was no danger of a permanent fistula, the case (No. 2) being, he believes, the longest persistence on record. The danger of urinary infiltration may be avoided with practical certainty by proper after-treatment. In a properly conducted operation the peritoneum is safe—injection of the bladder will always raise it

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high enough; and as it is barely attached to that viscus it yields upward to the slightest touch of the finger. The author showed that distension of the rectum had a very small effect on the anterior peritoneal fold. He also pointed out that Petersen's experiments gave unreliable results, and that Garson's table in reality supported his (Mr. Barwell's) views, and he detailed (in an appendix) fourteen experiments of his own in proof of this contention.

Mr. WALTER RIVINGTON read notes of a case of Vesical Calculus of unusually large size removed by Supra-pubic Cystotomy. Thomas K——, aged sixty-one, entered the London Hospital on January 13th, 1885. For sixteen years he had been troubled with symptoms of calculus. On examination per rectum, a large, round, smooth swelling was detected in the situation of the prostate gland. No stone could be detected with a sound. On February 24th median urethrotomy for the purpose of exploration was performed, and it was ascertained that the hard mass was not connected with the prostate, and that the bladder wall was pressed over by it to the right side. A sound pushed far back into the bladder at length struck a stone, which proved almost immovable when grasped by forceps. Under these circumstances it was decided to open the bladder above the pubes. A staff was introduced into the bladder and the usual incision made above the pubes. The end of a stone was now detected projecting into the bladder through an opening posteriorly. It was grasped with forceps, but could not be moved. Lithotrites were useless. The stone was therefore broken up with a chisel and mallet and extracted piecemeal. After the extraction, the wound in the bladder and that in the soft parts were separately sutured, with insertion of a drainage-tube, and a silver tube was inserted into the perineal wound. The patient rallied well from the operation. The supra-pubic incision was reopened on the 28th, as there was evidence of the escape of urine through the bladder wound. The surface of the wound was sloughy, but gradually cleaned and filled up with granulations. On March 21st the patient was allowed to be up for an hour in a wheeled chair. On April 17th the opening into the bladder had closed by granulation, and, with the exception of a fistula in the perineum, the patient had now recovered from the operation, and was up daily. At the end of May, three months after the operation, he had a renewed attack of cystitis. His urine became ammoniacal, diarrhœa ensued, and he died on June 4th. Permission was only obtained to inspect the abdomen. Suppurative nephritis of the left kidney was found, with inflammation of the bladder and of the large pouch in which the stone had been lodged. After the operation the collected pieces of the calculus weighed 23 oz. avoirdupois. In its restored form it measures in circumference 13 in. by 10 in., in length 4¾ in., in width 3¼ in., and 3 in. in thickness, and weighs 22½ oz. It is mainly composed of lithic acid and lithates. Although not absolutely the largest calculus ever removed from the human bladder during life, it appears to be the largest removed during life with recovery of the patient from the immediate effects of the operation. The case stands alone as regards the inclusion of the calculus in a pouch, the difficulty of the operation, and the breaking up of the calculus before extraction.

Mr. JACOBSON contributed a case of Supra-pubic Lithotomy. A labourer, aged nineteen, was admitted into Guy's Hospital on Jan. 21st, 1886. He had suffered from constant irritability of the bladder all his life, with marked symptoms of stone for five years, and with cystitis for a year. The lithotrite and sound gave evidence of more than one stone. For this reason chiefly lithotomy was preferred to lithotrity. Hypogastric lithotomy was made use of on account of the age of the patient, the long duration of the symptoms, and the great probability that the kidneys were impaired. On Jan. 30th hypogastric lithotomy was performed, the bladder having been injected with 10 oz. of water and the rectal bag introduced. The peritoneum was not seen. One stone was readily found on incising the bladder, but prolonged search failed to find others. This was probably due to the mistake of keeping the bladder distended with fluid during the search, owing to which two other stones, small and light, escaped detection. Neither sutures in the bladder, nor drainage-tube in the wound, nor catheter in the urethra were made use of. The patient's recovery was somewhat retarded by an attack of pneumonia setting in the day after the operation. There was never any sign of extravasation or cellulitis. On the fourth and fifth days the wound and urine were distinctly ammoniacal, but this condition yielded to treatment. Two weeks after the operation a large venous hæmorrhage took place, and a few hours after a small calculus was removed from the wound; a few days later another and smaller calculus escaped. On the twenty-third day urine was first passed naturally; by the fifth week micturition was normal. It is evident now that, owing to the small size of the largest calculus (only 300 grains), all might have been dealt with by lithotrity. The author, however, still ventured to bring the case forward, and concluded with the following propositions: 1. That this operation has a future of revived usefulness before it; and that it will be found of great value by those who only have to deal with stone occasionally, and who find themselves face to face with stones of good size in adults. 2. That while as an operation it can never contrast with the rapid brilliancy of a lateral lithotomy, it will, in its improved form, give better results in adults with stones not suited to lithotrity. 3. That at present, till a larger number of cases of the improved operations have been collected, it will be wise not to attempt to close the bladder with stitches. 4. That in reviewing an abandoned operation the following questions call for an answer: Do we stand in a better position towards the operation than our predecessors did? This question can only be answered in the affirmative after the work done by Dr. Garson, Professor Petersen of Kiel, and Sir Henry Thompson. On what grounds was the operation abandoned? The grounds on which this operation was abandoned were enumerated.

Sir HENRY THOMPSON opened the discussion by remarking that the alteration in lithotrity, resulting from Bigelow's treatment, had changed the conditions under which lithotrity was now performed, and left a different category for those cases that required cutting. There could be no question that stones weighing 1½ oz. to 2 oz. could be removed safely by lithotrity. He thoroughly agreed with the expression of opinion that it was safer to adopt the supra-pubic operation, provided the modern improvements that belong to it were adopted. The operation could be performed in a more safe and easy manner than was formerly possible. The distension of the rectum was valuable, not only from the fact that, as Bouley strongly contended, the supra-pubic interval was increased, but from the circumstance that it places the bladder immobile under the surgeon's hand in the abdomen, and out of the pelvis. Hildamus, in the 17th century, had shown how it was possible to push up the stone above the margin of the pubes in children by pressure inside the rectum. The distension of the rectum was most valuable in the removal of large tumours of the bladder by the supra-pubic method; Sir Henry had operated upon two such tumours by this method. In nine cases in which he had performed the supra-pubic operation he had used but one ligature, the liability to hæmorrhage being very slight. But one case of the nine had died from advanced renal disease, a few days after the operation — an unavoidable complication. In the case of a tumour in a lady who was very anæmic, he also preferred the supra-pubic operation, as likely to be attended with the least hæmorrhage. He showed a simple flexible tube that he employed to allow the urine to flow off. The wound ought not to be closed for some days.—Mr. POLLOCK said he would like to ask the Fellows how far they would justify the supra-pubic operation. He related a case in which the two extremities of a hairpin had penetrated the posterior wall of the bladder, and a calculus of large size had formed round this foreign body. Here he made an incision into the posterior wall and removed the calculus and hairpin. After the cystitis subsided an ordinary vagino-vesical fistula remained, and was treated successfully after the ordinary fashion.—Dr. HEYWOOD SMITH related a somewhat similar case, in which, however, the incision healed by the first intention by sewing the edges of the fresh wound together after the primary operation was finished.—Mr. CADGE recommended caution in deducing general conclusions on insufficient facts. In the last century the operation had fallen into undeserved obloquy, but he was not sure that we ought yet to conclude that lateral operation might be abolished in favour of the new supra-pubic method. Many of the already reported cases might have been dealt with by the lateral operation, and Mr. Crichton of Dundee had shown that stones weighing from 4 oz. to 8 oz. might be successfully dealt with by the old operation. He thought it was not yet proved that the supra-pubic operation would interfere largely with the lateral method. He agreed with Mr. Barwell that distension of the rectum was not of much value in raising the prævesical fold of peritoneum, but that it was

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mainly useful in raising the fundus of the bladder, which it could do even as much as 2 in. With the supra-pubic operation no stone should be left behind, a condition which was possible in the lateral method. The absence of hæmorrhage was another quoted advantage of the high operation, but in the dozen or so cases yet reported there had been three of decided hæmorrhage. Infiltration of urine, moreover, was not a common event in the lateral operation. In one case 18 oz. of fluid were injected into the rectal bag, on the removal of which a drachm of blood followed; in a day or so suppression of urine set in, and the patient died, advanced disease of the kidneys being found. At the necropsy a wound of the rectum between it and the bladder, going through the circular fibres of the muscular coat, was detected. It had done no great harm, but still the peril should be borne in mind.—Mr. R. W. PARKER had performed the supra-pubic operation once, and found it easy of performance. He had had twenty-two cases of stone, with the large proportion of eight females. In all these latter cases he rapidly dilated the urethra, and then removed the stone. He had had no death and no incontinence of urine following this procedure. His largest stone was rather smaller than that of the second of Mr. Barwell's cases. He exhibited the stones he had removed to show what could be done by the simple method.—Dr. GARSON said that Mr. Barwell's experiments had been made with the abdomen opened for four inches. His own were made with the abdomen unopened as well. The prævesical fold of peritoneum he found to be raised from 40 to 50 mm. After distending the bladder and the rectum, it was ascertained that for 5 centim. the bladder extended above the upper edge of the symphysis pubis. As the water was let out of the rectum the distance was reduced to 2½ centim. If the abdomen were opened first, but little, if any, raising of the peritoneal fold took place. Distension of the rectum first raises the bladder upwards and then forwards. In emptying the distended rectum the bladder describes a downward and backward course in a sort of curved line, so that what was uppermost became posterior.—Mr. T. BRYANT had repeated Dr. Garson's experiments and corroborated them in every way. The rectum was distended with 14 oz. first, and then the bladder with from 16 oz. to 20 oz., and in every instance he found that from 2 in. to 3 in. of the anterior wall of the bladder was exposed in the hypogastrium after making the usual incisions. He also added, with Mr. Cadge, a caution in thinking that evidence yet before the profession was not enough to justify any general conclusion on the utility and scope of the operation. Probably, however, in dealing with all large stones the supra-pubic operation was preferable to the lateral, especially if there be disease of the kidneys, though this complication would render any operation more perilous. He concurred with Mr. Parker in the opinion that in females rapid dilatation and lithotrity would prove sufficient for a large majority of stones.—Mr. LUND urged that in the lateral operation the danger arising from bruising of tissues made them unfavourable for healing; this was one difficulty that might be entirely disposed of by the supra-pubic method. The use of anæsthetics, he believed, was one reason why the operation might now be regarded with more favour than it was in the last century. In a case of piles for which the cautery had been used, the rectum became loaded with five days' accumulation; an enema was administered, and caused severe pain at the end of the penis; this, he thought, was explained by the distension exercising pressure on the sensitive neck of the bladder.—Mr. BARWELL said that his paper had been written before Sir Henry Thompson's lecture had appeared in THE LANCET, and before the *brochure* on the subject had appeared. He had performed experiments on the distension of the rectum so as to ascertain the exact position of the anterior fold of peritoneum as it would be in the surgical operation. He was surprised to find how little a safe degree of rectal distension raised the peritoneal fold. He did not think that in lithotomy there was any considerable use in having the base of the bladder brought nearer to the abdominal wound in the supra-pubic operation. No doubt there was a certain degree of danger in distending the rectum, especially in old people.—Mr. RIVINGTON said that he had removed a calculus measuring 6 in. by 5 in., and weighing 3 oz. by vaginal lithotomy, the wound healing almost completely by first intention. In another case, as in the President's, a hairpin had stuck in the anterior wall of the vagina and a calculus formed around it; here, also, he performed a similar operation. He should prefer vaginal lithotomy for most cases of the kind, unless the stone were of the very large kind.—Mr. JACOBSON considered that there would be no difficulty in detecting stones in future whilst exploring the bladder in the supra-pubic method. That he did not find all the stones in his case was not due to recesses formed on either side of the bladder in the rectum. It was dangerous to distend the rectum by anything more than 12 oz. or 14 oz. of fluid. In his own case some bloody mucus was passed for a day or two, but the distension had not been excessive. He concluded by expressing the opinion in the form of questions that the supra-pubic operation was preferable to the lateral.

CLINICAL SOCIETY OF LONDON.

Tubercular Ulceration of Palate.—Popliteal Aneurysm in Locomotor Ataxy cured by Pressure.—Acute Intestinal Obstruction after Ovariotomy.

AN ordinary meeting of this Society was held on the 26th ult., Mr. Thomas Bryant, F.R.C.S., President, in the chair.

Mr. CLUTTON read the notes of a case of Tubercular Ulceration of Palate, which was illustrated by drawings. The patient was a girl aged fifteen, who had been under his care about nine months. Her family history gave no evidence of a phthisical tendency. In her previous history it appeared that she had been in the Evelina Hospital for six months under Dr. Goodhart, who had described her condition in his book on Diseases of Children as a typical case of scrofula. In July, 1885, a year after leaving the Evelina Hospital, she was sent to Mr. Clutton at St. Thomas's Hospital by Dr. Rugg. The soft palate was then found to be divided by a median cleft, and the whole of the surrounding tissues swollen and superficially ulcerated. The surface was finely granular, and numerous small pit-like ulcers were distributed over the hard palate at a distance from the median fissure. The glands beneath the jaw were large and hard, as also were those in the left groin. The lungs, examined by Dr. Acland, were reported to be fairly healthy. During September the surface of the palate, previously ulcerated, almost entirely healed, but one auditory canal and the interior of the nose were found to be affected with a similar condition. In October the larynx was examined by Dr. Semon, when the epiglottis and arytenoid cartilages were seen to be ulcerated in the same manner. In November the lungs were found by Dr. Acland to have undergone a marked change, the right apex showing signs of active disease. The temperature, taken regularly about this time, recorded only a slight rise of the thermometer at night. In February of this year the palate had again broken down, and was occupied by three deeply cut ulcers. The right cheek also was now covered with scattered scaly papules, like the early stage of lupus. In March the lungs were found again to have improved, showing no distinct physical signs of disease. The palate also had again begun to heal. The secretions and small portions of the diseased surface were frequently examined by Dr. Acland and Mr. Ballance, but no bacilli were at any time found.—Mr. T. BRYANT had only seen two cases of lupus of the palate spreading to the larynx: one occurred in a well-to-do lady, in whom there was lupus on the nose and cheek; there were recurrences at long intervals, the tongue and epiglottis being involved after the palate; death took place from acute phthisis.—Dr. FELIX SEMON had seen Mr. Clutton's case. Was it lupus or tuberculosis? He approached the question from a clinical point of view. In September, 1885, there was no affection of the skin or lungs. Isambert of Paris had recorded the first case of faucial tuberculosis, and B. Fraenkel of Berlin followed him. In these cases of pharyngeal tuberculosis, tubercular affections of the lungs were sometimes present; in others totally absent. There was no reason why tubercle should not appear primarily in the mucous membrane. So far as he knew, however, there had been not a single satisfactory case recorded in which the larynx was primarily affected. He could not say from the clinical appearances whether a laryngeal disease were tubercular or lupoid, and the opinion of Schrötter and Stoerk confirmed him in this. But the temporary improvement of Mr. Clutton's case was in favour of the lupoid nature of the disease, and conflicted with the tubercular view taken by him (Dr. Semon) at first; then, after the skin had become affected the diagnosis seemed still more conclusive, and was made still more so by the spread into the nose and

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œsophagus. He referred to the case of the lady shown that evening. From drawings of the early stage of the disease it appeared that there was a very close resemblance between that case and Mr. Clutton's. With regard to lupus of the larynx, Chiari and Riehl had collected in 1882 all the cases on record, and there were not more than thirty cases. But he questioned whether it was so excessively rare, and believed that if every case of lupus were carefully examined laryngoscopically lupus of the epiglottis might be found more commonly. As to the treatment of lupus of the larynx, there was only one case that had been cured, and that was Chiari's. The best result in all other cases has been a temporary improvement. In the case of the lady above mentioned aphonia had lasted a year, and there were very large mamillated excrescences; the case seemed most unfavourable, but the patient urged perseverance and now was almost cured; there had been no recurrence for five months.—Mr. DAVIES-COLLEY asked whether all the brothers and sisters had been examined with a view to exclude syphilis as far as possible. The girl had an affection of the eyes, some lumps on the forehead and back of the head, and an ulcer above the internal malleolus of one leg. He admitted that no great improvement of the condition of the soft palate took place under the use of perchloride of mercury, though the leg had improved. He had not seen another case in the active stage, but had seen three or four cases in which a cicatricial contraction of the pharynx had occurred, probably as the result of a similar process.—Mr. MALCOLM MORRIS related the case of the lady aged thirty-five shown that evening. Her disease began in 1867 with ulceration of the mucous membrane of one nostril. This did not advance much till 1876, when it spread outside and affected the upper gum and hard palate; treatment was begun in 1873 with various medicines—cod-liver-oil, iodide of potassium, and iodine. At the end of September, 1884, Mr. Morris first saw her, when there was very widespread disease. The importance of the diagnosis between lupus and tubercle was then discussed. A French observer had said that scraping or scarification of lupus was liable to be followed by tuberculosis of the lung, and argued that it was dangerous to touch lupus for this reason. Lupus was capable of inoculation in animals, and the bacilli of the two diseases were identical. Professor Raudnitz of Prague had collected 209 cases of lupus, and in only two was there tuberculosis of the lung, whilst in twenty-one there was a family history of tubercle. Though there did not appear to be much pathological distinction between lupus and tubercle, yet Mr. Morris thought there was a decided clinical difference. He had surgically treated about forty cases, and had never yet seen any tuberculosis of the lung follow. The slowness of the growth, and the fact that drugs had some influence on tubercle and no effect on true lupus, were clinical differences. Altogether he considered that the identity of lupus and tubercle had by no means been proved.—Dr. GLOVER related the case of a man whose palate was covered with small superficial, round, painful ulcers. He was admitted into Middlesex Hospital under the care of Dr. Douglas Powell; numerous bacilli were found in scrapings from the diseased parts; acute phthisis rapidly developed, and he died in six or eight weeks. There was no history or other indication of syphilis.—Mr. CLUTTON, in reply, said he had not seen the whole of the family; but two others of the nine presented no trace of syphilis. The swellings on the body were observed by Dr. Goodhart, who did not consider them as syphilitic. Rest in bed often caused great improvement in ulcers of the leg. Mr. Davies-Colley said the child had rested in bed.

Dr. LONGHURST read a case of Popliteal Aneurysm cured by Pressure, occurring in a patient aged fifty-one, the subject of locomotor ataxy. He was a single man of temperate habits, who for many years was an active member of the Alpine Club. There was a family tendency to varicose veins and phlebitis, in which the patient participated. He had had syphilis in 1860, and was treated by mercury; no secondary symptoms appeared, and his health remained good till 1878, when symptoms of tabes dorsalis set in. A voyage to the Cape of Good Hope in 1883 effected no improvement. Early in April, 1885, the popliteal aneurysm made its appearance, and he was then seen by the author. He had been able to attend to his duties as a solicitor, and had hunted three times a week with the Brighton harriers, but there was no history of a distinct strain or injury. On examination there was a pulsating swelling, the size of a small walnut, in the left popliteal space, without bruit, and completely controlled by pressure on the femoral in Scarpa's triangle. There was evident pulsation in the anterior and posterior tibial arteries at the ankle; the superficial veins of the limb were varicose; the limb was well nourished. Pulsation in the right popliteal was forcible, and the calibre of the vessel full. Cases of popliteal aneurysm in the subjects of locomotor ataxy not being very common, there was some uncertainty as to the best course of treatment to be pursued. Dr. Longhurst considered that pressure would be the best method of treatment, and Professor Humphry concurred in this view. Accordingly on April 19th treatment by pressure was commenced under the direction of Mr. Thomas Smith. Esmarch's bandage was applied from the foot upwards over the knee and retained for an hour and a half. Then the screw tourniquet was applied to the femoral artery and continued all day, when it was removed, the pressure having been well borne. On the evening of the next day a shot bag weighing 11¼ lb. was suspended from a cross bar over the bed so as to compress the femoral artery in Scarpa's triangle; pulsation was completely controlled. An extra pound was added at the end of an hour, and the whole borne till 11 P.M., when it was taken off for the night. It was reapplied on the 21st, and, alternately with Esmarch's bandage, was continued till 11 P.M., when pressure was again removed for the night. On the next day the same treatment was pursued. At the end of the day there was no pulsation in the aneurysm. The weight was reapplied on the 23rd at 7.15 A.M., but had to be removed at 10.30, because the foot was numb and cold. It was, however, intermittently employed till 7 P.M., and finally disused. There was no pulsation in the aneurysm, but it existed in the small arteries around the knee, and only in the anterior tibial at the ankle. At 10.30 P.M. the limb was enveloped in a calico bandage, but as the pressure prevented sleep it was taken off at midnight. There was no return of pulsation on the 24th. The aneurysm was thus cured by pressure in five days, neither the varicose state of the veins nor the nervous disease having interfered with the treatment. The shrinking of the tumour took place gradually, and the collateral circulation became by degrees more fully established, so that, notwithstanding some lividity of the toe-nails and diminution in the temperature of the limb, the recovery was complete. The patient returned to his office a month from the commencement of treatment, and up to the present time the cure of the aneurysm had remained perfect. Unhappily, however, the nervous affection has steadily progressed, so that the sufferer is now unable to walk.—Dr. HADDEN referred to a case of locomotor ataxy associated with perforating ulcer for which amputation of the foot was performed, in which the hæmorrhage proved refractory. The nerves and vessels of the amputated limb showed marked changes.—Mr. THOMAS SMITH debated the question of treatment, and said that he had a predilection for hastening on the cure. It was interesting to observe that in Dr. Longhurst's case the pulse in the posterior tibial artery disappeared altogether one day and then returned the next. In cases of locomotor ataxy he should prefer to tie the artery on account of the general constitutional state; for in the patient under consideration the nervous troubles made rapid progress, which he could not but attribute to the taxation of his nervous forces resulting from the treatment by compression. In one case of perforating ulcer occurring in locomotor ataxy that had come under his notice, the patient died from hæmorrhage after amputation of the limb. He had operated on a case of locomotor ataxy for disease of the tongue: the wound healed very well and there was no trouble from hæmorrhage.—Mr. T. BRYANT considered that the treatment that was adopted was the most reasonable, but thought it should be given up if the capacity of the patient for endurance broke down. It was more likely to be successful than ligature, owing to the presence of arterial disease; in tabes dorsalis the blood was in much the same condition as in health. Doubtless, also, the rapid treatment was the best, and less likely to tax the patient's powers. Noting the fact that there was no murmur, it was probable that a large opening existed between the artery and the aneurysm; in such cases a complete cure required coagulation in the vessel as well as in the aneurysmal sac, and it was easy to understand how all the clot could get washed away.—Dr. CARRINGTON thought it should not go forth from this Society that there was any necessary connexion between arterial disease and locomotor ataxy without some kind of protest. So far as he knew cardiac or arterial changes were not of common occurrence

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in tabes dorsalis.—Dr. HADDEN said that he thought the connexion was one that had received very general assent of late.—Dr. A. MONEY remarked that several papers had appeared in the *Lyon Médical* by M. Teissier and others pointing out the frequent association of cardiopathy and arterial disease with tabes dorsalis.—Dr. LONGHURST, in reply to Mr. Smith, said the patient had no morphia.

Mr. MEREDITH read notes of a successful case of Laparotomy for the relief of Acute Intestinal Obstruction following upon Ovariotomy. The patient, a feeble old woman, aged fifty-eight, was operated on at the Samaritan Free Hospital in April, 1885, for double ovarian cystoma, complicated by very extensive adhesions (parietal, pelvic, omental, and intestinal). The subsequent progress of the case was in all ways satisfactory during the first week, at the end of which time all sutures were removed after the bowels had acted, the abdominal incision being found well united, and the pulse being recorded as normal. On the evening of the same day the patient suddenly complained of nausea, and soon after vomited a quantity of dark-green fluid. On examination, the abdomen was found free from distension and universally resonant on percussion, excepting immediately over the region of the cæcum, where some dulness was detected. The condition was diagnosed as commencing intestinal obstruction, probably caused by an adhesion band. All nourishment by the mouth was at once stopped, and replaced by nutrient enemata of beef-tea, containing occasional doses of tincture of opium. By the following morning there had been no return of the sickness, but the patient looked worse, the abdomen was somewhat fuller, and the urine passed during the night was for the first time found laden with albumen. Immediate operation was decided upon as likely to afford the patient the only chance of recovery under the conditions believed to exist. On opening the abdomen the peritoneum was found intensely red and congested, evidently in an early stage of acute inflammation. Attention was attracted to a coil of greatly distended small intestine, which was badly kinked and obstructed in consequence of the traction exerted upon it by a portion of the ligated omentum which was closely adherent to its surface. This having been released with some difficulty, owing to the inflamed and softened state of the bowel, another distended coil similarly obstructed by a separate omental band was also set free. No further obstruction being discoverable, the abdomen was then closed. The acute symptoms were at once relieved by the operation, and the temperature fell to normal again on the third day, but convalescence was tedious. No evacuation of the bowels took place until the twenty-third day, when fæcal matter was for the first time detected in the rectum, and relief followed upon the use of an enema. Thenceforth the bowels acted daily, and the patient left the hospital on May 16th, exactly six weeks from the date of her first operation. When last heard of at the end of October, she stated that she had quite recovered her health and was about to resume domestic service. In commenting on the case, Mr. Meredith urged the advisability of early resort to operation under similar circumstances, quoting an instance in his own practice where the patient's life might readily have been saved by such means.—Mr. T. SMITH asked whether the albumen in the urine was associated with the employment of the carbolic spray.—Mr. MEREDITH replied in the negative.

The following living specimens were exhibited:—Dr. Radcliffe Crocker: Arsenical Pigmentation in a case of Chorea. Mr. Malcolm Morris and Dr. F. Semon: Lupus of Face and Larynx. Mr. Clutton: Tubercular Ulceration of Palate. Dr. S. Mackenzie for Dr. Handford (Nottingham): A case of Xeroderma (? Myxœdema).

MEDICAL SOCIETY OF LONDON.

Irritable Brain and Congestion of the Brain in Children.—Simple Pneumothorax, with rapid recovery.

AN ordinary meeting of this Society took place on Monday last, Mr. Brudenell Carter, F.R.C.S., President, in the chair.

Dr. DAY read a paper on Irritable Brain and Congestion of the Brain in Children. He considered that the essential proximate cause of cerebral irritability was anæmia. Many individuals about to suffer from nervous headaches experienced curious sensations of restlessness and depression, probably due to cerebral anæmia. The causes of cerebral irritation were very numerous; sometimes it followed accidents either to the head or some other part of the body; it supervened at other times on chronic illness or acute disease. It was as much a primary disease in some cases as irritability of the larynx or bladder. Sometimes the irritability led to congestion, and this to meningitis. Irritability was, again, a symptom of actual disease of the meninges or brain. Many cases were read illustrating Dr. Day's remarks. He believed that in many cases cold sponging was the best method of reducing the febrile temperature. Cerebral irritation is frequently accompanied by fever and often followed by frontal headache. Excessive heat or profound cold may set up congestion of the brain. Delay in the treatment of such cases may allow of the development of coma, which leads to death. The distribution of the blood may be unequal in different parts of the brain, some being congested, others anæmic. Congestion of the brain very early succeeds irritation; if, indeed, it do not sometimes accompany irritation. A want of balance in the venous and arterial circulation of the brain may disturb its functions. In some cases there are negative symptoms—lassitude, change of manner, without fever, vomiting, or constipation. After lasting for some time, this stage may be succeeded by one in which positive signs and fever develop. In diagnosis the temperature is of but little value unless taken in connexion with other signs. The temperature of the body is very mobile in some nervous children. It is difficult, if not impossible, to draw the line between active congestion and inflammation.—Mr. R. B. CARTER considered that hospitals for sick children afforded a fine field for ophthalmoscopic observation in cases of cerebral disease. He remembered that M. Bouchut had drawn a distinction between neuritis and perineuritis; for the optic nerve received its blood-supply from the anterior cerebral, whilst the coverings of the nerve were supplied from the pia mater. In a case of coma after convulsions he had noticed the same colour as the surrounding fundus in the optic disc. In an undoubted case of meningitis he had seen there was the perineuritis that M. Bouchut had described.—Dr. CHARLES WEST doubted whether the observations of Bouchut were of much scientific value. The ophthalmoscope might corroborate a diagnosis, but it seldom initiated one. Most of the cases that Dr. Day had brought forward were probably examples of congestion rather than mere irritability. Pure and simple meningitis in the child was of very rare occurrence. Tubercular deposits might give rise to various symptoms, and when inflammation supervened the clinical source suddenly altered its character, vomiting being a notable symptom.—Dr. SANSOM spoke chiefly of the peripheral causes of cerebral irritation. In his experience, hypermetropia, and myopia more rarely, were often a cause of cerebral symptoms, simulating irritation. In a case which was first looked on as dyspepsia Dr. Sansom discovered optic neuritis, and gave a grave prognosis. Vomiting supervened later on, and opisthotonos developed. A sarcoma of the cerebellum was discovered. Although neuritis existed, there was sometimes no defect of vision.

Dr. WHIPHAM read notes of a case of Sudden Pneumothorax. The patient was a man aged twenty-one, who caught a severe cold. He was admitted into hospital on Dec. 10th, 1885. The condition began on Dec. 4th with a violent pain at the lower part of the right side. There were amphoric sounds over the right side; the vocal fremitus was fairly distinct, although most of the other signs of pneumothorax were present. On Dec. 14th the patient was so well that he was put on ordinary diet. On Dec. 23rd the air had become so far absorbed that the liver was at its normal level. In the middle of January the man was discharged well. A few other cases had been recorded, altogether eight in number. Five occurred in individuals under the age of thirty-seven. Dr. Thorburn's and Dr. George Johnson's cases occurred in lungs in which there was no obvious previous disease, and it was suggested that adhesions of the pleura had undergone alterations allowing of rupture. In Dr. S. Mackenzie's patient, aged fifty-seven, there was emphysema. Vogel believed that latent tubercular cavities might be the cause of sudden pneumothorax. In cases of the kind under consideration absolute rest seemed to be all that was necessary for perfect recovery. Active interference would be but seldom necessary, only when dyspnœa or cardiac distress seemed to call for it.—Dr. S. WEST had recorded a somewhat similar case in the Clinical Transactions, and had collected twenty-four such cases. The comparative absence of symptoms in Dr. Whipham's case

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was remarkable, for in healthy individuals the symptoms at the onset were very severe. Most of the patients were under the age of thirty. He thought it was very doubtful whether in the majority of cases there was not a gross lesion. In experimental pneumothorax of animals it was difficult to maintain the affection, as the air was rapidly absorbed.

HARVEIAN SOCIETY.

Compound Fracture of the Patella.—Sprained Joints.

A MEETING of this Society was held on Thursday, March 18th, J. Hughlings Jackson, M.D., F.R.S., President, in the chair.

Mr. G. R. TURNER read a paper on Compound Fracture of the Patella. The patient, a fireman, aged thirty-two, was admitted into the Seamen's Hospital on June 1st, 1885, with a compound transverse fracture of the patella. The cavity of the joint was open through a contused wound, two inches and a half in width, from which blood was exuding, the patellar fragments being separated by about half an inch to an inch. Thorough cleansing under antiseptic precautions, the limb being fixed on a straight posterior splint, with the wound left open, constituted the first treatment. A blood-clot subsequently was found to be projecting between the fragments, but it was not disturbed. At the end of the sixth week a small sequestrum came away from the lower fragment. The man made an excellent recovery, and was discharged in October with power to flex the knee nearly to a right angle, the fragments being then separated by about one inch and a quarter, and by three quarters of an inch when the limb was extended. In his comments upon the case, the author referred to the slight separation of the fragments in cases of compound fracture, possibly due to the escape of fluid from the joint; to the aseptic course of the case, notwithstanding partial necrosis; and to the question of treatment, in which he gave the preference to the expectant plan as opposed to wiring. The paper was concluded by a detailed summary of nineteen cases of this injury at present on record.—Dr. WALFORD described a case of compound fracture of the patella, in which, with partial antiseptic treatment, recovery had taken place in four months.—Mr. PICK commented on the influence of antiseptic treatment in lessening the gravity of the injury, and related the details of a remarkable case under his own care, ending in synostosis of the joint. He believed in very thorough cleansing of the wound, the edges being left open to admit of any putrescible matter being kept antiseptic. The separation of the fragments depended upon the amount of fluid effusion, but it was much more marked in cases where the capsule was torn.—Mr. GANT pointed out that in one case complete success had been obtained without antiseptics, although he had no doubt as to their value. He should never employ wiring in cases of simple fracture, the less severe treatment being quite as successful in its ultimate results, but he would use it in every case of compound fracture where the joint was once opened. Any great effusion, either of serum or blood, should be drawn off. In ordinary fractures he had used gutta-percha pads, drawn together by Malgaigne's hooks, with success. Where all the bones were injured by any form of destruction or partial anchylosis, he should prefer excision of the joint.—Mr. J. H. MORGAN referred to Mr. Pick's case, and observed that in the presence of much effusion union was assisted by the removal of the fluid. In such a case he should prefer to suture the fragments.—Mr. FITZROY BENHAM suggested that the limb should be kept flexed at an angle of 10°, believing that no action of the quadriceps extensor was liable to take place in that position.—Mr. TURNER, in reply, commented on the extreme rarity of compound fracture of the patella. He had found one case of suppuration in simple fracture.

Mr. EDMUND OWEN read a paper on Sprained Joints, in which he urged that a sprained joint should be dealt with on the same principles as those which guide the surgeon in his dealings with a fracture at or near the articulation. He advocated rest and compression for the joint, and maintained that if only the parts be at once enclosed within a plaster-of-Paris casing, with even compression, effusion will be prevented and pain allayed. He employed Croft's method of applying the gypsum splints, and urged its adoption in preference to lotions, ice-bags, simple bandaging, and strapping. He instanced various illustrative cases.—Mr. GANT would recognise two classes of sprains: those in which the tendons were affected, and those in which the ligaments only were injured. He related a case in which the extensor tendons had been torn by the foot being doubled under the leg. Passive movement should be employed early, even though pain was caused thereby.—Mr. KIALLMARK advocated the use of American plaster applied at once, instead of evaporating lotions. He would allow passive movement as soon as it was possible without causing pain.—Mr. PICK thought it difficult to decide when to begin passive motion, but he should generally begin early and persevere, using evaporating lotions at first. He referred to the use of very hot water in recent sprains on the stage.—Mr. VASEY mentioned the successful use of clay mould applied at once round a sprained joint.—Mr. OWEN, in reply, observed that he would be guided by the heat or coldness of the joint, and not by pain, in deciding when to commence passive motion.

EPIDEMIOLOGICAL SOCIETY.

Cholera in Fleets and Ships.

AT the meeting of this Society held on Wednesday, March 10th, Dr. Dickson, President, in the chair, a paper was read by Sir WILLIAM SMART on Cholera in Fleets and Ships. The author pointed out that one of the earliest English observers of cholera was Mr. Curtis, of H.M.S. *Seahorse*, and of the Naval Hospital at Madras, in 1782, who called the disease the "cramps," and the same name was used by Mr. Girdlestone, surgeon of the 101st Regiment, which regiment landed at Madras that year, and was at once attacked by cholera of the most intense type, the cramps being the most prominent symptom. At that time Dr. Paisley, the head of the E.I.C. Medical Staff at Madras, considered the disease to be the same as that which prevailed epidemically in London in 1669-70, which bore the name of "cholera morbus," applied to it by Dr. Sydenham at the time; of which, in contrasting it with ordinary summer cholera, he states: "It differs from that as far as the poles are asunder." To Dr. Paisley the application of the name to the Asiatic disease appears to have been due. After Curtis, who published in 1807, we have no naval authority on cholera, although it must have been seen by surgeons of ships in the East Indies. In 1833 it was among our ships at Lisbon, when the Spaniards denied its presence in Spain; it also was seen in the West Indies. In 1837, when epidemic at Malta, some ships were infected. In 1850 the squadron at Malta was severely attacked throughout the summer, and three times it appeared from infection received in the harbour, but from all the ships the disease disappeared when they were taken to sea. In 1854 it broke out in the fleets in the Black Sea and the Baltic. In the former the infection was brought from France, and it ravaged five ships, especially the *Britannia*, of which Sir William Smart gave the history in detail. He mentioned the length of exposure in some ships, twenty having cholera from the third to the seventeenth day after entering the infected port. The fleet went to sea, and in three of the line-of-battle ships there were violent outbursts at sea. That in the *Britannia* was the worst, and she returned to port on the fifth day, having lost 50 men in the first twenty-four hours of the outburst, and 93 out of 201 attacked in five days. She was cleared out and smoked, after which the disease ceased in her. Eighty-five men were transferred to the *Apollo*, of whom 26 died. The nurses sent with the sick were attacked, and some died, but the crew of the frigate were not at all infected by their visitors being eleven days on board. The Baltic fleet was infected with variola on leaving England, and that was followed by fever; but three months had elapsed when cholera appeared in the Gulf of Finland. With cholera on board, the combined fleet, English and French, went up the Gulf to Cronstadt, where the infection became worse; then it went to the mouth of the Gulf, and it had nearly disappeared when the French army arrived from Brest, bringing among the troops fresh infection to attack the sailors and marines who had landed to besiege Bomarsund, and thence took it to their ships. The French troops and ships suffered much more than the English. On Sept. 17th the French ships left for home, taking their troops, but the English did not leave the Baltic till Dec. 7th. In that fleet there were no severe outbreaks as in the Black Sea fleet, and the disease was more of the diarrhœal type. In the Black Sea there were 655 attacks of cholera

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with 354 deaths, and in the Baltic there were 327 attacks with 124 deaths. The author went on to give facts and details of the severer visitations of cholera in ships on the East Indian stations at recent periods. In 1858, the year of the second China war and of the Indian Mutiny; and in 1862, when our forces were directed to repel the Taeping rebellion, the *Euryalus*, whose crew had had no leave since quitting England, arrived, and next day part of the crew formed a boat expedition up the river, of which the water was drunk by them, and on the fourth day they landed and scoured the country. That same night cholera broke out in the party, but on returning to their ships no ill effects resulted to those who had not gone on the expedition, and the whole epidemic of cholera became one of dysentery and remittent fever. Sir William Smart said he had no reason to believe that cholera could be communicated by close contact; but there must be an infectious "aura" from the sick or their excreta, where cholera is of an epidemic type, that reproduces the disease in others, of which there was to his mind proof in the secondary infection of the marines in H.M.S. *Queen* in 1850. He had witnessed nothing to give support to the doctrine of Pettinkofer, but believed in the necessity for keeping the decks as dry as possible whenever any kind of bowel disorder was epidemic in crowded vessels. Although admitting that the theory of Koch may explain some phenomena of epidemic cholera, yet he finds no support to that theory in the terrific and sudden outbursts he has had to speak of; but he feels that it is not inconsistent with what appears in those epidemics that grow up more slowly by isolated cases, that may or may not culminate in an outburst of the disease. It appears that in epidemics the ratio of diarrhœal attacks increases proportionately with that of cholera attacks and mortality, thus showing that the diarrhœa was a constituent of the epidemic. In the worst infected ships this was equally observed, also that the first victims to cholera in the outbursts were the men already under treatment for diarrhœa, which adds support to the idea that the great majority of diarrhœal cases occurring in cholera epidemics possess the potentiality of development into the rice-water collapse type of the same disease.—In the discussion which followed, the President, Dr. Lawson, and Dr. Pringle took part.

CAMBRIDGE MEDICAL SOCIETY.

AT the meeting on Friday, Feb. 5th, Mr. WHERRY related a case of Inflammation of Joints Following Injury to Spine, occurring in a labouring man, aged fifty-four, who was working on a stack in the dark of early morning of Dec. 24th, 1885, when he fell off, dropping about eight feet on to his left side. He walked home with pain and difficulty a distance of over a mile, laid in bed drowsy, without appetite, and only just able to slowly move his limbs. After a week in this condition he was carried into the hospital on Dec. 31st. On admission he was drowsy and stupid, and answered questions in a dull manner when roused. Skin sensation seemed perfect everywhere. The movements of the limbs were very slow, difficult, and painful; no rigors, no sweats, and no bladder symptoms; bowels confined. He had always had good health, and was working daily up to the date of the accident. On January 1st, 1886, there was some swelling of the left wrist, fingers, and both ankle-joints, with pain on movement and tenderness, relieved by an opiate. Heart-sounds normal; evening temperature 101·6°. Next day there was marked redness and swelling of the left wrist-joint with œdema, and of the joints of the first and second fingers; beads of sweat on the left forehead, and a few small herpetic vesicles along the course of the left supra-orbital nerve; tears and secretion excessive in conjunctival sacs of left eye; pulse 80; considerable œdema of both ankles; patient drowsy; no general sweating; urine acid. The bowels acted after calomel. Evening temperature 101·4°. On Jan. 3rd the redness and swelling in the left wrist continued, as well as in both ankles; drowsiness and stupor; muco-pus in conjunctival sacs of left eyelid, not in right. The knees were usually kept drawn up in the bed, and were put down with an effort. Morning temperature 100·2°; evening temperature 101·8°. By Dr. Latham's suggestion he was cupped at the root of the neck behind, in two places, and about two ounces of blood drawn. No relief that night. On the 5th there was less pain and tension in the joints. His manner was still stupid and dull. Morning temperature 99·2°. He was cupped again in four spots and four ounces of blood drawn, and five grains of calomel and a grain of opium were ordered.—Jan. 6th: Bowels had been moved three times. Better. Wrist and ankles less swollen. Morning temperature 100°; evening temperature 101°. Mixture of senna and opiate.—7th: Wrists and ankles better; complains of pain in right knee, with some tenderness, but there is no swelling. Blister in four spots along the spine. Opiates at night. Blisters open by savine ointment. Calomel and castor oil in the evening; evening temperature 100·8°.—9th: The right foot and ankle more painful and swollen; the other joints better. Morning temperature 101·2°. Ordered a blister over the lower dorsal vertebræ. Evening temperature 101·8°.—10th: Feels better, and has had a good night; has no longer the dull stupid manner; his mind is clear. Was ordered tincture of opium three times a day. The blister to be kept open with savine ointment. From this time continuous improvement took place. The evening and morning temperature fell daily until the 19th, when the evening temperature reached the normal point, and the blistered surface was allowed to heal. There was some œdema about the affected joints after the redness and pain had passed away, but this entirely disappeared by the 23rd. There was still at this date a little tenderness and thickening about the left wrist. The unilateral sweating of the face was noticed from time to time. On Feb. 2nd the patient was sitting up in bed much improved, and had lost all pain, except now and then in the left wrist. There was some thickening and stiffness about the joints which were affected, and his grip was still weak, though very much stronger than before. Was this a case of injury to the spinal nervous system? There is nothing against this view in the fact that the man walked so far to his home after the injury. It has been especially noted by Le Gros Clark that after severe spinal injuries there might be very little shock, differing in this respect so much from other visceral lesions, There was not any difference between the appearance of the joints and that which manifests itself in rheumatism or rheumatic gout. The small joints and wrists and ankles were most affected, and the left wrist acutely, but the flexion of the knees and hip-joints, which was specially noted, pointed to inflammation, the first sign of an inflammation in a large joint being the constant assumption of a flexed position. There was no history of former rheumatism. With regard to the sweat symptom which pointed to a vaso-motor disturbance or paresis, both general and local sweating have been noticed after nervous shock, as after railway collisions, and one leg has been observed to sweat and not the other. Page tells the story of an alarmed woman who thought her child was about to be knocked down at a railway station, and who was herself knocked down on the platform. Polyuria followed during some weeks, except for twenty-four hours, during which it was replaced by an enormous flow of milk from the breasts; the vaso-motor disturbance seemed to move from one part to another. This patient had a sweating of the left temple, but no general sweating, though the skin was fairly moist. This phenomenon was observed by Mr. Wherry on two occasions, and it was carefully confirmed by others, sources of error such as draughts of air being excluded by screens. Mr. Wherry had been careful to give his own observations as to the facts without hazarding any definite pathology. Dr. Latham, who treated the patient so successfully, had localised the lesion with precision in the medulla oblongata, and considered that the dominant vaso-motor centre therein was disturbed. In the last edition of Erichsen's Surgery, in the account of spinal concussion, the diagnosis from rheumatism is made clear by the statement that "in spinal concussion there is never any concomitant articular inflammation."

Dr. LATHAM showed Uric Acid Crystals which he had prepared by heating together glycosine and urea; a full account of the method was published in THE LANCET of Feb. 6th.

THE PARKES MUSEUM.—The committee of this institution have arranged a course of twelve lectures, commencing on the 3rd inst., for the special instruction of those desirous of obtaining knowledge of the duties of sanitary inspectors. The subjects treated will comprise ventilation, water-supply, drainage, disposal of refuse, food, infectious diseases, nuisances, &c., and the lectures are to be delivered by well-known authorities. The fee for the course is five shillings.

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Reviews and Notices of Books.

Handbook of Diseases of the Nervous System. By JAMES ROSS, M.D. London: J. and A. Churchill. 1885.

DR. ROSS's treatise on Diseases of the Nervous System has achieved a high success, and we said of the second edition that it had no equal in the English language. The author therefore comes before the medical public in the capacity of a writer of a Handbook of Diseases of the Nervous System with the prestige that attends a former success in an arduous undertaking. After a careful perusal of the volume before us we have not the slightest hesitation in asserting that it is a very valuable work.

In producing a book of this kind the difficulty is to apportion its dimensions and to assign the amount of detail which shall be entered upon. Its contents should be something between those of a treatise and those which may be found in works on the subject of medicine. That has no doubt been Dr. Ross's aim. Naturally some difference of opinion may be entertained as to which side a handbook should lean, and we confess that we do not feel prepared to say whether more matter should not have been introduced into Dr. Ross's new book. The account of diseases of the nervous system in Dr. Roberts' and Dr. Bristowe's works is no doubt adequate for the general purposes of a physician. It seems reasonable, therefore, to compare those accounts with Dr. Ross's book in order to see in what respect the possessor of his manual would be better off than he who had but a general treatise on medicine to guide him. The number of illustrations in the handbook is unquestionably one advantage. Not that the illustrations possess much originality, for most of them have done duty in other works; but we have here brought together a very valuable series, which cannot fail to increase the reader's interest and elucidate the text. Additional advantages in the handbook are to be found in more accurate and detailed descriptions of the pathology and clinical symptoms of nervous disease, as well as fuller guidance in the methods of treatment. As to Dr. Ross's style, it is clear and terse; the matter has been well digested; the facts have been gathered from many sources, including the author's own experience; so that, all things considered, it is evident that we have before us a very valuable contribution to the knowledge of diseases of the nervous system. Dr. Ross's *forte* is his wide reading and powers of assimilation, combined with the necessary literary powers of expression in the conveyance of the information that he has to impart.

The mode of arrangement of the work is excellent. The first chapter is an "anatomical introduction," treating of the formation of nervous constituents, of nervous tissues, and of a nervous system on the lines of the theory of evolution. The physiological introduction corresponding to this is treated in the second chapter. Then naturally follows a chapter on General Morbid Anatomy and Physiology of the Nervous System, in which disease is regarded as a dissolution of the nervous system, using the term in the sense given it by Hughlings Jackson, as the process the very opposite of evolution. General Symptomatology is dealt with under the headings of æsthesio-neuroses, tropho-neuroses, and kinesio-neuroses—or disturbed sensory, nutritive, and motor functions. A chapter on General Treatment concludes the first part of the work on General Pathology. In this first part Dr. Ross displays the same kind of originality that is met with in his treatise—we refer to the adoption of the method implied in the principle of evolution as expounded by Hughlings Jackson. The Special Pathology treats of the various diseases in the following order: General diseases of the peripheral nerves, disorders of common sensation and of special sense, spasmodic disorders, atrophic paralyses, spasmodic paralyses, disorders of motor coördination, vascular diseases of the spinal cord, myelitis, spinal meningeal diseases, functional disorders, shock, concussion and allied conditions, vascular diseases of the brain, encephalitis, atrophy, hypertrophy and tumours of the brain, aphasia, diseases of cerebral membranes, paralysis agitans, multiple sclerosis, and chorea. The final chapter is one on General Diagnosis.

The reader will look in vain for heterodox or unauthorised statements; he will have to unlearn nothing. The printer's part of the work has been, on the whole, well done. Many typographical errors have been allowed to remain in the text, but most, though not all, of them have been corrected in a list of errata—the length of which is doubtless due to the work having been printed in America, the author possibly not having read the revised proof-sheets.

All But: a Chronicle of Laxenford Life. By PEN OLIVER. London: Kegan Paul, Trench, and Co.

UNDER the above title the author of "Charley Kingston's Aunt," &c., has again occupied his August and September vacation time in writing a pleasant romance depicting country life. It is now pretty generally known that it is Sir Henry Thompson who, under the *nom de plume* of Pen Oliver, has thus occupied his holiday in making a sketch after nature, which he has dedicated to one of his oldest friends, Dr. Russell Reynolds, first met among a crowd of freshmen at the gate of University College. It is pleasant to find two men, equally distinguished in their respective spheres, whose acquaintance, first commenced as students, has now ripened into friendship so highly prized. When others in the profession read, as we doubt not they will, this second volume of fiction by Pen Oliver, they will feel, as we have done, that the author has a wide sympathy for other and less distinguished members of the profession which he has himself adorned and elevated by his own career; for one of the characters in his work is a country doctor, Archibald Hamilton, "the chief—it might be said the only—medical man in Laxenford," a supposed country town in Suffolk. Sir Henry Thompson's description of Archibald Hamilton would apply to many a provincial practitioner:—

"He is indeed a good specimen of the metropolitan medical teaching of his epoch..... As not unfrequently happens to many a good student, a curriculum which consumes not less than seven years, counting from the date of leaving school, during which earnings are rarely possible, may consume also a large share of his patrimony, and necessitate an entry on remunerative occupation without long delay. Men of parts, who if they had capital to support the cost of living in London for a few years might pursue laborious scientific inquiry and rise to high distinction, are often compelled to devote themselves to the routine of professional life in the provinces, where, under conditions very favourable to health, a moderate livelihood, amid fair country society, may be speedily acquired. Nevertheless, much assiduous work must be accepted with small remuneration for several years before a position of comfort can be attained. Thus it is, happily for the inhabitants of many an outlying country district, that the local doctor is a man of considerable knowledge, with broad views, a good observer, and prompt to act judiciously in emergency. There are many men thus situated who are the equals in ability to some of the best in the metropolitan area, although in the country they have of course missed opportunities for improvement which city life would have afforded them, had they been able to remain within its influence."

We hope, too, most country doctors are as fortunate as the practitioner at Laxenford in their "other self and better half," who awaited her husband at home with a pleasant welcome after the toils of the day, and parted with him on a second summons to duty, "while a kiss or two played hide-and-seek in the silky mazes of the luxuriant brown beard"—to "work, moreover, much of which is never paid for and

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never expected to be, but by the gratitude of the indebted." But it is not to a description of the routine life of a country doctor that the work is devoted, but rather to the influence for good which a sound scientific training and high moral tone can exercise in a country district among all classes of society. The country labourer whose "missus is took bad" finds in him both doctor and friend, and my lord and lady of "Laxenford Hall" value his friendship not less than their poorer neighbours. "Signs of family trouble at the Hall set in"; and it is in smoothing these and averting a terrible catastrophe that Dr. Hamilton plays a principal part. We will not enter more into detail, but recommend our readers to peruse this pleasant production of Sir Henry Thompson's leisure. It is admirably illustrated by woodcuts, sketched by the author himself, of which "the doctor's house at the corner of High-street" is one of the prettiest.

OUR LIBRARY TABLE.

Catalogue of the Pathological Museum of the Western Infirmary, Glasgow. Compiled by JOSEPH COATS, M.D. Glasgow: A. Macdougall. 1885.—A good catalogue is an indispensable requisite for every museum, and it is gratifying to find that this fact has of late years received so much recognition at the hands of curators of the various valuable pathological collections in the metropolis and elsewhere. The latest addition to such volumes has been compiled with a care and accuracy which deserve imitation; and Dr. Coats has, whenever possible, supplemented the descriptions of the specimens with an outline of the clinical history of the cases from which they are derived. The Museum of the Western Infirmary of Glasgow appears to be one of great excellence, containing many specimens of rarity as well as abundant examples of the more common types of disease. Amongst the former may be cited: A specimen of fracture of the patella with ligamentous union after wiring, death occurring from fracture of the skull seven months after operative measures; one of a remarkable cyst of the head of the fibula; one of hernia of the pericardium; two of obstruction of the thoracic duct with chylous ascites; one of double uterus; two of tuberculosis of the Fallopian tubes and uterus; one of round-celled sarcoma of the thyroid penetrating the trachea. The series of specimens of diseases of the organs of circulation, especially of cardiac valvular disease and of aortic aneurysm, and that of lung disease, are particularly rich; whilst the specimens of uterine and ovarian tumours and of urinary calculi are numerous and varied.

Transactions of the Medical and Chirurgical Faculty of the State of Maryland, 1885.—The chief contents of this volume are: The Study of the Physiological Action of Drugs, by Dr. Newell Martin; Rectal Medication, by Dr. Cattrell; Report on Six Cases of Penetrating Gunshot Wounds of the Abdomen, by Dr. Randolph Winslow; Observations on the Origin and Cure of Hay Asthma, by Dr. J. N. Mackenzie; Carbon as an Antiseptic Dressing for Wounds, by Dr. David Stewart; Hard Chancre of the Tonsil, by Dr. Frank Donaldson; the Report on Surgery, by Dr. R. W. Johnson; that on Antipyrine, by Dr. J. S. Lynch; the Report on Obstetrics, by Dr. J. Morris, and on Gynæcology, by Dr. S. E. Neale; Report on Materia Medica, by Dr. E. F. Cordell; the Tonic Effects of Travel, by Dr. Van Bibber; Disposal of the Dead, by Dr. Rohé; Cocaine in Ophthalmic Surgery, by Dr. H. Harlan.

The Light of Life, or the Secrets of Vegetable and Animal Development Detected and Explained in Strict Conformity with Known Natural and Chemical Laws. Edited by JOSEPH JOHN KAIN. London: Wyman and Sons.—An inquirer after knowledge taking up this work, the title of which is calculated to raise the expectations to a considerable height, will, after getting somewhat mystified with the first chapter, on glancing at the second, entitled "Man Formed from a Centre—Man a Fruit of the Earth and Air," be interested to learn that "the centre" is the umbilical cord, and that man's first form is moulded and apportioned to the "three sides of the triangular figure of the womb." If this information is insufficient and the remaining pages be turned over, the reader will learn that germs do not cause disease; that vaccination is useless; that atmospheric pressure is the cause of the circulation, and friction of the corpuscles against the walls of the vessels produces animal heat.

The Pytchley Book of Refined Cookery and Bills of Fare. By Major L——. Pp. 280. London: Chapman and Hall. 1885.—This book appears to us to supply a want by furnishing a number of bills of fare for nice small dinners within the compass of men of ordinary means. The quantities required for the different dishes are given with a due regard to the prevention of needless waste, and in plain language. The bills of fare, which appear to have been drawn up with good judgment, are given in French and English—at least that was the author's intention; but many of the French names of the dishes are clearly wrong, and we are hardly prepared to acknowledge "beignet au parmesan" and "marrow aux fine herbs" as English. If the book reaches a second edition, and we think it deserves to do so, it is to be hoped that the author will have the names revised. At the end of the book there is a most excellent chapter on wines and their service.

Dictionary of National Biography. Edited by LESLIE STEPHEN. London: Smith, Elder, and Co.—We have received the sixth volume of this work. It includes biographies from Bottomley to Browell; and in every respect is equal to the preceding volumes, of which we have at the time of their receipt spoken in highly laudatory terms. When completed, the work will be an invaluable addition to a library.

The Therapeutic Gazette.—This is a monthly journal of physiological and clinical therapeutics. It contains a vast amount of information, specially valuable for men in actual practice. It has met with great success in America, and we venture to think its reasonable price (two dollars a year) and its practical character will commend it to the general practitioner and others in England.

New Inventions.

GLASS PIPES IN SANITATION.

FOR years past this idea has been mooted, though never yet successfully carried out in practice; but we are pleased to observe that it is now perfected by the Cooper's Patent Glass-lined Tube Company at their works, 3, Dyer's-building's, Holborn. The samples submitted to us prove that glass pipes from ½ in. diameter upwards, and lengths from 1¼ in. to 6 ft., inserted into wrought iron pipes of any bend or angle required, and secured therein by rigid cement so as to be practically homogeneous, will withstand any alternation of heat and cold, from 212° F. to 32° and lower, cannot, when fixed, be broken by any accidental mechanical violence, are hermetically sealed in their entirety, and so seem specially adapted to the requirements of breweries, laboratories, chemical manufactories, large milk establishments, and numerous other applications in the arts. While for all hygienic purposes they are immeasurably superior to the tin-lined lead pipes, which until now have been recommended, for the conveyance of water, and especially good soft water, in its pristine state of purity, from its source to its delivery.

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THE AURAL RESERVOIR.

THERE are certain inconveniences connected with the syringing of an ear. The surgeon wants both his hands free—one to work the syringe, the other to draw the auricle upwards, backwards, and outwards. Therefore an assistant is required to hold the receiving vessel. Then the patient's neck is encircled by a towel, which fulfils its purpose indifferently, and the patient goes home with a clammy neck and a demoralised collar. Messrs. Arnold and Sons have made at my suggestion an appliance which I find greatly facilitates the procedure. The aural reservoir consists of a cup, the back of which is flat and prolonged upwards, forming an ear-piece, through an opening in which the ear to be syringed is passed. It is provided with a stout wire handle, by which *the patient* holds it *in situ*. It is best held by the hand opposite to the side on which the ear is being syringed, and not by the hand of the same side, as represented in the accompanying figure. The advantages of the aural reservoir are—



1. It enables one to syringe an ear without the aid of an assistant. 2. It effectually prevents the least drop of water from trickling over the patient's neck. 3. It is simple, unbreakable, and cannot get out of order. It is made of tin, bronzed and enamelled, and comes up to the usual artistic finish of Messrs. Arnold's work.

M. J. MOLONY, L.R.C.P., L.R.C.S.,
Surgeon, Arklow Quarries, &c.

LACRYMAL SYRINGE AND COCAINE HYPODERMIC INJECTOR.

THESE instruments have been made for me by Messrs. Pickard and Curry for applying solutions to the lacrymal sac, and are represented in the accompanying illustration, lying in portable case. The syringe was originally designed to enable patients themselves to inject medicated fluids directly into the tear-bag, and I have found it of great assistance in thus treating severe cases of dacryo-cystitis which had previously remained unrelieved. Both syringe and injector are also specially serviceable for the application



of cocaine in ophthalmic operations, as iridectomy, tenotomy, enucleation, &c.; for when charged they can lie on a tray ready for use with other instruments. The rubber can be easily removed, the several portions cleaned and rendered aseptic, whilst the contents of the glass bulb can be seen and estimated. The advantages of cocaine as a local anæsthetic are so great and so often demanded in all departments of surgery that the convenience and economy secured by the use of these little instruments will be at once understood and appreciated.

Tunbridge Wells. G. ABBOTT.

THE REPORT ON THE DOGS' HOME.

THE report of the Committee of the Dogs' Home, read at the public meeting on Wednesday, is quite a national document in relation to the "friend and companion of man." In the year 1885 the Home received no fewer than 25,578 of these animals, of which 25,228 had previously been run in by the police and then brought to Battersea. Of the whole number 2236 had new homes found for them, and 2379 were restored to their owners. The remainder, amounting to 20,963 unclaimed, received their euthanasia in the lethal chamber, of which the committee reports "that it has admirably fulfilled all the predictions made in its favour by performing its work with admirable precision, never showing the least failure as a humane agent, but invariably and with perfect efficiency putting to death by a painless sleep each and every animal placed within its walls." To have saved all pain of death to over twenty thousand dogs in one year is something in the history of civilisation that may on a future day rank as a fact worthy of more than the passing note that must now be given to it; but it is right to indicate that as many as 146 persons residing out of London sent animals to the chamber, some from long distances, two from Scotland.

In connexion with the necessary killing of dogs at the Home the report mentions an act of grace on the part of the Queen. By the statute the animals need only be kept living three days, a period in the opinion of Her Majesty too short. The Committee has, consequently, extended the period to five days before sending the animals to the lethal chamber, except in the case of animals that are diseased.

The report is specially interesting on another topic—that of rabies. In the year 1885, 60 dogs suffering from rabies were killed at the Home, or just four times the number of 1884. These rabid animals were found in the various months of the year as follows:—In January, 2; February, 4; March, 4; April, 2; May, 5; June, 6; July, 7; August, 5; September, 2; October, 4; November, 9; December, 10. Mongrels, 15; half retrievers, 2; half collies, 2; half Skye, 1; half pug, 1; half pointer, 1; half setter, 1; half Dalmatian, 1; retrievers, 13; collies, 4; spaniels, 4; fox-terriers, 3; greyhounds, 2; lurcher, 1; poodle, white, 1; St. Bernard, 1; Pomeranian, 1; Dachshund, 1; black and tan, 1; Scotch terrier, 1; bull terrier, 1; Bedlington, 1. Of these, 54 were males and 6 were females. These cases were carefully noted in the first instance by the officers of the Home, and afterwards certified by the honorary veterinary surgeon.

The Committee expresses an opinion that it is desirable, in order that the statistics of rabies may be made trustworthy and complete, that the bodies of dogs alleged to be rabid, whether killed by the police or other persons, should be examined by a veterinarian, who should report to a Government department the result of his post-mortem investigations; also, when a dog exhibits signs of rabies at a police station, instead of a police constable being told off to kill it, a veterinarian should be called in, and in the event of his certifying that the dog is rabid, then the animal should be destroyed by him in a merciful manner. Such measures would, it is believed, materially allay panic in the public mind during the prevalence of rabies by checking and correcting erroneous and exaggerated impressions generally circulated at such times; for it is notorious that the most appalling ignorance exists generally throughout the country as regards the nature and symptoms of rabies. The Committee hope that some such arrangement may be made by the Government, and are glad to state that recently it was ordered by Sir Edmund Henderson, late Commissioner of Police, that a test of this kind should be made as regards a given number of dogs destroyed by the police in the streets of London, whose bodies will be submitted to Mr. A. J. Sewell, the veterinary surgeon to the Home, for post-mortem examination. We need not say that we concur heartily with these sensible propositions, and indeed we feel that the whole report is of a tone which commends itself to the scientific as well as to the philanthropic world.

On the 25th ult. Major Tulloch, one of the inspectors of the Local Government Board, held an inquiry relative to an application by the Cheshunt Local Board of Health for permission to borrow £38,800 for carrying out works of sewerage and sewage disposal.

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THE LANCET.

LONDON: SATURDAY, APRIL 3, 1886.

"THE President of the Royal College of Physicians of London shall be elected annually, on the day after Palm Sunday, as required by the Statute 23 & 24 Vict. c. 66, s. 6." So runs the wording of the thirty-ninth bye-law of the College of Physicians, and accordingly a fortnight hence the Fellows will be required to perform a duty which in the present year may be fraught with great consequences both for the College and the profession. The present distinguished occupant of the presidential chair was elected to that office in 1881, and during the past thirty years the President has usually been re-elected annually until he has completed a term of five years. Thus Dr. THOMAS MAYO was first chosen in 1857; he was succeeded in 1862 by Sir THOMAS WATSON; to whom followed in order, in 1867, Sir JAMES ALDERSON; in 1871, Sir G. BURROWS; in 1876, Sir RISDON BENNETT; the only exception to the five years' term being in the case of Sir JAMES ALDERSON. We fully admit that, as a general rule, it may be wise for the Fellows not to permit their President a longer term; so much is required of him that it is hardly just to him to request his longer occupancy of the chair; and the longer it is held by one individual the less are the chances of the office being transferred to any of his contemporaries. Still there are occasions when the interests of the College and the still wider interests of the profession may demand the prolongation of a tenure of office, the transfer of which to other hands might conceivably disturb the continuity of a policy which the outgoing President had initiated. In the same manner the College might on occasion exercise its undoubted right, and considerably curtail the customary period of office in the case of a President who had shown himself out of harmony with the wishes of the College. There are precedents in plenty for the prolonged tenure of office, and although they date back to times when the College had but slight relations with the outer circle of the profession, and when consequently its affairs were less interesting and more stagnant, still to those who adhere to precedent the fact may be reassuring. Thus Dr. JOHN LATHAM was President for seven years, being only fifty-two years of age on his first election (1813); his successor, Sir HENRY HALFORD, held office for twenty-four years (1820-44), and Dr. PARIS, who followed, for thirteen years (1844-57), both Sir HENRY and Dr. PARIS filling the office to the time of their death.

It may be asked whether there is any reason why the customary limitation of the years of presidency should on the present occasion be set aside? The Fellows, whose duty it is to elect their President, know well that the College of Physicians has of late years advanced considerably beyond its former restricted limits, and has taken a much larger share in the education of the body of the profession than before. We have often pointed the moral of its conjunction "for examination purposes" with the College of Surgeons. The credit of this salutary change, so far as the College of Physicians is concerned, must be ascribed to Sir W. JENNER and Sir H. PITMAN. The scheme is yet young; it must probably be still further modified in detail; and it seems a pity that its prosecution should be handed over to others, unless, indeed, the presidency could be held by Sir H. PITMAN, whose services as Registrar would then be lost to the College. Again, a few months ago the College determined by a large majority that facilities should be found for enabling those candidates who had qualified at the hands of the Conjoint Board to obtain medical degrees. Is this question to be allowed to lapse because it may chance that an incoming President may be out of sympathy with a movement which is almost unanimously supported by the teaching body in London? Once more, the College in its educational function ought to be so directed as to lead opinion in the framing of the curriculum, and it should therefore possess as its head one who is thoroughly alive to the needs of modern medical education and the capacities of the student. We trust the time is not far distant when the teaching institutions will be to a certain extent controlled and directed by the College, that there may be some guarantee of efficient teaching. The government of the College ought then to be placed in the hands of men who are conversant with all these matters, and who can deal with them as they should be dealt with.

We are conscious that it might be said we are laying too much stress upon the educational aspect of the functions of the College; but this is only because the place the College takes in medical education has grown in importance. If the Fellows as a body recognise this, and desire that the work initiated by the present President should be carried on, let them return him again with so united a voice that he must bow to their decision. Should Sir WILLIAM JENNER consent thus to continue to give his services to the College, not only would the prosecution of educational reform be assured, but the Fellows would be relieved of the very serious difficulty of selecting a new President from amongst those who, having already filled high office in the College, are entitled thereby, as well as by their reputation, to attain the highest office, but respecting whose views upon the pressing questions of the day all is uncertainty. Several names are being mentioned, but with one or two exceptions the physicians thus indicated have not clearly and boldly taken a stand upon the policy which was foreshadowed in the division of January last, or would give that stimulus to its prosecution which would ensure its success. Therefore we think that the approaching election is of great moment. Upon its issue depend the future position of the College and the prosperity of medical education in the metropolis. The new President might be a man of established fame, one who in less critical times could worthily stand as the leading representative of British medicine; but unless he is prepared to guide the College onwards in the path upon which it has entered, it were far better that he were not chosen, and that one who has perhaps less exalted claims should be preferred. It is a critical time, and we shall anxiously await the result of the voting on the 19th. It is perhaps unfortunate that the mode in which the election is conducted precludes any opportunity for the Fellows to become acquainted with the precise views held by the possible recipients of the honour before the vote is taken. It is

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incumbent, nevertheless, upon every Fellow to support a physician who, being otherwise eligible, has sound knowledge upon the actual state of medical education, and who has shown himself in sympathy with the most urgent question of the day in respect to the qualification of medical men. We trust, however, that the Fellows will not at present determine to which new candidate their support shall be given, as we have strong reason to believe that, under the very special circumstances existing at present, Sir WILLIAM JENNER might be induced to accept the presidency for another year.

THERE is, we fear, too much reason to apprehend that by the time the Lunacy Bill introduced by Lord Chancellor HERSCHELL reaches the House of Commons, if that stage of progress should be reached, it will be little better than a technical amendment of the law relating to the custody of lunatics, and not worth carrying further. While protesting his dislike of the private asylum system, his Lordship is yielding at all points to the pressure brought to bear on behalf of the asylum proprietors, and the prospect that this objectionable system will be speedily or even remotely superseded is daily becoming less hopeful. It is easy to understand that the position of the Lord Chancellor is a trying one, but we had thought that he was made of sterner stuff than previous occupants of the Woolsack, and might be trusted to hold his own, even though the pressure were even greater than it has proved. If Lord HERSCHELL had taken courage to adopt our proposals in their entirety, and left the House of Commons to buy up the existing licensed houses by the creation of guaranteed stock, redeemable by terminable annuities, no wrong would have been done to vested interests, and a decent end might have been once for all made of a great and grave cause of scandal and difficulty, without any direct appeal to the Chancellor of the Exchequer or to the ratepayers. The notion that heavy expenditure would have been necessary in the counties and boroughs to provide accommodation for private patients in connexion with public asylums or the purchase of private houses is groundless, and we cannot but feel that the Lord Chancellor has been ill-advised in attaching any importance to the apprehension. The concession that licences may be renewed or even transferred to successors, or in certain cases to new houses, stultifies the whole measure so far as the extinction of the system is concerned. It cannot possibly die out—at least within any reasonable time—under the relaxed conditions these "amended" provisions create. The Lord Chancellor may have formally placed the rope round the neck of the system, but he has undertaken to leave it quite loose; and he has, moreover, politely removed the drop, so that there is really no reason whatsoever why the condemned should not enjoy a long and happy life, even doing a thriving trade with the aspirants to successful commercial enterprise in the "specialty" of keeping lodging-houses for the insane.

Nor can we regard with satisfaction the encouragement given to the practice of detaining single patients in private houses without adequate supervision. It is manifestly impossible that single patients can be visited at sufficiently short intervals by the present staff of visitors; and we must confess that, looking to the whole of the case, we are by no means disposed to recommend any increase in the number of those essentially useless public functionaries called Commissioners in Lunacy. If the number of these officials were trebled, or even quadrupled, it would not be practicable for them to exercise anything approaching to a real supervision of the insane in private families. There is a too great tendency, even on the part of reformers, to look at this matter from a private and personal point of view, and then to press the notion formed—which is actually, though unconsciously, a selfish one—on the consideration of statesmen, as though it were worthy of being embodied in an Act of Parliament. Stripping the veil off the defence, or even desired extension, of the system of single patients, what do we find? Simply this: that it is a very convenient arrangement for a young or impecunious practitioner of medicine to receive a single patient under his care at a high rate of payment, for which he is supposed to render special services! As a matter of fact, we believe the large class of single cases under the care of medical men are neither well cared for nor advantageously placed as regards treatment. The Legislature, if it is to carry out a genuine and serviceable reform, must shake itself loose from the trammels of that influence which is just now being most sedulously brought to bear upon it by the representatives of the "specialty" in high places, and try to take a common-sense and thoroughly practical view of the needs of the public question. The medical profession as a whole—and it is for this we speak—will be well satisfied with a measure which is framed to place the care and cure of the insane on a simply and purely rational footing; and it will be finally satisfied with nothing less than this. We are of opinion that medical men should be practitioners of medicine, and nothing else. In respect to the scientific practice of medicine in all, or any, of its branches, they are in the position of labourers worthy of their hire; but neither as keepers of hotels or lodging-houses for the insane, nor as boarders of weak-minded folk in private families, ought the members of a profession which, above all others, needs to keep itself above suspicion of mercenary motives, to gain by the care of lunatics. This is the principle we have laid down, to which we have uniformly adhered, and which we are resolved to maintain.

A FURTHER step has recently been taken towards the development of the medical school at Oxford. Influenced by the success of the Cambridge School, the authorities have at last found it necessary to pass some new regulations which will materially lessen the time required for the attainment of the M.D. degree. The student can now present himself for the M.B. examination at any time after he has taken his Bachelor of Arts degree, instead of having to wait for four years as formerly; and, similarly, instead of waiting for his M.D. degree for three years after he has taken his M.B., he need now only have entered on his thirty-ninth term after matriculation, and have had his name on the books of one of the Colleges or Halls, or on the register of non-collegiate students, for twenty-six terms, to be eligible for admission to the higher degree. In fact, the University standing for the M.D. degree is now the same as for the M.A. Degrees in Surgery are instituted for the first time, and every candidate who is admitted to the degree of M.B. will *ipso facto* be admitted also to that of B.S.,

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whilst he may obtain the Mastership in Surgery in the twenty-seventh term from his matriculation. The regulations for the examination and the composition of the Board of Examiners have also undergone extensive alterations. If the subjects taken by the candidate for the B.A. degree have not included scientific subjects, such as Physics, Chemistry, or Animal Morphology, a preliminary examination in Science must be passed. The special subjects of the first examination for the M.B. degree are Organic Chemistry in its special relation to Physiology and Medicine, Human Anatomy, and Human Physiology. Special exemption is permitted in Organic Chemistry and in Human Physiology if the candidate has already been placed in the first or second class by the examiners in the School of Natural Science in Chemistry or Animal Physiology respectively. Organic Chemistry may be taken by itself, and Materia Medica and Pharmacy may likewise be separated from the subjects of the Second Examination. These subjects are: Medicine, Surgery, Midwifery, Pathology, Forensic Medicine and Public Health, and Materia Medica and Pharmacy. The passing of these two examinations will give the degrees of M.B. and B.S. The M.D. degree will be conferred after the reading of a thesis on a subject connected with the Science and Practice of Medicine, and must include the history and literature of the subject treated of. For the Mastership in Surgery a special examination will be held in Surgery, Surgical Anatomy, and Surgical Operations. For the conduct of the First Examination five examiners will be appointed—viz., one in Organic Chemistry, two in Anatomy, and two in Physiology; whilst for the Second Examination eight will be required—viz., two for each of the subjects of Medicine, Surgery, and Midwifery, and one for Pathology and Materia Medica respectively; Forensic Medicine and Public Health being conducted by the examiners in Medicine, Surgery, and Midwifery. The Regius Professor or his deputy is to act on both boards as senior examiner, and the examiners will be elected for three years. By these statutes the University has brought itself again into touch with modern systems of teaching and examinations, and the liberal and wise spirit in which they have been drawn up speaks well for the future of the Oxford School. It is another victory for science over classics in modern education; for every student who intends to take a medical degree will have a distinct advantage if he takes his B.A. in Natural Science rather than in Classics.

WE are not disposed to criticise or even to analyse Medical Bills not before Parliament. For purposes of criticism a Bill is non-existent till it is introduced. This is a useful and obvious rule, on the score alike of convenience and courtesy, in ordinary times. In such a crisis as the present it is of more than ordinary usefulness. In view of the introduction of the Medical Bill, we may do better service to the cause of true medical reform if we recall roughly the history of the question, and the points in which there has been the greatest unanimity of opinion. The two chief facts in the history of the question are that the subject has been investigated by a Select Committee of the House of Commons, and by a Royal Commission of the first quality as regards authority. The work of the Select Committee was cut short by a change of Parliament and of Government. The evidence taken was of much interest. But the committee was dissolved, with the Parliament, before it had time to make any recommendations. And to the last Government of Mr. GLADSTONE the subject appeared of such consequence as to justify a Royal Commission consisting of the following gentlemen:—The Earl of CAMPERDOWN, the Bishop of PETERBOROUGH, W. H. FORD COGAN, Sir GEORGE JESSEL, GEORGE SCLATER BOOTH, Sir WILLIAM JENNER, JOHN SIMON, THOMAS HENRY HUXLEY, ROBERT MCDONNELL, WILLIAM TURNER, and JAMES BRYCE. If such gentlemen as these did not "scamp" their work the Bill to be introduced by Her Majesty's Government should take their opinions into account. Did they "scamp" their work? Let us hear their own account of their stewardship:—

"We, in obedience to your Majesty's commands, have inquired into all the subjects committed to us for consideration. We have held forty meetings. We have called before us such persons as we have judged necessary, &c. ..... We have examined books, documents, papers, and records. ..... We have also had before us the evidence of the Select Committee."

Clearly, then, this Royal Commission did not "scamp" its work, but went somewhat thoroughly into it. We may now ask what were the leading suggestions of that painstaking Commission? They were two—viz., a reduction in the number of licensing authorities, and a reduction in the size of the General Medical Council. On the first question we must give from the Report of the Royal Commission an extract, which will not only show its opinion, but that of the gentlemen examined. The figures attached to their names in the foot-note give the reference to their evidence:—

"It will be found that for many years a Common Board for licensing has been very generally advocated, even by those whose opinions on other points of medical reform differ most. A proposal to form such a Board for England has been agreed to by all the English medical authorities, and on two occasions approved by the General Medical Council; and a similar proposal for Ireland was also agreed to by nearly all the medical authorities of that country. The principle of a Common Board was introduced into Lord Ripon's Bill of 1870, and has found a place in all the later Government Bills. It has also been advocated by a large majority of the witnesses who have appeared before us.[1] It is our opinion that the holding of a licence ought to be conclusive evidence of sufficient proficiency in medicine, surgery, and midwifery. After a long and careful inquiry, we have arrived at the conclusion *that such a standard of proficiency can only be ensured by reducing the number of licensing authorities.*"

The next great reform recommended by the Royal Commission was a reduction in the numbers of the Medical Council, while at the same time providing for the direct representation of registered practitioners. The reduction was procured by a method which we have always advocated—that of abolishing the representation of individual bodies, and giving a certain number of members to the medical authorities in each division of the kingdom acting

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1 *For:* Acland, 22; Sir J. Paget, 210; Erichsen, 655; Professor Paget, 849; Humphry, 1153; Jacob, 1376; Glover, 1903; Marshall, 2336; Byass, 2864; Waters, 2982; Gamgee, 3225; Semple, 3608; Pitman, 3705; Macnamara, 4186; G. Y. Heath, 4405; Morris, 4603; Cooke, 4919; Barton, 5040; Moore, 5446; Richardson, 5606; Collins, 5704; Quain, 6757. *Against (or do not support):* Scott Orr, 2281; Haldane, 2640; Spence, 3438; Gairdner, 4752; Stoker, 5238; Finny, 5290; Struthers, 5980; Redfern, 6049; Fraser, 6260; Haughton, 6461; Young, 6575.

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in a group. Clearly this is the right course to take. To leave the existing individual representation of bodies almost intact would be to neutralise and overpower any three or four direct representatives of the profession, as well as to make the Council more unwieldy and at the same time costly. We are aware that the Commission was not unanimous on these points. But the two points were supported by Lord CAMPERDOWN, Mr. COGAN, Sir GEORGE JESSEL, Sir WILLIAM JENNER, and Dr. MCDONNELL, and they are advocated by the great bulk of the profession. We cannot forget them or say that a Bill which does not secure them will meet the demands of the case, or the just and wise expectations of the profession.

AT a public meeting which was held last week at the Mansion House, Cardinal MANNING made reference to the evidence which was given before the Royal Commission on the Housing of the Working Classes, and to the conclusion of the Commissioners, that while ample machinery and legislative powers exist for the remedy of insanitary conditions in the metropolis, the great want is some body which would put the machinery in motion. This want, he pointed out, is now supplied by the Mansion House Council on the Dwellings of the People and its local committees, which take cognisance of all failures of sanitary administration throughout the metropolis, and, by making representations to the vestries and district boards, lead to their remedy. The effect of the work of the Council during the last year was that over six thousand well-founded complaints received the attention of the proper authorities. The Council have therefore conferred no small boon upon the metropolis, and have shown the various local authorities that an organisation exists which is ever watchful over the interests of those who have reason to complain that their representations have been unheeded.

This is, however, but the smaller portion of the good the Council have done during the year; the larger is the outcome of the communications they have addressed to the Secretary of State for the Home Department, who found therein sufficient reason for the holding of an inquiry into the sanitary condition of Clerkenwell and Mile-end Old Town, and into the manner in which the local authorities of these districts have performed the duties which devolved upon them by law. The report of Mr. CUBITT NICHOLLS, the inspector appointed by the Home Secretary, has just been issued with respect to Clerkenwell, and deals as thoroughly with the subject as could reasonably be expected of a gentleman not possessing a technical medical knowledge of public health. Mr. NICHOLLS visited all the houses concerning which complaints had been made by the Council, and considered the important questions of water-supply, of regulations for houses let in lodgings, and the need for action under the Artisans and Labourers' Dwellings Act. Clerkenwell possesses a large number of tenement houses in which the landlord is not resident, as well as cottages occupied by a similar class of tenant, the total number of houses to which regulations might be made to apply being nearly five thousand. The water-supply was found in many houses to be insufficient owing to the smallness of the size of the cisterns, and often to be liable to pollution on account of the method of storage in water-butts, and the only reliable remedy which would overcome these difficulties is, the report points out, the provision of a constant water-supply. Mr. NICHOLLS further recommends the regulation of all sublet houses in which the landlord is not resident, and of some proportion of those in which the landlord is resident. With regard to the Artisans and Labourers' Dwellings Act, he mentions a number of localities in which the operation of this Act is needed. The recommendations embodied in the report are approved by two members of the vestry who were associated with Mr. NICHOLLS in the inquiry, and it may be anticipated they will be adopted by the vestry. Should this happy result be brought about, we may expect to see the death-rate of this district, which is now two in every thousand of inhabitants above that of the whole of London, reduced by that amount, and that Clerkenwell will lose the unenviable reputation which it now possesses.

The effect of the acceptance of the principles embodied in the report will not, however, be limited to Clerkenwell. For years the vestries have been fighting against the necessity for exercising the powers with which the Legislature has armed them; it may be anticipated that they will, without exception, in a short time follow the example which we presume Clerkenwell is about to set them, and that, so far as house accommodation for the poorer inhabitants is concerned, London will be free from some of the reproach which it now deserves.

It is, however, a matter for regret that the scope of Mr. NICHOLLS' inquiry was not more comprehensive. The whole of the improvements which can be effected under Sir RICHARD CROSS's Act have been omitted from consideration, the details of the arrangements for the prevention of infectious disease have been passed over, the question of the use of underground rooms as dwellings has not been raised, and certainly the need in a parish constituted like Clerkenwell of frequent inspection has not been sufficiently appreciated. Mr. NICHOLLS' opinion that two inspectors could adequately perform all the duties which would devolve upon such officers under the various Acts of Parliament will not be endorsed by those who have had practical experience of public health administration in a large town. We cannot but think that in this respect the report is unfortunate, for it is liable to be regarded by negligent authorities as an excuse for their own actions, and certainly London would not gain thereby. But, apart from this, it may be said that sanitary work in the metropolis will receive a distinct impetus from the inquiry which has been held, and the Mansion House Council are to be congratulated on the success they have already attained; but they must not regard their labours as ended until the various recommendations are carried into effect.

WE have now entered fully into the spring of another year, and the time has come when we may fairly take account of the prospects of this country with reference to cholera. For three consecutive years cholera has prevailed as an epidemic either in or upon the immediate confines of Europe. Its prevalence in Egypt in 1883 was not followed by a second epidemic in 1884; but as to this we may observe that a second year's epidemic is more apt to follow on a comparatively trifling outbreak than upon a widespread epidemic such as Egypt suffered from three years ago. In

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Spain, the outbreak of 1884 was but slight; but in 1885 the disease broke out again with exceptional violence, thus following the precedents so often observed before. On the other hand, an epidemic of very fatal virulence in the south of France and in Paris during the summer of 1884 did not succeed in preventing another fatal prevalence in the same country in 1885; hence it appears that cholera does not follow any very definite laws as regards its recurrences, and in forming a judgment as to the future, we must, in the main, be guided by other considerations.

The news of the past two months supplies us with material that calls for earnest consideration. Cholera has continued to prevail in several parts of Europe during the winter months, and this week's intelligence of its recrudescence in the mining districts about Bilbao in the north of Spain comes to remind us of a real danger to this country. For months past the disease has prevailed in a more or less sporadic form along the coast of the Adriatic, between Venice and Trieste, and also further inland; and occasional outbreaks have taken place in the extreme south of Spain, and in near proximity to Gibraltar. But these occurrences do not constitute so great a danger to this country as the existence of the disease along the north coast of Spain and about the coast of Brittany, from both of which districts there is an ill-regulated traffic carried on by fishing-boats. Both these districts have been affected at intervals ever since the termination of the great epidemic of last year, and the very imperfect information we have received concerning the extent of the mischief—and this especially from the French authorities, whose mistaken policy of prevention seems mainly to lie in hushing up the truth as to the danger which exists—prevents us from knowing precisely what it is that we have to contend with. But if it should happen that an uncontrolled diffusion of infection along coasts with which we are in frequent and in near communication should follow former precedents, and this year give rise to a widespread epidemic, then a danger will have arisen which exceeds any we have as yet experienced during the epidemic of 1883-86. We must remember that the last great diffusion of cholera, beginning in the summer of 1869, had a five years' course in Europe, and that there are strong indications that the epidemics of the two preceding years are but a part of another diffusion which has not yet ended. It is therefore imperatively important that the authorities of those districts which, notwithstanding warnings and teachings such as they have never before had the benefit of, have not yet got rid of the conditions favourable to cholera diffusion, should without further delay proceed with energy, and fit themselves to cope with imported infection.

AT a meeting of the members of the medical profession residing in Glasgow and the West of Scotland it was unanimously agreed to invite the British Medical Association to hold its annual meeting in Glasgow in 1888, and it was decided that various public bodies of the city and district be requested to co-operate in the invitation.

THE supporters of the repeal of the Contagious Diseases Acts are urging upon the Government the necessity of giving facilities for taking the next stage of the measure before the 8th inst., because they feel that after that date nothing can be relied on.

Annotations.

"Ne quid nimis."

INFANT MORTALITY IN LONDON.

WITH the lapse of each year from the date of the last census the element of doubt and difficulty in the way of estimating populations detracts much from the trustworthiness of local mortality statistics. This difficulty applies with especial force to the mortality statistics of the different metropolitan sanitary areas, with regard to which the official method of assuming that the rate of increase of population since 1881 has been the same as that which prevailed between the last two censuses would in many cases lead to obviously fallacious results. The rate of infant mortality measured by the proportion of deaths under one year of age to registered births affords, however, a test of sanitary condition which is entirely free from the difficulty above mentioned. It is satisfactory to find that this test supplies evidence of the improving health of the London population. In the ten years 1861-70 the rate of infant mortality in London was equal to 162 per 1000 registered births; in the following ten years the rate fell to 158, and in the first five years (1881-5) of the current decennium it further fell to 150. The rate in 1885 was equal to 148 per 1000, and was 13 below the mean rate in the twenty-seven provincial towns dealt with in the Registrar-General's weekly return, among which the rate ranged from 128 in Hull and 131 in Brighton and in Portsmouth, to 174 in Liverpool and in Salford, 175 in Manchester, 189 in Cardiff, 193 in Leicester, and 218 in Preston. Infant mortality in the various sanitary areas of the metropolis during last year showed almost as wide a range as it did among the twenty-seven provincial towns. The mean rate in the whole of Registration London was, as above mentioned, 148 per 1000. The lowest rates in the metropolitan sanitary areas were 110 in Hampstead, 112 in Plumstead, 121 in Woolwich, 124 in St. George Hanover-square, and 129 in Lewisham. The rates ranged upwards in the other sanitary areas to 176 in the City, 180 in St. Martin's-in-the-Fields, 184 in Stepney, 190 in St. Olave (Southwark) and in St. George's-in-the-East, and 196 in Holborn. These high rates undoubtedly point correctly to those parts of the metropolis in which the social and sanitary condition of the population is most inimical to infant life, and there is little risk in assuming that the death-rates at other groups of ages in these sanitary areas would afford relatively unfavourable comparison with those prevailing in other parts of the metropolis.

THE PHYSICIAN AND HIS CULTURE.

IN his autobiography—a delightful book to be read and re-read by every aspirant to the career medical—Sir Robert Christison makes some preguant remarks on the study of Greek and Latin, and incidental observations on the attempt to supersede these languages in professional nomenclature. Traversing ground invariably occupied to a greater or less extent in the introductory lectures of our medical schools, Sir Robert runs counter to much of the advice with which on these occasions the young audiences are entertained. In reply to the contention that the study of the classical tongues "is for the most part a mere effort of rote memory, encumbering rather than strengthening the mind," he adds the weight of his experience and authority to the counter-argument, "that of all the studies suitable for boyhood there is no other which is so likely to strengthen the memory, imagination, attention, and judgment, so certain to instil taste, so useful for imperceptibly infusing an accurate and ready use of English, or so indispensable as the groundwork for acquiring modern tongues." Again, as to the assertion

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that "the use of terms taken from the dead languages is the mere survival of a bad custom," and that "these terms could be expressed as easily and far more elegantly in English," it may be enough to quote what Sir Robert says of the attempt made in the latter direction by so accomplished a physician as the late Dr. Craigie:—"His practice of physic presented one novel feature, inasmuch as he tried to affix to every disease a vernacular name, which, strangely for one of his usual Latinised diction, he strove to deduce from Saxon roots. His readers may be amused with such attempts at nomenclature as 'scaly tetter' for psoriasis, 'tedious blebs' for pompholix diutinus, 'knobbed nettle-rash' for urticaria tuberosa, 'rank red gum' for strophulus confertus, 'horny fishskin disease' for ichthyosis cornea, 'prominent limpet shell scab' for rupia prominens. But no one espoused his English nomenclature, and British medicine still recognises these abominations by their Latin names only." But, in truth, Sir Robert's position is no more than that persistently maintained by men of "the complete professional mind," to use Sir Henry Acland's felicitous expression, who agree with Hamilton and Mill that even the schoolmen discharged a most useful and indispensable function in adapting and refining the delicate instrument of language, and who see no gain either to English or to science by substituting for the "impenetrability of matter" the "unthoroughfaresomeness of stuff."

CORROSIVE SUBLIMATE IN DIPHTHERIA.

DR. WERNER, medical officer to a circumscribed factory population of about 2000 near Narwa, in the Gulf of Finland, writes in the *St. Petersburger Medicinische Wochenschrift* describing the satisfactory results he has obtained in diphtheria by treatment with perchloride of mercury internally, combined with ichthyol inunctions. The disease is very frequent and fatal in the locality, he having attended during the last six years ninety cases, the average mortality of which was between 60 and 70 per cent., the majority succumbing from general weakness when the local affection was passing off or after it had quite disappeared. Last year the type was peculiarly severe. In July, August, and September eleven cases occurred, of which no less than nine proved fatal. From the end of September to the present time, however, during which period there have occurred seventeen cases, all of which were treated with perchloride of mercury, and many of which were very severe, there were only two fatal cases, neither of which was seen till a few hours before death. The author's method is as follows: For young children he dissolves a quarter of a grain of the perchloride in 4 oz. of water, for children of six or seven half a grain in 6 oz. of water, and for adults three-quarters of a grain in 8 oz. of water. This solution is given to the patients while they are awake every twenty or thirty minutes, in measured doses, so arranged that the quantities made up shall last from twenty to twenty-four hours—i.e., about half a drachm in the case of young children and a drachm in that of adults. When a good deal of sleep is obtained larger doses are given at longer intervals. As a rule only milk is allowed as nourishment. If considerable pyrexia exists, an enema of from ten to thirty grains of antipyrin, according to the age of the patient, is given, the rectum having been previously cleared out. Externally ichthyol is diligently rubbed in over the swollen glands three or four times a day, the fingers being wetted with water when dry to permit of the rubbing being continued for some time. For the first two days of this treatment the local affection usually undergoes no improvement, but on the third day it begins to diminish and the general condition becomes better, the appetite increasing and the children regaining their wonted spirits. In no case did the author meet with the extreme debility which was frequent in cases treated by pilocarpine, even when the local affection was decreasing. As the patients approached convalescence the medicine was diminished, so that more than six bottles were never required. Complications never occurred, though three of the patients had previously had scarlatina.

PAROCHIAL NEGLIGENCE.

THE long-suffering ratepayer in Marylebone has at last rebelled against the neglect of the vestry of that parish to remove his house dust. For some time the inhabitants of this district have not only been put to the greatest inconvenience, but have had their health endangered through the neglect of the sanitary authority. A complaint made by Dr. Edis to the magistrate of the Marylebone Police Court has been the occasion of an outcry which, we trust, will awake the vestry and their officials to a knowledge of the fact that there is a limit even to the endurance of the London citizen, and that if they would avoid a scandal to which their negligence has given rise they must alter their procedure. Marylebone, like many other parishes, contracts for the removal of house refuse, and hands over the dependent householder to "the mercy of a set of irresponsible dustmen, who levy blackmail and exert their petty tyranny over domestics." Dr. Edis's complaint has been echoed by his neighbours, and we are convinced that the suffering has by no means been limited to those who have joined in his protest. The householder is prohibited under penalty from permitting any other person but the parish dustman to remove his dust, and as a rule does not know of any remedy when the dustman fails to appear. But Mr. Cooke, the magistrate to whom complaint was made, has promised to grant a summons and probably impose a heavy penalty if the vestry or their officer fail to provide the necessary relief; and this promise we may be sure will not be forgotten. The foolish custom which only compels the dustman to announce his presence in the street "in an audible and distinct voice" is altogether insufficient, and nothing but a weekly call at every house should satisfy the ratepayer. The contract system is one of the worst outcomes of vestry government, and there is no practical solution to the difficulty except that the vestry should undertake the duty themselves of removing house refuse.

ON THE MOVEMENT CURE IN CHINA.

AN amusing and interesting article has been contributed by Dr. Macgowan to the Medical Reports for China for the half-year ending March 31st, 1885. P'An Wei, the present Governor of Hupeh, wrote, in 1858, a *brochure* on Important Life-maintaining Methods, which gained him much renown, causing him to be sent for on the occasion of the fatal illness of the late Empress. The accumulation of air in the system by swallowing the breath was regarded as an important method of prolonging life by the ancient Chinese. Ch'ih Sung-tzu, a legendary personage, is said to have been the author of this method; he flourished for a period of at least twelve centuries somewhere about 2600 B.C., when the Yellow Emperor sought instruction from him in the art of prolonging life. Leihtzu, the immediate disciple of Laotzu, inquired of Ch'ih Sung-tzu, the custodian of the writings of his master, how the power of traversing the air, of living unscathed in fire, and the like, might be acquired, and was told that it was neither by wisdom nor skill, but through support by the vital aura, by which was understood to mean breath-swallowing. A man who is permeated with the vital aura is invulnerable. Disease appears only when vitiated air can find entrance or when the circulation of the vital aura is defective. The air starts in its circulatory movement from the "little heart," which is situated in the pubic region.

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Without fire this aura is the source of animal heat; without water it lubricates the viscera. The object of postures, motions, and frictions is to promote the due circulation of the vital air. A massage bat and massage pestle were employed in equalising the aura throughout the body; illustrations of these tools are given in Dr. Macgowan's account.

MUSCULAR ATROPHY OF CEREBRAL ORIGIN.

HEMIPLEGIA of cerebral origin is sometimes attended with decided wasting of the paralysed muscles. M. Cornil, in 1864, found that the nerve trunks in these cases had their fibrous sheaths much thickened, whilst the nerve fibres themselves were intact. M. Charcot observed in such instances that the nerve cells of the anterior horn of the spinal cord corresponding to the muscles were atrophied. This atrophy appeared to be the consequence of the propagation to the anterior horns of the inflammatory processes in the pyramidal tracts. Brissaud and others have frequently confirmed this view. M. Babiniski has put on record the following interesting instance in which the rule appears to be broken:—A woman, aged seventy, was attacked with complete right hemiplegia without hemianæsthesia; there were marked contracture and wasting, the wasting being most marked in the thenar and hypo-thenar eminences. The patient died eight months after the onset of palsy, having been all the time confined to bed. At the necropsy an area of softening was found in the left centrum ovale. There was crossed and direct descending degeneration in the spinal cord. The anterior horns, nerve roots, and nerve trunks were found to be perfectly free from any histological alterations. The muscles were much atrophied; their nuclei increased in number; the connective tissue proliferated and infiltrated with adipose tissue. The nerves and muscles of both sides were examined, so as to afford a perfect contrast. It is suggested that the process of descending degeneration in the spinal cord led to dynamic functional changes in the anterior horns and nerve fibres, and so caused the muscular atrophy without themselves undergoing the characteristic changes. Certain cases of disease of the spinal cord support this view. The case should be borne in mind in future investigations on the same subject.

THE SANITARY STATE OF NEWHAVEN.

WE are glad to find that the sanitary state of Newhaven, on which we were obliged some time since to comment adversely, is about to be dealt with by the sanitary authority, who after advertising for plans, and offering a premium for the best one, have decided to carry out an entirely new system of sewerage, according to a scheme prepared by Mr. W. H. Radford, M.Inst.C.E., of Nottingham. The scheme includes the retention of such of the existing sewers as are in good condition, the remainder being used for surface water only, and the construction elsewhere of Hassall's patent pipe-sewers, the whole system to be provided with adequate means of flushing and ventilation. The sewage from the town on the west of the river Ouse will be conveyed by a main outfall to a point away from the town, and near the mouth of the river, where it will be impounded in a concrete storage-tank during high water, the sewage being then run into the mouth of the tidal river at half ebb, so as to take advantage of a powerful current seawards. On the east of the river the present sewers and outfall at the mouth of the river will be utilised, but to prevent any backing of sewage a storage-tank, with means of flushing and ventilation, will be provided. Ultimately this outfall sewer will be connected with the previous one by means of a syphon under the river. By these several means, the impounding of sewage in the town or near habitations will be obviated, and the prevention of the passage of sewer air from the main culverts near dwellings, will be attained, and the coarse detritus will be removed from the storage-tanks before the contents enter the sea. An alternative outfall scheme, involving the construction under the chalk cliffs of a tunnel and of a well-ventilated storage-tank, has also been put forward, but whichever plan be finally adopted, the local authority feel confident that they will secure a permanent improvement in the sanitary state of the town.

PROPOSED MODIFICATION OF PIROGOFF'S OPERATION.

AT the recent congress of Russian practitioners, Professor Tauber described and demonstrated on the dead subject an operation for removal of the foot, which he believes has several advantages over Pirogoff's amputation. Standing on the outer side of the limb, he commences an incision at the insertion of the tendo Achillis, and carries it forward just below the external malleolus to the dorsum of the foot, and then vertically downwards on the inner side in front of the heel. When the middle line of the sole is reached, the incision is carried along it backwards and prolonged upwards to the starting-point at the insertion of the tendo Achillis, a flap having thus been cut consisting of the inner side and half the sole of the heel. The joint is then opened, the external ligaments being first divided and then the internal. The astragalus is seized with the bone forceps and removed, and the anterior part of the foot cut off by Chopart's line, nothing being left but the os calcis, the soft coverings of which on the inner aspect are untouched. The os calcis is seized with the bone forceps and turned so that the articular surface is towards the operator. The forceps are now taken by an assistant, who holds them tightly; the operator then saws the bone longitudinally in two; the outer half, which is free, is removed, the inner half remaining attached to the flap. The ends of the tibia and fibula are then sawn off just above the malleoli. The cut surfaces of these will be found to correspond almost exactly with that of the os calcis, which is now brought into apposition with them. The advantages claimed for this operation are: 1. The posterior tibial artery itself is untouched, only its branches being divided. 2. The insertion of the tendo Achillis, as well as its bursa, are not injured. 3. The surfaces of the os calcis and of the leg bones correspond very nearly to one another.

THE DRINK BILL FOR 1885.

IT is gratifying to know that in spite of the lamentable death of the late Mr. Hoyle we shall be favoured annually with an account of the expenditure of the United Kingdom on drink in the form of a letter to *The Times* by Dr. Dawson Burns. The great fact is a reduction in the expenditure on every kind of intoxicating liquor in 1885 as compared with 1884; on home-made spirits of £1,385,239; on foreign and colonial spirits of £180,744; and on wine of £204,190—a total reduction of no less than £3,080,496, or about 2½ per cent. Dr. Burns does not deny that this diminution is due rather to the depression of trade than to the growth of thrift and temperance. It is the best fact we know of in connexion with the depression of trade. The expenditure is still enormous and discreditable. Every man and woman should feel a personal responsibility to help to reduce it. Such an amount of alcohol can only mean great injury to liver and kidneys, bloodvessels and lungs. Medical men have a special responsibility, which we would venture to impress upon them. They are often blamed for recommending alcohol. They cannot always dispense with it, but they should think of the responsibility of the prescription.

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THE MANCHESTER AND SALFORD SANITARY ASSOCIATION.

THE Manchester and Salford Sanitary Association show, by the fact that they issue a thirty-third annual report, how many years they have been labouring in the interests of public health in their district. They began their work before sanitary administrations for towns had been properly organised, and they must be regarded as pioneers in the promotion of public health work. But they still find work to do, and they continue to promote everything that may assist in the progress of sanitary science. In the face of the prospect of cholera the Association last year called together a conference, and a strong executive committee was appointed to formulate an effective scheme for combined action between the sanitary authorities, Poor-law guardians, representatives of hospitals, and others interested in the protection of the public from imported infection. A leaflet was also issued for distribution in case of the advent of cholera; and it is impossible to over-estimate the value of such an organisation, with its skilled helpers labouring in concert with the sanitary authorities in the face of any such emergency as a cholera prevalence in the vicinity of such great cities as those in question. During the year the Manchester building bye-laws received the attention of a committee of the Association, and the corporation were in the end advised to take a step which has been very widely adopted by other similar bodies—namely, to consolidate and amend their code of building bye-laws. The Association also sought to suggest a modified standard of purity under the Rivers Pollution Act, and they addressed the Local Government Board in favour of making the inspectorship under that Act an entirely separate appointment. In some respects the Association finds that duties which it originally undertook and carried out with great advantage to the public no longer call for their intervention. Thus, in the face of the staff of inspectors now acting under the health departments of Manchester and Salford, it has been thought desirable to discontinue the work of house inspection. The Association have largely aided in promoting an advanced state of public knowledge in such matters as overcrowding, house-drainage, &c., and they may now well leave the duty in question to those officials who, in addition to advising, have special facilities for enforcing the needed improvements. But no curtailing of action originally undertaken by the Association prevents them from still finding ample work; and the list of lectures already given, of duties carried out during the past year, together with the programme laid down for the attention of the members during the current year, go to show how many gaps there are in the existing organisations of public bodies which such a voluntary Association as this one can occupy with great credit to itself, and with advantage to the moral and physical welfare of the community amongst which it labours.

THE HEALTH OF RUSSIA.

IN consequence of an urgent recommendation of the Society of Russian Physicians, a special Medical Commission under the presidency of Professor Botin, was some short time since appointed by the Minister of the Interior to consider the subject of sanitary reform throughout the Russian Empire. The report of this Commission has recently been issued, and it is announced that some general measures for improving the public health are indispensable in view of the excessive mortality, which is higher than that of any other country in Europe. The creation of a central administration of medical control over the public health, in which all the sanitary questions of the Empire are to be considered, is strongly advised. With reference to the paucity of medical men, it is stated that for a population of over 90,000,000 there are only 5200 medical men—1600 under the Minister of the Interior, 1000 engaged by the zemstov, and 2600 in private practice. No greater proof, perhaps, of the unhealthiness of St. Petersburg could be given than the fact that during the month of January last no fewer than 2704 persons died (1536 males and 1168 females), while the births for the same period amounted to 1314 boys and 1286 girls only—2600 altogether—or 104 less than the deaths. Such a rate of mortality as this fully justifies the increasing concern felt in Russia as to the necessity for sanitary reform, not only in the capital, but throughout the country.

SIR WILLIAM TURNER.

No more fitting honour has been bestowed on the profession of medicine of late than the knighthood of Sir William Turner, the worthy successor of the immortal Goodsir. The compliment can be justified by reference either to Sir William's contributions to the science of anatomy or to his services to the famous University of which he is a distinguished professor and ornament. There are few present members of the Senatus to whom the University of Edinburgh owes so much as to Professor Turner. We have not always agreed with Professor Turner in his views of the true interests of the Scottish Universities and of the best way to advance them. We have seriously differed from him. But this does not hinder us from offering him our heartiest congratulations, and wishing him a long continuance of the happiness which he enjoys in the success of his own labours, and in the fame of the University which he has done so much to promote.

PERIPHERAL NEURITIS IN TUBERCULOSIS.

THAT many neuro-muscular affections of obscure origin, but hitherto suspected without proof to be due to central lesions, are unquestionably dependent upon affections of the nerve-trunks themselves, has now been well established by the accumulated facts concerning peripheral and multiple neuritis. The same lines of inquiry are leading to the overthrow of many a case attributed to "functional" derangement. This has never been better illustrated than in a paper by Drs. Pitres and Vallard, to be found in the current number of the *Revue de Médecine*. Their subject is the nerve derangements which complicate the course of tuberculosis. Apart from obvious extension of the tubercular inflammation to the brain and spinal cord, there are numerous instances, especially among the phthisical, of hyperæsthesia and of anæsthesia, of neuralgiæ of various regions, of localised muscular atrophy, of vaso-motor disturbances, which have hitherto received no satisfactory explanation, or rather, we might say, which have not been sufficiently studied. The authors named have examined the peripheral nerves in several cases of phthisis so complicated, and have found undoubted evidence of parenchymatous neuritis. In some cases, indeed, the lesions and symptoms are so widespread and severe as to closely resemble the multiple neuritis due to alcoholic poisoning; and it is not always possible to exclude this etiological factor from the case. The conclusions at which MM. Pitres and Vallard arrive are stated as follows: 1. In the course of tuberculosis, as in that of other infective diseases, it is not rare for the peripheral nerves to become the seat of parenchymatous changes having the characters of so-called degenerative neuritis. 2. These forms of neuritis are local, and do not depend upon pre-existing lesion of the brain or cord. They are to be met with in subjects whose nerve centres (brain, cord, meninges) and spinal nerve roots are perfectly intact. 3. They may attack indifferently the sensory, motor, or mixed nerves; and may similarly involve the cranial nerves (optic, oculo-motor), the pneumogastric, the

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phrenic, &c. 4. Their very complex and variable symptomatology is as yet but incompletely known. It is, however, possible to divide them into three groups. The first comprises cases where the neuritis discovered post mortem has been unsuspected during life owing to the serious symptoms due to the development of the tuberculosis (latent neuritis). The second comprises cases in which localised or diffuse muscular atrophy constitutes the predominant symptom (amyotrophic neuritis). The third includes cases in which sensory disorders are produced, as hyperæsthesia, anæsthesia, neuralgia, &c. (painful or anæsthetic neuritis). 5. The frequency of peripheral neuritis in the tuberculous, the variability of its distribution, and consequently of its symptomatology, explain the occurrence and clinical polymorphism of the nervous derangements which arise in the course of tuberculosis.

IN MEMORIAM: DR. AUSTIN FLINT.

WE have been favoured with a copy of the memorial circular in which the Executive Committee of the New York Medical Association express their feelings in regard to the character and death of Dr. Austin Flint. The words are so appropriate, and so well accord with our own views, that we venture to quote some of them, which, we are sure, will be appreciated in this country, where Dr. Flint's genial and lofty presence had of late become as familiar as it was welcome:—

"Professor Flint, from early manhood, has ever been an indefatigable laborer in the field of medical science, and for half a century has been one of the most accomplished teachers and writers in the profession. His varied experience, extending over different portions of our country, enabled him, on his settling in New York City, at once to take the foremost place in the profession. As a consultant he was without a peer; his calm judgment, urbane manners, and strict conscientiousness made his presence ever welcome to his brethren. As a gentleman he will be held in grateful remembrance by all with whom he came in contact. His charities were proverbial. His death will be the cause of universal sorrow, especially occurring at a time when his deliberate counsels are most needed. We can never forget that genial countenance, those cheerful words, and that buoyant disposition, which, amid the greatest of sorrows, always pointed out the ray of light affording hope."

QUARANTINE FOR THE TONKIN TROOPS.

THE French Government have evidently given way to the clamour raised by the inhabitants of Toulon against the landing of troops from Tonkin in that port, and, having regard to the sanitary state of the town, we are not surprised at the fears which have been expressed. Some steps being necessary, Dr. Proust, the inspector-general of the sanitary services, and a staunch supporter of "quarantine" detentions under the disguised name of "observation," has matured a scheme which gives promise of securing all such efficiency as can be expected. According to the *Journal Officiel de la République Française*, the two islands of Port Cros and Bagau are to serve for the purpose. The former island is one of the most westward of the Hyères group, and thereon it is proposed to intern the passengers and crew of all non-suspect vessels arriving from Tonkin for a period of six days; all patients suffering from non-infectious diseases to be kept there in proper accommodation until they have recovered. The island of Bagau is much smaller than Port Cros, immediately to the east of which it lies. Bagau is to be reserved for so-called infected vessels, this term including those on which any case of cholera has arisen, the passengers and crew being disembarked, and the vessel and other articles being disinfected. So also, any infectious case arising in Port Cros is to be removed to Bagau. But, apart from this, there is to be no communication between the two islands, which are to have altogether separate and independent administrations. It will be interesting to observe the effect of these detentions as soon as they can be organised; the more so, as the quarantine measures heretofore adopted have certainly failed to protect France from the importation of cholera by means of troops returning from the East.

LACERATION OF THE CERVIX AND ITS SYMPTOMS.

OUR gynæcological friends would command greater respect for their specialty if they would give out a little more certain sound as to uterine lesions and their significance. Every lesion seems to be in fashion for a time, and then be found out to be more or less unsubstantial, when it gives place to another. One time ulcers of the cervix were the explanation of all ills that women are heir to. These were next referred to "displacements," which in their turn gave way to ovarian and tubal inflammations, which now seem threatened by lacerations of the cervix, generally produced by long or instrumental deliveries. Dr. Charles Meigs Wilson, in an interesting paper before the Obstetrical Society of Philadelphia, attaches great importance to this lesion as a cause of unique symptoms, pelvic distress and often severe reflex nervous symptoms mounting up to insanity itself. Neglected cases of laceration often end in subinvolution, with subsequent prolapsus, hyperæmia, hypergenesis of tissue, and ectropion of the cervical mucous membrane. One patient suffering from such symptoms had them all attributed to floating kidney, and was recommended to have it extirpated. She was quite cured by having the contour of the cervix restored. Another had ulcer of the rectum with painful defecation and ribbon stools, backache, and slight vaginal discharge. She was suspected of cancer of the rectum. Specular examination of the vagina showed extensive bilateral laceration with acute retroflexion. The restoration of the contour of the cervix and simple astringent application to the rectal ulcer completed the recovery. In a third case pyosalpinx was diagnosed and oöphorectomy recommended. Extensive laceration was found, the cure of which was followed by complete cessation of all the symptoms. This patient had suicidal dementia and sometimes required restraint. Another patient was in an asylum for fourteen months. Distressing pelvic pain and profuse leucorrhœa led to the discovery of extensive laceration of the cervix, and two months after to complete recovery, which continues after twelve months. The author did not dwell on the operative treatment, but in the discussion great importance was attached to the complete removal of hard cicatricial tissue and perfect union of the coapted edges. In all cases rest and milder measures should first be tried.

BUISSON'S TREATMENT OF HYDROPHOBIA.

CENTRES have been established in various parts of London and in a few provincial towns for carrying out M. Buisson's treatment of hydrophobia. The wound is washed with a solution of ammonia; the patient has a daily vapour bath at a temperature of 42° to 48° Réaumur, with a view to producing profuse perspiration for seven consecutive days, and draughts of a hot infusion of borage, also with a view to promoting the diaphoresis. We gave a brief account of this treatment in THE LANCET of Aug. 23rd, 1884. Dr. Buisson is said to have cured himself after the development of the symptoms of hydrophobia. He and his disciples regard the method as an infallible preventive of hydrophobia, and as an equally certain cure, if begun on the first day of the developing disease; on the second day its effect is less certain, and later it has no effect in staying the course of the malady. As to the merits of the treatment we can assert nothing. It

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is alleged to have prevented or to have cured the disease a hundred times. But the sources of fallacy are innumerable. We do not yet know the proportion of individuals bitten by a mad dog who become the subjects of hydrophobia. It is difficult to conceive that profound sweating can stay the course of a disease which seems to be due to the development of a living germ in the medulla oblongata. That washing a recent wound with liquid ammonia and making the individual perspire profusely should be able to prevent the disease can be reasonably conceived.

THE COMMONS MUST GO TO BED EARLIER.

IF the House of Commons cannot be induced to adopt the early-closing movement for itself by fair means, it is high time that publicly and personally most desirable reform should be effected, even though it be by means most foul. We are therefore glad to see that Mr. Blake, M.P., has written to a contemporary proposing that at twelve o'clock every night some hon. member shall rise in his place to move that any debate then in progress may be adjourned, and if this be carried that the division shall be immediately followed by a motion to adjourn the House. Mr. Blake is of opinion that a sufficiently large party to carry out this organised obstruction in the interests of health could readily be formed. We trust he is right. It would, of course, be better if the House of Commons could be placed on the footing of a public-house and compelled to close its doors at midnight. How gladly would the over-worked officials receive a standing order to lower the gas at a quarter to twelve, and to turn it off completely when Big Ben struck the last unit of the midnight hour! Let us hope Mr. Blake's revolt will succeed. The healths of our representatives and the value of their achievements alike point urgently to the need of this beneficent reform.

THE RIVER LEA.

THE Select Committee of the House of Commons appointed to inquire into the pollution of the river Lea has commenced its work, and has received the evidence of Mr. George Corble, the clerk to the Lea Conservancy Board, who gave an account of the Acts of Parliament relating to the rivers Lea and Stort. The Conservancy Board have, it appears, a prior right under the Act of 1855 to the use of the water, but they had not exercised this right to the full because they had been unwilling to interfere with the water companies who were dependent upon this source for their supplies. Mr. Corble believed the condition of the river, which last year was the subject of serious complaint, was due to the Tottenham effluent; and while he admitted that if the Conservancy Board had fully exercised their rights this condition would have been better, he did not know what the East of London would have done had the East London Water Company been deprived of its water.

LIGATURE OF THE INNOMINATE ARTERY.

MR. BENNETT MAY ligatured the innominate artery, under the spray, for a large subclavian aneurysm, at the Queen's Hospital, Birmingham, last Saturday morning. The patient, aged thirty-three, is a labourer in a large brewery, and has been accustomed to lift heavy weights on to his right shoulder. This joint has been three times dislocated, and symptoms of the arterial mischief first appeared eighteen months ago. Since the operation the patient's constitutional state has been most satisfactory. The temperature only rose slightly above normal on the fourth day. In tying the vessel Mr. May used a cord made up of six strands of carbolised catgut, and employed sufficient force to arrest all pulsation in the tumour, without, however, severing the coats of the vessel, which was much dilated. No pulsation could be felt at the right wrist when the patient left the operating theatre, but it reappeared slightly the same evening, and has since continued.

THE LATE DR. GEORG VARRENTRAPP OF FRANKFORT.

DR. GEORG VARRENTRAPP, who died at Frankfort-on-the Main on March 15th, at the age of seventy-seven, was one of those who have been most successful in drawing the attention of the public to the necessity of sanitary measures. He rendered great service to school hygiene both by his writings and as a member of the governing body; but his chief work was the carrying out of an improved system of drainage in his native town of Frankfort. He was the first to found a sanitary journal in Germany, and the eighteenth volume of this periodical is now in course of publication. His student days were passed at Würzburg, where he graduated in 1831, since which time he lived and practised in Frankfort, where he held the appointment of physician to the Hospital of the Holy Ghost.

WELL DONE SUNDERLAND, NORWICH, AND HUDDERSFIELD!

A HIGHLY creditable fact in vital statistics will have been noticed in an abstract of the Registrar-General's reports last week—viz., that in Sunderland, Norwich, and Huddersfield there was not recorded one death from any of the principal zymotic diseases—whooping-cough, measles, diarrhœa (interesting to notice diarrhœal deaths even in such a cold March as we have had), scarlet fever, fever, diphtheria, and small-pox. These towns have a population respectively of 116,542, 87,842, and 81,841—in all of 286,225. Sunderland, at least, has severely felt the incidence of the commercial depression. The low zymotic mortality which we emphasise is only the more creditable to the municipal and medical authorities of these towns, and enlarges our views of the possible results of sanitation and of medicine in reducing the mortality of communities.

TYPHUS IN MOSCOW.

SPOTTED TYPHUS was so prevalent in Moscow last month that, according to the *Russkaya Meditsina*, in spite of 150 temporary additional beds in the hospitals, patients had to be refused admittance for want of room; and the latest Moscow journals say that, this state of things continuing, it has been arranged to send all patients with chronic and incurable diseases out of the hospitals in the town. In this way some 500 beds will be available for typhus cases. The patients sent out will be provided for elsewhere. It is also stated that even in the Government prisons the disease is raging pretty severely.

THE IDIOTS BILL.

THE framers of this measure should at once determine, not only in their own minds but by an intelligible definition of the term "idiots," what class of persons they intend to deal with. As the Bill is drawn it is a highly unsatisfactory measure, affording opportunities for dealing with persons of feeble mind with only one certificate instead of two, and with the least possible protection. It will be a scandal if this measure passes with no more attempt to distinguish between two classes extremely easily confounded than the absurd intimations that "'idiots' or 'imbeciles' do not include lunatics," or "'lunatic' does not mean or include idiot or imbecile." The definition is not one whit more intelligible as a means of analysis than the famous synthetical formula, "Cæsar and Pompey are alike, especially Pompey."

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DR. TEJADA Y ESPANA.

THE death is announced of Dr. Tejada y España, editor of *El Genio Médico*, one of the weekly medical journals published in Madrid. He began his career as a "third-class surgeon" in the province of Burgos, and there became editor and proprietor of the *Eco de los Cirujanos*. He afterwards went to Madrid and took the degree of Licentiate in Medicine, which was succeeded by that of Doctor. Of two older medical journals which he edited he founded the *Genio*, which is now in its thirty-second year. He wrote also a Compendium of Surgery and a well-known novel, "*El Coche del Médico*" ("The Doctor's Carriage"). He was an honorary member of a considerable number of foreign scientific societies.

FOREIGN MEDICAL APPOINTMENTS.

PROFESSOR F. A. HOFFMANN of Dorpat has been appointed to the charge of the Leipsig Policlinic, vacated by Professor Strümpel, who has gone to Erlangen; Professor Dr. Richard Wiedermann, the physicist, succeeds Professor Dorns. Professor Lommel of Erlangen has been appointed to the Chair of Experimental Physics at Munich. Dr. Otto Haab, assistant in the Ophthalmic Clinic, has been appointed to the Professorship of Ophthalmology at Zürich, vacated by Professor Horner. M. Wasseige, a professor in the Medical Faculty of the University of Liege, has been appointed Rector, and received quite an ovation from the medical students and from his colleagues. He was at the same time raised to the dignity of Officer of the Order of Leopold.

A LARGE FEE AND A MUNIFICENT DONATION.

WE understand that the sum of £5000 has been entrusted to Sir Andrew Clark by a lady as a donation to medical charities. This sum he has distributed as follows:—£2000 to the London Hospital; £1000 to the Medical College attached to that hospital; and £2000 to the Royal Medical Benevolent College. The presentation was preceded by the payment of a fee of £1500 to Sir Andrew in consideration of his absence ~~from town for five days~~ on a professional visit to this lady in the South of France.

THE PASTEUR TREATMENT OF HYDROPHOBIA.

THE Academia Medica di Roma on Sunday, March 28th, Professor Guido Baccelli presiding, held an animated discussion on M. Pasteur's method in hydrophobia. Opinion as to its efficacy was much divided, and the discussion was adjourned till April 4th, when a decision will be come to, and a report prepared for publication in the Academy's official organ, the *Bollettino*.

FROM the report of the examination made by Colonel Sir Francis Bolton of the water supplied by the several metropolitan water companies during the month of February, it appears that the Thames water sent out by the Chelsea, West Middlesex, Southwark, Grand Junction, and Lambeth Companies contained in every case less organic matter than was present in the January samples, and in none of the samples was the organic matter excessive for this season of the year. Of the water drawn from the Lea, that supplied by the New River Company contained less, and that by the East London Company more, organic matter than any of the other river waters. All the samples were clear and bright on delivery.

THE Senate of the University of Edinburgh has offered the honorary degree of LL.D. to Deputy Inspector-General F. J. Mouat, M.D., F.R.G.S., &c.

IN the *Vierteljahresschrift für Dermatologie und Syphilis* Professor J. Caspary, of Konigsberg, figures one of two children, aged respectively four years and a year and a half, affected with ichthyosis fœtalis. They were the children of cousins, and were prematurely born. There seems to be no doubt that the affection was congenital; but the state of the skin did not quite correspond to that in the harlequin fœtus lately shown, brought by Mr. Sutton to the Royal Medica and Chirurgical Society. There were, however, flexion of the limbs and genu valgum. Professor Caspary gives some interesting references to other cases, entirely, however, from German literature, and discusses the relation of the condition observed with that of the so-called harlequin fœtus.

THE *Presse Médicale Belge* announces that the Council of Administration of the University of Brussels has actually ratified "the deplorable decision" of the Faculty of Medicine, which has the effect of depriving Professor Crocq of his chair of clinical medicine and of his examinership in the practical part of the examination for the M.D. degree.

THE Government of Spain have information to the effect that suspicious cases of illness have occurred in the mining district of Bilbao, and that two cases have been pronounced to be cholera. A later account contains the usual denial, but it will be recollected that the disease prevailed in this locality late during the course of last autumn.

THE Archduke Charles Theodore of Bavaria, who practises medicine, has obtained permission from M. Pasteur to be present at the inoculations in the laboratory of Rue d'Ulm. The Archduchess, who helps her husband in his professional labours, will accompany him as an assistant.

THE Gresham Lectures will be delivered by Dr. Symes Thompson on April 6th and three following days, the subject being the "Diseases of Infancy and Childhood."

SCHROEDER'S Treatise on Diseases of the Female Genital Organs has just been translated into French by two Belgian physicians, MM. E. Lauwers and Hertoghe.

Pharmacology and Therapeutics.

IMPROVED GELATINE LAMELS.

THESE lamels are prepared by Mr. Brownen and are designed to meet the requirements of modern surgery and medicine. It is asserted that the lamels or discs are prepared with the purest gelatine and are so manufactured as to be free from every impurity, including fungi and germs. Three of the lamels are now official in the British Pharmacopœia of 1885—atropine, physostigmine, and cocaine. The lamels are made for use in ophthalmic surgery, as well as for hypodermic medication. The specimens that we have submitted to trial have answered their purpose admirably. The articles may be procured of Mr. Martindale, 10, New Cavendish-street, W.

PHYSIOLOGICAL AND CLINICAL BEHAVIOUR OF ANTYPYRIN AND THALLIN.

Our knowledge of the action of the new antipyretics is receiving constant, we may almost say weekly, additions. One of the latest researches on these drugs is by Dr. Anseroff, and is reported in the *Russian Medical Review* for last month. The particular point to which he directed his investigations, which were conducted both in the laboratory and in the wards, was the effects of antipyrin and thallin on the vaso-motor apparatus both in the normal state and in fever cases. He employed for some of his experiments

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animals which were sufficiently under control not to require tying-up, which of itself must exert some influence prejudicial to the results. He found that antipyrin caused an increase of blood-pressure and a decrease of the internal temperature, as shown by a thermometer in the rectum; but a considerable rise, sometimes as much as 12°C., in the external temperature, that of the paw being generally taken. This rise of the temperature of the paw, however, did not occur where the limb had been previously paralysed by division of the sciatic nerve, showing that the antipyrin acted as a stimulant to the vaso-dilator nerves through the vascular centre, the vaso-constrictors of the interior being stimulated so that the tension remained above the normal. Similar results were given by experiments with thallin. With regard to the rise of temperature which sometimes occurs after the exhibition of considerable doses, Dr. Anseroff suggests that increased loss of heat may induce augmented heat formation. The rise observed after thallin may be explained by the exhaustion of the apparatus which regulates the loss of heat. Clinical observations on fever patients present an analogous result—viz., a lowering of the internal temperature going on side by side with an increase of the external temperature. Clinically, the following points concerning the two drugs should be borne in mind. 1. With thallin the temperature begins to rise again two hours after the dose. 2. Very frequently a single four-grain dose of thallin produces a rigor with a subsequent rise of temperature, sometimes above that which existed before the medicine was taken. 3. With respect to equal doses of the two drugs, thallin causes a more decided reduction of temperature, but is much more likely to produce a rigor with a subsequent rise. Antipyrin behaves, in the author's opinion, like hydro-therapeutic measures in improving the breathing, pulse, general feeling, and appearance of the patients.

PIPER METHYSTICUM (KAVA-KAVA).

A substance, the active principle of kawa, appears to possess more qualifications as a substitute for cocaine than either menthol or apomorphine, if we may speak thus from purely experimental researches, the results of which M. Lewin of Berlin has recently collected in a *brochure* published by A. Hirschwald. The plant is already known to the medical world under the name of kava-kava; the root has been used by the inhabitants of the Polynesian isles in the preparation of an intoxicating liquor which is their alcohol; it is also employed to check discharges from the urethra and other parts. Two crystallisable substances, kawahin and yankonin, have been separated from the root by Nölting and Kopp. By agitating the root with petroleum ether M. Lewin has extracted two resinous bodies: one (*a*) of these has a greenish-yellow tint and the odour of the plant; the other (*b*) has a reddish-brown colour. A minute particle of the two resins, or of the first, placed on the tongue causes a sensation of burning, which is followed by a certain degree of anæsthesia of the part touched. The anæsthetic effect is said to be well marked on the conjunctiva, and may be prolonged for hours in guinea-pigs by renewing the fragment of resin from time to time; the eyes underwent no pathological alteration, only a slight dilatation of the palpebral fissure. The introduction of minute quantities of the resin (*a*) under the skin of frogs produces marked loss of sensibility, so that the animal takes no notice of severe irritation of the affected part; ligature of the vessels of the limb experimented on made no difference in the result; the local anæsthesia continued to be local. Introduced into the subcutaneous tissue of rabbits the anæsthesia developed without any sign of inflammation. Kawa resin appears to exert a paralysing influence when administered in larger doses, and its effect in this regard is thought to be due to its action on the motor cells of the anterior horn of the spinal cord. Its first action is believed to be on the terminations of the sensory nerves. M. Lewin suggests that it also destroys the conductivity of fibres, conveying painful impressions in the grey matter of the cord; and he also thinks it acts on the brain, causing sleep.

COCAINE.

A case has been recorded by Dr. Schilling in the *Pharmaceutical Journal* in which the injection of six drops of a 20 per cent. solution of cocaine into the gums of a woman aged twenty-eight, to prevent the pain of extraction of a molar tooth, was followed after the extraction by symptoms of which unconsciousness and rigid aspect of the face were the chief. There was contraction of the retinal arteries, as witnessed by the ophthalmoscope. The inhalation of three drops of amyl nitrite restored the patient to consciousness, and it was considered probable that the brain was in the same anæmic state as the retina. Dr. Bignon says that cocaine, if it be pure, should be white, almost inodorous, entirely soluble in three parts of alcohol, two parts of sulphuric ether, in chloroform, in sulphide of carbon, and in twenty parts of tarzine, prepared either from tar or petroleum. According to him, also, the benzoate of cocaine is more stable than the hydrochlorate, and is preferable in other ways. Grunhagen and Berthold have ascertained that injections of cocaine in moderate doses increase the blood-pressure, and they believe that this result is to be attributed to an excitation of the vaso-motor centre, since it does not occur after section of the cervical swelling of the spinal cord. In larger doses a fall in blood-pressure takes place, due to paralysis of the vaso-motor centre; in a curarised rabbit whose vagi were cut in the neck after having received a large dose of cocaine, with consequent lowering of the blood-pressure, stimulation of the saphenous nerve caused no augmentation of blood-pressure until the effect of the cocaine had passed off.

HOMERIANA.

A plant called Homeriana (Palygonum aviculare), which is very common in Russia, and is used popularly as a drug, has been examined by Dr. Rotschinin and reported on in a paper read to the recent congress of Russian doctors. It has been found by Werner to contain a large proportion of alkaloid. A decoction, however, was used by Dr. Rotschinin, a tumblerful being given three times a day. It appeared to be really valuable in several cases of bronchitis, two of which were capillary; also in three cases of whooping-cough. It was tried in phthisis but no definitely satisfactory results were obtained.

GRINDELIA ROBUSTA.

The action of grindelia robusta has been investigated by L. Grimvetski, his paper on the subject being published in the *Russkaya Meditsina*. He found the liquid extract very useful in emphysematous asthma due to chronic bronchial catarrh, the asthma diminishing after a few doses, and the cough and expectoration likewise becoming less. His prescription was—"℞ Inf. rad. senegæ, ʒvi.; ext. grindel. robust., ʒij. to ʒiij.; syrup. glycyrrhizæ, ʒss. A dessertspoonful every two hours till relief is obtained." It was found that the drug was useless in asthma due to other causes.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Reading Urban District.—The death-rate for this borough during 1885 was 18·0 per 1000, and the zymotic rate 2·6. The inhabitants number somewhat over 42,000, and the population per acre amounts to 22·4. Amongst the deaths from infectious diseases there were 58 from measles, and 22 from whooping-cough. In short, a large number were beyond the present range of sanitary measures. But there were 19 deaths from scarlet fever; and in the absence of a proper hospital for the reception of such cases, it appears that in two instances only was removal effected to the small cottage at present available for isolation purposes. Diphtheria is known to have occurred in 21 cases, and 9 of the attacks proved fatal. Diarrhœa was, fortunately, almost entirely absent as a fatal disease. Sanitary work is steadily progressing; the houses still needing it are continuously being connected with the new system of public sewers, fresh bye-laws have just been finally dealt with, and the imperfect system of hand flushing to waterclosets has been replaced by cistern flushing in 236 cases. But in 24 instances there is direct communication between the closet pans and the water mains, and, knowing the extreme danger of this arrangement, Dr. Shea presses for the abolition of all such connexions.

Kettering Urban District.—Mr. Dryland reports the condition of this district as remaining satisfactory, there having been no epidemic, the general death-rate standing at 15 per 1000, and the infant mortality having diminished. The

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attention heretofore devoted to the perfecting of house, drain arrangements continues, and alterations are insisted on whenever nuisance or injury to health enables the authority to act. The old infectious hospital being dilapidated, a new permanent hospital is now about to be erected outside the town, and the new sewerage works are completed. Altogether this urban district has, for some years past, shown signs of steady sanitary progress.

Wellington Urban District.—Dr. Meredith reports that, notwithstanding a somewhat fatal epidemic prevalence of measles, the death-rate for 1885 amounted to only 15 per 1000. A scarlatina prevalence, which fortunately was of a mild type, became a good deal diffused amongst children attending the various schools; and under these circumstances it was found necessary to exclude children in affected houses from school attendance. As to this prohibition under the Education Code, the report points out how difficult it is to prevent children from mingling at play. This is true; and the medical officer of health who avails himself of this system of exclusion from school of children from special districts or houses, instead of resorting to the alternative of closing the school altogether, will always necessarily have to judge whether, under the local circumstances, he will best gain his end, of securing the utmost practicable isolation, by the one or the other process.

Doncaster, Goole, &c., Combined District.—In preparing his annual report on this combined district, Dr. Mitchell Wilson takes occasion of the issue of the Registrar-General's decennial report to make comparison for the past ten years between the districts in his combination and England and Wales as a whole; and these go to show a marked and progressive diminution in mortality, which may, in large part, be properly attributed to the sanitary work which has been carried out. In the *Doncaster Rural District* the death-rate for 1885 was 16 per 1000. Amongst the infectious diseases which prevailed were diphtheria, small-pox, and enteric fever, which led to sanitary improvements being effected; but it is evident that in certain localities the need for an improved water-supply still calls for remedy. Some important work has, however, been accomplished, such as the sewerage works for Balby-with-Hexthorpe; and the list of minor duties performed go to show that a good deal of beneficial work is steadily in progress. In the *Goole Rural District* there was a low mortality of 15·3 per 1000 and an absence of any serious outbreak of infectious disease. In the marshland districts the question of water-supply is one of considerable difficulty, for those supplies which are immediately procurable are brackish and unwholesome, and the expense of providing any other supply than that of rain from roofs would be very costly for such a district. Considerable attention is being given to the subject, but for various reasons no solution has yet been arrived at. In the *Selby Rural District* the death-rate of 18·4 per 1000 exceeded the average rate for the previous five years, but the zymotic rate of 1·3 was not heavy. Small-pox caused some mortality, and enteric fever was locally spread by impure water and defective drainage. Referring to sanitary work, Dr. Wilson reminds his authority that its value is not necessarily to be judged by the cost, and that much of the comparatively costless work which is continuously being done in the district forms a very important part of the sanitary administration carried out. A large improvement has been effected in connexion with the water-supply, and eighty new wells have been sunk during the past five years. In the *Tadcaster Rural District* the annual death-rate was 18·2 per 1000, and the rate from the zymotic diseases was as high as 3·4 per 1000. Scarlet fever was prevalent in Kippax and at Garforth. Enteric fever began and spread at South Milford through the use of brook water, which receives sewage not only direct from drains, but also indirectly by soakage from foul ash-pits. But on the whole there has, during the past five years, been a satisfactory diminution in the prevalence of continued fever, and in this connexion it is to be noted that polluted water-supplies have been extensively dealt with. A proper system of drainage and water-supply are much wanted at Kippax, but at Garforth, Micklefield, and at Great Preston sanitary works of importance were carried out. The *Goole Urban District* exhibited a death-rate of 15 per 1000 only, and the cases of infectious diseases reported were comparatively few in number, the hospital being, however, utilised for cases of small-pox. Strict supervision was maintained during the year under the Canal Boats Act, but as regards the respective duties of Hull and Goole at the entrance of the river matters are not very satisfactorily arranged to meet any danger from imported cholera. The scavenging of ash-pits and tub-closets still remains to be efficiently dealt with, and so far as we can judge, the only proper solution of the difficulty would be for the local authorities to organise a staff of their own to do it. During the past ten years 128 patients have been admitted to the fever hospital, and considering that it is but a workhouse establishment transferred to the sanitary authority, this result is by no means unsatisfactory. The death-rate in the *Selby Urban District* amounted to 18·5 per 1000. Dr. Wilson devotes a good deal of attention to the need which exists in this district for some proper provision for the isolation of infectious fevers, and it is to be hoped that his arguments will not pass unheeded. Last year saw the completion of a new water-supply for Selby, as also new bye-laws for regulating streets and buildings. The slaughterhouses are well looked after, the common lodging-houses are regularly inspected, and sanitary work is continuously maintained.

Cranbrook Rural District.—Mr. Butterfield is able to point to a continued small mortality in this district. The mean rate for the ten years ending 1884 was 15·5 per 1000, and that for 1885 is 15·7; the zymotic rate is also low—namely, 1·2 per 1000. New sewers have been constructed, which have secured the efficient drainage of 140 houses, polluted wells have been closed, and a few cases of infectious disease have been dealt with by a system of trained nursing which aims at the utmost procurable isolation together with disinfection. But there is one drawback to this district. The state of Cranbrook is such that it is described as surrounded by its own sewage, and it is urged that when the water-supply is drawn from the proximity of cesspools a catastrophe must be expected sooner or later, and that bad times are no sufficient argument to justify the postponement of the necessary remedial works.

Lincoln Rural District.—Subject to corrections necessary for public institutions, the death-rate for 1885 was 15·5 per 1000. The only disease which prevailed with sufficient intensity to call for special notice was diphtheria, and a somewhat large outbreak beginning with, and being spread by, so-called cases of quinsy and sore-throat, took place during the year. It was associated with conditions which call for substantial action on the part of the authority, such as overcrowding, want of proper drainage, cesspools overflowing into ditches and a beck, and slops and heaps of refuse lying about. But it was not found practicable to exercise sufficient care in connexion with school attendance, and it would be well for Dr. Harrison, after securing the co-operation of the school officials, to enforce for some time to come a rigid exclusion of all scholars from houses where sore-throat of any sort prevails. It has in some districts been found most useful to organise a roll-call at the beginning of every day's school as to such affections in the houses from which children came, and then to get the authority to put in force the exclusion clause of the Education Code. Diphtheria has caused 46 deaths in this district during the last ten years, and in 1882 and 1884 the fatal attacks were eleven and ten respectively.

Spennymoor Urban District.—This coal and iron district, with some 6000 inhabitants, has never been distinguished for activity in its sanitary work, and this notwithstanding the fact that its defects have been pointed out by the local officer of health and special medical inspectors. In 1885 the death-rate was needlessly high for so small a population—viz., 20·3 per 1000. Dr. O'Hanlon reports that many causes of disease still exist in this district, and amongst these he enumerates the following: (1) The influx of pitmen and others from infected districts, seeking work; (2) the unhealthy conditions of middens and privies; (3) the excessive use of intoxicating liquors; (4) the chewing of tobacco, and the drinking of laudanum amongst the women; (5) the ill-feeding of children; (6) the great neglect of children; and (7) the gossiping amongst women during the prevalence of epidemic diseases. Unless Spennymoor has materially altered within the past few years, and there is no evidence of this, the sanitary circumstances by which the populations are surrounded, and under which young people live, are calculated, to a large extent, to give rise to demoralising influences, and to bring about the very conditions for which the place is said to be noted. If the sanitary authority would only try it, they would find that the educational effect of perfect cleanliness of thorough-

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fares, yards, spaces about houses, and inside dwellings would probably do more than anything else towards removing those causes of death to which the medical officer of health refers.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 6183 births and 4603 deaths were registered during the week ending March 27th. The annual death-rate in these towns, which had steadily increased in the eight preceding weeks from 22·1 to 29·3, declined again last week to 26·4. During the first twelve weeks of the past quarter the death-rate in these towns averaged 24·4 per 1000, and exceeded by 0·2 the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 18·3 in Hull, 19·6 in Sunderland, 20·2 in Newcastle-upon-Tyne, and 22·2 in Wolverhampton. The rates in the other towns ranged upwards to 30·9 in Preston, 31·0 in Manchester, 37·3 in Blackburn, and 40·2 in Plymouth. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 430 and 427 in the previous two weeks, further declined last week to 406; they included 164 from whooping-cough, 128 from measles, 32 from diarrhœa, 28 from "fever" (principally enteric), 28 from diphtheria, 22 from scarlet fever, and 4 from small-pox. No death from any of these zymotic diseases was recorded last week either in Derby or in Halifax; whereas they caused the highest death-rates in Bolton, Portsmouth, and Blackburn. Whooping-cough caused the greatest mortality in London, Leicester, and Portsmouth; measles in Birmingham, Nottingham, Portsmouth, Bolton, and Blackburn; and scarlet fever in Birkenhead. The 28 deaths from diphtheria in the twenty-eight towns included 18 in London, 2 in Liverpool, and 2 in Wolverhampton. Small-pox caused 2 deaths among the residents of London and its outer ring, 4 in Bristol, and not one in any of the twenty-six other large provincial towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had been 7 on each of the preceding three Saturdays, was 8 at the end of last week; 5 cases were admitted to these hospitals during the week, against 1 and 2 in the preceeding two weeks. The Highgate Small-pox Hospital contained 5 patients on Saturday last, 2 cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had increased in the preceding nine weeks from 477 to 917, declined last week to 710, but exceeded the corrected weekly average by 202. The causes of 82, or 1·8 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Birmingham, Bristol, Preston, Plymouth, and Halifax; and the largest proportions of uncertified deaths were registered in Salford and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had increased in the preceding five weeks from 22·3 to 27·9 per 1000, declined again to 24·7 in the week ending March 27th, and was 1·7 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 13·9 and 14·8 in Greenock and Leith, to 30·4 in Paisley and 30·5 in Glasgow. The 609 deaths in the eight towns showed a decline of 81 from the number in the previous week, and included 29 which were referred to whooping-cough, 11 to diarrhœa, 8 to measles, 8 to scarlet fever, 4 to "fever" (typhus, enteric, or simple), 1 to diphtheria, and 1 to small-pox; in all, 62 deaths resulted from these principal zymotic diseases, against 51 and 46 in the preceding two weeks. These 62 deaths were equal to an annual rate of 2·5 per 1000, which exceeded by 0·2 the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 20 and 14 in the preceding two weeks, rose last week to 29, and included 27 which occurred in Glasgow. The 11 deaths attributed to diarrhœa corresponded with the number in each of the previous two weeks, and included 7 in Glasgow. The 8 deaths from measles were within two of the number in the previous week; 7 occurred in Edinburgh. The fatal cases of scarlet fever, which had been 5 and 4 in the preceding two weeks, rose last week to 8, of which 5 were recorded in Glasgow and 2 in Edinburgh. Two of the 4 deaths from "fever" occurred in Glasgow. The death from small-pox was returned in Edinburgh. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had steadily increased in the preceding seven weeks from 135 to 204, declined last week to 148, but were 26 above the number returned in the corresponding week of last year. The causes of 53, or 8·7 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 30·1, 38·3, and 40·5 per 1000 in the preceding three weeks, declined again to 34·6 in the week ending March 27th. During the first twelve weeks of the past quarter the death-rate in the city averaged no less than 33·5 per 1000; the mean rate during the same period did not exceed 25·1 in London and 20·0 in Edinburgh. The 234 deaths in Dublin last week showed a decline of 40 from the high number returned in the previous week, and included 18 which were referred to the principal zymotic diseases, against 19 and 13 in the previous two weeks; 12 resulted from whooping-cough, 4 from diarrhœa, 1 from "fever," 1 from scarlet fever, and not one either from small-pox, measles, or diphtheria. These 18 deaths were equal to an annual rate of 2·7 per 1000, the rates from the same diseases being 2·6 in London and 2·5 in Edinburgh. The fatal cases of whooping-cough, which had declined in the preceding four weeks from 18 to 6, rose again last week to 12. The deaths referred to "fever" (typhus, enteric, or simple), on the other hand, declined from 6 in each of the previous two weeks to 1. The 4 deaths attributed to diarrhœa showed an increase upon the numbers in recent weeks. Five inquest cases and 7 deaths from violence were registered; and 69, or considerably more than a quarter of the deaths, were recorded in public institutions. The deaths of infants showed a considerable decline, while those of elderly persons had increased, and exceeded the number in any previous week of this year. The causes of 30, or nearly 13 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

WAR OFFICE.—Grenadier Guards: Surgeon-Major F. B. Baker is placed on retired pay with the honorary rank of Brigade Surgeon; Surgeon George B. Stuart, M.B., to be Surgeon-Major, vice F. B. Baker, retired.

ARMY MEDICAL STAFF.—Surgeon-General Grahame Auchinleck, M.D., has been placed on retired pay; Brigade Surgeon Oliver Codrington, M.D., is granted retired pay, with the honorary rank of Deputy Surgeon-General; Surgeon-Major William Robertson, M.B., is granted retired pay, with the honorary rank of Brigade Surgeon; Deputy Surgeon-General William Arthur Thomson, M.B., to be Surgeon-General, vice Grahame Auchinleck, M.D., granted retired pay; Deputy Surgeon-General Edward Malcolm Sinclair, M.D., from half-pay, to be Deputy Surgeon-General, vice William Arthur Thomson, M.B., promoted. Brigade Surgeon Edmund Greswold McDowell, C.B., to be Deputy Surgeon-General, vice Alexander Guthrie, M.D., deceased.

ADMIRALTY.—Royal Naval Artillery Volunteers, Clyde Brigade: John Gray McKendrick, M.D., LL.D., F.R.S., to be Honorary Staff Surgeon.

YEOMANRY CAVALRY.—Lancashire Hussars: Surgeon Edward Henry Beaman resigns his commission.—Middlesex: Edward Stewart, Gent., M.D., to be Surgeon.

ARTILLERY VOLUNTEERS.—3rd Middlesex: Surgeon Edward Godfrey Purcell is granted the honorary rank of Surgeon-Major.—3rd Lancashire: Michael John Fox, Gent., to be Acting Surgeon.—2nd Middlesex: Surgeon Thomas Thyne, M.D., is granted the honorary rank of Surgeon-Major.

ENGINEER VOLUNTEERS.—2nd Gloucestershire (the Bristol): George Munro Smith, Gent., to be Acting Surgeon.

RIFLE VOLUNTEERS.—3rd (the Buchan) Volunteer Battalion, the Gordon Highlanders: Alexander Forbes Trail, Gent., M.B., to be Acting Surgeon.—1st Berwickshire: James Duncan Jeffrey, Gent., to be Acting Surgeon.—2nd Glamorgan: Captain Edmund Samuel Warburton to be Acting

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Surgeon.—3rd Lancashire: Surgeon John Burns is granted the honorary rank of Surgeon-Major.—6th Suffolk: Acting Surgeon William Thomas Angove resigns his appointment.—2nd Wiltshire: Surgeon and Honorary Surgeon-Major Charles Hitchcock, M.D., resigns his commission; also is permitted to retain his rank and to continue to wear the uniform of the corps on his retirement.—2nd Volunteer Battalion (the Gloucestershire Regiment): Arthur Fowell Turner, Gent., to be Acting Surgeon.—1st Dorsetshire: Surgeon Robert Godolphin Long resigns his commission; also is granted the honorary rank of Surgeon-Major and is permitted to continue to wear the uniform of the corps on his retirement.—3rd Durham (the Sunderland): Robert John Collie, Gent., M.D., to be Acting Surgeon.—3rd Volunteer Battalion (the Norfolk Regiment): Acting Surgeon Herbert Francis Prince resigns his appointment.—10th Lanarkshire (Glasgow Highland): George Bell Todd, Gent., M.B., to be Acting Surgeon.

Correspondence.

"Audi alteram partem."

THE FELLOWSHIP OF THE ROYAL COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—I have been surprised to see how little notice has apparently been taken of the proposed changes for the admission to the Fellowship of the Royal College of Surgeons of England. I allude more particularly to the exemption from the Primary Examination of Members of fifteen years' standing. I trust that, according to the well-known maxim "Audi alteram partem," you will allow me space to enter my protest against this proposed change, although by so doing I show want of agreement with some of the conclusions in your leader in the issue of the 20th inst.

It would be interesting to know on what grounds the Council of the College has felt it to be necessary to increase the number of Fellows on a reduced qualification. At the present time the diploma F.R.C.S. Eng. is considered, and I believe rightly so, the "blue ribbon" of surgical diplomas, I may say of the world. Why? Because of the known severity of the examinations, even apart from the number of distinguished men who have held it. Of the actual examinations the Primary is nowadays the severer, requiring much training and study as well as ability to acquire the requisite knowledge of anatomy and physiology. Every vexatious difficulty, so far as the curriculum is concerned, has now been removed, such as the necessity for extra courses of dissections, lectures, or even the waiting till a certain age is reached. Now any Member, as soon as he has been six years acquiring the knowledge of his profession, may, if he has the ability, present himself for examination and pass. "Where there is a will, there is a way." I know several gentlemen who, whilst engaged in large general practices, by the exercise of the necessary self-denial, have *made* time, read up, and passed the Primary as well as the Final. There is such a frightful tendency at present to level *down*. For goodness' sake, let some diplomas remain which are really distinctions, and which demand serious hard work as well as ability. I doubt whether there be any necessity, or it be even desirable, either in the interest of the College or of surgery generally, to increase the number of Fellows by lowering the present standing of a severe, searching, and scientific examination. There is no falling off in the number of candidates willing and able to undergo the test under the present system. On the contrary, year by year they are steadily increasing. Exactly the same argument might be used in the case of M.D. or M.B Lond., or indeed of any good medical degree, for the exemption to senior men of "subjects of minor importance to the practitioner." Why should not the First M.B., the Preliminary Scientific, or even the Matriculation be dispensed with? I believe the College made a retrograde movement some years ago in abolishing Greek and other extra subjects in the Preliminary Examination for the Fellowship.

I take no exception to the proposal to confer the honorary Fellowship on certain men of standing who have specially distinguished themselves, provided that the power is exercised with very great discretion. They will be known as F.R.C.S. (Hon.), and will not be confused with F.R.C.S. (Exam.), which latter will always carry with it the greater distinction.

I cannot but foresee disaster to the prestige of the College, to its Members equally with its Fellows, if so short-sighted a policy as lowering the standard of any of its examinations be carried out.

Your obedient servant,

London, March 29th, 1886. CHARLES GROSS, M.B., B.S.

THE LATE DR. BALY.

To the Editor of THE LANCET.

"——et idem
Indignor, quandoque bonus dormitat Homerus."

SIR,—The words with which I have ventured to cap this letter rose to my lips on Saturday morning, when startled by the new reading of history contained in the first of your "Annotations." You have there stated, in a moment of very unaccustomed forgetfulness, that Dr. Baly was never made Physician to Her Majesty the Queen; whereas that honourable position was really occupied by him for a year and a half.

In the obituary notice given in your issue of Feb. 9th, 1861 (p. 147) occur these words:—"In 1859 a physician was required who might share with Sir James Clark the office of regular attendance on the Queen and Royal Family. Those who were charged to make a just selection for this high office consulted free from all personal regards, from all solicitations and undue influences; they had the whole profession to choose from; and when, to Baly's great surprise, he was selected, the unanimous voice of the whole profession acknowledged that he was the fittest man. How well he justified the opinion was shown by the proofs of confidence which he received from the Queen and the Prince Consort, and by the esteem in which he was held in all the palace."

The Prince Consort, writing to Baron Stockmar on Jan. 29th, 1861, says (see "Life of Prince Consort," by Sir T. Martin, vol. v., p. 288): "We had the great misfortune yesterday to lose Dr. Baly, who was killed in an accident on the railway between London and Wimbledon. For us this is a serious loss, as he had gained our entire confidence, and was an excellent man, and Clark has quite given up practice."

I may here with propriety add that substantial proof of the Queen's gratitude and esteem followed, not long after Dr. Baly's death, in the assignment to his younger and unmarried sister of a set of apartments at Hampton Court Palace, which she still enjoys.

I am, Sir, yours faithfully,

March, 1886. ONE OF DR. BALY'S EXECUTORS.

*** Our correspondent will, we think, acknowledge, on reflection, that we correctly stated the facts. It is perfectly true that in April, 1859, the Queen was "pleased to appoint Doctor William Baly, F.R.S., to be Physician Extraordinary to Her Majesty," and we regret that we omitted to mention this. The "coveted post" to which we alluded was, however, that of *Physician in Ordinary* to the Queen. We are well aware of the high appreciation in which Dr. Baly was held by the Queen and the Royal Family, and that he went abroad with Her Majesty and attended her in the absence of Sir James Clark.—ED. L.

THE USE OF ANÆSTHETICS.

To the Editor of THE LANCET.

SIR,—In the annotations in this week's LANCET attention is drawn to the dangers which attend the use of chloroform when employed *alone*.

Having had an extended experience in the very frequent administration of chloroform alone, I would venture to think that the very strong opinion publicly expressed against chloroform in THE LANCET is likely to do serious harm, by creating a panic and raising fears and doubts which are not altogether justifiable. If we possessed an anæsthetic agent that was absolutely safe, the cry against chloroform would assuredly be right; but it is not so, and deaths from ether and other agents do occur. Ether may, and

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does, produce at times alarming and even fatal symptoms. I have seen sudden syncope occur during the administration of ether with Clover's smaller apparatus, and active measures called for to recover the patient. I am convinced that in some cases of strangulated hernia (not necessarily in elderly people) a fatal termination has been hastened by the administration of ether; and though ether rarely kills suddenly, it assuredly does so in some cases—it may be a few hours, or even days, after its administration.

As regards chloroform especially, ought it not, perhaps, to be more fully recognised than it is at present that its administration in surgical operating practice requires a very special study and experience? And, perhaps, it is not justifiable to recommend to a patient that anyone is competent to give chloroform. To enforce the truth of this it is only necessary to refer to the diverse ways in which chloroform is administered. In many cases the attention of the administrator is, unconsciously perhaps, divided between the chloroform and the operation.

In the hands of one who is careful at every moment to watch the respiration of his patient and to ignore the operation, and who gives enough and no more chloroform to produce a quiet unconsciousness, and who avoids pushing it to the degree of stertor, and who also does not neglect the position of the lower jaw and the state of the pulse, chloroform is a comparatively safe and most reliable anæsthetic. The operating surgeon, or his assistant, should assist in its careful administration by avoiding sudden alterations in the position of the patient. It is not justifiable to give chloroform in the sitting or, as I believe, in the semi-recumbent position, and perhaps chloroform should be abolished in dental practice. A subcutaneous injection of one-sixtieth of a grain of atropia with one-twelfth of a grain of morphia should be given about ten minutes before commencing the administration of chloroform. Considering the enormous benefits conferred by chloroform, I would say that, in my humble opinion, what is wanted is not so much a safe anæsthetic as a safe anæsthetist, and to urge that in the hands of those experienced in its use chloroform possesses many advantages both to the patient and the administrator that ether does not. In conclusion, Sir, I write of chloroform as I have found it, and in all humbleness and lowness of spirit, and with no desire to stir up the wrath of the champions of ether *v.* chloroform.

I am, Sir, your obedient servant,

ARTHUR G. BLOMFIELD, M.D.,
House-Surgeon, Devon and Exeter Hospital.

March 27th, 1886.

*** Dr. Blomfield does not make any reference to the A.C.E., the mixture of the three agents, which forms a safe anæsthetic, and by the use of which the dangers of chloroform alone and the inconveniences of ether are avoided.—ED. L.

THE DUBLIN HOSPITALS COMMISSION.

To the Editor of THE LANCET.

SIR,—Your Dublin correspondent has quoted extensively from the evidence given by Dr. Thomson before the Hospitals Commission, and as he seems to agree with him that Dublin is over-hospitalled, and that some of the existing hospitals should be amalgamated, to the advantage of teaching and of the public as well as of the patients, it is right that the other side of the question and reasons for the opposite opinion should be given.

1. Amalgamation is impracticable because the distances are too great to render one auxiliary or ancillary to the other for administration, treatment, or teaching. Moreover, the assurance of a friendly and harmonious co-operation of different staffs would be impossible. 2. The proportion of 6*s.* 8*d.* in the £ to the food of patients and 13*s.* 4*d.* to the general establishment is not worse than the Poor-law system, and it is ordinarily the proportion of necessaries to general house expenses in private families. 3. Dublin is not over-hospitalled, and a comparison with any other city does not afford ground for argument, because Dublin contains a general labouring class (according to the health officer, Sir Charles Cameron, and the Registrar-General, Dr. Grimshaw, not one of whom was examined before the Commission) of about 160,000 or 33,000 families residing in 48,000 rooms with utterly inadequate cubic space, and with a mortality of 42 per 1000 per annum. Such being the case, there will at least be 6 per cent. of this class constantly sick, or 9600; and if we allow that one-half will be able to provide themselves through dispensaries, we have left another to provide for, and at present there are about 2000 in the union hospitals, and there is bed accommodation space in all the hospitals for about 2400; so that Dublin, under its condition, cannot be shown to be over-hospitalled. Each of the staff has only a few patients on account of want of funds. 4. When medical fees are reduced, houses for the poor equal, and the provident system extended in Dublin as in other large towns in the empire, it will be over-hospitalled. 5. It is reasonable that the Imperial grant of £16,000 a year, originally given for encouraging medical research and teaching, as well as for support of hospitals, should be divided into a portion for medical research open to all medical men in the country and into a portion for results. I have clearly and incontrovertibly proved that during twenty-one years at the Army Medical Examinations the Dublin Medical School has lagged in the rear. My proposition, I think, would restore it to its lost position. 6. The public grant should not be shared with specialist hospitals. The reason is obvious. They will always have their special patrons, and the teaching in them, being rather athletic than developmental, does not require national support. 7. The Commission was scarcely well chosen, and the witnesses should have included Sir Charles Cameron and Dr. Grimshaw, the health officer and Registrar-General respectively.

I have the honour to be, Sir, yours faithfully,

JOHN ROCHE, M.D., &c.

Mount Clarence, Kingstown, March 22nd, 1886.

WELLINGTON COLLEGE.

To the Editor of THE LANCET.

SIR,—My attention has been drawn to an occasional note in THE LANCET of March 20th, which speaks of the "number of boys at present excluded from classes through illness" in this school. As such statements, apparently circumstantial, and given with authority, though not derived from nor verified at any official source, are likely to alarm parents and to do wrong to the school, will you allow me to say that the average number of boys out of school on the ground of ailment or accident, grave or slight, during the present term has been 13·6 out of a total number of 405. Unless I am much misinformed, this is not a large average as compared with other healthy schools in such an exceptionally severe spring. As soon as the weather mitigated, the number dropped to the usual average. The maladies have been mainly slight colds and coughs. There have been two cases of pneumonia, both of them now convalescent. Perhaps I may also say that the daily average of boys out of school during the past year was under 4, during the past two years under 4·5, out of rather more than 400. In the two years there have been only two cases of infectious illness, one of measles and one of scarlatina.

I am, Sir, your obedient servant,

E. C. WICKHAM,
Head Master.

Wellington College, Wokingham, March 23rd, 1886.

*** Mr. Wickham does not mention that during the period embraced by his letter, in which the institution is represented to have been exceptionally free from illness, one of the masters of the College died from septicæmia after six days' illness, that a boy died from peritonitis after four days' illness, that one of his own household died also of peritonitis, that a servant of the College died from pneumonia after four days' illness, and that a labourer on the grounds died also of pneumonia complicated by septicæmia. These following other similar deaths are suggestive of insanitation. From 13 to 14 per cent. of the deaths in the registration area in which Wellington College is situated are caused by pneumonia. These facts point to a distinct pneumonic tendency in the locality. The two boys recently ill with pneumonia, out of an average of from thirteen to fourteen cases of sickness, is a further confirmation of this disposition to pneumonia in the district. At the schoolboy age pneumonia is rare, for it is a disease affecting chiefly those under five and over twenty. Moreover, an average of from thirteen

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to fourteen boys incapacitated for work through illness at any one time, and in the absence of infectious disease, is more than should occur among healthy schoolboys. If Mr. Wickham will compare this number with the number of boys detained at home through illness after the Christmas vacation, when they have been subjected to all the irregularities and festivities of Christmas holiday time, during the coldest month of the year, we think he will find that the illness among the boys while under his charge, "in loco parentis," is in excess of what occurs while under their own parents' supervision. This should not be the case. We hope the time is not far distant when every public school will be called upon to make an annual return of sickness. At present there are no trustworthy statistics available.—ED. L.

HOPEINE.

To the Editor of THE LANCET.

SIR,—Referring to a letter of "Seismos" in THE LANCET, p. 497, regarding the composition of hopeine, I beg to call your attention to the explanation published by Dr. Williamson in the *Chemiker Zeitung* (1886, p. 238). According to this statement, the wild Arizona hops, as well as the lupuline obtained therefrom, contain at least two alkaloids—viz., one similar and probably even identical with morphia, called isomorphia, the other different from morphia in its physical and chemical properties as well as in its physiological action. The fact, proved by further experiments conducted by Dr. Williamson, that the precipitated hopeine prepared by an English manufacturing firm and supplied to French physiologists contained two alkaloids (both extracted from lupuline) has been confirmed by an analysis by Mr. Harland and independently by Dr. Weissenfeld. The quantity of isomorphia, according to Dr. Weissenfeld's statement, is larger in the lupuline than in the hops, while in hops separated from lupuline the other alkaloid (hopeine) is contained in larger propdrtion. As the quantity of alkaloids contained in hops is exceedingly small, the experiments meet with unusual difficulties. It seems that even Dr. Williamson's pure hopeine contained traces of isomorphia, and the principal object of further experiments is the separation of the two alkaloids after extracting the same from hops or lupuline. There can be no doubt that hopeine greatly differs from morphia and from isomorphia. A small sample I received from Dr. Williamson (although producing the well-known morphia reactions arising probably from traces of isomorphia) had a very marked mydriatic influence on the pupil of the eye, while morphia never produces dilatation. The pungent bitter flavour of pure hopeine and the burning effect on the nerves of the tongue are followed by insensibility of the same to a certain degree. Concentrated solutions endermically applied produce a prickly sensation on the skin. The effect on the system, if used hypodermically, is exceedingly strong, and hopeine could not be injected without danger in the same dose as morphia; dogs are killed by half the dose of hopeine than that required of morphia.

I am, Sir, yours faithfully,

Camomile-street, March 12th, 1886. W. WILD, M.D.

DEGREES FOR LONDON MEDICAL STUDENTS.

To the Editor of THE LANCET.

SIR,—"Post factum nullum consilium" is indeed most true, and will be bitterly proved to many a man now labouring to get the London Colleges' licence to practise, unless our Colleges have the pluck, they certainly have the success, to obtain power to grant degrees instead of that, to the general public, unknown quantity called a "licence." I speak from experience on this subject, and none know where the shoe pinches so well as he who wears it.

A short time since I succeeded to a good-class practice in a residential suburb of a large provincial town. My professional brethren are mostly old-established M.D.'s, and to my certain knowledge, having been told by mutual friends, I have lost several families simply because they would have a "Doctor," and not a mere "Surgeon"; besides this, I am constantly reminded, of course indirectly and most politely, that a surgeon is a very second-rate man compared to an M.D. A few days ago a sort of deputation of relatives and friends called upon me to urge my taking a degree, for, being anxious for my success, they saw, they said, how much the want of a degree handicapped me. This, Sir, is outside testimony, and therefore of value. Of course I have now no time or opportunity to take a degree, and consequently must go on living down public opinion that our English qualifications are as naught compared to an M.D. until our Colleges assert our rights.

No time could be more opportune than the present for our Colleges to get the Charter they are entitled to. Her Majesty has conferred a great honour upon them and us; would she not be equally willing—nay, anxious—to do us justice as well as honour? I am, Sir, yours truly,

March, 1886. JUSTICE.

CYCLICAL ALBUMINURIA.

To the Editor of THE LANCET.

SIR,—I am sorry that I did not notice Dr. Pavy's acknowledgment of my paper, and am obliged to him for his letter. My experiments were something more than repetitions of those in his Gulstonian lectures, and arrived at different results. My table was not intended to show the albumen per hour. The periods are too long, and the results, when used for this purpose, obviously misleading. Runeberg (zur Frage des Vorkommens der Albuminurie bei gesunden Menschen) is the only writer I know who has given a table of the hourly secretion of albumen, and that fully bears out my argument, as it shows that the albumen in the forenoon is not only relatively, but absolutely greater per hour.

I am, Sir, yours obediently,

Birmingham, March 31st, 1886. ROBERT SAUNDBY, M.D.

EDINBURGH.

(*From our own Correspondent.*)

END OF THE WINTER SESSION.

THE winter courses of lectures in the Medical Faculty of the University came to an end on March 31st, the customary valedictory addresses being delivered and the results of the class competitions announced. In the Extra-academical School the session was brought to a close on the 26th inst.

SCHOOL OF MEDICINE, SURGEON'S HALL.

At a recent meeting of the lecturers to the Royal College of Surgeons, Dr. D. Berry Hart was elected to the Lectureship of Midwifery and Diseases of Women, in the room of the late Dr. Angus Macdonald. Dr. Hart has already acquired the reputation of a successful extra-academical lecturer upon these subjects, having delivered courses of lectures during two summer sessions, which have been well attended by students, and he will prove a most valuable addition to the teaching staff of the College.

HONORARY DEGREES OF EDINBURGH UNIVERSITY.

A list of honorary degrees to be conferred at the approaching graduation ceremonial has been published. Amongst those who are to receive the degree of LL.D. are Professor Dicey, Fellow of All Souls College, Oxford; Mr. R. M. Cust, Secretary of the Royal Asiatic Society; Dr. F. J. Mouat; Sir Chas. Nicholson, Bart., M.D., formerly Chancellor of the University of Sydney; Mr. John Small, M.A., Librarian to the University of Edinburgh; Dr. Schmitz, formerly Rector of Edinburgh High School; and Mr. John Wilson, Emeritus Professor of Agriculture in the University of Edinburgh, and until recently Secretary to the Senatus Academicus.

UNIVERSITY REFORM.

The members of the University General Council Association are again taking active steps in the direction of urging upon Government the necessity for a sweeping measure of reform. A memorial upon the subject, signed by Dr. Rutherford Haldane, chairman of the General Committee of the Association, has been forwarded to the Secretary for Scotland. The memorial, which is a carefully compiled document of considerable length, contains a number of recommendations, the substance of which, it is hoped, will be introduced into the Universities (Scotland) Bill, when that long-expected measure does at length make its appearance. These recommendations deal specially with the relative status and powers

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of the University Court, the Senatus, and the General Council, In the first place, it is urged that the General Council, a body composed of 5000 members, graduates of the University, should have some distinct representation in the management of University affairs. To secure this, it is proposed to aggrandise the University Court by giving it the entire control of University finance, which is at present administered by the Senatus, by increasing its membership, at the same time making it a public Court, and by making it truly representative of all University interests, the proposition being that of the fifteen members of the proposed Supreme Court no fewer than five shall be elected by the General Council, whilst the Senatus shall have two representatives and the matriculated students one; the Town Council and certain educational bodies to be represented also by assessors. Another of the recommendations deals with extramural or open teaching; it is strongly urged that this principle should be extended to all the faculties in the University, the great success which has attended its application to medicine, in the development of the Edinburgh School, being cited as an instance of what might result in other branches of technical education were the system more extensively brought into vogue. The memorial is a document of considerable importance, since it represents the view very generally held by members of the Extra-academical School, and by many who are even more closely connected with the University.

PROPOSED STUDENTS' UNION.

A great effort is at present being made in Edinburgh by the students and their friends to found a Union and Debating Club on the plan of the institutions which bear the same name at Oxford and Cambridge. The scheme includes the erection of club buildings, which are to contain a fine hall for union debates, dining, smoking, and reading rooms, committee rooms, &c. It is hoped that an institution of this character will, to some extent at least, obviate the great defect in the Scottish university system—viz., the all but complete isolation in which the students individually live, and as a result of which they lose that social interchange of ideas which is so important a part in the broadening influences of an academic career. The scheme has received already considerable material support from past graduates of the University, and it is hoped that many more will contribute towards this valuable addition to the educative effectiveness of their *alma mater*. Contributions in furtherance of the scheme should be sent to the secretaries of the Students' Representative Council, at the University.

Edinburgh, March 31st.

IRELAND.

(From our own Correspondent.)

SACCHARIN.

SACCHARIN is a substance lately discovered in America by Professor Falberg, which is 230 times sweeter than sugar, and is obtained from coal-tar. At a recent meeting of the Royal Dublin Society Professor Emerson Reynolds, F.R.S., read a paper on this substance, which is of importance to medical practitioners, inasmuch as it can be used to sweeten and render palatable the food of persons who, suffering from diabetes, are precluded from using sugar, and for some months past it has been used for this purpose in one of the Berlin Hospitals. In appearance it resembles flour, but it is denser and is dissolved easily by hot water. It is rather an expensive substance, its present price being about 40*s.* per pound. The reason of the high cost of saccharin is due to the complex nature of the operations in obtaining it from coal-tar. As, however, an ounce of it will go as far as fourteen pounds of sugar, its actual expense as a sweetening agent is not much greater than that of sugar. Professor Reynolds referred in his paper to the question as to whether this substance could be taken without detriment to the human frame. To ascertain this, experiments were made on dogs, and eighty grains were administered daily to a dog for some time, without the slightest ill effects. When the cost of production becomes lessened saccharin may become a formidable rival to the sugar manufacture.

LEFT LUMBAR COLOTOMY.

I had an opportunity last Tuesday of seeing, at the City of Dublin Hospital, some cases of lumbar colotomy, recently operated on by Mr. H. Gray Croly, senior surgeon to that institution. The cases were three in number: two males, operated on for scirrhus of the rectum eight days and six weeks since respectively; and a female a fortnight ago, for recto-vaginal fistula. The cases are all going on favourably. It is rather an unusual circumstance that there should be three cases of lumbar colotomy in hospital at one time, and operated on by the same surgeon, and it is therefore worth recording. In the same hospital there is another patient, who, singular to state, has for the second time had Cock's operation for impermeable stricture performed on him by Mr. Croly—a most unusual occurrence.

SCLERODERMA.

An example of this very rare disease was exhibited last week at a meeting of the Medical Section af the Academy of Medicine in Ireland, by Dr. George F. Duffey. The subject was a female, and the disease commenced in February, 1885, on the index and middle fingers of the right hand, and in the following October both hands became implicated. At present there is a good deal of rigidity of both forearms, with some swelling of the hands, while the side of the neck and front of the chest are also implicated. The treatment adopted by Dr. Duffey was the internal administration of the iodide of potassium, and the local application of glycerine of starch, and from all accounts an improvement in the parts affected has certainly taken place.

THE DUBLIN BARRACKS.

It is stated that in consequence of the condition of the barracks in Dublin it is contemplated, in addition to the block of new buildings which are to be built at a cost of £112,000, to expend a sum of £1750 on the drainage of the Richmond Barracks.

Dr. Thomas Leary, of Castlederg, has been placed on the Commission of the Peace for the County of Tyrone.

Dublin, March, 30th.

BELFAST.

(From our own Correspondent.)

THE ROYAL UNIVERSITY.

A CONTEST is at present going on for a seat in the Senate of the Royal University. Mr. William Thompson of Dublin is a candidate, and will be strongly supported by the northern graduates of all professions. Mr. Thompson is himself a graduate in Arts and in Medicine of the late Queen's University, and is a leading Dublin surgeon, being connected with one of the hospitals. The feeling here is very much in his favour, and his election will give great satisfaction.

THE ROYAL HOSPITAL.

At the ordinary weekly meeting of the Board of Management of the Royal Hospital, held on March 20th, Mr. W. T. B. Lyons, D.L., was presented with two portraits of himself, one for the hospital, the other for his own family, by the members of the Board of Management and Life Governors. Mr. Lyons has for years devoted himself with energy to the work of the Royal Hospital, and, as a speaker at the meeting pointed out, he has been a zealous worker and sound adviser, in the darkest as well as the brightest days of the charity.

BELFAST OPHTHALMIC HOSPITAL.

From the reports presented at the last annual meeting of this deserving charity, we gather that during the past year 1260 cases have been treated in the extern department, 890 for diseases of the eye, 360 for diseases of the ear, and 70 for throat diseases, while in the wards of the hospital 89 cases have received treatment for more severe forms of similar diseases. The recipients of the charity have been chiefly the poor of Belfast and the North of Ireland. During the year the sanitary condition of the hospital has been carefully inquired into, and every effort made to keep the house in an excellent state of sanitation. During the past year a large sum of money has been expended in extensive and much-needed repairs, and in painting and papering the greater part of the house. Lady Johnston, with her usual generosity, on ascertaining this, offered to defray all the expenses therewith, and the accounts, amounting to over £54, have since most generously been paid by her. A large class of students is receiving clinical instruction at the hospital.

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THE TOWN COUNCIL.

Owing to the death of one of the aldermen there is at present a contest, and Dr. James Graham has been requested to come forward by ratepayers of all shades of political opinion, who deplore the present intolerable nuisance caused by the River Lagan, which is practically an open sewer, and who think that there should be some amendment of the deleterious influence caused by emanations from the gas-works. Dr. Graham, who lives in the vicinity of both these nuisances, pledges himself to endeavour to have the existing state of sanitation remedied. As Dr. Graham is deservedly popular, and as he is coming forward on the public health platform, we are likely to have an interesting contest.

Belfast, March 30th.

PARIS.

(From our own Correspondent.)

REAPPEARANCE OF CHOLERA IN BRITTANY.

INTELLIGENCE has reached Paris of the reappearance of cholera in Brittany. It will be remembered that the disease committed great havoc in the Guilvincc and Audierne, two fishing villages, to which the origin of the present threatened epidemic has been traced, and where, it is suggested, the germs of the disease have lain dormant till now. The reappearance of the disease is attributed, as usual, to overcrowding and to the filthy condition of these places, particularly at this time of the year, when there is a great influx of fishermen from different parts of the littoral of Brittany. Within the last fortnight about 2000 have already arrived, who, finding it difficult to get lodgings, huddle themselves together in every available hut, where they take their families, nets, and other instruments used in fishing, without even washing them or themselves before retiring. Notwithstanding the severe lesson of last year, nothing seems to have been done to avert the possible return of another epidemic of cholera. It is reported that on the 23rd inst. a fisherman arrived at Tréboul from Audierne, where it was known that he was affected with cholera. He was soon followed by others equally affected by the disease, and to the 29th of March, after a few deaths, the exact number of which was not given, there were in the small village of Tréboul thirty cholera patients, one-third of whom are said to be in a very serious state. It would appear that this locality is not the only one infected, as two fatal cases were reported to have occurred at Gouesnou, about six kilometres from Brest, and several cases have occurred at Concarneau, where one death took place on the 26th. There cannot be two opinions as to the culpable neglect on the part of the authorities in having allowed these men, who were known to have been affected with cholera, to travel about the country and thus propagate the seeds of the disease.

DEATH OF DR. FOURNIÉ.

Dr. Edward Fournié, a well-known laryngologist, died on the 24th inst. in the fifty-fourth year of his age. He began his career as an officier de santé in the navy during the Crimean War. After the war he took his degree at Montpelier, then proceeded to Paris and devoted himself to scientific researches, particularly on the functions of the different parts of the encephalon and of the nervous system. He published several works appertaining to the brain and throat, and was for many years Medical Director of the National Institution for the Deaf and Dumb. He was also editor of the *Revue Médicale Française et Étrangère*.

Dr. Gallard has been elected member of the Academy of Medicine; and Professor Vulpian, Perpetual Secretary to the Academy of Sciences, in the place of M. Jamin (deceased).

Paris, March 31st.

BRISTOL EYE HOSPITAL.—At the annual meeting of the subscribers to this institution on the 29th ult., it was reported that during last year the number of patients under treatment was 11,224, an excess of 709 over the previous year. The receipts amounted to £771, a sum which exceeded the expenditure by £40. The premises at present in use are inadequate, and the committee appeal for funds to enable them to carry out in a satisfactory manner their intention of considerably increasing the accommodation of the hospital.

NEW YORK.

(From our own Correspondent.)

AN HONORARY DEGREE FOR MR. LAWSON TAIT.

AT the annual commencement of the University Medical College on March 6th, the announcement was made by the Chancellor that the University had conferred the honorary degree of Doctor in Medicine upon Mr. Lawson Tait of Birmingham, England. Applause greeted this action of the University, for Mr. Tait has many very enthusiastic admirers in New York. His visit to this city, and especially his operation upon two patients in the great amphitheatre of Bellevue Hospital, was a memorable event. He diagnosed diseased ovaries in each case, after a brief examination in the presence of several hundred medical men and students, and proceeded at once to operate. His diagnosis proved to be correct, and both patients made good recoveries, though antiseptics were not used. He has several followers in New York, and extirpation of the ovary is now of almost daily occurrence. The antiseptic treatment, however, is very rigidly followed.

DEATH OF DR. S. O. VANDERPOEL.

Dr. Vanderpoel was well known for the interest he took in quarantine reforms. He was for many years health officer of this port, and was successful in placing it on a thoroughly practical basis. Detention for a given period was no longer the rule governing the care of ships, but sanitary inspection and cleansing became the practice. The result of this policy was that shipmasters took the utmost pains to bring their vessels into port in the most cleanly condition, and thus they were able to escape quarantine. Dr. Vanderpoel was Professor of Hygiene in the University Medical College. He was a supporter of the new code movement.

DEATH OF DR. AUSTIN FLINT.

While writing the above the announcement was made that this eminent physician had been stricken with cerebral apoplexy, and immediately after followed the news of his death. No physician was better and more favourably known in this country. He had been teacher and author for forty years. His father and grandfather were physicians of considerable eminence, and he early began a course of studies preparatory to entering upon the study of medicine. He first located in the western part of this State, where he established a medical periodical. He began to give courses of lectures in medical colleges, and at one time was connected with a school in New Orleans. Subsequently he located permanently in New York, where his best work was done. He was selected as president of the proposed session of the International Medical Congress at Washington in 1887. Dr. Flint was in his seventy-fourth year, and gave no evidence of failure of health. He was busily preparing for the meeting of the British Medical Association, where he was to deliver an address.

MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

The next meeting of this body will soon occur, at St. Louis. It is anticipated that some decisive action will be taken in regard to the much-disputed meeting of the International Medical Congress. There is no change in the current of medical opinion in regard to the controversy which has arisen. The profession as a body take little interest in the matter, while those engaged actively in the dispute remain hostile and unreconcilable. It is hoped that when the Association meets all differences will be adjusted and harmony secured.

New York, March 14th.

MEDICAL NOTES IN PARLIAMENT.

The Lunacy Acts Amendment Bill.

IN the House of Lords, on the 30th ult., the Lunacy Acts Amendment Bill was considered in Committee on recommitment. The Lord Chancellor proposed amendments, which were agreed to, modifying in some particulars the clauses relating to private asylums. Lord Grimthorpe expressed his opinion that no case whatever had been made out against private asylums, and he quoted figures to show that the discharges from those institutions were more numerous than the discharges from public asylums. The Lord Chancellor did not concur in the conclusions of Lord Grimthorpe,

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and he pointed out that, untested, the figures relied on by that noble and learned lord were of little value in the argument, because the removals from one private asylum to another were much more frequent than those from one public asylum to another, and no doubt all removals were enumerated under discharges. The various clauses having been agreed to, the Bill was ordered to be reported with amendments.

The Idiots Bill.

The Lord Chancellor moved the second reading of the Idiots Bill, which, he said, was drawn on the same lines as his Lunacy Acts Amendment Bill. The motion was agreed to.

Contagious Diseases Acts Repeal (No 2) Bill.

In the House of Commons, on the 25th ult., Mr. Stansfeld moved the second reading of this Bill. Mr. Cavendish Bentinck strenuously opposed the repeal of the Acts, and gave instances of cases in which their operation had been beneficial. Eventually, when the question was put a first time a division was challenged, but on the second occasion the second reading was agreed to without opposition.

Vaccination.

In reply to Mr. A. O'Connor, who asked the Under Secretary of State for Foreign Affairs if he would obtain information respecting the vaccination with humanised lymph of seventy-nine children in the Island of Rügen in June last; whether it was true that seventy-six of them were attacked in a few days with contagious disorder, which was communicated to their parents, brothers, and sisters to the number of 320; what number of the children died; and whether the lymph was obtained from the Royal Vaccine Institution at Stettin,—Mr. Bryce stated that Her Majesty's Ambassador at Berlin had been instructed to report on the subject.

Obituary.

JOHN FREMLYN STREATFEILD, F.R.C.S.

ON Thursday, March 18th, there somewhat suddenly passed away, at his house in Upper Brook-street, John Fremlyn Streatfeild, the Senior Surgeon of the Moorfields Ophthalmic Hospital, Ophthalmic Surgeon to University College Hospital, and Professor of Clinical Ophthalmic Surgery in University College. His illness was a short one. He performed an iridectomy for glaucoma on the previous Friday, and saw some patients at his own house on Saturday morning, but he felt too ill to go out, and sought the aid of his friend, Dr. J. E. Pollock, whose unremitting care was unable to arrest the progress of an acute attack of pneumonia, which terminated in death at a few minutes before two on Thursday afternoon. Mr. Streatfeild had had several attacks of bronchitis, and a few weeks before his fatal illness had a threatening of pneumonia, which apparently passed away after a few days' rest in bed. In unselfish obedience to a professional call he took a railway journey into Kent on one of the last days of the prolonged severe weather, and received a chill, to the effects of which he succumbed.

John Fremlyn Streatfeild was the son of the well-known Kent antiquarian, the Rev. Thomas Streatfeild, of Chart's Edge, Westerham, Kent, by his second wife, Clare, the daughter of the Rev. Thomas Harvey, of Cowden, and was born on October 14th, 1828. His mother is still living, and in her ninety-third year. He was a delicate boy, and until the middle of his fifteenth year was educated at home by his father. He then went to the King's School at Canterbury, and afterwards for a short time to a school at Tunbridge Wells. He commenced his medical education as the private pupil of Mr. Curling, and entered as a student at the London Hospital. He became a Member of the Royal College of Surgeons in the year 1852, and during the Crimean War served, with many others known to fame, on the surgical staff of the British Civil Hospital at Smyrna. On his return to London he entered upon the study of ophthalmology, and was soon afterwards elected assistant surgeon to the Royal London Ophthalmic Hospital. In 1862 he obtained the Fellowship of the College of Surgeons. He had previously been appointed assistant ophthalmic surgeon, and soon after ophthalmic surgeon, to University College Hospital as the coadjutor of Professor Wharton Jones. He was temporarily compelled to resign this post, as a new rule had been adopted at Moorfields disqualifying for promotion at that hospital anyone who held another ophthalmic appointment. The rule was found to be inconvenient, and was speedily repealed, when Streatfeild was at once re-elected at University College Hospital.

Professionally Streatfeild will be best remembered for his great dexterity in the performance of purely ophthalmic operations. His facility in making his corneal sections was remarkable, and his skill gained for him a considerable reputation. A certain brusqueness of manner, however, militated against his obtaining a large practice, as sometimes to strangers it made him appear unsympathetic. Streatfeild required to be known to be appreciated; he was certainly not unsympathetic. Associated with his characteristic bluntness there was just beneath the surface a vein of fun ever ready to show itself, and with it no slight admixture of wit and humour. Deeper still there was a genuine sincerity, a large-heartedness, and a courageous conscientiousness which gained for him a wide respect and esteem. His circle of intimate friends was not large, as he was of somewhat retiring habits and little cared to show himself at the meetings of the Medical Societies. He was a staunch Churchman and religiously gave away a tenth of his income. He inherited his father's antiquarian and archæological tastes, and was a collector of Wedgwood, of books, of antique furniture, and especially of anything belonging to or illustrating the history of his native county of Kent, of which he had a great love. No mean draughtsman himself, he had collected a large number of drawings and sketches of much that is quaint and picturesque in Kent, of its churches, its gables and chimneys, many of which were done by his own hand during the holidays that he loved to spend with his family in what was to him truly the "Garden of England." With the sketches he brought together during these visits a large number of facts, historical and otherwise, bearing upon the history of Kent and upon its manners and customs, which he intended, if he had lived, to have made into a book. No doubt the Kent Archæological Society, of which he was an active member, will take care that all this interesting material is not lost.

Streatfeild was a frequent contributor to the literature of his specialty. For a short time he edited the London Ophthalmic Hospital Reports, and often have its pages contained notes of his cases and illustrations by his pencil. He wrote the chapters on Ophthalmology in Erichsen's great Text-book of Surgery, and papers and "notelets" have appeared in the columns of THE LANCET. More lately, he contributed several special articles to Quain's Dictionary of Medicine. His literary style of composition was peculiar, and to many readers it sometimes failed to convey clearly the meaning intended; but his writings always showed both originality and practical experience. He was one of the founders of the Ophthalmological Society of Great Britain, and its treasurer from its formation. Few of its Fellows who were present will forget the humour with which he recently demonstrated with huge dummy instruments the steps of the operation of extraction of cataract, as a suggested means of teaching to a class the manipulations of ophthalmic surgery.

Mr. Streatfeild was in his fortieth year when he married, and leaves a widow and three children.

O. E. P. CHARD, M.B. LOND., M.R.C.S., L.S.A.

GRIM death has of late been busy in our ranks. Among the members of our profession who have lately passed away might be enumerated many who have been more celebrated for their writings, or more widely known to the public at large, but none who will be more missed in private life, more lamented among his friends and patients, than the subject of this notice. Mr. Chard passed his examinations at the College and Hall in 1846. He commenced practice at Eccleston-street, Pimlico, in 1851, and while busily occupied in attending to an ever-increasing number of patients, found time to graduate and obtain the degree of Bachelor of Medicine at the University of London in 1861. His medical friends and neighbours had frequent opportunities of observing the zeal, the kindness, the solicitude, and—to his

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poorer patients especially—the benevolence of the deceased. His charity to the really deserving was equalled only by the unostentatious manner in which it was bestowed. A harder worker never lived, and but for the cares of general practice, his education, penetrating intellect, and practical ability, would have secured for him a world-wide reputation. It was to his marked character of kindness to patients and abnegation of self that he owed his rapidly fatal illness in the sixty-second year of his age. On the 3rd inst. he was called to a patient suffering from severe pneumonia. In his anxiety to save a life, he spent many hours of the subsequent five days and nights by the patient's bedside. On the 8th inst. he broke down under this severe strain of his nervous system, took a severe cold ("a chill"), showed symptoms of peritonitis, and in spite of the anxious efforts of his medical attendants, succumbed to the attack on the 13th inst. Truly may it be said that, "He was skilful enough to have lived still if knowledge could be set against mortality."

Medical News.

UNIVERSITY OF CAMBRIDGE. — At a congregation held on March 25th the degree of Bachelor of Medicine was conferred on the following gentlemen:—

Walter Edwin Facey, St. John's; Herbert Paget Tayler, Clare; Walter Hamilton Hylton Jessop, and William Thomas Holmes Spicer, Gonville and Caius.

At Gonville and Caius College, the Shuttleworth Scholarship of the value of £60 for proficiency in Botany and Comparative Anatomy, open to the competition of all registered medical students of the University who are of not less than eight terms' standing, has been awarded to John Sydney Edkins, scholar of the College.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a meeting of the Court of Examiners held on the 22nd ult. and following days, the following passed the first half of the examination for the Letters Testimonial of the College:—

Joseph Daly, Joseph C. Lavertine, Ronald McDougall, John J. Myles, and Edmond F. B. Russell.

Twelve candidates were rejected.

At examinations recently held at the Medical School of the College, medals in Surgery were awarded as follows:—

Edwin Tyrrell Cummings, Senior Silver Medal.
Cecil L. Strangman, Junior Silver Medal.

SOCIETY OF APOTHECARIES.—The following gentlemen passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on March 25th:—

Avarne, Arthur Blair, King Henry's-road, Regent's-park.
Aston, William, Ivy House, Codsall, Wolverhampton.
Harney, Thomas Richard Aloysius, M.R.C.S., Australia.
Sealy, Francis Marmaduke, Gosberton Vicarage, Spalding.

COLONIAL AND INDIAN EXHIBITION.—Her Majesty the Queen has intimated her intention of opening the Colonial and Indian Exhibition on Tuesday, May 4th.

AT the recent meeting of the governors of the Suffolk General Hospital, Dr. Macnab, of Bury St. Edmunds, was elected a vice-president of the institution.

VACCINATION GRANT.—Mr. Philip E. Hill, of the Crickhowell Union, has received for the fifth time the Government grant for efficient vaccination.

THE Royal Belgian Society of Medical and Natural Sciences has awarded a gold medal to Dr. Courtin of Bordeaux, for his treatise on the Treatment of Stricture of the Œsophagus.

LEGACIES FOR PRIZES.—M. Jeunesse has left the Faculty of Medicine of Paris sums of 1500 francs and 750 francs for the foundation of prizes in Hygiene and Histology respectively.

HOSPITAL FOR EPILEPSY AND PARALYSIS.—At the nineteenth annual meeting of the governors of and subscribers to this institution, on the 31st ult., it was stated that the total income for the past year amounted to £1908, and the debt by which the charity is hampered now amounts to £1400. The number of in-patients during 1885 amounted to 106, and the attendances of out-patients were 8088.

YELLOW FEVER AT PORT ROYAL.—The latest communications from Jamaica report that the Duke of Sutherland's yacht, *Sans Peur*, has been placed under quarantine at Port Royal, yellow fever having been contracted on board at Colon. There were four cases, one being rather serious.

AT an inquest held on the 31st ult., touching the death of Alfred H. Hackney, M.R.C.S., L.S.A., who died on the 28th ult., after inhaling chloroform for the relief of neuralgia, the jury returned a verdict of "Death from misadventure."

THE Baroness Burdett-Coutts, Lady Wolseley, and others, have started "scrap" carts, which collect broken food in Belgravia and Mayfair. It is carefully cooked and made into soups, stews, pies, and puddings, and sold at a penny a dish to the poor.

HASTINGS AND ST. LEONARDS SANITARY AID ASSOCIATION.—The fifteenth annual meeting of the members and friends of this Association was held on the 30th ult. It is claimed for this Society that it is the parent of similar institutions in London and elsewhere.

OPHTHALMOLOGICAL SOCIETY.—In consideration of the ordinary meeting of this Society on May 6th being arranged to be devoted to the discussion of the subject of Exophthalmic Goitre, it has been decided to hold an extra meeting, which has been fixed for the 8th inst.

FOTHERGILLIAN GOLD MEDAL.—This medal has been awarded by the Medical Society (trustee of the fund) to John Strahan, M.D., of Belfast. The successful essay is entitled "The Nature and Varieties of the Fevers prevalent in the United Kingdom," and will be published in due course in the Society's Transactions.

THE long-disused Spa Fields burying-ground to the south of Exmouth-street, Clerkenwell, being about to fall back to the freeholder, the Marquess of Northampton, has been handed over to the Playground Society, which is now enabled, in consequence of a grant from the Lord Mayor's fund, to employ a number of men in draining and levelling it.

"THE MAID OF KENT."—A maiden lady, named Heathorn, who is known by this title, has just completed her 103rd year, having been baptised at Maidstone in April, 1783. The venerable lady possesses all her faculties, and is reported to have endorsed a cheque without the aid of glasses on her birthday, which occurred last month.

A CLERK, until recently employed in the office of the General Council of Medical Education and Registration, in Oxford-street, has been sentenced to four months' imprisonment for embezzling sums of money, believed to amount to upwards of £500, which had been paid to him as fees for certificates of registration.

DR. EDWARD BRONNER, a German physician, who has spent some thirty years of his life in England, died a few days since at Bradford, Yorkshire. Dr. Bronner was an ardent politician, and in 1849 sat as a representative of the people in the Constituent Assembly of Baden. He was also remarkable for wide benevolence amongst the poor. He translated into English Moleschott's "Chemistry of Food."

SMALL-POX AT TOTNES.—An outbreak of small-pox at Totnes, and the efforts of the sanitary authority to check the spread of the epidemic by means of disinfection, seem to have caused considerable excitement in the town. The opposition to the precautionary measures has, it is reported, even assumed the form of personal violence against the medical officer of health and the nuisance inspector.

EAST RIDING COUNTY ASYLUM, BEVERLEY.—On the 26th ult., at about 5.20 P.M., an outbreak of fire took place in the above asylum. The fire was first observed in the roof of the house occupied by Dr. Macleod, the medical superintendent, and was well alight before being discovered. There was a strong wind blowing, which caused the flames to spread rapidly. The asylum engine and brigade were very promptly got into use. It was at once seen that the portion on fire could not be saved, so the efforts of the brigade were directed to preventing the fire spreading to the female wards, to which the superintendent's house is attached. In these efforts, aided by the direction of the wind, they succeeded. Other engines were on the spot in due time, and the fire was extinguished. The discipline of the asylum was

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excellent; the patients were out of all harm's way without any panic or uneasiness, and, had matters turned out worse, no difficulty would have occurred in removing them to some place of safety. No one was hurt or in any way injured. Much property was saved, but Dr. and Mrs. Macleod lost their wardrobes, &c.

ST. JOHN AMBULANCE ASSOCIATION.—The half-yearly report of the North Yorkshire and Cleveland Miners' Association, just issued, makes very gratifying reference to the advantages of the instruction afforded by the St. John Ambulance Association. It is stated that classes have now been established at nearly every mine, and over 1800 men have become thoroughly qualified to render first aid in case of accident.

ACTION FOR ALLEGED CARELESS ADMINISTRATION OF CHLOROFORM.—An action at law has been instituted against two of the most renowned surgeons in Russia, Professor Sklifasofski and Dr. Kusmin, for alleged carelessness in administering chloroform, causing the death of the patient. It is reported, however, by the *Moscow List* that the necropsy proved that the cause of death was not narcosis, but something else.

LONDON HOSPITAL.—Last week a highly successful ball in aid of the funds of this hospital was held, and it is expected by the promoters of the gathering that, after paying all expenses, a goodly sum, measured by hundreds rather than by scores of guineas, will be available to hand over to the treasurer of the institution. During last year the total number of in-patients admitted was 8106, of whom 5754 were free, the rest being recommended by governors. The out-patients treated in that period were 67,942. To meet its expenses, the institution has an assured income of about £14,300, while, notwithstanding the utmost economy, its expenditure cannot be kept below £47,000.

UNIVERSITY COLLEGE HOSPITAL.—The annual general meeting of the governors of this institution was held on the 26th ult., when the report of the Council for the past year was received. It was stated that, though the total annual subscriptions had not fallen off, the legacies had decreased by £4000. Instead of a festival dinner, it is intended this year to hold a bazaar and fancy dress ball. The number of in-patients during the year was 2860. It is to be regretted that at the end of the year the hospital was in debt to the tradesmen and bankers to the amount of £13,652—an excess of £2556 over the deficit of the previous year.

THE HOMES OF THE WINDSOR POOR.—An important meeting was held at the Windsor Guildhall on the 25th ult., for the purpose of considering a scheme for the improvement of Bier-lane, one of the poorest quarters of the Royal borough. After a full discussion of the subject the meeting was adjourned for a month, in order that the Town Council may take such steps as they deem fit in furtherance of the project. The co-operation of several of the Royal Princes as patrons of the undertaking has been secured, and it is proposed to establish a limited liability company, to be called "The Windsor Artisans and Labourers' Dwellings Improvement Company."

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BELL, CHARLES E., M.B.O.S., L.R.C.P., has been appointed Surgeon to the Devon and Exeter Hospital, Exeter, vice William Budd, resigned.

CLIFTON, CHARLTON, M.B., C.M.Edin., has been appointed Ambulance Surgeon to the Northern Hospital, Liverpool.

DOWNES, HOWARD, M.R.C.S., L.R.C.P.Lond., has been appointed Registrar and Resident Clinical Assistant to the North-Eastern Hospital for Children.

EDGELOW, PERCY, M.R.C.S., L.R.C.P.Ed., has been appointed House-Surgeon to St. Peter's Hospital.

EVANS, THOMAS MELANCTHON, M.R.C.S., L.S.A.Lond., late Senior Assistant Surgeon, has been appointed Surgeon to the Hull Royal Infirmary.

GREEN, C. D., M.B.Lond., M.R.C.S., L.R.C.P.L., late Registrar, has been appointed House-Surgeon to the North-Eastern Hospital for Children, vice Meyer, resigned.

HANCOCK, WILLIAM, L.R.C.P.Lond., M.R.C.S., L.S.A.Lond., has been appointed Resident Clinical Assistant to St. Luke's Hospital, London.

HUMPHREYS, CHARLES E., M.R.C.S., L.S.A.Lond., has been appointed Public Vaccinator and Medical Officer of Health for the Llanfair District of the Llanfyllin Union, vice Jones, resigned.

NEWCOMBE, FRANK, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Ancaster District of the Grantham Union.

NICHOLSON, ROBERT HICKS BOURCHIER, M.R.C.S., L.S.A.Lond., late Assistant Surgeon, has been appointed Surgeon to the Hull Royal Infirmary.

PURDY, JAMES R., M.B., C.M.Aber., has been appointed Medical Officer for the Fourth District of the Hunslet Union.

REID, IRVINE K., M.B., C.M.Aber., has been appointed House-Surgeon to the West Norfolk and Lynn Hospital, King's Lynn.

ROBERTSON, THOMAS M., M.B., C.M.Ed., has been appointed Medical Officer for the West Butterwick District of the Gainsborough Union.

SHERBURN, JOHN, M.B., C.M., M.R.C.S., late Assistant Surgeon, has been appointed Surgeon to the Hull Royal Infirmary.

SPENCER, HERBERT RITCHIE, M.B., B.S.Lond., late Senior Obstetric Assistant and House-Surgeon, has been appointed House-Physician to University College Hospital.

THOMAS, HUGH, M.R.C.S., L.S.A.Lond., has been appointed Honorary Surgeon to the Birmingham Lying-in Charity.

THOMPSON, HENRY, M.R.C.S., L.R.C.P., L.M., late Assistant Surgeon, has been appointed Surgeon to the Hull Royal Infirmary.

Births, Marriages, and Deaths.

BIRTHS.

BENOLY.—On the 21st ult., at Leytonstone, the wife of N. Benoly, M.D., of a son.

MORGAN.—On the 22nd ult., at Gnosall, Stafford, the wife of T. Whitworth S. Morgan, M.R.C.S., of a son.

ORMEROD.—On the 16th ult., at Upper Wimpole-street, Cavendish-square, the wife of Joseph Arderne Ormerod, M.D.Oxon., F.R.C.P.Lond., of a son.

SAUL.—On the 18th ult., at Bedford-square, the wife of William Saul, M.D., of a son.

SEQUEIRA.—On the 28th ult., at Jewry-street, Aldgate, E.C., the wife of Henry J. Sequeira, M.R.C.S., of a daughter.

SMYTH.—On the 24th ult., at Holly Lodge, Brockley-road, Brockley, S.E., the wife of S. Sydney Smyth, L.R.C.P., F.R.C.S., of a son.

TREHERNE.—On the 24th ult., at Aldershot, the wife of Surgeon Francis Harper Treherne, Army Medical Staff, of a son.

WILSON.—On the 21st ult., at The Cedars, Kenninghall, Norfolk, the wife of J. H. Wilson, M.R.C.S., of a son.

MARRIAGES.

BENNETT—ROLSTON.—On the 24th ult., at the Parish Church of Stoke Damerel, W. E. Bennett, Surgeon R.N., to Sabina Elizabeth, eldest daughter of John Rolston, M.D., J.P., of Stoke, Devonport.

FARR—JAFFREY.—On the 25th ult., at the Parish Church, Barnes, Ernest Farr, M.R.C.S., L.S.A.Lond., of St. Helier's, Uxbridge-road, Ealing, W., to Ida Florence, daughter of Archibald Jaffrey, of Fern Lea, Barnes-common, Surrey.

HAMILTON—HILL.—On the 25th ult., at St. John's, Walham-green, James Hamilton, M.D., to Florence Ada Cranstoun, daughter of John Haynes Downing, Esq., and widow of the late John Joseph Hill, R.N.

SHEEHAN—BAKER.—On the 23rd ult., at Lavenham Church, J. C. Sheehan, L.R.C.P.Ed., L.R.C.S.Ed., of Grove House, to Jane, second daughter of Thomas Baker, of Lavenham, Suffolk.

DEATHS.

CÆSAR.—On the 26th ult. (whilst staying with his brother at High-road, Tottenham), Henry Augustus Cæsar, L.R.C.P.Ed., &c., eldest surviving son of the late Henry Augustus Cæsar, M.D., F.R.C.S.I., aged 50.

CRAIG.—On February 7th, at Valparaiso, John Craig, M.B., C.M.Edin., aged 23.

FAYLE.—On the 29th ult., at Eastbourne, Higginson Fayle, M.R.C.S., aged 66.

GODFRAY.—On the 12th ult., at St. Helier's, Jersey, C. Le Vesconte Godfray, Esq., M.R.C.S., L.M., L.R.C.P. (St. Bartholomew's Hospital), Surgeon to the General Hospital and Prison, son of the late Francis Godfray, Esq., Barrister-at-Law, and Advocate of the Royal Court of Jersey.

LAWSON.—On the 23rd ult., at George-square, Edinburgh, Robert James Lawson, M.B., C.M., Assistant Surgeon, R.N., late of H.M.S. *Triumph*.

SMITH.—On the 23rd ult., at Croom's-hill, Greenwich, John Gregory Smith, F.R.C.S.L.

STRATTON.—On the 16th ult. (very suddenly), at his residence, Valletort-place, Stoke Damerel, Thomas Stratton, M.D., retired D.I.G.H.F., R.N., aged 69.

TENNENT.—On the 16th ult., at Tomintoul, Banffshire, N.B., William Archibald Tennent, L.R.C.P., F.R.C.S., aged 38.

THOMSON.—On the 28th ult., at Aldershot, Surgeon-Major Alexander Thomson, aged 45.

URWICK.—On the 23rd ult. (after a few days' illness), at New Quay, Cornwall, William Urwick, M.R.C.S., L.S.A.Lond., only surviving son of W. W. Urwick, of St. George's-road, Pimlico, London.

WISE.—On the 30th ult., at Braemar-villas, West-green, Tottenham, Thomas Wise, M.R.C.S., &c., late of Plumstead, Kent.

WOOD.—On the 26th ult., at his residence, Onslow-square, Neville Wood, M.D., F.R.C.P.E., fourth son of Charles Thorold Wood, of South Thoresby, late Captain, Royal Regiment of Horse Guards (Blue), and grandson of Sir John Thorold, ninth Baronet, of Syston-park, near Grantham.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

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Medical Diary for the ensuing Week.

Monday, April 5.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—8 P.M. Communications by Drs. Joseph Walker, G. Cunningham (Cambridge), J. H. Redman (Brighton), and Messrs. C. T. Tomes, F.R.S., W. A. Maggs-Walter Colfin, S. J. Hutchinson, C. J. Boyd Wallis, F. Henri Weiss, H. G. Betts, J. H. Mummery, and A. S. Underwood.
SOCIETY OF ARTS.—8 P.M. Mr. Alan S. Cole: The Arts of Tapestry-making and Embroidery (Cantor Lecture).
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Dr. John Lowe: Traumatic Hydronephrosis.

Tuesday, April 6.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Arthur Gamgee: The Functions of Circulation.
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Dr. P. W. Latham: On some Points in the Pathology of Rheumatism, Gout, and Diabetes (Croonian Lecture).
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Roger Williams: Acute Nephritis in Lambs.—Dr. G. N. Pitt: Hydatid of Liver embedded in Syphilitic Deposit.—Dr. Sainsbury: Valvular Obstruction of Ureter.—Dr. Price (Reading): Embolism of Abdominal Aorta.—Dr. Turner: Septic Aortitis.—Mr. Sydney Jones: (1) Malformation of Foot; (2) Peculiarly-shaped Calculi (card).—Mr. Lockwood: (1) Congenital Fatty Tumour from Sole of Foot; (2) (for Mr. W. Adams) Fatty Tumours from Palm of Hand.—Dr. Sharkey: (1) Meningeal Hæmorrhage; (2) Phthisis commencing at Base of Lung (card); (3) Stenosis of Mitral, Tricuspid, and Aortic Valves (card).—Dr. Carrington: Double Intestinal Stricture.—Dr. Pye Smith: Cystic Teratoma from an Infant (card).—Messrs. Lunn and Larder: Aortic Aneurysm (card).—Dr. S. Taylor: Cerebral Tumour (card).—Mr. E. H. Fenwick: Stone impacted in Prostatic Urethra (card).

Wednesday, April 7.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown by Dr. W. S. A. Griffith and others.—Dr. Matthews Duncan: On Contraction, Inhibition, and Expansion of the Uterus.—Dr. Coates: A case of Labour in a Primipara suffering from Mitral Disease.—Dr. Amand Routh: A case of Serous Perimetritis.—Dr. Champneys: Note on the Artificial Production of so-called Lymphatic Varix.
SOCIETY OF ARTS.—8 P.M. Mr. J. S. Hodson: Preparation of Drawings for Photographic Reproduction.

Thursday, April 8.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Dewar: Electro-Chemistry.
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Mr. W. H. Stone: Man as an Electric Conductor, Condenser, and Electrolyte (Lumleian Lecture).
SOCIETY OF ARTS.—8 P.M. Mr. James Boyd: Asbestos and its Applications.
OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8.30 P.M. Adjourned Discussion on Mr. Priestley Smith's paper.—Mr. W. H. Jessop: (1) A New Pupillometer; (2) On Herpes Frontalis affecting the Eye.—Mr. W. Lang: A New Microtome.—Dr. L. Werner: On Vitreous Infiltration of the Retina and Central Guttate Choroiditis.—Mr. R. Brudenell Carter: Two New Forms of Perimeter.—Mr. W. Spencer Watson: Hæmorrhagic Glaucoma treated by Trephining.—Mr. G. E. Walker: Glaucoma treated by the use of Convex Lenses.—Mr. Edgar A. Browne: (1) Wound of one Eye followed almost immediately by Iritis Serosa in the other; (2) Water-colour Drawing by a Colour-blind Artist. (Living and Card Specimens at 8 P.M.)

Friday, April 9.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—8 P.M. Mr. Percy Dunn:
CLINICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Stephen Mackenzie: On Erythema Nodosum, especially dealing with its connexion with Rheumatism.—Dr. Samuel West: On some peculiar cases of Pneumothorax. Mr. Walsham: A case of Lithotrity at a Single Sitting in a Boy ten years of age.—Dr. Carrington: A case of Rheumatic Hyperpyrexia.—Mr. Bellamy: Enormous Vascular Growth of the Upper Extremity in a Child (living specimen).
ROYAL INSTITUTION OF GREAT BRITAIN.—9 P.M. Mr. William Anderson: New Applications of the Mechanical Properties of Cork to the Arts.

Saturday, April 10.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Oliver Lodge: Fuel and Smoke.
SOCIETY OF ARTS.—3 P.M. Prof. George Forbes: Electricity.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, April 1st, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radiation in Vacuo.	Max. Temp. Shade.	Min. Temp.	Rain fall.	Remarks at 8.30 A.M.
Mar. 26	29·97	S.W.	52	50	...	57	50	...	Cloudy
,, 27	29·85	W.	53	51	...	52	53	·09	Cloudy
,, 28	29·95	S.W.	50	49	...	59	49	·07	Cloudy
,, 29	29·69	W.	48	47	...	55	43	·06	Overcast
,, 30	30·09	W.	45	41	...	51	39	·11	Fine
,, 31	29·67	W.	50	47	...	56	44	·09	Cloudy
Apr. 1	30·13	W.	45	41	97	57	40	...	Fine

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

THE CHAIR OF PHYSIOLOGY AT ABERDEEN.

Professor Haycraft writes to ask to be allowed to contradict a statement which appeared in our issue of Feb. 6th that he is a candidate for the above post.

Mr. J. M. Edmunds.—The London School of Dental Surgery, Leicester-square; or the National Dental College, Great Portland-street.

THE POTASSIO-MERCURIC-IODIDE TEST.

To the Editor of THE LANCET.

SIR,—Works published within the past year, containing references to albumen tests, still recommend the potassio-mercuric iodide as being an exceedingly delicate and trustworthy reagent, with the additional advantages of being handy and easily applied. Of course by itself it is useless, unless citric or acetic acid be added to the urine, as in testing with potassium ferrocyanide or sodium tungstate. Now, everybody admits that potassio-mercuric iodide and citric or acetic acid will precipitate albumen. But it is a very different matter to admit that a precipitate given in any clear urine by these reagents is necessarily due to albumen. As a matter of fact, it may not be due to albumen. I cannot speak with anything like certainty regarding the other two reagents (potassium ferrocyanide and sodium tungstate), though I believe they are fallacious; but from a number of experiments I made in the London Hospital in 1883 with the potassio-mercuric iodide, I can confidently say that if sufficient time be allowed it will give a precipitate with almost every specimen of urine put to the test, even should no trace of albumen be detected by any other known reagent. This circumstance may possibly be explained by supposing the potassio-mercuric iodide to give increased effect to the precipitate of mucin which the acids have the power of producing. It is therefore not to be wondered at, though this test be found so remarkably delicate, the true explanation being that it is remarkably delusive and dangerous.

I am, Sir, yours truly,

Wick, March 17th, 1886. A. G. AULD, M.B., &c.

Mr. James McCulloch, M.R.C.S.—The name of the dentist mentioned is in the Dentists' Register for this year, as being in practice before 1878. He therefore has a legal standing.

VENTILATING SEWERS.

To the Editor of THE LANCET.

SIR,—Without doubt you are right in your statement that an efficient, safe, and cheap method of ventilating sewers is by pipes carried up above the buildings. Perhaps it would interest some of your readers to learn that recently an invention was patented by W. M. Hawkins, 59, Albion-street, Birmingham (No. 8108-84), by which clay pipes are securely held together with iron or steel hooping running through their edges to hold them in position. They can be carried up any height without any outside support. They cannot fall down, and no foul air can escape through the places where they are joined together. When once fixed they cannot move. The method is not expensive. I have also seen it tested as stove pipes, starting from the floor and going straight through the roofs of buildings.

I am, Sir, yours faithfully,

Clare, March, 1886. J. JOHNSON.

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EXTRAORDINARY SUBJECT FOR A PRIZE ESSAY.

THE Paris Academy of Medicine has chosen an extraordinary, not to say an impossible, subject for a prize essay this year—"Préciser par une Série d'Observations s'il existe un Traitement Abortif de la Syphilis Confirmée" (to determine by a series of observations if there exists an abortive treatment of confirmed syphilis), upon which M. Diday has suggested that the Academy must have been seized with an economical fit, and that it would be interesting to see if anyone could manage to write a paper of 400 pages on abortive treatment directed against confirmed syphilis.

Mr. John Woodland.—It is certainly right to ask permission before using a name or case publicly; but we quite perceive that this rule might be broken from mere inadvertence.

A Student.—Harrison Cripps' or Allingham's work.

COLOUR-BLINDNESS; ANOSMIA; GLAUCOMA.

To the Editor of THE LANCET.

SIR,—The letter of Mr. Piesse in THE LANCET of March 13th, p. 528, has indirectly given rise to one from Dr. Nicholas, and to another from "M.D. Durh.," in to-day's issue (p. 621). Both these letters, though somewhat apart from the original subject—colour-blindness among medical men—possess points of interest of their own.

I am not in a position to say much in reply to Dr. Nicholas; but I believe it is generally admitted that defects in the sense of smell, when they occur, are rather variations in degree of appreciation than confusion of odours. If the latter exist as a pathological result, I should fancy that it might in most cases be referred to an interference with the purity of the odour presented to the nervous apparatus on account of some fetid discharge in the nasal fossæ. As the result of imperfect development, I doubt whether we have anything parallel to colour-blindness. There may, of course, be a general lack of intelligence, or a want of education, on the part of some individuals which might lead a casual observer into the belief that odours are sometimes confused. But this confusion would then be merely the result of ignorance, and would in no way be comparable to colour-blindness. I advance this opinion in all humility, and beg to add that I am quite open to correction. As to the odour of chloral hydrate, I feel sure I am right in saying that it is universally considered to resemble that of melons. We have Dr. Garrod's authority on this point. I confess I have not read the evidence given by Dr. Stevenson; but I imagine the word "lemon" to be merely a typographical or reporter's error, in which the letters have become misplaced.

With regard to the suggestion made by "M.D. Durh.," that the word "glaucoma" is derived from γλαυξ, γλαυκος, an owl, I own I am unconvinced. I do not deny that many words are worse parented, if I may be allowed the expression; but on looking into the matter a little more closely, I think we shall be led to the conclusion that the tint of sea-green noticed in many cases of glaucoma really did give rise to the name of the disease. Mr. Brudenell Carter says: "In some of the more acute forms of increased tension the pupil presents a clouded aspect of a greenish colour; and it was to cases of this class that the word glaucoma (from γλαυκος, sea-green) was originally applied, at a time when the pathology of the condition was not understood." At the time to which Mr. Brudenell Carter alludes there was no doubt a large proportion of cases of increased tension in which the greenish colour was absent; but these cases, be it observed, were not placed in the same category. The inference is obvious. When it became known to pathologists that the greenish tint seen in the pupillary area was not an essential feature in every phase of the disease, the meaning of the term "glaucoma" was stretched to include all cases in which a block in the drainage system of the ligamentum pectinatum became evident by increased tension, cupping of the disc, &c. In conclusion, I may say that I have drawn the attention of some of my *confrères* in ophthalmic surgery to the letter of "M.D. Durh.," and the unanimous opinion is in favour of the accepted derivation.—I am, Sir, yours truly,

A. ST. CLAIR BUXTON, F.R.C.S.,
Assistant-Surgeon to the Western Ophthalmic Hospital.

Orchard-street, W., March 27th, 1886.

M.R.C.S.—The Medical Defence Associations exist for bringing such persons to justice; but, unfortunately, they meet with only a limited support from the profession. A person who *falsely* uses titles which imply that he holds medical qualifications is a fair subject for prosecution.

M. PASTEUR'S INOCULATIONS.

To the Editor of THE LANCET.

SIR,—Since it is likely that a body of commissioners will be formed to investigate Pasteur's method of inoculation for hydrophobia, and as several eminent members of the medical profession have been asked and consented to serve on such a commission, might I, as a member of the Royal College of Veterinary Surgeons, suggest that one of the commissioners be a veterinary surgeon. Considering the veterinary profession has so much to do with rabies canina, I think it is justly entitled to some share in the honour. Are we all not very much indebted to Mr. George Fleming, who has always taken a very great interest in the subject, for a great deal of information concerning rabies, and what more fitting acknowledgment could be bestowed on him than that he should be elected as one of the commissioners?—Yours obediently,

Manchester, March 29th, 1886. JOHN MOORE, M.R.C.V.S.

ACTION FOR MEDICAL ATTENDANCE IN AN ALMSHOUSE.

THE *Dundee Advertiser* of March 19th and 27th respectively contain the report of a very just action at law by Dr. Lawrence of Brechin, N.B., to recover £16 for a year's medical attendance on the late Miss Christina Jamieson, and of a very just decision of the sheriff substitute. Miss Jamieson, an old lady, was an inmate of the Brechin poorhouse—a sort of almshouse. But Miss Jamieson was not poor. She was not a pauper; for she paid latterly 10*s.* a week for her board, and died leaving a few hundred pounds to her relatives. Under these circumstances, it was not unreasonable that Dr. Lawrence should look to her trustees for payment. The sheriff entirely supported his claim, and allowed him £12 12*s.* and expenses of the suit. He held that the parochial board had nothing to do with Dr. Lawrence's claim, and that he, *qua* their officer, did not attend Miss Jamieson. The almshouses of Scotland are not on the same legalised footing as the workhouses in England; and Dr. Lawrence's case will be regarded by Scotch practitioners as one of some interest, and involving a question that has not been raised before.

Mr. A. Crespi.—Messrs. Longmans have published a book, entitled "Louis Pasteur, his Life and Labours," written by his Son-in-law, which was reviewed in THE LANCET, May 2nd, 1885.

Surgeon Lees Hall.—We regret we cannot comply with our correspondent's request, as to do so would be contrary to our custom.

THE PHARMACOPŒIA TEST FOR PEPSIN.

To the Editor of THE LANCET.

SIR,—In Dr. Murrell's interesting note on "Pepsin as a Digestive Agent," published in your issue of Feb. 27th, reference is made to the test for pepsin adopted in the new edition of the Pharmacopœia. Dr. Murrell sums up the differences between the tests of the 1867 and 1885 Pharmacopœias, and obtains as a "net result that our standard has been raised 71·5 per cent., for which," says he, "too much gratitude cannot be shown." This conclusion appears to be based upon the assumption that pepsin is 16 per cent. more active at 130° F. than at 98°. Experiment will prove that the increase in the activity of pepsin at the higher temperature is much greater than this.

The test for pepsin adopted in the Pharmacopœia of 1885 is that proposed by me as an amendment to the then official one, in a paper read before the British Pharmaceutical Conference in 1881, and printed in the "Year Book of Pharmacy" for that year, p. 417. It has been in constant use in my laboratory since that time. It is so simple and expeditious that Dr. Murrell's advice, "Test your pepsin," can be followed by all, to the great advantage of their dyspeptic patients. My original paper contains some rather important details of manipulation, necessarily omitted in the brief Pharmacopœia directions. The white of egg having been pressed through the wire gauze should be lightly rubbed in a glass mortar during the addition of the acidulated water, so as to separate the vermiform particles; this cannot be done by merely stirring. I always use wide test-tubes standing in a large beaker of water as a water bath; each tube is provided with a small glass stirrer. Half a dozen samples can in this way be tested at the same time under absolutely similar conditions. Dr. Murrell's opinion that "to give only from two to five grains of pepsin at a time is a palpable absurdity," may possibly be modified by a consideration of the fact that whilst in our laboratory experiments the products of digestion remain in the digesting apparatus, and gradually retard, and finally stop, the action of the ferment, in the stomach these products are constantly removed as digestion goes on. It must not be supposed that 100 grains of egg albumen are all that two grains of B.P. pepsin, or the minimum dose of a fluid preparation of pepsin, will digest in half an hour under other conditions, and with other surroundings! The following experiment will demonstrate the contrary. Ten times the Pharmacopœia quantity of egg and acidulated water were taken—that is, 1000 grains of egg and ten fluid ounces of acidulated water; these were placed in a beaker; 100 grains of egg and one fluid ounce of acidulated water were placed in a large test-tube and stood in the beaker; and the whole heated to 130° F. One fluid drachm (the minimum dose) of an active fluid preparation of pepsin was then added to both beaker and test-tube, the temperature maintained constant, and the contents of both stirred occasionally. When the egg in the test-tube had all dissolved, which in this experiment occupied twenty-five minutes, the contents of the beaker were thrown on a fine muslin filter and drained; the undissolved egg weighed 220 grains. Here then a dose of pepsin had dissolved 780 grains of egg in ten ounces of fluid, whilst a similar dose had dissolved 100 grains in one ounce of fluid. Another attempt was made to approach more nearly to the conditions under which pepsin acts in the stomach. The egg, acidulated water, and pepsin were placed on a parchment dialyser and floated on a bowl of acidulated water. In this case it was found that enormously more egg was dissolved in the dialyser than in a test-tube containing the same mixture. I fear my communication is already too long. I will only add that in testing B.P. pepsins against liquid preparations of pepsin the only fair way is to take the minimum dose of each—say, two grains of B.P. pepsin and one fluid drachm (the usual minimum dose) of fluid preparations; or one part of solid against thirty parts of liquid. I observe that Dr. Murrell took in his experiments one grain of dry pepsin and ten grains of fluid preparations. Obviously his results may have been misleading.—Yours obediently,

F. BADEN BENGER, F.C.S.

Exchange-street, Manchester, March 8th, 1886.

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MINCING MACHINES.

IN reference to a letter on this subject which appeared in our issue of March 13th, Messrs. J. Coppard and Co., of New Charles-street, E.C., write to say that the machines manufactured by them are free from the objection referred to by the writer of the letter, being made entirely of iron.

Mr. Jas. W. Smith.—The College of Surgeons issued a circular to their Fellows, intimating that the space at their disposal was very limited, and requesting those Fellows who wished to be present to send in their names, when the available seats would be assigned by drawing lots. A notice to a similar effect, addressed to the Members, was also published in our advertising columns of March 6th. As regards the College of Physicians, we believe that all the Fellows and Members had the opportunity afforded them of being present, and that the licentiates were taken in order of seniority. The authorities of the two Colleges seem to have used every endeavour to deal fairly with all who had any claim to be present.

Dr. Abrath.—We are not prepared to again open up the case.

PHOSPHORUS.

To the Editor of THE LANCET.

SIR,—As it is probable that the discussion at the meeting of the Clinical Society on March 12th on Mr. Hutchinson's case of necrosis may have left some of your readers in perplexity as to the possibility of phosphorus producing necrosis when given in a pill over a long period, the following extract from an undoubted authority will be read with interest.

Writing upon the action of phosphorus, Dr. Lauder Brunton says: "Its action upon the bones is somewhat peculiar, and has been fully investigated by Wegner. ..... In men exposed to the fumes of phosphorus—e.g., those employed in the manufacture of lucifer-matches—caries of the lower jaw is a frequent occurrence. This is *not* due to the action of the phosphorus *after absorption into the circulation*, but to the *direct effect of the fumes* upon the bone itself. For it has been shown that when a bone of an animal *fed upon phosphorus* was exposed, *no carious change took place*; but if one were exposed to the fumes, caries was produced, and amongst lucifer-match makers it has been noticed that only those who have carious teeth suffer from necrosis." (Brunton's Pharmacology, Second Edition, page 638.)

Again, in Dr. Ringer's Handbook of Therapeutics (Seventh Edition, page 304), we find the following confirmatory statement:—"The effects of chronic phosphorus poisoning have lately been elaborately worked out on animals by Dr. George Wegner, and with singular results. It has long been known that workmen exposed to the fumes of phosphorus are liable to necrosis of the jaw, and Dr. Wegner believes that this results from the direct action of phosphorus on denuded bone, and that necrosis will *not* set in unless, through wounds or carious teeth, there is some destruction of the soft tissues, thus enabling the phosphorus to reach the exposed bone. In support of this view, he adduces the following reasons: (1) If the periosteum of an animal is severely wounded, and phosphorus is given *in the form of a pill even for months*, the periosteal changes do *not take place*. (2) When the tibia of a rabbit is partially bared, a healthy granulating wound is soon established; but under exposure to a phosphorus atmosphere, periostitis is set up, similar to that in the jaw. (3) Many workers in phosphorus escape, whilst those who do suffer have carious teeth."—I am, Sir, yours faithfully,

Beckenham, March 24th, 1886. E. A. KIRBY, M.D.

Chyluria.—Chylous urine contains either a coagulum or flaky clots from the breaking up of the former in the great majority of cases. Unlike a mixture of urine and milk, chylous urine is further recognised by the fact that "the fatty matter almost invariably occurs in the form of excessively minute granules." The presence of large fat globules and the absence of a coagulum afford very strong evidence that the fluid is other than chylous urine.

X. Y. Z.—Our correspondent should refuse to give a certificate, and leave the responsibility with the coroner.

"FEMALE LABOUR IN COLLIERIES."

To the Editor of THE LANCET.

SIR,—Having seen an annotation under the above heading in your last issue (p. 605), I beg to submit that, in my opinion, the writer has judged both the work and the workers erroneously. As I have lived all my life in a colliery district, and have also served my indentures with a surgeon to a large colliery, I think I may say that I have seen the "Lancashire pit-woman" in all phases of her character. I feel sure that any person visiting the home of the female labourer on the pit brow will find that the household duties are as well performed as in any other household in a colliery district. Her morals will bear comparison with either those of the factory operative or the daughter of the agricultural labourer; for they are equal, if not superior, to both. Their clergymen bear witness that they do not suffer in this respect. Physically, their muscular development is surpassed by no woman. I think any colliery surgeon will bear me out when I say that they do not suffer from a health point of view. Now, when they are not injured morally, physically, or in a domestic sense, why should they be hindered from bearing their share of the world's work?—I am, Sir, yours truly,

ROBERT STOPFORD, L.K.Q.C.P.I.,
Late Medical Officer, Perim Island, Red Sea.

Appley Bridge, Wigan, March 30th, 1886.

A REMARKABLE DISLOCATION OF THE THIRD CUNEIFORM BONE.

To the Editor of THE LANCET.

SIR,—The following case is, I think, sufficiently rare to deserve being placed on record.

In February of last year an accident happened opposite my house, and the sufferer was at once brought into my surgery. I had witnessed the accident. The patient, a man of about thirty-five years, of pale and relaxed fibre, showed upon examination a dislocation of the external cuneiform bone. The luxation was somewhat peculiar; the entire bone, being displaced upwards, lay upon the inner edge and dorsum of the os cuboides. About half the dorsal surface of the cuboid bone was covered by the plantar surface of the cuneiform. The displaced bone could be very distinctly seen through the stretched skin of the dorsum of the foot, as if a cube had been placed under it. The patient suffered very little pain, and the bone could be easily reduced by mere pressure upon the dorsal surface, with only the slightest possible extension of the toes. When the foot was flexed by the will of the patient the luxation recurred. The member was placed in an appropriate splint, with a graduated pad over the displaced bone. The man was then removed to his home, some miles away. He thus passed from my care, and I have heard nothing further from him. The accident happened thus:—The man was endeavouring to mount a barebacked horse, which was standing close to the kerb-stone. He threw his right leg over the animal, which started forward with a bound, dislodging him backwards. As the horse passed from under him, he came down upon the edge of the kerb-stone with his left foot flexed and abducted. The sole was also somewhat everted. I am, Sir, yours faithfully,

HAYGARTH ADDISON, L.F.P.S.G.

Seven Sisters-road, N., March 23rd, 1886.

Dr. C. W. Pilgrim.—The reference probably was to the Edinburgh Medical Missionary Society, the secretary of which is the Rev. John Lowe, 56, George-square, Edinburgh.

L.R.C.P.—Erichsen's Surgery; Pepper's Surgical Pathology.

"PRACTICE AT THE CAPE."

To the Editor of THE LANCET.

SIR,—Having returned this month from the Cape Colony after a residence there of some years, I can endorse most of what "Cape Colonist" says in answer to "A Constant Reader's" letter in THE LANCET of March 20th (p. 621). The last three years have been years of drought, with consequent immense pecuniary loss to the farmers—the producers of the country. The harvest of this year, however, owing to abundant rainfall, promised to be a plentiful one: and the colony is very elastic, so that with a few good seasons the prospects of anyone intending to settle in South Africa would be much brighter. At the present time I would not recommend a doctor to venture out there. Still there are one or two openings in up-country places, and if "A Constant Reader" will communicate with me, I should be happy to supply him with any further information. In the Government *Gazette* for the colony vacant "district surgeoncies" are advertised from time to time, and any medical man leaving for the Cape would find it of great advantage in being able to go straight to such an appointment. When I left the Government had in view the establishment of a district surgeon at Tsolo, in Tembuland, with a salary of £250 per annum, with allowances and practise. But to secure these billets it is advantageous to have local influence. I am, Sir, yours obediently,

Dartford, March 30th, 1886. HENRY H. STURGE.

PLASTIC BRONCHITIS.

To the Editor of THE LANCET.

SIR,—I shall be indebted to you if you will kindly insert the following case, which has baffled all treatment, as far as a cure is concerned.

The patient, a female about middle age, is suffering from plastic bronchitis, and regularly expectorates large quantities of membrane, which unquestionably come from the bronchi and trachea. She has periodical attacks (every week or nine days) of dyspnœa, followed by casts of membrane which are expectorated with more or less bloody mucus attached to them. Some of the casts are as large as 1½ in. square. As soon as the attack is over she will be comparatively well for a week or so, until another attack ensues. I have prescribed all the usual remedies, but without permanent effect, and should be greatly obliged to any of your readers who have met with similar cases for their advice, either privately or through THE LANCET.—I am, Sir, yours truly,

March 26th, 1886. CYMRO.

"DIPHTHERIA AND PIGEON-KEEPING."

To the Editor of THE LANCET.

SIR,—In your issue of March 20th, p. 576, it is stated that M. Destrée of Brussels has called attention to the fact that there may be some connexion between pigeons and diphtheria. In a paper on an epidemic of diphtheria observed in Naples in 1871, published in the *Edinburgh Medical Journal* in 1872, and subsequently copied nearly *in extenso* in the *Medical Times and Gazette*, and in my graduation thesis in the University of Paris in 1881, I pointed out the fact that in the epidemic in question the wells were largely contaminated by the excrement of pigeons and poultry, and in some cases by that of horses. I also suggested guano under certain circumstances as a possible factor.—Yours truly,

Venice, March 22nd, 1886. J. A. MENZIES, M.D. Ed. & Paris.

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"DOCKED FEES."

To the Editor of THE LANCET.

SIR,—In reference to the communication of a correspondent in your last issue (page 604), on what he terms with more force than elegance "docked fees," will you kindly allow me, in the spirit of your motto, "audi alteram partem," space for a few remarks.

Far from agreeing with the tone of your correspondent's letter, which attributes to parsimony what I prefer to believe in the majority of cases is due to a laudable delicacy, I would merely observe that there has long been felt a certain amount of awkwardness in tendering to a doctor the extra silver coin the guinea fee necessitates. The guinea fee is a nuisance that has long been felt, and many doctors, in Ireland at least, have long since allowed it to drop into a silent grave. The inconvenience applies to many other cases. School fees, lawyers' fees, hospital fees, fees for classes of every description, are still reckoned in guineas, much to the inconvenience of the public. Quite different was the case when the guinea was the standard gold coin of the realm. It would have been quite as anomalous then to tender a professional man a fee of twenty shillings, the guinea being the legal coin, as it is now to tender a fee of twenty-one shillings, the sovereign being the legal coin. It is high time the medical profession separated themselves from this obsolete rate of remuneration. Let your correspondent recollect that if his fees are slightly diminished by the substitution, there will be a corresponding gain in other respects. He will effect a saving in his children's school fees, in his son's medical fees (should he follow in his father's footsteps), and should he unhappily tempt the law's delays, more important still, in his legal fees. Let the guinea fee follow the obsolete coin, and it will be found that the theoretical loss will in reality become an immense gain.

I am, Sir, yours truly,

March 30th, 1886. M.B. DUB.

INCOMPATIBLES.

To the Editor of THE LANCET.

SIR,—In the ninth edition of Garrod's Materia Medica, on page 326, it is stated that under the head of incompatibles neither liquor potassæ nor any other caustic alkaloid should be prescribed with tincture or extract of henbane, *as the virtues of the latter drug are completely neutralised.* (The italics are my own.) On page 311, prescription No. 69, of Tanner's Index of Diseases, the following prescription will be found:—℞ Liquoris Potassæ, ♏ x-xv.; Tincturæ Hyoscyami, ♏ xx.; Infusi Bucco, fl. ℥jss.: Ft. Haustus. If the statement in "Garrod" is correct, then the prescription in "Tanner" is worthless. Perhaps you or some of your readers can kindly inform me whether, after all, it is no more harm to prescribe liquor potassæ and hyoscyamus than to order bark and bichloride of mercury, which is often done, though these drugs are said to be incompatible.

I am, Sir, yours faithfully,

March 23rd, 1886. DUBITANS.

FOOD FOR THE DESTITUTE.

To the Editor of THE LANCET.

SIR,—Seeing an annotation in your issue of March 13th, p. 505, on nutritious food for the poor, I venture to forward you the following information upon that now absorbing subject. I have, with the assistance of a lady, for the last three weeks supplied to destitute families in my neighbourhood an average of 300 dinners a week, which might be termed "Irish stew," composed of stock made from bones, onions, carrots, rice, potatoes, and beef or mutton without bone, each person having from four to five ounces of the latter at a cost of a fraction under twopence-halfpenny each. We supplement this by the addition of one hundredweight of coal to each family. I remain, Sir, yours truly,

March 24th, 1886. M.R.C.S.

A CORRECTION.

To the Editor of THE LANCET.

SIR,—In your otherwise correct report of the case of multiple phlebitis read at the Islington Medical Society, I beg to state that the published temperatures were carefully taken in the *mouth*, not in the rectum, as reported.

I am, Sir, yours faithfully,

Green Lanes, N., March 27th, 1886. ALEXANDER MORISON, M.D.

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Croonian Lectures

ON

SOME POINTS IN THE PATHOLOGY OF RHEUMATISM, GOUT, AND DIABETES.

Delivered at the Royal College of Physicians of London, April, 1886.

BY P. W. LATHAM, M.A., M.D., F.R.C.P.,

DOWNING PROFESSOR OF MEDICINE, CAMBRIDGE; SENIOR PHYSICIAN TO ADDENBROOKE'S HOSPITAL.

LECTURE II.

WHAT in rheumatism is the starting-point of the morbid process? Is there such a thing as the rheumatic poison? If so, what is it, and what is the nature of the change which takes place as the result of its action? Let me in the first place enumerate the more salient features of the disease as gleaned from clinical experience. An individual after feeling out of sorts for two or three days, perhaps after a chill wakes up in the morning with one of the joints stiff and tender; soon afterwards it swells, and motion causes pain. Other joints now become affected—the knees, wrists, elbows, ankles, and the smaller joints of the hands and feet. There are pain, tenderness, increased heat, swelling, and redness of the skin. The tendency of these to shift from joint to joint is a remarkable feature of the disease. The slightest motion becomes insupportable; even vibration of the room or of the bed causes suffering. There is more or less febrile movement, the temperature ranging from 102° to 104° or higher, and generally more or less sweating, the odour of which is characteristic. The tongue is coated, thirst is generally a marked symptom, and the urine is turbid with lithates and has a strong acid reaction. The more acute and severe the case, the more profuse and acid is the perspiration, and the larger the amount of lactic acid which it contains. This last feature has led to the supposition that in acute rheumatism there is excessive formation of this acid, which, circulating through the system, gives rise to the symptoms which accompany the disorder. It is a theory which has got a very firm hold of the minds of many physicians, and is probably the one most generally adopted. There is so much to be said in its favour that until recently I unhesitatingly accepted it. I hope to show now that, though lactic acid is formed in excess in the disease, and its presence in the blood modifies the symptoms in some degree, it is not the chief agent in producing them. Other factors are at work giving rise to the characteristic feature of rheumatism—viz., the affection of the joints—as well as to some of the other symptoms which I have enumerated, and the excessive formation of this acid must be regarded more as one of the symptoms than as the cause which gives rise to them. The lactic acid theory, however, has furnished me with my true starting-point. In attempting for five or six years to arrive at some satisfactory explanation of the phenomena of this disorder the line of argument which suggested itself to my mind was much as follows:—

1. Lactic acid is the *materies morbi* in rheumatism.

2. According to the views of some authorities the natural source of lactic acid in the system is glucose—which is first transformed into lactic acid and then further oxidised into carbonic acid and water.

$$\underset{\text{glucose}}{C_6H_{12}O_6} = 2\underset{\text{lactic acid}}{C_2H_4\begin{Bmatrix}OH\\COOH\end{Bmatrix}}$$

$$\text{and } 2\underset{\text{lactic acid.}}{C_2H_4\begin{Bmatrix}OH\\COOH\end{Bmatrix}} + 6O_2 = 6CO_2 + 6H_2O$$

3. By the so-called "diabetic puncture" the metabolism of glucose in the system can be arrested; sugar appears in the urine, and we have the phenomena of diabetes. Changes, therefore, in the medulla oblongata entirely arrest the metabolism of glucose, and if so, should this be true, would it be possible by modifying these changes in the medulla partially to arrest the transformation of glucose into CO_2 and H_2O at the intermediate stage of lactic acid, and so develop rheumatism? That is to say, have neurotic conditions, have changes in the medulla oblongata, anything whatever to do with the symptoms which are associated with rheumatism?

These were the hypotheses with which I started. But I have tried to show in my previous lecture that lactic acid in the tissues is formed not from glucose, but from the nitrogenous molecules of the tissues—namely, the cyan-alcohols $CH_3.CH\begin{Bmatrix}OH\\CN\end{Bmatrix}$ and $CH_2CH_2\begin{Bmatrix}OH\\CN.\end{Bmatrix}$ My second hypothesis therefore falls to the ground, and with it the third to a very large extent. Certain points, however, presented themselves to me during the consideration of the subject, which seem to connect the disorder with changes in the nervous system, and to furnish a theory as to the causation of rheumatism, by which an explanation may be offered not only of the way in which the symptoms are produced, but also of the action of some of the remedies which have been successfully employed in the treatment of the disease. To these points let me now specially invite your attention.

As a first step in demonstrating the connexion of rheumatism with changes in the nervous system, let me refer to some nerve lesions which are associated with changes in the nutrition of the joints. In respect to this I find that more than fifty years ago the late Dr. J. K. Mitchell[1] advanced a theory of the pathogenesis of rheumatism which connected it with affections of the spinal cord. My own view, which localises the controlling action of the nervous system in the disorder, chiefly in the medulla oblongata, was formed quite independently; it was only, in fact, quite recently that my attention was directed to Dr. Mitchell's views by finding a reference to them on reading a most admirable work, abounding with interesting facts, by his son Dr. Weir Mitchell on "Injuries of Nerves." I here discover, however, some most important links in the chain of evidence supporting my theory, which I will place before you; and after referring to other cases of a similar kind I shall then attempt to point out the way in which the nervous centre is affected both in gout and rheumatism—how, in fact, the rheumatic poison is developed and how it acts.

In a work on "Gunshot Wounds and other Injuries of Nerves," by Drs. Weir Mitchell, Moorhouse, and Keen, of the United States Army,[2] there is the following statement:—

"*Alterations in the nutrition of joints.* Again we call attention to a peculiarity of nerve injuries which we believe to have been overlooked. Like the altered nutrition of the skin, the symptom which we are at present considering occurs at any time after the first few days. It consists essentially in a painful swelling of the joints, which may attack any or all of the articulations of a member. It is distinct from the early swelling due to the inflammation about the wound itself, although it may be masked by it for a time; nor is it merely a part of the general œdema which is a common consequence of wounds. It is more than these—more important, more persistent. Once fully established, it keeps the joints stiff and sore for weeks or months. When the acute stage has departed, the tissues about the articulations become hard, and partial ankylosis results, so that in many cases the only final cause of loss of motion is due to this state of the joints. Of all the agencies which impede movement it is the most difficult to relieve. Were we asked to state in what essential respect these lesions differ from subacute rheumatic disease of the same parts, we should certainly be at some loss to discern a difference. The subject suggests certain interesting reflexions. We have ourselves seen cases of spinal injury in which rheumatic symptoms seemed to have been among the consequences; and four such instances of striking character are to be found recorded in a paper by the late Prof. J. K. Mitchell, *Am Jour. of the Med. Sci.*, vol. viii., p. 55. Upon the hints which were thus furnished, Dr. Mitchell was induced to consider rheumatism as of spinal origin. His treatment,[3] founded on this view, was most successful, and is still used and recognised in this country. Modern pathologists have traced the causation of rheumatism to a strictly chemical source; but no one can avoid seeing that there may be a cause beyond this, even though the chemical conditions be still considered as essential links in the chain. Thus, after all, the true origin may be spinal, or, at all

[1] The American Journal of Medical Sciences, 1831, vol. viii., p. 56.

[2] Philadelphia, 1864, pp. 83-85.

[3] The treatment he adopted was to apply from eight to sixteen cups, abstracting about as many ounces of blood, to the cervical or lumbar spine, according as the upper or lower extremities were affected, and follow the cupping, if this did not afford relief, by the application of blisters to the spine.

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events, the indisputable fact that there are rheumatisms depending for existence on neural changes may aid us hereafter to discriminate varieties of type among the forms of rheumatic disease. It were easy to dwell upon this subject, but enough has been said to show that subacute inflammation of joints may be brought about by nerve lesions, and to direct medical thought anew in a direction which seems favourable to its true and rational progress."

In a subsequent work, the work to which I have already referred—"On Injuries of Nerves,"[4]—Dr. S. Weir Mitchell writes:—

"Of all the various forms of mischief wrought by nerve wounds, the most intractable and disabling are the curious inflammatory states of joints to which we were the first to call attention. ..... In a certain number of nerve wounds, notably most often in those of the upper extremities, one or more of the joints in the wounded limb become swollen. The nature of the injury does not seem to influence the case, as I have seen it follow dislocations, ball wounds, and contusions of nerves, while in an interesting case of Dr. Packard's it was one of the consequences of compression of the sciatic nerve by a tumour. More lately, in the service of my friend, Dr. J. A. Brinton, at the Philadelphia Hospital, I saw a man who had extensive joint lesions, owing to the brachial nerves having suffered during the dislocation, or upon the subsequent reduction of the humerus, so that I suspect these troubles are more common than has been supposed.[5] In one case the joints of the fingers became swollen and tender on the third day after ball wound of the brachial plexus, but usually the swelling appears much later, and, like the glossy skin, is frequently the offspring of secondary neuritis. Often masked at first by the general inflammation of the limb, or concealed by the œdema so common after nerve wounds, it is more persistent than these, and, as they fade, begins to assume importance. We may then have one articulation—and if only one, a large one—involved, or perhaps all the joints of a finger or every joint in the hand or of the entire limb may suffer. The swelling is never very great, the redness usually slight, and the tenderness on touch or motion exquisite. This condition of things remains with little change during weeks or months, and then slowly declines, leaving the joints stiff, enlarged, and somewhat sensitive, especially as to movement. A small proportion of such cases find ready relief, but in many of them the resultant ankylosis proves utterly unconquerable, so that it is vain to break up the adhesions under ether, or to try to restore mobility by manipulation of splints. All alike fail, and serve only to add to the essential tortures of the accompanying neuralgia and hyperæsthetic states of skin. Since writing my last paper[6] I have met with some of the former patients who suffered with these troubles, but in no case originally very severe was there any great gain—indeed in most of them the joints had become every year more stiff and useless. It is, then, quite clear that injuries of the spine, diseases of this organ, and of the brain, and wounds, or any form of lesions of nerves, are capable of developing in the joints inflammatory conditions, usually subacute, and which so precisely resemble rheumatic arthritis in their symptoms and results that no clinical skill can discriminate between the two. In this state it were well to leave the subject. The chemical theories have crumbled, and, in the growing tendency to believe that rheumatism may have more forms than one, it may not be amiss to recall the facts to which we have contributed, and which are well illustrated by the following cases. Other and more severe examples will be found in cases appended to the later chapters of this work.

"CASE 30. *Gunshot wound of the right brachial plexus: causalgia: tremor: arthritic lesions: nail-changes: acid sweats: hyperæsthesia: little loss of motion from paralysis: great gain under treatment.* B. D. L——, aged forty-three, a farmer from Maine. Enlisted July, 1862. He was healthy to the date of his wound, received July 2nd, 1863, at Gettysburg. While kneeling and aiming he was shot in the right side of the neck. He felt pain in the wound, but none down the arm. He spun around, feeling stunned, and fell on his back, not unconscious. In five minutes he arose and walked to the rear, where the wound was dressed with cold water, no splint being employed either then or later. At first all motion was lost. In an hour he could move his finger and abduct the arm, but not flex it. He thinks sensation was perfect, except as to the ulnar distribution. Within an hour he had severe earache, and pain in the shoulder, arm, and forearm. During the second week he began to have burning pain in the hand. At this time, which probably marked the onset of neuritis, the shoulder-joint grew stiff, then the elbow, and lastly all of the fingers. This condition was excessively painful, and remained unchanged. The tremor which is constant in the upper arm muscles began the day of the wound, and had not ceased on his admission to our wards. On admission, October, 1863, it was noted that the ball had entered the right side of the neck, in front, three inches above the clavicle, in the outer edge of the trapezius. The missile passed downward and outward, and struck the anterior edge of the supra-spinal fossa of the scapula, five inches external to the spine of the first dorsal vertebra. Both wounds sloughed, leaving scars 1½ in. in diameter. The patient is well and florid; the shoulder is motionless from stiffness; the lower joints are alike stiff, swollen, red, and painful; the arm, semi-prone and flexed, is carried across the chest, supported by the sound hand. He has slight motion throughout, but the effort causes fibrillar tremor and exquisite pain. The sense of touch is everywhere good, save that there is slight numbness of the back of the hand and forearm. Some causalgia is felt in the palm, but no other pain, except on movement. The palm is thin and red or purplish, and on it the patient uses water now and then as a dressing; there is no atrophy; the wound is healed, but tender, as are also the upper nerve tracks. Muscular hyperæsthesia of the deltoid and triceps is present. The nails are remarkably curved, the hair is scanty, the sweat ill-smelling and acid. The shoulder muscles alone have lost electro-muscular contractility (induction current). Under ether, the joints, when moved, are found to be free from well-marked organic adhesions. Passive motion and electricity caused speedy gain in movement, and in February, 1864, he was able to move all the joints with diminished pain. The muscles were at this time sensitive to induced currents, and the numbness and causalgia had nearly disappeared. He was allowed a furlough, at the expiration of which he deserted. This case is valuable as an example of arthritic changes, extreme in character, with very little sensory or motor paralysis, and seemingly aided by treatment."

Again, Sir William Gull[7] has recorded the following two cases, and his remarks upon them are so suggestive that I quote them in full:—

"CASE 27. *Acute rheumatic (?) affection of the larger joints; paraplegia of lower extremities; slough over sacrum; recovery.*—Annie E——, aged thirty-nine, was admitted into Guy's Hospital, March 31st, 1857, under the care of my colleagues, Dr. Hughes and Dr. Wilks (to whom I am indebted for placing the case at my disposal). Both hands were swollen, stiff, and painful, with an erythematous blush over the back of the right, and on the second joint of the thumb of the left. The legs were so far paralysed that she could only very slowly and feebly move them. The muscles were greatly wasted and flabby, but had not lost their excito-contractility by galvanism; sphincters weak; no swelling of the knees or ankles at this time; sensation nearly normal, but at times both legs felt numb, and were drawn up involuntarily; urine acid, high coloured, and scanty; tongue covered with a cream-like fur; skin hot; perspiration profuse, with acid smell; pulse 120; systolic murmur over ventricle. On examining the spine, the lower third of the sacrum was found to be bent forward, the result of a fall eleven years before; and near the sacral notch, on the right side, was the cicatrix of a wound which formed at that time. Except this there was nothing abnormal, nor any pain or tenderness on pressure. The history she gave of her case was that, being a widow, she was necessitated to work laboriously at a mangle. She had for two years, when much exerting herself, felt pain in the back between the shoulders, and a sense of constriction and coldness round the chest. Ten days before coming into the hospital, she was seized with pain in the left leg, and had spasmodic contraction of the muscles, with an increase of the pain and constriction round the chest. She had still power to extend the leg, but could not walk. The day following, the hand, knees, and ankles were swollen and painful. With these symptoms there were febrile heat and diarrhœa. The sphincter ani was so weak that the fæces ran from her involuntarily. On the third day a slough formed over the sacrum. No important change

[4] London and Philadelphia, 1872, pp. 168–172.
[5] I have since met with similar cases.
[6] Reports of the Sanitary Commission.
[7] Guy's Hosp. Reports, Third Series, vol. iv., 1858, Cases 27 and 28.

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occurred in her symptoms after her admission. There was great muscular emaciation generally; involuntary twitchings of the muscles of the arms and legs; aching, gnawing sensations in both calves; touching the feet gave rise to formication and very lively excito-motor movements. For ten days the hands remained red, painful, stiff, and swollen. She complained much of heat and profuse perspirations, which returned several times in the twenty-four hours. On April 8th the urine was ammoniacal, and contained mucus. The hands were still swollen and erythematous; face flushed; pulse 100, full, as in rheumatism; acid smell of perspiration; respiration 28; movements thoracic and abdominal; abdomen soft; pupils large; nights sleepless. Ordered a grain of opium every six hours, with six ounces of wine daily, and a chop. On April 18th the good effects of the opium and support were very apparent. The patient had passed good nights, and was tranquil in the day. Perspiration lessened. Urine retained in the bladder for thirty-six hours was at length passed voluntarily; it was acid and without mucus. Tongue pale and moist. The slough on the back had deepened. The pupils still continued large. Occasional contraction of the muscles of the legs. No permanent rigidity. Hands remained swollen and stiff, but less red. She was unable to move the shoulders freely. On April 22nd the hands had recovered their normal appearance, and had lost their stiffness; the legs could be moved more freely; the sense of constriction round the chest was gone; pulse 96; skin cool and dry; appetite good; urine normal, but she could not empty the bladder oftener than once in twenty-four hours. From this date she slowly recovered. The opium was continued throughout her convalescence. At the beginning of June the muscles of the lower extremities were galvanised regularly. By the end of the month she was able to stand without help. Her improvement was uninterrupted, and in September she left the hospital quite well.

"*Remarks.*—It is a matter of great clinical interest that lesions of the cord are occasionally attended with an affection of the joints not to be readily distinguished from that which occurs in acute rheumatism. When this happens there may be difficulty in determining the pathology of a case. It may, indeed, be impossible to say whether the symptoms at a certain stage are due to disease of the cord or to a rheumatic state of the blood. In such instances we have a proof of the near relation of humoralism and solidism; for one observer may maintain that the local lesions have a common origin in the altered state of the blood, whilst another may with equal confidence assert their dependence upon a primary disturbance of the nervous centres. The case here recorded is an example of these difficulties. Fatigue from mechanical labour, acting especially on the lumbar and dorsal portions of the spine, in a delicate and anxious subject, appears to have injured the nutriment of the cord; for two years, when much exerting herself, the patient felt pain between the shoulders and a sense of constriction and coldness round the chest. Paraplegia then suddenly came on, followed by redness, pain, and swelling of the larger joints, as in rheumatism; together with these symptoms, there were others indicating a rheumatic condition—white furred tongue, flushed face, hot skin, profuse perspirations having an acid smell, systolic murmur over left ventricle, &c. Was there here a rheumatic state of the blood induced by the spinal lesion, or was the nervous derangement the result of a rheumatic state? Notwithstanding the labours of morbid anatomists and chemical pathologists, we are not at present in possession of any certain knowledge of what constitutes the rheumatic condition. My colleague, Dr. Addison, from his clinical experience, has long drawn attention to the close connexion between spinal lesions and true rheumatism, but has never developed the idea beyond expressing a suspicion of their relation.[8] At the time this case was under care the treatment was a subject of much observation. The result was very satisfactory. Whatever might have been the state of the cord, it was clearly induced by fatigue, and was soon followed by sloughing of the integuments. It would not, therefore, admit of depletory measures, but, on the contrary, required a nutritious diet and wine. Opium was prescribed apparently with great advantage; it allayed nervous irritability, and gave the patient sleep.

"The following case is also illustrative of the relation between spinal injury and rheumatic symptoms. The same plan of treatment as above was equally successful. The therapeutical view of this subject is certainly not without the greatest interest. No doubt the texture of the cord has but feeble reparative powers, notwithstanding it has been shown by experimenters on animals that occasionally, after a transverse section, the parts unite and the functions are re-established.

"CASE 28. *Concussion of the spine; partial paraplegia; redness and swelling of the wrists and ankles as in acute rheumatism. Recovery.*—N. T——, aged thirty-eight, on Jan. 22nd, 1855, inadvertently stepped backwards into a hole a few feet deep and received a concussion of the spine. After a few days he became partially paraplegic, with weak sphincters, and at the same time there came on a diffused redness and swelling of the ankles and wrists. The swelling was not from effusion into the joints, but from œdema of the surrounding tissues. The joints were very painful. The redness and swelling were variable in degree. When most marked they presented the usual appearances of rheumatism, or rather of gout, for the erythema was brighter and the œdema more distinct than in rheumatism. The hands were equally affected with the ankles, though there was no obvious want of muscular power, nor any affection of sensation in the upper extremities. Tongue clear; pulse 120; no acid perspirations; urine high coloured, free from deposits, and of normal quantity. The nerves of the surface generally were hyperæsthetic to a slight touch, but deep pressure gave less inconvenience. The treatment consisted of good nourishment, wine and brandy freely administered, and opium to allay pain and overcome sleeplessness. The pulse gradually acquired more power, and sank to 80. The affection of the joints continued in varying degree through March, April, May, and June. From the beginning of April there was an improvement in the power over the legs. The same treatment was continued throughout without the use of mercurials, local depletion, or counter-irritation. In June the patient was able to walk without assistance. During sleep the hands and feet, wrists and ankles, often became erythematous and swollen. There was occasional formication in the lower extremities. Sleeplessness, from the beginning of the case and throughout, was a troublesome symptom. In July the patient was able to leave the hospital, and to resume to some extent his duties as medical practitioner. He was under the care of my colleague, Mr. Cock."

Again, according to Professor Charcot,[9] "nutritive disorders consecutive on lesions of the nervous centres not infrequently take up their seat in the articulations." He establishes two varieties. The first comprising such cases as those I have already referred to, and including here also the *arthropathy of hemiplegic patients*, first described in 1846 by Scott Alison,[9] afterwards by Brown-Séquard.[10] These "arthropathies are limited to the paralysed limbs, and mostly occupy the upper extremities. They supervene especially after circumscribed cerebral ramollissement, and more rarely as a consequence of intra-encephalic hæmorrhage. They usually form fifteen days or a month after the attack of apoplexy—that is to say, at the moment when the *tardy contracture* that lays hold on the paralysed members appears; but they may also show themselves at a later epoch. The tumefaction, redness, and pain of the joints are sometimes marked enough to recall the corresponding phenomena of acute articular rheumatism. The tendinous sheaths are, indeed, often affected at the same time as the articulations. It is needless to insist upon the interest which pertains to these arthropathies as regards diagnosis, articular rheumatism, whether acute or subacute, being an affection often connected with certain forms of cerebral softening, and one which, indeed, shows itself also occasionally after traumatic causes capable of determining shock in the nervous centres. On the other hand, many affections of the spinal cord are erroneously attributed to a rheumatic diathesis in consequence of the co-existence of these articular symptoms. The clinical characters which render it easy to recognise arthropathies correlated with lesions of the nervous centres, and which allow them to be distinguished from cases of rheumatic arthritis, are chiefly these:—1st. Their limitation to the joints of the paralysed members. 2nd. The generally determinate epoch in which, in cases of sudden hemiplegia, they make their appearance on the morbid scene. 3rd. The coexistence of other trophic troubles of the same order, such as eschars

[8] Lectures on Diseases of the Nervous System. Translated by Dr. Sigerson. New Sydenham Soc., 1877, p. 92.

[9] "Arthritis occurring in the course of Paralysis." THE LANCET, vol. i., p. 278, 1846.

[10] Ibid., July 13th, 1861.

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of rapid formation, and (when the spinal cord is involved) acute muscular atrophy of the paralysed members, cystitis, nephritis, &c. The type of the second group is to be found in progressive locomotor ataxia. ..... Ataxia arthropathy usually occupies the knees, shoulders, and elbows; it may also take up its seat in the hip-joint." Professor Charcot then goes on to describe the physical and clinical characters of this form of arthropathy, and after pointing out the absence of all traumatic or diathetic cause of rheumatism or of gout, he proceeds as follows:—"It is not very rare to find the spinal grey matter affected in locomotor ataxia; but the lesion is then generally found in the posterior cornua. Now, it was quite different in two cases of locomotor ataxia complicated with arthropathy, in which a careful examination of the cord has been made; the anterior cornua were in both cases remarkably wasted and deformed, and a certain number of the great nerve cells, those of the external group especially, had decreased in size, or even disappeared altogether, without leaving any vestiges. The alteration, besides, showed itself exclusively in the anterior cornua corresponding to the side on which the articular lesion was situated. It affected the cervical region in the first case, where the arthropathy occupied the shoulder; it was observed a little above the lumbar region in the second case, which presented an example of arthropathy of the knee. Above and below these points, the grey matter of the anterior cornua appeared to be exempt from alteration. From what precedes, I hope to have made it appear at least highly probable that the inflammatory process, first developed in the posterior columns, by gradually extending to certain regions of the anterior cornua of the grey matter, was able to occasion the development of the articular affection in our two patients. If the results obtained in these two cases are confirmed by new observations, we shall be naturally led to admit that arthritic affections connected with myelitis, and those observed to follow on cerebral softening, are likewise due to the invasion of the same regions of the grey matter of the spinal cord. In cases of brain-softening, the descending sclerosis of one of the lateral columns of the spinal cord might be considered as the starting-point of the diffusion of inflammatory work."

From these illustrations gathered from various authorities, it is, I think, very clearly shown that lesions in the spinal cord or along the course of the motor nerves may give rise to changes in the joints, which in many cases present no difference from the condition seen in subacute rheumatism, in others, as in Charcot's disease, producing rapid disintegration of the bony tissue—decay without repair, as it has been so aptly termed by Morrant Baker. But in all the cases we have changes taking place in the condition of the joints, and these changes produced by causes acting on the nerves connected with the part, either along the course of these nerves or at their origin in the central nervous system.

Now, is there in the phenomena of rheumatism anything suggestive of an irritating cause acting upon portions of the central nervous system? If so, what is it, and how is it produced? Let me call your attention to the changes produced in the system when under the normal state of things the surface of the body is exposed to the action of cold or heat. The effect, as is well known, is very different as regards cold-blooded and warm-blooded animals. External cold diminishes and heat increases the metabolic activity of the cold-blooded animal, acting like a mixture of dead substances in a chemical retort. But in a warm-blooded animal, within certain limits, cold increases and heat diminishes the bodily metabolism, as shown by the increased or diminished consumption of oxygen and production of carbonic acid as the temperature falls or rises. There is obviously a mechanism of some kind counteracting and, indeed, overcoming those more direct effects which alone obtain in cold-blooded animals. But under the influence of urari, which paralyses the end organs of the muscular nerves, a warm-blooded animal behaves, as regards its bodily metabolism, under the influence of external cold and heat like a cold-blooded animal. A similar result is obtained by division of the medulla oblongata. The temperature of an animal so operated upon falls, and then exposure to heat augments and exposure to cold diminishes its metabolic activity. "We can best explain these results by supposing that under normal conditions the muscles which, as we have seen, contribute so largely to the total heat of the body, are placed, by means of their motor nerves and the central nervous system, in some special connexion with the skin, so that a lowering of the temperature of the skin leads to an increase, while a heightening of the temperature leads to a decrease, of the muscular metabolism. Further, though the matter has not been fully worked out, the centre of this thermo-taxic reflex mechanism appears to be placed above the medulla oblongata, possibly in the region of the pons Varolii. When urari is given the reflex chain is broken at its muscular end; when the spinal cord is divided the break is nearer the centre."[11]

How does this bear upon rheumatism? An individual is exposed to a cold draught or gets wet; the surface is chilled; the cutaneous vascular areas are constricted; by reflex action through the vaso-motor system the splanchnic vascular areas and the vessels of the muscular areas are dilated; the vaso-motor nerves distributed to these parts are paralysed, so to speak; with this paralysis of the vaso-motor nerves there is dilatation of the vessels in connexion with them, and so a larger amount of blood is carried to the part, and consequently a larger quantity of oxygen to act upon the tissues. But an increased supply of blood is not sufficient of itself to increase the functional activity of an organ, and therefore to produce increased heat. This has been clearly demonstrated by the well-known experiments on the submaxillary gland and by the experiments on the muscles. The submaxillary gland is supplied by two nerves, the branches of the chorda tympani reaching it along its duct, and by branches of the cervical sympathetic reaching it along its arteries. Now the chorda contains two sets of fibres—(1) secreting fibres acting only on the epithelium cells, and (2) vaso-motor or dilating fibres. Stimulation of this nerve brings about two events—dilatation of the blood-vessels of the gland and a flow of saliva; that is, there is not only a dilatation of the vessels, and so increased supply of blood, but there is an absorption, an assimilation, of some of the molecular constituents of the blood by the gland cells, and if these constituents are properly elaborated by the cells, the formation of saliva. But the elaboration of these constituents can be modified, for by stimulating the sympathetic nerve "a slight increase of flow is seen, but this soon passes off, and so much saliva as is secreted is remarkably viscid, of higher specific gravity, and richer in corpuscles and protoplasmic lumps, and is said to be more active on starch than chorda saliva."[12] This fact has a very important bearing upon the subject I am discussing—namely, the fact that according to the variations in the stimulus applied to the two sets of nerves, alterations in the secretion can be produced; modification, that is to say, in the molecular changes in the contents of the secreting cell can in this way be brought about.

Further, if a small quantity of atropine be injected into the veins, stimulation of the chorda produces no secretion of saliva at all, though the dilatation of the blood-vessels takes place as usual. This proves "that atropine, while it has no effect on the vaso-motor fibres, paralyses the secreting fibres just as it paralyses the inhibitory fibres of the vagus. Hence, when the chorda is stimulated, there pass down the nerve, in addition to impulses affecting the blood-supply, impulses affecting directly the protoplasm of the secreting cells and calling it into action, just as similar impulses call into action the contractility of the protoplasm of a muscular fibre. Indeed, the two things, secreting activity and contracting activity, are quite parallel. We know that when a muscle contracts its blood-vessels dilate; and just as by atropine the secreting action of the gland may be isolated from the vascular dilatation, so by urari muscular contraction may be removed and leave dilatation of the blood-vessels as the only effect of stimulating the muscular nerve."[13]

If this is the case, there must be, in order that heat may be developed, not only an increased supply of blood to a tissue, but also some chemical change in its molecular constituents. Such a molecular transformation is shown by the production of lactic acid and carbonic acid when a muscle contracts or when it dies. The molecules forming these substances are detached from the muscular tissue. Now I would suggest that the change in the molecular constituents of the muscular tissue which leads to the further development of heat results from a weakening or lessening of the power, whatever that may be, which holds the molecules together; that with the dilatation of the vessels in the part, under the influence of the vaso-motor nerves, there is also a splitting up or tumbling to pieces of the

[11] Foster's Physiology, fourth edition, p. 467.
[12] Ibid., p. 261.
[13] Ibid., p. 251.

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albuminoid molecules, and from both causes heat is developed. The normal change of the cyanalcohols is interfered with. Their condensation into higher cyanalcohols with elimination of urea, or their change into cyanamides and amido-acids with the ultimate oxidation of the latter, is modified. The molecules $CH_2\{^{OH}_{CN}$ and $C_2H_4\{^{OH}_{CN}$[14] become detached more or less from each other, and by hydration (by which heat is developed) form substances—glycollic acid and lactic acid—which are readily oxidised, more readily than the amido-acid glycocine which is also formed. The oxygen, though conveyed in larger quantities than normal by the increased blood-supply to the tissue, is completely used up in oxidising into carbonic acid and water the glycollic and lactic acids[11] which have been formed; the excess of lactic acid and the glycocine are unoxidised, and pass into the circulation. Now, in a normal or healthy state of things, the irritating or stimulating cause acting on the vessels and nerves of the skin being removed, reaction would be set up there, the cutaneous vascular area acted upon by the lactic acid would dilate, and consequently the vessels of the muscular area would contract, and this latter contraction would be increased by the stimulating effect of the glycocine or some resulting morbid product, which, being a morbid product, would stimulate some portion of the nervous system. We should naturally expect that under the normal state of things it would so act upon the nervous system as to check the further formation of the morbid material. This could be done by stimulating the vaso-motor nerves connected with the vessels of the muscular area and causing their contraction. We have such an example of stimulation, though in a different direction, in the effect of carbonic acid on the respiratory centre. A closer illustration may perhaps be found in what results from the injection of bile (which contains glycocine) into the blood. This is at once followed by increased arterial tension. But the closest analogy may be found in the effects produced on the system by what is simply a form of vegetable uric acid—viz., caffeine. In moderate doses, this increases the heart's action, both by its direct effect on the organ and also by exciting contraction of the arteries; the blood-pressure and the frequency of the pulse are both intensified. The morbid product, then, which, as I shall endeavour to show, is uric acid, by increasing the arterial contraction, would, in a healthy state of things, cause less blood to go the muscular area, the molecular constituents would again be held more firmly together and undergo the normal changes, the uric acid being meanwhile excreted by the kidneys and the lactic acid by the skin. I have here drawn you a picture of an ordinary feverish cold—the primary chill, the ensuing febrile condition, the elimination of lithates, with the subsidence of the attack.

The morbid product I have said is uric acid and results from the excessive formation of glycocine in the muscular tissue. This brings me to the questions—What relationship has glycocine to uric acid, and how are these concerned in the phenomena of rheumatism? We know that in gout an abnormal amount of uric acid is present in the blood. The researches of Dr. Garrod have shown this very clearly. But how the uric acid is formed, why in some cases it leads to uric acid calculi, why in others it passes off in the urine as gravel, in others as urate of ammonia, and in all these cases, it may be, without the joints being disturbed; why, again, in other cases associated with uric acid in the blood, the joints become affected and present the symptoms known as gouty, are points still open for discussion, and I will, therefore, as I think they are closely related to and have a distinct bearing upon the phenomena of rheumatism, turn aside and detain you for a short time whilst I try to throw some light upon them.

(To be concluded.)

[14] See *ante*, page 628.

MEDICAL HEROISM IN RUSSIA.—The two Russian doctors who, as mentioned in a recent issue, heroically attended to a very violent hydrophobic patient, are now in the Kharkoff provincial hospital under the care of Professor Kovalevski. They are about to be sent to Pasteur in Paris, a considerable sum having been already received in subscriptions for the purpose of defraying the expense.

Gulstonian Lectures

ON

SPASM IN CHRONIC NERVE DISEASE.

Delivered at the Royal College of Physicians of London, March, 1886.

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LECTURE II.

(Concluded from page 626.)

THE case I shall relate next is a good instance of the results of pressure on the cord applied from within by central tumours. The disease is a very rare one, and the specimen I show is so beautiful an example of it that I have endeavoured to work out the histological changes which it has produced in the cord as minutely as possible, in order to see how far they explain the clinical phenomena observed during life.

C. W——, aged fifty, waiter, was admitted into St. Thomas's Hospital, under the care of Dr. Stone, on Jan. 24th, 1885, and died on March 18th, 1885. His family history was unimportant; he had a wife and five children, all strong and well. He had enjoyed the best of health since he was a child, and had never had syphilis. His illness commenced somewhat suddenly, with pain in the back, eighteen months before his admission. Partial loss of power and sensation in both his arms and hands soon followed, together with tremulousness on attempting to use them. It was not until three months before coming to the hospital that his legs became affected. Since then he had had numbness and pricking sensations, loss of power, and a sensation of coldness in them. On walking, the ground felt soft. His bowels had been irregular, and he had had some difficulty in passing urine; his appetite had been poor; he slept fairly well. On admission, he was a healthy-looking man, and complained of loss of power, numbness, and formication in his legs, together with incontinence of urine. On examination, no angular curvature or marked rigidity of the spine was discovered; but some tenderness without prominence was found about the lower cervical and upper dorsal vertebræ. The legs were almost completely paralysed and anæsthetic, but there was no wasting of muscles, no rigidity, and no tremors. The tendon reflexes were much exaggerated and there was ankle-clonus in both legs. The patient could use his hand and arms fairly well, but they were numb and tremulous and the grasp was weak. There was no ocular paralysis. Urine was retained and the bowels confined. Pulse 84; temperature normal. Tongue slightly furred. The urine was of specific gravity 1030; no albumen; faintly acid. The abdomen was natural; hepatic and splenic dulness was normal. The lungs were resonant and the breathing healthy, nor was there anything abnormal detected on examination of the heart. He continued in much the same condition for some weeks, complaining a good deal of pain in the back high up and of occasional pains in the legs. The muscular power and sensation underwent but slight variations in the upper and lower extremities, though he complained sometimes of twitchings. The temperature was generally normal, but now and then somewhat raised. Incontinence of urine set in about Feb. 5th, and it became alkaline and phosphatic, and contained albumen. On Feb. 24th it was noticed that there was tenderness in the lower dorsal and lumbar regions of the spine, and that complete anæsthesia existed below the level of the middle of the chest. On March 12th the legs were completely powerless and the right leg œdematous. The patellar and plantar reflexes were very brisk; ankle-clonus was marked, but there was no knee-clonus. Sensation of touch and of pain in lower extremities was abolished; sensation of heat was retained. There was no control over the bladder or rectum. In the centre of the sacral region was a large horseshoe-shaped bedsore, with a red granulating surface, and a smaller one was forming over the right hip. The urine was alkaline, and contained pus and mucus. On March 14th the patient took his tea at 5 P.M., and seemed to be in his usual condition. Soon after 6 P.M., when the sister

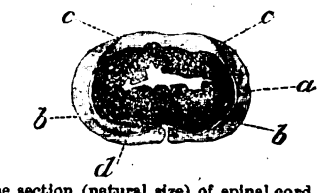
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came to him, he was found to be unconscious. At 6 P.M. his eyes were shut and he was breathing heavily, and when asked how he was, he said he was "as usual." The pupils acted to light. His tongue was protruded to the left, his left cheek was flaccid, and his left arm powerless. His head and eyes were turned to the right. The pulse and heart-sounds were very feeble, but there was no murmur. He altered but little after this, and died on March 18th.

The following is an account of the post-mortem examination, made twelve hours after death:—Body emaciated. Over the sacral region in the middle line a large superficial bedsore was seen, and there were several smaller ones in the neighbourhood. The peritoneum, pericardium, and right pleura were healthy; the left pleura was everywhere firmly adherent to the thoracic wall. The lungs were intensely congested and œdematous, but otherwise healthy. The heart appeared normal in size. The valves on the right side were natural; those on the left a little thickened, but competent. Along the line of attachment of the mitral valve to the wall of the heart on its auricular aspect was a series of papilliform elevations, such as are often found in this position in cases of endocarditis. There appeared to be little or no coagulum upon their surface. The spleen was large, weighing 9½ oz., and contained several large pyramidal infarcts, which were still soft, and had a very clearly defined white margin. The bladder, ureters, and the pelves of the kidneys were inflamed, and presented some phosphatic deposits upon their surface. The kidneys were somewhat large, succulent, and showed evidence of early suppurative nephritis. The capsule peeled off easily, and below it were seen, in large numbers, minute white dots, which felt gritty when touched with the point of the knife. In one kidney was a small infarct, opaque, yellowish white in colour, with a red margin. The weight of the kidneys was 10¼ oz. The liver was somewhat large, and very heavy, weighing 70½ oz. The pyloric end of the stomach was attached by slight adhesions to the gall-bladder. The latter was completely filled by a large gall-stone. Its walls appeared to be fairly healthy, except at the extreme fundus. The latter was thickened by new growth, and projected as a hard nodule in the small indentation through which the healthy gall-bladder often projects on the upper surface of the liver. From the nodulated fundus, as a centre, grew a large mass of carcinoma into the substance of the right lobe of the liver. The line which limited its growth furthest away from the gall-bladder was curved, and in its neighbourhood the luxuriant new growth bulged upon the surface of the organ. That portion which was nearest to the gall-bladder was depressed and harder, giving one the impression that it was older than the peripheral growth. Large vessels coursed over the surface of the mass. One or two very minute islands of new growth were seen here and there in the liver-substance at a distance. The stomach and intestines were healthy, and no focus of new growth was found which could have given rise to that in the liver as a secondary product. The spinal column, as seen from the interior of the body, seemed to be perfectly natural; nor, on removing the posterior portion of it and taking away the spinal cord, did it present any traces of disease. On removing the brain, the greater bulk of the right hemisphere, as compared with the left, was very striking; to the finger it felt soft, especially in the lower part of the parietal region and in the temporo-sphenoidal lobe. On making a horizontal section, so as to expose all the central ganglia to view, it was seen that the whole of the corpus striatum—both the nucleus caudatus and nucleus lenticularis—was softened, and broke up under a stream of water. The internal and external capsules, the convolutions of the island of Reil, and other convolutions adjacent to them, were in a similar condition. The right middle cerebral artery was found to be completely blocked, just beyond the spot where the first few vessels are given off to the central ganglia. On examination of the spinal cord, it was found that the dura mater was healthy. At the junction of the lower dorsal and upper lumbar regions was a softened area about an inch in length, and involving apparently the whole thickness of the cord. It was rather deep red in colour, with a pale yellowish island at one spot, which, with its deeper coloured periphery, was very suggestive of infarction as it is seen in other organs. Higher up, about the middle of the dorsal region, the anterior spinal artery was interrupted in its course, and surrounded by a long superficial hæmorrhage of a brownish-red colour. The cervical enlargement, especially in its upper part, seemed to be of enormous dimensions, retaining, nevertheless, the natural shape of the cord. On pressing with the finger, it was found to be very firm over an area one to two inches in length. On making a transverse section through the cord in the upper cervical region, where there was no feeling of increased density, the central canal was found to be much enlarged and to contain blood partially coagulated. Where the canal opened out into the fourth ventricle it appeared to be healthy. When a section was made through the enlarged and hardened portion of the cord a most curious appearance presented itself. A very narrow and even rim of apparently healthy white matter surrounded, as with a sheath, a dense reddish-grey mass, of oval outline. In the centre of this mass was a hollow space, which presented a very marked resemblance in shape to the central grey matter of the spinal cord, and which contained blood. On teasing out a portion of this new growth in the fresh state, it was found to consist mainly of spindle-cells and of cells with many long fine processes, such as one sees in gliomata.

In the first of these two cases of spinal tumour, where the pressure was exerted upon the cord from without, death occurred in twelve months from the appearance of the first symptoms. The latter were, in order of time, weakness of the legs in walking, increasing weakness of legs, accompanied by cramp and shooting pains, paraplegia, cramp, and involuntary flexing of legs; slight numbness and long continued attacks of muscular spasm in the lower extremities; and, finally, persistent rigidity. In the second case, the symptoms due to pressure alone, which was exerted upon the cord from within in the cervical region, continued for fifteen months uncomplicated by other disease; they were simply partial loss of power and sensation in the arms and hands, and some tremor in them when used. This was the condition of the arms when the patient was admitted into

FIG. 24.



Transverse section (natural size) of spinal cord in a case of central glioma. *a*, Rim representing spinal cord; *b*, anterior cornu; *c*, posterior cornu; *d*, central tumour.

the hospital, and it was little altered even at the time of his death, which occurred twenty months after the appearance of the first symptoms. During the last five months of life, fresh symptoms arose in relation with hæmorrhage and softening in the dorsal region of the cord—accidents which are very liable to occur in cases of gliomata; and the accident which finally proved fatal was embolism of the right middle cerebral artery, giving rise to left hemiplegia.

When a tumour grows in the spinal canal outside the cord, it may produce but few symptoms until it presses the cord against the resisting walls of the canal; but after this has taken place the course of the disease is naturally very rapid, as the cord is quickly flattened by the constantly increasing demands for growing space which are made by the tumour. When a tumour arises, on the other hand, within the spinal cord, it disturbs its functions even from the very commencement; but as the nerve substance appears to be elastic, and to allow a good deal of gradual stretching without serious interference with its functions, a tumour may go on growing for a long time before it produces striking pathological phenomena, either by pushing the cord against the bony walls of the spinal canal, or by exhausting the elasticity of the membranes which envelop it. These remarks apply only to gliomata and such non-malignant tumours as exert pressure on surrounding tissues, but do not invade them. The description which I now give of the microscopic appearances of the spinal cord and of the tumour in the present case shows that a state of things is produced by the disease which fully explains the chronicity of some of these cases, and the trivial symptoms which present themselves. The tumour is situated almost entirely in the cervical region, and mainly in the cervical enlargement. In the middle of the latter the mass assumes its largest proportions, and the enveloping sheath of nerve-tissue is comparatively smaller than in any other region of the cord (Fig. 24). When examined with the

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microscope, the greater part both of the white and of the grey matter can be readily recognised, though pressure has produced some alterations in them. On holding up a stained transverse section to the light, one observes in its anterior third a small oval area which is more transparent than the parts around; it is situated in the white rim, and lies upon the tumour. Under a low power this proves to be the anterior cornu, containing the usual multipolar cells (Fig. 26). Symmetrically placed upon the opposite side of the tumour is a similar oval mass, which is the other anterior cornu. The cells are not healthy on either side, but are pigmented, and more or less elongated by pressure (Fig. 28); but considering the pathological conditions to which they have been subjected, they are singularly well preserved. The anterior roots can be traced from the cornua through the white substance to the periphery of the cord, and the posterior cornua extend backwards along the margin of the tumour. The lateral, posterior, and anterior columns of white fibres are all present, and show but slight pathological alterations (Fig. 27); there is no marked sclerosis anywhere. The same may be said of the whole extent of the cord which is occupied by the main bulk of the tumour. The latter becomes smaller and smaller in the lower cervical region, and is no longer evident as a mass in the lower dorsal region. Here, however, considerable hæmorrhage and softening have occurred (Fig. 25); and to these changes the later symptoms in the case may be referred, when the legs became paralysed and increase of the tendon reflexes and ankle-clonus appeared. As the tumour becomes smaller, and finally ceases to be recognised as such in the dorsal region, it is probable that the changes present in the cord there represent the early stages of its growth. They occupy the left half of the posterior columns and the left lateral column, and consist of a peculiar thickening of the neuroglia, which is transformed into a hyaline substance (Fig. 37). The nerve fibres in its meshes are at first but little altered, then they become swollen; the vessels are much thickened, and their walls assume the same glassy appearance as the neuroglia. In the cervical region the central canal cannot be recognised, but in the lower parts of the cord, where the growth is early, it can be seen pushed to the right. As to the tumour itself, it consists of numbers of islands of new growth situated around large bloodvessels as centres, and starting from them. The vessels have the thickened hyaline walls already referred to, and numbers of fibrillæ can be seen issuing from them. The new growth is richly nucleated, and has a very definite radiate arrangement round each centre. On examining very fine sections under high powers, the new tissue is seen to consist of meshworks of very delicate fibrils and bundles of fibrils in which are situated the nuclei. It may therefore be put down as glioma. (Figs. 29 and 30.) In Virchow's *Archiv* for 1884 a very similar case is recorded by Dr. Reisinger, and an abstract of all the cases to be found in medical literature is added. They amount to twenty in all. It is very curious that in Dr. Reisinger's case the earliest changes were seen, as in mine, in the posterior columns near the central canal. The minute anatomy of the specimen I show here explains why the symptoms in cases of central tumour of the cord may be so slight and extend over such long periods of time, and why spastic conditions are not readily induced, as they are when pressure is applied from without. For even when the disease is so extreme that the substance of the cord forms merely a narrow ring round it, the nerve tissue presents very slight pathological changes.

I shall now relate a case which illustrates the modification which occurs in the symptoms of disease of the lateral columns, when it is combined with disease of other parts of the cord.

Case of Primary Disease of the Lateral Columns, accompanied by similar changes in other parts of the Central Nervous System.—M. H——, aged fifty-three, whose occupation was pulling down old houses, was admitted into St. Thomas's Hospital, under the care of Dr. Ord, on Nov. 10th, 1884, and died on Dec. 2nd of the same year. There was no history of nerve disease in his family. He had always enjoyed fair health, though troubled with indigestion and bilious attacks. The only definite illness he had had was ague at the age of twenty-three. He had never had syphilis. Before his present illness began he had been in the habit of drinking five or six pints of beer daily, but no spirits; he also smoked a good deal—about half an ounce of tobacco a day. His occupation necessitated pretty constant exposure to cold and wet, and he had had several falls, but had never had any symptoms of importance after them. About seven years before admission to St. Thomas's he had had great anxiety about money matters, and was up night and day for about a month. He then got out of sorts, and presently noticed that the toes of both feet were becoming numb, and the legs somewhat stiff; this, together with weakness, produced difficulty in walking, and the right leg began to drag. He was quite unable to walk in the dark or with his eyes shut, or to turn round quickly. The difficulty in walking had steadily increased, and both legs had become equally affected. Six months ago, total inability to get about made him take to his bed, the numbness increased, and he began to be troubled with jerking of the legs; the arms also got somewhat stiff. He noticed that, although he could grasp large objects well, he could not pick up small ones, such as pins. He had burning pains in the legs and shoulders, and shooting pains in the back and abdomen. During his whole illness he had suffered from indigestion and constipation; his legs had become thinner, and he had lost weight. His sight, which used to be very good, had gradually become dim, so that he could only read print when it was held very close to him. His hearing had remained good. The right foot and ankle had been swollen for a short time previously, but none of his other joints had been affected. He had lost all sexual desire, and for five years had had some trouble with his urine, sometimes having retention, at others continuous dribbling. He had never had any difficulty in speaking or in swallowing. On admission the patient was an emaciated man, complaining of inability to walk, dimness of sight, and shooting pains in the legs and thighs. Although unable to stand, he moved his legs freely in bed, and there appeared to be no loss of power in them, but there was some rigidity. The arms showed no loss of power; the grasp was strong with both hands, but there were slight tremors in the right arm when he used it. The muscles of the face were stiff and tremulous when strongly contracted. There was partial loss of control over the bladder, but none over the rectum. Sensation was impaired in the lower extremities, but not markedly; the patellar reflex was absent, and there was no ankle- or knee-clonus. Plantar reflex was brisk on both sides, the cremasteric absent. The lower abdominal reflex was slight on both sides, the epigastric absent. The right pupil was larger than the left, and both acted to light and to accommodation. There was no oculo-motor paralysis or colour-blindness. He had slight lateral nystagmus. There was well-marked atrophy of both discs, most marked on the inner side. There was no affection of speech or of hearing, but the sense of smell was much impaired. The radial vessels were somewhat thickened; the bowels constipated. The abdominal and thoracic viscera were free from serious disease. The urine had a specific gravity of 1025, was alkaline, and contained phosphates, but no albumen. During the rest of his life little alteration occurred in the symptoms which have been described, but cystitis with high temperature set in. He was also attacked with swelling, redness, and œdema of the metatarso-phalangeal joints on both sides and of the ankle-joints; he finally got bedsores, and died on December 2nd. The necropsy made next day showed the body to be that of a well-nourished, grey-haired old man. The legs were thin, and proportionately thinner than the arms. Both heels were black, as if from commencing gangrene. The external malleolus on the left side, as well as the sacrum, was in a similar condition. The ankle- and knee-joints were quite healthy. The heart, lungs, liver, and spleen presented no evidences of disease. The kidneys were healthy, but the bladder was evidently inflamed, as it contained three or four ounces of flaky purulent fluid, and its mucous membrane was of a deep purple colour. The intestines, pancreas, and suprarenals were all free from disease. The sheath of the spinal cord was distended with clear fluid, so that when the latter escaped the cord was seen to occupy but a small part of the tube formed by the dura mater. There was no undue vascularity, nor anything remarkable on external examination. On making transverse sections of the cord from below upwards, it was found that in the lower part of the lumbar region there were no abnormal appearances. But in the upper lumbar region three tracts of degeneration were visible. Two of them were in the lateral columns, which were symmetrically affected; the third consisted of the columns of Goll, which together formed a triangular area. The diseased parts were transparent, and had the colour of glue. The degeneration

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could be followed in all three tracts as far as the medulla oblongata, but there it became less and less evident, and could not be seen at all in the upper part of the medulla and pons Varolii. The disease in the lateral columns appeared to be superficially situated, and was more extensive in the upper than in the lower regions of the cord. It occupied a larger area on the surface of the lateral columns, but penetrated less deeply into them than is usually the case in descending degenerations. It was impossible to say from a naked-eye inspection whether the columns of Goll were the only parts of the posterior columns which were diseased, or whether the degeneration affected those of Burdach as well. The cord was firm, and, with the exception of the regions already referred to, it appeared to be healthy. The only morbid appearances discovered in the brain were found in the optic nerves. They were both pale and flattened, and evidently the seat of degeneration. The corpora geniculata, corpora quadrigemina, optic thalami, and supposed cortical centres of vision were all normal in appearance. There were symmetrical ivory exostoses on the fourth and fifth ribs on each side in the posterior third of their length, but they were not so situated that they could press upon either nerves or vessels.

The symptoms in this case which point to lateral sclerosis are weakness of the limbs, tremulousness, jerkings, and rigidity; while numbness, pains, loss of sexual desire, difficulty with the evacuations, dimness of sight, and absence of the patellar reflex indicate more extensive disease. On microscopical examination the spinal cord proves to be the seat of very widespread changes; and yet the parts affected are so constant throughout that the affection cannot be looked upon as an indiscriminate one, but must be placed among the more complicated combined system diseases. It will be seen by reference to Fig. 33 that the regions affected are (1) the lateral columns; (2) the posterior columns; (3) the direct pyramidal tracts; (4) the anterior root zones; and (5) in a minor degree the grey matter of the anterior cornu. But it will also be observed that in the neighbourhood of the grey matter everywhere a zone remains healthy, and, in addition, a superficial tract of fibres situated between the crossed pyramidal and cerebellar tracts posteriorly, and the anterior root zones anteriorly, is unaltered. The pathological changes throughout the diseased areæ are the same, and must be considered to be those of chronic inflammation affecting mainly the nerve fibres, and in a far less degree the neuroglia; in other words, they represent a form of chronic myelitis. In the regions referred to are seen increase in the nuclei of the neuroglia, and in the white corpuscles within the vessels, hyaline swelling of the neuroglia, distension of the neurilemma, and disintegration of the white substance of Schwann (Figs. 34, 35, 36). Motor phenomena were those which were most strikingly affected during life, and sensory changes were far less marked. The pyramidal tracts, direct and crossed, and the anterior root zones, are undoubtedly motor regions; while the columns of Goll are afferent, and connect centres below with centres higher up; hence the disease is principally an affection of the motor systems of fibres. The escape of the small superficial area in the lateral column from pathological changes is exceedingly interesting, and marks it out as a tract containing some particular set of nerves. Gowers first called attention to this small tract of fibres, which appear to be afferent, and to degenerate centripetally. Several other writers have also mentioned it, among them Dr. Hadden, and Dr. Howard Tooth has a paper on it in St. Bartholomew's Hospital Reports for 1885, vol. xxi. The medulla oblongata, pons Varolii, crura cerebri, motor convolutions, anterior crural and optic nerves, and the triceps femoris muscle were all examined microscopically. The optic nerves were found to be atrophied, and there was an excess of nuclei in the anterior crural nerve and in the triceps femoris; but with these exceptions all the parts examined were free from disease.

I have detailed this case, rather than one of the more usual ones, where chronic affections are confined to less extensive systems of nerve fibres, in order to show that disease is a very complex process, however much we may endeavour to simplify our notions of it, and likewise to point out in how modified a form disease of the pyramidal tracts presents itself, if there be in addition pathological changes in other regions of the cord.

Before leaving the subject which I have thus far been illustrating—namely, the relation between diseases of the cerebral motor system and the production of chronic muscular spasm,—a few words must be added in answer to the question, Does spasm ever result from afferent stimuli reflected on to efferent fibres in the cerebral centres, or from diseases of the commissures? If we limit the term cerebral centres to the grey matter of the hemispheres and central ganglia, I know of no undoubted instances of reflex spasm in connexion with them. Convulsions, which may be due to such causes, do not come within the scope of the present lectures; and had I the time to treat of them, I should shrink from casting a shadow upon ground which has been so brilliantly illuminated by the genius of Hughlings Jackson. Several cases of tumours of the corpus callosum have come under my notice, and they have been published by Dr. Bristowe in *Brain* (vol. vii.) I cannot do better than quote the words of so distinguished a physician and pathologist in describing the symptoms which were observed in them. The chief characteristic features were: "1. Their ingravescent character, a character which they possessed in common with other cases of cerebral tumour. 2. The gradual coming on of hemiplegia, for the most part resembling in its distribution the paralytic symptoms usually attending hæmorrhage into one of the hemispheres, or softening due to embolism. 3. The association with the paralysis of one side of vague hemiplegic symptoms of the other. 4. The supervention of stupidity, associated for the most part with extreme drowsiness, a puzzled inquiring look when awake, a difficulty of getting food down the throat, and cessation of speech. 5. The absence of implication of the oculo-motor nerves, and of direct implication of other cerebral nerves; and, lastly, death by coma." From beginning to end of these cases no muscular spasm occurred.

In the remarks which the time at my disposal has allowed me to make on diseases of the pyramidal tract, and the part played by it in the production of spasm, I have tried to point out how numerous and varied the clinical phenomena may be, according to the level at which the pathological conditions occur, according to the method of attack—whether from within or from without,—and according to the presence or absence of disease of other portions of the central nervous system. I must now leave this division of my subject, and pass on in the last lecture to a consideration of the spinal motor system, and to so-called functional spasm.

ON A

BACILLUS CULTIVATED FROM THE BLOOD AND FROM THE DISEASED TISSUES IN SYPHILIS.

BY F. S. EVE AND A. LINGARD.

THE course of syphilis and the structure of the new formations indicate a probability amounting to a conviction that the disease is produced by a micro-organism, which gains access to the body by the primary inoculation, and is carried through the lymphatic system into the blood. We have, as opportunity permitted, continued to investigate the question of the etiology of syphilis since 1884, when one of us (Mr. Eve) showed bacilli in primary sore, indurated lymphatic gland, and secretion from sores, at a lecture on the Histology of Syphilis given at the Royal College of Surgeons. We have, as our methods improved, with increasing constancy demonstrated bacilli in numbers in many (at least twelve) primary sores, in indurated glands from three cases, in gummata from two cases, in a papular syphilide, and in condyloma. After many attempts we have latterly succeeded in that which has hitherto not been accomplished—namely, in cultivating a morphologically identical bacillus from the blood of syphilitic patients in two instances, and from syphilitic tissues in three instances. We offer brief details of the following observations in which positive results were obtained.

1. A pure cultivation grew after inoculation, under stringent precautions, of solidified blood-serum with blood from the lobe of the ear of a patient in the Lock Hospital, who had a profuse tuberculo-squamous syphilide. An indurated sore had existed two months, but he had taken no mercury. 2. Cultivation from the blood of a young man, an out-patient at the London Hospital, who had a general well-marked roseola, which had recently appeared. He had only taken

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mercury three weeks. 3. A patient in the Lock Hospital was suffering with a hard sore, a bubo, and a general tubercular syphilide. He had taken no mercury. With his consent a papule with the subjacent cutis was excised with scissors from the front of the thorax, the skin being previously cleansed with a solution of carbolic acid (1 in 20), and the scissors heated immediately before use. A blood-serum tube was at once inoculated from the lymph exuding from the base of the papule, and in the course of a few days a cultivation similar to the preceding developed. On subsequent examination sections of the papule showed very numerous bacilli scattered in the connective tissue interspaces of the corium and around and within the small aggregations of round cells, which in parts invested the capillaries. Many of the bacilli showed the unequal staining to be presently described; others were uniformly stained (see Fig. 1). 4. A similar organism was also obtained in a cultivation from a much enlarged and distinctly indurated lymphatic gland from a man who had an indurated but somewhat ulcerated sore in the furrow

FIG. 1.



Bacilli in sections of a syphilitic papule. The three pale bacilli were unstained, and are possibly bacilli containing spores (950 diameters).

FIG. 2.



Cultivation from blood (950 diameters).

around the glans penis. The sore and the glans were excised at the same time, and in both bacilli were demonstrated. The sore had existed for one month. He left the hospital shortly after the operation and was subsequently lost sight of. The condition of the glands, the histological characters of the sore, and the history of the case, were all in favour of the view that he had syphilis. 5. Cultivation from lymph exuding from the base of a somewhat inflamed sore on the inner surface of the prepuce, which was removed by circumcision. There were distinctly indurated glands in both groins, and the patient subsequently developed secondary manifestations. 6. An impure cultivation grew after inoculation with lymph from the base of a freshly excised condyloma.

In none of the cases from which cultivations were obtained had mercury been administered for any length of time, and a long series of failures have led us to reject entirely cases which have been long under mercurial treatment. All these cultivations were composed of a very peculiar and somewhat polymorphous micro-organism (see Fig. 2), consisting of longer or shorter rod-like bodies, with rounded, and

FIG. 3.



Bacilli in section of a chancre (950 diameters).

FIG. 4.



Cultivation of bacilli from a phagedænic sore (950 diameters).

sometimes enlarged, or distinctly club-shaped ends; they were usually straight, but occasionally curved. The longer bacilli were as a rule unequally stained, and showed from three to five, or even eight, deeply stained segments united by unstained protoplasm and enclosed in a hyaline sheath. Organisms were observed in which the unstained material was drawn out in a thread-like filament connecting the enlarged end to the rest of the bacillus. The shorter organisms were composed of two elongated or oval masses of stained protoplasm separated by a clear interval, which relatively increased as the bacillus became longer. The transitional forms from these to the long beaded bacilli were patent to the observer. If the specimens after staining were not well washed, the organisms were uniformly coloured, or the beading was indistinct; hence in sections this peculiar characteristic could not be so clearly brought out; but it is well shown in Fig. 3, which was taken from a chancre in an undoubted case of syphilis. Many of the bacilli in sections of this sore were uniformly stained, or showed a clear median space such as may be seen in the short and in the uniformly stained bacilli in Figs. 1 and 2. Other slight shades of difference may be explained by the varying conditions under which the organisms grow in culture media and in the various textures of the body. The bacilli in the case above referred to existed in great abundance, either singly or in groups, in the connective tissue interspaces around and at the base of the sore; they were less numerous in the granulation tissue, a fact which may be explained by the observations of Ribbert on the resisting power of leucocytes to the growth of micro-organisms. This was their usual mode of distribution in chancres, but they were in many instances observed in lymph capillaries and within large clear cells. In lymphatic glands the bacilli were most abundant within and in the tissues adjoining the peripheral lymph channels, and were observed also in lymph cells. In sections of condyloma they were numerous in the connective tissue interspaces of the corium, still more so throughout the epithelium, and formed colonies on the surface. In gummata they were most numerous at the margins, where the disease was extending. In a case of phagedænic sore, a cultivation (see Fig. 4) closely resembling that above described was obtained from the ichor flowing from its surface, and later from the lymph flowing from the base of the sore after its free excision. Induration of the inguinal glands on both sides subsequently appeared, and syphilis was diagnosed. The general features and the staining reaction of this bacillus were the same as in that found in ordinary cases of syphilis, but the segmentation or beading was not so well marked. The cultivations obtained from syphilitic patients appeared as a thin, faintly yellow or brownish yellow, uniform, or slightly tuberculated layer on the surface of the media. The organism grew in solidified blood-serum, which it did not liquefy, and less readily in solidified hydrocele fluid and agar-agar. As regards its differentiation from the bacillus described by Alvarez and Tavel, as existing in normal smegma, we find that, in contradistinction to the latter, the bacillus here described is, after staining with fuchsin, decolourised by dilute nitric acid. Decolourisation occurs both in cultivations and in sections, and is also accomplished by oxalic acid. We have studied the bacillus of normal smegma both in scrapings and by cultivations, and are unable to identify it with that which we have found in syphilis. Nor does it seem in the least degree probable that in syphilis a non-pathogenic organism should be found in all the lesions, even in the internal organs. In sections known to be crowded with bacilli uniformly negative results have followed the use of Lustgarten's method. Our best preparations have been obtained by staining with a solution of Humbolt red in aniline oil and spirit, and decolourisation with spirit. The bacilli can also be demonstrated, but less satisfactorily, by Gram's method, and still less so by Weigert's solution of gentian violet. The inoculation of monkeys with our cultivations has so far been unsuccessful in inducing syphilis, but so has also inoculation with portions of chancres and of phagedænic sores. Nevertheless, the cultivation of a morphologically peculiar bacillus in two instances from the blood of syphilitics and from some of the chief lesions, and its recognition in the diseased tissues, have from analogy a striking significance in regard to the etiology of syphilis, and lead us to hope that by the continuation of our investigation we may yet experimentally prove that the organism described is the cause or the carrier of the disease. Owing to the attention which this question is now exciting in Germany we considered it necessary to publish this preliminary notice of our results.

A NOTE ON CYCLIC ALBUMINURIA.

BY WILLIAM COLLIER, M.A., M.D.,
PHYSICIAN TO THE RADCLIFFE INFIRMARY.

THE following case may prove of interest in connexion with Dr. Pavy's recent paper, reported in THE LANCET of March 6th, on Cyclic Albuminuria.

I was recently called to an undergraduate who was suffering from epistaxis. In answer to inquiries I learnt that for some years he had had at intervals similar attacks, which as a rule proved difficult to stop, though bleeding from other parts of the body, the result of cuts, or after the extraction of teeth, was easily controlled. The last attack of epistaxis occurred twelve months previously. He also

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mentioned that a brother and sister were at times troubled with epistaxis. The bleeding was on this occasion easily controlled by the use of alum. Two days later I was again sent for, and informed that the bleeding had returned early in the day and had been very troublesome. On asking for a little of his urine, the patient at once volunteered the following information. Three years ago, when at Rugby School, after getting a chill, albumen was found in his urine. Twelve months ago, when thinking of becoming a candidate for the Indian Civil Service, he underwent a medical examination, and was warned that he would probably be refused, as his urine contained albumen. In consequence of this advice he gave up the idea. Since the first appearance of albumen three years ago his general health had been good and he had led a very active life, having on two occasions run in the Rugby-Crick (the annual long-distance cross-country steeplechase), and had gone in for long-distance running at Oxford. His condition was as follows:—Complexion pale; tongue clean; pulse slow and resisting. Heart: slight accentuation of second sound; no evidence of hypertrophy. Lungs healthy. Urine passed at the time of my visit (about 5 P.M.) was acid, sp. gr. 1030, contained a large quantity of lithates, and with the nitric acid tests showed about one-eighth albumen. I requested him, as is my invariable custom, in accordance with Dr. George Johnson's teaching, to send me a specimen of urine passed the following morning immediately on rising. On testing this with the ordinary nitric acid tests I could find not the slightest trace of albumen, though the tests were carefully repeated several times. Another specimen, passed about 1 P.M. on the same day, contained about one-eighth albumen. The microscope showed the presence of amorphous urates, but no casts could be found. As the patient was feeling very ill, and had been for the past few days much troubled with headache, I advised him to return home. He left Oxford the same afternoon, and I have not as yet heard from him.

The case is very incomplete, and as I had only one opportunity of testing the morning urine, I should not have reported it had it not seemed to me to suggest that possibly some of the cases remarked on by Dr. Pavy may at the end of another year or two develop all the usual symptoms of chronic Bright's disease. I cannot doubt that, in spite of the patient's apparently sound health until within the last week or two, the headache, epistaxis, high-tensioned pulse, slightly accentuated second sound of heart, and albuminous urine from which he suffered, were all secondary to slow changes in the kidneys, the result of the chill taken when at Rugby three years previously. Nor is it improbable that had I had frequent opportunities of examining his early morning urine, I should have found in such specimens, as in my former examination, an absence, or at the most a very faint trace, of albumen. On referring to my notes of the clinical lectures given by Dr. George Johnson while I was a student at King's College Hospital, I find the following remarks in a lecture delivered June, 1879, on Practical Matters connected with Bright's Disease:—"Remember, also, to test urine both after food and exercise, as it frequently happens that scarcely a trace appears in the urine voided before breakfast, while a large quantity may be present in that passed an hour or two after. *Exercise* may cause the presence of albumen when the urine is unaffected by food." In proof of this Dr. Johnson related the case of a medical man suffering from chronic Bright's disease who found albumen after exercise, but never after food if he *rested*. While house-physician to the Wolverhampton Hospital, in which district cases of acute and chronic Bright's disease are very common among the stokers and hammerers at the various ironworks, I had ample opportunity of testing the value of Dr. Johnson's teaching, and can recall more than one case in which the urine was most markedly influenced by rest, containing only the slightest traces in the early morning, but considerable quantities in the middle of the day. Such facts would suggest the danger of disregarding the continued presence of albumen in the urine at certain periods in the day, in spite of the absence of symptoms—unless, at any rate, it had existed a considerable number of years.

SWANSEA HOSPITAL.—The secretary of the hospital has received, from an anonymous donor, a cheque for £600 towards the funds of the charity. Upwards of £3000 have been received in a similar way during the past few years.

EXCISION OF THE ENTIRE UTERUS FOR CANCER.

WITH NOTES OF A SUCCESSFUL OPERATION.

BY CHAS. E. JENNINGS, F.R.C.S. ENG., M.S.,
ASSISTANT-SURGEON TO THE CANCER AND NORTH-WEST LONDON HOSPITALS.

THE object of two lectures which I delivered at the Cancer Hospital this session was to advocate vaginal extirpation of the uterus, for early cancer of the cervix, as the operation to be usually performed, to the exclusion of other methods of treatment, as soon as the diagnosis is established. History teaches us that in the past the mortality which attended excision of the entire uterus was so great that the operation could only be considered a desperate remedy to be adopted for desperate conditions; to-day it is struggling for a settled place in surgery, and for the near future why should not extirpation of the uterus be followed by a measure of success equal to that which now accompanies other severe but recognised surgical procedures on abdominal organs? From statistics contained in a valuable paper on extirpation of the uterus, presented to the Obstetrical Society by Dr. Wm. Duncan in January, 1885, it appears that of 137 cases of abdominal extirpation 38 recovered and 99 died, being a mortality of 72 per cent., but of 276 cases of vaginal extirpation 197 recovered and 79 died, being a death-rate of 28·6 per cent. The former group of operations were divided among seventy-one and the latter among sixty-nine surgeons, and therefore it seems right to conclude that, except under some special circumstances, the vaginal should be preferred to the abdominal method of uterine excision. This conclusion is strengthened by the fact that many of the operations in the two categories were performed by the same operators. For example: Martin performed 6 hysterectomies by the abdominal method, and all the patients died; he operated 60 times by the vaginal method, with 47 recoveries and 13 deaths. Of 8 abdominal extirpations of the uterus by Billroth, 3 recovered and 5 died; of 12 patients operated upon by the same surgeon by the vaginal method, 8 recovered and 4 died. Of 8 abdominal operations by Schroeder there were 3 recoveries and 5 deaths; whilst of 27 vaginal extirpations there were 19 recoveries and 8 deaths. Guided by these statistics, I elected to excise the uterus per vaginam in the following case, where the removal of the entire organ was the only means by which life could possibly be prolonged beyond a very limited period.

On Sept. 1st, 1885, Mrs. R——, aged thirty-five, who had been twice married, attended at the Cancer Hospital, complaining of an offensive, sanguineous vaginal discharge, associated with pelvic pain and other symptoms, of some months' duration—viz., since the birth of her last child. One of her sisters was reputed to have died some years ago of "cancer of the bladder." Physical examination disclosed an infiltration of the cervix uteri with ulceration around the os externum. The disease being apparently well localised, it was decided to destroy the neoplasm and surrounding tissue with caustic potash. This was accordingly done on Sept. 5th; several sticks of caustic potash were employed, the cervix being previously painted liberally with a solution of muriate of cocaine to mitigate the pain. After the separation of the sloughs bleeding returned, and the necessity for a greater destruction of the cervix being evident, the patient was anæsthetised on Sept. 15th. The chief portion of the diseased cervix was scraped away with a curette, posteriorly as far as the junction of the cervix with the vagina, and Pacquelin's thermo-cautery was applied freely to the raw surface. This operation appearing satisfactory, the woman was duly discharged and treated as an out-patient; but the pain and hæmorrhage having soon returned, she became confined to her bed at home, and at the request of Mr. Prowse, who had been summoned to attend her, I examined the patient in consultation with him on Oct. 28th. The general strength had then declined considerably, and there were marked signs of anæmia. The vagina was flaccid, the uterus enlarged and a little prolapsed. That portion of the anterior lip of the cervix which remained after the previous operations was infiltrated; the posterior lip was absent, so that the finger on being passed upwards along the posterior vaginal wall glided into a conical rugose cavity, whose apex seemed limited superiorly by the internal os. The speedy recurrence and the rapid growth of the neoplasm convinced

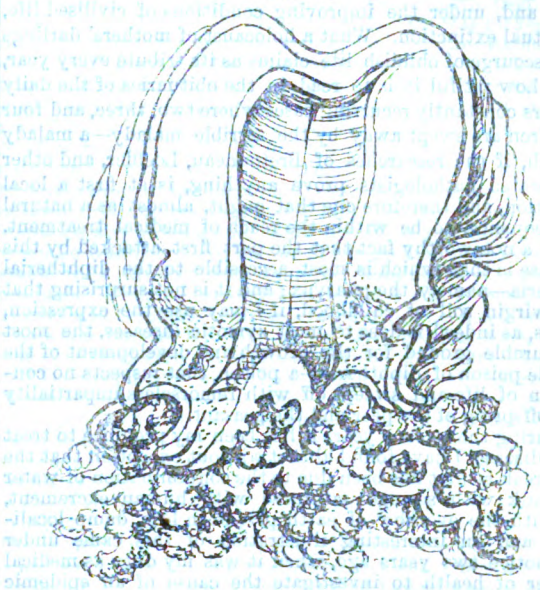
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me that the only means of averting death lay in extirpating the uterus as soon as the necessary arrangements could be made for the operation. But I specially pointed out that the disease had now so far progressed that, even if the uterus were extirpated successfully, a secondary growth might appear at a later date. Moreover, the present condition of the patient would add to the danger of an operation severe *per se*, so that its choice or rejection had to be left to the decision of the patient and her relatives.

As to the methods for vaginal hysterectomy, there are two chief varieties. By the first, extreme and continuous traction is made upon the cervix, whilst the vagina is being severed and the uterine ligaments divided with scissors or knives and separated from the organ with the handle of the scalpel; according to the second plan, the uterus having been first drawn down in order to admit of the separation of the vagina either entirely or partially, the speculum is withdrawn, the operator's hand is introduced into the vagina, and the remainder of the operation is completed with the fingers. Blundell strongly advises that the operation should be conducted by the latter method. It is easy to understand how, by this plan, the danger of wounding the bladder, ureters, small intestine, or rectum is minimised. The chief uterine vessels can be ligatured or clamped before division, and the duration of the procedure diminished. By the former, injury to the important pelvic structures with the point of the scalpel can hardly be avoided; the hæmorrhage from the divided vessels obscures the field of the operation; the traction on the uterus drags down also the viscera which are in anatomical contiguity with it, and the satisfactory enucleation of the uterus is rendered most difficult. More than fifty years ago Blundell removed the uterus four times, with three deaths. His mortality was probably due to hæmorrhage, for he possessed no means of securing the divided vessels. The vaginal arteries will rarely give much trouble if unsecured; but vessels such as the uterine and ovarian arteries cannot safely be trusted unligatured, even though they be severed from the uterus by avulsion or be slightly twisted by flexion of the organ.

On Oct. 30th, 1885, at 2.30 P.M., I operated in the following manner. The anæsthetic was administered by Dr. Fenton-Jones, and Messrs. Prowse, Shaw, and Dove assisted me. The patient was placed in the lithotomy position, and the vagina was thoroughly syringed out with a carbolised solution and afterwards sponged dry. A duckbill speculum was then introduced into the vagina, the urine drawn off with a catheter, a full-sized curved sound passed into the bladder, and the viscus supported against the pubes by this instrument during the operation. The ulcerated cavity was plugged with iodoform wool (10 per cent.) and a stout silk ligature inserted through the cervix. The cervix and the upper part of the vagina were dusted with finely pulverised iodoform, and semilunar incisions were made, posterior and anterior to the cervix, through the vagina. Laterally the vagina was left intact, the parts here being those where the chief branches of the vaginal arteries enter the uterus. The speculum was withdrawn and traction made upon the ligature. But the cervix was so friable from the cancerous deposit that the ligature tore through the neoplasm, and it was found necessary to grasp the cervix as high upwards as possible with volsellum forceps. The left index-finger, well carbolised, was introduced through the opening in the posterior cul-de-sac between the posterior wall of the uterus and the peritoneum. The latter structure was slowly separated from the uterus as high as the body, and then torn through so that the exploring finger passed into Douglas's space. The right forefinger was passed through the anterior semilunar opening, and the bladder being well supported on the staff, no difficulty was experienced in separating the ureters from the uterus and roof of the vagina, and the peritoneum from the uterus for some distance, when it also was torn through. The speculum being introduced into the vagina again and the anterior vaginal wall elevated with a spoon, the narrow lateral strips of vaginal membrane which had been allowed to remain attached to the uterus were snipped through with blunt-pointed scissors. The hæmorrhage which occurred was so slight that it was disregarded. The uterine arteries, with the connective tissue surrounding them, were grasped with a pressure-forceps on each side of the cervix, and divided with scissors on the median sides of the forceps. Such profuse hæmorrhage occurred from the uterine extremities of these vessels that the wire of an écraseur was quickly adapted around the cervix and pushed upwards as far as possible above the mouths of the vessels to control it. This having been accomplished, the proximal extremities of the uterine arteries were ligatured and the pressure-forceps were removed. The wire of the écraseur was slowly tightened in order to effect a supra-vaginal amputation of the cervix, but very soon the wire snapped asunder, and there being no renewal of the hæmorrhage, the extirpation was proceeded with by introducing the left hand into Douglas's space, and with the tips of two fingers, which surmounted the right side of the uterus, catching a stout silk ligature passed upwards in front of the uterus on a blunt needle. A similar manœuvre was repeated on the left side of the uterus, and the ligatures, which included the round and broad ligaments, Fallopian tubes, and the other structures passing from the uterus on either side and contained within the alæ vespertilionis, were tied as tightly as possible. These ligatures were satisfactory in so far as they constricted the broad ligaments and their contents into more or less rounded cords. But they were unsatisfactory in two respects: first, they lay close to the sides of the uterus; and, secondly, they would not be tight enough to maintain their grasp upon the parts contained within them if the uterus were cut away. Accordingly, two straight Wells's pressure-forceps, each 6¾ in. in length with jaws 1½ in. long, were employed to grasp the broad ligaments on the outer side of the ligatures. The broad ligaments were carefully cut

FIG. 1.



through with scissors close to the uterus, which was easily extracted, and the two ligatures slipped away. The left ovary, rather larger than the normal, protruded into the vagina, and it, with the morsus diaboli, were removed with part of the tube after the application of a silk ligature. The pelvic cavity was carefully cleansed with carbolised sponges. All hæmorrhage having ceased, the vagina was packed with iodoform wool. The handles of the pressure-forceps, which just extended beyond the ostium vaginæ, were tied together, a T-bandage applied, and the patient placed in bed, the entire procedure having occupied an hour and a half.

The pressure-forceps were removed by Mr. Prowse thirty hours after the operation, and on Nov. 1st I saw the patient with him in consultation. There being then considerable abdominal pain and tympanites, the temperature having risen to 102° F., the pulse being wiry, and the features having a pinched expression, we decided to seek the advice of Sir Spencer Wells. He advised that the quinine and opium which had been given should be continued, and that the vagina should be kept free from any source of infection by frequent sponging with antiseptic solutions. He expressed a hopeful prognosis, which proved correct, for the temperature fell and did not rise again above 100°. The patient recovered without manifesting any further symptoms of anxiety, and all discharge from the vagina ceased on Nov. 20th. After the removal of the uterus its anterior wall was incised in the median line, as shown in Fig. 1. It

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then appeared that the uterus was invaded by the new growth to a greater extent than we believed before the operation. There was no enlargement of the obturator glands at the time of the operation, but I learn from Mr. Prowse that recurrence has unfortunately taken place in the vagina. He writes as follows:—"March 7th, 1886: I first noticed some four weeks ago that the walls of the vagina were becoming somewhat harder than usual, and a fortnight ago some suspicious granulations made their appearance in the line of the cicatrix; these have now developed into well-marked ulcerations, and the vaginal walls have increased in hardness and have become quite nodular to the touch. I have not the slightest doubt as to the recurrence of the disease."

(To be concluded.)

NOTES ON DIPHTHERIA.

BY N. E. DAVIES, L.R.C.P.L., M.R.C.S.

ANY researches, however humble, likely to throw light on the pathology and successful treatment of diphtheria must of necessity be acceptable at any time, for a disease the germ of which originates in filth, overcrowding, and bad sanitary arrangements is surely one subject to considerable amelioration and, under the improving conditions of civilised life, eventual extinction. What a holocaust of mothers' darlings this scourge of childish life claims as its tribute every year, and how pitiful it is to read in the obituaries of the daily papers constantly recurring cases where two, three, and four children are swept away by the terrible malady—a malady which, if the researches of Bretonneau, Loeffler, and other celebrated pathologists prove anything, is at first a local affection, and therefore one that ought, almost as a natural consequence, to be within the reach of medical treatment. It is a noteworthy fact that the part first attacked by this disease is that which is most accessible to the diphtherial bacteria—namely, the pharynx; and it is not surprising that the virgin soil of childhood, if I may use the expression, offers, as indeed it does to most zymotic diseases, the most favourable ground for the growth and development of the subtle poison of diphtheria—a poison that respects no condition of life and sweeps off with remorseless impartiality the offspring of the peer and the peasant.

During the twenty years it has been my province to treat this disease, I have found almost without exception that the outbreak at first has been due to the contamination of water or milk with sewage saturated with human excrement, or with the overflow of earth privies in low, damp localities, and an interesting illustration of this came under my notice two years ago, when it was my duty as medical officer of health to investigate the cause of an epidemic in a little village near Sherborne, where an entire family of five children were destroyed by it, and where numerous other cases occurred, some of which ended fatally. In this case a spring of pure water was conveyed down a hill in a leaden pipe; this opened into a stone trough, and from this trough it again passed underground through some earthenware pipes (which were not cemented properly together) into a second trough, and thence it ran as an open stream through a thickly populated village lying in a valley about a quarter of a mile long. Now, between the two troughs I have mentioned was an open privy, the liquid contents of which had percolated through the earth, and thence through the joints in the earthenware pipes into the second trough, afterwards, of course, contaminating the whole stream in its downward course through the village. Now mark this circumstance: a few houses near the first trough used their water from that, and these escaped the epidemic; whereas those who used their water from the second trough and from the stream suffered more or less, and the family in which, as I have mentioned, the five fatal cases occurred, went for their supply exclusively to the second trough, and therefore got the poison in its most concentrated form.

Now what does the history of this epidemic teach? That, at all events in its first incursion, the cause was strictly local, and that the bacterial poison had its origin between the two troughs, and in the most fatal period of the epidemic, infected its victims by the mouth and alimentary canal through drinking the water. I opine that, such being the case, it is only natural to suppose that in the spongy substance of the tonsillar glands the micrococcus finds a congenial home,[1] and from thence by fibrinous infiltration and inflammation invades the blood and the whole system, and this in some cases so rapidly as to destroy life in a few hours. I call attention to this fact simply to show that an epidemic, at all events at first, spreads by direct contact with the poison—i.e., by imbibition. Afterwards, as a matter of course, it may spread by other means, and its virulence be intensified by conditions of climate and atmosphere.

There are many secrets in nature yet to be unravelled, and one of them is—Why should epidemic diseases in certain seasons be more virulent, more general, and more widespread than in others? Their fungoid origin has its prototype in the vegetable world; in some seasons and localities the mildew, the oidium albicans, or, better still, the common mushroom, thrives luxuriously, then perhaps for years (at least in this neighbourhood) it becomes almost forgotten, not because the season is not propitious, but because some peculiar or climacteric influence is wanting; so, I take it, with diphtheria, that though sporadic cases may start a localised epidemic, yet such a one as that which visited England in 1858 and 1859 requires an occult stimulus, the secret of which is at present buried in profound darkness. Hence for the present it is wise and right, I believe, to agree with Loeffler, Empis, Kellog, Avery, Bretonneau, and many other celebrated pathologists, that the disease is at first a local disease, and that the constitutional symptoms depend upon general infection from this local lesion, and their mildness or virulence upon locality, atmospheric conditions, age, heredity, and the surroundings, healthy or unhealthy, of the victim, and perhaps I may add, the amount of the poison that has been imbibed; and acting on this belief, how important it is, when an outbreak occurs, to endeavour in every way to localise it and prevent its spreading by means of contaminated water, milk, and clothing, or by intercommunication with infected areas, and by energetic treatment to stamp it out. Some years ago I resided with a practitioner in Suffolk, where sporadic cases of diphtheria seem to be common, and I must say his mode of treating the disease was eminently successful: it consisted in mopping the throat and pharynx thoroughly out daily with dilute nitro-muriatic acid, and administering iron; he also insisted that, however ill the patient might be, he or she should be taken frequently into the fresh air. This is really almost identical with the treatment laid down by Bretonneau, Ellis, and others; it was rather rough treatment, it is true; but desperate diseases require desperate remedies; and as its aim was to destroy the local lesion from which all subsequent mischief arises, it must have been good and in the main correct—at least results proved it so.

My plan of treating the disease is as follows; it answers the same end, and does not alarm the patient; and, even at the risk of being considered egotistical, I must say that it has been highly successful in the large number of cases that have come under my observation during the last eighteen or twenty years. I assume that the case is treated in its early stage—the only stage in which local treatment can really avail; for when once the blood becomes impregnated with the fungoid micrococcus or bacteria of diphtheria, the poison is then deposited in organs, such as the trachea or the bronchi, beyond the reach of local treatment; and it becomes a question whether the constitution of the patient can eliminate the poison, and nature, generous nourishment, iron, &c., once more re-establish convalescence. In the first place, in any affection of the throat I lose no time in examining it, and watch carefully for the unmistakable washleather-like creeping deposit of diphtheria, or the symptoms of its sister diseases, follicular tonsillitis, croup, and scarlatina; if it turns out to be diphtheria, I give a mixture containing six drachms of the tincture of the perchloride of iron to five ounces of sweetened water, and at this strength, *undiluted*, I insist that the child shall take every hour for twelve hours a dessertspoonful (if the patient is older or an adult, a much larger dose), and that this dose shall be repeated, whether vomiting occurs or not. At this strength I find in that time, or a few hours more, that the growth has a shrivelled look and its vitality is destroyed. I then reduce the dose and extend the intervals, and, as I believe, with many others, that iron has some specific

[1] In 98 per cent. of the cases the pharynx is first attacked.

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power of arresting the septic action of the poison in the system, continue it for two or three days or longer, keeping up the strength with strong beef-tea, milk, and port wine; if these cannot be taken, I use an enemata every four hours of equal parts of beef-tea, port wine, and cream or milk. The advantages of this treatment over the local application of caustics is that it reaches every part of the pharyngeal tract likely to be affected, and is, as I mentioned before, strong enough, given in this way, to destroy the vitality of the fungus of diphtheria; and let me here impress the absolute necessity of keeping a thorough draught of fresh air constantly passing through the room, for how can it be expected that a blood poison can be eliminated if it is continually breathed again? As well might one attempt to resuscitate a person dying from inhaling a poisonous gas without first taking the sufferer into the open air. It is needless to say that this treatment in the generality of cases should be supplemented by giving barley-water, sweetened in the case of children, containing two drachms of chlorate of potash or other antiseptic drug, to the pint, but I prefer chlorate of potash, for it is not unpleasant to the taste, and children will drink it readily.

Now, roughly speaking, this is the mode of treating the disease that I have found most successful, and one by the aid of which I have seldom had occasion to resort to more severe measures. The waywardness of a spoilt child will sometimes upset the best calculations by absolutely refusing to swallow anything; then it becomes necessary to resort to mopping the throat, and Bretonneau's mode of applying caustic solution is worth inserting here. He says: "In order to apply the acid to the base of the pharynx and upon the tonsils, I make use of a fine sponge about the size of a pigeon's egg, firmly fixed at the end of a flexible rod of whalebone, and I give to this rod a suitable curve after warming and softening it at the fire. Before touching the membranous spots on the throat, I take care to dip the sponge in concentrated acid and to press it so that it shall remained simply moistened. I take this precaution so that in the convulsive movements of the isthmus of the throat the expressed liquid may not extend its action beyond the point I intend to cauterise." This method, it will be seen, has the advantage of preventing the caustic solution going beyond the area affected and setting up violent inflammation of the pharynx or larynx. All the novelty I claim for my system of treatment is that I give much larger, stronger, and more frequently repeated doses of the perchloride of iron than I have ever seen advocated by others, and that if the destruction of the cause of the local lesion is the proper thing to do, as I believe it is, it answers the purpose, with the advantage of placing in the blood a drug which arrests the rapid deterioration of its healthy constituents produced by this disease, with its after-train of disastrous lesions.

Sherborne.

NOTE ON A CASE OF

NERVE-STRETCHING FOR FACIAL SPASM, OPERATED ON FIVE YEARS SINCE.

BY F. A. SOUTHAM, M.B.OXON., F.R.C.S.,

ASSISTANT-SURGEON TO THE MANCHESTER ROYAL INFIRMARY, AND SURGEON TO THE CLINICAL HOSPITAL FOR WOMEN AND CHILDREN.

IN THE LANCET of August 27th, 1881, I published particulars of a case of stretching of the facial nerve for clonic spasm ("convulsive tic") of the muscles of one side of the face of two years' duration, occurring in a woman aged fifty-nine, who had previously been under the care of Dr. Ross. The operation, which was performed in March, 1881, was followed by complete paralysis of all the muscles supplied by the facial nerve on the corresponding side. About five weeks subsequently, the affected muscles gradually began to regain their power, and at the end of five months the paralysis had entirely disappeared. As no return of the spasm has taken place, and a period of five years has now elapsed since the operation, the cure may be regarded as complete and permanent, and on this account the case may, perhaps, be thought worthy of further record.

In a recent article by Prof. Zesas,[1] particulars are given of the results of nineteen cases of this operation collected from different sources. In only two other instances—viz., in one case operated upon by Zesas himself, and in another by Navratil—in addition to the one above referred to, has the cure been permanent. In four cases there was considerable improvement, while in ten the operation failed to give more than a temporary relief; in the remaining two cases the result was doubtful, as their subsequent history was not followed out. Inasmuch, however, as benefit has resulted in seven out of seventeen cases, Zesas is of opinion that the operation should still be performed whenever the spasm is not due to intra-cranial lesions.

[1] Wiener Medicinische Wochenschrift, Nos. 27, 28, 1885. An abstract of this paper, by Mr. C. Atkin, F.R.C.S., will be found in the Medical Chronicle, Jan. 1886.

FRACTURE OF THE BASE OF THE SKULL, WITH OPTIC NEURITIS; RECOVERY.

BY W. T. JACKMAN, M.R.C.S., &c.

THE following case is of interest, showing, as did a case published by Mr. Sydney Jones in THE LANCET of Jan. 10th, that the complication of optic neuritis does not always indicate a bad prognosis in fractures of the skull.

M. H——, aged thirty, a coachman, of medium height, spare build, and temperate habits, was thrown from his horse on the evening of Dec. 6th, 1885. He was picked up in an insensible condition and carried to the stables, a distance of about one hundred yards, by two men, who left him for about an hour, and on their return, finding he had gone, they concluded he had only been stunned, and therefore did not say anything about the accident to anyone. Next morning he walked from his house (the lodge at the entrance of the drive) to the stables. He then complained to some men of headache, but they do not seem to have noticed anything peculiar about him. A short time afterwards he was missing and could not be found until 2 P.M., when he was discovered on one of the grooms' beds over the stable in a drowsy state and complaining very much of headache. When I visited him about 3 P.M. I found him drowsy and troubled with severe pain in the head, which was worse on the left side under the occipital bone, and suffering from cerebral sickness, which on inquiry I found had been persistent every half-hour or so all the morning. Tongue clean; bowels not open; temperature normal; pulse slow and laboured. On examining the head, some dried blood was found in the meatus of the left ear and a slight wound over the left occipital protuberance, which had evidently bled a little, and was surrounded by a swelling of about the size of a hen's egg. The pupils were sluggish to light. There were no other signs of fractured skull. The patient did not remember anything which had happened since he fell from the horse, and could not account for being in his present place. I found he had walked home after the men had left him the previous evening in the stable, had supper with his wife, passed a restless night, but there had been no vomiting. He had eaten a small breakfast and only complained of headache to his wife, who thought he was suffering from a bilious attack. I ordered ice to the head, perfect quiet, and ten grains of bromide of potassium to be taken every four hours.

Dec. 8th.—Consultation with my partner, Mr. T. Simpson, and diagnosis confirmed. Patient had passed a restless night. Vomiting less frequent; pain in the head still continues bad. Temperature 99°; pulse slow and feeble. Tongue slightly furred. Bowels not open. On examining the optic discs, the left was found to be normal, the right disc was hazy, and the veins were larger than normal, the arteries if anything smaller.—10th: Patient passed a bad night. Vomiting ceased. Bowels open after fifteen grains of calomel. Temperature 99·5°. Right disc red and edges hazy. Vessels as yesterday.—11th: Bad night. Temperature 100°. Pulse very weak. Right disc less red and veins smaller.—12th: Better night. Temperature 99·5°. Pulse stronger. Right disc less red and less hazy. Patient expresses himself as feeling better. Ice discontinued.—13th to 22nd: Gradual and steady improvement. Both discs normal. The patient was removed to his own home, and was able to resume his work on Jan. 16th, 1886.

It is interesting to note that, although the patient received the injury on the left side of the head, the bleeding was from the left ear, and that the inflammatory mischief was evidently on the left side of the head, as indicated by the persistence of the left hemicrania, yet the right optic disc

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alone was affected; as far as could be judged vision was not affected, though exact information as to the field of vision was impossible under the circumstances.

This is the third case of fracture of the skull which occurred in our practice last year, and all recovered. One was in a child five years of age, who had bleeding from the ears, nose, and mouth, and well-marked symptoms of fractured base. The third was in a boy aged five years, with depressed fracture of the right parietal bone.

Coggeshall.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

CHARING-CROSS HOSPITAL.

A CASE OF ACUTE CHOREA WITH PREGNANCY; INDUCED PREMATURE LABOUR; RECOVERY.

(Under the care of Dr. A. J. POLLOCK.)

THIS case is a good example of the form of disease known as "chorea gravidarum," which appears to be much more severe than any other variety of chorea. Dr. Barnes[1] estimates the mortality at one to three, and gives a long table of cases, from which it would appear that this affection usually comes on during the first three months of a first pregnancy; and Dr. Wilks[2] has observed that a large proportion of those who are attacked are unmarried girls. Dr. Ross[3] gives the age of the majority of those affected as from twenty to twenty-three; whilst Trousseau[4] refers to sixteen instances of the disease in which the age was from nineteen to twenty only. The etiology of the disease is not clear. Trousseau would refer it to the chlorotic condition which often accompanies pregnancy, whilst others would ascribe it to the nervous condition of such patients. Dr. Wilks' theory would lend support to this view, and the case which we publish gives additional proof of its correctness. There does not appear to be any previous history of rheumatism or of rheumatic affections in the majority of the cases recorded, though in some there had been a previous attack[5]. The progress of this case after the uterus had been emptied of its contents was most satisfactory, the condition of the patient before this proceeding being most alarming.

A. T——, aged twenty, kitchen-maid, unmarried, was admitted on May 31st, 1885, suffering from chorea. Her illness dated from May 28th, and its onset appeared to be unusually sudden. No change in her demeanour was noticed until the movements began, and on the third night of her illness she was slightly delirious. There was no history of rheumatism in the family, nor had the patient ever suffered from rheumatic fever herself. Her mother suggested that the cruelty of one of the other servants had some causative relation to the attack, as her daughter had often complained of it, and during the onset talked of nothing else.

On admission, three days after the supposed commencement, the patient presented all the usual phenomena of chorea. The movements were more marked in the upper than in the lower extremities; both sides were equally affected. No paresis could be made out. She appeared to understand most of what was said to her, but was quite unable to give any connected account of her illness. Articulation was indistinct. No physical signs of disease could be found in the chest or abdomen. The patient was about four months pregnant.

On June 3rd (four days after admission) her condition became much worse. She was now delirious all day, and paid no attention to anything that was said to her. The movements were so violent that partial restraint was employed. Arsenic, bromide of potassium, chloral hydrate, and conium were one after another employed in large and frequently repeated doses, but with negative results. The typhoid state rapidly supervened, though the temperature remained normal.

On the afternoon of the 12th the os uteri was dilated by the finger. During the night there was a copious blood-coloured discharge, and in the morning a fetid four months' fœtus was found in the vagina. The cord was fairly firm. A solution of perchloride of mercury (1 in 1000) was ordered to be injected into the uterus twice daily.

From this time improvement was gradual and continuous. In two days (June 15th) simple questions could be understood and answered, and the movements were distinctly less violent. The temperature rose to 101° on the 15th, reaching 104·5° on the 16th, but fell to normal on the 17th. On the 23rd it rose to 102°, but regained its normal character the same day. On the 27th the injections, which had been reduced to one daily, were altogether discontinued. The movements had almost ceased, but the patient's intellect was still clouded. At the time of discharge (July 22nd) the movements had altogether ceased, and, beyond being rather dull and stupid, the patient was in very good health.

1 Obstetrical Transactions, vol. x., p. 147.
2 Fagge's Principles and Practice of Medicine, vol. i., p. 641.
3 The Diseases of the Nervous System, vol. ii., p. 769.
4 Clinical Medicine, vol. i., p. 394.
5 Playfair: Science and Practice of Midwifery, vol. i., p. 237.

LIVERPOOL INFIRMARY FOR CHILDREN.

CROUPOUS PNEUMONIA AND GANGRENE OF THE LUNG; DEATH; NECROPSY.

(Under the care of Dr. OXLEY.)

THE patient, a boy six years of age, lost both parents from lung disease, a sister had a leg amputated for disease of the knee, while another sister suffers from keratitis and caseous cervical glands. The patient has always been delicate, and for some months he has had a cough. When admitted into hospital he was found to have a very rickety chest, his temperature was 103°, and his respiration 44 per minute. His cough was frequent, and he had a scanty, viscid, yellow expectoration; the breath was rather foul; he had also signs of consolidation of the lower lobe of the right lung. In two days the breath became extremely offensive, the odour being fæcal in character and permeating the whole ward; signs of a cavity also appeared in the base of the right lung. The consolidation gradually crept over the whole lung, the pulse becoming more and more feeble. The smell persisted, though not quite so offensive as at first, owing to antiseptic inhalations. The patient died after being in hospital thirteen days.

After death the right pleura was found generally adherent; the right lung was in a state of grey hepatisation; the lowest lobe contained a cavity about the size of a small orange; the walls were rough and of a dark greenish-blue colour, it contained some ichorous fluid; there was a second smaller cavity in the middle lobe. The lung substance round these cavities was of a pale greenish-blue colour; the tissue in the upper lobe was of a pale fawn colour, and was absolutely airless. The left lung was œdematous. The mediastinal and bronchial glands were caseous, and in most of them the caseous material was more or less calcified. None of the glands were gangrenous. There was no heart disease. No tubercle was found in any part of the body.

MULTIPLE ABSCESS OF THE LIVER FOLLOWING IMPACTION OF A PIN IN THE VERMIFORM APPENDIX, COMPLICATED BY MENINGITIS.

(Under the care of Dr. M'CLELLAND.)

The patient, a girl aged eight years, came under observation early in the year; she was then complaining of fever and pain in the right shoulder. Her family history was good, and she had been a strong healthy child. It was found after death that fourteen months before she had swallowed a pin in school; about that time she complained of pain in the region of the right groin. Nine weeks before admission into hospital she caught a cold, and during the next week was feverish and had pain in her right shoulder. She had then no cough; her complexion was muddy, but never yellow. When she came under notice she had a high temperature, which tended to remit in the morning; she was very restless and thirsty, perspired profusely at times, and her urine was normal. She was constipated, though in the later stage of her illness she had some diarrhœa; there was nothing abnormal to notice in the motions. There were signs of con-

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solidation of the base of the right lung. For some days nothing definite was noticed in the abdomen, but the liver enlarged rapidly, ultimately reaching to the level of the umbilicus. For a week before death the patient was in a typhoid condition, and two days before she died she had convulsions localised to the right side, and involving the mouth, arm, and leg. She never had any jaundice, her complexion being muddy throughout the illness. She died from compression of the brain having been twenty-six days in hospital.

When the body was examined, the liver was found very greatly enlarged, weighing 4 lb. 8 oz.; the upper part of the right lobe contained an abscess cavity the size of a small orange, full of thick pus; the whole of the right lobe was honeycombed by abscesses of very varying size, the largest being about the size of a filbert; the left lobe, though free from apparent disease, was very much enlarged. The gall-bladder contained a fair amount of golden yellow bile; there was no obstruction of the bile-ducts, and the upper part of the intestine was bile-stained. The vermiform appendix was thicker and longer than usual, and was adherent half an inch from its distal end to the pelvic wall; on separating the adhesion, the wall of the appendix was found very thin and ulcerated on its inner surface; the adhesion was found to correspond to the head of a pin of large size, which was impacted in the appendix head downwards. There was no sign of recent inflammation. The mesenteric and lumbar glands were normal. On opening the skull, the cranial sinuses were found to be distended with firm clot; about the middle of the longitudinal sinus the clot contained a drop of pus. There was a patch of intense congestion around the fissure of Rolando and over the paracentral lobule of the left side, the pia mater of these parts being dull and sticky. An abscess about the size of a large pea was found in the cortex of the right occipital lobe near its centre.

There can be little doubt that the hepatic abscesses were due to a septic embolus or to several emboli carried by the mesenteric veins to the liver. A very similar case is to be found in Dr. Murchison's book on the liver; but in that case there was only ulceration of the vermiform appendix, no cause for the ulceration being found. The present case would suggest that some foreign body was also the original cause in Dr. Murchison's case.

CUMBERLAND INFIRMARY.

CASE OF FÆCAL ACCUMULATION CAUSING SYMPTOMS OF PARTIAL OBSTRUCTION; REMARKS.

(Under the care of Dr. LOCKIE).

THE following notes have been furnished by Mr. G. Francis Smith, house-surgeon.

Robert M——, aged sixty-eight, was admitted on Jan. 17th last, complaining of distension and pain in the abdomen, with constipation. He had for some time previously (between two and three weeks) been suffering from frequent small watery evacuations, which had been treated as an ordinary case of diarrhœa.

On admission his tongue was slightly furred, the abdomen distended and tympanitic, but the pulse good. There was nausea without vomiting. He was given a dose of castor oil and opium, which produced a small evacuation from the bowels and temporary relief to the distension, nausea, and discomfort. On the following day the dose was repeated, without result. From this time up to Jan. 25th (eight days) the abdomen was more or less distended, the movements of the intestines, seen through the abdominal parietes, and constipation persistent. No tumour or localised fulness could be detected through the abdominal wall or per rectum. On the 25th a long œsophageal tube was passed up the rectum. The tube seemed to meet with an obstacle about six inches up the gut, and having passed this gave free exit to a large quantity of flatus, its escape being assisted by pressure on and kneading of the abdominal wall. In a few minutes the abdomen was flattened and flaccid, but even then nothing abnormal could be discovered on palpation. The flatus, however, reaccumulated in a day or two. From time to time various drugs were employed as aperients, or with a view of improving the tone of the gut, as it was thought the distension might be due to atony. Aloes and myrrh, sulphur and guaiacum, strychnia, belladonna, and ergot were in turn given, without effect. Galvanism was also employed. The flatus reaccumulated and constipation continued. The distension was relieved every second or third day by the use of the long tube. At the third introduction warm water was injected high up into the gut, and by this means exit was given to a quantity of frothy, light-coloured fæces, containing a number of black currant skins. On being questioned, the patient declared that "he had not tasted a currant since Christmas Day, but at that time he did eat a large amount of currant cake." For the next four or five times of the long tube introduction, some of these currant-skins came away with the fæces. For rather more than three weeks the bowels were systematically relieved in this manner, constipation otherwise remaining persistent. All this time no tumour could be felt in the abdomen; but from time to time the patient felt sick, lost appetite, and had a coated tongue and rather offensive breath. At the end of this time, on one occasion the tube was allowed to remain in the bowel for about half an hour. Some feculent matter and flatus passed during this time. The patient then had a hot bath, and after this his bowels acted naturally for the first time since admission. In two motions about six quarts of fluid feculent matter were passed, containing large quantities of black currant skins similar to those already noticed. From this time no reaccumulation occurred, and the bowels became regular, without having recourse to drugs. The patient was discharged on March 10th, apparently quite well.

The case is of interest, as showing how accumulations may occur, giving rise to obstructive symptoms, without being discovered by physical examination; and also showing the value of the long tube as a diagnostic and a therapeutic agent. Although no tumour could be felt, it was evident that the obstruction, however brought about, was in the large intestine and probably in the sigmoid flexure. The colon, when distended, could be easily traced, and its vermicular movements were very marked. Relief was never given until the tube had entered about six inches, and frequently not until a foot had been introduced.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Intra-cranial Cyst.—Acute Nephritis in Lambs.—Hydatid of Liver embedded in large Syphilitic Deposit.—Valvular Obstruction of Ureter.—Embolism of Abdominal Aorta.—Septic Aortitis.

AN ordinary meeting of this Society was held on Tuesday last, Dr. J. S. Bristowe, F.R.S., President, in the chair.

Mr. R. W. PARKER read the report of the Morbid Growths Committee on the Intra-cranial Cyst shown by Dr. Macdonald. In the opinion of the committee the cyst was a subdural hæmatoma; they did not think that there had been any new formation in the cyst wall, which was possibly of congenital origin, or due to hæmorrhage produced during birth. Fresh hæmorrhage appeared to have occurred, and possibly explained the paralysis. Mr. Shattock and Mr. Parker signed the report.

Mr. ROGER WILLIAMS exhibited specimens of Acute Nephritis in Lambs. The disease began soon after birth with difficulty in walking, the new-born falling down and lying on one side, sometimes with choroid movements, without loss of consciousness, without difficulty in breathing or cough; sucking was not impaired nor the appetite. The disease appeared to attack the lambs of ewes imported from Scotland, and especially those whose female parents were served by a ram who was far from vigorous, having to spend his strength on too many ewes. At all events, it was found that if a ram only served ten ewes the progeny were vigorous and did not become affected with the disease. Mr. Williams had examined two lambs, one that died of the disease and another killed at three weeks old. The urine was albuminous and acid, whereas it should have been alkaline. There were no renal casts, crystals, pus, or blood. The capsules of the kidneys stripped off easily, exposing a surface studded with congested stellate veins. The cortex was swollen and soft, pale and yellowish in colour, whilst

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the pyramids were firm and deep-red in colour. The disease was an acute tubal nephritis; the tubular epithelium was much degenerated, not staining with logwood, whilst the interstitial tissue was normal. The changes in both cases were identical, though one was in a more advanced condition than the other. Nothing abnormal was detected in any of the organs, and the spinal cord was healthy. Some of the lambs were born with the disease, and soon succumbed.—Dr. PYE-SMITH said the normal reaction of lamb's urine whilst suckling was acid.

Dr. G. N. PITT showed a specimen of old Hydatid of the Liver embedded in a large Syphilitic Growth. A man aged thirty-nine came last year under Dr. Goodhart's care, with a large painless globular tumour, with a firm sharp lower margin, occupying the left lobe of the liver and extending down nearly to the umbilicus. Thirteen years previously he had contracted syphilis, and three years later had been castrated for syphilitic disease of the testicles. In 1878 he had an attack of slight aphasia and right hemiplegia, which soon improved. In 1881 he was under Dr. Fagge's care with a large, painful, irregular tumour connected with the liver, which was diagnosed as of gummatous and lardaceous nature. Since then it had diminished in size. The urine at this time was normal. Previous to this he had worked as a ship's carpenter, and a few months later he was able to resume his work. On his admission in 1885 he was also suffering from œdema, and was passing urine of specific gravity of 1007, containing one-third albumen and in quantity about seventy ounces daily. After eight weeks he became uræmic and died. At the necropsy large white kidneys, somewhat lardaceous, were discovered. The left lobe of the liver, which weighed 146 ounces, was entirely occupied by a dense white fibroid mass, measuring six inches and a half by three inches and a half, which enclosed a contracted cavity two inches in diameter filled by numerous gelatinous-looking capsules one inside the other, evidently the remains of an old hydatid cyst. There was a bile-duct (stained yellow) in the middle of this fibroid mass, the adjacent structures being stained yellow. The author drew attention to the great rarity of such a large syphilitic mass without any evidence of caseation or breaking down, and compared this case with two of lymphadenoma occupying the left lobe of the liver, which had occurred at Guy's Hospital. The line of demarcation from the healthy liver structure in all was well defined. The growth in each case was intercellular—i.e., along the lymphatics,—compressing the liver-cells and destroying them; yet some bile-ducts and liver-cells persisted. Undoubtedly some of the large mediastinal tumours and lymphadenomata were syphilitic, and he suggested that the deposit caused by the irritation of the hydatid in the syphilitic subject was closely allied to, if not identical with, some of the large masses which have been described as lymphadenoma. The fibrous trabeculæ were parallel to one another beneath the capsule, but elsewhere they ran irregularly, and the deposit was in the liver substance, and not merely a laminated deposit round the hydatid. When a mediastinal tumour or a lymphadenoma gives the lardaceous reaction it is probably syphilitic.—Dr. SHARKEY referred to a case, published in the Transactions, of syphilitic perihepatitis that caused considerable discussion as to diagnosis during life. The patient died with profuse hæmatemesis. The capsule of the liver was found to be from one to three inches thick, and sections showed many scattered minute gummata, proving its syphilitic nature.—Mr. S. G. SHATTOCK said that in specimens of diffuse interstitial hepatitis there were always miliary gummata to be found, which he regarded as a *sine quâ non* of diffuse syphilitic lesions.

Dr. SAINSBURY read notes of a specimen of Valvular Obstruction of the Ureter. The patient was a female aged thirty-four, admitted into the Royal Free Hospital in a state of stupor, and she died next day comatose, having had epileptiform seizures. One year before admission she had had erysipelas, and had vomited frequently ever since; and once she had hæmatemesis. Epigastric tenderness and albuminuria were observed after admission. At the necropsy the left kidney was completely pyonephrotic; the series of compartments were completely filled with soft white material like thick white paint. The ureter in its upper two thirds was still patent, but its calibre was much diminished; just before entering the pelvis it enlarged suddenly; two small valve-like flaps were found guarding the entrance to the pelvis. The lower third of the ureter was impervious, and no opening into the bladder could be detected. The right kidney was granular. Ebstein had alluded to the existence of an atheromatous material in hydronephrotic sacs. Haller had described valvular obstructions in the ureter, different, however, from the specimen shown.—Mr. SHATTOCK said there was evidence that the interior of the dilated kidney was decidedly diseased; an ulcerative undermining of the mucous membrane of the pelvis might have produced the valve-like projections. He asked if the case were one of tubercle.—Mr. R. WILLIAMS said that in cancer of the uterus with hydronephrosis the ureters presented constrictions and valve-like septa.—Dr. BRISTOWE was inclined to agree with the views of Mr. Shattock.—Dr. H. SAINSBURY said there was no evidence of tubercle in the rest of the body. Tubercle never went on to such complete destruction of the kidney. It was difficult to understand that such perfect valves had been formed by ulceration.

Dr. PRICE (Reading) showed specimens of Embolism of the Abdominal Aorta. The first came from a woman, aged thirty-three, who was admitted into Guy's Hospital in 1883 with abdominal pain and vomiting; there was no history of alcoholism or syphilis. A presystolic bruit was discovered, but no thrill. Eight days after admission the right lower extremity became swollen, mottled, and cold, and finally gangrenous. The left lower limb presented the same changes later on. The urine also was offensive and dark-coloured. At the necropsy the frontal convolutions of the brain were coated with lymph; some thickening of the cerebral arteries and an embolus that did not totally obstruct the left middle cerebral artery were discovered. Mitral stenosis and roughening of the auricular aspect of the valve were present. The ante-mortem clot in the iliac arteries and aorta communicated by means of a small attenuated clot with a post-mortem clot higher up the abdominal aorta. The walls of the bladder and uterus were black and gangrenous. The second case was that of a woman aged forty-six, whose right limb became gangrenous, and was amputated thirteen years ago. In 1883 she was readmitted into Guy's Hospital with albuminuria and gangrene of the other leg. No evidence of cardiac disease was detected during life. At the necropsy some old pericardial adhesions were found about the apex of the left ventricle, whose anterior wall was much thinned and contained several yellowish grains on section, possibly of gummatous nature. The thrombosis extended up to the renal arteries; the embolus had been dislodged from clots in the left ventricle. The vena cava inferior was almost completely obliterated; this was probably the cause of the gangrene of one limb thirteen years previously. The bladder and uterus were healthy.—Dr. J. S. BRISTOWE was not satisfied with the evidence of the embolic origin of the aortic thrombosis. So far as his own post-mortem investigations went, he had not been able to find a single undoubted case of embolism of the aorta due to emboli from the valves of the heart or clots in its ventricles.—Dr. S. TAYLOR referred to a case of abdominal aneurism leading to aortic thrombosis that had been under the care of Dr. Bristowe. Pain and diarrhœa with paraplegia were the symptoms of sudden onset.—Mr. MARMADUKE SHEILD had recorded a case of Embolism of the Aorta, with gangrene of the limb, in THE LANCET of 1880. In another case he had examined, the aorta and heart were extensively diseased, and there seemed to be no doubt of the embolic origin of the aortic obstruction.—Dr. SAMUEL WEST had recorded in the Pathological Transactions a case in which there was no possibility of doubt as to the embolic nature of the thrombosis of the arch of the aorta.—Dr. CARRINGTON also referred to two cases of embolism with mitral stenosis, with clots in the auricular appendix, in which the source of the emboli was unquestionable.—Mr. R. WILLIAMS mentioned the case of a man aged fifty-five, who had embolism of the aorta, the embolus having come from an aneurysm of the abdominal aorta higher up than the obstruction.—Dr. PRICE, in reply, thought there was less doubt of embolism in the second case than the first.

Dr. C. TURNER read a paper on Septic Aortitis, illustrated by four cases. The first was that of a woman aged sixty-two, who had incompetence of the aortic valves. Ulcerated areas of various size and form were seen in the aorta; the endarterium was undermined in many places; much atheroma and calcification was present; the changes were less marked in the abdominal aorta. Masses of micrococci at the base of an ulcer occupying the deeper layers of the inner coat were readily stained with gentian violet after the tissue had been kept in a dilute solution of hydrochloric acid for a short time. Cholesterine crystals also studded the diseased areas. The heart was

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much enlarged and dilated, and there was some thickening of the valves. The kidneys were granular. She had suffered from rheumatism. The second case was a woman aged forty-eight, in whom the thoracic aorta contained a large mass of fibrinous substance immediately above the aortic valves, and several smaller masses higher up; there were also patches of endarteritis on which the fibrin had formed. The heart was normal. She had had a severe burn of extensive distribution, followed by suppuration and fever. There were two chronic ulcers in the stomach. The third case was a man aged forty-five, who also had much pyrexia; death was due to intra-thoracic hæmorrhage from the left internal mammary artery, the result of a stab in a public-house quarrel. Atheromatous patches were seen in the aorta, and soft fibrinous masses, the size of a small nut, were also present on the raised patches of the endarterium. The aortic valves and heart were normal. In another case, that of a man aged thirty-nine, who underwent an operation on the left thigh, similar changes were found in the aorta. Microscopically, in all the specimens there was to be seen a leucocytal infiltration of the arterial coats, especially about the vasa vasorum. In all the cases there was a source of septic infection. The toxic products of the mycotic growth probably originated the aortitis, the micrococci in the blood finding a suitable nidus for growth in the atheromatous patches. The *cloudy* state of the fibrin was possibly caused by micrococci in a less vigorous state of growth than existed in the arterial coats. The cases were clinically corroborative of Orth's experiments in animals.

The following card specimens were shown:—Mr. Sydney Jones: (1) Malformation of Foot; (2) Peculiarly shaped Calculi. Dr. Sharkey: (1) Meningeal Hæmorrhage; (2) Retroversion of Mitral Valve; (3) Stenosis of Mitral, Tricuspid and Aortic Valves. Dr. Pye-Smith: Cystic Teratoma from an Infant. Dr. C. Turner: (1) Kidneys with Necrosis of Pyramids; (2) Jejunum with Perivascular Hæmorrhages. Mr. Lunn and Dr. Larder: Aortic Aneurysm. Dr. Cayley: Child with large Hairy Mole. Dr. Seymour Taylor: Angiosarcoma of Brain. Mr. E. H. Fenwick: Stone impacted in Prostatic Urethra. Dr. A. H. Robinson: Hypertrophied and Dilated Bladder, with adherent Pericardium.

MEDICAL SOCIETY OF LONDON.

Traumatic Hydronephrosis. — Relation of Tonsillitis to Scarlatina and Diphtheria.

AN ordinary meeting of this Society was held on Monday last, Mr. R. Brudenell Carter, F.R.C.S., President, in the chair.

Dr. LOWE read a paper on Traumatic Hydronephrosis. The patient was a man aged twenty, who was run over by an empty waggon. There was great distension of the abdomen, and ten weeks after the injury a large tumour had formed in the right hypochondriac and lumbar regions. A group of large veins existed over the swelling. There was no hæmaturia after the accident and no evidence of previous calculus. Nine pints of perfectly clear fluid were withdrawn by means of a trocar and cannula; it was of a highly albuminous character. Later still, eight and a half pints were drawn off at a second tapping, and the cyst was injected with a diluted tincture of iodine. The diagnosis of hydatid tumour was also excluded, not only by the albuminous nature of the fluid but by the absence of hooklets, &c. In five of fifteen reported cases of traumatic hydronephrosis the ureter was obstructed by cicatricial tissue resulting from the traumatism. Cases of traumatic hydronephrosis offered a much greater chance of cure by tapping than did hydronephrosis from internal disease. In his own case he believed the ureter had been obstructed by a blood-clot. — Mr. BERNARD PITTS related the case of a girl aged nine, who was admitted into the Hospital for Sick Children. She had been run over by a hansom six weeks previously. There was a large left-sided hydronephrosis, from which forty-one ounces of clear urine having a slight trace of albumen were withdrawn. There was ·14 per cent. of urea in the fluid. Gentle massage retarded somewhat the accumulation of fluid, but a third tapping had to be performed and forty-four ounces of fluid withdrawn. By a more thorough massage carried out systematically the tumour only slightly refilled, and in a few weeks altogether receded so that nothing abnormal could be detected. The child has remained well ever since. In this case Mr. Pitts regarded the obstruction as due to blood-clots in the ureter. In another case related, a child passed casts of the ureter, the casts being clearly of hæmorrhagic origin.—Mr. WALTER PYE narrated the case of a gentleman who received a spear-wound in the abdomen, which was followed by hydronephrosis. Tapping was performed and the case ended in complete recovery. It happened five years ago.—Mr. DAVIES-COLLEY also related a case of right-sided hydronephrosis in a man aged fifty-five, who met with a railway accident. It was probable that the man had had a calculus prior to the accident; there was, at all events, a history of pain and hæmaturia. Massage in cases of traumatic origin might be productive of mischief. He did not think that blood-clot in ureters could be absorbed.—Dr. SAMUEL WEST spoke of the pathology of so-called traumatic hydronephrosis, and considered that some cases might really be instances of retro-peritoneal or peritoneal effusion. —Dr. LOWE, in reply, considered that hæmorrhage from the kidney could easily give rise to clots which would obstruct the ureter. A small hydronephrosis might be partially or totally absorbed. The ultimate result could not always be known; even when cases appeared to be cured fresh effusion might again occur.

Dr. HINGSTON FOX read a paper on Tonsillitis and its relation to Scarlatina and Diphtheria, excluding Catarrh and true (suppurative) Quinsy. The writer first described common, follicular, or septic tonsillitis, giving a group of cases in illustration. This was a brief and symmetrical disease, often affecting several members in one household, and frequently traceable to bad hygienic conditions. Intermediate between this affection and the tonsillitis of the specific fevers lay so-called infectious sore-throat, the pseudo-diphtheritis of Dr. Ashby. The outbreaks recorded in the proceedings of the Medical Society by Drs. Routh and Crisp were shortly described, and reference was made to various other outbreaks reported in recent years. It was suggested that the occurrence of these mixed forms of tonsillitis, often showing a short-lived infectiousness, gives ground for regarding scarlatina and diphtheria as primarily forms of tonsillitis which have acquired specific properties. On this view the poisons would enter the lymphatic system at the tonsils, which would be inflamed as a first effect. The function of the tonsils is, Dr. H. Fox thinks, connected with the reabsorption of the surplus saliva, and it is suggested that these glands absorb the poisons from the saliva. The poison of a common tonsillitis has little more than a local effect; that of a scarlatinal tonsillitis is able to reproduce itself in the system indefinitely without deterioration, and in this power of reproduction Dr. Fox would see the characteristic of a species of disease.

HARVEIAN SOCIETY.

Paralysis of Tongue, Palate, and Vocal Cord.—Treatment of Obscure Forms of Metrorrhagia.

A MEETING of the above Society was held on Thursday, April 1st, J. Hughlings Jackson, M.D., F.R.S., President in the chair.

The PRESIDENT showed a patient who had Paralysis and Wasting of the Right Side of the Tongue, and Paralysis of the Right Half of the Palate and of the Right Vocal Cord. He had recorded several cases in which these three symptoms occurred together (London Hospital Reports, 1864 and 1868). There was also paralysis and wasting of the left supinator longus, biceps and brachialis anticus, deltoid, supra-spinatus, and infra-spinatus: these muscles did not act to the faradaic current; in all anodal closure contraction was greater than kathodal closure contraction, except that the infra-spinatus did not react to forty cells. There was a patch of anæsthesia (to touch and to pain) on the summit of the left shoulder, roughly circular in outline and about six inches in diameter. The eyes were examined by Mr. Marcus Gunn. The left pupil was very slightly larger than the right; there was no difference in the palpebral apertures. The left pupil did not dilate in shade nor react to light (directly or consentaneously). During convergence, which was short and partial, the left pupil contracted as well as the right. Accommodation was defective in both eyes. The left pupil underwent changes in size during ordinary movements of the eyeball, tending to contract on looking downwards or inwards, and to dilate on looking upwards or out-

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wards. Dr. Wilson, to whom the President was indebted for most of the notes of the case, had twice observed sweating on the left side of the face, a symptom of which the patient complained. Considering that there was a clear history of syphilis and that the symptoms developed slowly, Dr. Hughlings Jackson thought there was syphilitic disease involving nerve roots. He expressed the opinion that the right hypoglossal nerve and the upper (bulbar) part of the right spinal accessory nerve were involved, and also some of the spinal cord nerve roots entering into the left brachial plexus. He had never, with one doubtful exception, seen paralysis of the palate in cases of disease of the portio dura nerve; deviations of the uvula were common in healthy people. He thought that lesion of the bulbar part of the spinal accessory nerve caused the palatal and vocal paralysis. The pupillary condition on the left was not like that occurring with paralysis of the cervical part of the sympathetic, except in that the pupil did not dilate when shaded. According to Ferrier, the particular spinal nerve root supplying fibres for dilatation of the pupil, or for inhibiting the action of the third nerve (Gaskell), is the first, or more probably the second dorsal; but in this case this nerve-root was not implicated, as the intrinsic muscles of the hand were not morbidly affected. Dr. Hughlings Jackson could not explain the pupillary condition; the patient's knee-jerks were present, and he had no tabetic symptoms, unless the left pupillary condition be reckoned as one. Nor could he explain the sweating of the left half of the face, except by supposing that the vaso-motor fibres in the cervical sympathetic arose from higher anterior roots than those supplying the iris.—Dr. S. MACKENZIE observed that he had seen about eight patients suffering with unilateral paralysis of the tongue, soft palate, and vocal cord, and they were of great interest on both anatomical and clinical grounds. The late Dr. Lockhart Clarke had shown the close anatomical union between the nuclei of the hypoglossal and spinal accessory nerves in the medulla, and Dr. Hughlings Jackson had been the first to turn these anatomical investigations to account in elucidating cases of this group. These cases seemed to demonstrate that the palate (levator palati) was innervated by the spinal accessory, and thus a very localised lesion in or outside the medulla explained the simultaneous paralysis of tongue, soft palate, and vocal cord. His own experience confirmed that of the President, that the palate escaped in pure cases of paralysis of the seventh nerve. In two cases he had recently exhibited at the Clinical Society there was also paralysis of the sterno-mastoid and trapezius, indicating that the spinal portion of the spinal accessory nerve was involved. In one of the cases, which, like the President's, was certainly syphilitic, there was no evidence as to whether the paralysis of the sterno-mastoid and trapezius came on at the same time as the paralysis of the tongue, palate, and cord; and, as there was also paralysis of the cilio-spinal fibres on the same side, which arise in the same part of the cord, it seemed probable that the internal and external branches of the spinal accessory nerve were affected by two distinct lesions. But in the second case, the paralysis of the tongue, palate, and cord came on coincidently with the paralysis of the sterno-mastoid and trapezius; and he (Dr. Mackenzie) would like to ask the President what explanation he would afford of such a case, particularly whether he thought a bulbar lesion would account for it. This, of course, would necessitate a close direct anatomical association of the two branches, notwithstanding their apparent difference in origin. He further remarked that in these cases the tongue, as a whole, was scarcely at all deflected to the paralysed side, but the raphe of the tongue was markedly curved, showing that the lateral protrusion of the tongue to the paralysed side in hemiplegia is probably due to other influences than that of the hypoglossal. He further asked the President how he explained in his case the anæsthesia of the shoulder, in the patient exhibited, being on the same side as the muscular paralysis.—The PRESIDENT replied that the disease did not appear to be in the cord itself. He could not explain the anæsthesia.

Dr. ARTHUR W. EDIS read a paper on the Treatment of Obscure Forms of Metrorrhagia. He urged the importance of regarding hæmorrhage merely as a symptom of some constitutional or local disorder, and not as a disease or entity *per se*. It was a conservative effort of nature in many instances to lessen the arterial tension and prevent the occurrence of more serious internal hæmorrhages. A correct diagnosis was the first and most important element of successful treatment, for until the former be known the latter is mere guess-work, and we are as liable to do harm as good in attempting to repress the hæmorrhage. The principle of diagnosis by exclusion was one which approved itself to many—determining, in fact, to what cause the hæmorrhage was not due. This could only be done by knowing beforehand what were the most likely causes of severe hæmorrhage—the *possibilities* so to speak, and then eliminating one after the other until we have left only two or more *probabilities*. Before concentrating attention upon the probable local disorder, the possibility of some complicating constitutional condition, whether cardiac, renal, or hepatic, should always be considered. A clear and concise history of the attack was of great importance in attempting to arrive at a correct diagnosis. Then, again, the colour and consistence of the discharge should be noted: whether bright or dark, fluid or clotted, recent or disintegrated. The duration of the flow, interval between the losses, influence upon the general health, and other similar considerations, should not be passed over. Unsuspected miscarriages and incomplete abortions proved a not inconsiderable percentage of these obscure cases. Some of the most difficult cases to diagnose occurred at or about the so-called climacteric period. Exploration of the interior of the uterus, either by dilating or incising the cervix, should always be resorted to where no sufficient outside cause for the hæmorrhage could be detected. Cases illustrating the difficulty of forming a correct diagnosis were given, and the lines of treatment sketched out. An interesting discussion followed.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

Sanitary State of London Poor Districts.

A MEETING of this Society was held on Friday, March 19th, Dr. Corfield presiding.

Dr. LOUIS PARKES read a paper on the Sanitary Condition of Poor Districts in the Metropolis, with especial reference to their Watercloset Accommodation. In introducing his subject, the author brought the following questions forward as being some on which it was very desirable to get an expression of opinion from members of the Society, as a body entrusted with the care of the public health of the metropolis:—1. Is it desirable that the waterclosets of poor-class houses should be flushed by hand with pails of water, or should they be supplied with water from a cistern? 2. Is the law, as it now stands, sufficient to enable a sanitary authority to enforce a supply of water by cistern to a closet which is without one, in all cases and under every kind of circumstance? and is it obligatory on an authority to undertake this duty whenever the fact of a closet being without a water-supply is brought to its notice? 3. If the law is insufficient or too undecided in its terms as regards the powers of the sanitary authority in this respect, or its obligation to enforce the powers with which it is entrusted, what alteration is it desirable to introduce in any fresh legislation on the subject? And with this may be included the consideration of what further powers with regard to watercloset accommodation it is desirable to furnish a sanitary authority with. The danger arising from the situation of closets in underground cellars in tenement houses was alluded to. These dangers were shown to be unnecessarily aggravated in many cases by the closet being without a water-supply, and used—as the only convenience—by all the lodgers in the house, who might be thirty in number, in some of the poorest quarters. A far better arrangement is for the closet to be in the back yard, outside of and away from the house. The "long hopper" closet is the one almost invariably found in use, and it is one of the worst forms; it soon becomes soiled and corroded, and is incapable of being properly flushed. The best form of closet for use by poor people is the "short hopper" of glazed stoneware, with vertical back and sloping front, and with syphon trap below. This form is easily flushed out and kept clean, when supplied with water by a two-gallon waste-preventing cistern. But such waste-preventing cisterns as are supplied to poor-class houses are almost invariably found to be out of order, the ball valve being defective or the outlet valve leaking. The syphon action water-waste-preventer is preferable as being more certain in action, but it is more expensive, and the chains, ball-cocks, and other detachable metallic parts in all these cisterns attract the cupidity of the destructive class of

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tenants in the poorest quarters, and consequently disappear. Flushing by hand with pails may be made to answer (1) if there is a water-tap in close proximity to the closet in the yard; (2) if the duty of flushing is entrusted to some one person in the house who shall become responsible for its proper performance; and (3) if the sanitary inspector can visit at frequent intervals to see that the flushing is not neglected. In courts and alleys which are not thoroughfares, the author advocated the use of trough-closets in the court, with separate locked compartments or cubicles for the use of each house. These closets can be effectually flushed by a Field's automatic syphon flush-tank, placed in a separate locked compartment, accessible only to the sanitary inspector. These trough-closets have been found in Liverpool and elsewhere to answer extremely well in the case of courts and blind alleys occupied by the lowest and most degraded classes. As to the sufficiency of the law, Section 81 of the Metropolis Local Management Act of 1855 gives power to a sanitary authority to enforce a suitable water-supply and water-supply apparatus to a closet without one, even where no nuisance, as the result of the absence of such fittings, can be proved to exist, and this power relates to houses built before as well as after the Act was passed. The case of Tinkler *v.* Wandsworth District Board of Works, although often cited, has no bearing on this question except indirectly, as here it was a question not of waterclosets but of privies and cesspits unconnected with the public sewer, in which water could not properly be used. It was, however, decided in this case that the local board had power to convert one privy into one watercloset with water-supply apparatus, but could not make a general order to convert any number of privies in their district into waterclosets without exercising discretion in each particular case. In the case of the Vestry of St. Luke's *v.* Thomas Lewis, it was a question of water-closets without water-supply. This case was tried in 1862 in the Court of Queen's Bench. The magistrate's decision adverse to the plaintiffs was reversed, and Lord Chief Justice Cockburn gave judgment to the effect that the vestry had power to order a water-supply to a closet without one. However, it still remains to be decided whether a local authority has power to make a general order enforcing water-supply to all or any number of closets in its district, without exercising discretion in each particular case. The Public Health Act of 1875 empowers a local authority to insist on a "sufficient water-closet" being provided, but there is no clause which deals with the enforcement of a water-supply. "Sufficient" was no doubt intended to include a water-supply. The author pointed out that by Section 7 of the Housing of the Working Classes Act of last session, sanitary authorities in the metropolis now lie under a statutory obligation to enforce in sanitary matters all the powers with which they are provided. It did not appear to be proved that any alteration in the law as regards water-supply to closets was either necessary or desirable, although enlargement of powers for the purpose of providing trough-closets in courts seemed to be needed.—In the discussion which followed, the President, Drs. Seaton, Pringle, Gwynn, Iliff, Dudfield, West, and Messrs. Furnivall, Bernays, Hartt, Cassal, Lovett, and Shirley Murphy took part.

ACADEMY OF MEDICINE IN IRELAND.

Keeping Perforation of the Membrana Tympani open.—The Radical Cure of Hydrocele.—Therapeutic Uses of the Digestive Ferments.—Fetid Expectoration from the Lung.

A MEETING of the Surgical Section was held on Jan. 22nd.

Dr. M'KEOWN (Belfast) described a method of making an Artificial Perforation of the Membrana Tympani which would remain open for a period varying from two weeks to two months. He made a triangular flap of the membrane, commonly selecting either that part in front of, or that behind, the handle of the malleus. He used a speculum, and illuminated the membrane by the frontal mirror. He then introduced the knife—a very fine straight knife with thin handle,—punctured the membrane in front of, or behind the top of, the handle of the malleus, cut upwards as far as he could, then made a second incision, beginning below, either at the anterior or posterior part of the membrane, as the case might be, and in a horizontal line with the lower end of the first incision, and cut upward till the two incisions joined. The flap thus formed, unless in case of very thickened membrane, fell down, or might be turned down with a fine probe, and commonly remained in position, adhering to the membrane below by blood exuded from the cut surface. He had operated on a considerable number of cases—some of long standing,—and he gave particulars of some of the most interesting. The ordinary incisions hitherto practised, except to discharge products of inflammation, were of no therapeutic use whatever. The operation proposed was not for the purpose of making an artificial way for the waves of sound, but to give rest to the ear for a long period, and to induce a nervous and vascular equilibrium favourable to the absorption of deposits and restoration of function. Most troublesome obstructions of Eustachian tubes of long standing had given way to this treatment alone. As to relief of tension in old cases, a simple incision closing in a day or two could do no good, but an opening for a period of from two weeks to two months might do a great deal. Time was the very essence of the question from a therapeutic point of view. He illustrated the use of the method in diagnosis, and also in opening a way for efficient treatment of some cases of hypertrophic change of the lining of the middle ear. So far as he could follow his cases, he found none were made worse, some were not benefited, but the majority were more or less relieved, some to a remarkable extent.

Mr. M'ARDLE read a paper on the Radical Cure of Hydrocele. After describing the methods of Volkmann, Julliard, and Bergmann, he read the notes of three cases illustrating the method of incision. He brought forward specimens to show the ease with which the tunica vaginalis could be removed in the operation for excision. He then compared the methods of injection and dissection chiefly as regards—1st. The relative difficulties of the operative procedures. 2nd. The dangers attending each. 3rd. The length of time required for cure. 4th. The chances of return after each method. In reference to the third point he called attention to the following as the dates of healing. After

Injection.		Incision.		Excision.
Billroth, 9th	...	Volkmann, 8–10th	...	Julliard, 10th
Stoltz, 9–10th	...	Küster, 14th	...	Bergmann, 11–12th
Weiss, 8–9th	...	Lister, 17th		

The chances of recurrence in various methods he stated as follows:—Injection: 315 cases; 41 recurrences. Incision: 238 cases; 5 recurrences. Excision: 72 cases; no recurrences. The percentage of recurrences after injection of different substances seemed to be very much the same: after iodine, 15 per cent.; chloral hydrate, 13 per cent.; perchloride of iron, 11 per cent.; carbolic acid, 10 per cent.; and chloroform, 10 per cent. Mr. M'Ardle recommended the dissection method in: (1) Multilocular hydrocele; (2) hydrocele connected with tubercular testis; (3) cases complicated by mucoid transformation of the cellular tissue of the scrotum; (4) cases where injection of ordinary hydrocele failed more than once; and (5) those cases of hydrocele in which the tunica vaginalis becomes greatly thickened, coated with chalky deposit, or filled with foreign bodies.—Mr. STOKES said he could not, in his own practice, recall a single instance of failure in the radical cure of hydrocele by what Mr. M'Ardle termed the old method of injection, although some of his cases had been injected more than once. In none of the cases was there any serious trouble, such as fever, sloughing of the scrotum, erysipelas, &c.; therefore, he was not disposed to alter his method of treatment for one more hazardous. He had seen Volkmann's treatment by incision, and one of the most important points connected with it had not been mentioned—namely, that having incised the tunica vaginalis, and attached the edges with great accuracy to the edges of the skin by continuous sutures, a series of deep sutures were applied to keep the surfaces in apposition. He had seen serious consequences follow the operation—for instance, retention of urine and fever.—Mr. BARTON said the question was one of choice between the operations which admittedly had certain risks and the well-established procedure which was without any serious risk. He was therefore gratified that Mr. M'Ardle had recommended those operations for the treatment of hydrocele only in difficult cases which had resisted injection.—Mr. CROLY had never known of a single case of hydrocele that resisted the ordinary treatment. Where failure occurred with others, he had no doubt it was due to using iodine in too diluted a form. He never thought of using a solution of iodine and water, but threw in a few drops of undiluted

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tincture of iodine, which invariably effected a cure. What he advised was to dip the probe into a little bit of lard and then wipe with red precipitate. A few grains of red precipitate introduced into the tunica vaginalis, or a few drops of tincture of iodine, would effect a cure in ninety-nine cases out of a hundred. By this means he would leave nothing to be cut out. He never saw gangrene, erysipelas, or anything bad follow the operation; or, if there did, it was the fault, not of the operation, but of the operator.

At a meeting of the Medical Section on January 29th,

Dr. PURSER read a paper on the Therapeutic Uses of the Digestive Ferments, in which he condemned as useless and irrational the internal administration of these substances, and argued that their true use in medicine was limited to the preparation of artificially digested food.—Dr. HENRY KENNEDY took exception to Dr. Purser's observations about the effect of pepsine, of which he had had favourable experience himself in children, with whom imagination could not be said to operate. How pepsine acted he was unable to explain. Some preparations of pepsine with glycerine were calculated to develop an unpleasant smell, which made it disagree.—Dr. WALTER G. SMITH regarded Dr. Purser's conclusions as founded on incontrovertible data. It was high time to protest against the illogical and irrational mode of using so-called aids to digestion.—Dr. J. W. MOORE said that rectal alimentation was one of the principal uses of digestive agents, from the addition of which to nutritive enemata he had seen good results.—Dr. ATTHILL said he was sure Dr. Purser's remarks were based on scientific principles, but possibly some of his deductions were not strictly correct; because experiments carried on outside the body could not be identical with experiments inside. While sensible that there was a vast amount of humbug in the sale of digestive ferments, he did not agree with Dr. Purser that those ferments were absolutely useless, having himself prescribed pepsine with good results, especially in the case of children and delicate women. In artificial feeding per ano the peptonised food was of the greatest importance.—Dr. PURSER replied that he was prepared for the protest made as to the use of pepsine, and had anticipated the objection in his paper. As to the effect of medicine on children and delicate women, he did not say the effect was produced through the imagination; but he did not know anybody who gave pepsine and nothing else. The diet was always regulated to make it more easily digestive, and pepsine was prescribed with acid or aromatic water, and aromatic water would often cure gripes in children. To say the thing was different inside the body and outside the body showed an erroneous conception of digestion, which did not take place inside but outside the body. The mucous membrane of the stomach was just as much outside the body as the palm of the hand. The preparations for rectal alimentation were of some value.

Dr. H. KENNEDY detailed two instances, both in young females, where a very profuse expectoration, attended by a most offensive odour, occurred. The fetor was so great as to diffuse itself through a large ward, like what occurs in gangrene of the lung. The physical signs were in each case confined to one lung, and were what is now known as chronic strumous pneumonia. In each case there were slight signs of hectic, with the nails curved; whilst menstruation was irregular. Under the use of a combination of powdered uva ursi and charcoal the patients improved much in their general health, and the fetor quite ceased at the end of ten days, and in about a month each patient left the hospital to look for places as servants. No local treatment in the way of inhalation was used.—Dr. HAYES instanced the case of a woman in Dr. Steevens's Hospital whom he had seen at the request of a colleague; the patient was the subject of a fetid bronchitis. He suggested an inhalation consisting of a combination of creasote, carbolic acid, iodine, and spirit, and the fetor disappeared entirely in a few days.

CHESTER MEDICAL SOCIETY.

A MEETING of this Society was held on Friday, February 5th, Mr. James Taylor, F.R.C.S., President, in the chair.

Small Mitral Valve.—Mr. H. DOBIE, on behalf of Mr. George Harrison, exhibited a heart, the mitral orifice of which barely admitted an ordinary black lead pencil. The other valves were healthy, but there was fatty degeneration of the organ. The patient was a woman of forty years of age, giving no history of rheumatic fever. Her pulse averaged forty-eight beats per minute, but no murmur was discoverable during the ten weeks she was in hospital.

Syphilis.—Dr. WEAVER (Frodsham) read notes of a case of Syphilis which he had observed through its various phases for two years. One marked symptom had been severe neuralgia in both temples coincident with periostitis of the vertex excited by a blow. Dr. Weaver asked what remedy had in the experience of members been found most effectual for this bi-temporal neuralgia, when gelsemium, bromide of potassium, and iodide of potassium, together with a long mercurial course, proved ineffectual.—Dr. DOBIE said he had recently seen a case in which gelsemium had failed yield at once to a course of perchloride of mercury with iodide of potassium. These he thought the best remedies for the neuralgia of syphilis.—Surgeon-Major TOMLINSON thought that when these means failed the hypodermic injection of morphia should be had recourse to.

Mr. ALEXANDER BARRON of Liverpool (visitor) exhibited a Microscopic Section of a Primary Desquamating Syphilitic Papule, showing lymphatic spaces containing a hyaline coagulum, in which multitudes of micrococci were embedded. He explained the staining reaction of the organism and the difficulties in its cultivation. He had found it in glands secondarily affected and in tertiary lesions of recent development. He thought it could always be found in syphilitic lesions if looked for at the proper time, and that, considered in the light of our knowledge of the pathology of tubercle and other allied diseases, the probability of its being the cause of the disease was very great.—Mr. STOLTERFOTH thought the detection of the bacillus might often form a valuable aid in the diagnosis of syphilis.

Dr. WATERS read a paper on the Communicability of Typhoid Fever, the discussion upon which was postponed.

At the meeting on March 5th, Mr. MILLER showed a specimen removed from the body of a labouring man, aged fifty-one, who had been under Dr. Stolterfoth's care in the Chester Infirmary. A firm pulsating tumour, with a distinct murmur to be detected by auscultation over it, was discovered situated behind the right sterno-clavicular articulation. A few hours before death great dyspnœa came on, and expectoration of mucus tinged with blood. The post-mortem examination disclosed a sac, bounded apparently by the surrounding tissues, without arterial coats, containing broken-down coagulum. This sac communicated on the one hand with the right carotid artery, which was atheromatous, by a minute aperture, and on the other with the œsophagus and the trachea, the former by a very free opening.

Mr. TAYLOR showed an Ovarian Cyst recently removed by him with success in the Chester Infirmary. Mr. Taylor also exhibited a piece of intestine removed (post mortem) from a case of obstruction of the bowels. This he handed over to the Pathological Committee for examination.

Measles.—Dr. HAINING read a note of five cases of measles which he had had the opportunity of personally observing closely, proving that measles is infectious in the stage of catarrh, and pointing to nine days as about the average length of the incubation stage.

Dr. DOBIE showed a beautifully designed and coloured Temperature and Pulse Chart of a case of Typhoid Fever, observations having been recorded several times each day by the husband of the patient.

Hæmophilia.—Mr. Moreton of Tarvin read a paper on Hæmophilia, giving details of a series of cases in one family of which he had had the care. The mother appeared to be the source of the mischief, but was not herself a "bleeder" and showed no tendency to post-partum hæmorrhage at any of her confinements. The eldest son was not a bleeder, but suffered when young from most obstinate dyspepsia, at one time weighing only 63 lb., while he was 5 ft. 9 in. in height. He is now alive and in good health in Virginia. The second boy, after frequent attacks of bleeding, died at the age of ten from epistaxis. The third, fourth, and fifth boys died between the ages of three and eight from hæmorrhage. The sixth died at eighteen months from bleeding from the mouth, without apparent injury. None of the girls were "bleeders." The mother had had four abortions, and in every case the fœtus was a male. Mr. Moreton frequently examined the blood of these patients, and always found it normal as regards coagulation and microscopic appearance.

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He thought a peculiarity in the structure of the capillaries would best explain the condition, but he believed it was open to anyone to start a new theory as to the real nature of the conditions which result in the disease.

A discussion followed, in which several members gave their experience of more isolated cases.

MIDLAND MEDICAL SOCIETY.

A MEETING of the above Society was held on Wednesday, March 3rd, Dr. J. Holmes Joy, President, in the chair.

Lead Tremor.—Dr. SUCKLING showed a man, a lapidary, who had suffered for years at times from lead colic. A week before coming to the hospital he noticed trembling of the hands, which came on somewhat suddenly and obliged him to give up work. There was marked rhythmical tremor of the hands and forearms on extension, ceasing during rest; also, wasting of the thenar muscles and some weakness of the extensors of the wrist. There was a well-marked blue line on the gums.

Brass-founder's Ague.—Dr. SUCKLING showed a man who had worked in brass for twenty-six years. The casting shop was immediately under the room in which the man worked, and whenever any casting was done the dense fumes given off always made him ill, causing shivering and sweating, very frequently also vomiting, pains about the chest and limbs, and broncial catarrh. The man had a well-marked green line on the teeth close to the gums, and his hair was of a greenish tint. Dr. Suckling met with the disease very frequently among the out-patients at the Queen's Hospital, and he found that iodide of potassium gave relief.

Amblyopia and Monoplegia.—Dr. SUCKLING showed a child with Paralysis of the Right Hand and Amblyopia. Several months previously it had been seized with vomiting followed by Jacksonian epilepsy, the convulsions always beginning in the right hand and then passing on to the right side of the face, then to the right leg. Three months ago the convulsions ceased to occur, but the right upper extremity remained paralysed and had become rigid. Latterly the child had lost its sight, running into objects and not recognising its parents. The pupils responded normally, and there was no change in either fundus; there was a marked history of phthisis on the mother's side. Dr. Suckling considered that the monoplegia indicated mischief in the convolutions around the left fissure of Rolando, and that the amblyopia was due to extension backwards and implication of the angular gyrus, and possibly also of the outer surface of the occipital lobe.

Aortic Aneurysm.—Dr. CARTER showed a specimen of Aneurysm of the Ascending Aorta, taken from a miner aged thirty-six. There was no previous history of rheumatism, syphilis, or chronic alcoholism, and the lesion was attributed to chronic aortitis occurring in connexion with over-strain of the heart in the course of his work. The tumour pointed externally to the left of the sternum, between the second and fourth ribs. In the early stage great benefit was derived from Tufnell's plan of treatment. Later on, when all other treatment had failed, and the aneurysm threatened to burst externally, galvano-puncture was performed, and for a month after this there was great improvement; but the symptoms returned, and finally death took place from hæmoptysis, due to encroachment of the aneurysm on the tissue of the left lung. The total duration of the illness was about sixteen months.

Spinal Curvature.—Mr. WILLIAM THOMAS exhibited two patients suffering from Angular Curvature of the Spine, each of them wearing an inexpensive jacket which he desired to bring before the members of the Society as a useful method of treatment. The principal feature of the jacket was a support of soft Swedish iron, which could easily be adapted to the changing shape of the spine, and could readily be arranged to support the head. This was applied closely to the spine, and, being sewn into a jacket of jean, was kept in position by lacing up the front. He claimed for it greater facility of application, more ease to the patient, less cost, and better results than from treatment by the plaster jacket.

Mr. JORDAN LLOYD showed a Hernial Sac that he had removed from a child, and another from a man aged twenty-nine; this latter contained a quantity of omentum. The result in both cases had so far been satisfactory.

Dr. MALINS showed a dumb-bell-shaped Ovarian Cyst containing a number of papillary growths.

Mr. HASLAM showed a Ruptured Liver and Right Kidney due to a kick on the abdomen from a horse. The patient, a man aged twenty-nine, had no symptoms indicative of a serious lesion until after five days; he was then seized with shock and collapse, his abdomen became distended, and there was suppression of urine; he died after twenty hours. At the post-mortem examination about half a pint of blood was found in the peritoneal cavity; this probably came from the damaged under-surface of the liver.

Mr. LAWSON TAIT read a paper on four cases of Chronic Inflammatory Disease of the Uterine Appendages.

Reviews and Notices of Books.

The Causes and Prevention of Blindness. By Dr. FUCHS, Professor of Ophthalmology in the University of Liège. Translated by Dr. R. E. DUDGEON. Pp. 247. London: Baillière, Tindall, and Cox. 1885.

THIS work is the outcome of a prize offered by the Society for the Prevention of Blindness in London at the Fourth International Congress for Hygiene, which met in September, 1882, at Geneva. The volume is divided into nine parts, as follows: eye diseases of hereditary origin, eye diseases of childhood, eye diseases incidental to the educational period, eye diseases consequent on general diseases, infectious eye diseases, influence of occupation on eye diseases, influence of social conditions on eye disease, influence of climate and race on eye disease, and, lastly, treatment of eye diseases. Perhaps the most interesting of these divisions is that which relates to the eye diseases incident to the educational period, and which of course treats at length of the development of myopia. Many points are here discussed, and many rules laid down that are wholly ignored in English schools. To mention only a few. How rare is it to find an architect who, in building a school, pays the least attention to the light. Yet this has been the subject of careful research by many German writers. Almost all are agreed that the windows should look towards the east and the south-east. There are advantages, however, about the south which should not be overlooked. Rooms so lighted are much more cheerful and wholesome; they are warmer, and the excess of light in summer, which is hardly to be dreaded in this climate, can easily be guarded against by blinds. The position of the windows should not be overlooked. Light should, if possible, be admitted chiefly or altogether from the left, and skylights always afford excellent illumination. The proportion of window superficies to floor superficies is given by the best authorities at from 1 : 8·6 to 1 : 1. In Brunswick an inspection of the schools showed that three-quarters of them were insufficiently lighted. In the evening, when artificial light is required, there should be one burner to every four scholars. We should like to know the proportion in most private and in several public schools; we fancy one burner to ten scholars would be nearer the mark. In Liège several of the schools are lighted by electricity. When will this be carried out at Eton, Harrow, Rugby, Westminster, Winchester, and Shrewsbury? Then the subject of the seats and desks is of the greatest possible importance. Dr. Fuchs says: "The scholar sits in a proper manner when the upper part of his body is straight, so that pelvis and shoulders are parallel to the border of the desk, and the head is erect or slightly bent forwards. The feet should rest upon the floor, the back supported by a sacral rest. When writing, the forearms, but not the elbows also, should rest on the desk." An indispensable requisite for this posture is a properly constructed seat. In an appendix to Dr. Fuchs' work Dr. Roth gives some good illustrations of good and bad positions in writing and drawing. Great interest attaches to the questions of the character and slope of writing, and to the features of the print children have to employ. Dr. Fuchs does not

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believe the German character to be so injurious to the eyes as is generally believed. In regard to age, no child under six should be admitted into school. For the lower classes the maximum for "sitting lessons" should be three and for the upper four hours. He compares the number of hours which the scholar has to give to lessons and to play between his tenth and nineteenth year in Germany, France, and England. They are as follows:—In England, working hours 16,500, play 4500; in France, work 19,000, play 1300; in Germany, work 20,000, play 650; and to this excess of work in Germany he attributes the prevalence of myopia in that country. Dr. Fuchs would cut down the time devoted to the dead languages. There is a valuable section on the purulent ophthalmia of new-born children, in which the importance of prophylaxis, both as regards mother and child, is strongly insisted on. The author approves of Credé's plan of dropping a weak solution of nitrate of silver into the eyes of the infant. The subject of trachoma, so frequent abroad, though happily rare in this country, is fully discussed. The book is well got up, and is a valuable addition to ophthalmological literature.

Clinical Lectures on the Practice of Medicine. By the late ROBERT J. GRAVES, M.D., F.R.S. In Two Vols. Vol. II. London: The New Sydenham Society.

WE have now to notice the appearance of the second volume of these Clinical Lectures, so creditable to British medicine, and so indispensable to every practitioner who would have a well-furnished mind, not to say library. Not that all Graves's theories, either of therapeutics or pathology, can be now sustained. He lived before the great revolution in practice which has resulted from a truer estimate of the part of nature and of art in the treatment of disease, though there are many indications that even in regard to the errors of the old practice he was in advance of his contemporaries. But, allowing for these, Graves must still be greatly read and respected by every intelligent practitioner. His range of practice was so wide, his attention to particular cases and details of cases was so admirable, his eye for therapeutics and the benefit of the patients was so keen, his resources and suggestions so original, and he was withal so reasonable—so physiological—in his pathology, that he will always stand out as a model physician. No disease was too vulgar for his study, no remedy too humble for him to consider. He treats of headache, of diarrhœa and constipation with as much orginality and interest as he does of exophthalmic goitre. His classical lectures on these subjects will be found in this volume, for which we have to thank the New Sydenham Society.

Essentials of Histology, for the use of Students. By E. A. SCHAFER, Jodrell Professor of Physiology in University College, London. Pp. 244; 281 Woodcuts. London: Longmans. 1885.

THIS work is divided into forty-two sections, chapters, or, as Mr. Schäfer prefers to call them, lessons. Each lesson, as the size of the book renders evident, is short, and is illustrated by several woodcuts; many of the woodcuts are taken from the histological portion of the last edition of "Quain's Anatomy," which Mr. Schäfer has had so large a share in editing; others come from the author's own stores, or from some well-known text-book. To show the method pursued by the author we open the book at random at the twentieth lesson. This treats of the structure of the larger blood-vessels. It commences with directions for five experiments, which the student should make for himself—viz., sections and staining of a medium-sized peripheral artery and vein; the demonstration of the endothelium; the demonstration of the other tissues by teasing and staining; the comparison of the structure of a large with that of a small artery and the structure of a vein; then follows a description of the structure of vessels, illustrated with seven woodcuts. Mr. Schäfer has had so much experience in teaching, and is recognised as so good a teacher, that it is unnecessary for us to say a word in regard to the letterpress. It is less full than Dr. Klein's admirable little volume on Histology, but it contains all that a student of histology, physiology, or pathology needs to know.

The Two Foundations of St. Bartholomew's Hospital: A.D. 1123 and A.D. 1546. By W. MORRANT BAKER, F.R.C.S., Surgeon to the Hospital. London: Smith, Elder, and Co. 1885.

THIS little book contains the substance of an introductory address delivered before the Abernethian Society at the first meeting of the session 1885–6. Specially interesting as it must of course be to all who can boast that they are *alumni* "of the oldest hospital in London," it possesses also general interest for all who are curious in the antiquarian history of our great medical charities. Interesting quotations are given, in the quaint old spelling and phraseology of the period, from a manuscript in the British Museum devoted almost entirely to the life and acts of the founder (more than seven centuries ago) of St. Bartholomew's Hospital—one Rahere, or more correctly Rayer. The author remarks that Rahere is often referred to as the King's minstrel, or even his jester, but that there is no good reason for believing that he ever held any official position in either capacity. Be that, however, as it may, he seems, in order to accomplish his good object, to have been like one of Shakespeare's immortal jesters, "wise enough to play the fool." In the words of the manuscript, "he made and feigned himself unwise, for he was so coacted and outward pretended the cheer of an idiot, and began a little while to hide the secretness of his soul; and the more secretly he wrought, the more wisely he did his work." Socialists, and other too perfervid and reckless agitators, may congratulate themselves that a hospital is more of a sanctuary than it was in the days of Richard II., when Wat Tyler, being wounded by the mayor, William Walworth, and subsequently conveyed "into the hospitall of Saint Bartilmewe," the mayor "went straight thither, and made him to bee carried into Smithfield, and there caused him to bee beheaded, his head to bee set on a pole, and borne before him to the King, then remayning in the field; and the King caused it to be borne neere unto him, therewith to abash the Commons, greatly thanking the Mayor for that acte." It is interesting to note that at the time of the second foundation the annual income of the hospital was about £800; in 1837, £30,000; and last year £60,000. The frontispiece of this interesting little work—which, by the way, is tastefully got up and clearly printed—is a reproduction of a portion of an engraving contained in the *Vetusta Monumenta* of the Society of Antiquaries.

Chemistry, General, Medical, and Pharmaceutical; including the Chemistry of the British Pharmacopœia. By JOHN ATTFIELD, F.R.S., Professor of Practical Chemistry to the Pharmaceutical Society of Great Britain, &c. Eleventh Edition. Van Voorst. 1885.

PROFESSOR ATTFIELD'S manual is so well known that an eleventh edition would scarcely call for notice if it were not for one important improvement—viz., a well written and remarkably lucid section on systematic organic chemistry, in which the modern classification is explained and all the chief groups discussed in some detail. So far is this from interfering with the practical character of the book, that it renders the experimental study very much easier. Without the classification derived from theory organic chemistry is a hopeless labyrinth of isolated facts, for the remembrance of which no human memory would suffice. Professor Attfield adopts an arrangement which is perhaps

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on the whole, the most convenient—taking first hydrocarbons and their derivatives, then the acid compounds, and so on. Few important groups are omitted in the classification, but it might have been wise to have given a general description of the amides and osmic acids, most of which are, however, described in appropriate places. On the whole, we are inclined to think, from its clearness, practical character, comprehensiveness, and enormous index, that no treatise on chemistry at present extant is likely to be as generally useful to medical men and medical students as that of Professor Attfield. To pharmaceutists it is of course essential.

New Inventions.

THE LENIMOR: A POCKET INHALER.

WE have received a small instrument, in shape resembling an enlarged cigarette-holder, about three inches long, which has been invented and patented as an inhaler. It is made of ivory, is very simple in its construction, and can be carried in the waistcoat pocket and made available for use at any time. All that is needed for the purpose in view is to place a pledget of wool soaked in the medicament—e.g., eucalyptol or turpentine—within the tube, the free extremity of which is then closed by a cap. Air is admitted by two small apertures below the cap, and the aperture at the mouthpiece is also of small size. By using the instrument in the manner of a pipe, the patient inhales the vapour quite as effectually as if he were wearing the less sightly oral inhaler. The inventor, who is a sufferer from lung disease himself, has found relief from its use; and we may add that we have tested it upon a patient, who stated that it was as effectual as the ordinary inhaler. We question whether in most cases the vapour has more than a local action upon the pharynx and upper larynx, but at any rate the idea is ingenious and the instrument worthy of trial.

DR. SPENCER'S IMPROVED BINAURAL STETHOSCOPE.

THE features peculiar to this stethoscope are the communication between the metal tubes or ear-pieces, which is made by means of a short transverse junction that serves also as a hinge; so that when in use the two curved ear-tubes cross one another, a red rubber band below the hinge serving to maintain the requisite degree of pressure to keep the stethoscope in position. The two flexible tubes, to which either a single chest-piece or two separate chest-pieces can be attached, if, as in the latter case, it is intended to convert the instrument into a differential stethoscope, are so constructed as to be detachable from the metal tubes, thus enabling the physician to carry the instrument with great convenience. We have had frequent opportunity for testing the stethoscope in consultation, and can assert that its conducting powers are very good. It is equally excellent whether used as a single or differential stethoscope. How far the open junction between the two tubes aids in reinforcing the sound we can hardly say, but at any rate the instrument is ingeniously devised and admirably constructed. It is made by Ferris and Company, Bristol.

SOCIETY FOR THE STUDY AND CURE OF INEBRIETY.

THE annual address by the President, Dr. Norman Kerr, delivered on Tuesday last, was on the Legislation needed for the Habitual Drunkard. The President called attention to the contrast between the United States and England. In the former country the poorest inebriate could be treated at a State-supported home for inebriates for six months, while in the latter there was no provision whatever, under the Habitual Drunkards Act, for the destitute or for persons of limited means. Only the well-to-do could avail themselves of the provisions of the Act. Truly, here was one law for the rich and another for the poor. Some homes had been very unsatisfactory, and confirmed, rather than cured, the inebriate habit. These injured the character of even genuine homes, of which the Dalrymple Home was the chief, it being the only licensed retreat conducted without financial benefit to the proprietary, and which published its returns in a scientific form. The Act should be improved and be made a permanent measure. As the appearance before two justices acted as a deterrent, this forbidding procedure should be abolished; and (as in the United States) a confirmed inebriate ought to be allowed to sign away his freedom and enter a retreat on a simple contract with the licensee. Any abuse of the liberty of the subject could be effectually prevented by inspection, visitation, and power of appeal by the patient. Escaped patients ought to be taken back direct to the home without the punitive ordeal of having to appear before a justice, as at present. There should also be provision made, at the public cost, for the poor and for such as could afford to contribute only a little towards their sustenance and care. Magistrates, too, ought to have the power to compel the entrance of certain well-defined cases of inebriety into a retreat.

Dr. J. B. HURRY (Reading) read a paper on Uncontrollable Inebriety.

ANTIPYRIN IN PERNICIOUS FORMS OF MALARIAL FEVERS.

To the Editor of THE LANCET.

SIR,—Whilst in charge of the Police Hospital of Bombay during my tenure of office as Acting Police Surgeon I had considerable opportunities of testing the effects of different kinds of treatment in malarial fevers, of a remitting as well as of an intermitting type. In common with most men who have had much experience of these fevers, I met many cases of a remittent type which were not amenable to the ordinary treatment, whether by quinine, arsenic, or diaphoretics with aconite. I determined to try the effect in such cases of administering antipyrin in sufficiently large and repeated doses, to ensure a reduction of the temperature to the normal standard. The result was most satisfactory, so much so that during the last five months of my tenure of office I found no case that was not amenable to this treatment. Many cases that for weeks had been quite unaffected by the ordinary remedies were instantly cured by the exhibition of antipyrin followed by quinine. The few cases in which I found the effects unsatisfactory eventually showed other complications, such as abscess of the liver or phthisis. I am of opinion that in pernicious forms of uncomplicated remittent fever we have a most valuable aid to treatment in antipyrin.

As I am not aware that this treatment has been advocated in the malarial fevers of the tropics, I write to give you the result of my experience, in the hope that it may prove of use to those who have to contend with this common and only too fatal disease.—Your obedient servant,

Sheffield, April, 1886. JOHN HOPE POTTER.

DEGREES FOR LONDON MEDICAL STUDENTS.

To the Editor of THE LANCET.

SIR,—Apropos of the letter signed "Justice" in your last issue, can you or some of your readers give any information regarding the proceedings of the Joint Commission of the two Colleges appointed to consider this question? I trust that the matter will not be shelved, but that if nothing is to be done we shall be told so without further delay; if, on the other hand, there is a prospect of the early removal of this fruitful source of heartburning amongst us, the sooner some intimation is given to that effect the better for the Colleges themselves. The season for "Brussels" is now coming round again, and many an English student may be deterred from deserting the metropolitan schools in favour of a degree-giving northern University by a timely announcement before his arrangements are made for the ensuing summer session.

I am, Sir, yours truly

April, 1886. FAIR PLAY.

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THE LANCET.

LONDON: SATURDAY, APRIL 10, 1886.

WE are now free to notice the new Medical Bill, which, by the courtesy of the Government, we have had before us for some weeks. Whether it is a good Bill, and what are its chances of passing, we shall leave for consideration at another stage of this article. Our first care shall be to give our readers some idea of its main provisions. We shall then be in a better position to consider its chief faults and defects.

The Bill is divided into three parts. Part I. has reference to Admission to Medical Practice and the Constitution of the General Council, and contains ten sections; Part II. has reference to Colonial and Foreign Practitioners, and includes seven sections; Part III. contains Miscellaneous Provisions, and contains seven sections. Part I. is the portion of the Bill in which members of the profession and those who contemplate entering the profession will be most interested, and it is chiefly the sections of this part of the Bill which we have to analyse.

Qualifying examinations, which after a certain day are to entitle to registration, are to be in Medicine, Surgery, and Midwifery; and a qualifying examination is to be in these three subjects, and to be provided either by the General Council or held by any of the following bodies—(*a*) Any university in the United Kingdom for the time being capable of granting such diploma or diplomas; or (*b*) any combination of two or more corporations in the same part of the United Kingdom who may agree to hold a joint examination; or (*c*) any combination of any such university as aforesaid with any other such university or universities, or of any such university or universities with a medical corporation or corporations, the bodies forming such combinations being in the same part of the United Kingdom. The standard of proficiency is to be such as to guarantee sufficient knowledge and skill for the practice of the three branches of the profession. It is to be the duty of the General Council to maintain such standard of proficiency, and for this purpose to appoint a number of inspectors to attend at all or any of the qualifying examinations held by any of the aforesaid bodies. The appointment of inspectors is to be sanctioned by the Privy Council. Inspectors appointed under the Bill are not to interfere with the conduct of any examination, but it shall be their duty to report to the Medical Council their opinion of the sufficiency or insufficiency of such examinations. The General Council is to forward a copy of such reports to the bodies which held the examination and to the Privy Council. Inspectors of examinations are to receive such remuneration as the General Council may determine, with the sanction of the Privy Council. Section 4 provides that if at any time it should appear that "the standard of proficiency required from candidates" at the qualifying examinations is insufficient, the General Council shall make a representation to that effect to the Privy Council, and the Privy Council may, by order, declare that the examinations of any such body or bodies shall not be deemed to be qualifying examinations for the purpose of registration; and the Privy Council, on the representation of the General Council, or of their own motion, shall have power at any time to revoke any such order. During the continuance of such an order the examining body in fault is not to have a representative in the General Medical Council. Section 5 provides that under the circumstances described in Section 4 the General Medical Council may hold qualifying examinations in any part or parts of the United Kingdom, providing for the appointment of examiners, the nature and conduct of the examinations, &c., provided that no candidate be excluded on the ground of adopting any particular theory of medicine, and that provision be made for the admission of women; or the General Council, subject to "the sanction and control of the Privy Council," may combine with any one or more of the bodies, and examinations so held are to be regarded as qualifying examinations. Expenses incurred by the Medical Council in the discharge of such examining duties are provided for in a subsection. Section 6 defines the privileges of a registered medical practitioner—viz., that he shall be entitled to practise Medicine, Surgery, and Midwifery in the United Kingdom and (subject to any local law) in any other part of Her Majesty's dominions, and to recover charges, expenses, fees, &c.

The constitution of the General Council is dealt with in Sections 7, 8, 9, and 10. The members of the Council are to number twenty-eight—i.e., six Crown members, four members chosen by registered practitioners, seven by the examining bodies in England, six by those in Scotland, and five by those in Ireland. Most of the bodies, including the Apothecaries of England and Ireland, are to continue to enjoy a representative all to themselves in the Medical Council; the exceptions are that the Durham and Victoria Universities are to have one between them in England; the Universities of Aberdeen and St. Andrews one between them in Scotland; the Universities of Edinburgh and Glasgow each receiving a representative. The representatives in the General Medical Council of the registered practitioners shall be also members of the Branch Council of their particular division of the kingdom. The president of the Council, by Section 9, must be chosen from the Council. Section 10 makes provision for the revision of the constitution of the Medical Council at any time by Her Majesty by an Order in Council, where Parliament does not object: the particular cases contemplated being new universities worthy of being represented in the Medical Council; or bodies having at first only collective representation, and so growing in importance as to deserve separate representation; or constituent bodies so diminishing in importance as not to be entitled longer to representation in the Medical Council.

We need not dwell here on Part II., which has reference to the admission of colonial and foreign practitioners to separate lists in the Medical Register on the strength of certain diplomas satisfactory to the General Medical Council, save to notice Section 13, which provides that a person holding a colonial or foreign diploma not recognised by the General Medical Council may appeal to the Privy Council, and that the Privy Council may then order the General Medical Council to recognise such diploma.

Part III. of the Bill empowers the Privy Council to take action, in default of the Medical Council, in respect of

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inefficient examinations, and provides that any two or more Lords may exercise the powers it confers on the Privy Council. It contains a clause securing the existing privileges of all practitioners now registered, and other miscellaneous and less important clauses.

The analysis of the Bill leaves us little space for criticism to-day. We cannot say that it is a Bill which rouses our enthusiasm. True, it concedes four direct representatives—but only by a gross process of addition to a Council, already far too large, where they would be hopelessly outvoted and outnumbered by the representatives of corporations and universities. The Bill deals timidly with the great questions of Medical Reform. It shirks them. It does not directly or materially reduce the number of licensing authorities. It does not reduce, but increases, the size of the Medical Council. There is an unpleasant assertion of the Privy Council in the Bill, as if the Medical Council would not be able to appoint an inspector or to pronounce on the efficiency of an examination without the sanction of the Privy Council. And in the foreign and colonial part of the Bill it is actually provided that the Privy Council, on appeal by a foreign graduate, may override the Medical Council and order it to recognise a foreign diploma of which it does not approve. It almost reads as if the Bill meant to provide powers for the Privy Council to supersede the Medical Council. There is much in the work and constitution of the Medical Council to have provoked such an effort on the part of the Government. But it ought to be possible to construct a Medical Council which might be trusted with full powers to govern medical education. The Bill gives the Medical Council no power of supervising examinations for higher titles. It makes no attempt to strengthen or simplify the penal clauses of the Medical Act, though from every large town the constant fraud of unqualified practice is reported. It is no doubt important to provide for the admission of foreign and colonial practitioners, and even to define the terms on which women are to be admitted to the profession. But these are objects infinitely less important than a sound and courageous reform of the Medical Council and the licensing bodies, and a proper provision of means for protecting the public from false and fraudulent practitioners.

THE magazines and newspapers have lately been discussing at great length the attractive topic of the choice of reading, and the merits of the best hundred books which the world has hitherto produced. However interesting and suggestive such a discussion may be, its value is largely undermined by the consideration that the mental aptitudes and intellectual needs of individuals are as varied as their physical features, and cannot be adequately met by any process of arbitrary selection. We do not choose food for the body with a view solely to obtaining the maximum of the nutritive elements. Experience teaches us that we must have regard to individual taste and individual need, and that digestibility and assimilability are more necessary qualities in our food than the possession of the greatest amount of carbon and nitrogen. A similar principle must regulate the choice of intellectual food if we would secure intellectual growth and avoid intellectual dyspepsia. PLATO and SPINOZA are no more suitable to every mind than cheese and beef essence to every stomach.

In the discussion to which we refer, attention has been directed rather to systematic than to desultory reading, to profit rather than recreation. Yet literature fulfils one of its noblest ends when it simply refreshes the jaded brain-worker, and reanimates him for fresh intellectual effort. Amusement and distraction are among the prime necessities of our nature, and can nowhere be more easily and innocently obtained than in following the devious plot of the novelist, or smiling at the sallies of the satirist, or watching the luminous sparkle of the poet's fancy. The garden of universal literature lies open, decked with a countless variety of hue and exhaling an infinite diversity of odour, and we need but to train the eye and cultivate the sense in order that we may enjoy its fragrance and taste of its sweetness. In teaching us what to read and how to read education fulfils one of its most necessary objects. It furnishes us with the passwords by which we can traverse the barriers of time and space, and enjoy the intellectual treasures of every race and every age.

No men need recreative reading more than medical practitioners, or are more likely to derive from it the peculiar form of intellectual distraction which they require. The absorbing character and scanty leisure of medical life are hostile to the cultivation of tastes and accomplishments which call for prolonged application; but the daily duties of the average practitioner involve very little bookwork, and in books, therefore, he can find that relief and variety which constitute the most essential features of the rest and solace so loudly demanded by the overtaxed brain. The barrister, clergyman, politician, or author, whose daily work involves a frequent reference to books, cannot take down a favourite volume with the same zest and freshness as the medical man who has been engaged during the day solely in the contemplation of disease. Books have a further recommendation to the busy practitioner. They can be taken up or laid aside at will; they can be carried in the pocket and enjoyed during the casual moments of leisure; they serve to distract the mind without in any way unfitting it for renewed application to the problems and duties of the hour; they are the only friends who are always present when their presence is grateful, always conversable when converse is desired, yet absent or silent when absence is welcome or when silence is golden.

In suggesting the choice of recreative reading to medical men, we would guard against the error to which we have above drawn attention—the error, namely, of laying down specific rules in a case where everything depends upon individual taste and individual training. History, philosophy, poetry, and fiction have each their place and their value, which cannot be adjudged according to any absolute and abstract standard, but vary with variations in intellectual taste and capacity. We think, however, we are safe in affirming one general rule—viz., that more true solace and abiding satisfaction are to be obtained from the loving and repeated study of some great classic than in the perusal of the ephemeral literature of the day—"wet," as Mr. RUSKIN describes it, "with the latest spray of the fountain of folly." The practitioner who carries about with him a well-thumbed "Homer" or "Horace," or a "Shakespeare"

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or "Goethe" soiled with stains honourable alike to poet and to reader, possesses a talisman of unfailing potency to relieve weariness, and to sweeten the worries and annoyances of his career. Another, to whom poetry is as a casket sealed, can revel in the fruits of SCOTT's noble fancy or in the humour and pathos of DICKENS. Poetry and romance have an undoubted applicability to the needs of the profession of medicine. Medical life is contracting or broadening, material or spiritual, according to our habits of thought and individual susceptibility, just as the same course of discipline now evolves a hero, now a craven. There are some to whom man in his birth and death, his laws of health and of disease, his passions and his capacities, seems but little elevated above the beasts that perish. Others, again, see an infinite pathos and an unfailing purpose in the great drama of human life, and amid the vicissitudes of hardship, suffering, and disease recognise the essential nobility of man. Poetry and romance are one mode of deciphering the perplexing enigmas of existence, and those whose daily path is through the valley of the shadow of death will do well sometimes to avail themselves of their luminous aid. Medical practice being essentially a process of observation of human life and human fortune, the practitioner will derive peculiar satisfaction from the writings of the philosophical essayists, such as BACON, MONTAIGNE, or EMERSON, in whose works he will find the facts which daily meet his eye analysed from a point of view widely different from his own. He regards human life in the concrete, they in the abstract. He deals with men and women, they with *man*.

Works of travel may be recommended for recreative reading, not merely from their intrinsic interest, but because of the important part which climatic treatment is beginning to play in the therapeutics of disease. There never was a time when a knowledge of foreign countries and foreign climates was so practically important to the medical practitioner as to-day; and while it is indisputable that such knowledge can be thoroughly and satisfactorily obtained only from personal experience, it is nevertheless true that much useful information on the subject can be agreeably gained from the vast and increasing literature of travel. It is a sign of the objective and utilitarian spirit of this age that the authors of the best works of travel no longer fill their pages with idle reflections and petty personal details, but furnish us with much precise data for induction in the form of maps, meteorological tables, and statistics of disease.

Recreative reading is a vast subject, and we can but touch its fringe. We desire merely to remind the practitioner that, in availing himself of the stores of literary wealth at his command, there are principles of choice peculiarly applicable to himself, and that the recognition of those principles will tend to the augmentation alike of pleasure and of profit.

THE discussion on Supra-pubic Lithotomy which was held at the Medical and Chirurgical Society at its last meeting is of historical as well as practical interest, for it marks in a very decided manner the revival of an old and discarded operation. Surgeons were met together not to discuss some new procedure, but the advisability of practising an operation which, once in vogue, had been deliberately and repeatedly abandoned on account of its high mortality. It would be a mistake to regard this as a mere swing of the pendulum, for in two important particulars the conditions are different now from those which prevailed when the "high" operation was abandoned in favour of the "low." The most important alteration is that which results from the introduction and improvement of lithotrity. Except in certain special conditions, only calculi of very large size are now removed by lithotomy, and therefore the question at issue has come to be, in the main, Which is the best method of removing *large* stones from the bladder? Looked at from an anatomical point of view this question admits of but one answer, for not only is the anterior part of the pelvic outlet narrow and flanked by rigid walls, but the removal of a large stone through it must be attended with damage to the prostate and may injure other important structures as well. The space above is amply sufficient for all requirements, and, if we exclude the peritoneum, there is no structure or organ about the fundus of the bladder liable to suffer under the manipulation of the "high" operation. The danger of the "low" operation largely depends upon the size of the stone removed, and the mortality rises with each additional drachm of weight. It would have been impossible to remove through the perineum the huge mass of calculous material shown by Mr. RIVINGTON, and success could not be hoped for in stones of much less size. But the danger of injury to the peritoneum in the "high" operation proved so great as to lead to the practical abandonment of this procedure, and it was only when Dr. GARSON showed that this danger could be obviated that surgeons again turned their thoughts to this operation. It is the combination of these two conditions—the reserving for lithotomy of cases of very large calculi only, and the demonstration of the means of avoiding injury to the peritoneum—which has tended more than anything else to revive the supra-pubic operation. On this point professional opinion is fairly unanimous; but the discussion last week showed a marked divergence of opinion on two questions of considerable importance—the value of rectal distension and the relative advantages of the "high" and the "low" operation for small stones. Dr. GARSON's experiments are well known; they have been endorsed by PETERSEN, THOMPSON, and BRYANT; but Mr. BARWELL controverts them, and urges that any safe amount of distension of the bowel is powerless to raise the reflection of the peritoneum from the bladder to an appreciable extent. In such a matter positive evidence is of more value than negative; and we cannot but think that Dr. GARSON has proved his point, and that the bulk of recent clinical experience affords very strong support to his view. Such a fact as that mentioned by Mr. CADGE, as well as others, shows, however, that care must be exercised in this matter, or serious mischief from stretching, compression, or rupture of the bowel may result. Not only does the plan of rectal distension push upwards and forwards the bladder and expose a considerable surface above the pubes, but it supports the viscus below and renders the manipulation of its interior more easy. This point was insisted upon by Sir HENRY THOMPSON, and is certainly one of some moment. The distension of the rectum carried out cautiously is likely, therefore, to be generally resorted to, although it has been shown to be not free from danger.

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The discussion as to the choice of an operation for children, or when from any circumstance a *small* stone in the adult has to be removed, is by no means closed. Much can be urged on both sides. For such cases the perineal operation is simple and safe, whereas our modern experience of the "high" operation is but slight, and mainly gained under the condition of a very large stone to be removed. But looking to the danger and inconvenience resulting from any injury to the neck of the bladder, and the proved safety of the supra-pubic operation, it is probable that it offers us the best means of removing even small calculi. This is particularly the case in children in whom the bladder is an abdominal rather than a pelvic organ.

To sum up, then, the position would seem to be fairly stated as follows. For the removal of very large stones, such as are now generally reserved by lithotomy in adults, the supra-pubic operation is distinctly superior to the perineal, being both safer and offering greater facilities for the extraction of very large stones. For small stones which are not removed by lithotrity the line of practice is less clearly defined; but the "high" operation should be thoroughly tested, as it appears to possess distinct advantages over the "low." Distension of the rectum is useful both in supporting and raising the bladder and in separating the peritoneum from the pubes, but care must be taken not to injure the bowel by too great distension.

DISCUSSIONS on medical education and legislation have more than once exhibited our brethren north of the Tweed in a very susceptible mood. If they have not exactly resented criticism, they certainly have not courted it; and anyone who has ventured to call in question the economical and scientific organisation of the Medical Faculty in Edinburgh has not had an easy time of it. But Scotch criticism of Edinburgh doings must be free from the suspicion of jealous inspiration, and its accuracy cannot be at fault for lack of local information. To such a criticism on professorial work and professorial pay in Edinburgh, the *Scotsman* of Friday, the 2nd inst., devoted no less than three columns and a half. Their perusal gives a rude shock to the prevalent notions that science does not pay, and that scientific men are not good men of business. The times are admittedly hard, but if the Scotch professors have ever heard of shrinkage of income, they certainly have not realised it, if we are to judge from the *Scotsman's* figures. The clear income of the fortunate incumbent of the Anatomy chair, is in round numbers £3400, and his physiological colleague nets about £2100. The summary is very remarkable:—Total income of chairs in medical faculty, £26,628; total expenditure of chairs in medical faculty, £5180; total clear income of chairs in medical faculty, £21,230. Average clear income—(1) Of five professors without practice £2200; (2) of seven professors with practice, £1460. "Universities exist, not for the professors, but for the public; and in the public interest it is desirable that the University revenues should be employed in the way most advantageous to the students and to the community. Surely a gross income of £26,600 ought to maintain more than twelve professors, no matter how eminent. If that sum were paid into a common University chest, as has been proposed, there is no doubt that wise and careful administrators could equip with it a medical faculty, not of twelve, but of twenty chairs at least, with the necessary complement of assistants to each. There would also be in that case an increase in the amount of research work done in the University, which is at present shamefully small. The shortcoming is due partly to the lack of research endowments, partly to the fact that the professors are too well off, and have a tendency—with a few notable exceptions—to rest with their laurels, and to become indifferent to the progress of science." These are not the expressions of an English critic, but the *ipsissima verba* of the *Scotsman*.

Annotations.

"Ne quid nimis."

THE ELECTION OF PRESIDENT OF THE ROYAL COLLEGE OF PHYSICIANS.

IN answer to many inquiries respecting the forthcoming election to the presidency of the Royal College of Physicians, we may repeat the statement we made last week, that we have no doubt that Sir William Jenner, if elected, would consent to serve for another year. There can be no question that at present, when important matters affecting the vital interests of the profession are pressing for solution, the occupancy of the presidential chair by Sir William Jenner for another year would be of the greatest advantage, not only to the College of Physicians itself but to the whole profession.

"REST AND REPAIR IN LONDON LIFE."

DR. ROBSON ROOSE has followed up his article on "The Wear and Tear of London Life," which appeared in the *Fortnightly* of February, with a paper on "Rest and Repair in London Life" in the number for April. The supplement is a pleasantly gossiping discourse on the best method of self-management in view of the worry and waste which life in society entails. There is much to interest the reader, and likely to prove useful, in the advice offered. On one point which may be specially noted Dr. Roose's counsel is of great importance. Treating of the difficulties of digestion which so commonly embarrass brain-workers, he directs attention to the great need there is of recognising the absolute requirement of power to digest when food is taken. Thus: "Take the case of a man who, after a hard day's work, sits down to dinner at eight or half-past, having taken a hasty and scanty lunch some hours previously. His sensations tell him that he is terribly in want of food, but they do not warn him that he has little or no power of digestion left. He eats freely and rapidly, and one form of discomfort is soon exchanged for another. Digestion goes on very slowly and the process is far from complete when bedtime comes. The sufferer is weary, but sleep is unrefreshing, and probably broken by dreams or nightmare. He begins the succeeding day weighted with the burdens of its predecessor." This is a true picture. The "power of digestion" is a necessity, and it is quite possible to be too much exhausted to take advantage of nutriment which has been too long withheld. The energy of recuperation may be itself impaired by whatever unduly exhausts the organism, and when this is at a low ebb there will be difficulty in the process of recovery by digestion and assimilation. Dr. Roose thinks seven o'clock is quite late enough for the dinner hour, and he would make the luncheon a fixed meal. He also recommends half an hour's rest before dinner. This he believes would "avert many of the troubles which are caused by taking food when the stock of nervous energy necessary for digestion has been well-nigh exhausted."

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We allude to this point only, but Dr. Roose discusses with much ability and in a practical sense most of the matters of moment relating to the subject he has taken in hand.

HOSPITAL ISOLATION OF SCARLET FEVER IN LONDON.

IN the Registrar-General's Annual Summary of the vital statistics of London and other large English towns in 1885, which has just been issued, attention is called to the fact that the mortality from scarlet fever in London has during the last fifteen years been constantly below the mean mortality in the whole country, while the London mortality from both measles and whooping-cough has shown an excess almost as constant. Moreover, it is pointed out that prior to 1871 London did not enjoy such comparative immunity from epidemic scarlet fever, the mortality from this disease being higher than the mean rate in the whole country. It is suggested that this recent marked decline in the mortality from scarlet fever in London may be to some extent due to the increasing use of public hospitals for the isolation of cases of this disease. In support of this suggestion it is stated that 5 per cent. of all the deaths from scarlet fever in London in 1878 were recorded in the fever hospitals under the control of the Metropolitan Asylums Board. In the next three years, 1879-81, the proportion ranged between 7 and 8 per cent., in 1882 the percentage rose to 9·3, in 1883 to 11·4, in 1884 to 16·4, and during last year 19·2 per cent. of the deaths from scarlet fever occurred in these hospitals. This suggestion as to the cause of the persistently low death-rate from scarlet fever in London in recent years deserves, as the Registrar-General remarks, the serious attention of those engaged in the sanitary administration of our large towns.

ILL-DEFINED FEVER.

ATTENTION was recently called to the fact that during the ten years 1871–80 there were 25,643 deaths registered in England and Wales from "simple continued fever," and that under this heading are doubtlessly classed more than one disease. It may be useful to refer to this subject in order, if possible, to throw some light upon the true signification of this heading. Prior to 1869 the certification of deaths from "fever" was so unsatisfactory that no attempt was made in the Registrar-General's reports to separate even typhus from enteric or typhoid fever. The report for 1869 gives 4231 deaths from typhus, 8659 from enteric fever, and 5310 under the heading then called "simple continued fever," which included all deaths from "fever" which could not be placed under the other two headings. The "fever" heading in the Registrar-General's reports prior to 1869 was somewhat unfortunately called "typhus," and there is no reason to doubt that the word "typhus" continued long after that date to be loosely used in medical certificates as a generic term for "fever." Medical certificates have, however, much improved in this as in other respects in recent years, and on reference to the last published annual report we find that only 963 deaths were referred to the heading now called "simple and ill-defined fever," to which, as in 1869, when the distinction was first introduced, all deaths from "fever" are referred which cannot be classed either as typhus or enteric fever. Thus, in 1869, 29 per cent. of all the deaths from "fever" were referred to "simple and ill-defined fever" for want of definite description in the medical certificates; whereas in 1883 the proportion of these ill-defined "fever" deaths had fallen to 12 per cent. It is not without interest to inquire how these fatal cases of ill-defined fever are described, and the Registrar-General's weekly returns throw some light upon this question, as cases of ill-defined fever in London are there referred to in detail. The number of these ill-defined fever deaths in London in 1885 were 82, against numbers declining steadily from 312 in 1875 to 78 in 1884. Of these 82 deaths, 25 were merely described as "continued fever," giving no assurance that some of them were not really cases of scarlet fever or even of small-pox; only 13 were described as "simple continued fever"; 13 merely as "fever"; 7 as "febricula"; 9 as "low fever"; 2 as "eruptive fever"; 2 as "simple fever"; and 2 as "suppressed fever." The remaining 9 cases were described in as many different ways, such as infantile fever, exhaustive fever, acute specific febrile disorder, &c. There is no reason to doubt that the gradual decline in the proportion of these ill-defined cases of "fever" will continue, but in the meantime due account must be taken of this disturbing element when comparing the death-rate from enteric fever in recent years, as the registered numbers of deaths from this disease are being constantly increased by the transference of deaths from ill-defined forms of fever; while, on the other hand, the number of deaths incorrectly referred to typhus is as constantly decreasing.

FOOD PRESERVATIVES.

AN interesting paper was recently read by Messrs. Sulman and Berry before the Chemical and Physical Society of University College; it was important also from its practical bearings on the preservation of foods, and especially milk. Their investigation, limited to the boracic, salicylic, and benzoic compounds, proved that such substances as aseptin, glacialine, and boroglyceride owed their preservative qualities almost exclusively to the free acid contained in them. Boroglyceride contained 25 per cent. of the genuine boracic ether of glycerine, and 75 per cent. of free acid and glycerine in equivalent proportions. The true compound, the ice-like solid, is immediately resolved into free acid and glycerine by the addition of water, and this reaction probably takes place when the true compound comes into contact with aqueous liquid or animal tissue. We agree with the authors of the paper that the use of so much free boracic acid is undesirable and injurious, especially as a preservative of milk for children. Salicylic acid and salicylates are not substances that can be used with impunity, and as they appear to be useless as preservative agents, their rejection is doubly necessary. Again benzoic acid precipitates the casein of milk. The best agent appears to be benzoate of soda, which is tasteless when pure, is one-third more powerful than boracic acid, and innocuous when taken in small quantities for prolonged periods.

LATE CLOSING IN WHOLESALE HOUSES.

WHOLESALE traders have all along been the most steady opponents of the measure for reducing the working hours of shopmen. They endeavour to defend their position by a double argument. On the one hand, they seek to convince us that an occasional sudden influx of custom demands, while it lasts, a prolongation of the period of daily work in order to meet it, and that this cannot be obviated; on the other they would have us believe that, slack and busy seasons taken together, the average duration of work bears very lightly on the employed. With the former contention we do not now concern ourselves, though it must be obvious that more men working within an allotted time will do as much as fewer working overtime. With regard to the question of average daily occupation, there is apparently much variation in the evidence of statistics. Some of our readers have doubtless been struck with the announcement of Mr. Alderman Evans that seven and a half hours represented the mean working day in most of the large warehouses in the City of London throughout the year. The statement is

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a remarkable one. It may, as Mr. Evans maintains, find some confirmation in the usage of the firm with which he is connected. We cannot accept it as generally applicable. It is exceedingly difficult of reconciliation with the notoriously long working time in many similar establishments in seasons of pressing business, except on the supposition that for a great part of each year trade of a given kind can hardly be said to exist. Callings which admit of so much leisure are fortunately few. Their influence cannot seriously affect the general course of corrective legislation. Facts have, on the other hand, been adduced by a writer in opposition to the above statement, which show that in certain large wholesale establishments young boys are worked for five or six months a year from 7 or 8 A.M. till 10 P.M., and even till after midnight, during five days in the week. Are we to understand that in houses of this kind no work at all, or next to none, is carried on during the rest of the year? On no other theory can these conflicting facts be made to agree, and ordinary commercial practice forbids this supposition. Should we even go so far as to admit that a low average may thus be attained, the proof in favour of late closing is still imperfect. It by no means follows that the stamina of youths, however robust, should be put to so severe a test as a strain of labour continued for several months, and occupying every hour during which recreation is ordinarily possible, save perhaps those devoted to meals.

MYCOTIC ENDOCARDITIS.

DR. WYSSKOWITSCH details the particulars of an experimental inquiry into the nature of ulcerative endocarditis (Virchow's *Archiv*, 103, Heft 2), to which is prefixed an account of the histological examination of twelve cases of endocarditis in the human subject. Four of these cases were chronic valvular thickening with calcification and necrotic areas, surmounted by warty deposits of fibrin; in four others the vegetations were more or less vascularised at their union with proliferated endothelial layers (thrombo-endocarditis); the ninth case appeared to be a chronic condition of the preceding; the tenth and eleventh showed post-mortem œdema after chronic endocarditis, with, in one case, bacteria (undoubtedly saprophytes). Lastly, there was a recent case of ulcerative endocarditis, which yielded abundance of micrococci on the valves, in the spleen and kidneys; on cultivation the micro-organisms had the characters of staphylococcus pyogenes aureus. The experiments which form the second part of his paper consisted in inflicting on rabbits an injury of the aortic valve by means of an instrument passed down the carotid artery; then injecting into a vein a few hours later cultures of various micro-organisms. It was shown that the operation of piercing the valve was well borne, and not *per se* followed by any pathological consequences; but that the inoculation was often productive of a malignant mycotic endocarditis upon the injured valve, with secondary metastasis, as in human ulcerative endocarditis. These positive results occurred when the inoculation was made with either of the following micro-organisms: Streptococcus pyogenes, staphylococcus pyogenes aureus, and coccus sepsis (Nicolaier); but the injection of micrococcus tetragonus and bacillus pneumoniæ had no such sequel. It was also found that the staphylococcus produced much inflammatory reaction and suppuration, whereas the streptococcus, although causing much more valvular deposit and more numerous infarctions, had no such severe action. The changes in the heart and vessels were not limited to the valves pierced by the stylet; the micrococci growing also on the mitral valve and aortic wall, which happened to be eroded by the passage of the instrument. It is therefore suggested that mycotic endocarditis may be of various forms depending upon different varieties of micro-organism. Other experiments to induce endocarditis after inhalation and subcutaneous injection of streptococci yielded negative results; but it was found that the rabbit can only bear inhalation of very small quantities, and it was doubtful if the micro-organism entered the blood stream at all. Professor Orth, under whose direction this research was undertaken at Gottingen, comments in another article upon the results obtained; they prove, he thinks, that the term "disposition" is no empty one, the mechanical injury of the tissue laying it open to the attacks of the micrococcus which is deposited in the clots. The experiments show also how slight may be the amount of injury required to so lower the vital resistance of the tissue.

VACCINATION AND THE HOUSE OF COMMONS.

EXTRACTS from the 1884 Report by Dr. Buchanan, F.R.S., to the Local Government Board on the subject of the Relation of Small-pox to Vaccination are being distributed by that Board to members of Parliament and others. The convincing proofs which those extracts afford of the immense benefits conferred by primary vaccination on the infantile population, and by efficient revaccination on those of a more mature age, will, we trust, come with new force at a time when the list of notices of motions in the House of Commons contain indications of attempts, more or less direct, to deprive that class of our population which is alone unable to take care of itself of the greatest protective against preventable disease which has ever been discovered. It would be well for all who have the welfare of their fellow-men at heart to urge members of the House of Commons carefully to study these extracts before recording any vote on the vaccination question.

THE LEA AND RIVER POLLUTION.

THE Parliamentary Committee appointed to inquire into the state of the River Lea sat again last week, and received the evidence of Major Flowers, the engineer of the Lea Conservancy Board, who gave an account of the steps taken to abate nuisance. Major Flowers is reported to have stated in the course of his evidence that he was of opinion that "no chemical process was of itself sufficient to bring sewage water up to a point of purity at which it might safely be restored to a state that would allow of drinking-water to be drawn from it, or the state in which the river should be for the purposes of recreation." The Luton sewage, he said, had proved a difficulty, and at his suggestion had been dealt with by means of a sewage farm, but the effluent was impure, as it could not be freed from all the chemicals which were mixed with it. Major Flowers' evidence as to the general condition of the Lea in its several parts will be read with interest at a time like the present, when there is indication of the reappearance of cholera in France. Above the first intake of the New River Company the water was good—as far as river water could be good. Between Hertford and Ware, where the Manifold Ditch fell into one of the affluents of the river, the appearance of the ditch-water was black and slimy; the black slime could be seen lying on both banks of the river, and a nasty smell was present. At Cheshunt, above the East London Water Company's intake, there was a great deal of pollution from sewage being pumped into the river. Sir Frank Bolton stated that he had analysed the water at the East London Water Company's works, and found but few traces of pollution; this he attributed to the great volume of water; but the East London intake compared unfavourably with that of the New River Company. Concerning the general question of river pollution, we are informed that the Rivers Pollution Bill did not meet in the House of Commons with

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the consideration that was expected, very much because Mr. Hastings, who had charge of the Bill, was unavoidably absent on the night it came up for the second reading. The statements of the Attorney-General at the Mansion House meeting on the 10th ult. had led the Society which was promoting the Bill to assume that it had the approval of the Government, and they were therefore much taken by surprise at the course the Government subsequently adopted. It was certainly unfortunate, under these circumstances, that Mr. Hastings, who could have explained all its details, was not present.

FORMATION OF MARSH GAS AND CARBONIC ACID FROM CELLULOSE.

HOPPE-SEYLER has come to the conclusion that the production of marsh gas is the result of a process of fermentation of a very general character. He has examined a large number of gaseous discharges taken from places where the water was pure but the soil contained several kinds of vegetable matter. It was found that marsh gas preponderated under such circumstances, more than half the volume of gas collected being composed of it; the remainder consisting of nitrogen, hydrogen, and sometimes oxygen and carbonic acid. Warm weather increases the emanation of gas from waterlogged soils. Observations on Lake Constance showed that temperature has far more influence than the composition of soil in the production of gas. The next step in the process of discovery is the source of the gas—the kind of organic matter. There seems to be but little doubt that the cellulose of vegetables is the material source of the gases; vegetable remains anywhere deposited become humus substances. If a glass flask, with drawn-out neck dipping under mercury, be filled with mud containing vegetable remains and water, a mixture of gases may be obtained consisting of marsh gas, a large proportion of carbonic acid, and a little nitrogen, that soon disappears. This development of gas may go on for months, the quantity evolved varying with variations of temperature, though the total discharge differs but little. In nature the carbonic acid diffuses rapidly into the surrounding water, by which it may be dissolved, or where the water is shallow, elaborated by plants, so that the tension of carbonic acid on the surface of mud is always kept low. In spring, with its low temperature, the soil becomes coated with diatoms, decomposing the carbonic acid and favouring diffusion by their movements. Low forms of plants displace the diatoms in the summer time. The influences of this general process of gaseous evolution upon the life of organisms and on geological strata and lodes must be great indeed, and Hoppe-Seyler promises further information from future investigations.

THE TAUNTON SANITARY HOSPITAL.

THE so-called Taunton Sanitary Hospital affords an example of the great utility of establishments provided by sanitary authorities for the isolation of cases of infectious diseases. It was the result of joint action between the urban and rural districts of Taunton, and was ready for use in 1879; accommodation being provided for the immediate and simultaneous isolation of first attacks of at least two different infectious fevers in both sexes by means of twenty-four beds, each having 144 feet of floor space and 2000 cubic feet of air, together with ample means of ventilation. Each year Dr. Alford issues a special report of the proceedings of this institution, and he has been able to show, over and over again, how wise has been the expenditure which was originally incurred in erecting the buildings, as also that still devoted to the maintenance of the hospital. During 1885 no less than 205 cases were admitted, 166 coming from the urban and 39 from the rural district. The number of patients was exceptionally large; it was brought about by an importation of small-pox, and it necessitated the provision of temporary buildings. Many authorities have objected that compulsion would be necessary to the proper use of such a hospital. This has been conclusively shown to be an erroneous view in the Official Report on the Use of Infectious Hospitals; and Dr. Alford's testimony is in the same direction, for he states that he has not had occasion in any case to resort to compulsory powers in order to secure removal to the hospital. He admits what is well known—namely, that it is amongst the most ignorant and the poorest that the greatest objection is found to accept the means of isolation afforded by such a hospital. There is, however, no more powerful method of removing the ignorance which leads to this feeling than the provision of a hospital, every separate use of which has its educational effect on the classes benefited by it. In Taunton some people use the building who desire to pay for the privilege, and £54 were thus reimbursed to the authority; but this is only an incidental feature in the finances of the district, the main point being that a vast sum in excess of the cost of isolating 205 cases of infectious disease was saved, which would have been incurred if these cases had been left to distribute infection in all directions.

THE ISOLATION OF DIPHTHERIA IN THE METROPOLIS.

WE are informed that the managers of the Asylums Board, having been requested to receive cases of diphtheria into their hospitals, and being precluded from doing so by the orders under which their institutions are regulated, have communicated with the Local Government Board on the subject. Every year makes it more and more evident that the Metropolitan Asylums Board must become the principal Isolation Authority for London, and it must be clear to all who know how largely prevalences of diphtheria are due to the spread of infection from person to person, that no such authority can fully perform the duties required of it which does not arrange for the isolation of cases of that disease. The large amount of accommodation hitherto held in readiness in London for the reception of cases of small-pox could easily be devoted to other infectious diseases, including diphtheria, now that small-pox is, with certain exceptions only, to be at once removed to floating and land establishments down the river.

MEDICAL ORDINANCE, CANADA.

THE following regulations relating to medical practice in the North-West Territories, Canada, were passed at the close of last year by the North-West Council. The Ordinance No. 11, relating to medical practitioners, provides that any person not registered according to the ordinance who practises or professes to practise physic, surgery, or midwifery in the North-West Territories for hire, gain, or hope of reward, or who advertises to give advice on these subjects, shall upon summary conviction before a justice of the peace be liable to a fine not exceeding $100; and any such person who takes or uses any name, title, addition, or description implying or calculated to lead people to infer that he is recognised by law as a physician, surgeon, accoucheur, or licentiate in medicine, surgery, or midwifery shall also be liable to a similar fine, the burden of proof in such cases to be upon the person charged. These penalties are recoverable from March 1st. The following persons are allowed to register under the ordinance:—(*a*) Persons residing and practising medicine &c. in the territories on December 18th last who hold a medical degree, diploma, or licence from any university, college, or corporate body in Her Majesty's

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dominions empowered by law to grant such degrees or licence, on payment of a fee of $5. (*b*) British subjects resident in the territories who have been practising medicine therein for one year previous to December 18th, 1885, who hold a medical degree, diploma, or licence from any university or college in the United States whose curriculum demands two years' attendance at medical and surgical lectures, which is authorised by law to grant such degree or diploma, on payment of a fee of $5. (*c*) Persons residing and practising medicine in the territories for one year previous to December 18th last, who shall before December 18th, 1886, pass an examination before any two medical practitioners, registered under the ordinance, appointed by the Lieutenant-Governor, on the subjects of anatomy, chemistry, physiology and materia medica, the principles and practice of medicine, surgery, and midwifery, paying such examiners a fee of $10 each, receiving from them a certificate, and paying a registration fee of $25. (*d*) Persons who shall hereafter become residents of the North-West Territories possessing the qualifications set forth in sub-section *a*, on payment of a registration fee of $50. Fees payable under the ordinance go to the general revenue fund of the territories.

HOSPITALS AND THEIR CLAIMS.

WE are glad to see the Duke of Westminster and others, who have it in their power to give great help to hospitals, expressing themselves publicly in support of these institutions, which are places of hospitality and help to all—even to the rich when overtaken with accident, but mainly to the poor. The public little know what generous service is given gratuitously and secretly to the poor by the members of our profession, or they would be eager to share the service by such gifts as they can bestow. We quite casually heard the other day of a senior physician of a northern metropolitan hospital being consulted in the middle of the night by a careful house-physician about two urgent cases of poor children who had been brought in. With true humanity, the physician lef this bed and home and went to see the cases for himself. It is facts of this sort that we commend to the consideration of those who—not from want of heart, but from want of thought—leave the problem of hospital support to hospital physicians and committees, as if some secret manna and comfortable beds fell down from heaven into these institutions, where the poor have the advice and skill they cannot buy.

THE PEND-JEH SORE.

DR. SUSKI, while on duty with his regiment in the neighbourhood of Merv, describes in the *Vrach* (No. 9, 1886) what is known in that locality as the Pend-jeh sore, which, he says, attacks nearly all persons who live or stay in the neighbourhood of Pend-jeh. His description is unfortunately limited to the naked-eye appearances, as he was unprovided with microscopical apparatus. He divides the disease into three stages. 1. A red spot appears, about the size of a millet-seed, which gradually increases to that of a pea or larger, in the centre of which a hard papule develops, which suppurates, bursts, and forms a primary sore, affecting the whole thickness of the skin, of a circular shape, about the size of a hemp-seed, with a dirty base and precipitous edges. 2. The sore enlarges, and close to it a second develops in the same way as the first, which, in its turn, is succeeded by others; these run together in groups, forming compound sores of the size of a five-kopeck-piece—i.e., of a penny—or even larger still. These affect the whole thickness of the skin, and have vertical edges and swollen circumferences, and are of a red colour. In addition to the sores, small enlargements appear in the thickness of the skin of the limbs, having the general direction of the lymphatics. The colour of the surface over these nodes undergoes no change. They are looked upon by the natives as pathognomonic of the disease. The larger glands were not swollen in any of the cases under observation. The sores secreted a considerable quantity of pus. 3. The healing process commences after the sores have been open for some time, and it nearly always begins at the spot which was first attacked. Granulations arise having a papilliform appearance, and reach the level of the skin or sometimes rise above it. These cicatrise usually under scabs, and if the latter are carefully removed the cicatrices themselves are seen to have a papilliform appearance. Between the healing points small dark-grey scabs appear, consisting of dust and dried pus, as may be seen with the aid of a lens if they are treated with alcohol and water. These little scabs are so closely adherent to the papillæ of the healing sore, that even when very carefully removed with forceps the apices of the papillæ are torn off and hæmorrhage occurs to such an extent sometimes as to require to be arrested. As the cicatrices harden the papillæ become atrophied. The cicatrix is depressed, and in the course of time becomes of a whitish appearance. The author believes that all the sores are developed from hair follicles, their favourite seats being the wrists, the ankles, the waist, the abdomen at the level of the waist, the forehead, the neck, and the face; more rarely the supraclavicular regions, the legs, the hands, the thorax, the back and the shoulders. With regard to the causes of the disease, he thinks they are to be found in the all-pervading powdery sand, the heat, which throws a great deal of work on the cutaneous glands, the bites of insects, and the sudden variations between day and night. The treatment found by Dr. Suski to be most advantageous was to wash the sores with a solution of corrosive sublimate of the strength of 1 to 1000, and dressing them with a mercurial ointment. At a subsequent stage a mixture of iodoform and alum was employed, and finally cauterisation with nitrate of silver.

THE HOMES OF THE WINDSOR POOR.

THE steps which are being taken to improve the sanitary condition of those parts of Windsor which were described last year at much length in our columns are necessarily slow, but we have reason to believe the difficulties are not insurmountable. Two distinct lines of action are required: the first involves the demolition of the unhealthy houses and the clearing of the site; the second, the reconstruction of proper homes for the working classes. To attempt to erect these on the site of those which are demolished would probably involve a larger expenditure than would make a reasonable pecuniary return; but money invested in this manner gives to a town an improved healthiness, diminishes sickness amongst those who at such times become a charge upon the ratepayers, and therefore it is unfair to look for more than a small rate of pecuniary interest on the money invested. There is, however, no reason why the scheme for improving Windsor should necessitate the erection of houses in the immediate locality of Bier-lane; Windsor is not so large that it would inflict a hardship on the residents of that part of the town if they were expected to occupy houses a short distance away, and where land for building could be had at a much lower cost than the site which is cleared. We understand that the Corporation would not be unwilling to entertain a scheme for laying out a road which would pass right through the unhealthy area, and which would lead to the demolition of some of the worst buildings; but if the Corporation were to adopt this course, there is no reason why the duty of building suitable houses for the inhabitants who are displaced should not be undertaken as a matter of private enterprise by those who wish Windsor well. We do not think there would be any lack of funds for this purpose

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if the Queen were to give expression of approval to this plan. We are convinced that any measure which promises benefit to Her Majesty's poorest subjects will have the Queen's sympathy, and nothing but her great influence is required to set in motion those who would gladly devote their efforts to carrying out her wishes.

ALLEGED DEATH FROM HYDROPHOBIA.

AN inquest was held on April 3rd by Mr. Braxton Hicks, at the Parish Offices, Putney, touching the death of Hannah Phillips, aged fifty-five. The deceased seemed in good health until March 27th, but then complained of faintness and a choking sensation. On the following day she seemed to have "hysterics," which came on "whenever a drinking vessel was shown to her." Death occurred on March 30th, after paralysis had set in. At the post-mortem examination the pharynx and spinal cord were found much congested, the blood fluid, and inside the lower lip were some abrasions, which, on the evidence of Dr. Walker, were of "uncertain age." Now the deceased had a pet dog with one tooth, and it was suggested to her that she might have been bitten by the dog, but this she denied. In consequence of this suggestion, probably, she seems to have taken a dislike to her old companion and bedfellow, the said dog. Dr. Walker was of opinion that the cause of death was hydrophobia, but as there was some doubt on this head the inquest was adjourned in order to enable the police, under whose care the dog had been placed, to report on the state of its health. We must confess we are sceptical on the matter. Some of the symptoms of the deceased read uncommonly like those of angina pectoris—a condition, by the way, rare in the female sex. To our minds the post-mortem signs are too equivocal to form a reliable basis for a conclusion as to the real cause of death. We shall look forward with curiosity and interest to the fate reserved for the dog, whose reputation may be considered to be "under a cloud."

THE BEAUFORT LIMB ABROAD.

"THERE will come a time," says General H. H. Maxwell n his Seventh Report on Arms and Legs in Rome, "when the peg-leg will be as dead as the dodo," and the rapidity with which the Beaufort limb is finding favour in Europe more than justifies the prediction. The last *Bulletin Trimestriel*, the organ of the Count's own charity, "L'Assistance aux Mutilés pauvres," teems with evidence of the good effected by the rehabilitating invention—of bread-winners saved to themselves and their families, of the dread of amputation minimised, and of the army of labour reinforced. Science is thus made to walk hand in hand with benevolence, and the almsgiving public, in subscribing to the charity, have the comforting assurance that here at least their bounty is not wasted. From France the limb has won its way to Holland, where General de Stuers, ably seconded by Count de Limbourg Stirum, has founded a society for providing it to all deserving applicants. Of all Count Beaufort's lieutenants, however, the earliest in the field and the most successful in action has been General Maxwell, whose annual reports of the charity in Italy are looked forward to, not only for their record of substantial service done, but for the dramatic interest of their details and their pleasant vein of style. The report just issued—the seventh—is, except perhaps the first, the most interesting he has put forth, as showing, *inter alia*, how effectively he has overcome the crucial difficulty of securing perfect coincidence between the joint of the artificial and the joint of the natural leg. He can thus from Rome, with absolute certainty that there will be no misfit, supply M. Werber in Paris with measurements which enable that accomplished mechanician to furnish the required limb in a few weeks, and to send the quondam cripple on his way rejoicing. The General's mathematical proficiency has here stood him in excellent stead, with results that, gratifying as they eminently are, must be more than needed to sustain him in face of the *mitrailleuse* of mendicancy with which the charitable Englishman is in Latin countries assailed. A narrative of the consequences he has incurred by his "craze for cripples," and of the experience he is daily acquiring in turning the flank of the begging-letter writer, concludes in a vein of humorous melancholy his seventh year's record of assistance in setting lame Italy on its legs.

ST. MARY'S HOSPITAL.

ON April 3rd the annual festival dinner in aid of the funds of St. Mary's Hospital was held at the Albion Tavern, the Right Hon. the Lord Mayor presiding. From the report of the Secretary it appeared that the working of the past financial year had left a deficit of £6380, which was accounted for partly by increased expenditure incurred by the opening of new wards, and partly by a falling off in legacies. From want of funds the authorities of the hospital were unable to open the large accident ward of the new Mary Stanford wing. Owing, however, to the public spirit and munificence of Mr. J. D. Allcroft, the governors had been enabled temporarily to overcome the latter difficulty. This gentleman has endowed the new wing for two years, at a cost of £2000 per annum. We sincerely trust that the step taken by Mr. Allcroft will be followed in regard to other charities by the possessors of wealth in the metropolis. There is no reason why any one of our general hospitals should be crippled in its usefulness for want of supplies. We maintain that money spent on our public medical institutions is well laid out, for it gives to the suffering poor such aid in their affliction and infirmities as can be obtained in no other way. More than this, it decreases the rates by checking the influx upon workhouses and workhouse infirmaries. Dean Swift, when preaching on behalf of a charity, found, to his chagrin, that the morning's collection fell short of the anticipated and desired total. On being informed that it would be advisable to curtail the evening's discourse, since the one in the morning was long enough to weary his hearers and tighten their purse-strings, the celebrated divine decided to act on the advice. He took for his text the words, "He that giveth to the poor lendeth to the Lord," and with characteristic piquancy added, "Now, my friends, you know the terms—if you like the security, down with the dust." We heartily recommend to our readers the study of Dean Swift's racy address. Slightly altering a saying of Mr. C. H. Spurgeon, embodying a proposition and an appeal, we would venture to remark to the affluent, "The poor are your children; you will not let them starve."

THE PREPARATION OF WHEAT FLOUR.

ANY reform which aims at improving the quality of bread must be of general and professional interest. Late years have seen considerable changes in this direction. They have witnessed the reduction to something like its true place in public esteem of mere colour as a test of nutritive value. People think less of the white loaf than of yore; it is not now the unique model of perfection in bakery that it was once too readily taken to be. There is more respect for its brown wheaten fellow; and while we are not prepared to admit without reserve all the excellencies which have been claimed for the latter, we may fairly allow that it deserves to rank as a food of highly nutritive efficacy. The principle which preserves in the bran, with its nitrogenous, fatty, and saline constituents, some of the best constituents of wheat, is on the whole a

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sound one. Its one objection is the inseparable association of irritating siliceous matter, which often precludes its free use among the sick, and in any case requires that the grain should be ground with more than usual care. This fact also places somewhat of a restraint upon the consumption of such bread even by the healthy. Among various methods which have been devised in order to meet this difficulty, our readers will recall that of Mége-Mouriès, which, by preserving the inner envelope while removing the outer coverings of the grain, succeeded in retaining most of what was nutritious in the bran with comparatively little indigestible or irritant matter. A revival of this mode of preparation has lately been described by Mrs. K. J. Dance in a little paper on bread-making. The authoress claims for her system that it is both more efficient and more expeditious than other processes now in use. Respecting its proper place among such we need not now express an opinion, but the soundness of the theory on which it is based at all events justifies the claim put forward that it should be fairly tested as to its practical value.

THE GENERAL HOSPITAL, JERSEY.

THE lamented death of Mr. Godfray of Jersey leaves a vacancy in the General Hospital. This hospital is an important institution, being the hospital for all Jersey, which has a population of 60,000. Hitherto all the work has been done by only one officer. It is felt almost universally by members of the profession in the island that this arrangement is indefensible. It is not in the interest of the poor that one man should be responsible for so much medical, surgical, ophthalmic, and other special work as is implied; still less is such an arrangement in the interest of medical science and art. Accordingly a petition has been forwarded to the States, and a letter to the Jersey Hospital Committee, on behalf of nearly all the registered practitioners of the island, praying that hereafter the hospital should be officered, as are all similar institutions in England and on the Continent, by a staff composed of two physicians, two surgeons, one physician for the treatment of women and children, and one for ophthalmic and aural cases. We do not doubt that the States and Hospital Committee will agree to some such arrangement as this. The public as well as the poor have a direct interest in making the work of the hospital as efficient as it can be made. By enlarging the staff the work will be better done, and all the advantages of a higher cultivation of hospital work will accrue to the general population.

WILMER v. AYLWARD AND OTHERS.

NOTHING of interest to members of the medical profession, as such, arises out of this suit, beyond what may attach to the proof that the question of *bona fides*, while all-important, is not in itself sufficient to protect any person acting under the provisions of the Lunacy Acts. It is true that the question left to the jury was whether the medical men had given their certificates "falsely and negligently," and, inasmuch as they did neither, they escaped censure; but the relieving officer, who admittedly acted in good faith, was mulcted in a comparatively heavy sum for damages because he caused the patient to be removed to the workhouse, either negligently or under a wrong impression. No increased sense of security, or perhaps we ought to say diminished sense of insecurity, can result from the decision in this case The fact remains that medical men sign certificates at their peril, and until the law is changed they must continue to do so. Whether the Bill now before the Lords, — if by any strange freak of fortune it should pass the Commons and become law—will place matters in a more satisfactory condition remains to be seen. We heartily hope it may, but meanwhile the counsel so often given in these columns must be repeated. No practitioner should sign a certificate unless he be compelled by the strongest force of circumstances to do so, and in the doing of this act he should bear in mind that he exposes himself to peril of annoyance, if not of injury, and should make his arrangements accordingly.

DRAINAGE OF IDIOPATHIC INTRA-CRANIAL ABSCESSES.

THE evacuation of traumatic abscesses of the brain has long been a recognised procedure, and has met with a fair measure of success. Recently Mr. Hulke has endeavoured to extend this practice to idiopathic abscesses within the cranium. A few months ago a man was admitted into the Middlesex Hospital, under Dr. Cayley, suffering from coma, which had supervened upon a long-standing purulent discharge from the ear. There were no localising symptoms. Mr. Hulke trephined the skull in the lower part of the temporal fossa, and by means of a director explored the temporo-sphenoidal lobe, without result. The operation was unattended with ill-results, but after the patient's death, a few days later, an abscess was found in the cerebellum. Quite recently a woman was under Dr. Cayley's care with similar history and symptoms, and intra-cranial suppuration was diagnosed. Mr. Hulke determined to explore the brain. In this instance he made an aperture in the cerebellar fossa of the occipital bone, and through a small incision in the dura mater he passed a director through the cerebellum in all directions, but without striking an abscess. Finding that the symptoms were unrelieved, he subsequently trephined the temporal fossa, and opened an abscess in the temporo-sphenoidal lobe. We believe these cases will be duly reported to one of the Medical Societies. They mark an important advance in cerebral surgery, but further comments upon them must be deferred until all the facts are before us.

THE BELGIAN MINERS.

AT the first International Congress of Hygiene held in Brussels, under the Presidency of the King of the Belgians, in 1876, the condition of the men, women, and children who work in the coal-mines of the Low Countries was denounced as opposed to the claims of humanity, the laws of health, and the general security of the community; the Belgian Academy of Medicine fifteen years ago pleaded the cause of the mining population; and medical men and sanitary reformers generally have pointed out the irreparable moral and physical injury done by allowing children of both sexes to work promiscuously in coal-mines. In spite, however, of all these earnest protestations, the Legislature of Belgium has done little or nothing to protect those who by hard necessity were compelled to sacrifice every consideration for the sake of a slight addition in the weekly wages earned by miners' families. Up to the year 1884 the work in mines was regulated by an old law dating back to 1813, which only stipulated that no children under ten years should be allowed to work underground. In April, 1884, however, a police regulation, which received Royal approval, was issued forbidding boys under twelve years and girls under fourteen years from working in mines. This of course is an improvement, though still an insufficient protection. The present adult population, however, has worked under the old law, and consequently experienced all its degrading, moral, and physical influences. The men and women are inevitably brutalised by unceasing toil, varied by the hardships of the semi-starvation that denotes periods of depression. The day's work varies from ten to fifteen hours; the wages, never high, have now fallen to at most 2*s.* 6*d.* a day for the fully qualified adult miner; but work is at present rarely obtained for more than four days in

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seven, so that the head of the family only earns about 10*s.* a week; he is therefore anxious that his wife and children should increase this amount, and, though the youngest may not go down in the mine, they can work on the surface even at the tender age of seven. Living is cheaper in Belgium than in England, but the difference is not sufficient to enable the miners to live decently on such meagre wages. The women and children very generally work for 5*d.* a day, so that the financial advantage which is supposed to atone for the ruin of home life is very slender. If to these considerations we add the unwholesome nature of the toil in the damp and often poisonous atmosphere of coal-mines, it will not be difficult to explain the deplorable outburst of violence which has so recently shocked Europe. Where the Belgian workmen are well organised—as, for instance, at Ghent, where the light of education has elevated the toiling masses—there has been no violence, and the strikes, when they break out, are conducted in an orderly manner. But where there is no organisation, no education, and the population has degenerated physically through the exposure of women and children to excessive labour and insufficient food, reason loses its control over the body politic, and human beings are apt to act as herds of wild animals.

HYDROPHOBIA AND THE DOG REGULATIONS.

FRESH evidence of the value of the practice of muzzling dogs as a precautionary measure against hydrophobia comes from Vienna. The muzzling of dogs was practised there from 1879 to 1883, and during those years the number of cases of hydrophobia officially known was respectively 26, 23, 38, 5, and 2. In the year 1884 muzzling was abolished, and during that year 93 cases of bites from mad or suspected dogs are said to have been notified. It would be interesting, and would add to the value of the statement, if the number of cases of hydrophobia resulting from these bites were given. The very noticeable fall in the figures, however, from 38 in 1881 to 5 and 2 in the following two years bears witness to the usefulness of these precautionary measures. In Prussia by means of muzzling the number of cases of hydrophobia are said to have been reduced to a minimum. We trust that the new Chief Commissioner of Police, Sir Charles Warren, will in this matter continue the wise policy of his predecessor, for even were it proved beyond the shadow of a doubt that the bite of a rabid animal could be rendered incapable of conveying hydrophobia, or that the dire disease itself was a curable one, the clearing of the streets of London of ownerless and wandering curs would still be a boon to citizens, and an act of mercy and kindness to the wretched animals.

MARYLEBONE "DUST."

IF further evidence were required of the disgraceful condition of this parish with regard to the neglect of the sanitary authority to remove house refuse, it is to be found in the report of the last meeting of the Marylebone vestry, when a letter from the newly-appointed dust contractor was read. The contractor stated that when he entered upon his contract a few days ago, his foreman was given 273 complaints from householders of non-removal of dust, while the total number he had received in five days was 945; there was hardly a house which was not full of dust, and he was compelled to send out extra carts. A more discreditable condition it is difficult to imagine, and a more frivolous excuse—the death of the hall porter, who received complaints—it is impossible to conceive. That the most important part of the scavenging arrangements of a large and wealthy parish should be disorganised through the death of a person in this position is evidence of the failure of vestry government to undertake successfully any but the smallest duties. The vestry are themselves responsible for the removal of house refuse; they are permitted by law to depute the duty to other people, but they cannot acquit themselves of the responsibility, and the law which permits the scavenger to be fined for neglect should also make the vestry liable to penalty if they in their turn omit to exercise due supervision over his actions. The householder is absolutely in the power of this incapable body; he is not allowed under penalty to relieve his household of a standing danger by authorising any but the vestry's contractor to remove his dust, and if he should deposit it in the road he is liable to prosecution by the police; he is, moreover, compelled to pay heavy rates to the vestry, yet the only remedy he has against this body is that of complaint. The almost hopeless task of reconstituting the local authority so as to make the interests of the ratepayer superior to the interests of the contractor is too slow to be depended on, and under these circumstances we would gladly see householders agreeing to adopt the course which has been indicated by Mr. Cooke in his reply to Dr. Edis; but even this method will only assist individuals, and the only remedy for the parish as a whole worth the name is for the vestry not to trust to contractors, but to undertake the duty themselves.

"DEATH FROM IRRITANT POISONING."

SUCH was the verdict of a coroner's jury recently empanelled at Chesterton, Hunts, to inquire into the cause of death of two children aged six years and sixteen months respectively. From the evidence it appears that the deceased, their mother, and another child were taken suddenly ill after partaking of the same food. Dr. Stevenson of Guy's Hospital failed on analysis to detect any trace of poison, but he laid stress on the fact that a number of people were similarly and simultaneously affected. They had all eaten some food prepared from flour obtained by grinding some "dressed wheat," but there was no evidence to show that the dressing, usually arsenical, had caused the symptoms. The flour was dark in colour, and the starch granules were all formed, or had been deformed, by damp and subsequent drying. May it not have been that the wheat contained an admixture of seeds of some poisonous plant? We are not aware whether or not any other persons than those mentioned above partook of the food. This is an important point for consideration. In any case, the fact is worth noting that, with the aid of the highest skilled evidence, a coroner's jury have found that two children have died from irritant poisoning without any poison having been detected by chemical and physical tests.

A NOBLE ACT.

ONE of the latest, if not the latest, of the applicants for the benefits of M. Pasteur's assistance is Mr. Harris, a student of Charing-cross Hospital. Courage and self-devotion are virtues so frequently, we might indeed say so constantly, practised by members of our profession, that they come to be looked upon as commonplace and of every-day occurrence unless occasionally attention be drawn to them. Mr. Harris was taking luncheon at the restaurant of the Grand Hotel, when a dog which appeared affected with rabies attacked a lady there present. Mr. Harris seized the animal by the throat and got it safely out of the building, but in trying to twist his chain round him to render him incapable of inflicting injury, the young man, although the dog was muzzled, received a bite. He started on the next day with a friend to place himself under M. Pasteur's care, for the dog, being taken to the Battersea Home, died of rabies. We hope, whether by M. Pasteur's inoculation or by the percental immunity of bitten persons, Mr. Harris will not suffer for his bold and generous intervention

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GAMBETTA'S BRAIN.

AT a recent meeting of the Anthropological Society of Paris a report by M.M. Duval and Chudzinski was read on the brain of M. Gambetta. The third frontal convolution was highly developed, the upper part of it being reduplicated. Reference was made to the brains of persons of low intelligence, and also to the prominence of Broca's convolution in the brains of Wulfert, the lawyer, and Huber, the philosopher, described by Rüdinger. In each of these latter *savants*, who were remarkable for their dialectical and rhetorical ability, the convolution was more wavy and complex than in ordinary brains, this being especially marked at the base, but there was no reduplication at the upper extremity of the convolution, as in Gambetta's. In the present case there were other indications that the brain was not that of an ordinary person. The right quadrate lobe was very complicated, and divided into two parts by a furrow branching off from the occipital fissure. Of these two parts, the inferior was divided into several little convolutions by a furrow with numerous stellate branches. The occipital lobe was very small, especially on the right side. Altogether the brain had a peculiarly fine appearance, due to its great and somewhat diagrammatic regularity, especially in the frontal region. The weight is to be discussed in a future paper.

PROFESSOR PETTIGREW, LL.D.

THE University of Glasgow has conferred the honorary degree of LL.D. on the Chandos Professor of Medicine of St. Andrews University, in recognition of his many labours in science and medicine. Few men of our day have more worthily won this honourable recognition than Dr. Pettigrew, His works on the "Valves of the Vascular System," on the "Muscular Tunics of the Heart," on the "Ganglia and Nerves of the Heart," and, above all, his researches on the various modes of flight, with his discovery of the now famous figure of 8 and wave theories of flying, place him amongst the most advanced scholars and original investigators of our day. We wish him long life for the enjoyment of this the latest of his many well-earned distinctions, and for the continued pursuit of his useful and valuable labours.

OVERCROWDING OF THE PROFESSION, AND MEDICAL ETHICS.

COMPLAINTS are frequently made in the Belgian medical journals of the overcrowded state of the profession in that kingdom, and of the frequency of serious breaches of medical etiquette to which this gives rise. It is stated that during the present year more than 200 students will be qualified and will have to seek to form practices for themselves, at the expense, of course, of established practitioners. In order to minimise the temptations to irregular and undignified methods of obtaining a *clientèle*, it is strongly urged that *cercles*, or local medical associations, should be formed wherever they do not already exist. It seems that a powerful and useful association has been for some time established in Verviers, and this is held up by *Le Scalpel*, one of the leading Belgian medical journals, as a suitable model on which other associations may be formed. Its rules, which have been largely borrowed from an older association at Antwerp, are as follows:—1. A practitioner summoned to a patient already under treatment cannot attend until the *confrère* previously in attendance has been informed. If this has not been done he must propose a consultation. 2. A practitioner called to a case of emergency occurring in a patient already under treatment should confine himself to giving such assistance as is necessary, and should leave a copy of his prescription for his *confrère*. 3. All the members of the association engage to act as substitutes for a *confrère* who is ill or on his holiday. This does not, however, hinder his making arrangements with some of them to attend his patients. 4. A practitioner absent or ill will notify to his *confrères* the time when he will resume his practice, and they will immediately send him a list of the patients they have attended, with any information they may consider desirable. 5. It is a point of honour with a practitioner not to retain patients belonging to a *confrère* who is ill or absent. 6. Another duty of the practitioner is to abstain from expressing an unfavourable opinion of, and from making unkind insinuations about, the treatment employed by a *confrère* who has preceded him. 7. A practitioner who succeeds another must not permit himself to accept a lower visiting fee than his predecessor. 8. The consultant cannot succeed the practitioner in charge until he has informed him in writing of the distinct wish declared by the patient that he should do so. 9. The practitioner should leave to the patient the choice of a consultant and accoucheur, and should not depart from this rule unless he is particularly requested by the family to name one himself. 10. The only practitioner with whom a consultation may be declined is one who is excluded from the Association.

HYSTERIA IN SOLDIERS.

DR. A. T. OZERETSKOVSKI describes in the Russian *Medical Review* a whole series of cases of hysteria occurring in soldiers, presenting nearly all the phenomena usually associated with this affection as it occurs in females —dumbness, deafness, deaf-mutism, various disturbances of vision and of general condition, spasms and paralyses, troubles connected with micturition, joint trouble, elevations of temperature, &c. The subsequent history of the cases in most instances left no doubt of the correctness of the diagnosis. Predisposition and heredity played a large part in the etiology, and in some instances there was injury or shock. Half the patients were recruits, which tends to show that the sudden change from domestic life and work to the arduous conditions of military service is not without effect on the nervous condition of the Russian soldier. The treatment of the hystero-epileptic cases was always unsuccessful, neither water, electricity, nor narcotics appearing to exert any influence over the frequency or severity of the attacks. The cure of the paralytic forms of the disease was successfully accomplished by means of exercise, gymnastics, &c.

THE LATE MR. FORSTER, M.P.

THE medical profession has lost by the death of Mr. W. E. Forster one of the few members of the House of Commons who have taken a broad and comprehensive view of the need of reform in the profession, both for its own sake and for that of the public. In the past he had proved himself a true friend, and we most sincerely regret that he has not been spared to witness in a future which as yet seems somewhat "dim and distant" the accomplishment of a truer and more satisfactory medical reform than appears probable at present.

THE GROCERS' COMPANY AND PATHOLOGICAL RESEARCH.

TWO lectures will be given next week in the theatre of the University of London by gentlemen who have been engaged as "Research Scholars" of the Grocers' Company in pathological investigations. The first of these will be on Tuesday next, at 5.30 P.M., when Dr. Wooldridge will give an account of several important discoveries of great pathological interest as to the Coagulation of the Blood. The second lecture will be given on Thursday by Mr. Lingard on the Etiology of Typhoid Fever.

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M. PASTEUR'S INOCULATIONS.

AT the extraordinary meeting on the 4th inst. of the Accademia Medica di Roma, under the presidency of Professor Guido Baccelli, the discussion on the new method in hydrophobia was resumed by Dr. Marchiafava, who was followed by Drs. Brunelli, Carruccio, Colasanti, Durante, Scalzi, Gualdi, Bastianelli, and Piermarini. Dr. Carruccio's contribution to the debate had the special merit of calling attention to the important experiments on the nature and treatment of hydrophobia conducted in 1810 by the able physician, Dr. Agostino Cappello of Tivoli. The proceedings came to a close with a resolution, unanimously voted, to the following effect:—"The Academy has decided to send to Paris a competent representative to study the Pasteur methods. With this object it empowers the President to ask for the necessary funds from the Ministries of the Interior and of Public Instruction, and from the Municipality." The next number of the *Bollettino* will contain a revised report of the discussion.

ARMY MEDICAL SCHOOL.

SIXTY surgeons on probation for the British Medical Service, and sixteen for the Indian Medical Service, met at Netley on the 1st inst. to attend the summer session of the Army Medical School. The introductory lecture was delivered on the following day by Professor Boyes Smith, who drew largely from his wide field of Indian experience for the subjects of his discourse. The talented lecturer, in the course of his address, paid a very eloquent tribute to the valuable services of his predecessor in the chair, Professor Maclean, in advancing tropical medicine, and dwelt with much feeling on the kind and ready help the Professor had afforded him when entering upon his new sphere of duty in the school. The large number of seventy-six surgeons sent to go through the present session has caused some difficulty in providing the necessary accommodation, and a certain proportion have been lodged in different houses in the adjoining village of Netley.

IMMORAL CONDITION OF THE LONDON STREETS.

THE committee appointed by the London Diocesan Conference to investigate and report on this important subject has not been able to add to the information already possessed, nor, so far as we can see, to make any useful suggestion. It is no reflection on the ability and energy of the committee to pronounce this judgment on the result of its labours. As a matter of fact, there is not much room for further inquiry, and there would seem to be little chance of good being done by directing attention to the subject. The committee is of opinion "that the continental system of a 'police des mœurs' would not commend itself to English feeling." Until something of this sort is adopted in England there is practically no hope of amendment.

UNQUALIFIED PRACTICE AT SHEFFIELD.

THE Sheffield Coroner has been making some very proper remarks on the subject of unqualified practice, in connexion with a case in which a boy was attended by a practitioner whom his parents thought qualified, but who was not so. This, he justly said, was attending people under a false pretence. It is, indeed, a very serious and culpable practice, which coroners do a great service in exposing. The coroner spoke in something like a tone of complaint that the Medical Society (*sic*) did not prosecute such cases, which he had communicated to the Society. But we should like to point out to the coroner that the duty of prosecuting an unqualified practitioner belongs really to the police or public authorities, and not to medical men. It is the public who suffer, and the prosecution by medical men is more or less invidious. We offer him, however, and all coroners who bring such cases to light, our hearty thanks.

CHANGES IN FOREIGN PROFESSORSHIPS.

DR. N. BOGOLYUBOFF, Extraordinary Professor of Surgery in the University of Kazan, has been appointed to the vacant Professorship of Surgery in the same university. Dr. Oscar Eversbusch, privat docent in Munich, has been appointed Professor of Ophthalmology in Erlangen. Dr. Kessel, privat docent in Gratz, has been appointed Professor of Otology in Jena. Dr. Grawitz, second assistant in the Berlin Pathological Institute, has been appointed Professor of Pathological Anatomy in Greifswald, in the place of Professor Grohe, whose resignation has been caused by ill health.

ROYAL UNIVERSITY OF IRELAND.

A MEETING of Convocation of this University was held on Tuesday last, the 6th inst., to elect a member of the Senate in the vacancy which had occurred by the expiration of Mr. Farrelly's term of office. Mr. Farrelly was opposed by Dr. Thomson, surgeon to the Richmond Hospital, the result of the election being that the latter gentleman was returned by a majority of three votes, the voting being 251 for Dr. Thomson, and 248 for Mr. Farrelly.

MR. SAVORY.

WE understand that Mr. Savory, President of the Royal College of Surgeons, has been offered a knighthood, an honour which he has declined to accept.

AN important paper was on Sunday last submitted to the Accademia dei Lincei of Rome by Professor Tommasi-Crudeli on "A Bacillus found in the Malarious Atmospheres of the Environs of Pola (in the Istrian Triangle)." The paper was accompanied with ten microscopic preparations by Dr. Schiavuzzi, and will shortly be published in the Academy's Transactions.

DR. OLIVER WENDELL HOLMES will leave Boston for Europe during the present month, and will pass the summer on this side of the Atlantic. It is just fifty years since he last visited Europe.

"A UNIVERSITY for Birmingham" is a project under discussion by the teaching staffs of Queen's and Mason Colleges.

Pharmacology and Therapeutics.

ANTIPYRIN IN OPHTHALMIC PRACTICE.

SOME observations by Khomyarkoff and L'voff (*vide* THE LANCET, Jan. 30th), tending to show the superiority of antipyrin over salicylate of soda in articular rheumatism and migraine, having induced a Russian ophthalmic surgeon, Dr. T. N. Katsauroff, to try it in cases of ciliary neuralgia and headache accompanying various eye diseases, he has published the results of this method of treatment in the *Vrach*. The patients comprised seventeen males and ten females, their ages varying from seventeen to seventy-five. Apart from the eye affection, all but three were free from disease. The antipyrin was always given in doses of a gramme (fifteen grains), and in every case appeared to be of distinct benefit in relieving the pain, a single dose being sufficient in fourteen cases, while in thirteen cases this had to be repeated, in two of them only (optic neuritis and scleritis) a third dose being found requisite. The author mentions that in nine cases where

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operations for cataract had been performed and the enforced subsequent dorsal position proved so irksome as to induce headache, the antipyrin seemed particularly valuable, though two of them were complicated by iritis. The action of the drug in these cases was rapid, an improvement generally taking place in half an hour, and the pain being completely relieved in an hour. More or less satisfactory results were obtained in ciliary and cephalic pain accompanying different forms of keratitis, of which there were four cases; in corneal ulcers, of which there were three cases; and in glaucoma, of which there were ten cases. The drug seemed, however, to have less effect on a case of double neuritis, on two of atrophy of the optic nerve, and on one of scleritis. As observed by Khomyarkoff and L'voff, antipyrin proved very valuable in Dr. Katsauroff's hands in migraine, his case being of traumatic origin, a foreign body having penetrated the soft structures of the orbit. Previously to using antipyrin as described, Dr. Katsauroff had been in the habit of employing salicylate of soda in cases of headache accompanying eye diseases, but he found that it was often necessary to give it in such large doses as to cause singing in the ears, whereas no unpleasant effects were produced by antipyrin in any of his cases.

HELENIN IN DIPHTHERIA.

Dr. Juan Beltrán Obiol has communicated to *La Cronica Médica*, a paper on the subject of the successful treatment of diphtheria by means of helenin. He refers to a work by Dr. E. Pilatte, published in Paris and entitled "Recherches expérimentales sur le Bacile de la Tuberculose," in which it is stated that the three substances most destructive to cultivations of bacilli are, in the order of their activity—(1) Sulphuretted hydrogen; (2) corrosive sublimate; (3) helenin. The first two of these are of course out of the question for diphtheria. Helenin, therefore, is the only one which can be used for this purpose. Dr. Obiol is very particular about the helenin he employs, for he finds many specimens in the market which are exceedingly impure. When pure, he says, it is perfectly white and flocculent, like sulphate of quinine. It has an aromatic odour and a bitter aromatic taste. It is insoluble in water, and does not communicate to it any opalescence. It is very soluble in alcohol, and even more so in ether, the solutions being clear, colourless, and depositing no sediment. It is also soluble to the extent of 2 per cent. in oil of sweet almonds. Impure specimens are apt to be granular, heavy, yellowish, only slightly bitter, with a resinous odour, and they sometimes impart opalescence to water, and deposit a precipitate from their solutions in alcohol and ether. Another substance sold as helenin, but which is said to be a derivative of shalin and not to possess the antiseptic properties of helenin, is crystalline, only slightly soluble in ether and alcohol, and not at all in oil of sweet almonds. The pure drug is ensured by prescribing "helenin (Baeza)." The author's plan was to apply powdered camphor on the end of the finger to the diphtheritic patches, and then to paint them over with a solution of helenin in oil of sweet almonds. This was done at first every four hours, and quickly produced complete destruction of the false membrane. The drug was also given internally in doses of one grain and a half to children of six years of age, care being taken to administer the powder after the application, as the latter sometimes induced vomiting. The author had great success with this method of treatment, but he insists on the necessity of the local applications being made by the medical man himself as far as possible, and not left to the parents. He found that when he commenced the treatment on the first day of the disease, a single day was sufficient to effect a cure; when he commenced on the second day, two or three days were required; when on the third or fourth day, from six to nine days were needed; but when he did not see the patient till the fifth or sixth day the hope of effecting a cure was not very great. In his experience albuminuria did not occur. The only unpleasant action of helenin is its constipating effects, against which it is necessary to guard by giving laxatives.

BINOXIDE OF NITROGEN IN CHOLERA.

Most persons who have dabbled in electrical science are aware of the unpleasant fumes emanating from batteries containing nitric acid. These, however, are said by a Spanish Professor to be an admirable preservative against cholera, it being noticed that none of the workmen employed in an electrotype establishment in Madrid where they were subjected to the fumes of the oxides of nitrogen died from cholera during the epidemics of 1834, 1859, and 1865, and that only such of the workmen as were, absent frequently from the factory were attacked at all. He has also ascertained that liquids from dead bodies, on being treated with binoxide of nitrogen, soon lose their peculiar smell and remain quite free from micro-organisms. A French naval surgeon also has made use of the binoxide in thirty-five cases of cholera, with very satisfactory results. On the whole the Professor predicts that this substance will prove a most important general disinfectant, and a valuable means both of preventing and treating cholera.

SULPHATE OF THALLIN.

Dr. Britneff, having investigated the effect of sulphate of thallin in fifteen febrile cases—pneumonia, tuberculosis and typhus,—has come to a conclusion similar to that reported by Jaksch, Guttmann, and others—viz., that, though thallin is an active antipyretic, its effects are of short duration, the temperature generally rising soon afterwards with a rigor. He does not expect, therefore, that it will be found of much use in medicine.

ALKALOIDS OF LOBELIA.

Two alkaloids, one liquid and corresponding to lobeliine obtained from Lobelia inflata, the other solid, crystalline, soluble in chloroform, have been discovered by Dr. v. Rosen in Lobelia nicotianæfolia. He also detected the second alkaloid in Lobelia inflata. Lobeliine hydrochlorate, lobeliine sulphate, and the solid alkaloid correspond in their pharmacological characters, and resemble apomorphia in producing emesis.

"SACCHARINE."

An ill-chosen name for a very sweet coal-tar derivative, for the term has hitherto belonged to an altogether different body. "Saccharine" is benzoyl-sulphonic-imide, and can be artificially prepared. It has an intensely sweet taste, and the possibility of its displacing cane sugar makes it interesting; Dr. Stutzer of Bonn has asserted that the new principle is absolutely innocuous in the system, from which it is speedily eliminated by the urine.

TOXIC PROPERTIES OF SASSAFRAS.

An interesting paper by Dr. J. Bartlett of Chicago has been published in the *Pharmaceutical Journal* on the toxic properties of sassafras. It appears to have some resemblance to three familiar drugs—opium, strychnine, and ergot; for it has a narcotic and sudorific action; a property of inducing tetanic and clonic spasms, followed by paralysis and a probable stimulant effect on the muscle of the uterus.

FRANCISCEINE.

Francisceine, according to the *British and Colonial Druggist*, is proposed as the name of a new alkaloid which has just been extracted from the Brazilian manaca root, the produce of the Franciscea uniflora and certain other species. The principle in question has a very powerful purgative and diuretic action, and is also possessed of diaphoretic and emmenagogue properties.

AREKANE.

Arekane resembles nicotine and has been obtained by E. Bombelon from the "betel nut." It is a colourless volatile oily alkaloid, smelling like weak meat bouillon, and has a strongly alkaline reaction. It increases the secretion of the salivary glands, retards the pulse, and exercises a purgative action.

BOARDING-OUT OF PAUPER CHILDREN.—On the 6th inst., at a meeting at Exeter Hall, an Association was inaugurated having for its object the promotion, in concert with boards of guardians and others, the boarding out of orphan and deserted children; the formation of a link of communication between boards of guardians wishing to board out such children, and others included under the Local Government Board Order of 1870, and certified boarding-house committees willing to receive them; also the facilitating exchange of information between the several boarding-out committees, and an inquiry into the operation of the various systems of boarding out, and general co-operation in all measures for the promotion of boarding out, and for the welfare of the children thus provided for. Lord Cranbrook was elected president of the Association, and amongst the vice-presidents were the Archbishop of Canterbury, Cardinal Manning, and Mr. Goschen.

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Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

King's Norton Rural District.—This district had in 1885 the low death-rate of 12·9 per 1000, the zymotic rate only reached 0·4, and the rate of deaths amongst infants under one year per 100 births was only 10·6. There was no death from small-pox, and the vaccination returns show that of 655 children due for vaccination only one remains outstanding. A few cases of diphtheria and of enteric fever occurred, and where these were associated with insanitary conditions remedial action was taken. Many improvements have been effected since the last report in the drainage and water-supply, and further works are still in progress. The sanitary hospital has well served its purpose of preventing the spread of disease, but it is only a temporary structure. The night-soil removal is very properly not imposed on the inhabitants; but being done by private contract, it is still not quite satisfactory. The disgusting practice of tipping the refuse into the road and then shovelling it into carts should be put down with a strong hand, and the authority had better adopt the model bye-laws on the prevention of nuisances which deal with this practice. But, on the whole, Mr. Hollinshead may be congratulated on the state of his district.

Swinton Urban District.—In this district scarlet fever became somewhat widely prevalent during the past year, and Mr. W. M. Jones points out how difficult it is to control such a disease when the first cases are kept secret from the sanitary authority. The Local Board of Health, by offering a fee for each case reported, afford an inducement to report every case; but yet this outbreak was allowed to get a firm hold on the affected locality without a single case being reported. This failure of a voluntary system of notification is by no means exceptional, and even the refusal of a single practitioner to comply with the wishes of the authority has more than once led to an entire break-down in the system. But in Swinton more is wanted than information as to spreading diseases—namely, some means for their isolation. When this is provided it will be time enough to call for compulsion in the matter of notification. Drainage works are still in progress, and the water-supply of the district is excellent.

Todmorden Urban District.—Mr. Charles Thorp recommends night scavenging. As to this we would suggest perusal of the model bye-law of the Local Government Board dealing with this subject, and of the comments on it in the annotated edition of the bye-laws. It is there pointed out that hitherto the construction of privies and receptacles for filth and refuse has very generally been such as to ensure rapid decomposition and consequent offensiveness of contents, and on this account it has been a frequent practice to require such structures to be emptied at night. This is, however, precisely the time not only when the scavengers themselves cannot see to do their work properly, but when they are least likely to be subjected to any proper supervision. Hence needlessly offensive operations are likely to be carried out. It is also the only time when persons desirous of absenting themselves during the process of scavenging are practically unable to do so. So also the period of sleep is that during which the human system is least able to resist the influence likely to result from the inhalation of noxious effluvia. And further, the more the conditions resulting from faulty structures are brought to light, the more likely are they to be remedied. For these and other reasons, scavenging under cover of darkness should be avoided. The death-rate for the district in 1885 was 17·3, and that from zymotic diseases 0·78, per 1000. The isolation hospital was useful in staying the spread of scarlet fever.

Towyn Urban District.—In a population of 3450, the death-rate for 1885 was 17·6 per 1000, which is not low for so small a population. Dr. Grosholz reduces it to 16·8 by deducting the deaths of prematurely born children; but obviously such a reduction makes the statistics valueless for the purposes of comparison, unless the same reduction were made everywhere else. No single case of sickness was heard of from either enteric fever or from diphtheria, but measles led to the temporary closing of the elementary schools. A curious epidemic of diarrhœa occurred in this district, beginning in Towyn, then creeping up the Dysynni valley to Aberganolwyn, and finally expending itself in Aberdovey. No single circumstance, such as water-supply &c., seems to have been common to those affected, and these were in many instances adults. Such outbreaks call for very searching investigation, but in this instance the actual cause was not made out. Towyn stands in great need of a proper system of sewerage and water-supply.

Aston Urban District.—The death-rate for this district has for some five years ranged from 12 to slightly over 14 per 1000, and stands now at the latter figure; but the infantile deaths are not so satisfactory, amounting as they do to 14 per year of every hundred children born. Scarlatina alone prevailed as an epidemic; and in this connexion it is noteworthy that the opening of an excellent hospital for infectious diseases has been one of the prominent features of the year. The sanitary authority have also determined to make an effort to secure early information as to cases needing isolation, by organising a system of voluntary notification at a fee of half-a-crown per case reported. Improvements in water-supply, sewer-ventilation, and methods of house-drainage are being effected, and the additional action needed to place the district in a satisfactory state is indicated by Dr. Bostock Hill in his report. Diagrams are also appended showing a new ventilating manhole, and details as to house-drainage; these cannot but be extremely useful to builders and to the public generally.

Llanelly Rural District.—In reference to a prevalence of scarlet fever, Dr. Raglan Thomas reports that in the Berwick hamlet much time was lost, by lack of information, in isolating the first attacks, and that the school authorities did not for some months comply with the request to close certain schools. It cannot be too widely known that under the revised Education Code the authorities of all schools coming within the provisions of that code have no alternative but to close schools on the instruction of the sanitary authority of the district, and also that, though appeal may be made to the Education Department, yet this does not enable the school officials to keep the schools open pending the appeal. The tabulated account of prevalent disease, its causes, extent, and the resulting sanitary action embodied in this report show that active work is maintained in this district, which in 1885 had a mortality at the rate of 15·33 per 1000. During the year, and with a view to any cholera emergency, a hospital hut was provided.

Taunton Urban and Rural Districts.—Considerable improvement in the water-supply of the *urban district* was effected during the year; but the private fittings, and notably the cisterns, call for further attention. Thus, Dr. Alford says that drinking-water is even drawn directly from a pipe discharging into the pan of a dirty closet. Closet supplies should always be drawn from separate cisterns, and if the service be a constant one no other cisterns are needed. The need for efficient ventilation and flushing of the town sewers has several times been commented on, especially in connexion with diphtheria, and we fear that even now the construction of the sewers remains faulty; if so, lodgment of contents is certain, and no ventilation and flushing should be regarded as superseding the necessity for reconstruction of such portions as are found to be faulty. The death-rate for Taunton reached 23·6 per 1000 during the past year, and the zymotic rate was no less than 3·7 per 1000. Fourteen deaths took place from small-pox, the disease prevailing in some dwellings built back-to-back in dark courts and alleys, with garbage, manure, filthy premises, and closets around; a state of things which needs the active interference of the sanitary authority. Measles and scarlet fever also prevailed. It is evident that there still remains ample scope for the labours of the energetic officer of health, who has already done much for Taunton. In the *rural district* the death-rate was also very high, reaching as it did over 18 per 1000; and the zymotic rate, too, was no less than 2·6 per 1000—small-pox, measles, and diphtheria being main contributors to it. In a number of places in this district there are old and imperfect sewers and drains, accompanied with stagnant and decomposing surface-slops. The water-supply also remains far from satisfactory, shallow wells being the rule, and these are often in most dangerous proximity to privies and piggeries. The past history of these two districts in relation to diphtheria should have led before this to more intelligent action, with a view to remedial measures being adopted on a wide and comprehensive scale. Many nuisances are well looked after, good advice is given, and the sanitary hospital works well. But

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more than this is needed for the due protection of life and health.

Windsor Urban District.—Dr. Casey reports that the death-rate for this district during 1885 was 18·6 per 1000 on a population of 12,493, a fatal epidemic of measles having helped to increase the mortality. It is, however, satisfactory to note that a single death from enteric fever was the only one that had taken place from that cause during a period of five years. In connexion with the work of the year it is stated that samples from eight wells were submitted for analysis and condemned, and that twenty-four houses were, at the instance of the authority, furnished with a supply from the mains. It is astounding to think of the ignorance of the owners of "private" wells which are sunk in the soil of this ancient borough, honeycombed as it has been in the past with cesspools leaking on all sides; but it remains a fact that people in Windsor still draw their water from the same source as that into which their ancestors poured their filth. Only two houses were closed during the year, and the report dealing with this question points to the evils connected with leasehold tenure, a lessee being naturally most unwilling to go to any expense in improving a property in which he will in a few years lose all interest. This is true, but leases can hardly be abolished, and sanitary authorities are constituted in order to see that persons having a financial interest—however limited—in property shall not so use, and profit by, that property as to prejudice the public health.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 6052 births and 3862 deaths were registered during the week ending April 3rd. The annual death-rate in these towns, which had been equal to 29·3 and 26·4 per 1000 in the preceding two weeks, further declined last week to 22·2. During the thirteen weeks ending last Saturday the death-rate in these towns averaged 24·4 per 1000, and precisely corresponded with the mean rate in the thirteen corresponding weeks of the ten years 1876-85. The lowest rates in these towns last week were 12·4 in Wolverhampton, 15·6 in Sunderland, 15·9 in Norwich, and 18·8 in Hull. The rates in the other towns ranged upwards to 27·9 in Plymouth, 28·7 in Brighton, 28·8 in Bolton, and 31·4 in Blackburn. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 430, 427, and 406 in the previous three weeks, further declined last week to 359; they included 157 from whooping-cough, 97 from measles, 36 from diarrhœa, 30 from "fever" (principally enteric), 19 from scarlet fever, 19 from diphtheria, and only 1 from small-pox. No death from any of these zymotic diseases was recorded last week in Norwich, Wolverhampton, or Huddersfield; whereas they caused the highest death-rates in Bolton, Birmingham, and Blackburn. The greatest mortality from whooping-cough occurred in Newcastle-upon-Tyne, London, Portsmouth, and Birkenhead; from measles in Portsmouth, Oldham, Birmingham, Plymouth, and Blackburn; and from "fever" in Preston. The 19 deaths from diphtheria in the twenty-eight towns included 8 in London, 2 in Bristol, and 2 in Manchester. Small-pox caused 1 death in Liverpool, and not one in London and its outer ring, or in any of the twenty-six other large English towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had been 7 and 8 on the preceding two Saturdays, had further increased to 11 at the end of last week; 4 cases were admitted to these hospitals during the week, against 2 and 5 in the preceding two weeks. The deaths referred to diseases of the respiratory organs in London, which had been 917 and 710 in the preceding two weeks, further declined last week to 506, and were 30 below the corrected weekly average. The causes of 83, or 2·2 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Brighton, Leicester, Plymouth, Derby, and Huddersfield. The largest proportions of uncertified deaths were registered in Oldham, Sheffield, and Preston.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 27·9 and 24·7 per 1000 in the preceding two weeks, further declined to 21·6 in the week ending April 3rd, and was 0·6 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 11·5 and 14·1 in Perth and Leith, to 22·5 in Paisley and 25·5 in Glasgow. The 534 deaths in the eight towns showed a further decline of 75 from the numbers returned in the preceeding two weeks, and included 14 which were referred to whooping-cough, 11 to diarrhœa, 5 to "fever" (typhus, enteric, or simple), 5 to diphtheria, 4 to scarlet fever, 4 to measles, and 3 to small-pox; in all, 46 deaths resulted from these principal zymotic diseases, against 46 and 62 in the preceding two weeks. These 46 deaths were equal to an annual rate of 1·9 per 1000, which was 0·2 below the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 20, 14, and 29 in the previous three weeks, declined again last week to 14, of which 12 occurred in Glasgow. The 11 deaths attributed to diarrhœa corresponded with the number in the previous week, but were 6 above the number in the corresponding week of last year. The 5 deaths from "fever" exceeded the number in the previous week by 1, and included 2 in Edinburgh and 2 in Paisley. The deaths from diphtheria, which had been but 1 in each of the previous two weeks, rose last week to 5, of which 2 occurred in Aberdeen. The 4 fatal cases of scarlet fever were returned in Glasgow, and the 4 of measles in Edinburgh. The 3 deaths referred to small-pox included 2 in Leith and 1 (certified as chicken-pox) in Aberdeen. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 204 and 148 in the preceding two weeks, further declined last week to 134, but were 4 above the number returned in the corresponding week of last year. The causes of 80, or 15 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 40·5 and 34·6 per 1000 in the preceding two weeks, further declined to 34·4 in the week ending April 3rd. During the thirteen weeks ending last Saturday the death-rate in the city averaged no less than 33·5 per 1000; the mean rate during the same period did not exceed 24·8 in London and 20·0 in Edinburgh. The 233 deaths in Dublin last week were within one of the number returned in the previous week, and included 15 which were referred to the principal zymotic diseases, against 19, 13, and 18 in the previous three weeks; 6 resulted from whooping-cough, 5 from "fever" (typhus, enteric, or simple), 3 from scarlet fever, 1 from diarrhœa, and not one either from small-pox, measles, or diphtheria. These 15 deaths were equal to an annual rate of 2·2 per 1000, the rates from the same diseases being 2·3 in London and 1·4 in Edinburgh. The fatal cases of whooping-cough, which had been 6 and 12 in the preceding two weeks, declined again last week to 6. The deaths referred to "fever," on the other hand, rose again to 5, from 6 and 1 in the previous two weeks. The 3 fatal cases of scarlet fever showed an increase upon recent weekly numbers. Two inquest cases and 3 deaths from violence were registered; and 74, or nearly a third of the deaths, were recorded in public institutions. The deaths of infants were more numerous than in the previous week, whereas those of elderly persons showed a marked decline from recent weekly numbers. The causes of 39, or nearly 17 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

WAR OFFICE.—Coldstream Guards: Surgeon Robert Hippisley Cox, Medical Staff, to be Surgeon, vice J. Magill, M.D., promoted.

ARMY MEDICAL STAFF.—Surgeon-Major Hubert Rothwell Greene, from the Seconded List, to be Surgeon-Major. The undermentioned Surgeons-Major are granted retired pay, with the honorary rank of Brigade Surgeon: Hubert Rothwell Greene, John Fitzgerald Brodie, Vivian Wearne.

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Fleet Surgeon William Middleton Power has been placed on the Retired List of his rank.

The undermentioned surgeons have been promoted to the

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rank of Staff Surgeon in Her Majesty's fleet: William Henry Patterson, Everard Home Saunders, Henry Anthony Wills Richardson, James Alexander Collot, Edward Wentworth Luther, Robert Bentham, Nicholas Crawford Ross, William Edward Bennett, James William Hambly Hawton, and Edward Ross Mulock.

The following appointments have been made:—Staff Surgeons J. B. Drew and T. O'Sullivan, to the *President*, additional, for service at the Royal Victoria Yard, Deptford; Fleet Surgeon G. Maclean, to the *Alexandra;* Surgeon J. Crowley, to the *Excellent;* Surgeon H. L. Crocker, to the Royal Naval Hospital, Chatham; and Surgeon J. J. Walsh, to the *Excellent*, additional.

YEOMANRY CAVALRY.—Lancashire Hussars: Surgeon E. H. Beaman, whose resignation has already been notified, is granted the honorary rank of Surgeon-Major, and is permitted to wear the uniform of the regiment on his retirement.

ARTILLERY VOLUNTEERS.—1st Argyll and Bute: J. Hunter and W. Hunter are granted the honorary rank of Surgeon-Major.—1st Devonshire: Surgeon G. Pycroft is granted the honorary rank of Surgeon-Major.—1st Glamorganshire: Surgeon F. W. Granger is granted the honorary rank of Surgeon-Major.—1st Lanarkshire: Surgeon J. Provan, M.D., is granted the honorary rank of Surgeon-Major.—2nd East Riding of Yorkshire: Acting Surgeon F. R. Chapman resigns his appointment.—1st West Riding of Yorkshire: Surgeon J. W. Scarth to be granted the honorary rank of Surgeon-Major.

RIFLE VOLUNTEERS.—1st Ayrshire: Surgeon J. McAlister is granted the honorary rank of Surgeon-Major.—5th Cheshire: Surgeon S. H. Munro, M.D., is granted the honorary rank of Surgeon-Major.—2nd Derbyshire: Surgeon W. Milligan is granted the honorary rank of Surgeon-Major.—2nd Forfar (Angus): J. Mackie, jun., M.D., W. F. Murray, J. K. Anderson, M.D., and G. P. Alexander, are granted the honorary rank of Surgeon-Major.—1st Lanarkshire: Surgeon A. K. Irvine, M.D., is granted the honorary rank of Surgeon-Major.—3rd Lanarkshire: Surgeon J. Dunlop, M.B., is granted the honorary rank of Surgeon-Major.—4th Lanarkshire (Glasgow 1st Northern): Surgeon R. Smart, M.D., is granted the honorary rank of Surgeon-Major.—6th Lanarkshire: Surgeon D. Maclean, M.D., is granted the honorary rank of Surgeon-Major.—4th Lancashire: Surgeon E. H. Roe is granted the honorary rank of Surgeon-Major.—1st Shropshire: Job Edwin Brooks, Gent., to be Acting Surgeon.—3rd Volunteer Battalion (the South Wales Borderers): John William Davies, Gent., to be Acting Surgeon.—6th (West) Suffolk: Harry Charles Costello Shaw, Gent., to be Acting Surgeon.—1st West Riding of Yorkshire: George Richard Green, Gent., to be Acting Surgeon.—2nd Volunteer Battalion, the Duke of Wellington's (West Riding Regiment): Surgeon J. E. Foster is granted the honorary rank of Surgeon-Major.

Correspondence.

"Audi alteram partem."

SUPRA-PUBIC *v.* PERINEAL LITHOTOMY.

To the Editor of THE LANCET.

SIR,—As circumstances prevented me at the last moment taking part in the discussion of the above subject at the Medico-Chirurgical Society, I shall feel obliged, having regard to the great importance of the subject, if you will kindly allow me space to express the views I intended giving utterance to after reading the abstracts of the cases which preceded the discussion.

In Mr. Rivington's case the importance of providing for drainage of the bladder after lithotomy, where the stone is large, is clearly shown; and though terminating fatally, it seems to me to afford some evidence of the value of the perineal incision, in addition to the supra-pubic, as providing a suitable outlet in cases where the floor of the bladder is much depressed by what has been lodging there. Though I cannot come to the same conclusion as Mr. Jacobson that the supra-pubic operation is likely to find much more favour in the future than it has in the past, I think with him that probably some surgeons who have only rarely to operate for stone—or, I would add, who have not met with much success with the lateral operation—may find it easier and safer than the latter proceeding. Mr. Barwell, in one of his cases, illustrates what I believe to be the best practice in females where the stone cannot be removed by lithotrity and evacuation—namely, the adoption of the supra-pubic method in preference to dilatation of the urethra and extraction, as the latter is so frequently followed by incontinence of urine. Passing, however, from these interesting examples to the general question as to the position which supra-pubic lithotomy should hold in relation to the treatment of stone, I think there is a good deal to be said. My personal experience of supra-pubic lithotomy has been so limited that I should not venture to speak of it did I not feel that, though small, it related to the consideration of the whole subject of removing those stones from the bladder which lithotrity could not be made to include. On the other hand, my experience of lateral lithotomy has not only been considerable, but has given results which make me view with some apprehension the proposal to revive, with what seems to me but little discrimination, the supra-pubic operation. Whilst admitting all the advantages claimed for Petersen's method, I would still limit its performance to those cases beyond the reach of lithotrity, where the relations of the stone to the pubic arch were such as to render extraction by this way without damage to the adjacent parts obviously hazardous, and in the female to those cases where Bigelow's proceeding was inapplicable. I do not think it possible to define closer than this.

My reasons for urging that the supra-pubic operation should be reserved for those stones which in our individual judgment appear to be beyond removal, with safety to the surrounding parts, by the perineal method, partly arise from a consideration of some of the conditions under which Petersen's operation may be performed, and the experience we possess already relative to the performance of lateral lithotomy as at present practised. Of all the contingencies an operator has to calculate upon and provide against, the most embarrassing is the consciousness that he may find such an anatomical disposition of the parts as to render the completion of the contemplated proceeding impossible. The reflection of the peritoneum has been found so low down as to render it impossible to open the bladder without entering the peritoneal cavity.[1] I cannot recall any contingency of this nature which might not be provided against beforehand that has ever led to the lateral operation having to be abandoned. Again, I do not think that Petersen's operation is entirely without special dangers other than those connected with an abnormal reflexion of the peritoneum. Our experience of Petersen's method has so far been comparatively limited. Let me illustrate my point in another way. A patient with a stricture and a distended bladder was placed on the operating table of Bellevue Hospital for the purpose of having his stricture relieved.[2] Whilst struggling under ether the abdominal tumour suddenly disappeared, and the former area of dulness became tympanitic. At a post-mortem examination the bladder was found ruptured, without ulceration or other alteration. No doubt the distension in this case was considerable, as two quarts and a half of bloody fluid were found in the abdomen. When, however, we consider the condition of distension, so far as both the bladder and rectum are concerned, in Petersen's proceeding, I cannot think, from the descriptions I have read, that we are entirely free from the possibility of such an accident occurring in the case of an atonic or weakened bladder which might have not been realised beforehand.

Passing now to our experience of lateral lithotomy, let us see for a moment what is our position. In young male children a well-executed lateral lithotomy may be regarded as an extremely safe operation. Many surgeons I could mention have practised it a considerable number of times without a fatal result. It leaves no permanent weakness or imperfection behind. Why should we wish to change it other than on the somewhat questionable ground that to some the change may prove more convenient? Passing to the adult, we are left in the present day, thanks to the progress lithotrity has made, with a small residuum of cases which this operation cannot cover. And this residuum is practically made up of three groups of cases: (1) cases where the stones are too large to come out except through the abdomen; (2) cases of stone where the condition of the prostate is such as to demand some special attention:

[1] Polaillon: THE LANCET, Jan. 30th, 1886. Autal: Medical Chronicle, March, 1886.

[2] Dr. Cruise: New York Medical Record, Aug. 1st, 1881.

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(3) cases of stone complicated with diseased or distorted bladders requiring drainage. I do not think that examples of these three conditions will be wanting in the practice of most surgeons. Of these three groups the first is provided for by supra-pubic cystotomy. I have already brought before the Society[3] two cases illustrating the second class, where patients were relieved not only of the symptoms which stone caused, but also of those produced by these large growths. Both patients are now alive and well, though several years have elapsed since these operations were performed. I have recently laid before the profession a record of cases[4] where I have been able to treat advantageously this frequent complication of stone in the bladder. Passing to the third class of cases, where the bladder requires not only the removal of the stone but draining, I would illustrate this in the following way. During the last two years two patients came under my care, one who had undergone the crushing operation twice and the other thrice, at comparatively short intervals of time. In both the operation could only be regarded as partially successful; both seemed to me to suffer almost as much without stones in their bladders as they did with. I cut and drained both, and the patients are now, I believe, and have been since the operation, perfectly well. Though lithotrity was successful in each, lithotomy was more so. I cannot, under the circumstances referred to in the last two groups of cases, admit that I could have obtained equally satisfactory results by an opening made into the bladder above the pubes.

Permit me to say, in conclusion, that we have, I think, sufficient evidence to show that the last few years have not been uneventful in the history of perineal lithotomy. We have learnt to define pretty accurately what cases are best met by crushing and what by cutting. We have improved our means of arresting any hæmorrhage that may follow the latter proceeding. Means have been methodically and successfully introduced for dealing with some states of the large prostate when it complicates stone. We have recognised the importance of bladder drainage as a necessary part of the after-treatment of some cases of lithotomy, and suitable appliances have been introduced and accepted for this purpose; and, further, the essential details of Listerism have been applied to these operations. Instead of aiming to change our ground and to substitute an abdominal for a perineal section, save under exceptional circumstances, I think we shall find it more advantageous if we endeavour to add further improvements in the directions I have ventured to indicate, in the perfecting of an operation which, of all others, so entirely depends on the precision and dexterity with which it is executed.

I remain, Sir, yours obediently,

Liverpool, April 2nd, 1886. REGINALD HARRISON.

To the Editor of THE LANCET.

SIR,—In THE LANCET of Jan. 30th, 1886, there is reference made to a case of attempted supra-pubic lithotomy by M. Polaillon, which was abandoned on account of anomalous distribution of the peritoneum. It is difficult to understand why a supra-pubic operation was attempted to remove a "stone measuring in circumference four centimetres by two"; stranger yet that it should have been abandoned through dread of wounding the peritoneum; as this may occur without disaster, the following case of epi-cystotomy will illustrate.

John M——, a native of Ireland, aged seventy-three, was admitted to the Buffalo Hospital of the Sisters of Charity on Sept. 22nd, 1884, with a history of symptoms of stone for the past two years. During the three months prior to admission to the hospital he had suffered intense pain, with cystitis. Examination with the sound revealed the presence of stone in the bladder, greatly enlarged prostate, and subacute cystitis.

On Sept. 23rd, 1884, in the presence of a large number of medical gentlemen, and with the assistance of my colleagues, Professors Cronyn and Stockton and Drs. Mickle and Clark, I performed epi-cystotomy. An effort was made to use Petersen's method of throwing the bladder upwards and forwards by introducing a rubber bag into the rectum and inflating it; but owing to an imperfect apparatus and the excessively enlarged prostate, the attempt was abandoned. The bladder was then injected with about six ounces of a solution of boro-glyceride (all it would hold). The patient took the anæsthetic (ether) badly. There was a constant convulsive movement of the abdominal muscles, and it seemed impossible to produce relaxation. This greatly complicated the operation, and partly accounts for the accident which occurred. The bladder was exposed by the usual incision, and seized by a pair of tissue forceps, which, by the way, are inferior for their purpose to the tenaculum. It was then incised, and a mulberry calculus, $1\frac{3}{8}$ in. in long diameter by 1 in. transversely, extracted with the thumb and forefinger. After washing the bladder out with mercuric bichloride solution (1 in 1000), a short rubber drainage-tube was inserted at the lower angle of the wound. The abdominal incision was then closed by silver-wire sutures, with the exception of about half an inch left open for drainage.

About fifteen minutes after the patient had been removed to his bed I was summoned in haste, and found, on reaching him, that he had vomited while recovering from the ether, and that a coil of small intestine about the size of the fist protruded from the wound. The stitches were rapidly cut, the intestine completely returned, and by means of a perineum needle four silver wire sutures were carried through the abdominal walls and the anterior wall of the bladder; then, anchoring the bladder to the abdominal wall, a soft rubber catheter was placed in the bladder per urethram, and a pad of gauze containing wood flour mixed with mercuric bichloride and naphthalin was applied over the wound.

Sept. 25th (8 P.M.): Temperature 101°; some pain in abdomen. Ordered one grain of powdered opium and two grains of camphor powder every four hours.—26th: Slept fairly; temperature 100°; bloody urine flowing freely through the catheter.—27th: Temperature normal; patient feeling well; urine clearer.—28th: Temperature normal; slept well; slight escape of very ammoniacal urine through wound; bladder washed out with boro-glyceride solution.—30th: Bowels fairly moved in response to a cathartic.—Oct. 1st.: Temperature normal; bladder washed out with mercuric bichloride solution (1 in 1000). From this time the patient steadily improved, the urine becoming clearer, and the wound healing completely. He was discharged cured on Oct. 23rd, 1884. Three weeks later he reported himself to Dr. Mickle at the Emergency Hospital, and stated that he was "quite well, and had no further difficulty with his urinary organs."

Notwithstanding the peritoneum was wounded during the operation, the patient made an excellent recovery, without peritonitis or any other untoward symptom. From his advanced age and the complications above mentioned, this case was fairly a crucial test of the operation of epi-cystotomy, and goes far in support of the claim I have made for it in a previous paper. I suggest that an effective method in dealing with such an exceptional case as reported by M. Polaillon would be to pass through the abdominal wall and the anterior wall of the bladder a long steel pin, thus fastening the peritoneal surface of the bladder to that of the abdominal parietes, and, either before or after incising the peritoneum, to stitch with fine catgut sutures the vesical layer of peritoneum to that lining the abdominal walls, in this manner preventing the escape of urine into the peritoneal cavity. The fact that the bladder in M. Polaillon's case was diseased would suggest the propriety of inserting a tube into the bladder at the lower portion of the wound for thorough drainage. The impunity with which exploratory incisions are now made in cases of abdominal tumours lends strength to this method.

The advantages of the supra-pubic operation I had the honour to point out in a paper read before the American Surgical Association at its meeting in Washington, D.C., held April 30th to May 3rd, 1884, in which I made use of the following language: "As regards the relative merits of epi-cystotomy and litholapaxy, recently discussed by Dittel, in properly selected cases and in experienced and skilful hands, the former will probably maintain its present position, but my own opinion is that supra-pubic cystotomy will prove by far the safer operation in the hands of the average surgeon." A more extensive experience in this class of cases has but served to confirm me in this position. It is gratifying to find my views endorsed by so eminent an authority as Sir Henry Thompson in THE LANCET for July 25th, 1885, more than a year afterwards, where he says: "The problem, then, left for solution is what is the best cutting operation for hard calculi (urates and oxalates) which weigh from about two ounces and up-

[3] Med.-Chir. Trans., vol. lxv. [4] THE LANCET, Jan. 16th, 1886.

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wards, as well as for those not quite so large, which are so peculiar in form (as occasionally, but very rarely, happens) that the lithotrite fails to grasp or retain them? I think there is no doubt about the answer—viz., that it is the suprapubic and not the lateral position." And again: "Finally, I think I am quite justified in believing that unless the operator has had a large experience of lithotrity (and there are not many of whom this can be affirmed), the high operation would generally be a safer proceeding than crushing for a calculus which is hard and much above an ounce in weight." In regard to the danger of impotence from peritoneal section, to which I alluded in my paper above mentioned, I am permitted to quote the following extract from a private letter received from my friend, Dr. A. H. Haemstadt of Pottsville, Pa.—a lithotomist of large experience: "Your eleventh accident—impotence—is well put; only one of eighteen whom I cut as boys, grown to manhood and married, has had issue as far as I can learn."

One of the strongest arguments in favour of the suprapubic operation is that it avoids all interference with the *genital* organs, thus preventing the so frequent reflex disturbance of the nervous system accompanying the introduction of instruments through the urethra—a practical point to which, I believe, I was the first to publicly invite attention. I am, Sir, yours truly,

W. G. TREMAINE, M.D.,
Major and Surgeon, U.S. Army; Surgeon-in-Chief, Buffalo Sisters' Hospital, &c.

Buffalo, N.Y., Feb. 15th, 1886.

PASTEUR'S EXPERIMENT.

To the Editor of THE LANCET.

SIR,—In your leader of March 20th, and in the special article in THE LANCET of last week, which are devoted to a description of the method by which M. Pasteur secures and uses the protective virus, the attention of the medical profession is intelligently drawn to a subject of great interest and importance. For the moment M. Pasteur is concerned with hydrophobia alone, but the issues presented to the mind of anyone who has become practically acquainted with the inception and progression of disease are many and far-reaching. It may be said of all disease that the period of active pathological change is preceded by a period of passive fermentation, which prepares the whole animal structure for the consequent and more perceptible morbid process. At present, however, this period of latency in the majority of diseases cannot be exactly determined, and, indeed, the conditions and circumstances of disease, regarded as they are at present under the somewhat uncertain light of our knowledge, are strangely various and bewildering. Perhaps, if the jaded general practitioner of medicine, careful and troubled like Martha about many things, were to express his mind freely concerning the mysterious vagaries of his many-faced adversary, Virgil's unkind description of the gentler sex—

"Varium et mutabile semper femina"—

would, with a trifling alteration, suit his purpose best. There are, however, certain diseases in which the period of incubation can be exactly determined, and in other cases by careful and long-continued observation the scientific physician has arrived at conclusions which are found to be erroneous only in exceptional cases. M. Pasteur proposes to deal with a disease during its incubation period, and has selected a disease which is "only conveyed by direct contagion, so that the date of the introduction of the poison into the system can be fixed with precision." (THE LANCET, March 20th). At present M. Pasteur proposes merely to inoculate persons who have been bitten by mad dogs, but, as you say in the leader from which I have already made a quotation, "in process of time it may become the fashion to inoculate with the mitigated virus in order to give protection against the possible bites of mad dogs, but at present there seems little likelihood of this practice being established, nor, on the whole, is it desirable." The practice would not, in my opinion, be desirable, because hydrophobia is a disease of the lower animals, and is only occasionally transferred from them to man; but if M. Pasteur succeed in his experiment, it might become desirable that all dogs should be protected by inoculation. By his brilliant discovery Jenner drove out from the midst of the people a terrible and deeply-rooted disease. In like manner M. Pasteur may succeed in removing from the animal world the disease against which his scientific labours have been for some time directed. If success should attend his efforts—and at present there is little reason for anticipating failure—a great advance will have been made in the preventive treatment of disease. I may be too sanguine in expressing my belief that the experiment which is proceeding at Paris is a swift approach towards the clear noonday of scientific medicine of which Jenner's discovery is the brilliant dawn. There is certainly ample reason to be found for the belief in the success which has attended the theory of vaccination in practice, and in the patient and questioning industry of the great French pathologist and chemist. He is indeed a worthy successor of his countryman, Lavoisier, who, dragged down with many others into the ruthless whirlpool of the first Revolution, asked for a fortnight more of life in which to finish an experiment.

In speaking of M. Pasteur and his experiment, one is led naturally enough to consider the manner in which it has been received by those who are opposed to science on purely sentimental grounds, and by those who, with varying degrees of responsibility, take part in the government of the country. In a recent and very admirable work Sir Henry Sumner Maine arrives at the somewhat sad conclusion that science will suffer under a government by the people. I have mentioned Lavoisier and his pathetic request, but, as Carlyle says, "the Republic had no use for experiments," and so the fortnight more of life was denied to the chemist. We have not yet descended to the depth of moral and social dissolution to which the French people were dragged by Robespierre, Marat, and company, but we are hurrying on at a startling pace, and only the other day, at the call of a shrill and shallow sentiment which would send all science to the winds, the Contagious Diseases Acts were removed from the Statute Book. "The day of checks and counterpoises is over," exclaimed Mr. Labouchere some time ago in the *Fortnightly Review*, and the present House of Commons is showing that there is some truth in the exclamation. "Government by the people for the people" (this is the formula I think) will mean a paralysis of scientific effort. True science can never be popular in the ordinary acceptation of the word. Unlike Radicalism, it does not promise well on the surface, and does not leap from a chaos of improbable and indefinite premisses to time-serving and popular conclusions. The best and most useful part of scientific work is hidden from the notice of the multitude. The days of earnest endeavour towards the practical attainment of a great scientific end are unheard of by the busy throng who thrive unthinkingly upon the discoveries that the votaries of science have made. At present we may congratulate ourselves that we are yet some distance from a government by the people, and rejoice in the fact that in spite of the absorbing Irish problem, a Governmental commission is to be appointed to investigate into the subject upon which M. Pasteur is experimenting. The names which you mention are of themselves sufficient to satisfy those interested that the work will be done in a thoroughly efficient fashion. Scientific investigation of the severest kind must always be applied to every discovery of moment, and in the instance of M. Pasteur's experiment the discovery is of the first importance. For my part, I believe that investigation will but prove the truth of the theory by making sure its practical success.

I am, Sir, yours truly,

Glasgow, March 30th, 1886. ROBERT MACPHERSON.

HEALTH-RESORTS FOR PHTHISICAL PATIENTS.

To the Editor of THE LANCET.

SIR,—I read with much pleasure in your issue of March 13th a leading article on Health-resorts for Phthisis. My purpose in writing now is to endorse, with what weight an experience of twenty-two years' practice in Sydney may carry, the truth of your remarks, in so far as they relate to Australia. I have frequently expressed to my medical friends here, and in words almost identical with your own, the great importance of warning consumptive patients, when contemplating removal to New South Wales, against taking up their residence in Sydney or any other place upon the eastern seaboard. During nine months of the year the atmosphere is warm and moist, and the surroundings highly detrimental to the phthisical invalid. Tubercular deposit rapidly undergoes softening, and night sweats, loss

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of flesh and appetite, with sometimes diarrhœa, ensue. How different, as a rule, the progress of the patient who has been wisely advised to betake himself to the great inland plains, where the air is dry and warm. Living in a town, or, far better, on a sheep or cattle station so situated, he gains flesh, his appetite returns, night sweats cease, and life becomes enjoyable. My case-books afford abundant evidence of cures so brought about. Even when cure has not been effected life has been greatly prolonged. To a young and, as is so often found in the phthisical, a highly intelligent mind continuous absence from the metropolitan centres of southern civilisation is often a sore trial and has a depressing effect. Fortunately my experience enables me to say that an exception to the rule of unbroken residence on the inland plains may be made during the winter quarter. At this season the climate in Sydney is dry and bracing, the very opposite condition to that which exists during the other nine months. I have been in the habit, therefore, of permitting my consumptive patients to visit Sydney during the winter, and when the privilege has not been abused the change of scene and distraction from their own sensations have proved advantageous to them. With this exception, however, it cannot be too strongly urged that phthisical patients should reside permanently upon the inland plains, which are at an elevation of from two to three thousand feet above the sea level.

I am, Sir, yours faithfully,

Sydenham-hill, March 30th, 1886. P. SYDNEY JONES.

UNUSUALLY PROLONGED PERIOD OF INCUBATION OF SMALL-POX.

To the Editor of THE LANCET.

SIR,—The following case of exceptionally long incubation of small-pox appears worthy to be put on record. The proof that the patient was but once exposed to infection, and that only for two hours and a half, is about as strong as available proof on such a matter is likely to be, inasmuch as, until the occurrence of the case in question, there has been no small-pox in Newcastle for above half a year, the last case before this having been notified in July, 1885; neither has the patient been anywhere outside of Newcastle, or in known communication with any infected person except one, or with any other person coming from an infected place. The circumstances are:—

Mrs. A. B—— first began to feel unwell on Friday, the 26th of March. A very sparse eruption of small-pox papules appeared on the 29th (fourth day of illness). On March 6th the patient's brother, T. S——, was discharged from a small-pox hospital upwards of thirty miles distant from here, and came to Newcastle to the house of his sister on the same day. He remained with her for two hours and a half, when he went away by the north train, leaving behind him none of his clothing or other belongings. No communication between the two has taken place since. There is therefore, good reason to believe that in this case the period of incubation extended from the 6th to the 26th of March inclusive, or in all twenty-one days. The patient bears faint vaccination cicatrices from infancy, equal in area to about six ordinary vaccine vesicles. It would be interesting to know how far the incubative stage has been affected by these.—I am, Sir, yours obediently,

HENRY E. ARMSTRONG,
Medical Officer of Health, Medical Supt., Newcastle Small-pox Hospital, &c.

Newcastle-on-Tyne, April 6th, 1886.

BIRMINGHAM.

(From our own Correspondent.)

THE MEDICAL INSTITUTE.

THE annual meeting of the Medical Institute was held on the 25th ult., under the presidency of Mr. J. S. Gamgee. A portrait of the late Dr. Russell was presented by Mrs. Russell, and accepted with much satisfaction as a memento of the esteem with which the high personal character and professional attainments of Dr. Russell are remembered by the members of the institute. The report shows that the library is increasing in popularity and usefulness, the circulation of books being more than 400 as compared with the numbers of the previous year. The financial position has improved somewhat, but still shows a deficit between the annual income and expenditure of a little less than £50. To meet this and a bank overdraft of £108 the Committee show good security, but feel that the prospects of the institute would be more encouraging if there was an absolute freedom from debt.

HEALTH LECTURES.

The third series of lectures have been well attended and well delivered. The interest manifested in these discourses has been well sustained and their success assured by the reputation and ability of the lecturer. The subjects have been such as to set an intelligent public thinking for themselves on the many problems associated with the more common ailments which affect the health and constitute the enjoyment or otherwise of daily life. After such teaching no reasonable excuse can be afforded for preferring the ignorance of bliss which is frequent among those who "enjoy" bad health.

THE JAFFRAY SUBURBAN HOSPITAL.

The 15th of March was a memorable day in the history of this young and promising branch, for it witnessed the transfer of the first detachment of patients from the parent institution. They were conveyed from the general hospital in ambulances and carriages, and on their arrival were at once placed in comfortable quarters in the pure atmosphere of their temporary home. Surrounded by plants, flowers, pleasing pictures, and readable books, the bracing air and cheerful adjuncts ought to produce palpable effects upon the chronic sufferers, and materally aid in restoring them to health and vigour. The value of this auxiliary to the older hospital will be immense, as it cannot fail to add to the prestige which the latter institution has accumulated during a period of more than a century in the cause of humanity.

THE WORKHOUSE INQUIRY.

As a result of the recent inquiry by the Local Government Board concerning the difference between the guardians andtheir senior medical officer, I regret to say that the authority has called for the resignation of the medical officer. It is difficult for outsiders to appreciate the merits of a dispute upon matters of discipline in technical details. The senior medical officer has held his position for a number of years, and has worked with zeal; that this has not been tempered with discretion is the opinion of the higher powers, and, like many good officials, he must yield with as good a grace as possible to the force of circumstances which he cannot control.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

GATESHEAD DISPENSARY.

AT the annual meeting of the Gateshead Dispensary held recently, the resignation of Dr. Wm. Robinson was received and accepted with regret. Dr. Robinson, who has been appointed medical officer of health for the borough, has acted on the honorary staff of the dispensary for nearly thirty years. The Committee passed a hearty vote of thanks for his long and valuable services. It was mentioned in the report presented by Dr. Hardy at the same meeting, that the work of the year had compared favourably with that done in previous years. The number of patients under treatment at the date of the last report was 221. This, with 2912 admitted during the year, makes the total number of letter-patients treated 3133, as compared with 2815 in the previous year. The letter patients consist of 2620 home-patients and 513 out-patients. The number of casuals was 9841, this being made up of 290 accidents, teeth extractions, and 8898 medical cases. The casualty patients of the year before were 10,003, and notwithstanding that the twopenny system has been carried out during the whole year the number has been practically maintained. During two or three months of the year a severe epidemic of measles was experienced; this was also followed by a slight one of scarlet fever, but the dispensary patients had been entirely free from the more severe forms of zymotic disease. The Samaritan fund had been of great service, and was largely drawn upon. It may be mentioned that the charge of twopence for the casualty patients had yielde[d]

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over £74 to the funds of the dispensary without in any way diminishing the attendance of patients.

HARTLEPOOL.

At the late meeting of the Hartlepool Port Sanitary Authority it was stated that the plan for the new hospital had been conditionally approved by the Local Government Board. The Rev. H. E. Savage offered to provide trained nurses, beds, &c., for temporary cases of small-pox if the authority would furnish a suitable building. A committee was appointed to frame bye-laws to regulate the removal of cases occurring on shipboard to the hospital. The medical officer, Dr. Biggart, reported that there were now in the tents seven cases of small-pox and five of fever, also that the former disease was on the increase. There had been fourteen cases from Hartlepool during the month, and eight from West Hartlepool.

Newcastle-on-Tyne, March 24th.

PARIS.

(From our own Correspondent.)

THE LATE PROFESSOR CHARLES ROBIN.

IN the will of the late Professor Charles Robin, which has lately been published, I find the following paragraph. After giving instructions about his funeral, which he particularly desired should be civil, he says: "If I die at Paris, my autopsy should be performed, as soon as possible after death, by one of the prosectors or assistants of the Faculty, designated by the the dean. My brain and my eyes should be removed, to be studied comparatively, the right eye with the left, which was wounded in 1835 by a blow with a stick, in order that the origins and optic convolutions may be properly studied." On this extract, Dr. Fano, a well-known ophthalmologist, makes the following remarks in his "Journal d'Oculistique":—"Charles Robin having died in the last quarter of 1885, it would be fifty years since his left eye was wounded. During all that time the right eye was never in any way affected, and everyone knows the fatigue that this organ must have been subjected to in a *savant* who spent a great portion of his days in working with the microscope, as he was a professor of histology. What becomes of the theory of what is termed sympathetic ophthalmia in presence of such a fact? What should be thought of the doctrine professed by some ophthalmologists relating to the necessity of enucleating a wounded eye to prevent sympathetic ophthalmia of a healthy eye?"

M. PASTEUR.

M. Pasteur is being loaded with honours, as he has been decorated by nearly all the Sovereigns of Europe, for his remarkable discovery of the means of prevention of hydrophobia, and the King of Portugal has just sent him an autograph letter, conferring on him the Grand Cordon of the Order of St. Jacques, a decoration specially designed to recompense scientific merit. This letter was handed to M. Pasteur by Dr. Bournay, one of the doctors who arrived in Paris on the 2nd inst. with three children from Portugal, reported to have been bitten by a mad dog. The children are sent at the expense of the Queen, to undergo M. Pasteur's treatment. They were accompanied by relatives, and by Drs. d'Abreu and Bournay, the former of whom will remain in Paris to study at his own expense M. Pasteur's system of inoculations. The French Minister of the Interior sent to M. Pasteur's laboratory about three days ago two foreigners who had been sent from Rome—a police agent and a gaoler,—reported to have been bitten by mad dogs. Eight more Russians arrived on Sunday morning, accompanied by a doctor and a veterinary surgeon, who took them direct to M. Pasteur's laboratory. They were reported to have been bitten, some by a mad wolf and the others by mad dogs. They were all wounded in the face; and as they are in good health, M. Pasteur inoculated them at once. Another patient of the first Russian party of nineteen, already referred to, died at the Hôtel Dieu on Friday last with symptoms of hydrophobia. He was one of the patients who was so frightfully mutilated in the face, and one of the teeth of the rabid wolf was found broken in his jaw at the necropsy. I may here remark that the first patient who died became affected with rabies twenty days after having been bitten, and the one now under notice thirty-two days. The treatment was commenced a fortnight after they were bitten. The treatment of the other seventeen having terminated without any untoward circumstance, they were about to return to their native country, when, on second consideration, they have been detained in order to undergo another course of M. Pasteur's treatment. After a long debate at the Academy of Medicine at Rome, it was decided to send one of its members to Paris, at the expense of the Municipality, to study and follow M. Pasteur's anti-rabic treatment. It is reported that the German Government have also decided upon sending a mission to Paris to examine and report upon M. Pasteur's method. It is presumed that this mission will be confided to M. Virchow and M. Koch. In anticipation of some more convenient place being provided for M. Pasteur to carry out his method, the Municipal Council have placed at his disposal some wooden huts that had been erected for another purpose in the Rue Vauquelin, and which are now unoccupied. The *Official Journal* has just published the eighth and ninth lists of the subscription for the Pasteur Institute, which amounts to 495,462 francs.

Paris, April 6th.

MEDICAL NOTES IN PARLIAMENT.

Workhouse Dietary Tables.

IN the House of Lords, on the 2nd inst., Lord Sudeley, in reply to a question put by Viscount Barrington touching the death of an infant in Totnes Workhouse from overfeeding, stated that the General Consolidated Order issued by the Poor-law Commissioners provides that paupers shall be dieted with the food set forth in the dietary table prescribed for the use of the workhouse. The dietary table at Totnes directs that children under two years of age shall be dieted at discretion. The order also provides that the medical officer shall be consulted by the matron as to the nature of the food of the infants, and makes it his duty to give all necessary instructions as to the diet or treatment of children. The Local Government Board would cause further inquiries to be made at Totnes into this special case.

Lunacy Acts Amendment Bill.

On the 6th inst., on the report of amendments in the Lunacy Acts Amendment Bill, certain amendments were proposed by the Lord Chancellor, and after a conversation, in which Lord Halsbury and the Earl of Selborne took part, was agreed to. None of them affected the principle of the Bill, and some of them were merely verbal. Lord Milltown and Lord Hobhouse proposed amendments relating to private asylums, which were rejected, and the report was afterwards received.

The Idiots Bill.

This Bill passed through committee without amendment.

Contagious Diseases Acts Repeal (No. 2) Bill.

On the 2nd inst. the House of Commons went into Committee on this Bill, when Mr. Campbell-Bannerman stated that it was the intention of the Government to continue this year the contributions which had been made under the authority of the Acts to certain hospitals. The Bill then passed through Committee, and, having been reported without amendment to the House, was read a third time.

Medical Act (1858) Amendment Bill.

On the 5th inst., on the motion of Sir L. Playfair, leave was given to introduce a Bill to amend the Medical Act, 1858. The Bill was brought in and read a first time.

The Case of William Goslin.

On the 7th inst., in reply to Mr. W. James, Mr. Childers stated that, so far as he had been able to ascertain, the prisoner William Goslin complained to the medical officer on Monday, the 15th ult. The next day he was taken off the treadwheel. On the 17th he was ordered medicine and put to bed in his cell. On the 19th he was ordered into hospital, and he died on the 21st. The medical officer did not seem to have recognised sufficiently early that the case was one of pneumonia. He should order a most strict inquiry into the whole matter.

THE quinquennial census of the French population is to be taken on the 30th prox.

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ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT a quarterly meeting of the Council held on Thursday, April 8th, Mr. Bruce Clarke was awarded the Jacksonian Prize for 1885, the subject being "The Diagnosis and Treatment of such Affections of the Kidney as are amenable to direct Surgical Interference." The subject for the Prize for the present year is "The Pathology, Diagnosis, and Surgical Treatment of Diseases of the Thyroid Gland." It was resolved that the subject for 1887 be "On the Pathology, Diagnosis, and Treatment of Tumours of the Bladder." No dissertation was received for the Collegial Triennial Prize. It was resolved that the following be the subject of the next Collegial Triennial Prize—viz.: "On the Structure and Functions of the Ganglionic System of Nerves in Man, to be illustrated by reference to Comparative Anatomy."

Mr. Marshall brought forward the following motion, which was seconded by Sir J. Paget, and carried by a large majority:—

"That the Council have considered the resolution carried at the meeting of Fellows and Members held on Dec. 17th last, in reply to a communication from the Council bearing date the 16th of the previous month, which resolution is as follows:—'That the answer of the Council is not satisfactory, and that the Council be respectfully requested to reconsider the subjects: (1) Of the representation of Members of the College; and (2) of submitting for approval any alterations proposed to be made in the constitution or the relations of the College, or in any of its bye-laws, to a meeting of the Fellows and Members.' That the Council, in reply to this resolution, have to make the following statement:—

"1. As regards the subject of the 'representation of the Members of the College.' Whilst fully recognising the gravity of the question of the representation of Members of the College (presumably in or upon the Council), the desire of Members to be so represented, and the advantage of uniting in harmonious relationship all the constituent elements of the College, the Council still retain the opinion already expressed by them, 'that it is not desirable to diminish the privileges of the Fellowship by depriving Fellows of the exclusive rights of electing to the Council and of being eligible to become members thereof.' Entertaining this view, the Council are unwilling, and, indeed, unable consistently, to take proceedings for making any organic change in the constitution of the College which would impair the present status of the Fellows, by whom alone they have been elected to office as the governing body of the College. The two methods of widening the basis of the Fellowship, one by election and the other by examination, just agreed to by the Council, by means of which it is hoped that the acquisition of the Fellowship and its concomitant rights by Members of the College will be facilitated, involve no organic or constitutional change in the government of the College. The Council are quite aware, however, that these new proposals do not constitute a complete response to the desire of Members to a share of representation in or upon the Council. At the same time they would point out that no detailed plan, formulated by the two bodies mutually interested in the question—that is, the Fellows and the Members—by means of which a share of representation might be assigned to the latter, has yet been presented to the Council. The Council are quite prepared to give careful attention to any such jointly authorised plan approved by a majority of each body, and would found their decisions concerning it, not merely upon a consideration of the relative interests of the Fellows and Members, but also upon a due regard to the position and future welfare of the College. 2. That in reference to the other subject—viz., that of submitting questions to general meetings of Fellows and Members,—the Council have to reply that, whilst they still adhere to the opinion that it is unnecessary, and would as a rule be impracticable, to refer certain questions to the consideration of a general meeting of the Fellows and Members, they wish to state that, in accordance with their declared view, 'they would be glad to consult the Fellows and Members when larger questions arise, such as those which concern the constitution of the College,' and they would take care to report the conclusions at which they might arrive, in regard to any plan presented to them concerning the representation of Members, to a special meeting of Fellows and Members. The Council, however, could only regard such a meeting as consultative, and not as possessed of a direct power to veto or alter their decisions."

It was moved by Mr. Lund, and seconded by Mr. Macnamara: "That the Council do hereby rescind so much of the resolution passed at the meeting of the Council of the 12th of November, 1885, as relates to the non-desirability of Members participating in the election of Fellows as members of Council, and do substitute in the first paragraph of the said resolution the following words—viz.: 'That it is not desirable to diminish the privileges of the Fellowship by depriving Fellows of the exclusive right of being eligible to become members of the Council.'"

This motion was lost by 17 to 4.

Mr. Henry Cayley of Calcutta and Mr. George Yeoman Heath were elected Fellows of the College under Sec. 5 of the Charter relating to Members of fifteen years' standing.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their Primary Examination in Anatomy and Physiology at a meeting of the Board of Examiners on the 3rd inst., and when eligible will be admitted to the Pass Examination:—

J. L. Owen, Hugh Robert, G. H. Wilson, F. W. Vernon, G. A. O'Brien Reid, and W. P. Johnstone, Edinburgh University; R. C. Wakefield, Glasgow; J. J. Hanley, Dublin; W. W. Margemont, Ceylon Medical College; H. M. Holt, Yorkshire College, Leeds; H. B. Williams and F. Cant, Owens College, Manchester; G. A. Waring, Belfast; G. H. Douthwaite, Birmingham.

Passed in Anatomy only:—

Algernon J. Horton, Birmingham; A. H. Barstow, W. H. Thompson, and J. S. Vassalli, Yorkshire College, Leeds.

Passed in Physiology only:—

R. B. Morris, E. A. Humphreys, Thomas Boulton, and R. H. Read, Owens College, Manchester; J. T. Harty, Cork; G. J. Wontersz, Ceylon and Edinburgh University; G. F. Barber, Sheffield Medical School; W. H. Webster, Edinburgh; R. T. Wrightman, Sheffield Medical School.

Candidates referred for six months, 6; for three months, 15.

Passed on the 6th inst.:—

W. Twyford, J. E. Platt, H. Ramsden, S. F. Mawson, A. H. Marsh, W. Nuttall, A. E. Brindley, H. Langdale, T. A. Goodfellow, and H. C. Faulke, Owens College, Manchester; W. S. Lang, Edinburgh University; G. D. Freer, Birmingham; R. G. Sheldon, Liverpool; A. D. Tripp, Guy's Hospital; Frederick Barker, St. Thomas's Hospital; H. C. Fox and J. P. Smith, Middlesex Hospital; J. L. Firth, King's and University Colleges; O. M. Jones, London Hospital.

Passed in Anatomy only:—

C. Ridley Pigg and T. F. Clemson, Owens College, Manchester.

Passed in Physiology only:—

H. Vermaak and G. Saint Johnston, Birmingham; J. Robinson, Yorkshire College, Leeds; W. Hague, Owens College, Manchester; W. Jenner Best, London Hospital.

Candidates referred for six months, 7; for three months, 9.

SOCIETY OF APOTHECARIES.—The following gentlemen passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on the 1st inst.:—

Hodge, William Theodore, M.R.C.S., Middleton, Tamworth.
Hubbard, Daniel Lovett, The Grove, Clapham-road.
Nevins, John Ernest, Abercromble-square, Liverpool.
Rake, Herbert Vaughan, Fordingbridge, Salisbury.
Wheatley, James, Edgerton, Huddersfield.

AT the monthly meeting of the Association of Public Sanitary Inspectors on the 5th inst. Dr. Alfred Carpenter delivered a lecture on Sanitary Legislation.

ON the 4th inst. a church parade of the various temperance orders having lodges in South London was held on behalf of the London Temperance Hospital.

MURCHISON SCHOLARSHIP EXAMINATION.—We are asked to state that application for admission to this examination will be received up to the 11th inst., as originally advertised.

AT a conference on sanitation, on the 6th inst., in connexion with the Architectural and Building Trades' Exhibition now being held at the Agricultural Hall, Mr. R. K. Burton read a paper on Drain Testing, and Mr. Howard Smith delivered an address on Sanitation. A discussion followed.

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THE RIVER LIFFEY.—At a meeting of the Dublin Corporation this week a sum of £200 was voted for cleansing the foreshore of the river Liffey.

ON the 1st inst., Dr. Louis Parkes delivered a lecture at the Parkes Museum on London Vestries and the Administration of Sanitary Law in the Metropolis. The address was followed by a discussion, in which Mr. Shirley Murphy, Mr. Mark Judge, and others took part.

VACCINATION GRANT.—Dr. Yarrow, public vaccinator for the St. Luke's division of the Holborn Union, has been awarded the Government grant for efficient vaccination for the third time.

AT Gillingham, on the 4th inst., a child aged nine years was in the act of inflating a toy balloon, when, suddenly trying to reverse the operation by sucking the air back, the toy was drawn down the child's throat, causing suffocation. A similar case is reported to have occurred in the same neighbourhood within the past month.

ALLEGED DEATH FROM SEA-SICKNESS.—Early this week an elderly female named Watson, a steerage passenger from Fleetwood to Belfast, was taken ill during the voyage, and when she reached the latter place she was found to be unconscious. She was removed to the Royal Hospital, but she died the same day.

BIRMINGHAM MEDICAL INSTITUTE.—The officers of the institute elected at the recent annual meeting are Professor Vose Solomon, President; Dr. Thomas Savage and Mr. C. A. Newnham, Vice-Presidents; Dr. Robert Saundby and Mr. Bennett May, Hon. Librarians; Mr. Gilbert Barling and Mr. Wood White, Hon. Secretaries.

ABERDEEN HOSPITAL FOR INCURABLES.—The annual meeting of the managers of and subscribers to this institution was held on the 1st inst., when the report showed that the average number of patients during the past year had been 38. The ordinary expenditure amounted to £1000, and the income, excluding legacies, to £751. The cost of the new buildings has exceeded the amount received for the old premises by nearly £3000. The committee appeal for fresh and increased subscriptions.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—A statue of Mr. William Dease, who was President in 1789 and died in 1798, will in a few weeks be erected in the entrance hall of this College. The statue, which is life size, has been executed in Carrara marble by Mr. Thomas Farrell, R.H.A., the eminent sculptor, and represents the deceased surgeon in the costume of the time in which he lived. He is seated in a chair holding in one hand a volume of his writings. The pedestal is already in position in the hall, and is formed of Sicilian marble. We may add that the cost of the statue has been defrayed by a grandson of Mr. Dease.

YORKSHIRE NORTH RIDING INFIRMARY.—The annual court of governors of this institution was held at Middlesborough on the 1st inst., when the committee reported that the number of patients admitted during the past year was 545, against 494 in 1884, the opening of the children's ward in November accounting for a portion of the excess. The number of out-patients again showed a very decided increase—viz., from 1419 in 1884, making 9034 attendances, to 1811 in 1885, with 13,863 attendances. The subscriptions and donations amounted to £2914 and the expenditure to £2930. The report and balance sheet having been adopted an illuminated address was presented to Dr. Williams, one of the hon. medical staff of the institution, in recognition of his valuable services during the past 15 years.

THE LATE DR. BRONNER.—On the 6th inst., at a well attended meeting held at Bradford, it was resolved:—"That this meeting desires in some public manner to express its sense of the eminent services of the late Dr. Bronner in connexion with the medical institutions of the town, and especially the Eye and Ear Hospital, which he was instrumental in establishing; and to which he gave his untiring attention to the day of his death; that a subscription list be opened, with the view, in the first instance, of raising funds to clear off the debt on the building of the above-named hospital, and, in the next place, of founding a laboratory for scientific purposes in connexion with the hospital, this meeting feeling assured that the late Doctor had these objects nearest his heart." A committee was appointed to give effect to this resolution, and a sum of upwards of £1000 was subscribed in the room.

HEALTH OF BELFAST.—During the five weeks ending the 27th ult. there were 335 fatal cases of diseases of the lungs, a number equal to a rate of 14·4 per 1000. This excessive mortality may be mainly attributed to the inclemency of the weather during the month of March.

INSTITUTE OF ACTUARIES.—At a meeting held at the rooms of the institute, Adelphi-terrace, on the 29th ult., Mr. James Chisholm, F.I.A., read a paper criticising the method in use by Life Assurance Companies of adding a number of years to the age of a person proposing to assure his life, to compensate for supposed extra risk due to impaired health or imperfect family history. Mr. Chisholm contended that the method in question was based on an incorrect theory, and was moreover misleading in practice. He made suggestions, illustrated by a diagram, for obtaining the opinion of medical examiners in a more accurate way, and expressed the opinion that it was very desirable that assurance companies should adopt as far as possible one common form of medical report. Several members of the medical profession were present, some of whom took part in the discussion which followed the reading of the paper.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ANDERSON, JOHN, M.B., C.M.Aber., has been appointed Medical Assistant at Elmhill House Asylum, Aberdeen, vice Sinclair, resigned.

BEVERS, E. A., M.R.C.S., L.S.A.Lond., has been appointed Consulting Dental Surgeon to the Radcliffe Infirmary, Oxford.

COMBES, REGINALD H., M.R.C.S., L.R.C.P.Lond., has been appointed Resident Medical Officer to the North-West London Hospital.

HALLIBURTON, W. D., M.D., B.Sc., M.R.C.P., Sharpey Physiological Scholar, has been appointed Assistant Professor of Physiology to University College, London.

HUTTON, HENRY R., M.A., M.B.Cantab., has been appointed Honorary Physician to the Ancoats Hospital, Manchester.

KUTTLITZ, REGINALD, M.R.C.S., has been appointed Medical Officer and Public Vaccinator for the Hamsterly District of the Auckland Union.

PERKINS, H. A., M.D.Ed., M.R.C.S., has been appointed President of the Central Board of Health of Tasmania.

Births, Marriages, and Deaths.

BIRTHS.

ANDERSON.—On the 6th inst., at 105, Gloucester-place, Portman-square, the wife of John Anderson, M.D., C.I.E., Brigade-Surgeon, retired, of a daughter.

COTTELL.—On the 30th ult., at Old Brompton, Kent, the wife of Surgeon A. Cottell, Medical Staff, of a daughter.

EVANS.—On the 24th ult., at 21, Charles-street, Cardiff, the wife of Dr. Frederick William Evans, of a son.

MARRIAGES.

DAVIDSON—HENDERSON.—On the 6th inst., at St. Augustine's, Forest-hill, James McKenzie Davidson, M.B., C.M., of Aberdeen, to Georgiana Barbara Watt, daughter of the late W. Henderson, of Aberdeen.

GROOM—CHAPMAN.—On the 6th inst., at Brussels, Harry Groom, M.B., M.R.C.S., L.S.A.Lond., B.A., of Wisbeach, to Rebecca (Minnie), third daughter of William Chapman, Esq., of Antwerp.

MARSH—HOOPER.—On the 30th ult., at Holy Trinity Church, Clapham, Frank Marsh, F.R.C.S.Eng., of Grasmere, Rolton-park-road, Edgbaston, late of Stafford, to Annie Constance, youngest daughter of the late William Hooper, of Beechwood, Clapham-common.

DEATHS.

MANLEY.—On the 5th inst., at Ipplepen, Devon, Henry Manley, M.R.C.S., L.A.C., aged 58.

PETT.—On the 3rd inst., at his residence, Avenue-road, Regent's-park, Alfred Pett, M.D., in his 82nd year.

RAWLINS.—On the 2nd inst., Frederick William Armstrong Rawlins, M.D., late of Stoke Newington, aged 59.

RICHARDS.—On the 1st inst., Owen Richards, M.D, of Vronheulog, Llandderfel, formerly of Bala, aged 73.

SKEEN.—On the 2nd inst., at Westfield-terrace, Aberdeen, Deputy Surgeon-General William Skeen, M.D., Army Medical Staff, aged 53.

THOMSON.—On the 28th ult., at Aldershot, Surgeon-Major A. Thomson, M.D., Army Medical Staff, aged 45.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

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Medical Diary for the ensuing Week.

Monday, April 12.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
SOCIETY OF ARTS.—8 P.M. Mr. Alan S. Cole: The Arts of Tapestry-making and Embroidery (Cantor Lecture).
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Clinical Evening. Cases will be shown by the President, Dr. Ord, Dr. Stephen Mackenzie, Dr. Purcell, Mr. John Morgan, and others.

Tuesday, April 13.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Arthur Gamgee: The Function of Circulation.
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Mr. W. H. Stone: Man as an Electric Conductor, Condenser, and Electrolyte (Lumleian Lecture).
SOCIETY OF ARTS.—8 P.M. Mr. P. L. Simmonds: Progress of the British Possessions in the last Quarter of a Century.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Mr. Sedgwick: The Chemical Pathology of Respiration in Cholera.—Mr. Knowsley Thornton: Two cases of Splenectomy.

Wednesday, April 14.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.
HUNTERIAN SOCIETY.—8 P.M. Mr. Bryant: Cystic Tumours of the Breast.
EPIDEMIOLOGICAL SOCIETY OF LONDON.—8 P.M. Dr James Cameron: Observations on a Certain Malady occurring among Cows at a time when the Milk produced by them disseminated Scarlatina.—Dr. Buchanan: Certain Alleged Injuries by Vaccination in North Germany.
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Mr. G. Massee: Structure and Evolution of the Florideæ.
SOCIETY OF ARTS.—8 P.M. Dr. C. Meymott Tidy: The Treatment of Sewage.
BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens will be shown by Drs. Greig Smith, George Miller, and others.—Dr. Robert Barnes: Vicarious Menstruation.

Thursday, April 15.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Dewar: Electro-Chemistry.
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Dr. W. H. Stone: Man as an Electric Conductor, Condenser, and Electrolyte (Lumleian Lecture).
PARKES MUSEUM OF HYGIENE.—8 P.M. Rev. F. Lawrence: Eramscausis, Sanitary Burials.
HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Clinical Evening. Dr. Broadbent: Case of Bulbar Paralysis.—Dr. Stephen Mackenzie: An Unusual case of Pemphigus.—Mr. A. J. Pepper: A case of Excision of the Knee-joint.—Mr. Winslow Hall: Specimen of Congenital Malformation of the Heart.—Also cases by Mr. Jonathan Hutchinson, Dr. Hughlings Jackson, Mr. H. E. Juler, and Mr. Noble Smith.

Friday, April 16.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
SOCIETY OF MEDICAL OFFICERS OF HEALTH.—7.30 P.M. Prof. Bischof: Dr. Koch's Gelatine-Peptone Test for Water.
ROYAL INSTITUTION OF GREAT BRITAIN.—9 P.M. Prof. Sir Henry E. Roscoe: Recent Progress in the Coal Tar Industries.

Saturday, April 17.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Oliver Lodge: Fuel and Smoke.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, April 8th, 1886.

Date.		Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radiation Vacuo.	Max. Temp. Shade	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Apr.	2	29·83	S.W.	56	51	100	62	41	...	Cloudy
,,	3	29·88	W.	49	47	91	56	47	·17	Cloudy
,,	4	29·93	S.W.	49	47	64	58	44	...	Cloudy
,,	5	29·94	W.	49	46	96	61	45	...	Overcast
,,	6	29·69	W.	52	49	100	57	48	·03	Cloudy
,,	7	30·01	W.	45	42	72	52	39	...	Cloudy
,,	8	29·27	W.	51	48	85	52	43	·19	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

LUNACY LAW REFORM.

A. H. B.—We must adhere to the expressed opinion that it is very undesirable that medical practitioners should derive profit from lodging the insane in their houses; and to the view that single patients are not, as a rule, well placed. It is no part of our contention that the treatment of lunacy must be carried on by specialists. Our readers generally will not fail to know that we claim for the profession as a whole the right to practise every branch of the art of healing. The opinions we have formed on this subject are based on observation and experience, and we must be excused for feeling strongly, and saying plainly, that when the subjects of mental disease are removed from the immediate care of their friends, it is better that they should be placed in the custody of public officials responsible to the State, and who derive no pecuniary advantage from receiving the individuals under their care.

Festina.—The question can hardly be answered without having read the tracts; but we do not see anything to object to in the advertisement itself.

Mr. E. Bingham.—The lists are published in THE LANCET weekly.

THE LIBRARY OF THE ROYAL COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—There is really no excuse for the discourtesy which is shown the Fellows and Members of the College of Surgeons who use the library of that institution by some official persistently neglecting to forward to the medical journals intimation of the times when the library will be closed. There has been no mention of the date of the expected opening of the building upon the Embankment, consequently there is still, it is presumable, plenty of time to take happy "constitutionals" to the library of the College of Surgeons, fruitless though they may be, in regard to the object for which they are undertaken. But the sooner the Hall is opened the better, for then the classic walls of the College Hall will cease to re-echo whispered epithets of doubtful politeness let loose by disappointed workers.

I am, Sir, yours truly,

Finsbury-circus, E.C., March 20th, 1886. H. PERCY DUNN.

PRINCELY BEQUESTS.

To the Editor of THE LANCET.

SIR,—Many of the readers of THE LANCET will be glad to hear that the late Mr. John Smith, a much esteemed medical practitioner of Bishop's Lydeard, Somerset, has by will given to the Taunton and Somerset Hospital the sum of £1000, payable on the decease of his wife. In addition to this sum, the same gentleman has bequeathed to the Royal Medical Benevolent College at Epsom (after the decease of his wife) a sum of money not far short of £10,000.

I am, Sir, your obedient servant,

Taunton, April 4th, 1886. ARTHUR KINGLAKE, J.P.

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A DESCRIPTIVE TITLE FOR A PHARMACIST.

SOME misunderstanding exists amongst the public as to the signification of "chemist" and "apothecary." A suggestion has been made by a German, who objects to the word "apotheker" as of foreign origin, that the Teutonic pharmacist should be styled "Gesundheitswieder-herstellungsmittelzusammenmischungskundiger."

Alpha.—A fee cannot be claimed.

WARLOMONT'S MANUAL OF ANIMAL VACCINATION.

To the Editor of THE LANCET.

SIR,—Being away from home, I have only just observed in THE LANCET of Feb. 13th and 20th the notice of this Manual which you were good enough to insert, and Dr. Harries' reply to some points in that notice.

I respect the rights of criticism, especially when, as in your esteemed journal, reply is permitted. Here is mine. Your reviewer is disappointed at not having found "more exact evidence.....calf vaccine." He is exacting; the author has fully described the principles of the processes hitherto used by him. As to the comparative value of his preparations, it is the medical world that must decide; it, at least, cannot be unaware of the considerable use made of them in the United Kingdom and in the colonies, and nothing could speak more eloquently. As to statistics, Dr. Harries has already shown with what facility they may be distorted. I have stated, and I repeat, that *living* vaccine, human or animal, is always more certain, so far as concerns its *immediate manifestations*, than *preserved vaccine*. Only, as vaccination from arm to arm is mistrusted by most people, and as that from calf to arm is as yet uncommon in general practice, it was necessary to find a preparation which should most nearly approach that certainty, and that is what I have attempted. The favour with which my "emulsion" has been received proves that I have not come far short of the ideal. As to the question of learning whether human lymph can bear comparison with this last in the matter of carriage to great distances, I believe that to be finally determined. It is only *very exceptionally* that human vaccine reaches remote regions in a state of activity, whilst the applications that I am constantly receiving from the Congo prove that my "emulsion," as a rule, arrives there in a state of complete activity.

Whatever may be the merit of my little work, your reviewer recognises none. That is not much! "There is little," he says, "scientific work." What does this prove, if it be not that the reviewer of THE LANCET, presumably well read in the specialty, and knowing my original treatise, has found nothing new in the Manual, which is but a condensed extract of the former? But could it be otherwise? And is it necessary that a book be stripped of all scientific interest, for those desiring to be placed *au courant* of a question, because it is only an extract, at least if the original work be not itself devoid of all scientific merit? Allow me to quote to you on this head the opinion of a man who is scarcely a novice in the subject: "That is," says M. Pasteur, "what I have just done with your book.....of such great general and scientific interest."

I am, Sir, yours truly,

P. WARLOMONT,
President of the Royal Academy of Medicine of Belgium.

San Remo, March 29th, 1886.

"CAN A HERNIA DISAPPEAR IN A FEW WEEKS?"

To the Editor of THE LANCET.

SIR,—The above is the title of an annotation in THE LANCET of Feb. 20th (p. 363). I am able to answer the question in the affirmative. A slowly on-coming hernia is by no means so likely to disappear, or be cured, as the one Dr. Velleman of Brussels saw; but I will vouch for the following. I copy from my note-books:—"July 27th, 1879, John D——, aged two years, was brought to me on account of a left oblique inguinal hernia. At the top of the right scrotal sac, just over the spermatic cord, is a congenital nævus, quite circular, one-eighth of an inch high and three-fourths of an inch in diameter. There is atrophy of the right testis, and hypertrophy of the left, with thickening of its cord. There is slight tenderness of the left testis. The hernia is a small one, not quite as large as a pigeon's egg, and comes only just outside the external ring. It was first noticed four weeks ago. Applied a truss." The child was brought to me next on Aug. 18th, when I noted the following:—"The tenderness of the left testis has disappeared, and the gland is softer. The truss-pad had caused some irritation of the skin, with a little inflammatory action beneath, and the hernia has completely disappeared. Making the child cry, crowding down the intestines by pressure on the abdomen, and bending his body backwards failed to force down any intestine or omentum. A weaker truss was advised to be kept applied for some time longer as a precaution." In this case the hernia disappeared in three weeks.—I am, Sir, yours truly,

P. O'CONNELL, M.D., M.Ch., Queen's Univ., Ireland.

Chicago, Ills., U.S.A., March 6th, 1886.

DRY DRESSINGS FOR INTERNAL CAVITIES.

To the Editor of THE LANCET.

SIR,—Since the publication in THE LANCET of my paper on the above subject I have had numerous correspondences from brother practitioners and chemists as to where to procure and how to make the vaginal suppositories referred to. Would you kindly allow me to state that specimens may be procured and all particulars obtained from Messrs. Clare and Hunt, chemists, Scarborough.—I am, Sir, yours truly,

Scarborough, April, 1886. CHAS. F. HUTCHINSON, M.D.

CIVILISATION AND THE SIZE OF THE HUMAN CRANIUM.

IN the course of a paper recently read before the Grant College Medical Society at Bombay by Surgeon D. N. Parakh, I.M.D., in which an account was given of the midwifery work done in the only obstetric hospital in Bombay for native women, the author remarked that from measurement soon after birth of the transverse, fronto-mental, and the antero-posterior diameter of the heads of native children the conclusion was that the greatest measurements were in the following order as to race: (1) European; (2) Persian or Iranee Parsee—i.e., a modern Persian professing the old Zoroastrian religion, and just arrived from Persia; (3) Parsee; (4) Goanese; (5) Mahommedans, Hindoos, and native Christians. From what he had seen in practice, his impression was that owing to the increasing civilisation of the masses in India the human cranium is gradually increasing in size, the pelves of women unfortunately not undergoing a corresponding increase in capacity. This is particularly the case among the Parsees, who have, under the British rule, suddenly emerged from a semi-barbarous life into a life of great mental activity, the males (even now) being about a generation or two ahead of the women in that respect. Hence British rule, whilst it has improved the head and heart and purse of the coming Parsee race, has entailed greater suffering on the parturient woman. In saying so, Mr. Parakh was not, he stated, unmindful of other evils of civilisation which make parturition difficult. The average weight of the children at birth was 5·85 lb. The maximum was 8·75 lb. The minimum 3·75 lb. The heaviest children were in precisely the same order as to race as mentioned above in the case of head measurements.

Professor Buchanan (Glasgow).—Yes, in an early number.

THE LUNACY LAWS.

To the Editor of THE LANCET.

SIR,—I feel it my duty to report the experiences I have lately had in certifying as to the mental condition of a supposed lunatic; believing it will afford assistance to many, and draw attention to a serious defect in our lunacy laws and expose a grave injustice, both to medical men and to those whom they may be called upon to examine; as a premium obviously is being offered on their being able to establish the insanity of the person.

Last November, late one evening, the relieving officer of the Brentford Union called on me, bringing a printed official order, signed by the chairman of the Brentford magistracy, commanding me to visit a very poor young girl in the neighbourhood who had been reported to him as being insane by the Poor-law official. I was also directed to send in writing by that night's post the opinion I had formed respecting her condition. I reported that although the girl exhibited many suspicious symptoms, yet I hardly felt able to certify her as being insane; but I would advise her admission into the workhouse infirmary, where she might be watched. The relieving officer, however, informed me that as she was a suspicious mental case she could not be admitted, there being no accommodation there for such patients. Accompanying my report was an application from myself for a fee of 21*s.*, to which I received no reply. I applied again with the same result. Then I wrote to Mr. Glossop, the magistrate who had signed the order, and from him I received a most kind and courteous letter, assuring me that the matter should be immediately looked into by him. In a few days he wrote again to say that he had written to the clerk of the magistrates, and he had replied that the guardians had refused to acknowledge their responsibility, and the Local Government Board and the Lunacy Commissioners had also denied assistance. Unfortunately just at this moment Mr. Glossop died; but had he lived I feel sure he would have left no stone unturned until my fee had been paid to me. Mr. Hastings Draper, solicitor, of 83, Vincent-square, kindly now took the matter up, and on last Saturday week he made an application at Brentford before the magistrate on my behalf. But the decision was given against me, the magistrates refusing to acknowledge their responsibility, and also acquitting the guardians from theirs. I was, however, directed to write to the clerk of the county board, but he referred me to Scotland-yard, and there the matter rests at present, the reply that I shall probably next receive from that quarter being quite as unsatisfactory as the others. The magistrates refused my application on the ground that although the relieving officer had applied to them for assistance, and the girl, although not in actual receipt of Poor-law relief, was nevertheless virtually a pauper, the guardians could not be made responsible, because she was not on the books as a pauper; and also for the astounding reason that I was unable to establish her insanity. Therefore it would appear that if she had been a pauper and not lunatic, or if she had been a lunatic and not a pauper, or if she had been a lunatic possessed of property and at large, or if she had possessed means and I had failed to establish her insanity, I had no claim on the magistrates or guardians, even though I had been in each instance ordered by the magistrates to attend. I think I need add little to what I have written in order to show what a great injustice exists both towards the medical practitioner and the unfortunate individuals he may be called upon to examine, but I do not believe you will deem that I have trespassed unnecessarily on your space in endeavouring to urge that immediate steps should be taken to rectify so great an evil.

I am, Sir, your obedient servant,

Ealing-common, April 5th, 1886. W. C. STEELE.

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MICRO-ORGANISM OF CARCINOMA.

To the Editor of THE LANCET.

SIR,—On Saturday last I received from Dr. Andrew of Shrewsbury a breast containing a hard lump, which on section proved to be a typical scirrhus." As the specimen was quite fresh, and had not been in any kind of hardening fluid, or, indeed, been cut into or examined in any way, I thought it a good opportunity for ascertaining the presence or absence of micro-organisms. I therefore dried the surface of the growth with filter paper, and made a cut through the centre of the tumour with a clean knife. I then scraped the cut surface, and moistened a series of cover glasses with the "cancer juice." The films, being dried, were stained with gentian violet, methyl blue, &c. At first I was not able to see any organisms, though the large nucleated cells of the alveoli were deeply stained. But in one or two preparations which had been longer in the staining fluid I was surprised to find the field entirely covered with enormous numbers of micrococci. They were but faintly coloured, yet were distinctly visible with a $\frac{1}{12}$th immersion objective. "Juice" from various parts of the tumour was examined, with the same result. Sections were then cut with the freezing microtome, and stained, with a view to demonstrate the distribution of the micrococci in the tissue elements. But though many dyes were used, and the sections, in some attempts, left many hours in the fluids, the micro-organisms were in most cases not stained at all; so that in one or two only, with very careful illumination, could the organisms be seen. From what was then made out, they seemed to abound chiefly in the spaces between the cells of the alveoli. They were also seen within the protoplasm of the cells. The fibres of the connective tissue were in places covered with them. They were much fewer in number beyond the growing margin of the tumour.

I am hoping that these observations will lead to the examination of many more carcinomata, and that a stain may be found which will colour these micrococci with certainty, even when *in situ* in thin sections of the morbid growth. I am, Sir, yours faithfully,

Iron Bridge, March 29th, 1886. LAW WEBB.

Ignoramus.—The term is one not recognised in medicine, and is probably intended to denote the peculiar tint of the expectoration.

HOSPITAL NURSES.

To the Editor of THE LANCET.

SIR,—I wish to appeal to you on behalf of the health of hospital nurses. Many nurses break down, and their health is permanently undermined, by their being kept on duty until they are laid up by serious illness, which illness might be prevented, or rendered much less serious, by a little relief from duty and proper medical treatment in the early stages. In most hospitals the matron has the entire control of the nurses; she engages and discharges them, and they are not allowed to speak to one of the medical officers without first obtaining her permission. Consequently, a nurse will never complain to the matron of not being well until she is really seriously ill, for fear the matron might think she was either shirking work or not strong enough for her duties, and so discharge her at once. A frequent cause of ill health is unsuitable and insufficient food, with too little time to take it. For example, at one of the smaller but most popular metropolitan hospitals breakfast, consisting of tea and bread-and-butter only, is served at 6.30 A.M., and only a quarter of an hour is allowed to take it. After this somewhat scanty and hurried meal, the nurse has to be on duty in the wards for five hours and a quarter before she gets her dinner. Cannot something be done to improve this? The patients have their medical officers and the house visitor to supervise the supplying of their wants, and to whom they can appeal. Could not the same excellent supervision be extended to the nurses' home? Apologising for troubling you,

I am, Sir, yours faithfully,

A WHILOM HOSPITAL NURSE.

Hednesford, Staffordshire, April 6th, 1886.

Mr. C. Hammond.—Clinical Lectures by Pridgin Teale and Clifford Allbutt. J. & A. Churchill, 1885.

COLOUR-BLINDNESS AMONG MEDICAL MEN; "ANOSPHRESIA"; PARTIAL ANOSMIA AND HYPHROSMIA.

To the Editor of THE LANCET.

SIR,—I am indebted to Mr. St. Clair Buxton for his reply to my inquiry. I, of course, purposely avoided the question of any means of diagnosis other than vision. Truly enough, not all of us get called as witnesses as to fact; but medical practitioners are, I think, more liable to be called than the average run of men. It would seem advisable for all persons, particularly medical men, to have their vision tested for colour, and, if defective, to keep a detailed record of the facts. That might be useful, among other things, for a determination of the amount of change, if any, occurring with the lapse of years. I am greatly interested in Dr. Nicholas' "anosphresia." I think that there is no doubt about its existence, and I shall look forward with pleasure to the expression of any opinions with which Dr. Stevenson may favour us. Certainly, a partial anosmia—which I take to mean complete inability to smell one or a few odours—exists, as does a partial hyperosmia, an exceedingly acute power of smell for one or several odours, the powers of smell for all other odours being an average or "normal" one. This is one of the topics I have discussed in my little work mainly on "olfactics," which is now in the press.—I am, Sir, yours faithfully,

CHAS. H. PIESSE, M.R.C.S., F.I.C.,

Strand, W.C., April 1st, 1886. Public Analyst.

A SEA-VOYAGE AND AUSTRALIA FOR PHTHISIS.

To the Editor of THE LANCET.

SIR,—For the benefit of the profession generally, and particularly for those medical men who are so fond of sending away their phthisical patients to Australia as a last resort, a few suggestions may not be out of place.

I have just arrived, having come out in a ship in which, without exaggeration, there were quite 85 per cent. of invalids among the passengers, and those chiefly consumptive. From my own observations, I noticed that those in the first stage invariably recover, and if the journey does not cure them, a subsequent residence in Australia usually does. Those in the second stage sometimes benefit by the voyage, or, on the other hand, may go back; whilst those in the third stage nearly always succumb—I believe it is very rarely that they recover. Now, it is particularly respecting this last class that I venture to address you. As recovery is so rare, does it not seem a great shame to take these patients away from a good home with all its attendant comforts and kind friends to rough it by themselves at sea? And, I assure you, there is a very great deal to put up with, though it would be occupying too much of your valuable space to go into details. Then I would earnestly recommend the medical men in England to give it their utmost consideration before deciding to send a patient away in this stage. I do not think I am alone in these opinions. I believe they will be fully endorsed by those who have been to sea under similar circumstances. And now, as to the time of the year a patient should be sent out. Really, that does not matter; as soon as it is found that a patient is ill with phthisis, the sooner he sets out the better. At no time is the winter here so severe as at home, and in this neighbourhood it is particularly genial. The nights and mornings are frosty, but the days warm. The air is invariably very dry. In the summer, however, it is very hot, and a somewhat mountainous district should be chosen. Most of the Melbourne practitioners send their patients in the winter to Sandhurst, Echuca, or the Riverina.

Hoping these few remarks may be of some little use to medical men in England, Believe me, Sir, yours faithfully,

Sandhurst, Victoria. M.R.C.S.

THE COMMISSION ON HYDROPHOBIA.

To the Editor of THE LANCET.

SIR,—I am sorry to trespass on your limited space; but I quite agree with your correspondent, Mr. Moore, M.R.C.V.S. (p. 670), and cannot imagine why the name of the eminent veterinary surgeon, Mr. G. Fleming, should not have been placed on that Commission, or his name even mooted in connexion with it, which appears so conspicuous by its absence. Is it still in its embryonic state, or has a committee been formed, and an order promulgated to that effect, composed of those members of the profession whose names appeared a short time ago? If such is the case, I cannot but think a grave error has been committed by those responsible for such a board concerning the valuable information that might have accrued from such an authority on rabies canina. The very backbone or information we require lies here, and yet they do not place a representative of that profession on the list. For the sake o suffering humanity and the feelings of those medical men who have the misfortune to be brought into contact with that terrible malady, I think it but fair that every available source should be seized, and such would be greatly enhanced by placing Mr. Fleming on the list, by virtue of his position, and by so nobly heading that profession to which he belongs.

I have the honour to be, Sir, your obedient servant,

City London Infirmary, E., April, 1886. W. GEM.

L.R.C.P. — Parkes' Hygiene, Ganot's Physics, Baldwin-Latham's Sanitary Engineering, and the Public Health Acts. A practical knowledge of chemistry and microscopical analysis of water is required, as well as of the manner in which a sanitary report should be written.

A QUESTIONABLE TREAT.

To the Editor of THE LANCET.

SIR,—On the occasion of the Oxford and Cambridge Boat Race on Saturday last two friends and I, by virtue of cards of invitation from the local authority, were admitted to the (sewage) pumping station at Corney, Chiswick to view the race, where we stayed some two hours. But during the whole time a most sickening odour prevailed. Was the authority justified in converting such a spot, with its tainted atmosphere, into a pleasure resort? There were hundreds of men, women, and children present. The works may satisfy the Thames conservators; but was not the purpose that it was put to on Saturday last liable to be injurious to health? I am, Sir, your obedient servant,

April 7th, 1886. W. W.

RINGWORM IN A NEW-BORN INFANT.

To the Editor of THE LANCET.

SIR,—A lady who for some time past has had a dread of ringworm appearing in any of her children was delivered about a month ago of a female child, which was found to have several spots of ringworm on its body and one on the scalp. These have gone on increasing, and now rather an extensive surface of the back is covered with the rings. Is it not unusual for this affection to appear in a child of that age? I should like some of your readers to say what treatment they would recommend under the circumstances (age of child and extent of surface affected).

I am, Sir, yours truly,

March 30th, 188 SURGEON.

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AN UNUSUAL CASE OF CONGENITAL MALFORMATION.

To the Editor of THE LANCET.

SIR,—Perhaps you may consider the following case of sufficient interest to find a place in your columns.

On Jan. 28th I was summoned to the house of Mrs. P——, who gave birth to her eighth child at 1 P.M. on the previous day. The midwife in attendance complained that the child was sick each time it took milk-and-water, but that the food did not appear to reach the stomach. On examination, I found the child (a girl) healthy looking and well developed, and the mouth and fauces normal. Meconium and urine had passed several times. I left, promising to return in the evening, ordering a little weak milk-and-water to be administered at intervals during my absence. Hearing on my return that nothing had been retained in the child's stomach, I ordered some nourishment to be administered in my presence, so that I might watch the result. A few spoonfuls were taken, but the liquid was quickly returned unaltered. Thinking there must be some obstruction in the œsophagus, I explored this region with a No. 8 French coudée catheter, but the instrument was arrested at a point on a level with the upper border of the sternum. I tried one or two smaller sizes, with the same result, and came to the conclusion that the œsophagus was impervious at the point named. The child, after becoming very much emaciated, died at 2 A.M. on Feb. 2nd, the ejection of nourishment continuing until death. I think, apart from the abnormal condition of the œsophagus, the case is of some interest on account of the time the child existed without food, the character of the motions, which were passed daily until the day before death, indicating that nothing in the shape of milk had entered the stomach. I regret that the parents would not allow a post-mortem examination to be made.

I am, Sir, yours faithfully,

GEORGE HERBERT SALTER, M.R.C.S., &c.

Gisborne, Victoria, Australia, Feb. 2nd, 1886.

Mr. W. Wallace had better apply at the Office of the Crown Agents for the Colonies, Downing-street, S.W.

CASE OF DISTENDED BLADDER WITHOUT SYMPTOMS.

To the Editor of THE LANCET.

SIR,—The following case may perhaps be deemed worthy of record in your columns.

The Rev. M——, aged seventy, was first seen in September, 1885, for eczema. I discovered on examining his abdomen an oval tumour, which reached up to the umbilicus. This continued increasing in size until the middle of March, 1886, when I again saw him. The tumour had now grown above the umbilicus, and there was a slight bulging of it towards the left. He did not pass urine more than twice or thrice a day, and only once during the night, "to break the monotony," as he said. His urine was free from mucus or pus. Whilst under the influence of chloroform, Mr. F. Treves drew off three pints and twelve ounces of perfectly healthy urine, the tumour entirely disappearing. An examination per rectum revealed a large middle lobe of the prostate, and some enlargement of the right lobe.

I venture to bring this case forward in a very brief manner to demonstrate the occurrence of a bladder distended with nearly four pints of urine, and not causing any symptoms which gave rise to a suspicion of its presence.

I am, Sir, yours faithfully,

Princes-street, W., April, 1886. T. ROBINSON.

"APOPLEXY WITH COMPLETE HEMIPLEGIA."

To the Editor of THE LANCET.

SIR,—With reference to his most interesting case of hemiplegia in a patient aged twenty-five, which appeared in THE LANCET of March 20th, p. 568, Dr. Fraser asks, "Is it sanguineous or serous effusion or hysteria?" I should say neither, but probably embolism. It would be interesting to know if the anæmic (?) murmur still exists.—Yours faithfully,

Pill, Somerset, April 2nd, 1886. A. H. BOYS.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Murphy, Sunderland; Surg.-Major Staples, Gibraltar; Dr. Armstrong, Newcastle-on-Tyne; Dr. Allchin, London; Mr. Boys, Pill; Prof. Burdon Sanderson, Oxford; Mr. Southam, Manchester; Mr. Mayo Robson, Leeds; Dr. Underhill, Tipton; Mr. W. C. Steele, Ealing; Dr. Steel, Manchester; Mr. Morrant Baker, London; Dr. Johnston, Sheffield; Mr. Piesse, London; Dr. Hutchinson, Scarborough; Messrs. Boussed, Valadon, and Co., London; Mr. Boys, Pill; Mr. R. Harrison, Liverpool; Mr. G. W. Knott, Travenna; Mr. Gem, London; Mr. Heygate, Bath; Mr. Kinglake, Taunton; Mr. Branthwaite, Willesden; Mr. F. Bentham, London; Dr. Diplock, Gunnersbury; Mr. T. W. J. Allen, Grimsby; Dr. Perkins, Hobart; Dr. Illingworth, Clayton; Mr. T. A. Kennedy, London; Mr. Bride, Melbourne; Messrs. Woollams and Co., London; Mrs. E. B. Mawr, Bucharest; Earl Sheffield; Mr. Fry, Swindon; Dr. Chunder Roy, Beerbhoom; Mr. R. Jamieson, Edinburgh; Dr. Spooner, Clapton; Mrs. Pratt, London; Messrs. Read and Co., Bristol; Dr. Chattergre, Kushinghur; Messrs. Hall and English, Birmingham; Mrs. Pratt, Bournemouth; Messrs. Midgley and Sons, Manchester; Dr. Mackay, Esks; Mr. Nicholson; Dr. D. Squire, London; Mr. Parsons, London; Mr. Kammerer; Mr. Bell, Dover; Mr. Browne, London; Mr. Phillips, Narberth; Dr. Brody, Detroit, Canada; Dr. Bowles; Mr. Newton, Sutton; Messrs. Condy and Mitchell, London; Surg.-Major Kenner; Mr. Collins; Mr. Leesy, London; Mr. Sacker, London; Mr. Paradise, Leigh; Prof. Rummo, Naples; Mr. Fryer, Gloucester; Madame Barker, Dieppe; Mr. Vate, Hendon; Mr. Marshall; Messrs. Cox Bros., Willeton; Mr. Harle, Bournemouth; Dr. McAdam, Edinburgh; Mr. Dixon, Pewsey; Mr. R. Freeman, London; Dr. Charteris, Buzby; Messrs. Clare and Hunt, Scarboro'; Dr. Thomas, Glasgow; Mr. Thomas, Swansea; Mr. Baker, Hereford; Mr. Hutchinson, Newmarket; Mr. Hope; Mr. Avering, Paddington; Mr. Montgomery, Partick; Messrs. Richardson and Co., Leicester; Messrs. Jerons and Co., Liverpool; Mr. Hulmer, Birmingham; Mr. Evans, Oswestry; Mr. Lange, Holloway; Fairplay; Matron, Denbigh Infirmary; H. W.; G. S. D.; Voyage, Kennington; D. N.; A. C., Devonport; Medicus, Highbury; Festina.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Stock, Weston super-Mare; Mr. Babso-Shasht; Mr. Roberts; Mr. Baton, St. Asaph; Mr. Crasswell, Highbury; Mr. Webb, Bury; Mrs. Turrell, Hertford; Mr. Rideal, London; Mr. White, Bayswater; Messrs. Lee and Martin, Birmingham; Dr. Adams, West Malling; Messrs. Woolley and Co.; Mr. Armstrong, South Shields; Messrs. Thompson and Son, London; Mr. Bennett, Mayfair; Mr. Jones, Denbigh; Messrs. Hewlett and Co., London; Mr. De la Rue, Dieppe; Messrs. Muller and Co., Glasgow; Mr. Poole, Donaghadee; Mr. Fuge, Taunton; Dr. Waller, Peterborough; Mr. Cockell, West Hartlepool; Mr. Elliott, Chichester; Mr. Fowler, Pontymister; Mr. Foote, Rotherham; Mr. Hollings, Wakefield; Mr. Daly, Bristol; Mr. Evans, Cardiff; Messrs. Carlesse and Co., Devizes; Mr. Christmas, Eastbourne; Mr. Appleton, South Norwood; Mr. Willan, Leicester; Mr. Collins, Trowbridge; Dr. Brock, Hull; Mr. Hodgson, St. Helens; Mr. Logan, Glasgow; Mr. Wallace, Barnsley; Mr. Pratt, Clapton; Dr. Vintras, London; Mrs. James, St. John's Wood; Mrs. Piggot, Preston; L.R.C.P. & S., West Felton; A. H.; North; A. W. W., Fairfield; R. L.; Medicus, Fulham; A. F., Peckham; Physician; Bromyard; Surgeon, York; Matron, Bedford Infirmary; Medicus, Bilan; Medicus, Brighton; Treasurer, Rotherham Hospital; A., Fenchurch-street; The Secretary, London Temperance Hospital; Alpha, London; C. D., Little Ford; Matron, Bridgwater Infirmary; X. Y. Z.

Port Elizabeth Telegraph, Cumberland Pacquet, Rutland Post, Hexham Courant, Surrey Comet, West London Observer, Scotsman, &c., have been received.

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Croonian Lectures

ON

SOME POINTS IN THE PATHOLOGY OF RHEUMATISM, GOUT, AND DIABETES.

Delivered at the Royal College of Physicians of London, April, 1886.

BY P. W. LATHAM, M.A., M.D., F.R.C.P.,

DOWNING PROFESSOR OF MEDICINE, CAMBRIDGE; SENIOR PHYSICIAN TO ADDENBROOKE'S HOSPITAL.

LECTURE II.

(*Concluded from page 677.*)

Two years ago I published a paper on the formation of uric acid, in which I endeavoured to show that the formation of this substance in the human subject is due, in the first place, to defective assimilation or metabolism, and, secondly, that it is a condensation product much in the same way that cyanuric acid is a condensation product of cyanic acid or that cyanuric acid and biuret are condensation products of urea. Starting with the result obtained by Strecker,[1] that if uric acid is heated in a sealed tube to 160°–170° C. with a cold saturated solution of hydriodic acid, it is decomposed with the formation of ammonium iodide, carbonic acid, and glycocine:

$$\underset{\text{uric acid}}{C_5H_4N_4O_3} + 5H_2O = 3NH_3 + 3CO_2 + \underset{\text{glycocine}}{CH_2(NH_2)COOH},$$

I endeavoured by treating glycocine in sealed tubes and otherwise with cyanuric acid and potassium cyanate to reverse the process and perform the synthesis of uric acid, but unsuccessfully. Horbaczewski, however, stated in a paper published in the *Berichte* for Nov., 1882, page 2678, that by heating glycocine and urea together he had accomplished it. On heating glycocine with ten times its weight of urea in an open vessel to 200°–230° C. he obtained a cloudy and thick fluid. This, on cooling, was dissolved in weak potash solution and supersaturated with ammonium chloride and precipitated with an ammoniacal solution of silver and magnesia. This precipitate containing the uric acid was washed with water containing ammonia and decomposed with potassium sulphide. The filtrate freed from the precipitate was supersaturated with hydrochloric acid and evaporated down. On cooling the impure uric acid separated, which was again dissolved in a weak solution of potash, and submitted twice to the same process as above. Lastly, the product was washed with alcohol and dried. It was next treated with bisulphide of carbon to dissolve the sulphur, and then treated with ether. I tried the experiment, carefully following the directions, but failed to obtain a satisfactory result. Testing the substance at various stages, I got with nitric acid and ammonia a colour somewhat approaching the murexide colour, but nothing more. I failed then probably from using too high a temperature. The experiment for a long time received no confirmation, but in May, 1885, in the *Monats. f. Chemie*, S. 356–362, Horbaczewski gives the following additional particulars:—

"Uric acid is obtained very readily by carefully heating a mixture of glycocoll and urea in a test-tube over the flame of a small Bunsen's burner, holding the test-tube in an inclined position and moving it backwards and forwards over the flame, and taking care to keep up a continuous and free evolution of ammonia from the mass, being careful also that the temperature is not raised too high. The mass, at first clear and colourless, gradually becomes yellowish and opaque. The mass is then heated very carefully until (during the heating) it becomes quite hard, without being charred, or at least until a copious deposit is formed. The experiment is now completed. It is desirable to use only a small quantity (0·1 grm. to 0·2 grm.) of glycocoll at one time. In this way the whole experiment occupies only a few seconds, and the residue after cooling remains of a pale yellowish colour; while by using a large quantity of glycocoll the residue appears of a dark brown colour. As regards the quantity of urea which must be used in the process, it is necessary to use a large excess. When, therefore, the glycocoll and urea are mixed together in proportion of one molecule of each, no uric acid is obtained, nor is any obtained when one molecule of glycocoll is taken with two molecules of urea. It is only when three molecules of urea are taken with one of glycocoll that uric acid is produced. It is very difficult, however, to isolate the uric acid in this case, and to purify it, on account of the very dark brown colour of the residue. The larger the quantity of urea taken, the more easily is the experiment made, and the residue is so much freer from colour. It is therefore advisable to mix one part of glycocoll with from seven to fifteen of urea, and to heat them together in the manner above described. If the experiment is successful, a very small portion of the residue gives the murexide reaction; it is not so marked as with pure uric acid, but it is quite distinct. If the experiment has not been perfectly carried out, no murexide reaction will be obtained from the residue alone. The amount of uric acid obtained by this method, even when successfully performed, is rather small. In several experiments from one gramme of glycocoll and the proportionate quantity of urea, only from 50 to 150 milligrammes of impure uric acid were obtained. The reason of this unsatisfactory result appears to be that the reaction only takes place at a high temperature, at which also the uric acid is in some measure decomposed."

After reading this paper I again tried the experiment, and succeeded in producing the substance. [The full details of the process will be found in THE LANCET for Feb. 6th, 1886, page 244. Several specimens obtained by this method were exhibited at the lecture.]

The following equation represents the changes:

$$3CO\begin{cases}NH_2\\NH_2\end{cases}_{\text{urea}} + CH_2\begin{cases}NH_2\\COOH\end{cases}_{\text{glycocine}} = 3NH_3 + 2H_2O + \underset{\text{uric acid}}{C_5H_4N_4O_3}$$

But it is important to know what are the intermediate stages, if we are to understand the mode of formation of this substance in the living body. Now hydantoic acid has been formed synthetically, and here we have the first step towards the synthesis of uric acid. By heating urea and glycocine to a temperature of 120°–125° C. they combine and form hydantoic acid:[2]

$$CO\begin{cases}NH_2\\NH_2\end{cases}_{\text{urea}} + CH_2\begin{cases}NH_2\\COOH\end{cases}_{\text{glycocine}} = NH_3 + CO\begin{cases}NH_2\\NH-CH_2-COOH\end{cases}_{\text{hydantoic acid}}$$

and this dehydrated forms hydantoin; for by boiling the latter with baryta water it is converted into hydantoic acid:

$$CO\begin{cases}NH-CO\\|\\NH-CH_2\end{cases}_{\text{hydantoin}} + H_2O = CO\begin{cases}NH_2\\NH-CH_2-COOH\end{cases}_{\text{hydantoic acid}}$$

By heating urea alone to a temperature somewhat higher—viz., to 150°–160° C.,—condensation takes place and it is converted into biuret, $C_2O_2N_3H_5$.

$$2CO\begin{cases}NH_2\\NH_2\end{cases}_{\text{urea}} = NH_3 + \underset{\text{biuret}}{CO\begin{cases}NH_2\\NH\\NH_2\end{cases}}$$

If now we combine together hydantoin and biuret, we have the elements of water and ammonium urate:

$$CO\begin{cases}NH-CO\\|\\NH-CH_2\end{cases}_{\text{hydantoin}} + CO\begin{cases}NH_2\\NH\\NH_2\end{cases}_{\text{biuret}} = H_2O + \underset{\text{ammonium urate}}{C_5H_3N_4O_3 \cdot NH_4}$$

In performing Horbaczewski's experiment, when the temperature is raised to 120°–125° C. hydantoic acid is formed, and at 150°–160° C. the urea condenses into biuret. If, then, between 130° and 160° C. the hydantoic acid is dehydrated into hydantoin, which melts at 207°, and at that temperature or one something above, combined with the biuret in

[1] Strecker, Zeitschrift f. Chem. [2], iv., 215.

[2] Heintz: Jahresb. für Chem., 1865, s. 360.

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the manner above shown, forming water and ammonium urate, we have a complete explanation of the process. That the synthesis takes place in this way I have confirmed in some measure by experiment. One part of hydantoin with four parts of biuret were treated in the same manner as in the experiment with urea and glycocine. Throughout the same results follow as when operating upon glycocine and urea, but the yield of uric acid is smaller. On evaporating the solution after the addition of hydrochloric acid, crystals are deposited which give the murexide reaction very distinctly, but as yet I have not been able to isolate the uric acid.[3] The constitution of glycoluril $C_4H_6N_4O_2$, which can be obtained from uric acid and from allantoin, also favours this view. By boiling glycoluril with acids it is converted into hydantoin and urea, consequently by combining these substances together in a suitable way we ought to perform the synthesis of glycoluril:

$$CO\begin{cases}NH-CH_2\\ \quad|\\ NH-CO\end{cases}_{\text{hydantoin}} + CO\begin{cases}NH_2\\ NH_2\end{cases}_{\text{urea}} = CO\begin{cases}NH-CH\\ \quad\|\\ NH-C-NH-CO-NH_2\end{cases}_{\text{glycoluril}} + H_2O$$

If, then, hydantoin were combined with biuret instead of urea, we should have

$$CO\begin{cases}NH-CH_2\\ \quad|\\ NH-CO\end{cases}_{\text{hydantoin}} + CO\begin{cases}NH_2\\ NH\\ NH_2\end{cases}_{\text{biuret}}$$

$$= CO\begin{cases}NH-CH\\ \quad\|\\ NH-C-NH-CO-NH-CO-NH_2\end{cases} + H_2O$$

and ammonia being given off, the compound would be

$$CO\begin{cases}CO-NH\\ \quad|\\ NH-C\quad CO\\ \quad\|\quad\ |\\ NH-C-NH\end{cases}_{\text{uric acid}} + NH_3 + HO_2$$

which is the molecular formula for uric acid given by Medicus, and the one most generally accepted.[5]

My explanation of the formation of uric acid in the animal economy, based on these considerations, is as follows. In the human subject glycocine conjugated with cholic acid is poured out as glycocholic acid, a constituent of the bile, into the intestine. After the bile has served its purpose in digestion, the glycocine as well as taurine are returned into the blood. These, together with the other amido bodies, leucine, and possibly tyrosine, the products of the digestion of albuminous food, reappear in the urine as urea; that is, the urine does not contain them, but its urea is proportionately increased. Now these amido bodies, glycocine, leucine, &c., are probably carried by the portal vein straight to the liver, and from certain facts which I need not here detail we are led to the view that among the numerous metabolic events which occur in the hepatic cells, the formation of urea from these bodies may be ranked as one. Suppose from some cause this metabolism of glycocine is interrupted (and I need only refer here to the interrupted metabolism of starch or glucose in diabetes as an illustration of what I mean), whilst taurine, leucine, &c., still undergo the normal changes with the production of urea, we should then have in the gland the two substances, glycocine and urea (or the immediate antecedent of urea), the conjugation of which by the gland (just as in the case of hippuric acid being formed from the conjugation of glycocine and benzoic acid) would produce hydantoic acid:

$$CO\begin{cases}NH_2\\ NH_2\end{cases}_{\text{urea}} + CH_2\begin{cases}NH_2\\ COOH\end{cases}_{\text{glycocine}} = NH_3 + CO\begin{cases}NH_2\\ NH-CH_2-COOH\end{cases}_{\text{hydantoic acid}}$$
(ammonia)

which dehydrated would be converted into hydantoin

$$CO\begin{cases}NH-CO\\ \quad|\\ NH-CH_2\end{cases}$$

Hydantoin is easily soluble, and so would pass on in the circulation to be combined elsewhere with two molecules of urea or with biuret, which is also soluble, to form ammonium urate:[6]

$$CO\begin{cases}NH-CO\\ \quad|\\ NH-CH_2\end{cases}_{\text{hydantoin}} + CO\begin{cases}NH_2\\ NH\\ NH_2\end{cases}_{\text{biuret}} = H_2O + C_5H_8N_6O_3 \cdot NH_4$$
(ammonium urate)

It may be urged as an objection that in order to produce hydantoic acid and biuret out of the body a temperature of 160° C. is required, and therefore that the body at the normal temperature of 37°–38° C. cannot produce this result. The fact that the conjugation of benzoic acid and glycocine takes place in the body at the normal temperature when benzoic acid is introduced into the alimentary canal, hippuric acid being formed and passing off in the urine, to effect which conjugation out of the body requires exactly the same temperature of 160° C., is a complete answer to such an argument. But I will show directly that the combination of urea, or its antecedent ammonium cyanate, with other bodies does actually take place in the animal body.

Horbaczewski, in his paper in the *Monatshefte*, also describes a method for obtaining methyl uric acid by synthesis. He says: "It was naturally to be expected that if in the previous experiment instead of glycocoll a derivative of glycocoll was employed, instead of uric acid a derivative of uric acid would be obtained. The experiment was performed with sarcosine, and confirmed this supposition. When sarcosine is heated in small portions (0·1 to 0·2 grm.) with five to ten parts of urea, after the method described for uric acid, and carefully warmed until the mass becomes solidified whilst hot—which can always be effected in the present case,—the residue is found to contain methyl uric acid. This can be demonstrated at once in the residue by the murexide test—in fact, a small atom generally gives a much more decided reaction than can be obtained from the uric acid residue. If the experiment has been successful, the reaction is very striking. The methyl uric acid can be separated from the residue in exactly the same way as described for uric acid. The purification of this compound can be effected far more easily than that of uric acid, and presents no difficulties whatever."

The changes which have taken place here are, I venture to suggest, of the same character as those indicated for the formation of uric acid. The sarcosine is combined first with

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[3] The reason probably is that the hydantoin combines more readily with the biuret in its nascent state—that is, as condensation of urea takes place—than with biuret fully formed.

[4] Strecker-Wislicenus: Org. Chemistry, London, 1881, p. 539.

[5] This explanation of the synthesis of uric acid indicates, I think, the way in which guanine, xanthine, hypoxanthine, theobromine, and caffeine may each be built up from glycocine, and thus showing their relationship to uric acid. By combining glycocine with formyl diamine

$$CH\begin{cases}NH_2\\ \diagdown\\ NH\end{cases}$$

which is prepared from HCN, we should obtain the substance

$$CH\begin{cases}NH-CH_2\\ \diagdown\quad|\\ N-CO\end{cases}$$

and this, united with two molecules of urea, or with biuret, would probably result in

$$CH\begin{cases}CO-NH\\ \diagdown\quad|\\ NH-C\quad CO\\ \quad\|\quad\ |\\ N-C-NH\end{cases}$$

guanine.

From guanine the other bodies have been obtained; but it would appear probable that they should be synthesised independently. By combining glycocine, formyl diamine, guanidine (obtained from biuret), and urea, in the order given, xanthine would result. By acting on the compound of glycocyne and formyl diamine so as to obtain its methyl derivative

$$CH\begin{cases}N\cdot CH_3-CH_2\\ \diagdown\quad|\\ N\text{———}CO\end{cases}$$

combining this with dimethyl carbamide, and then with urea, the resulting product should be caffeine. I have not had time to attempt these experiments since this mode of synthesis occurred to me. I hope to do so, however, during the summer, and so either confirm or refute the hypothesis.

[6] In the paper published two years ago I suggested that the synthesis might take place also, in another way, by the conjugation of glycocine first with biuret, which afterwards combining with urea would form ammonium urate; but this would give a different molecular arrangement for uric acid, and the actual production of uric acid from hydantoin and biuret shows that this is the correct interpretation.

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one molecule of urea forming methyl hydantoic acid, which dehydrated into methyl hydantoin and then combined with biuret forms ammonium urate:

$$CH_2\begin{cases}NH.CH_3\\COOH\end{cases}\ (\text{sarcosine}) + CO\begin{cases}NH_2\\NH_2\end{cases}\ (\text{urea}) = NH_3 + CO\begin{cases}NH_2\\N.CH_3-CH_2.COOH\end{cases}\ (\text{methyl hydantoic acid})$$

$$CO\begin{cases}NH_2\\N.CH_3-CH_2-COOH\end{cases}\ (\text{methyl hydantoic acid}) = CO\begin{cases}NH\text{——}CO\\N.CH_3-CH_2\end{cases}\ (\text{methyl hydantoin}) + H_2O$$

$$CO\begin{cases}N.CH_3-CH_2\\NH\text{——}CO\end{cases}\ (\text{methyl hydantoin}) + CO\begin{cases}NH_2\\NH\\NH_2\end{cases}\ (\text{biuret})$$

$$= CO\begin{cases}N.CH_3-C & CO-NH\\ \| & |\\ NH\text{——}C-NH & CO\end{cases} + NH_3 + H_2O\ (\text{methyl uric acid})$$

Now methyl hydantoin has been actually formed after the administration of sarcosine to a living animal and detected in the urine. Considerable discussion took place at the time this was announced as to whether or not methyl hydantoin really appeared in the urine, and a number of experiments were made by Schultzen, &c. The importance attached to the question at the time arose from the fact that it appeared to demonstrate the existence of carbamic acid in the animal system, and to show that this acid was the immediate precursor of urea. A good deal may be advanced in favour of this view of the formation of urea, but as I have endeavoured to show that the antecedent of urea is ammonium cyanate, and as methyl hydantoin has been formed by mixing together sarcosine, potassium cyanate and ammonium sulphate, and digesting them at the temperature of the body (40° C.), the experiment with sarcosine possesses great interest and significance with regard to the steps by which uric acid is formed in the animal economy. In the *Zeitschrift für physiologische Chemie* Dr. J. Schiffer gives an excellent summary of the experiments and views of the others, together with an account of his own observations and experiments. From this paper[7] I take the following extracts:—

"Few investigations in the range of physiological chemistry have in recent times excited so much attention as those of Schultzen on the transformation of sarcosine in the animal body. In conjunction with Leon v. Nenki[8] he had previously found, on giving glycocine as food, the amount of urea excreted corresponded with the amount of N given. ..... He repeated his experiments with methyl glycocine, or sarcosine. Increased secretion of urea did not take place; on the contrary, two new bodies appeared in the urine, both having an analogous composition, the one compounded of sarcosine and carbamic acid, the other of sarcosine and sulphamic acid. The first of these bodies was identical in its constitution with methyl hydantoic acid, but was not recognised as such by Schultzen. He concluded from his investigation that the sarcosine attached to itself the carbamic acid resulting from disintegration of the albuminous bodies, and which in a normal condition gives rise to the production of urea. With this hypothesis it appeared very plausible that urea should disappear from urine containing sarcosine. He imagined, therefore, he had explained the mode in which urea was formed, and had thus solved one of the most important questions in physiological chemistry by the convincing proof of a carefully devised experiment. ..... Salowski found, after administering taurine, its uramido-acid tauro-carbamic acid in the urine.[9] ..... Later E. Bauman and Hoppe-Seyler[10] succeeded in forming methyl hydantoic acid synthetically under such conditions as might exist in the animal body. Equivalent amounts of sarcosine, potassium cyanate, and ammonium sulphate were digested at a temperature of 104° F., the potassium sulphate removed by alcohol, and the baryta salt of the acid referred to obtained. In a similar manner Salkowski[11] at the same time produced this acid, or rather, as it is easily decomposed, its anhydride, methyl hydantoin. So far everything seemed to confirm Schultzen's experiments. But when further experiments were made, essentially different results were obtained. These experiments were undertaken by E. Salkowski on the one hand, and Bauman and v. Mering on the other. The results obtained by all completely demonstrate the absence of sarcosine sulphamic acid. As regards methyl hydantoic acid, Salkowski[12] first stated that in the urine of dogs it appeared only in small quantity after the administration of sarcosine; whereas Bauman and v. Mering, in their experiments on the human subject, showed that after administering as much as 25 grammes of sarcosine, methyl hydantoic acid was entirely absent from the urine, and that Schultzen in his experiments could not have had this substance to deal with. At the same time they discovered a probable source of error in his experiments—viz., that in the presence of sarcosine Liebig's test for urea fails. They discovered also, as Salkowski also did, that a portion of the sarcosine appeared unchanged in the urine. In later communications Salkowski confirmed the view of Bauman and v. Mering, that after the administration of sarcosine there is no appearance whatever of methyl hydantoic acid in the urine. There appeared to be very little left, then, from Schultzen's experiments. One point only still remained for investigation. As the uramido-acids are so easily converted into their anhydrides, and as this is specially so in the case of methyl hydantoic acid and its conversion into methyl hydantoin, this latter substance might possibly exist in the urine after the internal administration of sarcosine. Salkowski has given great care and attention to this point, without, however, arriving at any definite proof. ..... This, then, was the state of the question when Professor Bauman informed me that methyl hydantoin reduces sulphate of copper in an alkaline solution, and asked me to make some fresh experiments with sarcosine founded upon this reaction." Schiffer then describes the experiments he performed to demonstrate the existence of methyl hydantoin in the urine, and thus sums up the result of his investigations:—"Our knowledge therefore of the destination of sarcosine in the organism may be formulated as follows: By far the greatest part is excreted unchanged: a smaller portion, one-fifth to one-sixth, is transformed into the uramido-acid we have been discussing, or rather into its anhydride (methyl hydantoin), and a smaller portion is oxidised into methyl urea."

Sarcosine, then, undergoes little change in passing through the system, but a portion is converted into methyl hydantoin. If, therefore, when glycocine is absorbed from the alimentary canal, it does not undergo the normal change, we may reasonably suppose that when brought in contact with ammonium cyanate it will be acted upon in the same way as sarcosine and a portion transformed into hydantoin, and thus we have the first step towards the formation of uric acid. Circulating in the system, the hydantoin may, under certain conditions, so affect the central nervous system, and thereby the metabolism in the kidneys, that when it arrives at these organs condensation of two molecules of ammonium cyanate may take place with elimination of ammonia, forming biuret, and this be conjugated with hydantoin; or this condensation may take place independently of the nervous system. Condensation of the cyanates readily takes place, as is shown by the action of acetic acid on potassium cyanate, forming potassium cyanurate and potassium acetate:

$$3KCNO + 2CH_3.COOH = KH_2C_3N_3O_3 + 2CH_3COOK + 2H_2O$$

pot. cyanate — acetic acid — pot. cyanurate — pot. acetate

Such a view, I think, meets all the difficulties which have been raised with regard to previous theories as to the formation of uric acid—difficulties which have been very clearly set forth by Dr. Garrod in his Lumleian lectures. Nor is it difficult to understand that, if, as I have endeavoured to prove, the final conjugation of two soluble bodies takes place in the kidney, forming the very slightly soluble ammonium urate 1-1 2400, a portion may not be excreted but remain in the blood, overflow as it were, and so pass on into the circulation; a result which certainly happens when the ureters are ligatured. The ammonium salt would then, meeting with the soda in the blood, be converted into sodium urate, the form in which it is deposited about gouty joints. The appearance, then, of uric acid in the secretion is the result

[7] Zeitschrift für physiol. Chemie, Bd. v., s. 257.
[8] Zeitsch. f. Biologie, Bd. viii.
[9] Berichte, Bd. vi., s. 744.
[10] Ibid., Bd. vii., s. 34.
[11] Ibid., Bd. vii., s. 116.
[12] Ibid., Bd. viii., s. 115.

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primarily of the non-transformation or metabolism of glycocine into urea, whether that glycocine be derived from the bile poured out into the duodenum or formed elsewhere in the body.

I now come to the question of the abnormal formation of uric acid in the human system. Just as in diabetes the essential fault lies in the inability of the system, either in the liver, or it may be elsewhere, to effect the metabolism of glucose, which then passes into the circulation and is discharged by the kidneys, so in gout or gravel the imperfect metabolism of glycocine is the primary and essential defect. Unchanged, it passes from the alimentary canal or elsewhere into the liver; there, under the action of the gland, it is conjugated with urea resulting from the metabolism of the other amido bodies, leucine, &c., and is converted into hydantoin; it then passes on to the kidneys to be combined with other molecules of urea or biuret, forming ammonium urate, a portion of which overflows into the circulation and is converted into sodium urate. It is not difficult to understand that in persons who are addicted to the pleasures of the table, who are fond of port, and who take little exercise, the liver should become "sluggish," that the gland cells should from overwork become inactive or destroyed, or that the terminations of the nerves should from excessive stimulus become somewhat paralysed, and the gland in some measure, like the submaxillary after the injection of atropine. The result would be the imperfect performance of its function and the non-metabolism of glycocine. But it is not every toper and gourmand who develops gout, nor is every gouty man necessarily a toper or gourmand. Further, it is certain that uric acid is also present in excess in the blood under other pathological conditions which have no connexion whatever with arthritic mischief. How are these facts to be explained?

Gulstonian Lectures

ON

SPASM IN CHRONIC NERVE DISEASE.

Delivered at the Royal College of Physicians of London, March, 1886.

BY SEYMOUR J. SHARKEY, M.B., F.R.C.P.,

ASSISTANT-PHYSICIAN AND JOINT-LECTURER ON PATHOLOGY AT ST. THOMAS'S HOSPITAL.

LECTURE III.

MR. PRESIDENT AND GENTLEMEN,—In my second lecture I finished the remarks which I had to make on the connexion between the cerebral system of fibres and the clinical phenomena of spasm. I shall now proceed to a short consideration of the spinal system, and the relation between diseases which affect it and spasmodic contraction of muscles.

II. SPASM IN CONNEXION WITH SPINAL MOTOR MECHANISMS.

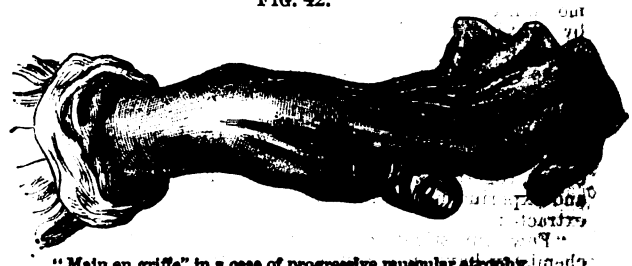
By the spinal system, I mean all those nerve-centres which occur between the central ganglia of the brain and the termination of the spinal cord. Each of these centres consists of afferent and efferent nerves and ganglionic cells; and as my object is to treat the subject from a general point of view, we may divide it into: 1. Spasm produced by diseases of efferent spinal nerves. 2. Spasm produced in a reflex manner by diseases of afferent nerves. 3. Spasm produced by diseases of the ganglionic cells.

1. *Spasm produced by Diseases of Efferent Spinal Nerves.*—A very large proportion of the cases in which spasm of muscles produces distortion are not to be explained by supposing that irritation of the diseased nerve gives rise to excessive muscular contraction. On the contrary, the healthy muscles are those actively concerned, while the diseased muscles are for the most part passive. Progressive muscular atrophy is a well-known instance of this, where a peculiar claw-like distortion is produced by atrophy of the interossei and the continued activity of other muscles (Fig. 42). Here the neuro-muscular disease appears to owe its origin to an affection of the large cells in the anterior cornua of the spinal cord. But even where no gross disease of nerve or muscle exists, it seems to be a rule that, when the origin and insertion of a muscle remain approximated for a certain time, the muscle contracts and gradually shortens. This frequently occurs in joint disease, and after prolonged application of splints. In the case of progressive muscular atrophy, the "claw" condition results mainly from atrophy of the interossei. These muscles extend the two distal phalanges and flex the proximal, and when their influence is removed the opposite condition prevails, owing to the action of opponents—namely, extension or hyper-extension of the proximal phalanges, and flexion of the peripheral. The case from which the drawing was taken was kindly sent me by Mr. Sidney Harvey. The patient was a woman aged twenty-seven, who was healthy in other respects, and the mother of a family. The disease had commenced in the left hand at the age of seventeen or eighteen.

Another instance of a similar kind is found in the disease called "pachymeningitis cervicalis," where the contraction varies according to the part of the cervical region which is affected. If that part from which the median and ulnar nerves emanate be diseased, the muscles supplied by the musculo-spinal nerve remaining intact produce the form of distortion in which the wrist is extended; while, if the upper half of the cervical region be the seat of the disease, the muscles innervated by the median and ulnar nerves produce quite a different form of distortion, in which the wrist is flexed.

Great interest has been taken of late in the effects of alcohol upon peripheral nerves, and some of our own countrymen have played a prominent part in the investigation

FIG. 42.



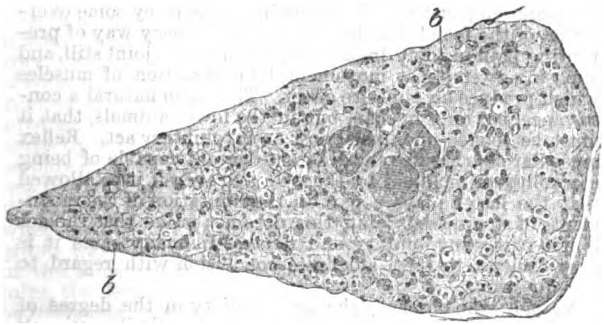
"Main en griffe" in a case of progressive muscular atrophy.

of them—Wilks, Buzzard, Dreschfeld, Hadden, and others. There is very little doubt that a multiple peripheral neuritis results from the circulation of this poison, and produces such symptoms as neuralgic pains, anæsthesia, paræsthesia, various degrees of paralysis and atrophy, mainly occurring in the extensor muscles, ataxia, abolition of tendon reflexes, vaso-motor disorders, and occasionally rigidity. Although our knowledge of this subject is not very advanced, it is probable that this rigidity is of the kind we are now considering—namely, rigidity of the more healthy muscles, which overpower their diseased opponents; and the latter being usually the extensors of the legs, rigid flexion results. Similarly, in cases of disease of the peripheral nerves and muscles on the extensor surface of the forearms produced by lead, rigidity of the opposing flexors is sometimes observed. As I have had an opportunity of making a post-mortem examination in a case of atrophy of the nerves and muscles of the forearm from lead-poisoning, I have brought drawings which illustrate peripheral neuro-muscular disease due to this cause. The drawings were made from microscopic preparations of the muscles of a patient aged forty-eight, a plumber, who was admitted into St. Thomas's Hospital, under the care of Dr. Bristowe, on March 18th, 1882, and died three days after admission from coma following an epileptiform convulsion. The patient had had several attacks of intestinal colic and of gout, and had also had "dropped hands" five or six years previously, from which he said he made a complete recovery. For the two months preceding his admission he had been labouring under general dropsy, and wrist-drop. His arteries were found to be rigid, his heart hypertrophied, and his urine albuminous, with specific gravity 1011. He had paralysis, with marked wasting of the muscles of the forearm, mainly the extensors, and also of the thenar and hypothenar muscles, and of the interossei.

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At the post-mortem examination, the heart was found to weigh 22 oz., the valves being competent. The kidneys were contracted, hard, and granular on the surface, and weighed 8 oz. The common extensors of both forearms were pale and atrophied, and quite unlike the healthy muscles, the supinator longus being among the latter. The posterior interosseous nerve was soft and greyish, while the median and others were firm and white. The microscopic sections of the extensor muscles from which the drawings were made showed the following peculiarities (Figs. 37, 38, 39, 40, 41):—Longitudinal section: (1) Here and there were seen well-formed, large, striated muscular fibres; (2) atrophied, but striated

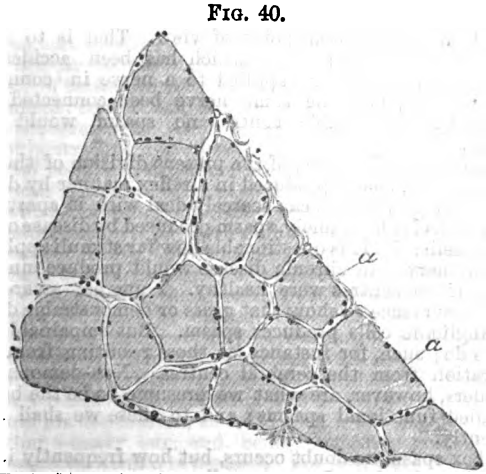
FIG. 38.



Transverse section of the common extensor of the forearm in a case of lead-palsy. The darkly shaded masses in the centre (*a*) are the largest muscular bundles left, most having been reduced to very small dimensions (*b*).

fibres, many extremely thin; (3) waxy-looking, non-striated fibres, some of fair size, some very small; (4) strands of wavy tissue, where no muscular fibres could be distinguished, but where long rows of nuclei were seen, like necklaces, often running parallel to each other, and quite close together; (5) very thick-walled vessels. Transverse section showed the muscular bundles very small, each one having a homogeneous appearance, and presenting nuclei irregularly distributed upon it. The nerves were so altered as to be incapable of recognition. The sections of the spinal cord in the cervical region showed no evidences of disease. The

FIG. 40.



Transverse section of the supinator longus muscle from a case of lead-palsy, showing the unaltered muscular bundles (*a a*).

supinator longus, as is well seen in the drawings, was practically healthy.

In all these and similar cases, the diagnosis depends upon the electrical reactions of the nerves and muscles in the affected part. For where the rigidity is directly produced by contraction of the affected muscles, the electrical conditions in them closely resemble those of health. Whereas, when the distortion is due to atrophy of one set of muscles, owing to disease of the peripheral nerves supplying them, what is called the "reaction of degeneration" is found in them. Setting aside such cases as these, in which the distortion is produced by rigidity, not of the diseased muscles, but of their healthy opponents, there exists still another class, in which contracture results from the shortening of diseased muscles, it is true, but nevertheless does not depend upon true spasm. We may take as an example the following case.

Case of Distortion of Arm due to Shortening of Degenerated Muscles.—On August 11th, 1885, I saw, with Mr. Clutton, a boy aged five, who had fallen down in April and fractured the lower end of the right humerus. He was treated with anterior and lateral rectangular splints for one month, and was then found to have loss of sensation and of voluntary power in the hand and forearm. The friends took him to Mr. Golding-Bird, who applied electricity daily for one month, without producing any improvement. When I saw the boy, his right forearm was rigidly pronated and the wrist partially flexed. The fingers were flexed at the peripheral joints, and slightly over-extended at the metacarpo-phalangeal joints. On attempting to overcome this condition and extend the wrist, the deep structures along the flexor surface of the ulna got tense and hard, and on bending up the elbow-joint they were again relaxed. The tips of the fingers were anæsthetic as far as the proximal phalangeal joints. The thumb had not lost sensation. The question which presented itself to us was, whether this rigidity was due to muscular spasm, or to shortening of muscles, &c., from disease. Dr. Kilner tested the muscles electrically with me, and found that, while all the extensor muscles of the forearm reacted normally, the flexors could not be brought into action even by the strongest currents. The muscles were therefore clearly in an advanced condition of degeneration. To confirm this conclusion, the child was put well under chloroform, but no change whatever occurred in the limb; all was as rigid as before. Here, no doubt, we had to do with inflammation and subsequent degeneration of nerve and muscle, and the cicatricial contraction which accompanies it. Electricity and chloroform are our principal aids in the diagnosis of such cases.

Dr. Alliott, of Sevenoaks, kindly sent me a man, aged sixty-five, who had dislocated his left shoulder-joint five months previously. On examination of the arm, almost complete paralysis of all the muscles was found with but little alteration of sensation. The elbow, wrist, and fingers were all somewhat flexed, and incapable of extension; but still there was no active contraction of muscles, for even the strongest faradaic current produced no effect in them.

In certain cases of long-standing facial paralysis, the muscles on the affected side are evidently shortened, for the angle of the mouth is drawn to that side, and the orbicularis orbis partially closes the corresponding eye. And yet the effect produced by speaking or by laughing is most curious, the affected side remaining motionless. In these cases, the electrical reactions of the muscles supplied by the diseased facial nerve show almost complete degeneration, which has been accompanied with permanent shortening.

If so many cases of distortion are due to other causes than active contraction of the muscles supplied by the affected nerves, the question suggests itself, Does chronic muscular spasm occur at all from direct irritation of motor nerves? Let us take some of the most frequent and familiar examples of peripheral nerve-disease. Musculo-spiral paralysis is often seen in quite the early stages; but we do not see, nor do we hear the patient describe, muscular spasm as one of its symptoms. The same may be said of most cases of facial paralysis due to peripheral causes. In chronic poisoning by lead and alcohol, various nerve symptoms are met with, including paralysis, and even muscular rigidity occasionally; but, as has already been pointed out, this is due to the contraction of antagonists, and not of the diseased muscles themselves. In sciatica, from various causes, we meet with twitchings and sudden muscular contractions; but they are very transitory. Again, if we look at those cases where motor or mixed nerves are pressed upon and irritated by new growths, pain is a very prominent symptom, and spasm seems scarcely to occur, though twitchings and transitory contractions are observed. A case which I have already related affords a good example of a tumour pressing upon a purely motor root. The new growth was a myxoma, which grew in connexion with one of the left anterior spinal roots, and gave rise to symptoms in the left arm. These were weakness and attacks from time to time of pain and cramp, but no prolonged spasm was ever produced.

Dr. Bristowe has written a paper on "Painful Paraplegia" in St. Thomas's Hospital Reports, vol. xii., in which h

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relates several cases of paralysis accompanied by pain, which owed their origin to malignant tumours involving peripheral nerve-roots. Some of these cases I saw myself, and also examined post mortem. Evidence of spasm occurs in only one case, where the limbs are said to have become stiff occasionally.

Clonic spasm is not unfrequently seen in late stages of facial paralysis, when there is shortening of the muscle from atrophy. Electrical examination shows that the latter condition is present, and also that a certain amount of muscular tissue, capable of active contraction, remains. The clonic spasms result from irritation of the nerve and muscle which has survived the process of destruction. In cases of meningitis at the base of the brain, spasm of the muscles supplied by the motor nerves involved is not observed. In spinal meningitis, on the contrary, it is a very marked symptom. Here, however, it is not improbably of a reflex origin, and not due to direct irritation of motor nerves.

Tetany (Fig. 43) is a disease in which the presence of some, although generally trivial, alteration of sensation, increased electric irritability of nerve and muscle, and prolonged muscular spasm suggest a peripheral cause. The pathology of this affection cannot be said to be known, and opportunities of examining cases post mortem rarely fall to the lot of pathologists. Dr. Hadden kindly gave me the opportunity of examining microscopic sections of the nerves and muscles of the affected parts, which were taken from a child who died from diarrhœa while suffering from tetany. At first I thought there were changes to be made out, but

FIG. 43.



The hand in a case of tetany.

on procuring sections from the same parts in a healthy child of the same age (sixteen months), who had died of an acute disease, and comparing them with those from the subject of tetany, I came to the conclusion that there was very little difference between them. Looking at my own experience, I should say that while occasional spasm occurs not unusually in peripheral nerve disease, from direct irritation of the motor filaments, and may even be permanent in disease of the facial nerve, it is quite the exception to find muscular contractions among the marked phenomena of such cases.

Weir Mitchell, who has had a very large experience of injuries and diseases of peripheral nerves, writes thus on the subject:[1] "Increase of bulk, proliferation of connective tissue, and wasting of nerve tubes are consequences of chronic neuritis..... The nerve tubes in large part perish or waste, and the symptoms affect at first rather the sensory sphere than that of motility. We have pain and anæsthesia, or hyperæsthesia, but not, as a rule, local convulsions..... In certain cases the nerve-wound, in place of causing primary loss of motility, occasions either sudden muscular contraction, followed by instant loss of power, or, in very rare instances, long-continued spasm..... Tonic contractions of muscles are occasionally met with at a later stage of these injuries, but are, perhaps, among the rarest of the secondary symptoms." Looking, then, at the experience of Weir Mitchell and others, we may safely conclude that muscular spasm is rarely caused directly by chronic disease of peripheral motor nerves.

[1] Injuries of Nerves and their Consequences, 1872.

2. *Spasm produced in a Reflex Manner by Disease of Afferent Nerves.*—There is scarcely a more difficult subject in the whole range of nerve pathology than that of reflex spasm. Cases of general convulsions, as well as of local spasm, are so frequently explained in this way, and are in so many instances quite insufficiently supported by scientific evidence, that one cannot help coming to the conclusion that many cases are accepted as of reflex origin which, at any rate, carry very little conviction with them. Some reasons can be adduced for the difficulties which beset the diagnosis. Many of these cases occur where some sensory nerve is the seat of severe pain, or where a part is diseased which is painful to move. A good example of the former class are spasms of the muscles of the face, accompanying facial neuralgia; and of the latter, rigidity in joint disease. But the most ordinary method of expressing pain is by some over-action of the facial muscles; while the ordinary way of preventing pain in joint disease is by keeping the joint still, and opposing attempts at movement, by contraction of muscles which produce an opposite effect. This is so natural a contrivance, not only in man, but in the lower animals, that it must be looked upon as almost an involuntary act. Reflex muscular acts are in very different degrees capable of being controlled or modified by the will, and even if it be allowed that the latter plays a part in the limitation of the movements of a diseased joint, this does not prove that the act is not partly involuntary and reflex. In many cases it is very difficult to form a definite conclusion with regard to this question.

No one who observes the great variety in the degree of reflex muscular contraction produced by similar stimuli applied to different individuals can be surprised at finding evidence that persistent spasm occasionally occurs as the product of a reflex act, or that a stimulus which produces no motor result in one person gives rise to definite muscular contractions in another not equally healthy. Thus in hemiplegia accompanied by descending sclerosis in the lateral columns deep reflexes are much more brisk than they were before the hemiplegia occurred; and contractures, Brissaud says, may be suddenly increased by comparatively slight injuries. If this increased reflex excitability be due to the hyperphysiological activity of the spinal centres, which have been loosed from cerebral control, similar disorders of nerve centres rather than of nerve fibres are probably the most fertile causes of reflex spasm. So that it is scarcely too much to say that the injury or disease which supplies the stimulus to the sensory nerve in such cases, though apparently the principal agent, is really so in many instances only from a particular point of view. That is to say, a mine exists in the patient which has been accidentally exploded by a stimulus applied to a nerve in connexion with it; but, had the same nerve been connected with a healthy and stable centre, no spasm would have ensued.

In speaking, therefore, of the present division of the subject—namely, spasm produced in a reflex manner by disease of afferent nerves—we can scarcely deal with it apart from the next division—namely, spasm produced by disease of ganglionic cells; for it is questionable how far stimuli applied to afferent nerves in chronic disease would produce muscular spasm if the centres were healthy. I am not aware that there is evidence to show that gross or demonstrable disease of ganglionic cells produces spasm. But impalpable disorders do; such, for instance, as those resulting from their separation from the cerebral centres. Non-demonstrable disorders, however, are what we presume to be the basis of so-called functional spasms; and to these we shall revert presently.

Reflex spasm no doubt occurs, but how frequently it does so, or how far the afferent or efferent nerves or the nerve centres take the leading part in its production, are points which can scarcely be estimated. As good an instance as I know of reflex spasm is recorded by Mr. Clutton in the St. Thomas's Hospital Reports (vol. x., p. 64). A boy, aged fourteen, had been bitten in the face by a dog eighteen months previously. The spot had been painless until a month before his appearance at the hospital, but since that time he had suffered from constant shooting pains in the neck, which always started from the scar. At the same time that the pain was felt, the angle of the mouth was drawn outwards, and the skin of the neck was wrinkled by the action of the platysma; the whole side of the face and neck blushed, and then became bathed in perspiration. This succession of symptoms recurred every time the boy

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pinched. Croton chloral hydrate in five-grain doses twice a day soon cured the affection.

Weir Mitchell, in his work on Injuries to Nerves, gives instances of reflex muscular spasm; and this condition is often referred to intestinal, uterine, or other irritation, but often without sufficient reason. Charcot has written a good deal in support of the view that various affections of joints may give rise to rigidity of muscles in a reflex way; and it certainly is very difficult to explain them otherwise. The following case appears to me to be one of this kind.

Case of Persistent Muscular Spasm due to Joint Disease.—F. W——, aged sixteen, was an out-patient at St. Thomas's Hospital, under the care of Mr. Clutton, in February, 1884. I saw the case with him, and the following is the clinical record which he took while the patient was under his treatment, and which he has kindly put at my disposal. She was sent to him by Mr. Mercer, of the Bath Mineral Water Hospital, with the following history. During May, 1883, she had had rheumatic fever, and the joints chiefly affected were the wrists and ankles. For three months the wrists were placed in splints, and in the autumn of the same year she was sent to Bath with perfectly stiff fingers and wrists. Passive movement was employed, which made the fingers pliable, but which left the wrists as stiff as ever. The accompanying illustrations (Figs. 44 and 45) show the condition which existed when the case came under Mr. Clutton's notice. The photograph was taken by Mr. Charles West. Both hands were in the same condition. On attempting to move the wrist-joint, the flexors and extensors alike resisted, and could not be overcome. Taking them by surprise produced no better results. When the patient was placed under ether, the muscles yielded to attempts at flexion and extension, but the rigidity did not entirely disappear. There were but few adhesions in the joint, and these readily gave way under the anæsthetic, but left the state of affairs practically the same as before—that is to say, the wrist could be flexed or extended, but on removing the force the hand again assumed the position shown in the illustration. When the wrist was extended the fingers always became flexed, and when it was flexed they became extended. The patient could voluntarily extend or flex the phalanges, and could separate the fingers. The thenar muscles also acted normally. The wrist was rigid, and could not be moved in either direction, and there was slight hyper-extension at the metacarpo-phalangeal joints, which was easily overcome voluntarily when the patient flexed the fingers. Dr. Kilner tested the electrical condition of the nerves and muscles, and found it normal.

Let me here briefly refer to a class of spasmodic affections which appear to have the same explanation as tendon reflexes. Whether explicable as a reflex or purely local phenomenon, contraction of muscles occurs when they are put on the stretch by their antagonists; and this has the effect of controlling and steadying movements which might otherwise be jerky and uncertain. When the influence of the lateral columns of the cord is removed, the spinal centres in which reflex acts are produced in relation with parts below the level of the lesion are brought into a state of excessive activity, and stretching of a tendon produces an abnormally sudden and extensive contraction. This is very probably the cause of the tremors in the direction of movement seen in cases of disseminated sclerosis. But it is probable that some cases may have a peripheral origin. A medical friend of mine informed me that he once took a vehicle in order to drive to a house where he was going to stay for a while. The driver put him down two miles and a half from his destination, and drove off. The medical man had rather a heavy bag, and, being unable to get another conveyance, he carried it himself. For four days after this walk he suffered from pretty constant contractions of the triceps muscle of his right arm, whenever he flexed the latter. In this instance the muscle had been what we call strained, the tendon had been unduly pulled upon, and when the arm was flexed the slight increase of tension made the triceps contract. Such a case represents a very small departure from the normal, but suggests an explanation of more troublesome affections—such a one, for instance, as the following.

Case of Persistent Rhythmical Contraction of the Palmaris Longus, due to Injury.—On July 7th, 1878, I saw a girl, aged nineteen, who had had her wrist bent backwards and sprained five years previously. The parts injured had swelled, and she had been obliged to carry her arm in a sling for some weeks. Ever since that time she had suffered without intermission from twitchings of the arm and palm of the hand. On examination, I found that the general power of the arm was unimpaired, but that there were spasmodic contractions of the palmaris longus muscle, occurring with perfect regularity ninety times in the minute. The contractions were energetic, and showed the muscle and its attachments very beautifully. In this case, probably the palmaris longus had been stretched, and the peripheral nerves ending in it had been rendered more irritable, the result being that the slight tension of it, which occurs ordinarily in the act of extending the wrist, caused the muscle to contract. This, occurring frequently, gave rise to a neuro-muscular habit.

The following is a somewhat similar instance. Mr. Clutton once showed me a girl, aged ten, who had fallen down a week previously and slightly sprained her right wrist, but had done herself no other damage. I found her suffering from an affection which had come on immediately after the fall. Her right arm was in a position midway between pronation and supination, and was the seat of perfectly regular tremors of very small excursion, such as one sees in paralysis agitans, occurring in a direction transverse to the longitudinal axis of the limb.

Other pathological conditions, as well as injuries, may produce these rhythmical spasms. In January, 1886, a girl, aged fourteen, was in St. Thomas's Hospital, under the care of Dr. Bristowe, for rhythmical contraction of the occipito-frontalis muscle on both sides, which occurred from fifty to sixty times in the minute, and had been going on for some months. The history she gave was that she had had a very bad attack of "erysipelas of the face," commencing on the forehead and spreading downwards. The onset was sudden, and the description she gave of the affection corresponded with that of erysipelas. Roughness and pigmentation of the skin of the forehead could still be seen. As the disease got well, the contraction of the occipito-frontalis muscle supervened, and continued for months without intermission, except during sleep. The original cause of this condition was probably an irritable state of the muscle and tendon owing to inflammation, and an involuntary neuro-muscular habit was soon developed. Although the girl showed no evident hysterical peculiarities, I found that she had marked localised tenderness over those regions which Charcot has found to be unduly sensitive in hysterical subjects. Moreover, information which I subsequently obtained proved that at least one other member of her family was hysterical, for, while the patient was still in the hospital, her sister, aged eleven, was admitted under Dr. Bristowe's care, suffering from a similar affection. The latter had been under me as an out-patient for fits, which were evidently hysterical; and at the early age of eight years she had had an attack of rhythmical spasm of the occipito-frontalis muscle, which lasted three months and then got well. When I saw her in the hospital during the second attack, I found that the muscle was contracting pretty regularly 120 per minute, and this condition was accompanied with sighing, yawning, slight movements of the tongue, partial loss of sensation on the left side, pain in the left hip and knee, and drawing up of the left leg so as to produce distinct shortening.

Other cases of spasm from peripheral injury are more complicated, but appear to be reflex in their origin, whether the pathological stimulus acts upon the nerves which exist in muscles and tendons or upon other afferent paths. The following is an example.

Case of Spasmodic Movements of the Jaw, the Floor of the Mouth, &c., due to Injury.—On Nov. 20th, 1877, a boy, aged ten, came to St. Thomas's Hospital on account of a peculiar affection which he had had for five days. There was nothing noteworthy in his family or personal history, except that he had suffered from incontinence of urine. Five days before coming to St. Thomas's he had been in a playground where his schoolfellows were having a game of football. He happened to be in their way, and one of them took him by the back of the neck and threw him to one side. His neck pained him at the time, but by the following day the pain was gone. In its place, however, was a peculiar affection, consisting of constant movements of the lower jaw and of the floor of the mouth, and they had increased since then. As he stood in front of me, I saw the lower jaw and the floor of the mouth descend in regular and frequently recurring jerks, and when the boy's mouth was open it was seen that the tongue was likewise jerked spasmodically downwards and backwards. In addition to this, the larynx

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descended slightly, and the depressor muscles in the neck could be seen contracting. Each downward movement was accompanied by a sound like the croaking of a frog. Neither the faradaic nor the galvanic current applied from the nape of the neck to the parts below the jaw had the slightest effect on this curious condition. I gave the child some bromide of potassium, and sent him away. Nine months after that I saw him, and he was nearly but not quite well.

As I have already said, it is a matter for speculation how far such causes would give rise to spasm, if the nerve-centres were in a normal condition. What is really developed in these cases is an involuntary neuro-muscular habit. We are all familiar with the ankle-clonus which is set up sometimes in healthy people when sitting with the toes on the ground and the heels a little raised. If we start the clonus voluntarily, or if it has occurred several times in succession involuntarily, it may be difficult to stop it by an effort of the will, unless the position of the legs be altered. This is probably a physiological representative of certain cases of muscular spasm which assume pathological dimensions.

I have now come to the end of the remarks I have to make upon the first two divisions of spasmodic affections in connexion with chronic nerve disease—those, namely, which result from pathological changes in the cerebral motor mechanisms on the one hand, and the spinal motor mechanisms on the other. The third division, and that the most difficult of all, remains still to be dealt with, and is coextensive with what are called functional spasms. As I have already pointed out, the first two divisions should, and we may hope some day will, cover the whole field of spasmodic affections; and by placing functional diseases under a separate heading we publicly confess our ignorance, and proclaim that there is a very long list of spasmodic affections which have been carefully observed without success, so far as their pathology is concerned. In lectures professing to deal, however perfunctorily, with spasm, it would be impossible to pass by in silence the class referred to. It remains, therefore, for me to consider how far these functional diseases are capable of explanation or reasonable classification.

(To be concluded.)

ABSTRACTS OF THE

Lumleian Lectures

ON THE

ELECTRICAL CONDITIONS OF THE HUMAN BODY.

BY WILLIAM H. STONE, M.A., F.R.C.P.

LECTURE I.

AT the outset Dr. Stone asserted that he was not going to treat of so-called medical electricity. Electricity had not risen to expectation as a means of treatment of disease. To say that electricity is life is untrue. He proposed to treat of certain physical conditions of the human body in its relation to electrical currents, and to concern himself more with the inorganic and physical than with the physiological side of the problem. The importance of placing the physiological and medical application of electricity on a physical basis of absolute measurement was obvious. The earlier methods of detecting and estimating the existence of electrical currents were too indefinite and unmeasured to be of any scientific value. The galvanoscopic frog was a delicate but uncertain method of estimation—entirely empirical and unmeasurable. Professor Hughes had shown that the telephone can be used in the place of a galvanometer; this was demonstrated to the audience by telephones placed at intervals round the room, and the intensity of the sound in the instrument was made to vary by increasing and diminishing the distance between the primary and secondary coils.

Dr. Stone next proceeded to the main subject of his first lecture, which was to determine the resistance of the human body to the passage of electricity. Previous workers on the electrical conditions of the human body had been unable to estimate its resistance, or had made very erroneous statements from a variety of causes. Dubois-Reymond, Count du Moncel, and others had worked at the subject of animal electricity, but with scanty results. Volta, Humboldt, Lenz, Fechner, and Gilbert had all investigated the subject of electrical resistance of animal tissues. Dubois-Reymond practically gave up the problem of estimating the electrical resistance of the body as a whole. Serious errors were made because the occurrence of polarisation was not taken into account. The resistance, moreover, varied greatly, as Dr. Stone was the earliest to show, according as a low tension be employed or one of high tension, as from the induction coil; the resistance, indeed, was totally and entirely different in the two cases. The Count du Moncel experimented on his wife, and at least succeeded in demonstrating the electrolysing capacity of animal tissues, as permanent scars left by tremendous ulcers testify in the person of the lady to this very day, though the Count has long since gone to his last rest. He estimated the resistance of the body to electricity in terms of the Swiss and French unit, this being taken as one kilometre of telegraph line. Actually his numbers were 350 to 220 kilometres of telegraph line as the approximate resistance, but he employed very small electrodes, and this vitiated the result, as Dr. Stone afterwards showed. Still it was astonishing, considering the imperfect methods used, that so near an approach was made in ascertaining the real resistance of the body. The Swiss unit of one kilometre of iron wire is equal to about 10 ohms. The Count's lowest estimate of 2200 ohms (220 kilom.) was not grossly inaccurate.

The two chief difficulties that exist in the estimation of the resistance next occupied attention. One was the difficulty of making good contact. The older workers never made good contact. Electrodes 4½ cm. by 3½ cm. were employed; these being not nearly large enough. The body might be regarded as a cable, consisting of a mass of conducting material contained in a good insulator. In dry atmospheres human skin rubbed against woollen tissue developed electricity with facility, and this was the explanation of the electrical boy, who by friction on the carpet developed electricity. Again, the human body rapidly electrolyses; it might be regarded as a secondary battery of no inconsiderable power. It also had what Dr. Stone formerly spoke of as electro-chemical capacity, the body being regarded as a condenser. But in order to be in harmony with the recent results of Professor Hughes this capacity would better be named self-induction. It was most important to determine the resistance of the tissues which were insulated by the skin. In order to arrive at it we should make the contact, mathematically speaking, infinitely large. The resistance due to the skin Dr. Stone showed by using salt-and-water, and very large leaden poles could be brought down to zero. He obtained, in fact, the best contact by using a broad ribbon of lead wound round the skin, which gave very perfect contact over a sufficiently large area. The variability of result as to resistance owing to the high insulating power of the skin could be done away with by obtaining perfect contact. Estimations were made from definite anatomical points; the styloid process of the ulna and the external malleolus of the fibula were very useful for the purpose. Instead of the deflecting galvanometer he used Wheatstone's bridge, or a modification of it. Small bichromate batteries were good, but pure chromic acid ones even better. Each of these elements gave an electro-motive force of two volts. As electrodes he had tried powdered wet carbon, spongiopiline, and surgical serrefines inserted through the skin. The last was exceedingly painful, and the others not so good as leaden appliances. By allowing the current to pass from foot to foot the largest quantity of tissue could be operated upon; from hand to hand was also useful, but those estimates taken from hand to foot were of great value. The distance from one hand to the other corresponded fairly to a man's height. The following table shows some results from the living human conductor:—

	Height.	Measurement from hand to foot.	Resistance. Foot to foot.	Foot to hand.
	ft. in.	ft. in.		
Mr. T——	5 6	5 9½	945 ω	1320 ω
Mr. S——	6 3	7 0	930 ω	1027 ω
Hungarian giant ...	7 6	8 7	930 ω	1032 ω

The resistance might be measured by using momentary contacts; the results were, however, vitiated by electrolytic action that was set up by the electrical current acting on the tissues, a counter electro-motive force being set up. By

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employing alternating currents errors also crept in, owing to the electro-chemical or voltametric capacity of the human conductor. The resistance of a St. Thomas's Hospital porter's tissues by using the alternating currents was determined with the aid of a galvanometer and found to be 1160. But polarisation setting in causes usually a steady rise in the resistance; chemical decomposition taking place inside the body develops an opposing electro-motive force. Dubois-Reymond asserted that he had not taken the trouble to ascertain the human resistance, but Dr. Stone believes that he really gave it up in despair owing to his obtaining such variable results. The lecturer said that at the suggestion of Dr. O. Lodge he had adopted Kohlrausch's principle, the apparatus consisting of an induction coil and telephone. This will be explained in another lecture.

Reference was next made to Sir Henry Mance's method of measuring resistance; this eliminated the errors due to polarisation and electrolysis. The body might be regarded electrically as a faulty submarine cable; it was for this that Mance employed his method, but Dr. Stone now used it for investigations on the human body. It appeared that Mance had already made a few observations, and actually determined the resistance of the human living conductor at 900 to 1100 ohms. Rosenthal's estimate of 8 to 20,000 ohms was much beside the mark. In Mance's method a modified Wheatstone bridge was used; it allowed polarisation to do its worst. The following simple formula showed the method of estimation of resistance:—

Let P_1 = R. of coil A and P_2 = R. of coil B
R_1 = R with coil P_1 and R_2 = R with coil P_2

Then $$X = \frac{(R_1 - P_2)(R_2 - P_1)}{(P_2 + R_2) - (P_1 - R_1)}$$

Or $$X = \frac{A - B}{C}$$

It was ascertained by experiment on the porter that the resistance rose 7 ohms from polarisation, and Dr. Stone stated that, as a rule, the resistance increased whilst the current was passing through the body. Some observations had been made by other investigators and at different times than those of his own—especially Mr. Lant Carpenter; and it was interesting to note that the results were practically the same, though different kinds of apparatus had been used. Thus with an electro-motive force of 2 volts the resistance for the first minute was found to be 1194 ω, but at the fourth minute 1230 ω; with 4 volts at the fourth minute, 1155 ω; with 8 volts (Dr. Stone) the first minute gave 1130 ω, the fourth minute 1160 ω. It seemed clear, then, that the human resistance was much less than had hitherto been supposed. Further, Dr. Stone found that if the patient had been in sound health the size of the individual made no difference, as the table already given shows, where, if anything, the smallest man gave the highest resistance. As is the length of the levers of the body so is the sectional area of the muscles that move them. He would not assert, however, that the law was universal. In disease considerable differences obtained. Mr. Cunynghame had taken the resistance of the human body as 2000 ohms, with a view to determine the real limits of safety for electric lighting, and this was a difficult matter. Accidents happened with powerful dynamos, but it was almost impossible to ascertain their frequency or anything about them; they were seldom made public, and generally hushed up, probably because it was thought by the promoters of electricity for useful purposes that publicity of the facts relating to accidents might interfere with the future success of the industry.

Dr. Stone next considered a few of the alterations in resistance that occurred in certain diseases. The point was not yet settled whether the human body acts as a solid or as a fluid conductor; the behaviour of fluids and solids to heat showed that there was a considerable difference in their molecular structure. In his opinion the tissues did not act as fluid conductors. It was ascertained that dropsy enormously reduces the resistance. It sank to one-half in one case which Dr. Stone had the opportunity of investigating before and after the appearance of dropsy; this did not seem as if muscle acted as a fluid conductor. In fact, muscle was more resistant in good condition than when replaced by connective tissue. The lecturer had investigated six cases of very old hemiplegia; the difference of resistances respectively between the sound and diseased side were 420, 350, 360, 120, 550, and 730 — results so different from the normal 1000 that he considered them as not to be explained by mere accident. Certain cases of impregnation of the body by metallic impurities were also ascertained to alter considerably the resistance to the passage of electricity Thus in a case of mercurial intoxication there was a considerable increase in the conductivity of the tissues, which was not so marked in lead-poisoning. In a case of impregnation by copper, where the right hand was most affected, it was found that this hand gave less resistance—was, in fact, a better conductor than the left. The urine in this case was decomposed by electrolysis and 3 milligrammes of metallic copper obtained. As to the influence of pyrexia, Dr. Stone quoted some results, which have already been published in *Nature*, in a case of ulcerative endocarditis; the general result, which requires confirmation by further observations, was to the effect that the resistance in fever is greatly decreased.

THROMBOSIS OF THE CORONARY ARTERY DURING ETHER ANÆSTHESIA.

SUDDEN DEATH AFTER THREE WEEKS.

BY WALTER MOXON, M.D., F.R.C.P. LOND.,
PHYSICIAN TO GUY'S HOSPITAL.

MR. PETER GOWLLAND had operated for some anal trouble upon a gentleman who was staying at an hotel in Finsbury. The wound had healed; it had been only a small incision, not confining the patient to bed. At the time of the operation ether was administered, and it was noticed that a great deal of ether was required to produce full anæsthesia, but beyond this no signs of any unusual occurrence were observed. Three weeks after the operation the patient was found dead on his bed. The body was naked, already cold, and in full rigor mortis; it was twisted as in suffering, the face turned to the pillow. A light was burning in the room, the time being near midsummer. From all the circumstances it was evident that the deceased had been seized with sudden illness, and had died as he was undressing for bed. A brother who had been a good deal with him in the last few months said that there had been no complaint made by him. A servant at the hotel had seen Mr. Gowlland's patient go upstairs to his bedroom about 11 P.M. on the night of his death, and had noticed the alacrity with which he ran up the stairs; she remarked that he appeared to be an active, vigorous sort of person, in good spirits.

On inspection, seventeen hours after death, the body was well nourished and younger looking than the stated age. There were no signs of decomposition. The examination discovered nothing whatever of a morbid nature except in the vascular system. The state of the heart at once drew attention. Its left side, especially the ventricle, was much distended with liquid blood, the right cavities being distinctly less loaded than usual. The substance of the heart was very soft and flabby, although rigor mortis was strong in the trunk and limbs. The endocardium and endarterium were stained red, showing that the red blood-corpuscles had partially disintegrated since death. The relatively empty state of the right heart, taken with the distended condition of the left, proves that the cause of death had not been any kind of obstruction to respiration, but was due to failure of the left ventricle after the left auricle had acted. Death was due to syncope in cardiac diastole. On proceeding to examine the heart more narrowly, the course of the coronary vessels could be traced with the finger, these arteries feeling like threads of stone in the rather considerable amount of fat which followed the lines of the inter-ventricular grooves. The inside of the aorta was found, on the other hand, to be in a good state of preservation for the age of the individual. There were but a few patches of quite superficial degeneration, and these did not implicate the mouths of the coronary arteries, which were of normal size, readily admitting an ordinary probe. But on opening up the left coronary artery with a fine pair of scissors, its walls crackled and broke, with a fractured stony edge, and this went on as the course of the vessel was followed until reaching about two-fifths of the way down towards the apex of the heart. At this point the channel of the vessel proved to be partially obstructed.

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It was the point of origin of a rather large branch, which went towards the left ventricle, and this branch was filled with a thrombus, which projected into the channel of the parent vessel, so as to almost close it. It should be noticed that the blood everywhere else was quite liquid. There was no clot in the aorta nor in the coronary artery, except the little clot in this branch of the vessel, and this clot was of pale colour and firm consistence, and adhered to the vessel's wall; but the end of it, which projected into the main coronary artery, was dark in colour and of recent date.

In the interpretation of these facts the first question is whether the clot was embolic, or whether it arose in the place where it was found. I think there can be no doubt of the autochthonous origin of the clot, seeing that no source of embolism was discoverable, and that the clot was in a particularly narrowed, tortuous, and stony part of the vessel, conditions favouring the coagulation of the blood there. Further, it should be noticed that the thrombus occupied the part of the coronary system of vessels which is most prone to disease. Now it is beyond measure improbable that a solitary embolus would find its way to this special point, whilst this is the very point where a thrombus would take its rise. The locality is thus a practically decisive reason for believing that the coagulation occurred in the affected branch of the coronary vessel, and as negative ground for the same conclusion no source of embolus could be found; the valves and the lungs were quite healthy. The age of the thrombus would correspond to about three weeks, so far as my experience enabled me to judge; and this was the period that had elapsed since the anæsthesia by ether had been undergone. It is therefore obvious that the clot formed about and probably at the time of the ether administration, three weeks before death. This being admitted, it will be seen that the heart showed itself able to maintain the circulation in a manner very satisfactory whilst it lasted; so that its possessor was noticed to be robust, cheerful, and active at a time when a clot of more than two weeks' date had closed a very considerable branch of the arterial supply of the left ventricle. The state of the muscle of this part of the ventricle was carefully examined, and I was not able to see any marked difference between the muscle fibre of the part whose artery was obstructed and the rest of the fibre of the ventricle. There were here and there a few fibrils with traces of granular change, and there was some brown pigment about the nuclei of some of the fibrils. The formation of the thrombus was probably by extension from a small beginning, or more degeneration must have occurred in the muscle. It must be concluded that anastomotic twigs carried on sufficient circulation till shortly before death.

The effect of experimental occlusion of a large branch of coronary artery upon the heart of a mammal has been stated by several observers.[1] The facts observed have varied somewhat with the kind of animal experimented on. The heart of a dog thus treated was found to continue its action for a short time quite efficiently, so that the arterial pressure was fully sustained until the rhythm of the contractions was suddenly lost and the heart stopped at once, the last beats of the auricles distending the ventricles, whilst these became utterly insensitive to any kind of stimulation, and death took place with the heart in diastole. But in order to make such an experiment the heart has of course to be exposed and maltreated; and under these circumstances it is apt, independently of interference with the coronary arteries, to go wrong in the manner described. Cohnheim's account of the behaviour of the heart corresponds with what is known as "delirium cordis." My friend and colleague, Dr. Wooldridge, who speaks on this matter with the authority of large experience, writes to me as follows:—"I have often seen a gradual failure of the heart from long maltreating. I have never seen it stop suddenly, except as the result of the development of delirium of the heart, so that the fibres or groups of fibres in the ventricle work away at a great rate in their own time, but not in harmony with one another, so that a very wriggling condition is set up. Meantime the auricles go on beating and the ventricles become very distended. Delirium of the heart may arise from faradaic excitation of the heart (localised faradisation), and also by mechanical injury, sticking in needles, &c. I have also seen it arise from strong constant current, and it arises with peculiar readiness in dogs poisoned by chloral. I have seen it occur *spontaneously* in an exposed heart."

[1] Von Bezold: Med. Centralb., 1867. Samuelsohn: Zeitschr. f. Klin. Med. Cohnheim: Allg. Pathol.; i., 34.

The suddenness of death and the great distension of the left ventricle in the present case correspond exactly with the description of Cohnheim and others of the mode of death witnessed in experimental closure of a large branch of the coronary artery; and a large branch of the coronary artery was, in fact, closed in the case narrated. The experiments enable us to follow what took place. Death in these cases appears to be due to delirium cordis, and the facts observed in Mr. Gowlland's patient render it probable that delirium of the heart may be set up without exposure or maltreatment if a large branch of the coronary artery be stopped. The small dark recent portion of the clot which extended from the old clot of the branch into the parent vessel would serve to suddenly starve a much larger area of ventricular muscle, and so imitate exactly Cohnheim's experiment, save only that the obstruction was not complicated by operative maltreatment of the heart. I think the case must be added to the list of deaths through inhalation of ether.

SECONDARY INFLAMMATION OF THE PAROTID.

BY STEPHEN PAGET, F.R.C.S.

PAROTITIS, not due to mumps, may be due to local injury, or may occur during one of the acute fevers, usually typhus. It also occurs in pyæmia; and of this true pyæmic parotitis I have collected many cases. But the following cases make up a fourth group; a few of them, but only a few, are cases of pyæmia. In all, the primary lesion was in the abdomen or pelvis. In nearly all, the parotitis was the only secondary lesion. Most of the patients recovered; and in many cases the absence of all signs of pyæmia or septicæmia was especially noted. It is probable therefore: (1) That the parotid is related to the peritoneum; (2) that it is also related to the generative organs; (3) that an abdominal or pelvic lesion may be followed by parotitis without pyæmia; and (4) that such a parotitis, if it occurs late, in a patient not exhausted by the primary trouble, and with healthy kidneys, is usually followed by recovery. This relation of the parotid to the abdomen and pelvis was called by old writers a "sympathy." It is probably very complex; it may include the minute structure and chemical and vital changes of the parts concerned; their vascular, lymphatic, and nervous connexions; their liability to diseases; their inherited and embryonic tendencies.

But even if all the following cases were cases of pyæmia, which they are not, we should still have to ask why pyæmia starting in the genito-urinary system is more often the cause of parotitis than pyæmia starting in the limbs. This question has made me examine the relation, in pyæmia, between the site of the primary lesion and the distribution of the secondary abscesses; I hope soon to publish some statistics on this point; certainly the distribution is not a matter of chance. Thus disease seems to be able to demonstrate relations between organs which in health appear independent. My best thanks are due to those gentlemen who have kindly told me of cases.

CASE 1. *Use of the catheter; parotitis; death.*—A gentleman aged eighty, with enlarged prostate and residual urine, had used a catheter twice a day for two months; then he insisted on its being passed more frequently. A week later his bladder became irritable; then came a rigor and acute right parotitis. Death in forty-eight hours. No pus was observed in the urine.—(THE LANCET, February, 1886.)

CASE 2. *Use of the sound; parotitis; death.*—A gentleman aged eighty-five, with slightly enlarged prostate and irritable bladder, who had often used a catheter, was sounded, easily and without much pain. Next day there were violent rigors and right parotitis, which ended in suppuration. Death in fourteen days from exhaustion.—(THE LANCET, January, 1886.)

CASE 3. *Use of the catheter; parotitis; recovery.*—A gentleman aged eighty-two had used a catheter, and a false passage had been made. He then had retention; relieved with a catheter properly passed. This was followed by swelling of one parotid. It did not suppurate, and he recovered.—(MS. case.)

CASE 4. *Use of the catheter; cystitis; parotitis; death.*—A gentleman aged eighty-four, with irritable bladder and

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much residual urine, began the daily use of a catheter on Sept. 8th. Two days later he was feverish, passing bloody urine. On the 27th he was thought to be dying; but on this day the right parotid became swollen, and with this his condition improved. The gland suppurated, was incised, and began to heal; but he afterwards sank steadily, and died on Oct. 14th.—(MS. case.)

CASE 5. *Cystitis; parotitis; recovery.*—A lady over seventy-five, with chronic cystitis and leakage of urine, was laid up after a fall. This made her cystitis worse, and three or four weeks after the accident she had swelling of one parotid, with dusky redness of skin over it. Slow suppuration followed, revealing a sloughing mass almost as large as a walnut; this by degrees became detached and was cast off. Two months after the accident all was healed, and she is still alive and active.—(MS. case.)

CASE 6. *Peritonitis (?) after delivery; parotitis; recovery.* A primipara, aged twenty-eight, suffered from tenderness of the abdomen on the day after delivery, and this was followed by "septicæmia." The perineum had been slightly torn. On the nineteenth day she had inflammation of the right parotid, with rapid swelling of the face and neck, "so that tracheotomy seemed inevitable." In six days the parotitis was nearly gone. A week later it returned, but only for two days. Rapid recovery.—(*Amer. Gynæc. Trans.*, iv., 125.)

CASE 7. *Induced abortion; parotitis.*—C——, aged forty-one; six children. Pregnancy at third month. Salivation great. Abortion induced for pernicious vomiting. Five days later acute left parotitis; no womb-symptoms, but slight fever and sour-smelling discharge.—(Dr. J. M. Duncan. M.S. case.)

CASE 8. *Peritonitis after delivery; parotitis; recovery.*—A young woman, with severe peritonitis after delivery, was treated with mercury internally and externally. The peritonitis improved, but mercurial stomatitis came on with right parotitis. This was resolved; then came left parotitis. Early incision, without waiting for fluctuation; gland infiltrated with pus. Rapid relief.—(*Gazette Hebdom.*, 1868.)

CASE 9. *Retarded convalescence after delivery; parotitis.*—A lady was confined of her second child on Jan. 25th. Labour natural; but uterine pains continued, giving her no rest, and her temperature kept about 101°.—27th: She has passed a large clot; the uterus is large and somewhat tender; syringed out with carbolic (1 in 40). In the evening very cold, with teeth chattering.—28th: Temperature 103°; pulse 140; tongue very dry.—29th: Better; uterus much smaller.—30th: Uterus larger again; syringed out. Much flatus in intestines. There was never at any time any offensive vaginal discharge.—31st: Much flatus; tongue as hard and dry as ever; temperature 103°.—Feb. 2nd: Urine normal; temperature 100°.—3rd: Complains of pain at right angle of jaw.—4th: Right parotid greatly enlarged; she cannot open her mouth.—5th: Much less swollen. Tongue still very dry.—7th: Swelling gone; temperature and pulse normal. There were never any offensive lochia or any signs of peritonitis. There was a drain wrong in the house, or said to be wrong, and a lady previously living there had been ill after her confinement there. (Dr. Godson. MS. case.)

CASE 10. *Pyæmia after delivery; parotitis; death.*—A primipara, aged twenty-nine; delivery with forceps; extraction difficult; ruptured perineum. On the third day peritonitis with fever and vomiting, followed by jaundice, pains in the chest, and dyspnœa, with rapid loss of strength. The uterus was kept irrigated. Shortly before death swelling of the left parotid. Death on the ninth day. Post-mortem: Laceration of vagina; endometritis; abscesses in broad ligament; diffuse suppurative peritonitis; spleen swollen; chronic interstitial nephritis; fresh adhesive pleurisy; infarcts in right lung; pulmonary œdema.—(*Amer. Jour. Obstet.*, 1884.)

CASE 11. *Delivery; puerperal mania; parotitis.*—A multipara, aged twenty-eight. March 7th: Natural labour.—19th: Left parotitis.—20th: Maniacal.—28th: Parotitis going down; temperature normal. Case still under treatment.—(Mr. Brockatt: St. Thomas's Hospital.)

CASE 12. *Pyæmia after delivery; parotitis; death.*—A multipara, aged thirty-six. Delivery by section of the child; it was an arm presentation, with firm retraction of the uterus. Temperature the same day 105°. Next day, temperature 105·5°; pulse 140. She had repeated shiverings, and continued to get weaker.—Ninth day: Moved into St. Bartholomew's. Very weak; face sallow; abdomen tender; sordes on lips.—Tenth day: Rigor; temperature 102·8°.—Twelfth day: A tender swelling in the right maxillary region; skin over it glazed. Tongue dry; no offensive discharge.—Thirteenth day: Swelling of face extending; she cannot open her mouth.—Fourteenth day: Better; swelling less. A roseolous rash, papular on the extremities, but nearly a uniform blush over the right breast. Urine half albumen; contains blood and casts.—Fifteenth day: Bowels loose; rash all over body, large magenta papules, and irregular blotches.—Sixteenth day: Very noisy last night; a spreading bedsore has appeared. No pain. Sick once. Urine loaded with albumen; blood and casts.—Seventeenth day: Rash more brown. Vomit is thought to contain pus from the parotid swelling.—Eighteenth day: Restless, with perpetual vomiting. Parotid swelling very red and brawny. Two days later death occurred. Just before this the parotid swelling discharged freely into the mouth.—(Dr. Duncan: Martha Ward Books, vol. v., Case 54.)

CASE 13. *Traumatic peritonitis; no signs of pyæmia; parotitis; recovery.*—A young man fell off a bicycle, and a dray-wheel passed over his abdomen. Collapse; acute peritonitis. This was gradually clearing up when he became worse, with high temperature, slight delirium, and double parotitis. The swelling rapidly became very great; the skin was very red. Under belladonna lotion the swelling began to go down in thirty-six hours, and in a few days had disappeared. There were no other bad symptoms.—(Mr. A. Scott: Brighton Med. Chir. Soc., 1883.)

CASE 14. *Peritonitis; no signs of pyæmia; parotitis; recovery.*—A boy, aged twelve, was admitted into Guy's Hospital with acute general peritonitis, probably from abscess round the cæcum. After some days he had high temperature, delirium, and double parotitis. Both glands swelled rapidly, both suppurated, and were incised, with evacuation of pus. There were never any symptoms of pyæmia or septicæmia.—*(Ibid.)*

CASE 15. *Peritonitis from perforation; parotitis; death.*—A man, aged twenty-four, was admitted into the Middlesex Hospital on Jan. 4th, with acute peritonitis of a week's duration. He had a similar attack three years ago.—8th: Sudden pain in both parotid regions. Next day both glands were swollen and tender, and he could not open his mouth.—10th: Profuse sweating. Urine acid, no albumen.—14th: Left parotid swelling is discharging into the ear. Two drachms of pus let out by incision. Restless and delirious at night.—16th: Temperature 101·2°; pulse 128; respiration 44. Tongue dry and glazed. He looks wasted and apathetic. A purpuric eruption has appeared above the umbilicus, over the præcordia, and over the right breast. As there was some discharge from the right ear the right parotid was incised. No pus. Sweating; delirium; rapid rise of temperature to 104·8°; death.—*Necropsy:* Peritoneal abscesses, some of great size; signs of old peritonitis. The appendix opened by ulceration into a pelvic abscess.—(Dr. Finlay: Clin. Soc. Trans., 1885.)

CASE 16. *Peritonitis; parotitis; pyelo-nephritis; death.*—This is a post-mortem record of a case where parotid abscess was found conjoined with pyo-salpinx, suppuration in Douglas's pouch and around the rectum, acute pyelo-nephritis, with chronic interstitial nephritis, amyloid disease of liver and spleen, and pneumonia. The probable sequence of events is thus given: Rupture of the perineum; prolapse of the uterus; endometritis; pyo-salpinx with adhesions; escape of pus into subperitoneal tissue, followed by amyloid disease and septicæmia.—(Dr. Kingston Fowler: Med. Soc. Trans., vol. vii.)

CASE 17. *Bullet wound of lumbar spine; parotitis; pyæmia; death.*—President Garfield, shot on July 2nd, 1881. In August gastric irritation and vomiting set in. On the 17th the right parotid began to enlarge, and on the 24th it was incised; only a few drops of pus escaped. Later, it opened into the mouth and ear, and more incisions were made. In September, during intense heat, he had broncho-pneumonia, with great somnolency; then rigors, delirium, and prostration. Sudden death on the 19th.—*Post-mortem:* The bullet had broken the right eleventh rib, perforated the first lumbar vertebra, and become encysted behind the peritoneum, below the pancreas. Death from hæmorrhage from an ulcerated mesenteric artery. Very large abscess between liver and transverse colon. Signs of double bronchitis and broncho-pneumonia. One small abscess in left kidney. Parotid suppuration nearly healed.

CASE 18. *Malignant disease of lumbar spine: parotitis.*—A man, aged sixty, in the spring of 1885 was attacked by pain in the loins and lower extremities; it was constant,

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with frequent exacerbations. He passed from under observation till his death on Oct. 8th, 1885. Post mortem, there was found a malignant tumour of the lumbar and sacral vertebræ, with secondary deposits, in liver, lungs, and bronchial glands. The kidneys were in the state called "surgical." There was an abscess in the subperitoneal tissue above the symphysis pubis and another in the substance of the right parotid.—(Mr. J. F. Macready. MS. case.)

CASE 19. *Peritonitis; abdominal section; parotitis; recovery.*—A man, aged twenty, fell ill with loss of appetite and severe abdominal pain, followed by vomiting and absolute constipation. Abdominal section revealed general peritonitis and a fetid abscess round the cæcum. The peritoneum was washed out, and the abscess was drained. Slight albuminuria a day or two later, followed by right parotitis. No suppuration; recovery.—(Dr. Barlow and Mr. Godlee: *Med. Times and Gazette*, Dec. 1885.)

CASE 20. *Peritonitis from perforation; parotitis; death.*—A man, aged twenty-six, had three weeks' paroxysmal abdominal pain, followed by jaundice about the eyes and vomiting. Exploration of right femoral hernial sac; gas and thin yellow fluid escaped. Sac stitched to skin and drained. His general condition now improved.—Fourth day after operation: A tender spot behind left angle of jaw.—Fifth day: Not so well; fever, loss of sleep, abdominal pain. Considerable swelling at both angles.—Sixth day: Death.—*Post-mortem:* Diffuse peritonitis; much pus in pelvis; a collection of bile-stained fluid near the duodenum, and a perforating ulcer of the anterior surface of the first part of it.—(Mr. Godlee: *Med. Times and Gazette*, May, 1885.)

CASE 21. *Gastric ulcer (?); parotitis; recovery.*—A lady, aged thirty-six, of feeble constitution, suffering from vaginitis, inflamed piles, and two small bedsores, suddenly showed symptoms of acute gastric ulcer; opium and nutrient enemata gave relief, but she was left in great mental and bodily weakness. Two or three weeks later the left parotid became inflamed and suppurated; a large abscess formed, and was opened in two places. This was followed by considerable left facial paralysis. She has never quite recovered her health of mind and body. The paralysis is less.—(Mr. C. T. Oldham. MS. case.)

CASE 22. *Gastrotomy; no signs of pyæmia; parotitis; recovery.*—A girl, aged seventeen, had in her stomach a matted mass of swallowed hairs, 2 lb. in weight. Mr. Thornton removed it by a transverse 5 in. incision through the stomach, and closed the wound with silk. There were no symptoms from either the stomach or the peritoneum; but in a few days one parotid swelled. It felt boggy, and was incised; no pus. Next day the other swelled, but subsided under belladonna and glycerine on wool.—(Trans. Internat. Med. Congress, 1885.)

CASE 23. *Gastrostomy; no signs of pyæmia; parotitis.*—A woman, aged forty-one, had for six months suffered from difficulty of swallowing. On Dec. 12th, 1884, the abdomen was opened, and the stomach was secured to the abdominal wall. — 20th: Stomach opened. — 22nd: Swelling in region of parotid. — 26th: Incised; about half an ounce of pus escaped. — Jan. 16th: Parotid wound healed. — Feb. 19th: Died of exhaustion.—No signs of general pyæmia.—(Mr. W. Bruce Clarke. MS. case.)

CASE 24. *Enterostomy; no signs of pyæmia; parotitis.*—A girl aged fourteen, after a fortnight's bad health, had fever, constipation, and vomiting. Urine 1030; no albumen or sugar. The vomiting became dark, then fæcal.—Feb. 7th: Abdominal section by Mr. Langton; enterostomy.—9th: Vomiting ceased; much relieved.—16th: Temperature has never risen above normal; she has slept and taken food well; has vomited once or twice; fæces have passed freely by the artificial anus. To-day a slight swelling of right parotid region.—18th: Goes on very well; temperature normal; parotid swelling rather larger. — 22nd: Urine normal. The parotid swelling has disappeared. General health good.—(Dr. Duckworth. Elizabeth Ward Books, St. Bartholomew's Hosp., 1886.)

CASE 25. *Abdominal obstruction; parotitis.*—This case is mentioned in Fagge's Principles of Medicine (i., 300). The obstruction was due to cancer of the sigmoid flexure.

CASE 26. *Cancer of sigmoid flexure; abdominal section; colotomy; parotitis.*—Emma T——, aged sixty; intestinal obstruction.—Jan. 4th: Abdominal section; puncture of cæcum; no peritonitis.—Jan. 7th: Obstruction still unrelieved; colotomy. Jan. 13th: right parotitis, which subsided in eight days. Death from the local disease.—(Mr. A. E. Barker: Univ. Coll. Hosp.)

CASE 27. *Herniotomy; parotitis; recovery.*—A man aged forty had a left inguinal hernia, strangulated twenty-four hours. Strangulation at both rings. Operation tedious; large piece of sac removed. Peritonitis followed, and he nearly died. On the third day after operation the left parotid swelled very suddenly. It subsided as suddenly, and in three days there was scarcely a sign of it. He recovered steadily. Something was being done to the drains at the time, but no bad smell was perceived.—(Mr. E. S. Dashwood. MS. case.)

CASE 28. *Removal of omentum; parotitis; pyæmia; death.*—A man had an omental tumour removed from a hernial sac. The operation was followed by pyæmia, of which the parotitis was a result. The case was in St. Bartholomew's Hospital some years ago, but the notes are incomplete.

CASE 29. *Acute jaundice; pyæmia (?); suppuration at angle of jaw; recovery.*—A man aged twenty-two, who had "some time previously" had gonorrhœa, with sore-throat, complained on March 7th of languor, headache, and weakness in legs.—11th: Vomiting; constipation; abdomen distended and painful; urine scanty, coffee-coloured, and albuminous.—13th: Marked jaundice, mental oppression, and pains in limbs. The thigh seemed swollen.—15th: The bowels well opened; urine scanty, but not albuminous. 18th: Vomiting ceased; less oppression; and pulse and tongue improved. — 20th: Continued improvement; less jaundiced. — 21st: Rash on the skin like urticaria. — 27th: Two or three days ago erysipelas of the right side of the face and neck came on, and suppuration occurred at the angle of the jaw; the abscess was opened.—30th: The erysipelas is disappearing, and he is recovering steadily.—(Dr. Habershon: Guy's Hosp. Rep., 1861.)

CASE 30. *Ovariotomy; parotitis; recovery.*—A multipara, aged thirty-two. Swelling of abdomen noticed since the last child. Punctured, and cystic fluid drawn off; feverish for some days.—Feb. 19th: Ovariotomy; evident peritonitis; the abdomen washed out with carbolic (1 in 100). She bore the operation well. No fever followed it. Four days later left parotitis occurred, with rise of temperature; a week later, right parotitis. Then the left parotid broke, and was freely incised. The right parotid also suppurated, and was incised. The temperature was highest early in the course of the parotitis, then it gradually sank.—(Professor Möricke: *Zeitschr. f. Gebürtshilfe und Gyn.*, v. 348.)

CASE 31. *Ovariotomy; parotitis; perimetritis; death.*—A multipara, aged forty-eight. Swelling of abdomen noticed five years. June 29th, ovariotomy; many adhesions. There was some fever next day, but it was gone by the sixth day. Then came a rise of temperature, with left parotitis. Five days later this was incised; a considerable quantity of pus was let out. The fever abated, but a week later there came fresh fever, with perimetritis; diarrhœa; bedsore; death on thirty-fifth day.—(*Ibid.*)

CASE 32. *Ovariotomy in an old patient; parotitis; death.*—A multipara, aged sixty-five; swelling of abdomen noticed three months. She is very feeble and wasted. Nov. 6th, ovariotomy; a large cyst with colloid contents, which had to be scooped out. No fever after the operation. Six days after it came slight rise of temperature, with swelling of right submaxillary and sublingual glands, followed by swelling of the parotid. Pus was seen issuing from Wharton's duct. Three days later the parotid was incised and pus let out. Fever; quick weak pulse. Swelling extended over neck. Death the same day. Operation wound healed by linear scar.—(*Ibid.*)

CASE 33. *Ovariotomy; parotitis; recovery.*—A strong, full-blooded woman, Frau S——. Swelling noticed two years. Much œdema of lower limbs. Oct. 20th, ovariotomy; strong adhesions, broad pedicle. No fever after the operation. Six or seven days later came painful swelling of right parotid. It all disappeared in six days.—(*Ibid.*)

CASE 34. *Ovariotomy; parotitis; abortion.*—A multipara, aged thirty-four; last child six years ago. Jan. 30th: Ovariotomy; two ovarian tumours were removed. Some rise of temperature for the first two days; she was then quite free from fever till the seventh day. Then came right parotitis, with some fever, and extension of inflammation over neck and face. This subsided, with a little subcutaneous abscess. Abortion followed. She is still under treatment.—(*Ibid.*)

Möricke's remarks on the last five cases are as follows. The patients had not been exposed to mumps, except in Case 30, and this was doubtful. Nor were their histories or their ages consistent with mumps. Their homes were

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healthy. They did not infect each other. The parotitis was not due to pyæmia, for in all the cases there was a fever-free interval between the operation and the parotitis, and only one patient died with any symptoms like those of pyæmia. He has never seen parotitis after any other operation on the generative organs. In the interval between the primary lesion and itself, and in its rate of frequency after ovariotomy (1 in 50), this parotitis is very like the orchitis of mumps (1 in 60).

CASE 35. *Pelvic cellulitis; parotis; recovery.*—A primipara: aged twenty-two. On eighth day with pelvic cellulitis, double parotitis, which lasted only a week.—(Dr. T. Williams: Univ. Coll. Hosp.)

CASE 36. *Ovariotomy; parotitis: pus in left ovary; pyæmia; death.*—Miss E. W——, aged forty-nine. Strumous diathesis. First symptoms three years ago. June 18th: Ovariotomy; peritoneum darkly stained, containing a pint of very dark fluid. Appendices epiploicæ and intestines stained and injected, especially those near pelvis. Tumour broken up and removed (11 lb.). No grounds for anxiety during first week. She remained well till the eleventh day, taking solid food. All sutures removed.—28th: Slight swelling and stiffness in left parotid region.—30th: Parotid swelling more diffused.—July 2nd: Swelling very hard, with a red blush over it. Temperature 103°.—4th: Swelling hard and livid; no fluctuation. Furred tongue, thirst, and anorexia. Temperature 102·6°.—5th: Thin pus began to escape from the ear.—6th: Semi-comatose, with tremors of tongue and arms. Temperature 102° and 103·8°. Two small abscesses below lobe of ear incised.—7th: Temperature 105·4°. Death. —*Post-mortem:* Operation wound healed. Hæmorrhagic infarcts in lungs. Purulent pericarditis. Numerous abscesses of both kidneys. Left ovary cystic, filled with thick fetid purulent matter. Fetid pus escaped on pressure below lobe of ear; angle of jaw was denuded of periosteum. —(Dr. Bantock: *Med. Times and Gaz.*, Nov. 1878.)

I have ventured to add the foregoing case to the others, and to regard the parotitis as secondary to the suppuration in the left ovary or in the kidneys. Dr. Bantock speaks of it as due to primary otitis, and regards the suppuration in the left ovary as secondary.

CASE 37. *Pelvic abscess; parotitis.*—Catherine C——, aged fifty-four. Recurrent cancer of uterus; pain over pubes; no general peritonitis.—June 24th: Left parotitis.—July 3rd: Pus three ounces, let out.—15th: Peritonitis.—17th: Death. *Post-mortem:* Pelvic abscess; no general peritonitis; no signs of pyæmia.—(Dr. T. Williams: Univ. Coll. Hosp.)

CASE 38. *Ovariotomy; septic state already present; parotitis; death.*—The patient was bedridden and greatly wasted. Had been tapped twice, last time six weeks ago; grave septic symptoms had set in; "the operation was altogether a forlorn hope." Universal adhesions; death seemed imminent during and after the operation. Next day she had rallied, and for seven days she did fairly well, and the tube was removed. On the ninth day there were a slight rise in temperature and left parotitis. In three or four days the gland broke into the ear, and was also freely incised. "She had all the tokens of a mild septicæmia, from which she gave promise to get well: but her relatives were strict homœopaths, and objected to my medicine. So they took her home, where she died on the thirty-second day from vomiting, as I afterwards learned."—(Dr. Goodell, of Philadelphia.)

CASE 39. *Ovarian tumour; removal; parotitis; recovery.*—Miss ——, aged twenty-seven; ascites for two years and a half; tapped fourteen times. A hard swelling to be felt floating in the abdominal cavity.—April 18th: Operation; removal of a hard nodular papillomatous tumour of right ovary.—21st: Swelling of both parotids; barely any rise of temperature; rapid recovery. The tumour had merely omental adhesions, and a long, slender, twisted pedicle. "The ascitic fluid was evidently secreted directly from the tumour, and did not come from pressure on abdominal veins or from irritation of the peritoneum."—(*Ibid.*)

CASE 40. *Oöphorectomy; parotitis; recovery.*—Mrs. ——, aged twenty-one, invalid for several years, bedridden for six months with constant pain. Left ovary enlarged and very painful; morphia habit.—Sept. 17th: Both ovaries removed; left hypertrophied and cystic.—21st: Painful swelling of right parotid; left parotitis a few days later. No marked rise of temperature; no quickening of pulse; not the slightest evidence of septicæmia. "Sympathetic, not symptomatic"; exactly like mumps, but slower to disappear.—(*Ibid.*)

CASE 41. *Operation for lacerated cervix; parotitis; recovery.* There was hæmorrhage almost immediately after the operation; the patient lost a great deal of blood, and was much weakened. Convalescence slow, but no trace of fever. In the second week parotitis came on, first of one side then of the other. The submaxillary glands also became tender and swollen. The glands slowly subsided; she then for some time had hysterical trismus.—(*Ibid.*)

Dr. Goodell has very kindly sent me his account of the last four cases. It will soon be published in the *American Journal of Obstetrics*. Case 39 is already reported there, vol. xvi., p. 744. He also refers to *Annales de Gynæcologie*, Aug. 1885, and to the two cases of Dr. Macdonald.

CASES 42 to 52.—These ten cases were mentioned in the discussion on Dr. Goodell's paper at the American Gynæcological Society last autumn. Dr. Sutton referred to a case in which one gland after the other began to swell during convalescence after ovariotomy, the patient dying during the third week. Dr. Johnson reported a case of swelling of both parotids after ovariotomy, which ended in death on the ninth day. Dr. Mann related three cases. One of these ended in death with septic symptoms; another recovered; both were ovariotomies. The third was a penetrating wound of the abdomen. It recovered. Dr. Emmett gave two cases: one after operation for lacerated cervix, with recovery; one after operation for a small vesico-vaginal fistula, with death. Dr. Baker gave a case after Tait's operation. The gland suppurated and death ensued. Dr. Reamy gave two cases: one after Tait's operation, with death; one after hysterectomy, with recovery.—(*Med. Times and Gaz.*, Dec. 26th, 1885.)

CASE 53. *Abdominal section; parotitis; recovery.*—Mrs. S——, aged fifty. Large retro-peritoneal tumour removed by abdominal section, together with left kidney, to which it adhered. Eleven days later, right parotitis, which was incised and drained. No signs of pyæmia.—(Mr. Hulke: Middlesex Hospital.)

CASES 54 and 55. *Ovariotomy; parotitis; recovery.*—Mrs. D——, aged fifty-two. Swelling noticed seven months. June 28th, ovariotomy. Adhesions in front, and to the omentum. Pedicle broad and thick. Left ovary healthy. Eight days later intense parotitis, lasting for about a fortnight. Recovery otherwise uninterrupted. "This is the second time I have met with parotitis after ovariotomy. In neither of these cases was there temperature or other symptoms to lend the least colour to the opinion that the parotid inflammation was septic. In neither case did the glands suppurate. The parotitis merely complicated the convalescence a little by the pain and slight fever it induced." Dr. Macdonald refers to a case of parotitis after ovariotomy for a burst cyst in the *Centralblatt für Gynäk.*, 47, 1884.—(*Edin. Med. Journ.*, May, 1885.)

CASE 56. *Incision of cervix uteri; parotitis.*—Dr. Matthews Duncan told me of this case, which occurred in the practice of Sir James Simpson. The inflammation was very severe, and of both glands. It subsided rapidly, without suppuration.

CASE 57. *Repeated parotitis with each pregnancy.*—Mrs. M——, aged forty-three, tall and thin. During six successive pregnancies she has had enlargement of the left parotid. "She has learned to recognise this as one of the first indications of her condition." It increases with the advance of gestation and disappears after delivery.—(Dr. Harkin: THE LANCET, Feb. 1886.)

CASE 58. *Use of a pessary; parotitis; recovery.*—A lady, aged sixty, had bearing-down pains; uterus rather low down. Hodge pessary introduced without much pain. On her way home, pain and faintness. Four days later, pain in the back, tremor, dry tongue, pulse 120, temperature 104·5°; left parotid region swollen and painful. Shivering fit the day before. The day after, less fever, less pain, less swelling. Next day, slight vaginal discharge; pessary therefore removed, though not causing any discomfort. She soon got well, and remained well, even after the re-insertion of it.—(Dr. Cribb: THE LANCET, Jan. 1886).

CASE 59. *Amenorrhœa; parotitis at menstrual periods.*—(Stéphanie, v. 23.) In May, parotitis. In June, parotitis. In July, swelling of the labia. In August, parotitis. In September, parotitis. In October, menstruation; no swelling of parotid or labia. In November, swelling of the labia. The parotitis was always on the left side.—(Prof. Peter: *Gaz. des Hôp.*, 1868, p. 146.)

With this case may be compared a passage in Dr. Goodell's paper: "I am now treating two ladies for nerve exhaustion. One has excessive salivation just before and durin

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menstruation; in the other, who has a congested and tender left ovary, the left parotid gland does not secrete during menstruation, and then the mouth and fauces on that side are dry and painful."

CASE 60.—Billroth, among his Zurich cases, had one of parotitis after a blow on the testicle.

STONE SACCULATED IN THE BLADDER OF A FEMALE.

BY CHAS. WILLIAMS, F.R.C.S. ED.,
SURGEON TO THE NORFOLK AND NORWICH HOSPITAL.

CASES in which a vesical calculus is impacted in a cyst situated in the walls of the bladder are so extremely rare, that I consider it a duty to record this very interesting example.

A fine and healthy girl, aged three years, living in Norwich, came under the care of the late Mr. George Hutchison in the year 1873, having for several months previously suffered from very decided symptoms of stone in the bladder. It had been noticed by her mother that from the time of her birth she had experienced a difficulty, as well as occasionally severe pain in passing urine, and that sometimes she voided blood mixed with it, and was in the habit of straining so violently as to produce prolapsus of the rectum.

On sounding the bladder, which was an unusually capacious one, it was with some difficulty that a calculus could be detected. At the wish of the parents Mr. Hutchison resolved to remove the stone by dilatation. Mr. W. H. Day assisted at the operation, and I was requested to administer chloroform. The urethra was freely and quickly dilated with Weiss's trivalve dilator. There was considerable trouble to find the stone, and when found a still greater trouble to seize it with the forceps (and it was particularly noticed that, although the patient was thoroughly under the influence of the anæsthetic, the getting hold of the stone with the forceps occasioned severe straining); the blades could not be made to grip the calculus; they continually slipped off, bringing away pieces of the stone. At last it became absolutely necessary to ascertain what occasioned the difficulty. For this purpose the urethra was still further dilated, and the neck of the bladder was also divided with a probe-pointed bistoury. The stone could now be felt with the point of the finger immovably fixed in the floor of the bladder on the patient's left. It appeared to be of the size of a pigeon's egg, and was enclosed in a sac, through the neck of which a small portion protruded into the vesical cavity, and it was off this nodule that the forceps so continuously slipped. Many efforts were made to dislodge it—first with a scoop, then with the finger, which could barely reach it, and next with the forceps; they all proved unsuccessful. Several portions were broken off the uncovered portion, but the main piece was left *in situ*, as it was considered undesirable to make any further attempt to remove it, the patient having been a long time under the influence of chloroform and apparently in a very exhausted condition.

The next day the child had voided very little urine. A catheter was introduced, and a small quantity of sanguineous urine flowed out. She was very drowsy, and had been so since the operation. When roused she took milk and brandy very freely, but immediately afterwards became drowsy again; she did not appear to have recovered from the influence of the chloroform. The next day she died. No post-mortem examination was permitted.

I am induced to believe this child died of chronic chloroform-poisoning, and not from the effects of the operation, which was by no means roughly performed, and there was very little blood lost. She never thoroughly revived, but became comatose, and died in that condition. It is difficult to imagine what could have given rise to the formation of the sac; there never was an obstruction to the escape of the urine, such as stricture or prostatic enlargement might engender, for neither existed. We are taught that a cyst is usually formed by the straining necessary to expel the urine; the mucous membrane is forced between the bands of muscular fibres, hypertrophied in consequence of the strain to which they are subjected. Nothing of the sort can apply in this case, and it is not easy to believe that the stone was the cause of the cyst, which it might have been had it been situated close to the neck of the bladder. When impacted in this situation, the very pressure to which a stone is subjected by the constant and long-continued action of the bladder to expel it causes the mucous membrane to ulcerate through, and the stone is in due time forced into a cavity, which enlarges as the stone grows, and in this way it may form a tumour in the vagina, as was the case reported by me in THE LANCET of Nov. 7th, 1885. An effort is then made by nature to contract the opening, which in this child was nearly accomplished; but the calculus was far from the neck of the bladder, and could barely be touched with the point of the finger, so that a different explanation of the formation of the cyst is required; and as no examination was allowed to be made, it seems to me to be almost impossible to suggest in what way the sac was formed. Sabulous matter or a few urinary crystals may probably have been deposited originally in a mucous follicle, lacuna, or fossa, and gradually augmented in quantity, and in this way the sac enclosing the calculus may have been produced. The mother of the girl at four years of age suffered from stone, which was removed by the late Dr. Edward Lubbock; it was the size and shape of a walnut. She has suffered from incontinence since that time.

IMPERFORATE RECTUM TREATED SUCCESSFULLY BY LEFT INGUINAL COLOTOMY.

BY HUGH STOTT, M.R.C.S., L.S.A.L.

A CASE of imperforate rectum was recently brought under my care. The subject was a small but full-time infant four days old; it was an illegitimate child. The mother had noticed that the baby had not passed a motion since birth, and that it was constantly sick, the vomit being of a yellow colour, of a strong odour, and staining the clothes. The mother at the birth of the child was attended by a midwife. The rectum, on examination, disclosed a natural opening for the anus, and on passing a bougie made of soap up the canal it was arrested at the second inch; by carefully inserting the little finger no bulging of bowel or any indication of such could be made out. I therefore resolved, instead of dissecting up and seeking the end of the bowel, to perform left inguinal colotomy or Littré's operation. For this purpose I gave chloroform, and made an incision above Poupart's ligament in the left groin, about two inches in length, in a curved direction upwards towards the anterior superior spine of the ilium. Upon opening the peritoneum a quantity of yellow-coloured fluid exuded, and the large bowel bulged forwards; this was pushed upwards until the lowest part was reached. It had no free end, but was attached. The bowel was stitched on either side of the edges of the wound and then opened between the stitches. Some meconium escaped; there was little or no bleeding. The wound was dressed with strips of lint saturated with carbolised oil (1 in 100), a loose pad of cotton-wool, and then a bandage. The child recovered from the chloroform and was not sick; it was put to bed with its mother, and took from the bottle cow's milk and water. The stitches, which were silk, were removed on the third day, and the wound healed kindly, without any sign of suppuration, which is to be wondered at considering the wretched and dirty state of the surroundings. The child is now three months old, and is thriving; the wound has perfectly healed, and looks clean and healthy; at present there is no prolapse of bowel. The operation was done by myself without assistance, except that an old woman looked on. This will show the simplicity of the operation.

Perhaps the question may be raised, Was it right to endeavour to prolong this child's life? It has been said in such cases, "Let the child die," but I strongly agree with Mr. T. Holmes, who says, in reference to these cases, "A surgeon who would not operate in a case of this kind would, I think, neglect one of the plainest duties of his profession." Is a surgeon to arrogate the power as to whether a person shall live or die? As to the choice of operations, I selected Littré's: first, because it is easier to do without assistance; and, secondly, because contractions following a dissection upwards in the course of the rectum are so liable to take place, leaving the patient probably in a worse state than he was before. It may be I shall later on endeavour to establish a natural discharge for the fæcal matter at the anus.

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A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. BARTHOLOMEW'S HOSPITAL.

SARCOMA OF BLADDER; CYSTOTOMY; SUPRA-PUBIC PUNCTURE.

(Under the care of Mr. MORRANT BAKER.)

IN the case which is here recorded operative surgery could afford only palliation. It is an example, however, of how much relief may be given in certain cases of malignant disease of the bladder, even under circumstances the most unfavourable. The total duration of life after the patient's first admission into the hospital was not much more than four months, but about half of this period was rendered free from acute pain and distress by the performance of the operation, and for some weeks the patient felt comparatively well. For the notes of the case we are indebted to Mr. Vogan, late house-surgeon.

J. S——, aged fifty-five, a harness-maker, was admitted to Darker ward on Sept. 11th, 1884. About six months ago he felt a smarting pain when micturating. Two weeks previously he had noticed blood in his urine and smarting pains at the tip of the penis both before and after micturition. He now has great pain about the loins, which shoots down the thighs, and frequent desire to micturate. No history of syphilis, gout, or rheumatism. Urine: sp. gr. 1026; alkaline; blood and albumen present, but no sugar. Examined per anum, the prostate was not noticeably enlarged, but felt a little firmer and more prominent on the left than on the right side, but the difference was not more than might be accidental. Examined by sound, no stone could be detected, but some hard substance was struck.

Sept. 23rd.—Pain in loins continues, also that referred to end of penis; there is also pain on defecation. He cannot hold his urine for more than two hours and a half, and has to strain to pass it.

26th.—Bladder washed out with syphon apparatus, which gave him some relief.

Oct. 6th.—There is not much blood in the urine, but on passing a catheter directly after micturition about two ounces of bloody fluid were drawn off. Pain referred to sacrum.

9th.—The urine on examination under the microscope was found to contain blood-corpuscles, pus-corpuscles, and bladder epithelium, but no portions of new growth were seen. He can only hold his water for an hour and a half at a time, and has more pain on passing it and on defecation.

11th.—The patient was taken into the operating theatre and anæsthetised, and Mr. Baker made a median incision in the perineum. On passing his finger into the bladder, a growth was felt about the size of a small Tangerine orange, having a large and firm base, though somewhat constricted. It was situated behind and slightly to the right of the prostate. Several pieces, each about the size of a filbert nut, were removed with Sir Henry Thompson's crushing forceps. The base was then felt to infiltrate the walls of the bladder, which were adherent to the surrounding tissues. Hæmorrhage was rather free during the operation and for about one hour afterwards.

12th.—Slept well and feels easy. The pain in the bladder is much less than before the operation. Temperature 100·4°.

25th.—Got up after tea yesterday. Rests at night much better than before the operation, and has no pain except during and for a short time after micturition. Very little blood in the urine, which nearly all passes through the penis.

Nov. 7th.—On examination per anum, a large swelling was felt in the region of the prostate; it was exceedingly tender. The patient has lately complained of pain in the hypogastric region.

11th.—Discharged from hospital. All the urine passes per urethram. Hardly any blood in the urine, but rather more pain has been complained of lately, both at the time of and after micturition and defecation. The patient has been greatly relieved by the operation.

29th.—Readmitted, suffering from recurrence of severe pain and other symptoms, as on the former occasion. At the present time there is just in the scar of the operation in the perineum a hard tumour the size of a horse-chesnut. The hypogastrium is tender, and a fulness in the region of the bladder is very distinct.

Dec. 12th.—The bladder has been washed out twice a day with warm boracic acid lotion, which gives him some relief. The temperature varies from below normal to 102·4°. The difficulty and pain in passing the catheter are increasing. The tumour in the perineum has rapidly increased in size during the last week, more especially anteriorly and in the direction of the left crus penis. It is also encroaching on the wall of the rectum. During the last few days a hard swelling has appeared on the right side of the penis about its centre. Passes urine every three-quarters of an hour.

13th.—The patient was anæsthetised, and after examination Mr. Baker decided not to perform any further operation for the removal of the growth, this having extended to the rectum and involved nearly the whole of the perineum.

19th.—The swelling on the right side of the penis has disappeared, but that in the perineum has partially broken down.

Jan. 1st, 1885.—This afternoon Mr. Baker made a supra-pubic puncture into the bladder and introduced through the wound a soft red-rubber catheter. A long piece of india-rubber tubing was attached to the end of the catheter, so as to conduct the urine to a utensil under the bed and allow of continuous drainage.

2nd.—Patient very much relieved by the operation.

16th.—For some days the patient has requested that the catheter should be removed, saying that it gave him pain. It was removed to-day, and a pad of absorbent wool kept over the wound.

19th.—The patient has been gradually sinking, and died at 11 o'clock last night.

Necropsy.—There were two small sarcomatous nodules in the right pleura, and two similar nodules in the liver. The bladder was filled, except at its upper part, by a new growth that infiltrated its anterior and lateral walls as well as the fundus, and had a cauliflower-like form. By the backward extension of the tumour the rectum had become fixed and surrounded, and close to the anus the growth had sprouted into the gut, and by breaking down had established a recto-vesical fistula. The ureters were a little distended, and their orifices into the bladder partly occluded by the growth. The renal pelves and calyces were dilated. The left renal pelvis contained fetid pus.

ROYAL BERKSHIRE HOSPITAL.

A CASE OF SUBACUTE MYELITIS, WITH CALCULUS IMPACTED IN THE URETER; REMARKS.

(Under the care of Dr. H. FRENCH BANHAM.)

S. J——, aged thirty-eight, was admitted on Nov. 10th, 1885, and died Jan. 4th, 1886. On examination there was found to be complete loss of motor power in the legs, and all sensibility to touch or temperature was annulled. There was also absolute paralysis of bladder and rectum. The bladder was enormously distended, and formed a considerable tumour, so large as to arrest the attention on reaching the patient's bedside. The urine was withdrawn by the nurse, but the quantity was not measured. The knee reflexes were intact, but the plantar and hypogastric superficial reflexes were absent. Bedsores already existed over the upper part of the nates. Pain in the back, which seemed to have troubled the patient a great deal before admission, still existed, but was chiefly in the dorsal region. There was more or less complete anæsthesia over the abdomen as far as the umbilicus, and although she was troubled with the girdle sensation, there was not found here any hyperæsthetic zone. The patient was possessed of less than average intellect, and it was difficult to determine how much reliance could be placed upon her statements in regard to the previous history of her illness. It would seem, however, that an uncertain amount of pain in her back and legs had characterised the early part of her illness, and that the paraplegia with loss of control over the sphincters had been preceded by perverted sensations and numbness, if not by complete anæsthesia. The anæsthesia

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over the abdomen was soon found to vary a good deal from day to day, and to be irregular in its distribution. Within a few days of admission she began to be troubled with severe muscular spasms, by which the legs were flexed upon the abdomen. The urine soon presented an alkaline reaction with abundance of ropy mucus—the usual indications, indeed, of a pronounced cystitis. Without going into particulars with regard to the treatment adopted, it may be said that all efforts, general and local, directed to the relief of the spinal trouble, the cystitis, and the bedsores, were unavailing, and a downward progression marked the course of the disease, and the patient died on Jan. 4th.

Remarks by Dr. BANHAM.—The circumstances were unfavourable to a complete and thorough post-mortem examination, and the spinal cord unhappily was not examined. It will, however, be conceded that paraplegia, with absolute anæsthesia, loss of control over the bladder and rectum, and bedsores over the sacrum, form a group of symptoms that, taken collectively, render the existence of myelitis not probable only, but certain; and it may be said that such a condition was present. In addition to the myelitis, there was an impacted calculus in the ureter, which above was distended and thinned, while the pelvis and kidney were in the morbid condition that constitutes what is known as "surgical kidney." We have, therefore, in this case the coincidence of two diseases of sufficient rarity to justify the suspicion of a causative relation existing between them. The calculus and the alterations that the kidney and ureter had undergone indicate clearly that disease in these parts had preceded the spinal symptoms, which, indeed, only came on within three months of the final issue. It seems probable that there was a subacute transverse myelitis, which, commencing in the lower part of the spinal cord, ascended and became converted into a meningo-myelitis, all secondary, and due to an impacted calculus in the ureter. From a comparison with other similar cases that have been recorded, and that have been the subject of careful examination, there can be no doubt that the spinal cord lesion in this case was consecutive to a neuritis which travelled upwards from the irritation in the kidney and ureter.

CASHEL UNION HOSPITAL.

LARYNGOTOMY; RECOVERY.

(Under the care of Dr. LAFFAN.)

THE following case of successful laryngotomy may prove interesting from the encouragement which it holds out to prompt action in like emergency. Dr. Laffan knows of cases where life has apparently been lost from want of operative measures in similar circumstances.

M. N——, farm labourer, aged fifty-three, was admitted at 4 P.M. on July 30th, 1885. He complained of sore-throat and had some slight difficulty of breathing. On examination signs of an ordinary attack of pharyngitis presented themselves. The uvula was more swollen than usual; but to this much significance was not attached. Therefore some routine treatment was ordered, and he was sent to one of the wards. An hour had scarcely elapsed when Dr. Laffan was hurriedly sent for, with the announcement that the patient was dying. In about ten minutes he was found suffering from such extreme dyspnœa as to promise speedy asphyxia. The imminence of his danger was explained to him, and his permission obtained for operation. The larynx was at once opened through the crico-thyroid membrane; there was scarcely any bleeding, and a dilating tube was easily inserted. At the moment of operation he fell back apparently dead, but the entrance of air into the chest, a subcutaneous injection of ether over the sternal region, and ammonia to the nostril quickly revived him. Notwithstanding that every possible precaution was taken, such as regulated temperature, hot steaming, &c., the patient was seized with pleuro-pneumonia of the right base twenty-four hours after the operation. Fourteen days after this he was attacked with pleuro-pneumonia of the left side, and it was not till after the lapse of five months that he recovered perfectly. He was detained in the hospital some time longer, as his family circumstances were poor, and Dr. Laffan was anxious to avoid exposing him to the hardship incidental to a damp house and scant living. The tube was maintained in for eight days only, and the wound healed a few days afterwards.

The pain which ushered in the inflammation of the right lung was situated so near where the ether was injected that it was thought not impossible that there might be some connexion between the two; and when the second lung was seized it followed immediately on the opening of a small abscess, which formed at the point of injection. Dr. Laffan would prefer to select the arm or leg for the seat of injection on another occasion.

STRANGULATED FEMORAL HERNIA; ASPIRATION, FOLLOWED BY TEMPORARY RELIEF; OPERATION; FÆCAL FISTULA; DEATH FROM PHTHISIS; REMARKS.

M. L——, a female, married, aged fifty, was admitted on July 30th, under the care of Dr. Laffan, with strangulated right femoral hernia. The history was that she had had a rupture for twelve months, and that this had doubled in size and become very painful about two days prior to her admission. Taxis had been tried by the previous surgeon, and was consequently now only slightly attempted. There was severe pain, but no great constitutional disturbance. She declined to allow a cutting operation, and Dr. Laffan then resolved to give tapping with the aspirator a trial. A small trocar and cannula were employed. Some fluid bowel contents came away; the bowel became readily flaccid, and slight pressure caused it to disappear altogether; this it did, however, without gurgle. Next day the tumour reappeared to the extent of half its former size. It was much softer, and some fluid matter exuded on pressure. On Aug. 1st she was attacked with severe pain in the part. On the 2nd she consented to be operated on. This was accordingly done about 6 P.M. A portion of the anterior wall of one of the coils, about the size of a florin, was found to be gangrenous, and in it there was a small opening, produced by the aspiration needle. Some of the adjacent portions of bowel presented marked signs of inflammation. Constant vomiting followed. This was checked after some hours by drop doses of aromatic ammonia. There was some abdominal swelling, with a pulse of 112 and a temperature of 99·8°. There was some local tenderness, but it scarcely amounted to pain, and no general peritonitis at any time set in. A fæcal fistula ultimately formed. The discharges from the fistula were frequent during the day, and as it was high up in the small intestine, these weakened her very much. An effort was made to compensate for these by injections into the distal end, but these would not be tolerated by the part. An attempt to close the fistula by pressure, and another to restore the continuity of the bowel for temporary digestive purposes by means of a flexible tube, likewise proved failures. Pancreatic enemata were administered per rectum, and these helped to sustain the system to a certain extent. Dr. Laffan was arranging for an attempted cure of the fistula with Dupuytren's enteretome, when the recrudescence of a chronic phthisis set in, and finally disposed of the patient on Sept. 16th.

Remarks by Dr. LAFFAN.—There are two points in this case worthy of note. The first is the unreliability of the treatment by the aspirator, since by the seeming return of the tumour which followed from it, it tended to mask the real state of things. Absence of gurgle in the case of an unemptied gut would be significant enough, but in that of an emptied one might mean nothing, and could not therefore afford the help which it would in the case of an untapped bowel. The second point is the hint afforded by the continued, though very small, discharge of intestinal contents. This in itself I shall in future regard as an almost certain sign of gangrene, as I know of no instance where structures not gangrenous have failed to close up after the use of a small trocar, No. 3 of the most improved form of aspirator.

ST. JOHN AMBULANCE ASSOCIATION.—The third annual meeting of the Gibraltar Centre was held on the 31st ult., at the new Assembly Rooms. The Governor, his Excellency General Sir John Adye, G.C.B., presided, and Lady Adye presented certificates and medallions, among the recipients of the latter being the Chief Justice, Sir H. J. Burford Hancock. Brigade Surgeon A. Clarke has reported to St. John's Gate an excellent case of first aid rendered by Gentleman Cadet H. R. Beddoes, now attending his lectures at the Royal Military College. A poor woman was knocked down by a train at Farnborough Station and had her foot and leg smashed. There was profuse arterial bleeding and much shock. No surgeon was available, but Mr. Beddoes applied temporary tourniquets and took such other measures as undoubtedly saved the woman's life.

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Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Chemical Pathology of Respiration in Cholera.—Splenectomy.

AN ordinary meeting of this Society took place on Tuesday last, Mr. G. D. Pollock, F.R.C.S., President, in the Chair.

Mr. WILLIAM SEDGWICK read a paper on the Chemical Pathology of Respiration in Cholera. After some introductory remarks on cyanosis in relation to choleraic collapse, the author referred to the early observations of Dr. John Davy and Mr. Finlayson on the absolute reduction of carbonic acid in the air expired by cholera patients in Ceylon during the epidemic of 1819; and to those of M. Rayer on the absolute reduction of oxygen absorbed in the cases observed by him in Paris during the epidemic of 1832. Such observations proved simply that the pulmonary interchanges of gases was diminished; whilst those of M. Doyère, made during the epidemic of cholera in Paris in 1849 and 1854, demonstrated that the amount of oxygen absorbed, although absolutely diminished, was relatively much larger than the amount of carbonic acid eliminated, and was always above the standard proportion observed in the interchange of these gases during health. Attention was directed to the absence of any unsatisfied demand of the blood for oxygen; to the failure of the voice common to cholera, and to gastro-intestinal cases simulating cholera; and to the influence of the disease on the dyspnœa of phthisis. The contraction of the lungs observed after death during collapse resulted from absence of blood and of air, and was referable to diminished supply of carbonated blood during life. Percussion during collapse, as was first shown by Professor Griesinger, gave, in consequence, a small area of cardiac dulness. The relative excess of oxygen accounted for the integrity of the mental faculties, for the contracted state of the left ventricle after death, and for the emptiness of the brachial and other large arteries which has been observed during advanced periods of collapse. As carbonic acid was a lower compound than urea, the production of the former was greatly diminished, whilst that of the latter was stopped, during well-marked collapse. Owing to the reduced production of carbonic acid there was diminished animal heat during collapse, whilst the rise of temperature, which occurred before and also after death, was dependent on the accumulation of previously unconsumed oxygen.—Dr. B. O'CONNOR asked for a fuller explanation of the rise of temperature immediately preceding and following death. He did not gather whether the accumulated oxygen combined with carbon in the production of carbonic acid and the development of heat, or whether there was some other method by which heat was liberated.—Mr. SEDGWICK considered, in reply, that the accumulated oxygen combined with some combustible substances when the vital influence was removed. It was the first occasion on which the chemistry of collapse had ever been brought before the notice of any medical society in this country. During hibernation the oxygen absorbed was almost double the amount of carbonic acid eliminated, a condition which had some analogies with the chemical changes in collapse.

Mr. KNOWSLEY THORNTON read a paper on two cases of Splenectomy. This paper contained a detailed record of a case of splenectomy for cystic spleen in a girl of nineteen. The pedicle was ligatured with silk and the ligatures cut short. The operation was performed with full antiseptic precautions. The patient made a complete recovery and is now in much better health than before the operation. Another case of splenectomy for hypertrophy of the spleen was also related. In this case there was retraction of a small artery from the middle loop of the three ligatures, with hæmorrhage into the omentum and remarkable general oozing, and cyanotic condition of the patient, who apparently rallied from the operation, but died from internal hæmorrhage in five hours and a half. Tables of eleven successful and twenty-three unsuccessful splenectomies, with four successful partial splenectomies, were appended, with remarks on the causes of success and failure. All the cases in which leukæmia was present were fatal, and operations under these circumstances are, the author contends, unjustifiable. Credé had collected most of the cases in a paper in Von Langenbeck's *Archives*. Splenectomy for hypertrophy of the organ was not so favourable for operation as wandering spleen or cystic disease of the organ. In reply to the President, he said Mr. W. Haward's case had been included in the table; it happened in 1881, and was one of leukæmia. So far as he knew, the girl was now in a good state of health and menstruating normally; as a house and parlour-maid she was performing a fair amount of hard work. In one of the successful cases the woman bore a child after the operation. In another case the woman was in good health nine years after splenectomy.—Dr. A. MONEY said that, in animals, after removal of the spleen a fresh formation of splenic tissue was said to occur in the neighbourhood of the original spleen.—Mr. THORNTON said that the running powers and appetites of animals were increased after experimental splenectomy; it was interesting to observe that in his successful case the girl acquired an enormous appetite.—Mr. BRUCE CLARKE inquired if any reason could be assigned why cases of leukæmia should prove so unfavourable for operation.—Mr. G. D. POLLOCK had made a necropsy on a case some years ago in which the spleen was two feet in length and of enormous dimensions; death took place apparently from simple exhaustion.—Mr. K. THORNTON, in reply, considered that leukæmic patients would not bear any surgical operation well; the blood coagulated with great difficulty, and there was a proneness to hæmorrhage.—This last fact was illustrated by a case, narrated by the President, of a man who died two days after a large hæmorrhage into the legs.

CLINICAL SOCIETY OF LONDON.

Erythema Nodosum and Rheumatism.—Peculiar Cases of Pneumothorax.—Lithotapaxy in a Boy of Ten.

AN ordinary meeting of this Society was held on the 9th inst., Mr. Bryant, F.R.C.S., President, in the chair.

Dr. STEPHEN MACKENZIE read a paper on Erythema Nodosum, especially dealing with its connexion with Rheumatism. The paper commenced with the narration of the case of a young woman who was admitted into the London Hospital with erythema nodosum. Whilst under treatment for this, symptoms of a moderately severe attack of acute rheumatism developed, with doubtful signs of heart affection. Two slight relapses of the rheumatic symptoms occurred. The discrepant statements of writers on the subject are well known, and the occurrence of this case led the author to collect data for forming an opinion as to the connexion between erythema nodosum and rheumatism. By the assistance of Drs. Hadden, Carrington, Arthur Davis, and James Anderson, particulars of 108 cases of erythema nodosum were collected from the records of St. Thomas's, Guy's, St. Bartholomew's, and the London Hospitals. Analysis of these cases gave the following facts: There were eighteen males and ninety females, or five females to one male. The greatest incidence of the disease was found to occur in the second and third decennia, next in the fourth and first decennia, whilst few occurred in and after the fifth decennium. The age incidence is very similar to what occurs in rheumatism. In seventeen cases, or 15·7 per cent., there were present well-marked symptoms of acute or subacute rheumatism. In four of these cases the rheumatism was stated to have preceded the erythema, in two the erythema preceded the rheumatism, in two the erythema and rheumatism appeared concurrently, and in the remainder the sequence was not recorded. Besides these cases, there were seventeen others in which arthritic pains were present, apparently distinct from the pain in the limbs in which the eruption was present. In three of these there was a history of previous rheumatism, in four there was evidence of heart disease or disorder, besides sore-throat in the attack in two, and a family history of rheumatism in two. Though the evidence of the rheumatic nature of these last seventeen cases is not so strong as in the first seventeen, the author believed that they ought really to be included in the rheumatic category. If this were done it gave 17 + 17 = 34, or 31·4 per cent., with symptoms of rheumatism occurring with erythema nodosum. Further, in twelve cases in which no rheumatic symptoms accompanied the attack of erythema the patient had previously suffered from rheumatism. In six cases recurrences were noted. In one case the patient died in the sixth attack of acute rheumatism, and had erythema nodosum with three of the attacks. Sore-throat (including two cases

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of tonsillitis), which so often precedes and accompanies acute rheumatism, was present in twelve cases—though not specially inquired for; and in eleven cases there was a family history of rheumatism. A matter of great importance in establishing the connexion between erythema nodosum and rheumatism is the condition of the heart. Some important evidence was given. In twenty cases some definite lesion was present; ten of these are included in the group of cases in which rheumatism accompanied the attack of erythema; but in ten others, and three doubtful lesions, there was no arthritis accompanying the attack, though in some there had been previous rheumatism. Most important of all was the fact that a heart lesion, presumably endocarditis (with in one case pericarditis), developed in five cases during the attack of erythema nodosum. In three of these there was accompanying affection of the joints, whilst in two the joints were not affected in the attack. The author submitted that these facts justified the following conclusions:—1. That erythema nodosum is frequently associated with definitely rheumatic symptoms—e.g., arthritis, sour sweats, sore-throat, &c. 2. That heart disease (endocarditis) may arise during an attack of erythema nodosum, both in cases in which arthritis is present and in cases in which there is no affection of the joints. 3. That these conclusions justify the inference that erythema nodosum is frequently, if not generally, an expression of rheumatism, even when no other definitely rheumatic symptoms are present.—Dr. S. WILKS alluded to the connexion of rheumatism with erythemata generally, remarking that the nomenclature had been materially altered of late years. With regard to some of the cases quoted by Dr. Mackenzie, there might be some doubt as to their being rheumatism. In blood-poisoning of many kinds, affection of joints and rashes were met with, and yet the cases were not rheumatism. He was sometimes in doubt which was the more important, the rash or the arthritis. The so-called purpura urticans was sometimes associated with slight joint affection, so that he had considerable doubt as to the nature of some of such cases; by the older observers the skin diseases might have been regarded as the essential elements, the joint pains and fever being looked upon as manifestations of the cutaneous lesion.—Dr. CARRINGTON spoke of the connexion between erythema nodosum and heart disease; the existence of systolic apical murmur was not certain evidence of endocarditis.—Dr. S. WEST said that the relative frequency of heart disease in acute rheumatism was about 50 per cent.; in erythema nodosum but a few per cent. He thought that cases of erythema nodosum were only occasionally coincident with acute rheumatism.—Dr. RADCLIFFE CROCKER discussed the nature of the connexion between the arthritic pains and the erythemata; a nervous or local mechanism might be suggested; the rash was frequent in the neighbourhood of painful joints. In a case of simple synovitis of one knee a single patch of erythema papulatum was also limited to the joint. This suggested a direct local connexion, the eruption being due to the joint changes rather than to some profound blood lesion. Whilst he regarded erythema nodosum as of rheumatic nature, it differed considerably clinically from the other forms of erythema so frequently seen in rheumatism.—Dr. MACLAGAN said that erythema nodosum was long ago regarded as a manifestation of the rheumatic diathesis. No doubt many things were called rheumatism, and errors were liable to creep in from the difficulty of diagnosis in some cases. That erythema nodosum was related to rheumatism was shown by the family and personal history of a case he had lately seen, in which the child had erythema, followed by chorea and heart disease, when his brother also became the subject of chorea.—Dr. HINGSTON FOX had met with cases of acute rheumatism and scarlatina in different members of one family; he thought there was a connexion between scarlatina, acute rheumatism, and erythema nodosum. Hebra regarded erythema nodosum as an inflammation of the lymphatic vessels.—Dr. B. O'CONNOR had found that the rheumatic symptoms had been of a very mild character in some cases of erythema nodosum.—Dr. LAYCOCK regarded rheumatism as of nervous origin.—Dr. A. MONEY said he had read Dr. Barlow's paper communicated to the Liverpool meeting of the British Medical Association, and agreed with its statements. He had never seen undoubted heart disease in immediate relation with erythema nodosum.—Dr. S. MACKENZIE said his conclusions had not been influenced by any previous bias on the subject. Dr. Wilks' criticism was a just one, but still none of the collected cases showed the slightest evidence of other disease than rheumatism, and the cases had occurred in the practice of different physicians at large hospitals. The redness and tenderness sometimes preceded the occurrence of erythema nodosum, and, although the eruption did occur in the vicinity of joints, yet he had seen the eruption not in their immediate neighbourhood, so that he could not accept Dr. Crocker's suggestion of local causation. He agreed that the relative frequency of heart disease and acute rheumatism was as Dr. West had stated. He considered that he laboured under some disadvantage in having to read in abstract the evidence which he had brought forward, but he fully believed that further investigation would support the conclusions at which he had been forced to arrive by the statistics collected by independent workers.

Dr. SAMUEL WEST read notes of three cases of Pneumothorax. The first case was one of sero-purulent effusion, which was tapped twice, the patient being in perfect health three years after the attack. The second case died from suffocation due to discharge of the viscid contents of a large cavity into the bronchial tubes. In the third case death occurred from hæmorrhage due to an aneurysm. In the first case sudden dyspnœa occurred whilst in bed three months before the patient was seen. There was no cough previously, but cough and expectoration after the sudden attack of dyspnœa. The patient was at work the day before. Ten days before admission the dyspnœa grew gradually worse, and was attended with pain in the side. Pneumothorax of the right side with effusion was diagnosed. Forty-one ounces of sero-purulent fluid were withdrawn. The pressure was high. A second tapping fourteen days later yielded twenty-two ounces of fluid. Complete recovery followed. Three years have elapsed, and the patient is well and active. The second case was one of phthisis of nine months' duration. The pneumothorax of the right side took place whilst the patient was in hospital. Death occurred two days later from asphyxia due to obstruction of the bronchi by the contents of a large cavity, emptied probably by the compression of the lung. The third case began suddenly three weeks before admission; there had been cough for two months, or five weeks before the attack. The patient was admitted with dyspnœa and hæmoptysis. Pneumothorax of the right side with effusion was diagnosed. Paracentesis was performed, and twenty-eight ounces of sero-purulent fluid withdrawn. Three weeks later thirty-six ounces were obtained. A few days later still, a purulent discharge took place at the site of the puncture. Then a free incision was made. Hæmorrhage from the pleural cavity set in two days later, and hæmoptysis occurred a few days afterwards. Exhaustion led to death without further hæmoptysis. In the first case the cause was probably phthisis; the pressure in the pneumothorax was high. The composition of the gas was discussed, and also the nature of the effusion. The dilated state of the veins was commented upon, and also the prognosis in pneumothorax. As to the second case, Dr. West remarked that the chief cause of the dyspnœa, discharge of the contents of cavities into the bronchi, was not often described. On the third case it was observed that aneurysm of the pulmonary artery and pneumothorax were but rarely associated; the processes which led to each condition were, so to speak, of opposite nature. A criticism of the proposed treatment of profuse hæmoptysis by the artificial production of pneumothorax concluded the interesting paper.

Mr. W. J. WALSHAM read a case of Lithotrity at a single sitting in a boy ten years old. A boy aged ten was admitted into St. Bartholomew's Hospital, July, 1884, for stone in the bladder. Mr. Walsham performed lateral lithotomy in August, 1884. The boy made a good recovery, and was discharged without signs of stone. He was readmitted in February, 1885, with a return of his symptoms; and on the 26th of that month Mr. Walsham at one sitting crushed and removed a stone, the larger fragments of which weighed fifteen grains and consisted of oxalate of lime. The boy had no bad symptom, and left his bed within three days of the operation. Although in this boy both the cutting and the crushing operations were successful, a comparison of the results of the two was most striking. After the cutting operation, although he had no bad symptoms, he had to remain in bed for over three weeks, and for the first few days necessarily suffered some inconvenience from the passage of urine through the wound; whereas, after Bigelow's operation, although he was kept in bed for three days for the sake of precaution, he was practically convalescent on the morning after the operation. The chief objections that have been raised to lithotrity in children are, to quote the words

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of an eminent Indian lithotritist, Surgeon-Major Fryer, "that the genito-urinary organs are undeveloped, the bladder small, the urethra narrow, and the mucous membrane of both extremely sensitive and liable to laceration." That the genito-urinary organs are undeveloped, and that the bladder and urethra are smaller than in adults, are of course facts, but Mr. Walsham questioned whether they are objections to lithotrity in children. The undeveloped condition of the genito-urinary organs, by which presumably is meant, as concerns lithotrity, the undeveloped condition of the prostate, Mr. Walsham regarded as a positive advantage, as one of the chief difficulties in lithotrity in adults is referable to an enlargement of this organ; nor does he regard a small bladder, of course within limits, as a very serious objection—many lithotomists, Sir Henry Thompson among the number, preferring to work with the bladder containing only two or three ounces of urine. There are but few bladders, even in young children, that will not contain at least this amount. Even granting that the bladder is smaller than could be desired, it is more likely to be in a healthy condition than in adults, and if a little more injury is done to the mucous membrane, the forces of repair are all in favour of the child. With regard to the narrowness of the urethra, he had not the least difficulty in passing a No. 12 evacuating catheter after the meatus had been incised, and Dr. Keegan had found that the urethræ of boys of between four and six years will admit the passage of a No. 7 or No. 8 evacuating catheter, and the urethræ of boys of between eight and ten a No. 9 to No. 12. Experiments made by himself on the urethræ of children confirmed this belief. Mr. Walsham, moreover, questioned the extreme sensitiveness and liability to laceration of the urethra in children, and Dr. Keegan went so far as to pronounce this dictum as one of the time-cherished delusions in surgery. Dr. Keegan had performed the operation forty-two times in India on boys under twelve; and the success which had attended his cases showed that, even if such laceration occurs, it does no serious harm. Twenty of his patients were under the age of six; one was only one year and nine months. The smallest stone weighed 5 grains, from a boy of eleven; the largest, 236 grains, from a boy of seven, was composed of oxalate of lime. Mr. Walsham, in the light of this experience of Dr. Keegan and others in India, questioned whether lithotrity at one sitting ought not, as a rule, to be the operation undertaken in boys, whatever their age, as it had now become the operation in adults.—Mr. T. BRYANT considered that lithotrity was available for small stones. But the urethra was a tender and delicate part, and for large stones he thought that more damage might be done than would ensue from a lithotomy incision.—Mr. J. HUTCHINSON thought the Society was much obliged to Mr. Walsham for his case, and for the record of Indian experience. The operation was one that must be submitted to experience before a positive conclusion as to its practicability and value were decided upon. Certain disadvantages unquestionably appertained to the lateral operation in children.—Mr. BRUCE CLARKE spoke of the size of the urethra in young children. He mentioned one case in which a stone having the diameter of a No. 16 English catheter was liberated from the urethra.—Mr. R. W. PARKER referred to the statement of Von Langenbeck that in the lateral cutting operation the ejaculatory ducts were liable to be injured, with evil consequences later in life.—Mr. WALSHAM, in reply to Mr. Parker, could say no more than that the observer named and Mr. T. Smith had asserted that damage might be done to those parts.

The following living specimens were shown:—Mr. Bellamy: Enormous Vascular Tumour of the Upper Limb in an Infant. Mr. Stephen Paget: Synovial Cyst of the Leg in connexion with Disease of the Knee. Dr. S. WEST: Pneumothorax, with rapid recovery.

MEDICAL SOCIETY OF LONDON.

Evisceration of Globe of Eye.—Dislocation of Patella.—Bony Union of Fractured Patella.—Myxœdema with Contractions.—Spinal Sclerosis and Osteo-arthritis.—Lateral Sclerosis with knee-clonus but without ankle-clonus.—Amputation of Leg for Sarcomata.—Hereditary Tremor.

A CLINICAL meeting of this Society was held on Monday last, Mr. Brudenell Carter, F.R.C.S., President, in the chair.

Mr. R. BRUDENELL CARTER showed a boy aged ten, whose left globe had been eviscerate by Dr. P. H. Mules' operation, by which an artificial vitreous body might be employed.

Mr. J. H. MORGAN exhibited a girl with outward Dislocation of the Left Patella on flexion at the knee. Hueter ascribed the deformity to congenital laxity of the ligaments, especially on the inner side of the knee; others regarded it as due to a partial paralysis of the triceps extensor; with the latter view Mr. Morgan could not agree.

Mr. A. P. GOULD exhibited for Mr. Batterham of Wolverhampton a man aged thirty-seven, with Bony Union of a Transverse Fracture of the Patella. A plaster-of-Paris bandage was applied immediately after the accident. Six days later he got up, and on the tenth day left the hospital. At the end of ten weeks a leather support was applied, and the patient was able to walk long distances without fatigue.—Mr. B. JESSETT referred to a case of compound comminuted fracture which he treated by plaster-of-Paris bandages, with the result of complete bony union. A second case of simple transverse fracture was also successfully treated by the same method.—Mr. ALLINGHAM, jun., also testified to the value of the method of treatment.

Dr. W. M. ORD showed a typical case of Myxœdema in a woman aged thirty-seven, in whom the affection had lasted fourteen years. In addition, there was persistent contraction of the muscles in the limbs; generally speaking, the limbs were in a state of extreme flexion, which could be easily overcome, but prevented the deep reflexes from being obtained; it had varied considerably from time to time, and the winter cold always made it worse. Dr. Ord considered that the contractions were of functional nature. The highest motor centres were in a state of feebleness, and incoordination sometimes resulted therefrom. Mental aberrations taking various forms were also observed in myxœdema. In reply to Mr. R. B. Carter, Dr. Ord said that no contraction of the triceps was obtained on percussing the patella tendon.—Mr. S. MACKENZIE spoke of the character of the tonic spasm, which differed from tetany and from the ordinary hysterical contracture, in which extension is a prominent feature. Did sleep make any difference in the spasm?—Mr. BEEVOR remarked on the tremor of the hands, which was also observed in experimental mxyœdema.—Dr. HERON said that one patient of his was perfectly aware of the long interval between the apprehension and the execution of a desired act.—Dr. D. DREWITT spoke of hereditary myxœdema.—In reply, Dr. ORD said he was unable to say in what parts the delay occurred; probably it varied in different cases. The spasm relaxed during sleep.

Dr. ORD also exhibited a case, apparently of Disseminated Spinal Sclerosis. All the joints of both hands were deformed, being of the nature of osteo-arthritis. Considerable thickening of the joints with ankylosis existed; there was much muscular atrophy of the hands, and also a glossy skin. The tremors and rigidity of limbs had in great degree diminished. The association of several dystrophies with the spinal symptoms was very noteworthy. The osteo-arthritis and atrophy of muscle and skin had been present about three years. Probably the loss of power, tremors, rigidity, and trophic changes were all due to one and the same spinal affection.—Dr. BEEVOR asked whether it might not be a case of paralysis agitans.—Dr. ORD could not accept this view.

Dr. STEPHEN MACKENZIE showed a boy affected with Lateral Sclerosis of doubtful date; probably it gradually began two years ago. There was present an unusual condition of the deep reflexes. There was no ankle-clonus, but a most marked bilateral knee-clonus, the vibration lasting as long as the tension was maintained. In reply to Mr. Carter, he thought there was probably a localised lesion specially involving the nerve apparatus presiding over the quadriceps extensor. The phenomenon in this case had been detected by Mr. Rawes, house-physician at the London Hospital.

Mr. PURCELL showed drawings of a case of Round-celled Sarcoma of the Deep Muscles of the Calf. Amputation was performed by the method attributed to Hardie of Manchester. He also showed a case of subperiosteal ossifying sarcoma of the tibia and fibula of a boy; amputation was performed. Secondary growths appeared later on in the head and spine, lungs, liver, and brain.—Mr. CARTER related a case in which the same operation was performed for compound fracture of the leg.—Mr. JESSETT said that the retention of semilunar cartilages in the stump prevented the retraction of the thigh muscles.

Dr. S. WEST showed a case of Hereditary Tremors. The tremors existed in all the limbs, especially affecting the hands. It resembled paralysis agitans in that on performing

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volitional acts the tremors almost disappeared. The patient, a man aged fifty, was one of a family of ten, all of whom were more or less affected. The mother and grandmother were also the subject of the disease. He had six children, some of whom were affected. The affection began very early in life.—Dr. S. MACKENZIE had seen two or three cases of the same kind. The articulation was affected sometimes, and always made worse by excitement. He had seen the disease in very early childhood.—Dr. A. MONEY said the hereditariness recalled the disease known as chronic hereditary chorea, which also ran in families, but differed in coming on during adult life, and in being associated frequently with mental defects.

OPHTHALMOLOGICAL SOCIETY.

Coloured Drawing by a Colour-blind Artist.—Persistent Pigmentation after Jaundice.—New Formation of Pigment on Anterior Surface of Iris.—Staphyloma of Choroid.—Relapsing Cyclitis.—Herpes Facialis, with Affection of Eye.—Hæmorrhagic Glaucoma treated by Trephining.—Wound of Eye immediately followed by Iritis Serosa of the other Eye.—Central Guttate Choroiditis.—Glaucoma treated by Convex Lenses.

AN ordinary meeting of this Society was held on the 8th inst., Mr. Hutchinson, F.R.S., President, in the chair.

The PRESIDENT referred to the loss the Society had sustained by the death of Mr. Streatfeild, who had acted as its treasurer since the foundation of the Society. He paid a high tribute to Mr. Streatfeild's moral qualities, as well as to his surgical attainments.—Mr. BRUDENELL CARTER moved that a letter of condolence be addressed by the President, in the name of the Society, to Mrs. Streatfeild.—The motion was seconded by Mr. COWELL, and unanimously carried.

Mr. EDGAR BROWNE showed a drawing made from a copy by a colour-blind man. He had omitted the red, and substituted a rusty red for the green. The patient was unaware of his defect.

Dr. SEYMOUR TAYLOR showed a patient who had jaundice eighteen or nineteen years ago; the lower lids on both sides were pigmented, but on the left side the pigmentation had disappeared; the lower lid was of a dark green colour, and in the subconjunctival tissue of the lid there was a dark band of pigmentation, which did not affect the tarsal area.—The PRESIDENT had never seen a case where the same slaty colour of the pigment was present and had the same distribution. The case was quite distinct from chromidrosis.

Mr. NETTLESHIP showed drawings and microscopical sections of the Iris of four cases, where a new formation of pigment occurred on its anterior surface. In each eye there was a patch of pigment on the front of the iris; the new pigment had the same appearance as the natural uvea, with which it was continuous in one case. In this case microscopical preparations were made, and the new pigment was everywhere covered by a thin but distinct colourless layer, varying in thickness, and often showing scattered round nuclei or corpuscles; this lamina was continuous with the altered anterior basement membrane of the non-pigmented part; where the pigment was present the proper tissue of the iris was atrophied.—Mr. LAWFORD showed a similar condition in a less advanced stage; the eye had undergone iridectomy for glaucoma; there had been iritis.—Dr. BRAILEY thought Mr. Lawford's case fully explained by ectropion of the pigment layer of the posterior part of the iris, so common in advanced cases of glaucoma. The pigment was rolled far more into view than it is commonly. He regarded Mr. Nettleship's cases as of quite a different character, as in them the eye appeared to be otherwise normal. The appearances of the lithographic plate published by the same author in vol. v. were not consistent with the view of ectropion from glaucoma, and that was probably like the cases he showed to-day, and consequently entirely different from that of Mr. Lawford.—Mr. H. E. JULER had some sections in his possession which led him to take the same view.—Mr. LANG said that where the pigment appeared as a circular band around the pupil, the iris muscle was also turned upon itself, but that where the distribution of the pigment was irregular there was no eversion of the sphincter.—Mr. NETTLESHIP said that in one case, of which he had specimens, there was no doubling up of the sphincter, but the iris was atrophied at its free margin.

Mr. LANG exhibited a patient with Glaucoma and Coloboma of the Choroid, with Loss of Vision. The coloboma extended upwards and outwards, was narrow and long, and reached nearly up to the yellow spot. He did not know whether it was congenital or due to myopic staphyloma. As to traumatism, there was a scar in the cornea of the other eye, which was also somewhat myopic; but this was hardly sufficient to explain it. The patient had lived in Ceylon, and another patient from this region also had a scar on the cornea.

Mr. J. HUTCHINSON showed a woman suffering from Relapsing Cyclitis. At first sight syphilis suggested itself. There was iritis with ciliary congestion; also a dusky papular eruption on the skin, with sores on the lips. But the eye had been affected one year, and the other eye two years ago had undergone the same changes, with the result that the ciliary region was now thin and dusky. The cutaneous eruption had lasted two years; was better in summer and worse in winter. Mr. Hutchinson had also seen another case of the kind. Both patients had resided in Australia. The eruption had some resemblance to small-pox, and it left scars. There were indolent masses and tubercles on the fingers and ears, some of which looked like chilblains. The weakness of circulation which accompanied chilblains was possibly also operative in the production of relapsing cyclitis. Inherited gout and rheumatism perhaps played a part, as well as that condition of circulation that gives a proclivity to chilblains. In the case shown there was a strong history of a tendency to rheumatism, but none of gout; the patient had a cachectic strumous aspect.

Mr. WALTER H. JESSOP read a paper based on four cases of Herpes Facialis affecting the eye. In the first case the herpes followed the track of the external division of the supra-orbital nerve; the eye was affected with iritis, keratitis punctata, and increased tension; recovery, with perfect vision, occurred quickly. In the second, herpes along the lacrymal division of the ophthalmic nerve was followed by keratitis punctata and interstitialis. In the third case there was herpes along the frontal and lacrymal divisions of the ophthalmic nerve, early anæsthesia of the cornea, and superficial keratitis. In the fourth case the herpes followed the course of the infra-orbital nerve, and there were phlyctenular ulcers on the cornea. It was pointed out that herpes facialis followed the distribution of the fifth nerve, and that, when the eye was involved, the branch affected was usually the ophthalmic, but sometimes the superior maxillary. The most usual distribution was along the frontal, but there was no recorded instance of the nasal being the only branch affected, nor of the nasal and lacrymal branches being simultaneously attacked, while the frontal escaped. The fourth case was, he believed, the only recorded instance of the cornea being affected in herpes infra-orbitalis. Mr. Hutchinson had pointed out that the eye was affected if the oculo-nasal branch was attacked. The most common ocular complications were swelling of the lids, conjunctivitis, and increased lacrymation; the cornea might become affected by superficial ulceration, phlyctenulæ, interstitial keratitis, or keratitis punctata, and neuro-paralytic keratitis has been recorded. Serous or plastic iritis might occur, and the pupil, though generally contracted, has been found sometimes dilated. The chief affection of the fundus was papillitis. The tension was said to be generally lowered. Palsy of the extrinsic muscles and paresis of accommodation had been recorded. After referring to the post-mortem evidence of neuritis and dilatation of the ophthalmic artery, Mr. Jessop expressed the opinion that all the ocular symptoms, with the exception of the rarest, might be explained by supposing a dilatation of the vessels due to irritation of the sensory nerve. Vascular dilatation lasting some time would especially influence such a structure as the eye. If the whole attack were due to the neurotic storm, the different nerves would be affected nearly simultaneously, and the ocular symptoms would be coincident with the cutaneous eruption, which was not the case. Mr. Jessop attributed to Mr. Hutchinson the credit of first separating herpes accompanying the ophthalmic division of the fifth nerve from erysipelas.—The PRESIDENT said that it was a mistake to suppose that herpes zoster did not occur in apparently healthy persons. His observation, to which reference had been made, was that the severity of the disease was in proportion to that with which the tip of the nose was affected; and if the disease occurred in the latter situation, the eye suffered. It was desirable to bear in mind that the true definition of zoster was a neuritis, often

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attended by skin disease; there were many cases where neuritis occurred and caused pain, but no skin lesion.

Mr. SPENCER WATSON showed drawings from a case of Hæmorrhagic Glaucoma in a man aged sixty-four; the sclerotic was trephined, and the choroid was accidentally perforated. The tension became normal, and so remained for three months, but without any improvement in vision. The tension, however, again rose, so that the result was most unsatisfactory.—Dr. W. A. BRAILEY said that in those cases where pain was severe and vision hopelessly lost the best treatment was to stretch the supra-trochlear nerve.—Mr. MCHARDY thought the case showed conclusively that the operation of trephining was liable to fail entirely to relieve the distressing tension in these cases. He had been astonished by the ease with which the supra-trochlear nerve could be found in the living subject.—Mr. EDGAR BROWNE had stretched the supra-trochlear in two cases without noticing any diminution in tension.—Mr. WATSON said, in reply, that since the operation pain had not recurred.

Mr. EDGAR BROWNE read a case of Wound of one Eye, followed almost immediately by Iritis Serosa of the other. The accident happened to the patient on Nov. 6th, 1885, after which he took a long railway journey, and in the severe cold. It was found on Nov. 7th that a wound of the left eye existed; the cornea was hazy, the pupil sluggish, and a thorn in the anterior chamber was found lying obliquely, fixed between the iris and posterior layer of the cornea; the anterior surface of the lens was opaque; the thorn was coated with lymph. Mr. Browne did an iridectomy on Nov. 7th. The next day violent pain was experienced in the other eye, which showed iritis with much congestion, but no dots on the cornea. A day later, however, keratitis punctata had developed. The wounded eye healed well, and by Dec. 23rd the mischief had altogether subsided. There was at no time any papillitis. It was discussed whether the case could be regarded as one of sympathetic serous iritis; there were difficulties doubtless in the way of accepting this view, but the facts alone were worth recording.

A paper on Central Guttate Choroiditis, by Mr. L. WERNER, of Dublin, was read by the SECRETARY. Its object was to point out that the "infiltration vitreuse de la rétine et de la papille," described by Dr. Masselon, was, in reality, the same disease as central guttate choroiditis. A drawing of the latter condition, published by Mr. Nettleship in the Transactions, vol. iv., showed a condition exactly resembling Dr. Masselon's drawings; the descriptions were practically identical, both authors describing the same small scattered dots of choroidal disease, apparently caused by deposit, equally distributed in both eyes, with retention of vision.—The PRESIDENT did not consider that the preservation of vision was a constant part of these cases, though the diminution of vision was not proportional to the amount of lesion.—Mr. ADAMS FROST quoted a case where vision was unaltered.—Mr. JULER referred to a case, previously recorded, where there was some disturbance of pigment, which supported the view that the affection was seated in the choroid.—Mr. NETTLESHIP had recorded the cases referred to by Dr. Werner for the reason that vision was not affected, though the patches were so numerous; as a rule, vision was affected. It was possible that the seat of these so-called colloid nodules might determine whether vision was altered. Where they occurred in the optic nerve, as was occasionally the case, vision was more liable to be affected, even though the number of nodules was small. He, of course, laid no claim to novelty in his paper, and the honour of first describing the condition belonged to Messrs. Hutchinson and Waren Tay.[1]—Mr. WAREN TAY said this disease was not necessarily central. Now and then a case was observed in which similar spots were purely peripheral, without the vision being affected. The patients need not be senile, for precisely similar spots were seen in quite young people. In the first cases noted vision was affected, but most observers had since seen cases where vision was unaffected.—The PRESIDENT had had an opportunity of comparing the condition noted in a drawing five years ago with the condition of the eye at the present time; there had been no alteration, and vision had slightly improved. Mr. Waren Tay had been the first person to call his attention to this condition, and the paper in the Ophthalmic Hospital Reports was founded on these first cases.

Mr. GEORGE E. WALKER gave an account of two cases of Glaucoma treated successfully with Convex Lenses. Case 1: A man aged thirty-three, in whom the left eye had been excised after two iridectomies for glaucoma. The right eye subsequently showed similar symptoms, and Mr. Walker ordered him to wear continuously spectacles with a 36-inch focus, which just neutralised his hypermetropia. When last seen, at the end of three months, vision was normal and the eye free from pain. Case 2: A man aged fifty-five, who since childhood had been liable to headache on attempting to read. In 1877 he began to have attacks of great pain in the eyes and head, with blindness. In 1883 he was told he had chronic glaucoma; iridectomy was done in the left eye, which speedily became blind. On October 28th, 1885, Mr. Walker found vision imperfect, the field narrowed, and tension increased. Vision was improved by a 20-inch convex lens; after using this glass for a fortnight pain had ceased, vision had improved, and the field had increased. He remained well up to the day of the meeting (162 days). On the previous day Mr. Walker had introduced homatropine in order to examine the fundus. He travelled to London, and on the following morning was found to be suffering from acute glaucoma. With rest in bed and fomentation, he improved so rapidly that, two hours before the meeting, he was in a fair way of recovery. The patient said that the attack resembled previous ones; and, though inopportune, it afforded an opportunity of proving that the previous attacks were of the same nature, though more severe. Mr. Walker maintained that these two cases, together with the previous one, which had remained well since, shown to the Society in 1884, afforded conclusive proof of the truth of his theory of the production of glaucoma, and afforded corroborative evidence that the ciliary body was not merely an engine of accommodation, but also a pump, or lymph-heart, for the purpose of forcing waste fluid from the anterior chamber into the vein.

Mr. W. H. JESSOP showed a new Pupillometer constructed on the same principle as a wire gauge.

Mr. BRUDENELL CARTER exhibited two Perimeters, the first of which was his original quadrant perimeter recently modified by Mr. Hawksley. The quadrant is formed of tubing, rectangular in section, and contains a small pulley concealed within its free extremity. The traveller which carries the object is attached to a length of fine catgut, also contained within the tube, which passes round the pulley, and also round a reel at the other or fixed end of the quadrant. The second perimeter was in essentials that invented by Dr. Dyer, of Newport, Rhode Island, and lately described and figured in the Transactions of the American Ophthalmological Society.

[1] Ophthalmic Hospital Reports, 1875.

OBSTETRICAL SOCIETY OF LONDON.

Contraction, Inhibition, and Expansion of the Uterus.—Mitral Stenosis in Labour.

A MEETING of this Society was held on Wednesday, April 7th, Dr. Black, Vice-President, in the chair.

Dr. MATTHEWS DUNCAN read a paper on Contraction, Inhibition, and Expansion of the Uterus. The uterus proper, or its body, is chiefly considered, but not to the entire exclusion of the cervix uteri and vagina. Contraction is temporary, and followed by relaxation and return to original dimension. It may be morbid in force, in duration, in rhythm, in extent. Contractions in childhood are believed to be present, and in the whole of menstrual life, and especially in menstruation. They are morbid in dysmenorrhœa spasmodica and may be tetanic. The rate may be six in an hour. Contractions perhaps occur in a fibroid, certainly around it, and especially at menstrual periods. The healthy contractions of pregnancy, to which Dr. Braxton Hicks has devoted much attention, are considered; they may be morbid and painful. Then come the contractions of abortion, miscarriage, and labour at term and in the puerperal state. When do pains commence? Then the commencement of labour is discussed; it is not the commencement of contractions, but of inhibition and of retraction. The internal os uteri is not the weakest part, but the fundus—at least according to mechanical principles. Stretching of fibres does not explain commencement of labour. The uterus grows to a size, and it is expanded by growth and a very slight force. The analogy of urination and of defecation with labour is considered. The necessity of inhibition of the circular fibres of the lower segment of the uterus is discussed. Morbid changes of inhibition are pointed out.

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Lastly, the power of arresting and inducing contractions is mentioned.—Dr. HERMAN had had under his care in the London Hospital a case somewhat analogous to the examples of painful uterine contractions during pregnancy which Dr. Duncan had related. It was that of a patient with fibroids of the uterus, who suffered from severe paroxysmal uterine pains throughout the inter-menstrual period, these pains being only absent during menstruation. She was treated with ergot, which aggravated the pains. The cervix uteri was then dilated, after which the pains ceased, and they were absent for two or three months. They then returned, and the cervical canal was again dilated and the pains again removed. After this he lost sight of the patient. — Dr. CHAMPNEYS said that the antagonism existing between the opposite poles in the uterus had been called "polarity" by Reil, and he thought it was a convenient and concise term. Although Dr. Duncan had expressly stated that he was not now discussing polarity, it had formed a considerable part of the discussion on his paper, and Dr. Champneys had made these few remarks on that ground. He thought that spontaneous yielding of the cervix could not be denied in face of the following facts. In labour with contracted pelvis the head is sometimes arrested above the brim, the membranes present in the shape of the finger of a glove; but in spite of these conditions the cervix is found by the hand (introduced, perhaps, for the sake of turning) hanging flabby and relaxed almost as if labour had already occurred. Again, it sometimes happens that the os tincæ refuses to dilate, and remains rigid; however strong the labour pains may be under these circumstances, great retraction may take place, and Bandl's ring may be felt high up, the lower uterine segment being greatly thinned; the polarity is disordered, the expansion which should possess the lower pole of the uterus is replaced by contraction, and the result is a deadlock. In such a case, in presence of accidental hæmorrhage, he had turned by bipolar method, brought down a foot, and (apparently from reduction in the contents of the uterus) the cervix relaxed. He thought it could not be maintained that the external os was stronger than the internal. He would ask Dr. Duncan whether he had been able to distinguish the contractions of the vagina from those of muscles near it. Painful labour pains during pregnancy were like those of other hollow viscera in which disorderly contractions produced colic.—Dr. BRAXTON HICKS, without discussing the whole paper, wished to point out a fact not alluded to—viz., that during the last six weeks of normal pregnancy the os and cervix were in a large number of cases patent enough for one or two fingers to be readily passed in. When proceeding to induce labour at seven and a half or eight months he was often able to employ at once the largest size of Barnes' bags. The subject of the paper could not be fully discussed without this fact being taken into accoun.t — Dr. HORROCKS said that physiologists have formulated a law that whenever a muscle contracts its opponent relaxes. This law is applicable to all muscle, voluntary or involuntary. He illustrated the law by reference to various groups of muscles. The sphincter of the orifice of a cavity is the opponent of the walls of the cavity. Hence the cervix uteri relaxes when the fundus contracts. This is a physiological process known as inhibition, and doubtless has some nerve centre in the spinal cord or sympathetic plexuses presiding over it. If the longitudinal fibres in the cervix assist in opening the cervical canal, they are no doubt acting when their opponents, the circular fibres, are relaxing. Have we any means of affecting this inhibition and contraction by drugs or electricity? In his hands electricity has failed to bring on labour. Chloroform, chloral, and opium may to some extent inhibit uterine muscular action, but not electricity. The rhythm of the contractions is an interesting study. Dr. Boxall distinguishes two varieties of rigidity, muscular and fibrous. One or both are frequently operative, and they are often combined. The treatment must vary in the two cases. In omitting to relegate the rigidity to its cause may possibly be found the varying results obtained by electricity.—Dr. W. S. A. GRIFFITH, referring to the effect of electricity on the uterus, remarked on the great differences of opinion held by different observers, most of whom, however, appeared to agree with Dr. Horrocks that it was of little value in causing or increasing uterine contractions. Dr. Kilner, in a paper read two years ago, pointed out the value of the interrupted current in diminishing the acuteness of labour pains.—Drs. Galabin, Graily Hewitt, G. Roper, and Cleveland also spoke.—Dr. MATTHEWS DUNCAN, in reply, said that he was much fortified in his own views by the general concurrence of the gentlemen who had spoken. Some supposed differences of opinion were the result merely of different meanings of terms.

Dr. GEORGE COATES read a case of Mitral Stenosis in Labour. The patient was twenty-two, and had suffered from rheumatic fever, but had no suspicion of heart disease. She had suffered from anæmia and breathlessness. The labour began on Oct. 23rd, 1885. On the 24th she felt faint several times. On examining the heart a presystolic murmur at the apex was detected. In the evening the os was fully dilated, and she showed signs of exhaustion; the forceps were applied and delivery accomplished. The pulse varied in the next two hours from 180 to 130, then it fell to 108, and in the morning to 76. The murmur disappeared on and after the tenth day. On Nov. 13th she had a rigor, and sharp pain in the left breast, one elbow, &c. She was treated for acute rheumatism and recovered, the murmur quite disappearing.—Dr. HERMAN thought Dr. Coates' case interesting and instructive. He would be largely guided in the management of heart disease during pregnancy by Dr. Angus Macdonald's writings, but he thought that author took too unfavourable a view of the prognosis. Published cases and consultation cases contained too large a proportion of bad ones. Dr. Coates' case showed that pregnancy and labour might be gone safely through.—Dr. CHAMPNEYS said that Dr. Coates' case differed from most recorded and from those he had seen. All carefully recorded cases were valuable. Dr. Macdonald's work was from a very small number of observations. Mitral stenosis was supposed to be the worst form of mischief in these circumstances.—Mr. E. S. TAIT gave details of a similar case to that of Dr. Coates, but there was no acute rheumatic attack during convalescence.

The following specimens were shown:—Dr. W. S. A. Griffith: Naegelé Pelvis. Dr. John Phillips: Infant one month old with Fusion of the Phalanges of the Right Index and Middle Fingers (living specimen). Dr. John Phillips, for Dr. Playfair: Hæmato-salpinx with Ovarian Cyst. Dr. Benington; Meningocele in a New-born Child.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

A QUARTERLY meeting of this Association was held on April 8th in the Great Central Hotel, Carlisle, Dr. Campbell (Garlands, Carlisle) presiding. There was a large representative attendance from Scotland and the north of England. Papers dealing with important points in lunacy and the treatment of insanity were read by the Chairman, Dr. Keay, Dr. Campbell Clarke, Dr. Ireland, Dr. Wallis, and Dr. Greenlees, and considerable discussion followed. On the motion of the Chairman, seconded by Dr. Macleod of Beverley, the following resolution was passed:—"For the safety of insane patients, as well as those brought into contact with them, it is desirable that previous to removal to the asylum it should be the duty of the relieving officer effecting the removal to ascertain satisfactorily that such patients are not in possession of articles likely to cause injury to themselves or others." It was further agreed that copies of this resolution be forwarded to the Parliamentary Committee of the Association, as well as to the President of the Local Government Board and the Commissioners in Lunacy.

THAMES VALLEY DRAINAGE.—The Heston and Isleworth Local Board has received the sanction of the Central Board to borrow £77,000 for the purpose of constructing a separate system of sewage disposal for these two parishes. By the scheme to be employed the sewage, instead of being pumped up, will be forced through iron pipes to the proper level by means of Shone's pneumatic ejectors. After clarification by precipitation and filtration through land, the effluent will be discharged into the Crane, a tributary of the Thames.

AT a meeting of the governors of the Cardiff Infirmary on the 12th inst., it was resolved to let the old infirmary building to the council of the South Wales University College on lease for seven years at £400 a year rent, the College to spend £1000 in alterations of the building.

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Reviews and Notices of Books.

Practical Surgery; including Surgical Dressings, Bandaging, Fractures, Dislocations, Ligature of Arteries, Amputations, and Excisions of Bones and Joints. By J. EWING MEARS, M.D., Lecturer on Practical Surgery and Demonstrator of Surgery in Jefferson Medical College, Surgeon to St. Mary's Hospital, &c. With 490 Illustrations. Second Edition. Philadelphia: P. Blakiston, Son, and Co. 1885.

Surgical Handicraft. A Manual of Surgical Manipulations, Minor Surgery, and other Matters connected with the Work of House-Surgeons and Surgical Dressers. With 233 Illustrations on Wood. By WALTER PYE, F.R.C.S., Surgeon to St. Mary's Hospital and to the Victoria Hospital for Sick Children, &c. Second Edition. London: Henry Kimpton. 1885.

To some extent these works cover the same ground. In each we have descriptions of surgical dressings, bandaging, and of fractures and dislocations. But Dr. Mears describes the ligature of arteries, amputations, and excisions, which are not included in Mr. Pye's book. In his turn, however, Mr. Pye deals with many matters not alluded to by Dr. Mears, such as the varieties and application of trusses, the use of catheters and bougies, the preparation of patients for operation, and many of the minor operations in surgery. The descriptions of surgical dressings are alike good in both books. Dr. Mears has gone to head-quarters for his details of antiseptic dressings, and we observe that the figures illustrating them are taken from Mr. Watson Cheyne's work. By the way, Mr. Pye speaks of immersing the instruments prepared for an operation in a solution of carbolic acid of the strength of 1 in 60 to 1 in 120, whereas the usual strength of the solution is 5 per cent., and it is certainly desirable to have it of this strength where aseptic surgery is aimed at. The application of bandages is plainly dealt with by each author, but Mr. Pye is much fuller than Dr. Mears. The latter's illustration of how the reverse spiral should be made is very inaccurate, and similarly the drawing of the breast bandage is at fault. Dr. Mears devotes 360 pages to the treatment of fractures and dislocations, and we are therefore surprised not to find any mention of Carr's splint for the treatment of Colles' fracture. The details of the application of the various means for arresting hæmorrhage are very imperfectly given by Dr. Mears; forcipressure is only mentioned, not described, and torsion is most imperfectly represented and inadequately described. Mr. Pye's account of the arrest of hæmorrhage is much better, but he fails to notice the importance of leaving on forcipressure forceps until an internal clot has formed, and of removing them with extreme gentleness so as as not to open up the vessel or displace the clot; when used in this cautious manner forcipressure is quite sufficient to arrest hæmorrhage from arteries the size of the lingual, if not larger. As regards torsion, Mr. Pye speaks with some reserve, and states that a healthy condition of the artery is essential to its success, and that in the case of large vessels the artery requires to be drawn out of its sheath and fixed by one pair of forceps while it is twisted by a second pair. Neither of these limitations is correct; markedly atheromatous or calcified arteries may be safely twisted, and the use of a second pair of forceps is quite unnecessary. Mr. Pye has reduced the size of his volume considerably, and has made some alterations in the text by excision and addition; he has thus added to its value and also put it within the reach of a much wider circle of readers. We are sorry to see that he has not included the old-fashioned carrot-poultice among his list of poultices; it is a very valuable application to bed-sores &c., and very few nurses know how to make it.

Text-book of General Botany. By Dr. W. J. BEHRENS. Translation from the Second German Edition. Revised by PATRICK GEDDES, F.R.S.E. 8vo, pp. 374. Edinburgh: Young J. Pentland. 1885.

WE are indebted to Germany for so many of the works on botany used in this country that the fact of being excelled in that science by another nation seems to have lost its sting; and we now receive from the hands of a well-known botanist at the university which has the largest botanical class in Great Britain a text-book of botany translated from the German, which might surely have been produced, one would think, by an English author, consisting as it does of well-known facts arranged in relation to the latest discoveries. The first glance through the book causes a feeling of wonder that Dr. Behrens' work should have met with the hearty reception it has done from teachers of botany, but this vanishes on a closer inspection of its contents. It is arranged in five parts. Part I., relating to morphology, is somewhat condensed, and presents no features worthy of special remark except the illustrations, which in this part, as throughout the book, are almost without exception excellent. Part II. is devoted to systematic botany. The classification and the names adopted for the groups are at variance with those in common use in this country, and here an editorial chapter is much required to explain the differences between the various systems of classification adopted on the Continent as compared with that followed in works on systematic botany in this country. On reaching Part III. the favour with which the book has been received is explained. Nearly one hundred pages are devoted to the fertilisation of flowers by insects and the natural modes of transport of seeds and fruits, a subject of great interest to students, and calculated to arouse their enthusiasm and to prepare them for the more abstruse parts of the subject which must subsequently engage attention in Part IV., which is devoted to anatomy and physiology, and in Part V., containing an account of the cryptogams. The illustrations in Part IV. will be found very useful, and the subject-matter adapted to give clear ideas to the student. In fact, Parts III. and IV. are the most valuable portions of the work. Part V. is too succinct, and the author in attempting brevity has in some cases sacrificed strict accuracy, and leads the reader into the danger of forming erroneous ideas; thus, Florideæ are said to be "distinguished by the circumstance that their spores are generated in capsules," a statement that, to say the least of it, is misleading. As a text-book, it certainly affords the teacher an opportunity of entering into details and explaining statements that without his help might seem contradictory, and to the student it affords an opportunity of obtaining a comprehensive but general view of the progress that has been made in the science during the last twenty years. The book would have been much more valuable had the reader been referred in foot-notes to works where a more extended knowledge might be obtained. Thus a reference under Algæ to Bornet's "Études Phycologiques," would have enabled the student to reach, in the subject of the Florideæ, the position in which the author proposes to place him—namely, "at the newest standpoint of science." But this omission is the fault of the author, not of the translator or of the reviser, whose work in each case is well done.

The Medical Register for 1886. London: Printed for the General Medical Council, and sold for the Council by Spottiswoode and Co.

The Dentists' Register. Printed for the General Medical Council, and sold for the Council by Spottiswoode and Co.

MEDICAL practitioners and dentists will be pleased at the appearance of these Registers. "Better late than never." We believe the delay is not the fault of the Council, nor of its indefatigable registrar. But there certainly is delay which

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seems inexcusable, the Register for the year not appearing till after three months of the year have gone. We fear the Queen's printers, however well they print, print exceedingly slowly. The Medical Register is a work of importance, containing, in addition to the names and qualifications of all registered practitioners, much valuable statistical information. In one table (E., p. 68) is given the relative number of registrations effected in the three divisions of the kingdom since registration began; and in another (F., p. 69) the number of persons whose names have been entered in, or removed, for causes specified, from, the Register in each year from 1875 to the present. This volume contains about forty pages more than that for 1885. The difference is made up chiefly in the greater number of registered persons. The Register for 1886 contains the names of 672 more practitioners than that for 1885. We trust that the Medical Council will see its way clear to still further analyse and classify the facts contained in this Register. The number of each kind of qualification, the number of qualifications possessed by different registered persons, &c., are facts that would be more instructive and interesting than the number and date of each meeting of the General Medical Council. The Dentists' Register does not call for special notice. It shows that there are 5198 dentists in the United Kingdom, 82 per cent. of whom have no other qualification than that they were in practice before the Dentists Act.

THE BROWN INSTITUTION IN 1885.

MR. VICTOR HORSLEY'S report to the Committee of the Brown Institution for the year 1885 shows that a large amount of work of great variety has been prosperously and successfully carried on. A larger number of animals has been treated in the hospital than in any previous year, and at the same time the scientific research in the laboratory has been unremittingly pursued. Mr. Horsley finds that, owing to the great increase of work, it will be necessary to obtain a considerable sum of money in order to equip the laboratory with certain necessary instruments and apparatus which have hitherto been wanting. During the past year 3357 new cases of disease amongst animals were brought to the hospital of the institution for treatment. Of these we note there were 11 of glanders and farcy, 17 of rabies, 155 of distemper, 309 of parasitic disease. The most interesting part of the report is that concerning the laboratory. Twelve gentlemen, besides the Professor himself, have been engaged in original scientific work; this fact speaks volumes in favour of the establishment of a pathological laboratory situate in a more central part of London and having more accommodation. The Brown Laboratory is not a large place, and those who have been there best know its lack of accommodation. This makes it only the more surprising that so much good work could have been carried out under such incommodious circumstances. Dr. Berdez has made an investigation of the ptomaine produced by Koch's "comma bacillus." He has shown that the ptomaine produced by the active growth of Koch's bacillus is not apparently different from that produced in similar fluid, either by the growth therein of a common putrefactive bacillus or of Finckler's comma bacillus. Dr. Theodore Cash has been engaged in the investigation of the manner of destruction of pathogenic micro-organisms by other micro-organisms non-pathogenic in character. Dr. Cash has also shown that animals can be protected from the fatal effects of inoculation with anthrax bacilli by first bringing them under the influence of mercury. It is hardly possible to exaggerate the importance of this observation. Dr. Klein has discovered that the virus of foot-and-mouth disease is a micrococcus, cultivations of which are able to produce the malady. Full details were published in THE LANCET of Jan. 9th, 1886. He has also studied the action of perchloride of mercury on micro-organisms. It has been found that much stronger solutions (ten and fifteen times) than those mentioned by Koch are required to arrest the growth of or to kill micro-organisms. Pathogenic organisms are less resistant to perchloride of mercury than non-pathogenic ones. Spores are of course more resisting than the bacilli themselves; while, for instance, bacillus anthracis of the blood succumbs on exposure for thirty minutes to watery solutions of perchloride of mercury of 1 to 10,000 or stronger, spores have survived, quite uninjured, exposure in solutions of 1 to 10,000 for four days, and even 1 to 1000 for an hour. Mr. Lingard has continued his investigations into the intimate etiology of gangrenous stomatitis or noma. The same disease appears to exist in monkeys and calves as well as in man. The essential characters of the micro-organisms in all cases were similar. They consist of a leptothrix-like growth, the individual threads of which are made up of small bacilli. They occur in great numbers at the line of extension of the necrotic patch. Cultivations have been made from three cases in the human being, one case in a monkey, and numerous cases in calves. Mr. R. W. Parker and the Professor have investigated the question whether perfect reunion of tendons can occur when the divided ends are separated as far as possible. This question has been answered in the affirmative; so that it appears that the rapid method of treatment of tense tendons in orthopædic surgery is decidedly the best. Dr. Wooldridge has been engaged in the study of the coagulation of the blood. Perhaps the most interesting result obtained has been the isolation of a substance from perfectly fresh animal tissues, the injection of a solution of which into the blood of an animal causes rapid death. It causes death by producing intra-vascular fibrinous coagulation. In addition to causing intra-vascular coagulations, the substance curiously enough prevents the coagulation of shed blood. Of Mr. Horsley's valuable researches on the thyroid gland, on canine chorea, and on the relation that obtains between the posterior columns of the spinal cord and the excited motor portion of the cerebral cortex, we have already given full abstracts in THE LANCET of Jan. 9th and 16th, 1886.

ROYAL COLLEGE OF PHYSICIANS.

AN extraordinary meeting of the Comitia was held on Monday, the 12th inst., at 5 P.M. Sir William Jenner, Bart., K.C.B., occupied the chair.

On the motion of the President, the thanks of the College were unanimously given to Her Most Gracious Majesty the Queen for her presence and assistance at the laying of the foundation-stone of the new Examination Hall for the two Colleges; and a vote of thanks was also passed to the Building Committee in general, and especially to the Registrar, Treasurer, and Assistant Registrar, for the trouble they had taken in making the arrangements for the ceremony so complete and satisfactory.

The draft agreement drawn up by the solicitors to the two Colleges for the joint responsibility and management of the new building was considered and approved. Permission was granted to the President to affix the College seal to the lease of the house in Knightrider-street. It was stated that the rental under the new lease had been increased from £30 to £250. The report of the Council on the question of conferring degrees in Medicine and Surgery, and an outline scheme for an examination in Arts in furtherance thereof, were received and referred to the Joint Committee of Delegates for consideration and report, without any expression of opinion by the College on the merits of the scheme.

An animated discussion on the report of the Croonian Trust Committee, in which many of the leading Fellows of the College took part, led to a postponement of the question until another meeting. The chief objections expressed were that the present Croonian Lectureship would be greatly modified by the new scheme, and that future lectures would be mainly devoted to therapeutic science instead of taking a wider range as at present, whilst there was also a great feeling against the surplus, after the lecturer had been paid, being devoted to payments for original researches or inquiries. The report of the committee, and an alternative scheme drawn up by Dr. Bristowe, were ordered to be printed and circulated among the Fellows.

The Medical Bills Committee and the Lunacy Bill Committee were reappointed to watch and report to the College on the Medical Reform Bill and the Lunacy Bills now engaging the attention of Parliament. Dr. West's proposals for the formation of standing committees were allowed to stand over until another meeting, and this concluded the business before the Comitia.

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THE LANCET.

LONDON: SATURDAY, APRIL 17, 1886.

THE Fellows of the College of Physicians, and indeed the friends of London medical education generally, will feel a sense of relief in the statement we were enabled to repeat last week that Sir W. JENNER, if re-elected, would consent to hold the office of President for another year. If the occasion were an ordinary one, and the selection to the office were little more than a formal kind of recognition of the esteem in which a physician is held by his colleagues, the profession at large would not need to concern itself as to whether the changes in the presidency were quinquennial, or even annual. But the College of Physicians stands in a different position to-day. It is no longer a mere society of physicians; it has at last taken a very prominent part in promoting education, and its relations to the profession as a whole have become so much more intimate that the interest and anxiety felt as to the nomination of its President have greatly widened. Henceforth the College, in order to maintain its position, will have to look beyond its own interests, and will require to exercise its functions in a liberal and progressive spirit, very different from the manner in which it used to act. It has in a sense broken with the traditions of the past, and must see to it that no obstacle comes in the way of completing the work it has undertaken. Doubtless there are some within the College who regret this. They deplore the changes which are coming over the College, and the loss of its dignity and prerogative which they imagine must inevitably accompany such changes. No doubt they equally lament the disappearance of the Latin prelections and orations in which the Fellows were wont to exhibit their superior culture over the rank and file, and see in all this a degradation of a profession which from their point of view is hardly to be regarded any longer as "learned." An amusing example of the persistence of this superstition is to be found in the examinations for the Membership of the College, where the "culture" of a candidate is supposed to be tested by the translation into English of a passage from "Celsus" or "Aristotle." Happily the major portion of those in whose hands the fortunes of the College are committed see more clearly the position which the demands of modern medical education require them to take, and are determined that an institution which upheld the honour of medicine in the past shall not be content to rest upon its former glories, but shall lead the way in promoting everything that tends to the improvement of medical learning.

No one can doubt that there are many eminent men who would do honour to the College if chosen for the office of President; many whose labours, professional and educational, entitle them to the distinction which can be awarded to so few. Amongst the senior Fellows, whose Fellowships date from the years 1839 to 1859, we find, for instance, such names as the following:—Sir G. PAGET, Dr. REES, Sir H. PITMAN, Dr. C. WEST, Sir W. GULL, Dr. G. JOHNSON, Sir H. ACLAND, Dr. R. QUAIN, Dr. S. WILKS, Sir A. CLARK, and Dr. R. REYNOLDS. Without professing any knowledge of the views held by each of these gentlemen upon the questions which will for some time to come engage the whole attention of the College, it is plain that to some among them the office would be neither desirable nor possible. Thus neither Sir GEORGE PAGET nor Sir HENRY ACLAND could be expected to devote their time and attention to the affairs of the College of Physicians, holding as they do such important positions in the Universities and in the General Medical Council. Nor do we think that there is any precedent for provincial Fellows being elected to the presidential chair. It is not probable that Dr. OWEN REES, Dr. JOHNSON, or Dr. REYNOLDS would undertake the duties of the President's office, especially as the present circumstances demand so much from him in the prosecution of the affairs of the College. Dr. WEST has returned to the metropolis after a few years' sojourn abroad, and although he has evinced great zeal in pressing certain matters of reform upon the notice of the College, it may well be doubted whether he is sufficiently *au courant* with the medical curriculum of to-day to take the lead in the direction of educational reform. To Dr. QUAIN, we fear, objection must be taken, not on the score of his interest in educational matters, for he has been a moving spirit in the University of London and the General Medical Council, but because he has never warmly supported the conjunction of the College with the College of Surgeons. His famous Conjoint Scheme was found to be impracticable, but he may, for aught we know to the contrary, still cherish the hope of bringing it about, and if so the College would again be plunged into a state of discord. Moreover, Dr. QUAIN has never been connected with a medical school as a teacher, and that alone should be a bar to his preferment. Of Sir WILLIAM GULL's claims to this high office we would wish to speak with every respect. He occupies an eminent position in the public as well as in professional estimation. But he has not been reticent in regard to his opinions, and has declared himself so markedly in opposition to the attempt to secure medical degrees for students in London other than those furnished by the London University, that the Fellows may well pause before placing in his hands the power to direct the ways of the College. Of the three who remain, there can be no question as to the high qualifications of all, most especially of Sir HENRY PITMAN. There is no Fellow of the College who is more conversant with all the details of medical education than he, from the experience he has gained during his long tenure of office as Registrar. He perceives clearly the position which the College must assume in the future if it is to play the leading part in this matter. But Sir HENRY PITMAN is so useful in his present position that, although he has rightfully earned the gratitude of the College, it might be felt that by his promotion a vacancy would be caused which it would be most difficult to fill. Indeed we know that, if elected to the presidency, he would, in consequence of his advanced age, refuse the honour. Both Dr. WILKS and Sir A. CLARK have expressed themselves in favour of the College taking steps to secure to London students reasonable facilities for graduation. They are highly esteemed as physicians and as teachers, and if we might express a preference for Sir A. CLARK, it would be mainly on the ground that he has taken so active a share in the promotion of thorough medical training at the school

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with which he is connected, and has, besides, evinced so keen an appreciation of the defects of the present curriculum, that he is likely to prove most zealous in the cause which a large body of English medical practitioners have at heart.

It is, however, fortunate that the Fellows will probably be relieved, for twelve months at least, from the necessity of weighing the claims of these and others to the office of President, as the Fellows will, we feel sure, be glad to express their sense of Sir WILLIAM JENNER'S services by re-electing him by an overwhelming majority.

IN pursuance of the resolution adopted by the College of Physicians in October—namely, "That it is desirable that persons examined by the Royal College of Physicians of London, and the Royal College of Surgeons of England conjointly, and found duly qualified, either by the ordinary or by an additional examination, should have a degree in Medicine and Surgery conferred upon them," the Council submitted to the Fellows of the College on Monday last an outline scheme defining the conditions under which the degrees should be conferred. Although this scheme was only formally introduced, and passed on for the consideration and report of the Committee of Delegates of the two Colleges, without any expression of opinion on its merits by the Fellows of the College of Physicians, its importance and interest necessitate some criticism of it on our part. We take it as an evidence, in the first place, that the Council of the College of Physicians has no intention to leave the question at rest now that the principle of instituting a degree in Medicine and Surgery has been confirmed by the authorities of the two Colleges, but to move another step forward. At the same time we feel that more is needed to put the degree on a satisfactory basis than is shown in this outline scheme.

The amendment moved by Dr. WILKS at the October meeting, to insert the words "or by an additional examination," indicated that the general feeling of the Fellows, as of the medical profession, was in favour of the present examinations being supplemented by some other before a degree could be conferred. The present examinations were to confer the Licence and Membership only, and then another examination would have to be passed before the conferring of the Degree. Many of the Fellows felt that this should be a supplementary examination in Medicine and Surgery, but the Council is evidently of opinion that the existing examinations in those subjects are sufficiently stringent even for candidates for a degree, and we are in agreement with it in this opinion. Since the formation of the Conjoint Examining Board the professional examinations have reached a high degree of excellence. It is in the preliminarary part of the medical student's education that the standard is so miserably deficient. The Second Class Certificate of the Second Division of the College of Preceptors is deemed sufficient for registration, and it is almost impossible to find a lower grade of examination in school subjects conducted by any responsible public body in the kingdom. It is obvious that, even if passing such an examination is permitted for the ordinary licences to practise, it is quite inadequate to test the general education of a future holder of a degree. Consequently the Council has recommended the institution of a special examination in Arts, to be conducted by examiners appointed by the two Colleges, and that this examination shall be compulsory on all persons who have not passed an equivalent examination in a University of the United Kingdom, India, the colonies, or in foreign countries, as recognised by the Board of Management of the two Colleges. It is not, however, laid down whether this Arts examination must precede the final examination, or whether it may be passed at any time before or after this; but we suppose that the latter view is the one favoured by those who drafted the scheme. The compulsory subjects are Latin, one other language, Arithmetic, Geometry, Algebra, and Elementary Mechanics, and two of the following optional subjects—namely, Greek, French, German, Italian, Spanish, Higher Mathematics, Experimental Physics, Elementary Botany, Elementary Zoology, English History, and Geography. It would be much more satisfactory if Experimental Physics, Botany, and Zoology were removed from this list, and, with the present examination in Chemistry, formed into a scientific group, the passing of which, as of an efficient Arts examination, could be made compulsory. No exception could then be taken to the thoroughness and stringency of the course laid down for obtaining the degree.

THE more the Medical Bill is examined the less do we care for it. We do not mean to say that it may not pass, or that, if the Parliamentary situation were different, it might not have a chance of doing so. The worse a Bill is, in some respects, the more is its chance of passing. A Bill that does some good, that removes a scandal, that reforms a corporation or a number of corporations, raises far more opponents than supporters. This is especially true of a Medical Bill. Dealing with a class of subjects and corporations about which the ordinary member of Parliament is in an absolute fog, the matter is abandoned to those in charge of the Bill; and those in charge of the Bill are apt to rely on this ignorance of the House, and to fear only the opposition which comes from bodies needing to be checked, reformed, or disestablished. These bodies can always find spokesmen in Parliament. A strong Minister, who would take the trouble, might in half an hour satisfy the House of Commons that the objects for which the profession has fought for fifteen years are reasonable objects—viz., a reduction in the number of licensing medical boards; a reduction in the members of the Medical Council, and its greater independence of the individual medical corporations; a fair representation of the profession in the Medical Council; and a penal clause more effective for punishing false and fraudulent practice by unqualified persons. Such a Minister would be able to show the House, too, that nearly all these objects had been supported by the Medical Council itself, and by a Royal Commission which had with great pains investigated the changes necessary in the examining bodies and in the Medical Council. We will venture to say that no public man could make this representation more effectively than Sir LYON PLAYFAIR, who knows more about the matter than probably any other man in either House of Parliament. And yet he has deliberately made himself the author of a Bill which secures none of these objects, which will pro-

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bably tax the profession in perpetuity to keep up three times the number of corporations that are necessary, which dares not to disestablish the most glaringly superfluous bodies, or to attempt the most obvious reforms in the Medical Council. No one knows better than Sir LYON PLAYFAIR that the system of medical graduation has been most seriously disparaged of late, justly or unjustly, and that a proper Medical Bill should provide means for satisfying public and professional opinion as to its nature, as well as the sufficiency of the minimum examinations. But his Bill leaves the examinations of universities untested, save as to their being severe enough to imply mere professional competence in those who pass them. These are things that the Bill fails to do. What it positively accomplishes is to place the profession in an unprecedented degree under the rule of the Privy Council—to enable the Privy Council to compel the Medical Council to recognise foreign diplomas of which it disapproves; to enlarge the Medical Council by the addition of four direct representatives of the profession, who will find themselves confronted with twenty-four "old hands" in the Council, ready to uphold all its circuitous impotency for good, and all its ability for spending the scanty money of the profession without advantage. There are some medical reformers who are so enamoured of the idea of direct representation that they will support any Bill which grants this, in however delusive and ineffective a form. It will be curious to see if they will buy this concession at the great cost of the rule of the profession by the Privy Council. They will find that the author of this Bill has such a poor opinion of the Medical Council which is to be created by the Bill, that at every turn it is made to require the sanction of the Privy Council, or rather of two lords of that honourable body. We cannot ask for a more severe condemnation of the Council or of the Bill. The Bill of 1858 mentioned the Privy Council nine times. In this Bill it is quoted as a ruling authority between forty and fifty times. We are not prepared to purchase direct representation at such a cost. We do not suspect Sir LYON PLAYFAIR of any wish to harass or degrade the profession; but he cannot answer for his successors, who might be two eclectics or globulists, or patrons of bone-setters, who might override the Medical Council in the interest of their *protégés*, as it is to be dominated by the present Bill in the matter of unsatisfactory foreign diplomas. It would be far better to give the Lord President or the Vice-President a seat in the Medical Council, than to subject its chief actions to the will of the Privy Council.

PROFESSOR HUXLEY is among the prophets, and, like them, according to his idea of prophets and their work, he is "constantly striving to free the moral ideal from the stifling embrace of the current theology and its concomitant ritual." Why is this? As a scientist Professor HUXLEY is, of course, an agnostic. This is a necessity of his position *as a scientist*. Science does not know anything about the subject matter of religion. As a man, apart from his science, it is competent to Professor HUXLEY, as to every other intellectual being, to believe or disbelieve what he pleases. Are we, then, to understand that the Professor undertakes to expound the evolution of theology as a scientist or as an ordinary thinker? It is important to get at the truth about this, because if it is as a scientist the Professor writes, his propositions and reasoning must be tried by science; whereas, if he writes as an ordinary thinker, he is as much at liberty to indulge in speculations as is any other individual. It is only fair that Professor HUXLEY should tell us plainly in what light we are to regard him. As the matter now stands, we fear that, while on the one hand some simple-minded or careless reader may be misled by the impression that what the Professor has to say must needs be right and true because *he* says it, not a few who admire his strictly scientific work will be scandalised by the loose and illogical character of his speculations in theology.

The result of Professor HUXLEY'S two papers on the "Evolution of Theology" is *nil* in a scientific sense. This must be admitted by all, even including those who agree with him. He has not advanced the inquiry one step in any true sense. The most he has accomplished is to raise a doubt in the mind of the reader whether the Professor himself really knows what he means by evolution. Judged from a scientific standpoint, it would not be unfair to describe Professor HUXLEY'S lucubration on the "Evolution of Theology" as an awkward attempt to apply the principle of progressive development without any practical recognition of the cognate and inseparable principle of development by the environment. Because the Professor finds certain similarities of thought and aim in association in otherwise differing systems, he jumps to the conclusion that these several systems must needs have been evolved from that same original, wholly forgetful of the fact that similar surroundings must necessarily call out or evolve like, or more or less closely resembling, qualities from essentially different stocks. The outcome is mainly dependent on the compelling force of the environment. This is how species is developed. If the principle of development by the environment is to be subordinated to that of progressive evolution from an original, then the whole philosophy of the Darwinian method falls to the ground. Surely Professor HUXLEY must see this; and if he does, it follows that the discovery of certain similarities in the habits of thought, and the intellectual aims—so called—of diverse religions cannot be accepted, and ought not to be paraded, as evidence of a common origin. This fault—for as such we must regard it—of Professor HUXLEY'S method in the treatment of his subject places it wholly outside the boundaries of the scientific, and renders it difficult, if not impossible, for us to discuss it.

Meanwhile, how are we to explain Professor HUXLEY'S engrossment with this subject? When a man is satisfied in his own mind as to the truth or falsity of a theme or series of propositions, he is content to rest on his conviction, so far at least as his own intellectual consciousness is concerned. If Professor HUXLEY were a professional theologian, we could understand that it might seem to him necessary to keep himself and his views in evidence. Or if he were concerned to promulgate a new faith, we could see the reason why he should busy himself with the polemics of religion. But as at most he is only an image-breaker, and has nothing to set up in the place of what he destroys, we must confess ourselves at a loss to account for his activity. There have been such outbursts of mental energy as have

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taken the form of almost passionate endeavours to re-establish crumbling convictions on firmer foundations. Is it in this light the "Evolution of Theology" is to be read? If so, we could wish that the frank spirit of truthfulness which has so greatly distinguished Professor HUXLEY'S career in science had also characterised his excursion into "theology," and that he had more candidly designated his latest lucubration by some title which would have told the story of his effort and presented it in its true character as an attempt to patch up a leaky craft in whose seaworthiness even its owner has begun to lose faith. We respect the honest doubts of any man, but when a doubter becomes dogmatic and strives to deepen his own disbelief by creating distrust in other minds, with no better materials and methods of reasoning than are set forth by Professor HUXLEY in his articles on the "Evolution of Theology," our respect is not enhanced, and we incontinently fall to wondering why a man of vast intellectual resources and altogether exceptional ability should thus disport himself.

PROFESSOR BOUCHARD, whose name is well known in connexion with original views on gout, rheumatism, and other diseases of nutrition, has lately investigated the interesting question of the poisonous character of normal healthy urine, and given the results of his researches to the Academy of Medicine of Paris. The question is at all times an interesting one, but perhaps more so at the present moment on account of the battles which are taking place in the Academy between the microbists and the anti-microbists, since any fact proving the poisonous character of the products of healthy metabolism will be hailed by the latter with delight.

The Professor commences by showing how substances which are indispensable to the healthy functions of the body may, when present in excess, merit the title of poisons, and no better example can be given than that of oxygen. It is undoubtedly indispensable, but when present in excess it kills by convulsions. In the same way, water, chloride of sodium, chloride of potassium, and other bodies, when present in excess of a certain proportion, produce death; so that the body of a man may be regarded as penetrated by various poisons introduced from outside or formed within, each of which has its particular route of elimination or is destroyed by intra-cellular oxidations, or is arrested and destroyed by the liver. Though we cannot determine the exact amount of poisons which may be in the body at a given time, we can determine the degree of toxicity of those which are eliminated by the various emunctories; we can determine what mass of living matter (always of course using the same kind of living matter) can be killed by the products eliminated by each organ of excretion; and we can form a unit of toxicity or "toxie," for the sake of comparison, by taking the amount which is necessary to kill a kilogramme of living matter. In this way we can determine what quantity of toxic units is eliminated in a given time by the kidneys, skin, intestines, and liver. M. BOUCHARD commences the study with the urine.

The poisonous nature of normal urine has been known since 1881, when it was studied by MM. FELTZ and RITTER, and again by Professor BOUCHARD in 1884. The first effect to be observed after an intravenous injection of from 10 to 15 cc. is a contraction of the pupil, which may become pin-point in size; the breath movements are much increased in number, but diminished in extent; movement is undecided and feeble; the secretion of urine is much increased, and the temperature is lowered, owing to a diminution of calorification; reflexes are abolished, and coma sets in, ending in death without convulsions, except slight muscular spasms. If now we try to determine the "toxie," or in this case the "urotoxie"—that is, how much urine is necessary to kill one kilogramme of living matter,—we meet with various numbers, depending partly on the state of dilution of the urine, but 45 cc. may be taken as the average. From this may be calculated the urotoxic coefficient of man—"that is to say, the quantity of 'urotoxies' which the unit of weight fabricates and eliminates in the unit of time. An adult healthy man eliminates in twenty-four hours, for each kilogramme of his weight, a quantity of urinary poison capable of killing 465 grms. of living matter. His urotoxic coefficient is then 0·465." From which it may be calculated that it takes a healthy man two days and four hours to manufacture sufficient poison to intoxicate himself. But, as was stated before, the toxicity of the urine varies from time to time and under different circumstances, and its properties were found to differ according to the state of waking or of sleep. During sleep less urine is excreted, but it is more concentrated, and accordingly it might be thought that the urine of sleep was the more toxic, but this was found not to be the case; the urine of sleep was less poisonous than that of waking. In eight hours of sleep a man eliminates from two to four times less urinary poison than during eight hours of waking. It must not, however, be concluded from this that sleep hinders the elimination of the poison. The period of minimum toxicity is just before sleep, and this then gradually increases till at the moment of waking it is five times as toxic, and eight hours after attains its maximum, which is nine times as great as the minimum, from which point it rapidly falls in eight hours to the minimum, to a new period of sleep. This difference in the characters of the urine may be partly explained by the fact that digestion takes place during the hours of waking, which might introduce into the urine an increased quantity of potassium or alkaloids associated with peptonisation, or the toxic matters of the bile; but that this can account for the totality of the difference is impossible, because the time of minimum toxicity would be at the moment of waking, instead of just before going to sleep. Moreover there is a qualitative difference as well as a quantitative; the urine of sleep has a convulsing, the urine of waking a narcotic, action; the one produces muscular spasm, the other sleep; so that, viewed in this light, the body produces during waking substances whose accumulation tends to produce sleep, and during sleep substances which act on the muscular substance, producing contraction and waking. And, further, the one kind of poisons is antagonistic to the other, so that if the urine is mixed in quantity proportionate to the amount eliminated, the product is not the mean between the two, but is considerably less. The toxicity is two-thirds of the sum of the separate toxicities.

IT will be recollected that the Royal Commission on the Housing of the Working Classes pointedly referred to the

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failure in administration of sanitary laws in the metropolis, and remarked that "what at the present time is specially required is motive power, and probably there is no stronger motive power than public opinion." They recommended, therefore, that the Secretary of State should be empowered to appoint competent persons to inquire as to the immediate sanitary requirements of each district, having regard to the several powers entrusted to the local authority, whether the Metropolitan Board of Works or the vestry or district board; that the local authority should be empowered to nominate members of their own body to act with the officer so appointed, and that the reports of the results of such inquiries should be transmitted to the local authorities, and also should be laid before Parliament. Mr. GOSCHEN and Mr. LYULPH STANLEY were of opinion that this proposed survey of the whole of London, if made at all, should be undertaken on the responsibility of the new London Government, "to which the execution of the action which may have to follow such a survey will certainly have to be left." It was therefore evidently intended that this survey should be very thorough in its character, and should, we presume, be carried out on such lines as those followed by the officers of the Local Government Board.

It is with much regret that we find that the inquiries now being held by Mr. CUBITT NICHOLS very largely fail to carry into effect the apparent intention of the Commission. In our issue of the 3rd instant we expressed regret that the inquiry of Mr. NICHOLS into the sanitary condition of Clerkenwell was not more comprehensive, and although we thought it would give an impetus to sanitary work, we noted that many important points in the condition of the district had not received attention. This opinion is emphasised by a further report which has just been issued concerning the hamlet of Mile-end Old Town, and which deserves serious attention, for it contains in a more marked degree the shortcomings of the preceding report, and it may be accepted that the method of inquiry which is adopted in respect to both districts is that which will be applied to the rest of the metropolis. The inspector appears very much to have confined his observations to certain complaints which emanate from the Mansion House Council; this body is conferring a great boon upon London by its philanthropic efforts to stir local authorities into action, and is deserving of the warmest commendation, but we are unable to understand how this Council comes to be almost the sole means by which an inspector appointed by the Secretary of State receives his information. That it is so there can be no manner of doubt; for we find in the inspector's report the extraordinary statement that Mr. NICHOLS does not consider the hamlet to be in a bad sanitary condition, as the total number of houses reported by the Mansion House Council is but 508, or about 5 per cent. of the houses occupied either as lodging or tenement houses. There is not in the report a particle of evidence to show whether the Mansion House Council themselves profess to have made a complete survey of the whole hamlet; but even if they had undertaken this self-imposed duty, we fail to understand how a self-constituted authority has come to take the place of an investigator, who should not only possess all the technical knowledge which is required of a medical inspector of the Local Government Board, but have some authority from the State itself to make such inquiry.

We are forced to the conclusion that a course is being adopted which is very different from that intended by the Commission, upon whose recommendation these inquiries are being held, and that the Home Secretary has entirely failed to appreciate the meaning of a sanitary survey and its relations to the health requirements of a community. We are convinced that the error which is now being committed will be disastrous to the health interests of the metropolis, for the reports which are being issued as Parliamentary returns will carry with them all the weight which attaches to documents emanating from the Home Office, and will give an impression far different from that which would result from investigations conducted on other lines. We do not for a moment desire to imply that any other course than that adopted is open to any inspector, however able, if he lacks the medical knowledge of the kind required; but we are not the less sure that a sanitary survey of a district which is presumably intended to deal with the whole of the conditions affecting the health of its inhabitants, whether these conditions are subject to the control of a vestry, the Metropolitan Board of Works, or any of the other authorities having jurisdiction within the area, cannot be replaced by an inquiry whether the statements of a voluntary association are well founded. Such a survey requires primarily a considerable technical medical knowledge and detailed acquaintance with the health requirements of London. We sincerely hope, before further action is taken under the recommendations of the Royal Commission to which we have referred, that the Home Secretary's attention will be directed to the necessity of a complete alteration of the method of procedure, and to the advisability of introducing skilled medical experience into the investigation.

IT was with great pleasure that we were able last week to publish the result of the quarterly meeting of the Council of the Royal College of Surgeons, indicating as it appears to do the commencement of a more enlightened mode of treating the questions of reform now agitating the Fellows and Members at large. The chief of these questions, which have hitherto been received in a spirit of dogmatic opposition, have at last been discussed on their merits, and it is not surprising, as a result, that a very different view concerning them is now promulgated by the Council. Concerning the most important of these points—the representation of the Members of the College in or upon the Council,—the Council now recognise "the gravity of the question," as well as "the advantage of uniting in harmonious relationship all the constituent elements of the College." A more important admission could not be wished for, and we much thank the Council for it on behalf of the Members at large. Such a deliberate expression of opinion will give great encouragement to those who are working in the cause of this necessary and equitable reform, and cannot fail to aid in the settlement of the questions in dispute. Notwithstanding this admission, however, the Council still retain the opinion already expressed by them, "that

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it is not desirable to diminish the privileges of the Fellowship by depriving Fellows of the exclusive rights of electing to the Council and of being eligible to become members thereof." While entertaining this view, it is only consistent on their part that they (the Council) should decline *to initiate* "proceedings for making any organic change in the constitution of the College which would impair the present status of the Fellows, by whom alone they have been elected to office." The Council, however, indicate not only the method to pursue in order to bring about the desired alterations, but assert also their willingness to give careful attention to any jointly authorised scheme of reform, approved by a majority of the Fellows and Members, which may be submitted to them. The initiation of a scheme of reform must therefore emanate from those who desire reform. The Council merely carry out the provisions of the Charter, and as a Council have no power to make alterations. We should be the last to find fault with the position which the Council now take up, as enunciated in their latest proceedings. Had a similar spirit prevailed two years ago, much unnecessary delay and ill-feeling might have been spared. *Mieux vaut tard que jamais.*

The "bipartite"—the academical and the political—character of the Fellowship is brought into special prominence by these last official utterances of the Council. Nominally founded "in order more effectually to promote and encourage the study and practice of the art and science of surgery," the Fellowship carries special privileges apart from the promotion of surgical science; and the Council seem more jealous of the political character than of the academical; they seem unwilling to lessen the political privileges, or to abate one jot or tittle of advantage which their exclusive possession seems, to their mind, to convey. On the other hand, as regards the *academical* status of the diploma the Council seem less mindful; they have from time to time lessened the severity of the purely academical tests, with a view to secure a larger number of applicants, while at a late meeting not only did they decide to elect a certain number to the Fellowship every year without any academical tests whatever, but they further proposed that Members of a certain standing should be admitted after passing a very modified examination. The question naturally occurs, Will the representation of Members of the College on the Council "impair the present status" of the Fellows? In other words, will privileges, at present enjoyed solely by the Fellows, be lessened in value, not by curtailing them, but by extending them to Members? We confess ourselves unable to see what the Fellows will lose, and therefore in what manner their present status will be impaired. On the other hand, we *do* think that any large increase in their number by methods other than the ordinary scholastic tests will lessen the academical distinction appertaining to this diploma. We would rather see justice rendered to the Members of the College by granting them corporate rights as such, than that the academical status of the Fellowship should in any way suffer, or the professional position of its holders be at all lowered, as it naturally will be by becoming year by year less select.

It now only remains to submit to the Council "a detailed plan," formulated by the two bodies mutually interested in the question—that is, presumably the Associations of Fellows and Members of the College,—embodying the changes which must be made in the present Charters by means of which political privileges shall be conferred on the Members. This is in accordance with the advice we offered in former articles. We would again impress this view on the two representative Associations. It is quite clear that for purposes of legislation the Associations will have to work together. The sooner this scheme of reform, which it is but right to mention has been formulated by the Association of Fellows, is drawn out and submitted to general criticism the better. It will probably have to be amended before it assumes a permanent form. The Council at length promise any such authorised scheme a fair field, and to discuss it themselves, as well as to submit it to a general meeting of the Fellows and Members.

On the whole, therefore, the prospect of reform at the College of Surgeons seems more hopeful than at any former time. It behoves those who have taken on themselves the laborious and irksome task of promoting and carrying out these reforms not to hesitate. We can only hope that the Fellows at large will appreciate the gravity of the question of the representation of Members, and the advantage of uniting in harmonious relationship all the constituent elements of the College. We would wish them to be liberal as regards what we have called the political aspect of the reform, and advise them to make a stand for the more purely academical exclusiveness of their order. As regards the Members, they must show themselves in earnest, and in sympathy with the proposed changes, by joining the Association in large numbers, and by communicating their views if unable to be present in person. We look forward to the realisation of this reform with no small anticipation, being convinced that it will prove advantageous, not only by raising the status of the individual practitioner, but by cementing into one solid body the somewhat antagonistic elements of which the College is at present composed.

Annotations.

"Ne quid nimis."

THE CROONIAN TRUST.

THE Royal College of Physicians is still in difficulties with regard to the disposal of its suddenly increased wealth under Dame Mary Sadlier's bequest. The scheme of the Council, which in May last was with several amendments thereto referred to a Croonian Trust Committee, has quite disappeared, and on Monday last a new scheme was submitted to the Comitia. Its chief provisions are the appointment of a Croonian lecturer, required to devote his lectures (not less than three and not more than six) to the discussion of "one or more subjects in anatomy, physiology, and pathology, in their bearing on therapeutic science, with a view to the more efficient prevention, control, and cure of disease." For these lectures he is to be paid half of the income of the Croonian Trust, which will in future amount to upwards of £200, and the remainder is to be devoted to "payment for such original researches or inquiries as may appear to the College to be most urgently called for." We fail to see how a bequest for promoting the study of anatomy can be legally transferred to therapeutical science, even if we

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grant that there be such a science. Moreover, this scheme will, in effect, throw a large sum of money (£100) annually into the hands of juniors making researches in pathology and therapeutics, the bearing of which on the control and cure of disease may remain an unknown quantity for many years after the publication of their researches. Grants for original research and inquiry are given now by the British Medical Association, the Royal Society, and the Grocers' Company, and we doubt the advisability of the Royal College of Physicians devoting a moiety of the Trust to a similar purpose. The present Croonian lecturer is kept in no such narrow limits as this scheme proposes; he is always a physician of mature standing and clinical experience, and we greatly prefer the continuance of the existing system, or one on similar lines, to that suggested by the Committee. The ripe views and observations of a good clinical physician are well worth paying for, and are always at the command of the College. We are pleased to know that this scheme has fared no better than its predecessor, that Dr. Bristowe has proposed an alternative one more in accord with the views expressed above, and that the consideration of both of them, after they have been printed and circulated among the Fellows, has been deferred to a future occasion.

THE COCCI OF CROUPOUS AND HYPOSTATIC PNEUMONIA.

DR. LEHASHOFF publishes in the *Russian Weekly Clinical Gazette* an account of some observations made with a view to determine the frequency with which microbes are present in cases of croupous and hypostatic pneumonia. He examined sections, the liquid contained in the lungs, the contents of the smaller bronchi, and also the fluid of the cerebral ventricles, and in some cases the blood from the heart and large venous trunks. The ordinary methods of staining not being very satisfactory, the author undertook a series of observations for the purpose of improving upon them, and found that the best method of staining lung sections was to immerse them for from two to five minutes in an aniline solution of gentian violet, and afterwards for from four to fifteen minutes in an aniline or watery solution of eosin, then to wash them and dry them with alcohol, and finally to treat them with clove or cedar oil. By this method of staining the micro-organisms could be seen to be distributed in a very irregular way, usually in groups. The cocci found in the centre of a lobulus always preserved their ordinary form, and were strongly stained; while single cocci towards the circumference were often hardly to be distinguished, being but slightly stained. While some of the cocci presented a distinct envelope, others apparently of the same variety were seen close to them without any envelope at all. The size of the pneumococci was not constant, this being perhaps due to the manipulations the sections had undergone in preparing them for examination. The cocci seen by the author entirely corresponded with those described by Friedlander. Altogether there were examined forty-eight cases, forty-one of croupous and seven of hypostatic pneumonia. In the latter class of cases it did not seem that any characteristic cocci were constantly present, while in the forty-one cases of croupous pneumonia Friedlander's cocci were found in the lung tissue in thirty-eight cases. In eleven of these the fluid of the cerebral ventricles was also examined, cocci being found in eight. In the earlier stages of the disease the number of cocci was small; this gradually increased, attaining its maximum when red hepatisation was changing into grey. The blood was examined in twelve cases, but no pneumococci could be discovered. The observations were carried on by cultivations in jelly and inoculations of animals. For cultivations in jelly the liquid from the lungs, the blood and the fluid of the cerebral ventricles were used. Two kinds of colonies were met with. One kind was obtained after inoculation not only of pneumonia but of other diseases, and of putrescent blood. The second kind differed from these in being of a dull white without any admixture of grey, and in being distinctly raised above the surface of the jelly. This kind was only observed after inoculation from croupous pneumonia. From ten inoculations with pneumonic lung juice these colonies were obtained eight times; five inoculations with ventricular fluid were twice successful, and three inoculations with blood only once. Experiments with mice showed that when these animals were inoculated from colonies of the second kind they developed croupous pneumonia, and in one case out of three in which the greyish cocci were inoculated croupous pneumonia also followed, The author remarks that further observations are necessary on this subject, since mice are very subject to croupous pneumonia, and it is possible that numbers of other micro-organisms may have the power of setting up the disease in them.

DRAINAGE OF THE OXFORD VALLEY SCHEME.

IT is a matter of regret that the important scheme for the drainage of the Oxford Valley should have come to a stand-still. The original cause of the stoppage was the fear of the Oxford Water Company that the removal of the Iffley lock, one of the proposed alterations, would injure the water-supply. This difficulty, however, had hardly been overcome when a fresh objection was raised—viz., that the removal of the lock would drain the ditches and watercourses of the neighbourhood which now serve as boundaries. A fresh scheme was then proposed, by which it is intended to reconstruct the lock without altogether removing it. This plan, although beneficial for agricultural purposes, will not, it is thought, satisfy the sanitary requirements of Oxford, besides which it will be more costly. Now, as a considerable sum had been guaranteed both by the University and the city of Oxford for the original scheme of the commissioners, they naturally demur to subscribe to a new scheme, which will be more costly, and, as they believe, less effective. It is to be hoped, however, that some arrangement may be effected by which the original scheme may be carried out, since it is most important for the sanitary interests of Oxford that the flood water of the river should be rapidly carried off. We cannot help thinking that the damage likely to be caused by the removal of the Iffley lock has been greatly exaggerated; at all events, the experiment might be tried. If all the evil consequences predicted occurred, why then it would be easy to reconstruct the lock in the way now proposed; nor would this cause much additional expense, since in any case the lock would have practically to be almost entirely removed before it could be reconstructed. The fact that all the engineers consulted are in favour of the removal of the lock is a strong recommendation to give this plan a trial before proceeding directly with the work of reconstruction.

INCAPACITY OF JURYMEN TO SERVE.

AN adjourned inquest was recently held at the "George Inn," Bathampton, before Mr. Craddock, coroner, touching the death of Jessie Louisa Hill, aged forty-four. The deceased lady had suffered from nervous depression for some time, and, according to the finding of the jury, had ended her life by drowning during a fit of temporary insanity. The case is of interest to the medical profession in consequence of the course taken by the coroner in the matter of a certificate which had been given by Mr. Heygate, surgeon, to the effect that a juryman was unable to attend the inquiry in consequence of an attack of acute dyspepsia. The coroner, for some reason or other, seemed impressed with the idea

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that the malady in question was not grave enough to excuse the absence of a juror. We are quite ready to admit that it would be well in all judicial inquiries, if, as usually obtains in the Superior Courts, the doctor certifying to the illness were required to state his opinion on oath. This was done on Monday last in the Central Criminal Court at the trial of the case Reg. *v.* Bartlett, where Dr. Broadbent went into the box to testify to the inability of Dr. Green to give evidence on account of illness. In this instance no question was asked as to the nature of Dr. Green's complaint, and rightly so, for it is not the province of the Court to inquire into the ailments of a witness or juror unless there are grounds for supposing that the doctor is not acting *bonâ fide* in the matter. It would have been better had Mr. Heygate been present at the inquest to support his certificate on oath; at the same time, we are at a loss to understand why the coroner should have considered *acute dyspepsia* an insufficient excuse for the non-attendance of the said juror. The term dyspepsia, like many others in common use, merely expresses a symptom or series of symptoms which may have for its cause some simple error in diet, an irritant poison, or an acute specific fever. But, from whatever cause arising, it certainly is not conducive to strict and close attention to the detailment of facts, and the formation of an impartial judgment upon the facts. Undoubtedly a considerable amount of inconvenience was caused by the absence of the juror, although, as we think, unavoidably; but a little tact would have served to ease off the friction which unfortunately took place. We advise medical men, whenever possible, to attend in person and give their opinion on oath.

EMBOLISM OF THE AORTA.

DR. VINCENZO CAMMARERI of Naples has published a memoir upon Obliteration of the Abdominal Aorta, which is summarised in *Le Progrès Médical* (No. 13). He has collected all the cases on record, starting from Barth's case in 1835 and Romberg's ten years later. In the majority the cause is embolism proceeding from the ventricle, the embolus being arrested at the bifurcation of the aorta, and leading to secondary thrombosis extending upwards—rarely above the level of the renal arteries, and downwards into the iliac arteries and their branches. The event is marked by the sudden appearance of complete and painful paraplegia. The sphincters are generally unaffected. Sometimes there is tetanic rigidity of the lower limbs; the reflexes and sensibility are abolished. Often in addition there are other symptoms—as hæmaturia, ischuria, suppression of urine, rachialgia, acute decubitus, &c. Whether a fatal result occur rapidly or not depends upon the extent to which the vessel is obliterated; in some cases, owing to partial obstruction or to a certain amount of collateral circulation, life has been prolonged for several weeks, or even months. The paraplegic symptoms have been ascribed by some to anæmia of the muscles, by others to anæmia of the cord; but the writer demurs to the latter explanation, except in cases where the coagulation has extended high enough to block the lumbar arteries; but even here he thinks the paralysis may be explained by interference with the muscular nutrition. Experimental ligature of the lumbar arteries in the dog produces paresis of the hind limbs, but the paraplegia equally follows the infliction of the wound without ligature. The author then explains the muscular paralysis following upon obstruction of the aorta as being due to the absence of oxygen and the presence of an excess of carbonic acid in the tissues. In like manner he explains the absence of reflexes; whilst the occurrence of muscular rigidity in some cases is compared with cadaveric rigidity—attributable, that is, to coagulation of myosin, and not to over-excitability of the muscle. The same "asphyxial" condition of the tissues is held to account for the anæsthesia, whilst the symptom of pain is attributed to irritation of nerve fibres from the presence of products of disintegration, the nerves being rendered excitable by imperfect anæmia or collateral hyperæmia. The lowered temperature, œdema, and gangrene are easily explicable by the stasis that is established, and the supervention of syncope from cardiac paralysis may be due to heightened arterial tension. The frequency with which aortic embolism is associated with mitral stenosis does not appear to be insisted on; but it is easy of explanation, since it is especially in such cases that thrombi sufficiently large to block the vessel are found in the auricle.

THE TOTTENHAM SANITARY ASSOCIATION.

THIS Association was formed twelve years ago in order to enable those amongst the inhabitants of the district who were interested in the subject to guide those concerned in some special matters connected with the administration of the laws relating to health; and although the work of health authorities has materially changed since its constitution, yet the Association still finds useful work to do. The report now issued is mainly a statistical one. It shows the present population of Tottenham to be 74,969, and it is striking to note that the number of unoccupied houses is 2338, or 15·5 per cent. of the total. But no less than 1659 new houses were erected in 1885. The death-rate for the year was 15·8 per 1000—that is to say, it is much the same as that prevailing in the twelve suburbs with which comparison is yearly made by the Association. Of the deaths from infectious fevers, there were no less than 63 from diphtheria, and the increasing fatality from this disease is very properly regarded by the Association as calling for the very earnest consideration of the sanitary authority and of the medical officer of health. The diphtheria deaths in the four years 1876-79 averaged some 5 per annum; in 1880 and 1881 they reached 10 and 20 respectively, and in the four years ending 1885 the numbers have been 27, 34, 48, and 63. When once diphtheria is recognised to be locally prevalent, deaths from that disease, which were formerly put down as due to other causes, are more correctly registered, but this alone cannot account for what must be regarded as a very serious feature in the recent sanitary history of Tottenham. Mr. R. D. R. Sweeting inspected Tottenham on behalf of the Local Government Board, during 1885, on account of this prevalence of diphtheria, and it is to be hoped that the recommendations which were appended to his report will be acted on. These recommendations aimed at removal of all obvious causes of disease, and it may fairly be anticipated that action in the sense they indicated will operate beneficially as regards diphtheria, as well as the general health of the district.

DRUNKENNESS AS AN EXCUSE FOR CRIME.

PERHAPS it would be more correct to say drunkenness as a negation of crime, for if there be crime there must needs be responsibility; whereas if there be no responsibility there cannot possibly be crime, the criminality lying in the progressive nature of the act, not in the act itself. This being understood, the question arises how far drunkenness absolves from responsibility. Dr. Savage of Bethlem discusses this topic in an interesting paper which appears in the *Journal of Mental Science* for April. There can be no question as to the responsibility of a person who knowingly places himself in a condition to do wrong unconsciously. The criminal act of getting drunk covers all that is done by the self-intoxicator; but questions arising in connexion with accidental drunkenness, or the permanent effects of drunkenness and hereditary demoralisation by drink, render the general issue extremely complicated. Practically

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we think it should be understood and laid down as a principle that self-intoxication does not negative responsibility, and that the only question of extenuating conditions must take the form of an inquiry whether inheritance or disease rendered self-intoxication so abnormally facile as to justify the belief that the act of intoxication was unwittingly accomplished. The paper by Dr. Savage will repay perusal.

EFFECTS OF AN EXTENSIVE FRACTURE OF THE SKULL.

A CASE of extensive wound of the skull and brain is reported in the Russian *Herald of Forensic Medicine*. The patient was a man who had been struck by a piece of an anvil of about seven pounds' weight. The wound extended from half an inch above the concha of the left ear to the right parietal eminence. The fracture of the skull corresponded in length and position with the external wound. In many places it was splintered, the posterior edge of the fracture being raised above the level of the anterior edge. The whole wound was filled with crushed brain-substance, partly grey and partly white. There was both motor and sensory paralysis of the right arm. The power of sensation in the right leg was diminished; the pulse was 80 and the respirations 20; the temperature was also normal. The patient was fully conscious and in a peculiarly placid state of mind, being pleased with everything. He forgot, however, a number of abstract nouns and all proper names; his memory for numbers was also affected, and he had forgotten how to read. The wound was dressed with antiseptic bandages, and completely healed in fourteen weeks. During this time ten splinters were removed. The symptoms of amnesic aphasia gradually passed off. The memory for abstract nouns returned in about a fortnight. The placid humour passed away, and the man became decidedly irritable and suffered from insomnia and headache. The paralysis of the leg passed off during the first few weeks. Sensation returned in the arm and movement also, and after three months contraction occurred. After the lapse of eight months the man was still unable to read, and complained of constant headache and great feebleness of memory.

IS BOAT-RACING INJURIOUS?

THE annual contest between Oxford and Cambridge for aquatic supremacy proved this year to be one of unusual severity, and two, if not three, men in both crews towards the end of the race showed evident symptoms of distress. This fact has led to some sensational statements being made to the effect that some of the men will never get over the consequences of their exertions. We believe, however, that such statements have no real foundation, and, beyond the fact that the men were temporarily distressed, nothing like permanent mischief is likely to result. Some years ago, before the conditions of training were thoroughly understood, such rumours were frequent after each great boat-race, and even very eminent medical authorities set their faces steadfastly against boat-racing as an exercise. But a close inquiry into the after-history of the crews of the Oxford and Cambridge boats has proved conclusively that the mortality among the heroes of the annual race is certainly not greater than among the average of University men generally. The names of Sir Balliol Brett, Bishops Wordsworth, Selwyn, and Macdougall, Dean Merivale, Hon. G. Denman, J. M. Croker, and F. M. Arnold are well known as those of members of victorious crews more than forty years ago, who have survived up to quite a recent date—indeed, some are still living; and to these may be added names, less known to fame, who were still able to answer *Adsum* when the roll was called a few years since Sir George Burrows, who is still living, has told us he took part in one of the earliest of the College races on the Cam, quite fifty years ago; whilst Lord Penrhyn, who has just died at the advanced age of eighty-six, was a member of a crew who in 1824 performed the extraordinary feat of rowing, with five others, from Oxford to Westminster Bridge within sixteen hours, a distance of 118 miles, with many locks to pass through, in one of the heavy wherries and with oars of the period—a performance far more severe than rowing a four-mile race: for, with a heavy six-oared wherry, they had to keep up the pace continuously, except at the locks, for sixteen hours, at eight miles an hour; whilst, with light outriggers, sliding seats, and improved oars, the pace of the racing eight is little over twelve miles an hour for twenty minutes. A reason in favour of boat-racing as an exercise is the fact that the progress from ordinary to severe exertion is made very gradually. The tyro who first commences to row has to learn first to manage his oar; as soon as his muscles get accustomed to the weight, he is taught to bring his whole muscular system into action to propel the boat; but this has to be done gradually, otherwise he will acquire awkward habits. As soon as he has learned to row he begins to cultivate pace, but this has to be practised cautiously, since if allowed to "blow" himself he will soon row out of form; and it is only by degrees that the bursts are lengthened as the "wind" improves. Next, after considerable preparation, come the "trial" races, in which the men's physical and staying powers are closely watched; and then comes the final selection into the crack crew. The result is, that an unsound man is usually found out long before the severe trial comes; whilst, for sound constitutions, a course of systematic and careful training tends to improve the physical and vital powers, and fits men to undergo the strenuous exertions of a boat-race without injury.

DOCTORS' DOOR-KEEPERS.

WE must confess to a strong persuasion that, as a rule, it is better for a "doctor's door-keeper" to be a male than a female. An exception may be made in favour of women servants in attendance at the houses of certain specialists—for example, the gynæcologists; but, speaking generally, we think it is more decorous that the door should be opened by a man than by a woman, looking to the mixed character of the gathering in most waiting-rooms, and the service which has not unfrequently to be rendered to those who are infirm or weakly. As to the idea put forth by a contemporary that doctors' door-keepers are "got up" to look impressive—that, of course, is absurd. Opening the door to a considerable number of sickly-looking folk, for the most part accompanied by friends with anxious countenances, is not an inspiriting occupation, and it is scarcely to be expected that the doctor's door-keeper will wear a particularly jovial expression, but it should suffice that he is respectful, self-possessed, and well-behaved, and if these qualities can be secured both doctor and patient may well be satisfied.

"THE DOCTORING OF THE POOR."

UNDER this heading the *Echo* of April 5th contained an article which proposed the establishment of the local doctor as the parson is established, making him accessible to all. So far as the Poor-law service is concerned, this is already done to the extent which public and social prudence seems to render reasonable. The class a little above the pauper is fairly well provided for at the dispensaries and the out-patient rooms of hospitals. We must confess to thinking that a great deal of weak sentiment is expended on the subject of doctoring the poor. The "poor" are, on the whole, better cared for in respect to their medical necessities than the classes a little above them. The real difficulty of

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the day is how to provide efficient aid in sickness for those who when they are in health support themselves by honest industry, but who when they are stricken down by disease are not only themselves helpless but place their belongings on the brink of pauperism, and this through no fault or wrong-doing of their own. These deserve our deepest sympathy, and their necessities call for a remedy which it is difficult to devise.

SIR HENRY PITMAN AND THE MEDICAL COUNCIL.

SIR HENRY PITMAN has resigned his office as Representative of the Royal College of Physicians of London in the General Medical Council. Sir Henry Acland is understood to be in the East, and there is no immediate prospect of a meeting of the Council. Sir Henry Pitman's object in resigning at present is to give the College ample time to choose his successor. It will not be easy for the College to find a representative so efficient. Sir Henry Pitman's knowledge of College affairs, his good judgment in professional and medico-educational questions, and his long experience, are qualities not easily acquired. To the Council his loss will be almost greater than to the College, for, in addition to the above qualities, he had a faculty for work and business which made him most valuable as chairman of the Business Committee of the Council, in which capacity he did his best to develop methodical and business-like habits in the Council.

INFANT FEEDING.

THE old difficulty of bringing up children by hand received a fresh illustration at an inquest on the death of an illegitimate child at the Totnes workhouse during the past week. From the report of the *Totnes Times* of the 3rd inst. we gather that the infant in question was taken from its mother when fourteen days old. It came under the care of Dr. Hains, the surgeon to the workhouse, who suspected it to be the subject of hereditary syphilis. Dr. Hains directed that the child should be fed exclusively on milk. When one month old it was somewhat fretful, and the matron on her own responsibility ordered baked flour to be added to the milk. It appears from the report that the doctor had explicitly forbidden to the nurse in charge the use of any solid food for the infant. When fourteen weeks old the child died rather suddenly, and on post-mortem examination solid pultaceous food was found in masses in the stomach, and to the irritation produced therefrom Dr. Hains attributed the cause of death. The matron, on examination, appears to have insisted on the use of baked flour as a routine article of food for young infants, and even maintained that the extra three ounces of bread allowed by the Local Government Board (obviously for the nursing mother) might be used for the food of an infant a day old! Such an observation is hardly worth notice except as an illustration of the views of female Bumbledom; but we gladly seize the opportunity of emphasising the principle that, with all deference to the matrons of workhouses, in the feeding of infants as well as in regard to their physic the doctor's directions should be implicitly obeyed. The mere "quieting" the child, though it counts for something, is not the "be all" and "end all" of bringing it up. But, to be perfectly fair, we must face the difficulty that diluted cow's milk is often an inadequate food for infants. Although in the case in question no doubt Dr. Hains was right as to the origin of the "pultaceous bullets" found in the stomach, yet we can testify to the occasional passage from the alimentary canal of extremely hard, compact masses of solid casein due to the incapacity of the infant digestion to deal effectively with cow's milk. How to treat this idiosyncrasy, which is not so very rare, is a great difficulty when we have to do with ignorant and obstinate nurses. The fretfulness of the child causes the nurse to rush at once to some form of starchy food, which may no doubt to some extent help mechanically by leading to the diminution of casein coagula, but is in itself indigestible. Some very simple and expeditious plan of partial separation and digestion of the casein of cow's milk is a desideratum. As a useful and nutritious diluent of cow's milk we have found the time-honoured barley-water the best of all, and attended with the minimum of disadvantages. But we cannot too often insist on the perils of hand-feeding, and that the way in which many illegitimate English children are often torn at a tender age from the nourishment of a mother's breast, are fed by rule of thumb, and die without organic disease but of practical starvation, is a continual scandal.

HEALING BY FIRST INTENTION AFTER OPERATION FOR FISTULA.

DR. RUIDNOVSKI, having found that after operations for anal fistula in rural districts where there was no hospital accommodation, and where the hygienic conditions were bad, it is often difficult to get the wounds to heal by second intention, determined to make an attempt to obtain union by first intention by means of sutures. A boy of fourteen with an anal fistula was operated upon in this manner; the sinus was found to be not single, but complicated with two lateral sinuses. After the incision had been made into the gut, the soft tissue between the sinuses and the granulations were all scraped away with a Bruns sharp spoon, the surfaces of the wound being brought together by a deep and a superficial row of sutures. Opium was given, and in a week's time the dressings were removed and the wound was found to have healed perfectly by first intention.

EDUCATION OF THE BLIND IN BOARD SCHOOLS.

THE late Mr. Fawcett believed that every occupation which is ordinarily possible for people with sight may and should become possible for the blind. The right hon. gentleman was able during a not very long life to show that his courageous creed was no mere theory, but that it could be carried out with marked practical success by one possessed of education though deprived of the sense of sight. Education, however, is the indispensable qualification to all profitable advancement. That special difficulties stand in the way even of its partial attainment by the blind cannot be denied, but it is also beyond question that such impediments have often been completely surmounted; and it is probable that care and method inspired by past example will greatly lessen their power of opposition in time to come. We are inclined to think that our Education Department might realise more fully than it does this capability of the blind for receiving instruction, as well as its own comparative fitness and capacity for imparting it. Societies, endowed schools, and hospitals are understood to be charged with the culture of this outlying field, and they have accomplished, without doubt, a great amount of really good work. Such efforts, however, must needs have but a limited influence. Is there no means of contriving that a part of the machinery of the Board of Education should be utilised to supplement the efforts of these older charitable establishments? The question has already suggested itself to one of the blind themselves, Mr. William J. Day, who in a pamphlet on the subject recommends that the training of blind persons should form part of the national system of elementary instruction, and should be compulsory. He denies that any considerable departure from present usage or any need of special qualification, is implied in the necessary employment of embossed as compared with ordinary printed letters. In the general tenour of these remarks

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we concur. Some inconvenience, it must be allowed, may conceivably arise from the general introduction of this plan. We might, for example, find ourselves confronted with the anomalous spectacle of one or two blind pupils in a school, and under tuition by teachers more numerous than themselves. A comparatively large district might furnish but few blind inhabitants, while of these a still smaller class —the young—would be eligible for ordinary elementary instruction. The incongruities which must result if each of these attended different schools would, however, be obviated, at all events in towns, by selecting one school in every such district, and making provision in it for blind scholars. We are not without hope that some such plan may yet be found to be practicable, and while we are unwilling to wander far from the central theme of this discussion, we venture to make the suggestion that another defect, still more difficult to treat—that of deaf-mutism,—may also some day come to be included within the widening range of the School Board administration.

CHOLERA IN BRITTANY.

THE reported recurrence of cholera in Brittany enforces the caution contained in our recent issue as to the danger which this country may have to face during the rainy season on account of cholera on neighbouring coasts. For the moment no news is forthcoming as to the prevalence of the disease on the north coast of Spain, but there can be little doubt that cholera is prevalent in certain portions of Brittany, and especially in and about Treboul. Probably the disease is of a more or less sporadic character, and hence the denials as to the existence of Asiatic cholera; but whatever form the disease assumes, it is clear that it is an affection having very near affinities to the epidemic which prevailed in France in 1884 and 1885; and in view of the communications between the coast of Brittany and our own coasts by means of fishing-boats, &c., it is important that our port and riparian sanitary authorities should be on the alert.

JONATHAN HUTCHINSON, LL.D.

THE University of Glasgow has been singularly happy this year in its selection of those whom it pleaseth to honour. We announced last week that the University had conferred the degree of LL.D. on Professor Pettigrew, and we have now the great pleasure to add that the same honour has been offered to, and accepted by, Mr. Jonathan Hutchinson, who although not an *alumnus* of that University, or, we believe, of any university, is, of all medical scholars, one of the worthiest recipients of so truly eminent a distinction.

BOARDING-OUT OF PAUPER CHILDREN.

MR. STANSFELD, in answering a question on this subject on April 9th, expressed his strong approval of this system, and said that there were 141 unions in which guardians were empowered to board-out children under duly appointed committees. He also said that a lady had been appointed to visit the children, and that her report will soon be published. We have repeatedly expressed approval of this system. It requires, however, the supervision of persons interested in the children.

THE FATE OF THE LOCK HOSPITALS.

NOW that short-sighted agitators against the Contagious Diseases Acts have ridden their hobby to the death, what is to become of the nine Government Lock Hospitals, providing in all 626 beds? Are these most useful agencies in the cause of moral and physical health to be disestablished, or simply left to rot in idleness? From 1864—when the first of the Acts, now unhappily repealed, was passed—to 1870, the total number of beds available for the treatment of these special diseases was raised from 40 to 666, and mainly by the action of the Government. Unless something be done, and at once, it must be anticipated that a great and good work will be summarily arrested, to the lasting injury of the services and of the general population, and the further degradation of public morals.

SEWER AIR IN THE HOUSES OF PARLIAMENT.

THE Committee appointed to investigate the ventilation of the Houses of Parliament has hastened to report the all-important discovery that sewer air pollutes the contained atmosphere of the Houses. Great structural reforms will be indispensable for the final remedying of this grave fault; but, without waiting for this, the Committee recommend immediate measures to mitigate the evil. There ought not to be a moment's avoidable delay in adopting the course suggested. If the air of St. Stephen's be not simply unduly carbonised, but actually tainted with sewage exhalations, it is manifest that our legislators are exposed to grave perils, which cannot be permitted to exist after they have been pointed out.

INVERSION OF THE TEMPERATURE CURVE.

DR. CORIVEAUD draws attention in the *Journal de Médecine de Bordeaux* to some cases of pneumonia in children in which the ordinary temperature curve was inverted. A similar observation has, it seems, been made by Damaschino in a thesis published in 1867, as he says: "In broncho-pneumonia the evening exacerbation is not always constant. In some cases the fever is as high in the morning as in the evening; in others the morning readings are even higher than those taken in the evening." Hirtz, too, in his article "Chaleur," in Jaccoud's Dictionary, mentions that in acute phthisis the morning temperature is occasionally higher than the evening.

TYPHUS IN LONDON.

IN 1869, when the deaths from "fever" in the Registrar-General's reports were first returned under the three headings, typhus, enteric or typhoid, and simple or ill-defined, 716 deaths were referred to typhus in London. Since that date the deaths referred to this cause have remarkably and almost steadily declined, and it appears from the Annual Summary for 1885, just issued, that only 28 deaths were referred to this disease during last year in London, against numbers declining from 92 to 32 in the preceding four years, and against an average (corrected for increase of population) of 106 in the ten years 1875-84. Typhus, under the influence of more energetic sanitary administration, is undoubtedly becoming a rare disease in England, but part of the rapid decline of deaths from typhus in London in recent years is more apparent than real, for formerly a very considerable number of deaths were incorrectly referred to typhus, which was used (as, unfortunately, it was in the Registrar-General's reports until 1869) as a generic term for "fever." There is very good ground for doubting whether all the 28 deaths referred to this disease in London last year were really cases of typhus; 2 were of children under five years of age, 8 of young persons aged between five and twenty years, 4 of persons aged between twenty and forty, and 14 of persons aged between forty and sixty. It may be noted that 6 of the 28 fatal cases were recorded in the fever hospitals of the Metropolitan Asylums Board, corresponding with the number in 1884, when the total deaths referred to this disease were 32. It appears from the Registrar-General's annual summary that, after distributing the hospital cases, 8 of the 28 last year belonged to East London,

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including 3 to Poplar and 2 to Whitechapel sanitary areas; 10 belonged to South London, including 5 to Camberwell and 2 to Greenwich; and 3 belonged to Islington and 2 to Hackney sanitary areas. It is noteworthy that only one fatal case of typhus belonged to Central London, where the density of population is greatest, and where the general death-rate shows so large an excess; this death from typhus belonged to the sanitary area of St. Luke's. With a view to finally stamping out the disease in London, the isolation of a larger proportion of the occurring cases is essential, and it is scarcely satisfactory to note that of the 556 deaths referred to this disease in the past eight years only 143, or 26 per cent., occurred in those hospitals. It may perhaps be assumed, however, that the remaining 413 included all those cases that were incorrectly referred to typhus.

THE ATMOSPHERE OF RAILWAY CARRIAGES.

A CONTEMPORARY expresses a preference for death by "asphyxia," to death by cold from sitting in a draught. We are not quite sure that, even granting the somewhat shaky use of a technical term, this preference is well grounded; but, however that may be, there is no sort of reason for making a selection. It is not necessary to choose between closed and open windows in travelling by rail. Nothing could possibly be easier than to ventilate a carriage moving rapidly, by a very simple and obvious contrivance of air-chambers in the roof. There need be no down draught, and certainly no difficulty exists in providing effectually for the egress of impure air and the introduction of pure air. The fact of movement overcomes the obstacle to ventilation which exists in the case of a fixed chamber.

SCURVY AFTER BAD HARVESTS.

FROM the report of the medical department of the province of Perm, in the eastern part of Russia, we learn that, owing to bad harvests in 1883 and 1884, the inhabitants suffered severely from scurvy in the succeeding years, the localities where the harvest had been the worst suffering the most. Statistics show that each year the disease began to manifest itself in the month of February, increasing in severity till May, when it attained its maximum, from which time it regularly decreased till September, when it was at its minimum.

COLONIAL EXHIBITION HOSPITAL FUND.

A SUGGESTION made by Dr. J. H. Aveling that donation boxes to collect a general fund for the London hospitals should be placed in the Colonial Exhibition, has, we learn, been approved by H.R.H. the Prince of Wales, and steps are being taken to obtain the fullest advantages from this important concession.

TOY BALLOONS.

IT seems that the little toy balloons or indiarubber bladders which children inflate with the breath may be readily reversed by inspiration and even drawn into the air passages. In two instances recently death has occurred by suffocation, a balloon of the sort being drawn into the opening of the glottis. This is a matter of danger which ought to be recognised. Parents and nurses should be on their guard.

FOREIGN MEDICAL APPOINTMENTS.

DR. C. DELYANNI has been appointed Professor of Clinical Medicine in the University of Athens. It is announced that a chair for Syphilis and Dermatology is to be established in Athens. Dr. J. Steiner has been appointed Extraordinary Professor of Physiology in the Medical Faculty of Heidelberg.

IN his report to the Registrar-General on the results of his analysis of the water distributed during the month of March by the several metropolitan water companies, Dr. Frankland states that, taking the average amount of organic impurity contained in a given volume of the Kent Company's water during the nine years ending December, 1876, as unity, he finds that the proportional amount contained in an equal volume of water supplied by each of the metropolitan water companies and by the Tottenham Local Board of Health was—Kent, 0·6; Colne Valley, 1·2; New River, 1·2; Tottenham, 1·6; West Middlesex, 2·4; Southwark, 2·5; Grand Junction, 2·6; Lambeth, 2·7; East London, 3·1; Chelsea, 3·4. The Thames water sent out by the Chelsea, West Middlesex, Southwark, Grand Junction, and Lambeth Companies contained in every case less organic matter than was present in the February, and still less than in the January, samples. The water drawn from the Lea, and distributed by the New River and East London Companies, exhibited a similar reduction in the proportion of organic matter present. All the samples were clear and bright on delivery.

DEPUTY SURGEON-GENERAL SKEEN, whose death we announced last week as having occurred on the 2nd inst., was born in 1833, and, having received his professional education at King's College, obtained in 1855 the licence of the Royal College of Surgeons of Edinburgh, and in 1859 the degree of M.D. at King's College, Aberdeen. In 1855 he entered the army, and after considerable service on the Gold Coast he was elevated to the rank of staff surgeon, and in 1861 took part in the Gambia expedition against the Mandingoes. He afterwards served in the West Indies and in India. From 1876 to 1879 he was stationed at Aberdeen, and during the latter year was sent to South Africa; here he was engaged in the Boer war, acting as senior medical officer of the Transvaal, and being with the forces in Pretoria during the siege. For his services in South Africa he was frequently mentioned in the despatches. In 1880 he was made brigade surgeon, and was appointed Deputy Surgeon-General in 1884, when he returned to this country.

MR. T. FISHER UNWIN is about to publish a work entitled "Medical Missions: their Place and Power." It is written by the Rev. John Lowe, the secretary of the Edinburgh Medical Missionary Society, and will contain an introduction by Sir William Muir. It will also be further embellished with a medallion portrait of Dr. John Abercrombie, the founder of the above Society.

AT their last meeting, the Council of King's College promoted Dr. Urban Pritchard to the Professorship of Aural Surgery, in consideration of the great services he had rendered to the hospital as Aural Surgeon during the past ten years. We believe that this is the first professorship in aural surgery that has been instituted in this country.

DR. THEODORE WILLIAMS, having completed fifteen years' service as Physician to the Brompton Hospital for Consumption, has, on the recommendation of the medical committee, been unanimously re-elected by the Committee of Management for a further term of five years.

MR. OULESS has finished the portrait of Sir Henry Pitman, and it will be presented to the College by Sir Risdon Bennett, on behalf of the subscribers, at the meeting on the 19th inst., previously to the election of the President.

THE death is announced of Dr. Joseph Nowak, Professor of Hygiene in the University of Prague.

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PROF. F. S. DENNIS, of New York, has recently had under his care a case of double gluteal aneurysm. The treatment he adopted was to perform a laparotomy, turn aside the viscera, and then ligature the two internal iliac arteries in the pelvis. The patient succumbed to chronic renal disease a week after the operation.

ON the 11th inst. the death occurred at Liverpool of Mr. Thomas Pennington. The deceased, who was born in 1807, obtained the licence of the Society of Apothecaries in 1828 and was admitted a member of the Royal College of Surgeons in 1829.

MR. CUBITT NICHOLS' report on the sanitary condition of Clerkenwell has just been presented to Parliament, and will shortly be published.

M. VULPIAN has been elected, after a sharp contest with M. Milne Edwards, as permanent secretary to the Physical Science section of the French Academy of Sciences.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Blackpool Urban District.—Dr. Welch issues a very complete report on the sanitary state of this borough, and it calls for the more attention because Blackpool constitutes one of the most important of the holiday resorts in the north-west of England. The infant mortality is excessive in Blackpool, and this is due in the main to such causes as diarrhœa, chest and wasting diseases, and so-called convulsions. As regards diarrhœa, Dr. Welch, who has mapped out the cases which occurred according to locality and to soil, is of opinion that it is mainly due to excessive moisture and high temperature acting conjointly on filthy surroundings, and he urges that it is in the direction of increased cleanliness, such as will aim at securing perfectly clean air, food, soil, and water, that improvement must be looked for. The suggestion as to the connexion of diarrhœa with filth is certainly borne out by the fact that enteric fever, which, though less frequent than it was, is still too frequent, coincided in point of distribution with diarrhœa, and of sixteen separate occurrences of enteric fever eleven were found to be associated with filthy conditions of premises or serious drainage defects. In some respects there is in Blackpool considerable scope for an active sanitary authority. The sewer ventilation has for some time past been a matter calling for attention, and Dr. Welch points that he is in entire concurrence with Dr. Page of the Local Government Board as to the need for improvement in this respect. He urges too, and with reason, that the fitting of charcoal trays to ventilating shafts is mainly instrumental in preventing the dilution of sewer air, and hence of ventilation, because the trays act as a barrier to the in-current of fresh air. He also presses for a proper hospital for infectious diseases, instead of the make-shift, which, by reason of site and accommodation available, fails to satisfy the most reasonable demands either of the public or of the medical profession. Blackpool has compulsory registration, and yet it has made no permanent arrangement for the isolation of two separate infectious fevers. But still the town can lay claim to a death-rate of only 15·3 per 1000, and this may be taken as an indication of what its possibilities are as a health-resort.

Coventry Urban District.—With a population of 46,739, Coventry may be congratulated on an annual death-rate for 1885 of only 16·2 per 1000. There were also only two deaths from any of the continued fevers during that period; and altogether the deaths from infectious fevers have been exceptionally low for at least two whole years. This result is doubtless, in the main, due to the persistent efforts which have for some time past been made in this ancient borough to get rid of causes of preventable disease, and to isolate the first attacks which come under notice. Dr. Mark Fenton's report gives evidence of maintained activity in these respects, and especially so in the closure of wells and in the extension of the public water-service to houses and to closets. Then, again, Coventry has long worked successfully with a temporary iron infectious hospital, and during 1885 as many as 101 patients were admitted, a corresponding number of centres of infection being thus removed from amidst the population. But the advantages secured by early isolation have been made so evident that a more attractive and suitable building was last year completed on a site of some five acres, where accommodation for twenty patients, each with 2184 cubic feet and 153 feet of floor space, has been provided. Dr. Fenton now urges his authority to go forward in other directions, and above all to deal with certain unwholesome areas and to provide a public abattoir, both of which are eminently necessary in order to secure permanency in the improved condition as regards mortality which has been attained, and with a view to wholesomeness not only of premises now bordering on existing slaughter-houses, but of one of the principal food-supplies of the population.

Sunderland Port District.—The increase in the inspection of vessels in this port is most satisfactory. In 1876 the number inspected was 965; last year it had reached 2142, and it involved inquiry as to the accommodation of no less than 23,490 persons, including crews and passengers. The effect of these inspections and of the operations resulting from them must be very widespread, and, indeed, Mr. Harris tells us that the sanitary condition of the ships is steadily improving; the average percentage of those which are good, or fairly so, being 84. Of 478 foreign vessels examined, 12·3 per cent. were in a distinctly insanitary state, but amongst British ships the rate reached 16·5 per cent. This is the reverse of creditable to a nation that professes to take the lead in such matters at sea as well as on shore; but from reports which we have received as to other ports we believe the Sunderland experience to be exceptional. German and French vessels compared unfavourably with British ones; the Dutch and the Danish ones were best kept. All reports as to port districts refer to the bad ventilation of forecastles; and it is to be hoped that the attention of shipbuilders may before long be pointedly drawn to this matter. A cowl with which Mr. Harris has experimented goes far to remedy the evil, and it has the advantage of getting rid of the foul air without risk of admitting water. Difficulties are experienced in Sunderland port in connexion with the isolation of infectious diseases. Perhaps in the action now being taken by the urban authority a solution of the question may ultimately be found.

Southend Urban District.—Excluding the deaths amongst visitors, the death-rate for 1885 was 15·2; including these it reached 17·7 per 1000. The little make-shift cottage hospital served to prevent a spread of small-pox. The dust question is a difficulty here, as elsewhere, where the authority try to get the scavenging done by contract instead of doing it themselves. Efficiency in filth removal is what should be aimed at, and not a mistaken economy, and this especially in a town which is professedly a health-resort. Mr. Phillips points out that improvements in connexion with the system of sewerage have been effected by the provision of tall ventilating shafts, and that the through-ventilation of new house drains is being enforced.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 6120 births and 3500 deaths were registered during the week ending April 10th. The annual death-rate in these towns, which had been equal to 29·3, 26·4, and 22·2 per 1000 in the preceding three weeks, further declined last week to 20·1, and was lower than in any previous week of this year. During the thirteen weeks of last quarter the death-rate in these towns averaged 24·4 per 1000, and corresponded with the mean rate in the first quarter of the ten years 1876-85. The lowest rates in these towns last week were 15·5 in Hull, 15·9 in Bradford, 16·3 in Wolverhampton, and 16·6 in Sheffield. The rates in the other towns ranged upwards to 25·6 in Manchester, 26·8 in Blackburn, 27·8 in Preston, and 28·7 in Portsmouth. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 430, 406, and 359 in the preceding three weeks, were 364 last week; they included 131 from whooping-cough, 121 from measles, 37 from diarrhœa,

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26 from "fever" (typhus, enteric, or simple), 21 from scarlet fever, 21 from diphtheria, and 2 from small-pox. No death from any of these zymotic diseases was recorded last week in Hull, Huddersfield, or Halifax; whereas they caused the highest death-rates in Blackburn, Preston, and Portsmouth. Whooping-cough caused the highest death-rates in Manchester and Derby; measles in Oldham, Birmingham, Plymouth, Blackburn, and Portsmouth; and "fever" in Preston. The 21 deaths from diphtheria in the twenty-eight towns included 15 in London. Small-pox caused 1 death in London and its outer ring, 1 in Bristol, and not one in any of the twenty-six other large provincial towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had been 7, 8, and 11 on the preceding three Saturdays, had further increased to 13 at the end of last week; 3 new cases were admitted to these hospitals during the week, against 5 and 4 in the previous two weeks. The Highgate Small-pox Hospital contained 3 patients on Saturday last, one case having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 917, 710, and 506 in the preceding three weeks, further declined last week to 350, and were so many as 160 below the corrected weekly average. The causes of 77, or 2·2 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes were duly certified in Birmingham, Leicester, and in three other smaller towns; and the largest proportions of uncertified deaths were registered in Cardiff, Halifax, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 27·9, 24·7, and 21·6 per 1000 in the preceding three weeks, further declined to 21·2 in the week ending April 10th, but was 1·1 above the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 15·1 and 17·8 in Dundee and Edinburgh, to 23·4 in Paisley and 24·6 in Glasgow. The 524 deaths in the eight towns showed a further decline of 10 from the numbers returned in recent weeks, and included 12 which were referred to diarrhœa, 11 to whooping-cough, 6 to measles, 4 to "fever" (typhus, enteric, or simple), 3 to diphtheria, 2 to scarlet fever, and 1 to small-pox; in all, only 39 deaths resulted from these principal zymotic diseases, against 62 and 46 in the preceding two weeks. These 39 deaths were equal to an annual rate of 1·6 per 1000, which was 0·5 below the mean rate from the same diseases in the twenty-eight English towns. The 12 deaths from diarrhœa slightly exceeded the numbers in recent weeks, and were 4 above the number in the corresponding week of last year. The fatal cases of whooping-cough, which had been 29 and 14 in the previous two weeks, further declined last week to 11, and included 9 in Glasgow. The 4 deaths from measles exceeded the number in the previous week by 2; 4 occurred in Edinburgh. The 4 deaths referred to "fever" were below the average of recent weekly numbers, and 6 below the number in the corresponding week of last year; they included 2 in Glasgow. The fatal cases of scarlet fever and diphtheria were also below the average. The death classed as small-pox (contrary to the system of classification used by the Registrar-General of England) was one attributed to chicken-pox in Edinburgh. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 204, 148, and 134 in the preceding three weeks, further declined last week to 109, and were 25 below the number returned in the corresponding week of last year. The causes of 90, or more than 17 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 40·5, 34·6, and 34·4 per 1000 in the preceding three weeks, further declined to 33·0 in the week ending April 10th. During the thirteen weeks of last quarter the death-rate in the city averaged no less than 33·5 per 1000; the mean rate during the same period did not exceed 24·8 in London and 20·0 in Edinburgh. The 223 deaths in Dublin last week showed a further decline of 10 from the number returned in recent weeks, and included 16 which were referred to the principal zymotic diseases, against 18 and 15 in the previous two weeks; 11 resulted from whooping-cough, 3 from "fever" (typhus, enteric, or simple), 2 from scarlet fever, and not one either from small-pox, measles, diphtheria, or diarrhœa. These 16 deaths were equal to an annual rate of 2·4 per 1000, the rates from the same diseases being 2·3 in London and 1·6 in Edinburgh. The fatal cases of whooping-cough, which had been 12 and 6 in the preceding two weeks, rose again last week to 11. The 3 deaths referred to "fever," on the other hand, showed a decline of 2 from the number in the previous week; and the fatal cases of scarlet fever were fewer by one. Eight inquest cases and 9 deaths from violence were registered; and 65, or considerably more than a quarter of the deaths, were recorded in public institutions. The deaths of infants and of elderly persons were fewer than those returned in recent weeks. The causes of 21, or 9·4 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

WAR OFFICE.—Grenadier Guards: Surgeon Hugh Rayner, M.B. Medical Staff, to be Surgeon, vice G. B. Stuart, M.B., promoted.

ARMY MEDICAL STAFF.—Surgeon-Major Edward Joseph Boulton is granted retired pay, with the honorary rank of Brigade Surgeon. Surgeon Oswald Gillespie Wood, M.D., to be Surgeon-Major. The undermentioned Surgeons to be Surgeons-Major:—Lloyd Brereton Ward, William Birkmyre Miller, M.D., George Blake Hickson, John Prendergast, James Adolphus Smith, John Martin, John Joseph Greene, M.B., Nathaniel McCreery, Joseph Andrew Gormley, M.D., John Edward Vaughan Foss, M.D.

INDIA OFFICE.—The Queen has approved of the retirement from the service of the undermentioned officers of Her Majesty's Indian Military Forces:—Brigade Surgeon John Houston, M.D., of the Madras Army, and Surgeons-Major Richard Thomas Lyons, M.D., and James Kelly, of the Bengal Army. The undermentioned officer is granted a step of honorary rank on retirement:—Brigade Surgeon George Alder Watson, of the Bengal Army, to be Deputy Surgeon-General. The Queen has approved of the following promotion, amongst others, among the officers of the Staff Corps and Indian Military Forces made by the Governments in India:—Surgeon-Major Henry Potter, M.D., of the Bengal Medical Establishment, to be Brigade Surgeon.

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Fleet Surgeon William Connolly, M.D., has been placed on the retired list of his rank.

The following appointments have been made:—Inspector-General of Hospitals Timotheus J. Haran, to Plymouth Hospital; Staff Surgeon George H. Madeley, to the *Phaeton*, and Staff Surgeon Robert Turner to the *Hotspur*.

MILITIA INFANTRY.—4th Battalion, the Royal Welsh Fusiliers: Surgeon John Richards is granted the honorary rank of Surgeon-Major.—3rd Battalion, Seaforth Highlanders (Ross-shire Buffs, the Duke of Albany's): Surgeon J. Corbet is granted the honorary rank of Surgeon-Major.—Nottinghamshire (Southern Nottinghamshire): Surgeon I. Massey, M.D., is granted the honorary rank of Surgeon-Major.—3rd Battalion, the Royal Irish Regiment: Surgeon John Percy Waddy is granted the honorary rank of Surgeon-Major.—5th Battalion, the Rifle Brigade (the Prince Consort's Own): Surgeon George P. Bate, M.D., is granted the honorary rank of Surgeon-Major.

ARTILLERY VOLUNTEERS.—1st Aberdeenshire: Surgeon J. Rodger, M.D., is granted the honorary rank of Surgeon-Major.—4th Durham: Surgeon S. Gourley is granted the honorary rank of Surgeon-Major.—1st Inverness-shire: Finlay Matheson Mackenzie, Gent., to be Acting Surgeon.—1st London (the City of London):—The undermentioned Surgeons are granted the honorary rank of Surgeon-Major: F. G. Bennett and V. Ambler, M.D.—2nd Middlesex: Surgeon R. T. Daniell is granted the honorary rank of Surgeon-Major.

RIFLE VOLUNTEERS.—1st Volunteer Battalion, Princess Charlotte of Wales's (Royal Berkshire Regiment): Surgeon O. C. Maurice is granted the honorary rank of Surgeon-Major.—3rd Durham (the Sunderland): Surgeon C. Nattrass, M.D.,

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resigns his commission; also is granted the honorary rank of Surgeon-Major, and is permitted to continue to wear the uniform of the corps on his retirement.—1st Edinburgh (the Queen's, City of Edinburgh Rifle Volunteer Brigade): The undermentioned Surgeons are granted the honorary rank of Surgeon-Major: R. J. B. Cunynghame and F. Cadell.—3rd Volunteer Battalion (the Essex Regiment): The undermentioned Surgeons are granted the honorary rank of Surgeon-Major: David MacEwan and Alexander Campbell.—1st Volunteer Battalion, the Buffs (East Kent Regiment): Surgeon Henry Penfold, M.D., resigns his commission; also is granted the honorary rank of Surgeon-Major, and is permitted to continue to wear the uniform of the Battalion on his retirement.—2nd Volunteer Battalion, the Queen's Own (Royal West Kent Regiment): Surgeon J. P. Purvis is granted the honorary rank of Surg.-Major.—3rd Volunteer Battalion, the Norfolk Regiment: Surgeon S. M. Hopson is granted the honorary rank of Surgeon-Major.—2nd Volunteer Battalion, the Northumberland Fusiliers: Surgeon A. Wilson is granted the honorary rank of Surgeon-Major.—1st Tower Hamlets (the Tower Hamlets Rifle Volunteer Brigade): John William Jackson, Gent., to be Acting Surgeon.—1st Volunteer Battalion, the Gordon Highlanders: Surgeon A. D. Davidson, M.D., is granted the honorary rank of Surgeon-Major.—1st Dumbartonshire: Surgeon P. F. Robertson, M.D., is granted the honorary rank of Surgeon-Major.—8th Lanarkshire (the Blythswood): The undermentioned Surgeons are granted the honorary rank of Surgeon-Major: A. Fergus, J. E. Brodie.—20th Middlesex (Artists'): James Cagney, Gent., M.A., M.D., to be Acting Surgeon.—24th Middlesex: Surgeon J. T. Powell, M.D., is granted the honorary rank of Surgeon-Major.—1st Volunteer Battalion, the Royal Warwickshire Regiment: Surgeon Thomas Thompson is granted the honorary rank of Surgeon-Major.

Correspondence.

"Audi alteram partem."

THE BAROMETER AS A GUIDE TO HEALTH.

To the Editor of THE LANCET.

SIR,—A short while ago there came under my notice an abstract of the observations of Dr. M. A. Veeder of Lyons, New York, on the barometer as a guide to health. He says he has noted the occurrence of several deaths from apoplexy at times when rapid fluctuations of the atmospheric pressure were indicated by the barometer, and suggests the cause to be a difficulty in the adjustment of the volume and rate of the circulation of the blood to the varying atmospheric pressure upon the surface of the body, and consequent unusual strain on the weakened bloodvessels. He believes that at such times over-excitement, over-eating, improper clothing, and the like, act as determining causes of the rupture, and would warn persons who are advanced in years, or subject to symptoms that indicate an apoplectic tendency, to exercise great moderation in all things whenever the mercury is seen to be unusually active in its movements.

My attention was directed to this subject many years ago, and in the year 1872 I casually mentioned my opinions to Professor Gairdner of Glasgow, where I met him in consultation on a case of aphasia. I have often noticed a remarkable sequence of cases of cerebral and other hæmorrhages, and convulsions in children, during periods of great electrical disturbances and sudden and extreme fluctuations in the barometer. There is great difficulty, however, in obtaining an accurate reading of the barometer at the moment of seizure, the exact time of it being rarely noticed, and often considerable delay elapses before the message is brought to the medical man, during which the barometer may have made one of its sudden changes. On this account I have been unable to record many cases with the accuracy I could have wished. In two cases, however, I was more fortunate.

On Monday, March 1st, 1880, whilst spending the evening at the house of a friend, I received an urgent message to attend two patients who had been seized with cerebral hæmorrhage within a few seconds of one another. They were both past the middle period of life, one (a male) dying in a few hours, the other (a female) surviving for four days. My friend, who was in the habit of frequently consulting his barometer, examined it immediately after seeing me to the door, and found it standing at 28·10, the lowest reading he had ever seen it register. From the *Scotsman* of Tuesday, March 2nd, 1880, I extract the following notes of the storm:—"The following telegram was received at the East Coast Signal Stations from the Meteorological Office, London, yesterday: 'Deep depressions off north of Scotland; hoist north cone for west to north-west gale, Monday, 10.20 A.M.' A severe gale was experienced in Glasgow on Feb. 26th. The barometer by 10 A.M. stood at 28·8, a fall of 0·5 from Sunday. The barometer at Kirkwald registered 28·34, the lowest point registered since Nov. 22nd, 1877. At Longhope, Orkney, the barometer registered at midnight on Sunday 28·45, and at 9 A.M. on Monday 28·10, when broke forth the severest storm from the west witnessed since Nov. 16th, 1877. Between 2 and 3 P.M. peals of thunder were heard at Edinburgh."

I think that there can be no hesitation in connecting the cerebral hæmorrhage in the above cases with the sudden fall in the barometer. Indeed, so convinced am I of the connexion that for many years past I have been in the habit of advising my elderly patients to remain in-doors, and avoid intemperance in eating or drinking and over-physical or mental exertion, when the barometer suddenly rises or falls. Such sudden changes of atmospheric pressure must be attended with great danger to persons with weak hearts and diseased arteries. As none of our text-books, nor any of the authorities I have been able to consult, make any mention of the connexion between cerebral hæmorrhage and sudden variations of atmospheric pressure, I have cited the above cases in the hope that some of your contributors may be able to throw some light on the subject.

I am, Sir, yours sincerely,

WILLIAM F. MURRAY, M.D., F. & L.R.C.S.

Forfar, March, 1886.

P.S.—On Wednesday last, April 7th, the barometer suddenly sank to 28·4 in the evening, and remained at that point for a considerable time on Wednesday evening and Thursday morning. On my way to Perth on Thursday forenoon I ascertained from Mr. Robertson of Coupar Angus, who reports for the Meteorological Society, that his instrument had stood at exactly 28·4 the same evening and morning. On Wednesday night I had one case of convulsions in a child, and two cases of uterine hæmorrhage ending in abortion in the early months of pregnancy. In the *Dundee Advertiser* three cases of sudden death are reported to have occurred on the same evening within a radius of about twelve miles. They were all males—one seventy-two, one seventy-eight, and one above eighty. They had all been apparently in good health. This must be more than a mere coincidence.

SUPRA-PUBIC CYSTOTOMY.

To the Editor of THE LANCET.

SIR,—The danger of wounding the peritoneum in epicystotomy depends, I believe, to a great extent on the condition of the urine in the bladder. In a large proportion of cases of vesical calculus, bladder tumour, or cystitis (not induced by external agencies, dirty catheters, &c.), the urine is not septic. In some instances it is peculiarly suited to the growth of micro-organisms, so much so that, if passed into anything but a carefully purified vessel, it becomes putrid in a few hours. Even in these cases, as my valued teacher, Sir Joseph Lister, first pointed out, it is not necessarily septic when voided. I have now in my possession several specimens of urine from cases of cystitis and pyelitis, which I have preserved for a considerable time without any change having occurred in them (in one instance for more than six months), showing the absence of putrefactive organisms in the urine of these cases. These specimens have not been boiled, but were simply passed into purified vessels.

Numerous experiments on the lower animals, and cases of wound of the bladder in the human subject, during operation or otherwise, show that the contact of healthy urine with the peritoneum does not necessarily produce peritonitis. I believe that urine which contains muco-pus or pus, provided it is not septic, would be as little irritating to that membrane as healthy urine. From the examination of numerous subjects in the post-mortem theatre, I have satisfied myself that in a small proportion of them epi-

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cystotomy could not have been performed without wounding the peritoneum or stripping that membrane off the bladder, as in M. Autal's case.

Major Tremaine has written in THE LANCET of April 10th, in reference to M. Polaillon's case: "Stranger yet that it [epicystotomy] should have been abandoned through dread of wounding the peritoneum; as this may occur without disaster, the following case will show, &c." This case supports my prediction at the British Medical Association meeting at Cardiff last year[1]—"That in a short time some malignant growths of the bladder with the portion of bladder wall to which they are attached, even when implicating the peritoneum, would be successfully removed, &c." At a meeting of the Bristol Medico-Chirurgical Society on Jan. 13th, I ventured to state my belief that in all cases in which the urine is not septic the peritoneum can be wounded with impunity in epi-cystotomy, provided strict antiseptic precautions are carried out. In those rare cases of low distribution of the peritoneum, complicated with a septic condition of urine in the bladder, it would be advisable to adopt the perineal route.

I am, Sir, yours obediently,

Clifton, Bristol, April 12th, 1886. W. J. PENNY, F.R.C.S.

NOTE ON ACUTE KERATITIS.

To the Editor of THE LANCET.

SIR,—In the many excellent treatises and manuals on diseases of the eye, the descriptions of the objective symptoms of acute inflammation of the cornea leave nothing to be desired in respect to minuteness and accuracy. Its constitutional relationship to syphilis and struma is also duly recorded and explained. But, so far as my reading extends, the acute constitutional disturbance with which it is not unfrequently accompanied in the case of children and some adolescents, also exceptionally among adults, has escaped the attention of writers. The local disease is ushered in by a febrile disturbance; the child has not only lost its appetite, but is thirsty and chilly, creeping up to the fire. The pulse is quick and easily compressed. It is under these conditions that small doses of tartarised antimony in combination with liquor ammoniæ acetatis prove useful. Our object, of course, is to restore the action of the skin; and until this has been effected, tonics, oils, or antisyphilitic remedies are useless and out of place. Quinine I have not found to reduce the febrile symptoms.—I am, Sir, yours faithfully,

Birmingham, March 31st, 1886. J. VOSE SOLOMON, F.R.C.S.

THE ROMAN SCHOOL ON M. PASTEUR.

(From our own Correspondent.)

THE universal interest now taken in the Pasteur treatment of hydrophobia is specially marked in Italy, where, according to the statistics recently collected by Mancini, cases of the disease occur in the proportion of 0·04 to every 10,000 of the inhabitants. Seldom, indeed, has the Reale Accademia Medica of Rome discussed any topic with more animation than the treatment in question, and a *résumé* of its proceedings on the 4th inst. will be found instructive in more than one phase of the subject. After Drs. Marchiafava and Brunelli had spoken, and Dr. Carruccio (the secretary of the Academy) had read Pasteur's letter on the necessity of forming a great international institution in Paris for the reception of hydrophobic cases of all countries, Professor Colasanti related the experience of Italian physicians who had watched Pasteur's methods in that physiologist's own laboratory, and, taking it as proved that of 500 hydrophobic patients under his care Pasteur had had but three failures, he contended that this result more than justified Rome in following the example of St. Petersburg, New York, Buda-Pest, and Berlin, and establishing a special hospital for the practice of the Pasteur treatment.

The next note struck was a slightly sceptical one. The President, Dr. Guido Baccelli, hoped that Pasteur's method would come out unscathed from the critical ordeal to which it was about to be subjected, but he counselled caution in accepting and still more in practising it, and reminded his audience that something very like the same experiments had already been carried on in Italy—notably, by Dr. Agostino Cappello of Tivoli, more than sixty years since. These experiments, though made with the scientific resources of 1820, had still an appreciable value, if only as suggesting that rabies of the second degree is not transmitted. In Pasteur's experiments a distinction must be drawn between prevention on the one hand and cure, properly so-called, on the other; and on this point further light is to be desired. If, as Cappello asserted, rabies of the second degree is not transmitted, then multitudes of those who flock to Pasteur are already safe from the disease without his inoculations. Dr. Baccelli thought that, without committing itself further, the Academy should send a competent representative to Paris to watch the treatment with the vigilance it required. At this stage of the proceedings two telegrams were read for Dr. Politini announcing the despatch of a paper giving details as to the inoculation of the virus practised by him for a series of years.

Then followed an encounter between Dr. Colasanti and Professor Francesco Scalzi (Cesalpino's apologist), the former maintaining that Cappello's experiments differed from those of Pasteur, in that Cappello inoculated with the saliva of the hydrophobic dog, while the superior science of the Frenchman saw that the virus resides in the medulla spinalis, and used this, specially prepared, for the inoculations. Dr. Scalzi rebutted this charge, till an accurate acccount of Cappello's papers, as read before the Accademia dei Lincei in 1823 and 1826, had to be produced. This was done by Dr. Carruccio, who, recapitulating Cappello's attempt to neutralise the hyprophobic virus by the canine saliva, read the author's conclusion that, "from numerous experiments made on dogs and cats, he is satisfied that the rabies, after its first passage into another animal, not excluding those of the species *canis*, no longer preserves its venefic force, but is quite destroyed, and hence is not reproducible as contagious maladies are reproduced." Cappello, it seems, was able to predict with singular accuracy what cases bitten by a mad dog would die and what would recover—his thesis being that rabies of the first degree is alone capable of transmission, while that of the second (that is, one remove from the original mad dog) is not. Dr. Gualdi showed that Cappello's observations were most accurate, and were largely confirmed in France, where Brachit in 1840 and Regnault in 1844 published a long series of cases to prove that the hydrophobic virus in its second and third passage had lost its contagious virulence. As to Pasteur's statistics, Dr. Gualdi contended that their scientific value was often more than doubtful, because many patients subjected to the treatment had already been cauterised immediately after the bite; that others had been bitten in parts covered with their clothes; while very few, bitten on the naked skin, had not received some sort of therapeutic aid at the time. He mentioned what had occurred in the hospital of S. Gallicano, where a family of seven had been brought, all bitten by the same hydrophobic dog. Of these, three had their garments torn and the skin divided, but they escaped; two bitten on the bare skin died; and the remaining two, who had also been bitten on the bare skin, lived. He concluded by saying that if Cappello's observations and well-known practice had not been correct, the canine race in the Roman Campagna would have been stamped out long ago.

Dr. Bastianelli, in confirmation of the efficacy of clothes in preserving those bitten by mad dogs from the virus, cited the case of a countryman who, after a genuine hydrophobic bite, escaped, while his sister, who mended his trousers torn by the animal's teeth, and who had imprudently drawn through her teeth the thread which had been in contact with the saliva-stained garment, died of hydrophobia. Professor Marchiafava admitted the sagacity and diligence of Dr. Agostino Cappello, but dissented from Dr. Gualdi as to the validity of Pasteur's experiments, which, he said, rested on the grand impregnable principle of the attenuation of the virus, a principle demonstrated in the prevention of small-pox, carbuncle, the cholera of fowls, the red disease of pigs, &c., and established by the fifty animals which Pasteur had rendered scatheless from the bites of hydrophobic dogs. He was followed by Dr. Piermarini, who read from a former bulletin of the Academy (1881) an extract from a paper by himself to show the protective influence clothes exercise against the passage of the virus into the wounds inflicted by mad dogs; and the President, Dr. Baccelli, summed up the debate in a few succinct periods, in accordance with which was framed and unanimously voted the order of the day already given in THE LANCET.

Rome, April 9th.

[1] British Medical Journal, Aug. 15th, 1885.

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MANCHESTER.

(From our own Correspondent.)

CASES OF POISONING.

Two cases of poisoning under unusual circumstances have lately occurred here. Two patients of a medical man in Openshaw, one a woman aged thirty-nine, and the other an infant of five months, had medicine made up for them on the same day by his assistant, and both died with symptoms of narcotic poisoning, the woman within twelve hours and the infant on the second day after. From the evidence at the inquest, it was found that in both cases the medicine supplied contained morphia—to the extent of 18¾ grs. per oz. in that supplied to the woman, and nearly double the amount in that supplied to the infant, though in the latter case the dispenser denied having used either morphia or opium. The verdict in the case of the woman was death from opium poisoning owing to negligence on the part of the dispenser; in the second, although the evidence was, if anything, less strong, a verdict of manslaughter was returned; but on the following day evidence was adduced in the police-court that death in this case might have resulted from disease of the lungs, and the stipendiary therefore refused to commit the defendant for trial.

SIR H. ROSCOE.

Sir Henry Roscoe, as one of our members of Parliament, has already brought his special scientific knowledge to bear upon matters before the Legislature, and was largely instrumental in getting Mr. Hastings' "Bill for the Purification of Rivers" rejected upon its second reading, as being under present conditions impracticable, and so hostile to the interests of manufacturers in this part of the country that, if passed, it would impose such restrictions and burdens upon many industries as would render it impossible to carry them on. Still later, he has been placed upon a committee charged with the duty of endeavouring to discover the cause of, and remedy for, the odours which so often offend the nostrils of our legislators within the House of Commons.

ST. MARY'S AND THE LOCK HOSPITALS.

A suggestion was thrown out at the annual meeting of St. Mary's Hospital that the time had arrived when an endeavour should be made to obtain a better and more modern building for this important charity, and now an appeal is before the public asking subscriptions for the same; but it is questionable whether the time is opportune, and at present the response has not been so encouraging as could have been desired. At the annual meeting of the Lock Hospital, at which the Dean of Manchester presided, it was stated that by dint of the most rigid economy the expenditure had been kept within the income, though this unobtrusive charity is perforce of limited funds compelled to keep one-half or more of its beds empty. That the management has, indeed, been careful is shown by the fact that the cost of food was less than ninepence per patient per day. The skin department of this institution also suffers from want of funds. It is now carried on in a separate building, and some good work is, as far as means will allow, being carried on there by Dr. Brooke.

FREE BREAKFASTS.

During the severity of the past season a scheme, which cannot be too highly commended, has been carried out under the auspices of the School Board authorities of providing free breakfasts to those poor children who were known to belong to parents in necessitous circumstances. It was stated at the last meeting of the School Board that 2500 children has thus been fed at a cost of four-fifths of a penny per head. The funds for providing the same were from voluntary contributions.

OPEN SPACES.

Our corporation has of late come in for a goodly share of criticism, not to say abuse, from certain quarters, but it cannot be denied that in many ways they endeavour to look after the interests of the health of the community. The Council has lately had under consideration the question of provision of open spaces, and a subcommittee has been appointed to consider and report as to the extent of its powers, and how best it may be brought about that, in laying out for building purposes land in the suburbs of the city, a due proportion shall be reserved open and free for the use of the inhabitants. Again, the Health Committee has for some time past seriously taken in hand the subject of unhealthy dwellings and homes of the poor, and at the Council meeting held recently a report was presented thereon, but it met with considerable opposition, the cry of vested interests being, as usual, raised against it, and the discussion was postponed.

Prosecutions for offences under the Adulteration Act are frequent; milk, butter, and coffee have all received attention, and the latest delinquents have been the bakers. In one case alum to the extent of forty grains per 4lb. loaf was discovered, and the offender fined £5 and costs.

The compensation to the Local Board officials of Bradford and Rusholme upon the amalgamation of these townships with the city has, after much delay caused by opposition from some members of the corporation, been settled. The two medical officers of health will receive annuities of £8 and £24 per annum respectively.

Sir Wm. Roberts has been placed upon the Commission of the Peace for Merionethshire. In this instance, at least, it cannot be said that the honour has been conferred for political motives, for few men have associated themselves less with politics than Sir William.

Manchester, April 12th.

LIVERPOOL.

(From our own Correspondent.)

THE QUEEN'S VISIT.

THE approaching visit of Her Majesty to Liverpool and her residence there on the 11th and 12th proximo are being looked forward to with much interest. It will be her second visit to this city, her first having taken place in 1851, when she was accompanied by the late Prince Consort. Thirty-five years is a sufficiently long interval to cause great changes in the ranks of the medical profession in any locality, and but comparatively few of the present local medical practitioners can remember Her Majesty's first visit, while many who were then living and practising have passed away. The Exhibition, commonly known by its short title of the "Shipperies," will be held upon the site where it was proposed to erect the hospital for infectious diseases, but the site was condemned as unsuitable by the profession and the public in consequence of its close proximity to a large and extremely noisy railway junction.

THE LADIES' CHARITY AND LYING-IN HOSPITAL.

Dr. Glynn Whittle has been elected surgeon to the hospital, in the place of the late Dr. R. A. H. Wood. Dr. Whittle, who has very high qualifications, has been one of the district surgeons of the charity. The hospital will have in him a most useful medical officer, and the present staff a very genial colleague.

THE ROYAL SOUTHERN HOSPITAL.

Mr. Paul performed the Tagliacotian operation for an ulcer of the leg at the Royal Southern Hospital on Tuesday last. The patient was an otherwise healthy young man. He had a large ulcer in the usual position, which, probably on account of the large amount of cicatrix over the bone, always broke down after it had healed directly he got about. A broad flap of skin was dissected up from the opposite calf and attached to the freshened edges of the ulcer, the legs being fixed in suitable apposition by a plaster-of-Paris bandage. This is the sixth operation of the kind, and so far all have succeeded. In the children's ward is a case of rather severe stab in the back in a boy of eleven. This is the second example of the use of the knife amongst mere children which has come under the care of Mr. Paul within the last six months. The cause here was a religious party fight. The police will do well to prevent the spread of this most unfortunate tendency amongst boys.

ASSAULTS UPON AND BY POLICE CONSTABLES.

In so large a city as this it is only to be expected that there should be numerous assaults upon the police by the drunken and savage roughs to be found in every large community. Such cases, when clearly proved, are generally severely punished. It occasionally happens, however, that policemen are themselves guilty of violence towards prisoners in their custody, which is not surprising, seeing that in so large a force as 1300 men there must of necessity

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be a few "black sheep." Formerly it was not uncommon for these cases to be hushed up, the complainant being induced for a consideration not to appear. Captain Nott-Bower, the present head constable, has most resolutely set his face against this practice, and has resolved that every case shall be fully inquired into by the magistrates as well as by himself and the Watch Committee. His resolution is much to be commended, as it is only by this means that perfect confidence can be felt in the police.

Liverpool, April 14th.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

UNIVERSITY OF DURHAM.

THE number of candidates for the approaching examinations on the 19th and 26th of this month is as follows:—1st M.B. (under the new regulations), twenty-eight entries; Sanitary Science, certificate for proficiency in, two; 1st M.B. (old regulations), twenty-six; 2nd M.B. (new regulations), thirty-two. In the 1st M.B. (old regulations) and 2nd M.B. (new regulations), Mr. Frederick Treves is associated as foreign examiner in Anatomy with Dr. Mears; Mr. Golding-Bird as the foreign examiner in Physiology, with Dr. Thomas Oliver. Mr. McBean is examiner in Materia Medica in the 2nd M.B. (new regulations). This gentleman, I believe, will this summer give lectures on Therapeutics as well as Materia Medica, Dr. Barron having retired from the chair of Therapeutics.

PHOSPHORUS-POISONING.

Another case of phosphorus-poisoning from lucifer matches, in a man, was admitted to the infirmary about ten days since. His symptoms were from the first mild. This makes the sixth or seventh case admitted into that institution during the last four months.

NEWCASTLE CHEST HOSPITAL.

The full title of this institution is the Northern Counties Hospital for Diseases of the Chest, and it held its annual meeting on the 5th ult. The mayor presided, and spoke of the great benefit of hospitals to the public. The year, on the whole, had been a successful one; 554 patients had been treated. This institution, like others doing good work, had felt the pressure of the times in the diminished subscriptions of the past year. The committee regretted the resignation of Dr. J. C. Murray, who had removed to Stranraer, his place being filled by Dr. F. C. Coley of Newcastle.

SMALL-POX AT WEST HARTLEPOOL.

At a late special meeting of the Hartlepool Port Sanitary Authority Dr. Biggart reported that there were now twenty-two cases accommodated in the tents. It was decided to ask the Commissioners to grant the authority the use of a portion of the waggon works.

NEWCASTLE INFIRMARY.

The Committee of the Newcastle Infirmary have issued an appeal to the public for increased support, stating that the present annual expenditure is £13,949, and its receipts only £10,437, and that if its work is to continue £3000 will have to be added to the yearly income. At present the banking account is overdrawn to the extent of £3000. One of the grounds of appeal is that "the infirmary is really the parent of all the numerous medical charities, and that the increase in the number of such charities has not diminished the work of the infirmary, though without doubt it has materially lessened the support which would have been given to it." Though the number of patients has increased from 14,294 in 1863 to 39,360 in 1885, the amount of subscriptions have only increased during this time £500 per annum. On the other hand, Mr. C. S. Jeaffreson, who was formerly connected with the Newcastle Infirmary, but is now one of the surgeons to the Eye Infirmary, writes to one of our local papers pointing out that the statement that the infirmary is the parent of all the medical charities of this city is entirely at variance with facts. Mr. Jeaffreson says—"None will deny that a very large amount of useful and valuable work is done by the infirmary, but that those who best know the workings of our medical charitable system will agree with me that with due economy, proper management, and proper supervision of the class of patients who receive the benefits of the charity, £10,500 a year should amply suffice for its requirements."

IRELAND.

(From our own Correspondent.)

ROYAL COLLEGE OF SURGEONS IN IRELAND.

IN addition to the names already mentioned as having recently been elected Honorary Fellows of the Royal College of Surgeons in Ireland, may be added that of Sir Spencer Wells, whom the Council at their meeting last week duly elected to that honour, and I am informed that he will be present at the banquet to be given by Sir Charles Cameron, the President, on the 28th inst. A History of the College, which the President has been engaged upon for a considerable time past, is now almost finished, and it is hoped that a copy of the work will be in time for the ceremony on the 28th inst. By the kindness of Mr. Farrell, the well-known sculptor of this city, I have had an opportunity of seeing his statue of Mr. Dease, one of the founders of the College. It is an excellent work of art, and is sure to give every satisfaction to all interested in the matter.

ROYAL UNIVERSITY OF IRELAND.

A deputation from the Senate, which included Lord Emly, the Vice-Chancellor, had an interview with the Lord-Lieutenant last week, for the purpose of asking his Excellency to impress on the Government the necessity of granting a sum of £10,000 for providing laboratories and scientific apparatus for the new buildings now being erected. A deputation from the University, with a similar object, some time since had an interview with the Financial Secretary to the Treasury, without any result. Lord Emly stated that when the University was founded it was understood the buildings should be provided by Government with all necessary appliances, and that, in point of fact, the buildings recently erected by the Government would be perfectly useless, as the University could not furnish the necessary apparatus out of the grant of £20,000 a year at present allowed. His Excellency said that the view of the Government appeared to be that the endowment was ample, and that all University appliances could be provided out of it. However, if the Senate would state their views on paper, he would forward them to the Treasury, with an endorsement as to his own opinions.

OUTBREAK OF FAMINE FEVER IN LISMORE UNION.

Last week five cases of famine fever were admitted to Lismore Fever Hospital from the district of Cappoquin, and the following remarks, as bearing on the subject, may be of interest. During the winter severe distress prevailed in Cappoquin district owing to the want of employment among the labouring classes, and, in consequence, the guardians instructed their engineer to report as to the condition of the labouring poor, and, if necessary, to carry out any sanitary works that might be required. He reported that he found many of the labourers without a morsel of food, and employment was therefore given to about fifty for a few weeks, and then ceased, as the guardians could not open up special work to cope with the distress without the consent of the Local Government Board. However, the labourers were placed on half out-door relief, and consequently many families existed in a state bordering on starvation on an allowance of one shilling per week. The medical officer of the union, Dr. Dennehy, brought the matter of the outbreak of fever before the guardians, and it has been stated that an inspector of the Local Government Board has been sent to inquire into the state of the district. So far as has been ascertained, the fever is confined to the locality where it originated, and by proper precautions and by additional employment being given to those most in need, it is expected that the distress will be alleviated. No additional cases, it is believed, have occurred.

BOARDING OUT OF PAUPER CHILDREN.

This procedure has generally been attended with satisfactory results not alone to the children but also to the ratepayers, as the nurses almost invariably adopted the children placed under their care. Exceptions, however, occasionally occur, and last week an instance of the kind was reported at a meeting of the guardians of the North Dublin Union. It was discovered that a woman to whom two children had recently been given out of the workhouse to nurse and rear had thirteen additional children who were living in a cottage of only two apartments, and very properly the children in question were at once removed from her custody.

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NORTH DUBLIN UNION.

A deputation from the guardians recently waited on the Governors of the Richmond Lunatic Asylum in order to obtain a capitation grant of four shillings for the pauper lunatics sent into the workhouse from the asylum under the 9th section of 38th and 39th Vic., cap. 67. The governors of the asylum, however, were of opinion that these lunatics were sent in under the provisions of the 11th section, and not of the 9th, of the Act referred to, and declined to make any payment or to enter into the matter until the guardians could produce the consent of the Local Government Board and of the Lunacy Inspectors to the claim. As the sum claimed is £1600, and as the South Dublin Union are endeavouring to establish a similar demand, the matter will be again brought forward, and doubtless will ultimately be granted. The refusal of the governors to acknowledge their indebtedness is said to arise from the fact that the present accommodation and attendance given to harmless lunatics sent into the workhouse is very deficient.

Dublin, April 13th.

PARIS.

(From our own Correspondent.)

DEATH OF PROFESSOR BOUCHARDAT.

THIS eminent physician expired on Thursday, the 8th inst., at his residence in Paris, in the eightieth year of his age. He died from extreme exhaustion resulting from great depression of spirits, by which he had become affected since his retirement from the Professorship of Hygiene, which he held at the Paris Faculty of Medicine since 1852. For some time before his retirement he became rather deaf, in consequence of which he was obliged to refrain from taking part at the examinations for the Doctorate. He was otherwise in good health, but his forced retirement from an active life so preyed on his mind that he gradually broke down and nothing seemed to renovate him. Professor Bouchardat did not do much in the way of practice, but devoted his whole time to the improvement of his office and to scientific and literary work. He wrote a good deal, and the mere enumeration of his works would fill some columns of THE LANCET. He wrote principally on Materia Medica, Pharmacology, and Hygiene. The works bearing these titles are the text-books of the Paris Faculty, and will probably remain so for some years to come. His "Annuaire de Thérapeutique," which was commenced forty-five years ago, and his "Nouveau Formulaire Magistral," which has passed through nineteen editions, are well known to the profession. He took his degree in 1832, and was soon after promoted to agrégé, but, as he evinced a predilection for pharmacology, he was appointed pharmacien to the hospitals, in which capacity he was attached to the Hôtel Dieu from 1834 to 1853. He was a member of the Academy of Medicine since 1850, and became its president in 1866. He was also an officer of the Legion of Honour. He leaves two sons, one of whom is a surgeon-major in the French Army, and the other is a professor at the School of Pharmacy. The funeral of the deceased physician took place on Saturday last, in the presence of a large concourse of persons of all ranks in and out of the profession, among whom were many of his patients of both sexes; and to give your readers an idea of the number that attended I may mention that the old cathedral of Notre Dame, his parish church, and where the service was performed, was at least half full. Though his desire was that his funeral should be as simple as possible and without any official pomp, yet the members of the Faculty and the Academy of Medicine considered it their duty to attend in a body, though not in their official garbs.

DEATH OF DR. AMÉDÉE FORGET.

I have also to report the death of Dr. Amédée Forget, which took place on Sunday, the 11th inst., in the seventy-fifth year of his age. He was for many years in failing health, which induced him to retire from practice. He was once president of the Société de Médecine of Paris, and at his death was consulting surgeon to the Institution of the Legion of Honour, of which he was also an officer. His medical knowledge was very extensive, and he more than once received a prize from the institute in recognition of the value of his works.

A VENERABLE SAVANT.

There are three men whose names have been for some time almost constantly before the public: M. Pasteur, for his remarkable discoveries; M. de Lesseps, as a pioneer of civilisation; and M. Chevreul, as an illustrious chemist, academician, and centenarian. M. Chevreul styles himself the "doyen des étudiants." In order to celebrate his hundredth birthday, which is on Aug. 31st next, the various learned societies of France propose having a public demonstration in his honour. It is also proposed to celebrate the centenary of the introduction of the potato into Europe by Parmentier in the form of a banquet, which will be presided over by the three illustrious men above named, and on which occasion "la pomme de terre" will be the "plat d'honneur."

M. PASTEUR.

The Stanley Club at Paris gave this evening a dinner to M. Pasteur, which was presided over by the American Minister. In replying to the toast of the evening, M. Pasteur, referring to his system of treatment by inoculation, said that the insults of anti-vaccinators and anti-vivisectors, the hesitation, temporising, or jealousy of newspapers, were immaterial to him. He could afford to wait with confidence, albeit there were some who waited with the hope of his failure. I may here mention that the Sultan of Turkey has decided upon sending a mission to Paris composed of two medical men and a veterinary surgeon to study the anti-rabic method of M. Pasteur. One of the party is the bearer of the Grand Cordon of the Medjidieh and a sum of 10,000 fr., which are to be given to M. Pasteur in the name of the Sultan, the latter being intended for the Pasteur Institute. At the last meeting of the Société d'Hygiène, M. Pasteur announced the death of another patient (which will be the third) of the first Russian party from Smolensk. He died on April 2nd, at the Hôtel Dieu, with the symptoms of hydrophobia. M. Pasteur is by no means discouraged by these deaths; he will only be induced to study more particularly the phenomena attending the bites of wolves, which he considers more grave than those of dogs or other animals.

Paris, April 14th.

MEDICAL NOTES IN PARLIAMENT.

Contagious Diseases Acts Repeal (No. 2) Bill.

IN the House of Lords on the 9th inst., Lord Sandhurst, in moving the second reading of this Bill, said that it was intended simply to carry out public opinion, which had of late years gone in one direction—viz., in that of the repeal of the Acts. Viscount Cranbrook agreed that when Acts were inoperative they should be removed from the Statute Book, but protested against the idea of local authorities being called on to undertake a duty which the Legislature refused to carry out. The motion was then agreed to.

On the 12th inst. the Bill passed through Committee, and on the 13th inst. it was read a third time and passed.

The Idiots Bill.

On the 12th inst. this Bill was read a third time.

The Medical Act, 1858.

In the House of Commons on the 14th inst., a Bill to amend the Medical Act, 1858, was brought in by Mr. Morgan Howard, and read a first time.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their Primary Examination in Anatomy and Physiology at a meeting of the Board of Examiners on the 8th inst., and when eligible will be admitted to the Pass Examination:—

W. H. L. Copeland and H. S. Tuppen, Cambridge University and St. Thomas's Hospital; Montague Tench, J. Kynaston Couch, J. A. T. Woodgate, and F. G. Parsons, Middlesex Hospital; A. E. Norburn, R. Devereux Mothersole, and C. Price-Jones, Guy's Hospital; A. H. Cheatle, King's College Hospital; J. England Brogden, St. Bartholomew's Hospital; W. S. Sharpe, G. Coleridge Davis, and Alexander Lewers, St. Mary's Hospital; F. Grange, Charing-cross Hospital; W. B. Ransom, Cambridge and University College Hospital; W. Harris Best, London Hospital; A. J. Adkins and C. J. Martin, St. Thomas's Hospital.

ANATOMY ONLY.—H. Lee Green, Toronto University; John Griffith, St. Mary's Hospital; A. H. Blunt, St. Thomas's Hospital.

PHYSIOLOGY ONLY.—P. W. Turnor, St. George's Hospital; P. Christian de Wet, St. Thomas's Hospital.

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Passed on the 9th inst.:—

ANATOMY AND PHYSIOLOGY.—W. L. Liston, Owens College and St. Mary's Hospital; J. Mansbridge and William Morrison, Charing-cross Hospital; E. T. Larkam and J. W. Gill, Middlesex Hospital; F. R. P. Taylor, Westminster Hospital; C. S. Dowdell, University College Hospital; Arthur Fagan, London Hospital; A. E. P. Hughes, St. Thomas's Hospital.

ANATOMY ONLY.—E. D. Kell, University College Hospital; E. A. Nicholletts, London Hospital; Herbert Fraser, St. Thomas's Hospital; Reginald Hedley and James Smith, Bristol Medical School; Mallard Martin, Sheffield Medical School; John Robertson, Guy's Hospital.

PHYSIOLOGY ONLY.—R. W. Anderson, University College Hospital; A. E. Howse, King's College Hospital; J. M. Fry, Westminster Hospital; D. J. Aaron, London and Madras; A. W. Gray and R. S. M. Groves, Birmingham School of Medicine; P. R. Hird, Yorkshire College, Leeds; W. J. Watkins, Bristol Medical School; J. A. Wood, University College Hospital.

The Library of the College of Surgeons will be closed on Friday and Saturday, the 16th and 17th inst., for the purposes of the Final Examination for the Membership, 280 candidates having entered for this examination.

ROYAL COLLEGES OF SURGEONS AND PHYSICIANS.—The following gentlemen passed their Second Examination in Anatomy and Physiology at a meeting of the Board of Examiners on the 5th inst., and when eligible will be admitted to the Pass Examination:—

J. E. Briscoe, Yorkshire College, Leeds; S. W. Morgan, Hedley Hill, H. F. Mole, and J. T. Grey, Bristol Medical School; Thomas Watts, Oliver Eaton, Patrick Rowan, J. H. Barker, B. Wiseman, J. Halliwell, Aubrey Conway, J. A. Cooke, and E. H. Robinson, Owens College, Manchester; S. Farrage Gibbs, H. N. Crossley, H. E. Knight, C. H. Roberts, and F. B. A. Colby, St. Bartholomew's Hospital; R. A. Bremner and J. E. F. Hosking, Guy's Hospital; H. E. Skyrme and Samuel Davey, London Hospital; A. S. Milner and B. F. F. Jackson, Charing-cross Hospital; G. E. Weary and J. Tertius Clarke, St. Thomas's Hospital; R. T. Gravely, St. Mary's Hospital.

ANATOMY ONLY.—A. C. Gaskin and H. C. Titterton, Owens College, Manchester.

PHYSIOLOGY ONLY.—H. K. Ramsden, Owens College, Manchester; Masha A. Khan and E. J. Reynolds, London Hospital; G. H. Humphreys, St. Bartholomew's Hospital.

Passed on the 7th inst.:—

ANATOMY AND PHYSIOLOGY.—F. E. Forward, H. H. Hulbert, and T. P. Cowen, St. Thomas's Hospital; E. Beddoe Hulbert and Harry Davis, University College Hospital; J. T. Clapham, W. G. Willoughby, Ransom Pickard, W. F. Cholmeley, Bedford Price, A. R. Poulter, G. H. D. Robinson, H. G. G. Cook, and C. Evelyn Ormerod, St. Bartholomew's Hospital; Percy J. Kingston, Oakley E. Higgens, William Henry, and F. W. Lewitt, St. Mary's Hospital; Maxwell Le Cronier, W. Marshall Davidson, and H. Higgins, St. George's Hospital; H. C. H. Parham, P. J. Duncan, and E. J. Appleton, Charing-cross Hospital; T. Boswall Beach, King's College Hospital; Louis Beckett, London Hospital.

ANATOMY ONLY.—Colin E. W. Bennett, Middlesex Hospital.

PHYSIOLOGY ONLY.—Frederick Bell, St. Bartholomew's Hospital; R. H. Tompsett and Harry Gervis, St. Thomas's Hospital.

Passed on the 8th inst.:—

ANATOMY ONLY.—Cyril Ogle and W. S. Heberden, St. George's Hospital; R. J. Hutchinson, London Hospital.

Passed on the 12th inst:—

ANATOMY AND PHYSIOLOGY.—E. A. Edelsten, B. C. Oldham, Robert H. Elliot, Alfred Willson, J. C. Shaw, A. W. L. Jones, S. Browning Smith, C. E. Hutt, and J. A. Hayward, St. Bartholomew's Hospital; L. H. Bennett and C. H. Duncan Morland, St. George's Hospital; E. A. Falkner and B. H. Deare, Middlesex Hospital; J. R. Plant, Westminster Hospital; J. W. Higginson, University College Hospital; P. C. Thomas and E. A. Roberts, St. Thomas's Hospital; A. E. Baker, Charing-cross Hospital; H. S. Ballance, King's College Hospital; Arthur M. Hickley, St. Mary's Hospital; H. B. Bolus, Guy's Hospital; W. Soltan Fenwick, London Hospital.

ANATOMY ONLY.—P. Napier Jones, St. Mary's Hospital; E. R. Streeten, St. George's Hospital; F. E. Marshall, King's College Hospital.

PHYSIOLOGY ONLY.—A. Talman Ilott, Charing-cross Hospital; E. D. Y. Pode and F. R. S. Milton, St. Thomas's Hospital; A. C. Davies, University College Hospital; Charles Spurrell, Guy's Hospital.

Passed on the 13th inst., and when eligible will be admitted to the Final Examination:—

ANATOMY AND PHYSIOLOGY.—W. J. Foster, St. Mary's Hospital; J. Gilbert Ogle, E. M. R. Bryant, and E. G. Carpenter, St. Bartholomew's Hospital; A. N. Boycott, H. G. Turney, and F. C. Abbott, St. Thomas's Hospital; F. Bernard Betts, Westminster Hospital; A. B. Watson, J. Ring, J. A. Hutton, and G. Colborne, Middlesex Hospital; B. M. H. Rogers and Arthur Gale, University College Hospital; K. Worsley Poole, F. S. Harris, and Ernest Burchell, London Hospital; R. T. Hewlett, King's College Hospital; H. W. Clarke, Charing-cross Hospital.

ANATOMY ONLY.—W. Metcalfe and Lennard Cutler, St. George's Hospital; H. W. Reynolds and Frank T. Long, St. Bartholomew's Hospital; Walter Gibson, Guy's Hospital; Edgar H. Strong and W. V. Eaves, University College Hospital.

PHYSIOLOGY ONLY.—P. T. B. Beale, King's College Hospital; D. Lawson, and C. L. Howe, Middlesex Hospital; Charles Wilson, William Thomas, W. H. Coates, and Stuart R. Blake, London Hospital; N. A. A. Trenow, St. George's Hospital; Arthur Boulton, Charing-cross Hospital; Francis Dugon, Guy's Hospital; D. D'Auvergne Wright, University College Hospital.

SOCIETY OF APOTHECARIES.—The following gentlemen passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on the 8th inst.:—

Burnside, Eustace Augustus, Richmond-road, Bayswater.
Pain, Francis, M.R.C.S., Stratfield House, Thurlow-park-road, Dulwich.
Whitten, Samuel, Fairfield-road, Bow.

On the same day the following gentleman passed his Primary Professional Examination:—

Conolly, Charles Hamilton, St. Bartholomew's Hospital.

THE library of the Royal Medical and Chirurgical Society will be closed from Good Friday to Easter Monday, both days inclusive.

MR. M. C. SOUTTER, M.R.C.S., A.K.C. Lond., of Finsbury Park, has been elected a member of the South Hornsey Local Board of Health.

ANTI-VACCINATION AT LEICESTER.—Of the thirty-eight guardians elected for the Leicester board this week twenty-six are stated to be pledged to resist the operation of the Vaccination Acts.

THE Duke of Connaught presided on the 14th inst. at the festival dinner in aid of the funds of the British Home for Incurables. During the evening subscriptions amounting to about £1000 were announced.

VACCINATION GRANTS.—Mr. Garrett Horder, of Crockherbtown; Mr. R. G. Price, of Treorchy; and Mr. Geo. Lowther, of Kingston-upon-Hull (fifth time), have received the Government grant for efficient vaccination in their respective districts.

A NEW sanatorium for infectious diseases, erected at Alcester by public subscription as a memorial to the late Marquis of Hertford, was publicly opened on Saturday last by the Marchioness of Hertford, in the presence of a distinguished company.

AMONGST the guests present at a banquet given at the Mansion House by the Lord Mayor, on the 13th inst., to the representatives of the learned societies, were Sir James and Lady Paget, Mr. W. S. Savory (President of the Royal College of Surgeons), Sir Andrew and Lady Clark, Sir William Gull, Dr. B. W. Richardson, and Dr. Edwards.

MEASLES IN BERLIN.—An epidemic of measles is, it is reported, prevailing to a considerable extent amongst the upper classes of Berlin, one of the latest sufferers being the Crown Prince of Germany. His Highness's age being fifty-four, the disease cannot be considered entirely free from danger, but fortunately the attack appears to be of a mild character.

SANITARY ASSURANCE ASSOCIATION.—At a meeting of the Council on the 12th inst., General Sir Peter S. Lumsden, C.B., C.S.I., G.C.B., was elected a member of the Executive Council on the motion of Sir Joseph Fayrer, F.R.S. Mr. Mark H. Judge, A.R.I.B.A., submitted a draft Bill for the better sanitation of dwellings. This draft was referred to a Committee for consideration and report. One of the provisions of the proposed Bill is as follows:—"After January 1st, 1888, it shall not be lawful for any dwelling-house, school, hotel, or other public building used, or intended to be used as such, to be so used unless and until a certificate has been deposited with the local authority in accordance with the provisions of this Act."

PRESENTATIONS.—In recognition of his having given two courses of instruction in ambulance work to the members of the Leith police force during the past winter, Dr. O. H. Garland has recently been presented with a silver cigarette case by his pupils.—On the 3rd inst., at a meeting presided over by Sir Andrew Clark, a testimonial, consisting of a timepiece and an illuminated address, was presented to Dr. Dundas Grant in recognition of his services as chairman of the late East London Industrial Exhibition.—On the 4th inst. the boys of Marlborough College presented Dr. Fergus with a silver tea service, he having, as previously intimated, resigned his post as medical officer of the College after a tenure of thirty-seven years.—On the 8th inst., previous to his departure for Cape Colony, Mr. Davidson was presented by several of the inhabitants of Alnwick with an illuminated address, a valuable case of surgical instruments, and a purse of gold as a mark of their appreciation of the manner in which he had performed the duties of medical officer of health of the town and house surgeon to the local infirmary.—On the 5th inst. Dr. Lionel Weatherly was presented by the working men and women of Portishead with a timepiece and an address, on the occasion of his quitting the neighbourhood.

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AT the quarterly meeting of the directors of the Naval Medical Supplemental Fund held on the 13th inst., T. Russel Pickthorn, Esq., Inspector-General, in the chair, the sum of £64 was distributed among the several applicants.

THE SEWAGE QUESTION.—The treatment of sewage formed the subject of a paper introduced at the Society of Arts on the 14th inst. by Dr. Meymott Tidy. The paper was exceedingly voluminous, and although the author did not present it in more than outline, the reading of it occupied the entire morning, discussion being postponed until a future date. Sir Frederick Abel presided, and there was a large attendance of engineers, chemists, and others interested in the question.

THE HOSPITALS ASSOCIATION.—The annual meeting of the members of this Association was held on the 14th inst., Sir Andrew Clark presiding. The report, which was read by Mr. F. Almond Hunt, and ultimately adopted by the meeting, divided the work carried out by the Association into three main heads—the collection, classification, and arrangement of figures and facts bearing upon the administration of hospitals and asylums, and their publication; the appointment of sectional committees; and the dissemination of information likely to benefit hospital economy. Mr. H. Burdett, in moving the adoption of the report, detailed the progress which is being made by the Association. Amongst the other speakers were Mr. Pease, M.P., Dr. Bristowe, and Major-General Keating. Sir Andrew Clark was elected president of the Association.

THE LIVERPOOL LOCK HOSPITAL.—For reasons more obvious than logical, lock hospitals receive few or none of the gifts so lavishly showered upon other hospitals in the shape of books, engravings, prints, flowers, &c. It is therefore very gratifying to give an exception to this general rule. Some years ago, at the request of Mr. F. W. Lowndes, one of the surgeons to the Liverpool Lock Hospital, the proprietors of the *Graphic* forwarded to the hospital a large parcel of back numbers with separate large engravings, both coloured and plain. With the assistance of some influential friends these were framed and glazed, and were sufficient to cover the walls of the female wards. Recently, Mr. Lowndes received another parcel from the same donors, with engravings for the male wards.

SOCIAL SCIENCE ASSOCIATION.—At a special general meeting of this Association held on Wednesday, the 14th inst. (Mr. Hastings, M.P., in the chair), a motion, of which due notice had been given, for the dissolution of the Association and its amalgamation with some other body, and an amendment recommending a continuance of the annual Congresses having been considered and ultimately withdrawn, it was unanimously resolved, on the motion of Mr. Hastings, M.P., seconded by Mr. Mark H. Judge: "That the action of the Association be suspended for the present, and that a committee of twelve be now appointed to reduce within the smallest practicable limits the expenditure, and to clear off the existing liabilities; to dispose of any of the books or other property of the Association; to call the Society into active existence whenever the circumstances of the time may seem favourable; and to report to a special general meeting of the Association on a requisition signed by at least twenty members."

ASSOCIATION OF MEDICAL PRACTITIONERS QUALIFIED IN SANITARY SCIENCE.—At a largely attended meeting held on the 9th instant, the above Association was inaugurated. It was proposed by Dr. H. F. Parsons, and seconded by Dr. Louis Parkes, that the body be called "The Association of Medical Practitioners qualified in Sanitary Science," which was carried unanimously. The main object of the Association is to obtain the registration of sanitary science degrees and certificates of universities and corporations whose medical degrees and licences are at present registrable. Among others who have joined the Executive Council are the following:—P. Hinckes Bird, F.R.C.S. Eng.; D. W. Finlay, M.D. Glasg.; A. Newsholme, M.D. Lond.; Louis C. Parkes, M.D. Lond.; H. F. Parsons, M.D. Lond.; C. E. Saunders, M.D. Aberd.; W. R. Smith, M.D. Lond; W. E. Steavenson, M.D. Cantab.; J. F. J. Sykes, M.B., B.Sc. Ed.; E. F. Willoughby, M.B. Lond.; D. S. Davies, M.B. Lond. (Bristol); R. Bruce Low, M.D. Ed. (Helmsley); and J. F. W. Tatham, M.B. Dub. (Salford)—Hon. Secretaries: J. Edwin Cooney, L.R.C.P. Ed. (20, Vereker-road, West Kensington, S.W.); H. A. Fotherby, L.R.C.P. Lond. (St. George's Infirmary, Fulham-road, S.W.)

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BALDWIN, T. A., M.D Dub., L.R.C.S.I., has been appointed Assistant Surgeon to the Hull Royal Infirmary.

BOND, B. M., M.R.C.S., L.R.C.P., has been appointed Resident Clinical Assistant to the East London Hospital for Children and Dispensary for Women, Shadwell.

DE'ATH, GEORGE HANBY, M.R.C.S., L.R.C.P.Lond., has been appointed Coroner for the Winslow Division of Bucks; Medical Officer to the Buckingham Workhouse; Medical Officer for the Leckhampstead District of the Buckingham Union; Medical Officer of Health for Buckingham; and Medical Officer of Health for the Leckhampstead District of the Buckingham Union.

FISHER, H. HOLDRICH, M.B.Lond., M.R.C.S., L.R.C.P.Lond., has been appointed Surgical Assistant to the Glasgow Royal Infirmary.

HOWLETT, E. H., F.R.C.S., has been appointed Assistant Surgeon to the Hull Royal Infirmary.

MURDOCH, ANDREW, M.B., C.M.Glas., has been appointed Medical Officer for the Rainford District of the Prescot Union.

PETCH, RICHARD, M.D.Lond., M.R.C.S., L.S.A.Lond., has been appointed Honorary Medical Officer to the York County Hospital.

PHILLIPS, H. A., M.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Dunham District of the East Retford Union, for the Newton-on-Trent District of the Gainsborough Union, and for the Clifton District of the Newark Union.

PIGEON, H. W., M.B., B.C., F.R.C.S., has been appointed Assistant Surgeon to the Hull Royal Infirmary.

ROCKLIFFE, W. CRAVEN, M.A., M.B.Cantab., M.R.C.S., &c., has been appointed Honorary Ophthalmic Surgeon to the Hull Royal Infirmary.

SHEPERD, R. J., L.R.C.S.I., L.K.Q.C.P.I., &c., has been appointed Medical Officer for the Rednorshire District of the Hay Union; and Public Vaccinator and Medical Officer of Health for the District, vice Applebe, resigned.

STANILAND, SAMUEL, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Stapleford District of the Wilton Union.

TANNER, HERBER, L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer for the Audlem District of the Nantwich Union.

TURNER, RICHARD, M.B., has been appointed Honorary Medical Officer to the York County Hospital.

Births, Marriages, and Deaths.

BIRTHS.

DICKSON.—On the 11th inst., at Great Marlow, Bucks, the wife of John Dunbar Dickson, M.D., of a son.

FENNER.—On the 7th inst., at Cromer, the wife of Robert Fenner, M.R.C.S., L.R.C.P., of a son.

IMLACH.—On the 9th inst., at Canning-street, Liverpool, the wife of Francis Imlach, M.D., of a son.

PEARCE.—On the 14th inst., at Lennox Villa, Hurstp'erpoint, the wife of Henry Pearce, M.R.C.S., L.S.A.Lond., of a son.

WAGSTAFF.—On the 9th ult., at Acre-lane, Brixton, the wife of John Philip Wagstaff, L.R.C.P.Lond., M.R.C.S.Eng., L.S.A.Lond., of a daughter.

MARRIAGES.

DAVIDSON—HENDERSON.—On the 6th inst., at St. Augustine's, Forest-hill, by the Rev. J. H. Morgan, D.D., James McKenzie Davidson, M.B., C.M., of Aberdeen, to Georgiana Barbara Watt, daughter of the late W. Henderson, of Aberdeen.

FRASER—WEIR.—On the 7th inst., at the Cottage Moor Farm, Tain, Scotland, by the Rev. Colin MacNaughton, of Tain, Alexander Fraser, Esq., M.B., Professor of Anatomy, Royal College of Surgeons, Dublin, to Joanna Calder, second daughter of the late Rev. James Weir, A.M., Minister of Drainie.

DEATHS.

ALEXANDER.—On the 7th inst., at Margery Hall, Forest-gate, E., Frederick John Alexander, M.R.C.S., in his 63rd year.

BENSON.—On the 6th inst., Patrick Benson, M.R.C.S., L.S.A.Lond., aged 83.

BRAMWELL.—On the 10th inst., at 23, Drumsheugh-gardens, Edinburgh, Effie, youngest daughter of Byrom and Martha Bramwell, in her 11th year.

BROSTER.—On the 10th inst., at Marland-place, Southampton, John Broster, M.D., aged 52.

FOWLER.—On the 8th inst., at Brockett Hall, Torquay, Elizabeth Clara Emily (Lilly), only daughter of Oliver H. and Caroline Fowler, of Cirencester.

LOGIE.—On the 6th inst., at Queensborough-terrace, W. (of heart disease), Cosmo Gordon Logie, Surgeon-General, late of the Royal Horse Guards (Blue).

PICKFORD.—On the 13th inst., William Henry Pickford, formerly Surgeon-Major, Grenadier Guards, and late Surgeon-Major, Scots Guards, in his 52nd year.

RAYNER.—On the 8th inst., at Tiviot Dale, Stockport, William Rayner, M.D.Lond., aged 75.

TATE.—On the 9th inst., at Camden-road, N.W., George Tate, M.R.C.S., L.S.A.Lond., aged 84.

TAYLOR.—On the 4th inst., at Crow Trees, Bradford, Yorkshire, William Taylor, M.D., aged 72.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, April 15th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Apr. 9	29·52	W.	43	40	91	50	39	·12	Cloudy
,, 10	29·63	W.	45	42	79	48	36	·02	Fine
,, 11	29·65	S.W.	39	38	84	53	37	·14	Raining
,, 12	30·06	N.W.	43	39	86	57	38	·04	Fine
,, 13	30·29	W.	46	43	93	57	39	...	Hazy
,, 14	30·30	N.W.	47	45	77	54	44	·02	Raining
,, 15	30·27	E.	47	44	...	...	43	...	Hazy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

EUROPEAN CAPITALS AND THEIR WATER-SUPPLY.

ROME heads the list with her 204,000,000 litres of pure water every twenty-four hours. Her population being 345,036, every inhabitant can dispose of 591 litres per diem. London comes next, for every one of whose 4,085,040 inhabitants there are 300 litres daily. Paris takes the third place, her population amounting to 2,240,124, and each inhabitant having for alimentary uses 58 litres per diem, and for secondary purposes 169—a total of 227 litres. Berlin has 1,302,283 inhabitants, for each of whom there are 140 litres daily; Vienna, 770,172 inhabitants, with 100 litres each per day; Naples, 463,172, with 200 litres; and Turin, 278,598, with 98 litres a head every twenty-four hours.

A CURIOUS COINCIDENCE.

To the Editor of THE LANCET.

SIR,—You may think the following rather remarkable coincidence worth recording. Soon after it was published I recently purchased a work on Medicine in the Borough. About a fortnight or so ago I found that an error had been made in binding it—viz., pages 817-32 left out and pages 833-48 inserted in duplicate. The publishers very promptly undertook to rectify the mistake on my notifying it to them. They returned it on April 1st. On April 8th I purchased of the same bookseller a copy of another work, and on inspecting my purchase later on I discovered that an exactly similar error had been made in binding it—viz., pp. 65-80 left out and pp. 81-96 inserted in duplicate. Considering the number of books issued daily, the small percentage of mistakes that occur in binding them, and the variety of mistakes that might be made, it certainly is strange that two books similarly imperfect should have been issued by the same publishers, pass through the same booksellers, and finally reach the same purchaser—the one exactly a week after the corrected copy of the other had been returned. Perhaps some mathematician would like to calculate the chances against such a coincidence occurring again before the end of this century!—or next!

I am, Sir, yours truly,

April 12th, 1886. C. L.

DON JUAN CUESTA Y CKERNER.

THE death of Dr. Tejada, editor of the *Genio Médico Quirurgico*, which we noticed a short time ago, has been followed by that of another representative of the Madrid medical press—viz., the venerable and much esteemed editor of the *Correspondencia Médica*, Señor Don Juan Cuesta y Ckerner. One of the last paragraphs he penned was for the issue of March 16th, on the death of his friend and rival, Dr. Tejada, in which he stated his regret that, owing to infirmity from which he had long suffered, causing dyspnœa, he was unable to be present at the funeral, adding, almost prophetically: "How often I have thought during the attacks of asphyxia which seize me that he and I would be travelling the path of eternity together."

ROYAL COLLEGE OF SURGEONS.

THE following are the questions put to the candidates at the late examination in Anatomy and Physiology:—

Anatomy.—From 2 to 5 o'clock P.M. Candidates to answer at least four questions.

1. Mention the muscles which are attached to the following parts of the skeleton—(*a*) Great wing of the sphenoid, (*b*) angle of the inferior maxilla, (*c*) coracoid process of scapula, (*d*) coronoid process of ulna, (*e*) internal cuneiform bone of the foot. Give the nerve-supply of each muscle.

2. Describe the dissection necessary to expose the common femoral artery.

3. Describe the under-surface of the liver, and state the relative position of structures in contact with that surface.

4. Give the origin, course, and distribution of the spinal accessory nerve.

5. Describe the innominate artery, and give its course and relations.

6. Describe the arrangement of the superficial veins of the upper extremity.

Physiology.—From 2 to 5 o'clock P.M. Candidates to answer at least four questions.

1. Describe the circulation of the blood through the liver. Give the structure and functions of a hepatic lobule.

2. Describe the structure of a bronchial tube. Mention the uses of each of its constituents.

3. Explain the processes by which the normal temperature of the body is maintained and regulated.

4. Give the microscopic structure of a striated muscle-fibre. How may a muscle be excited to contract? What phenomena accompany contraction?

5. Describe the development and structure of a ripe Graafian follicle. What change does it undergo after the discharge of the ovum?

6. What is the meaning of the term "blood-pressure"? By what circumstances may blood-pressure be modified?

CASE OF STRANGULATED HERNIA.

To the Editor of THE LANCET.

SIR,—The following particulars of a case of strangulated hernia may be of interest to some of your readers.

On the evening of Sept. 2nd, A. B——, fireman, came to my surgery, stating that he had fallen on a joist while cleaning the engine-room skylights, and saying "he thought he had ruptured himself." He fell at 4 P.M., and at the time did not experience any uncomfortable feelings. A short time afterwards he found a small tumour, which very quickly got larger as he continued working. I examined him, and found his scrotum an enormous size. I immediately placed him on the surgery floor and endeavoured to reduce the tumour by taxis. Having failed, I got the chief engineer to administer chloroform, under my superintendence, and again tried to reduce the swelling. For three-quarters of an hour I steadily laboured at the case, and, giving up all hope, I determined to operate. Having placed the patient on a suitable bed in one of our hospitals, I operated at 7.15, having up to then tried every effort at reduction. I was assisted by Mr. Kennedy (engineer), who gave chloroform (the chief engineer being tired) and Mr. Helberg (purser), who gave me most valuable assistance throughout. In operating, when I came to the sac I found it much congested, being caused, as I thought, by the efforts previously made at reduction. I divided the constriction, and returned the tumour with slight difficulty. Having tied the few vessels, I waited to see if any more were bleeding, but finding none, I brought the edges of the wound together, applying some carbolised oil, a pad, and spica bandage. After the operation he was quite cheerful. In an hour and a half I saw him again, when he said "the tumour was coming down." I immediately undid the bandage, and found a tumour at the site of the wound, also the scrotal bag enlarged. I cut the sutures, removed some clots of blood (for of such the tumour was composed), and, having discovered two small vessels bleeding, I tied them, and once more brought the edges of the wound together. I then applied some pounded ice in a napkin to the wound, the application of ice being carefully repeated throughout the night. At 11 o'clock I gave him half a drachm of tincture of opium. In the morning he felt very well. Pulse and temperature normal. We then arrived at Adelaide, and the Government inspecting medical officer, Dr. Toll, came on board. He kindly took the case into hospital, while we proceeded on our way to Melbourne. While in hospital the case was as follows:—The first night there was an elevation of two degrees in temperature, which went down again next morning. The bandages were undone, and the wound on examination looked healthy. It was dressed with carbolic lotion (1 in 40), and improved daily, healing by granulation. The bowels, which up to this had not been moved, were relieved on the seventh day. The patient was able to go about in twenty days after the operation. He is now on board, and is quite well. I have advised him to discontinue his work as a fireman, for I consider labour in the stoke-hole unfit for a man in his condition.

I am, Sir, yours very faithfully,

P. H. ROCHFORT,

March, 1886. Physician and Surgeon, Royal Mail *s.s. Soracta*.

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A HEALTHY CITY.

SPEAKING of Goulburn, in New South Wales, a recent English visitor, Dr. J. E. Taylor, says: "It is a picturesque and clean town, with wide streets and fine buildings, surrounded by a breezy, open country on one side, and a bold, craggy ridge, half forest-clad on the other." He then proceeds to state that "Goulburn is said to be so healthy that the doctors rely on the natural increase of population for a living! People are neither in a hurry to be sick nor to die."

Mr. W. Rayner.—There is high legal authority for the statement that workhouse *infirmaries* are not included under the term "hospitals" in relation to the Coroner's Inquiry Act. But although we believe that technically a medical man could claim fees for giving evidence as to the cause of death taking place in workhouse infirmaries, long usage to the contrary has become an "unwritten law."

Mr. T. E. Young.—Any saccharine substance will answer the purpose.

CONGENITAL NÆVOID LIPOMA.

To the Editor of THE LANCET.

SIR,—I have thought that the notes of the following case might prove of interest to some of your readers.

J. B——, aged eight weeks, is anæmic, emaciated, and has snuffles. No other specific history or symptoms. In the left axilla there is a nævoid growth, somewhat larger than a walnut in size, and over the spine of the left scapula two nævus stains. The veins of the arm on the same side are dilated and tortuous, without heat, pain, thrill, or pulsation of any kind. The skin and subcutaneous tissue between the shoulder and elbow are pendent, flabby, and pervaded by an indolent and incompressible growth, apparently consisting of large meshes of connective tissue containing numerous fat-cells, and being traversed by thickened and dilated vessels, constituting a distinctly vascular element. The subcutaneous tissue is adherent to the skin. In the forearm there are two swellings, one about the size of a pea, the other rather more than twice that size, produced partly by a tortuosity of the vessels and partly by fibro-fatty growth. The terminal phalanges of the left hand are double-jointed, the middle finger deviating considerably towards the ulnar side. The ends of the fingers occasionally become cyanosed. Over the manubrium sterni on the left side is an enlarged lymphatic gland. The right shoulder and arm present no nævoid appearance or discolouration; nevertheless, the integuments on this side from the elbow to the shoulder are pendent and soft, being involved by a fibro-fatty growth, identical with that existing on the opposite side. The growth at present causes no pain or inconvenience to the child, nor does it much impede the movements of the arms. The mother says that the growth still increases.

I do not consider this a case for operative interference at present, since, as stated above, it does not now cause any distress or material inconvenience, and, moreover, since former cases prove that these growths have a strong tendency to recurrence. Again, the anatomical relations to the growth in the axillary region would in most minds preclude the idea of any operative interference. It is when these growths are situated in the anterior part of the thigh, just below Poupart's ligament, close upon and almost in relation with the femoral vessels, that they cause most inconvenience by the pressure which they exert on the femoral vein, producing œdema of the limb, and necessitating some surgical interference. The mother states that during the time she was carrying the child, and just prior to the period of quickening, she had a fright. As she was passing along the street one day a monkey suddenly sprang from a window on to her shoulder, and tore off her shawl. She considers that this incident may perhaps account for this strange anomaly.

I am, Sir, yours obediently,
Hounslow, March 3rd, 1886. C. GOWER LEMMITTE, M.R.C.S., &c.

SALICIN.

THE willow is now being largely cultivated in America for medicinal purposes. The switches at the end of two years are from four to seven feet long, and are cut and gathered into bunches like sheaves of wheat. In the stripping building they are steeped in water, and the bark at the larger end is loosened for a couple of inches by machinery. One by one the switches are placed in the mechanical stripper, and with a pair of pliers are pulled through with a sudden jerk. They are then wiped off with a woollen cloth, bundled, and laid away to dry. All the leaves and bark are dried and baled, when they command a price of twenty-five cents a pound. On one farm in Georgia there are at present 400,000 willows growing, and 80,000 additional slips have recently been put in, it being intended eventually to devote sixty acres to this crop. The average yield is a ton to the acre. When dried, the willows command 200 dollars per ton, and find a ready market.

"DOCKED FEES."

To the Editor of THE LANCET.

SIR,—The question of guinea *versus* sovereign may be considered as finally settled. In a question of fees submitted to the arbitration of the highest authorities not very long ago their award was expressed in pounds. From this it must be inferred that, as regards the medical profession, the guinea is now abandoned. None of the classes alluded to by "M.B. Dub." are the least likely to follow our example, and so we shall be still more victimised. I am, Sir, your obedient servant,

April 9th, 1886. M.D.

ACORN-COCOA AS FOOD IN CHILDREN'S DISEASES.

DR. GUSTAV V. HÖSSLIN writes in the *Münchener Medicinische Wochenschrift* that he has tried a food called "acorn-cocoa" (eichelcacao), which had been used in Prof. Senator's polyclinic and the Augusta Hospital in Berlin, and has found it as valuable as it had been reported to be. It is composed of cocoa, baked acorns, sugar, and baked flour. He employed it in the cases of thirty children, varying in age from four weeks to six years, suffering from chronic diseases of various kinds, in twenty-nine of whom it produced an immediate and permanent improvement. The youngest children were given no other nourishment, beyond some milk, with it, the elder ones only having soup in addition. The little patients liked the food, and their appetites soon began to increase. Dr. v. Hösslin has also tried the acorn-cocoa in phthisis in the case of adults, and thinks that it has been of benefit, but suggests that further observations are required on this head.

PECULIAR FORM OF WHOOPING-COUGH.

To the Editor of THE LANCET.

SIR,—I should feel obliged if any of your readers would state whether they are acquainted with the following peculiar form of whooping-cough occurring in an elderly man, a little over fifty years of age. It commenced with an irritating laryngeal cough, attended with slight expectoration. But in about three weeks from the commencement, on the termination of each paroxysm of coughing, the patient was seized with a violent attack of suffocation, caused apparently by spasmodic closure of the glottis, and lasting from thirty to sixty seconds. These attacks caused very great distress, especially during the night; but a cough-mixture containing hydrochlorate of morphia was of great benefit, and prevented the patient from being utterly exhausted by want of sleep.

Two weeks later—that is to say, five weeks from the commencement of the cough, several characteristic "whoops" occurred during the attacks of coughing, while the spasms of suffocation after each attack continued as before. It was then decided to treat the affection as whooping-cough, with full doses of the tincture of belladonna, while the morphia was entirely stopped. Almost immediately the spasms of the glottis seemed to be subdued by the belladonna, and after three days they almost entirely ceased. The patient now continues to suffer from the characteristic "whoop"; but the cough has greatly decreased in frequency and severity, and the spasms of the glottis have disappeared. If, however, the belladonna were to be entirely discontinued, there is reason to fear that the spasms would return. The patient had whooping-cough in his childhood, but only very slightly.

The peculiarity of the case consists in the occurrence of the spasms of the glottis so long before any distinct symptoms of whooping-cough had appeared. The inhalation of chloroform during each spasm gave very decided relief. I am, Sir, yours faithfully,

Naval and Military Club, Piccadilly, W., April 14th, 1886. M.D.

FOOD FOR THE POOR: A SUGGESTION.

To the Editor of THE LANCET.

SIR,—Since the end of the Russo-Turkish war I have not had the need to write to you, but lately I have felt I might offer you a few observations. In the first place, with regard to food for the poor and unemployed in London. I have seen no mention of a trial having been made of Indian corn meal—the "polenta" of Italy, the "mamaliga" of Roumania,—and yet, I assure you, it is excellent. In Roumania we have no starving population, but the peasants content themselves with mamaliga, which is prepared by Indian meal being stirred into boiling water until it becomes a very thick batter; it is then poured out on to a wooden platter, when it becomes solid. It is eaten hot, alone or with an onion, or a dried fish, or "tourt" (thick sour milk), or with a slice of goat's milk cheese. It is rarely that our peasants taste bread, and yet they are as a rule strong and healthy. Mamaliga is served very often at the table of the rich, but then the meal is sifted before boiling, and it has the addition of fresh butter. As an experienced housekeeper, I think in English kitchens, where they complain of insufficient cooking accommodation, it would be a welcome innovation were they to serve occasionally a lump of hot mamaliga and a morsel of cheese rather than the eternal soup. I am, Sir, yours faithfully,

Caimata, Bucharest, Roumania, April 2nd, 1886. EMMA B. MAWR.

THE TREATMENT OF GONORRHŒA CHRONICA BY INJECTIONS.

To the Editor of THE LANCET.

SIR,—There can be no question, as Dr. Casper says, ordinary injections in gonorrhœa chronica do not reach the real seat of the mischief; but if they are applied by means of Brichsen's liquid caustic catheter, quite as rapid an effect is produced as with Dr. Casper's grooved bougies. Three or four drops only are injected by this means; but this quantity is quite sufficient for the purpose, and the operation rarely requires repeating more than three or four times at the most, and then only at intervals of from five to seven days. The inflamed spot is easily detected by the pain the catheter produces on reaching it.—Your obedient servant,

Surbiton, Feb. 19th, 1886. F. P. ATHINSON.

ERRATUM.—In the seventh line from the bottom of our notice last week of Dr. Spencer's binaural stethoscope, for "consultation" read auscultation.

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COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Saundby, Birmingham; Mr. Frederick Treves, London; Sir Lyon Playfair, London; Mr. Simeon Snell, Sheffield; Dr. Moxon, London; Mr. W. Fraser, Aberdeen; Messrs. Savory and Moore; Mr. S. Paget, London; Mr. Jackson, Holloway; Dr. Stokoe, Wycombe; Messrs. Grinley and Co., Calcutta; Dr. Simmons, Nebraska, U.S.A.; Messrs. Doulton and Co., Lambeth; Dr. Laprade, Lyons; Dr. McNaughton; Mr. Stevens, Rochdale; Dr. Casper, Berlin; Mrs. Walsh, London; Mr. Paterson, Leeds; Mr. Montgomery, Partick; Mr. Condy, London; Rev. W. Bell, Dover; Capt. Hamilton, Brighton; Messrs. Oppenheimer and Co., London; Mr. Shanks, London; Mr. Braddon; Mr. Besser, Dalston; Mr. Bland, Colchester; Mr. Murlin, Sutton; Mr. Hastings, London; Dr. Fraser, Tain; Mr. Earp, Notts; Mr. Armstrong, South Shields; Mr. L. F. Cogan, Northampton; Mr. Stott, London; Mr. J. Oliver, London; Mr. A. W. Powell, Mt. Gambier; Dr. Ward, Sutton Coldfield; Dr. Suckling, Birmingham; Dr. Kirk, Partick; Mr. E. W. Russell, London; Mr H. V. Drew, Canterbury, N.Z.; Mr. Warrington Haward, London; Mr. Rideal; Dr. Boothroyd, London; Dr. Francis Hawkins, London; Mr. G. R. Turner, London; Mr. McDonald, Manchester; Mr. Lefèvre, London; Mr. J. E. Cooney, London; Dr. Ward Cousins, Southsea; Dr. Campbell, Garlands; Messrs. Williams and Co., London; Mr. Salmond, Alfreton; Mr. Kuhn; Dr. J. S. Walker, Hanley; Mr. Todd, Moy; Mr. Brewster; Messrs. Allsopp and Co., London; Mr. Senier, Norwood; Messrs. Leader and Sons, Sheffield; Mr. Dilworth, Prescot; Mr. Lucas, Ipswich; Dr. Skerritt, Bristol; Dr. Morris, London; Dr. E. Clarke, London; Mr. Freeman, London; Dr. Gray, Dalton-in-Furness; Mr. Thorburn; Messrs. Smith and Son, Manchester; Mrs. Hitch, Hollington; Messrs. Johnson and Co., Croydon; Dr. McLean Swindon; Messrs. Jevons and Co., Liverpool; Mr. Brewster, Bootle; Mr. Essex, Pontypool; Messrs. Marshall, Glasgow; Mr. Heygate, Bath; Dr. Hardwicke, Harwich; Dr. W. H. Stone, London; Dr. J. Williams, Brynmeurig; Dr. Debour d'Estrée, London; Dr. Murray, Forfar; Dr. Beresford Ryley, London; Mr. Rowbotham; B.; Surgeon, Redruth; B. B.; Surgery, Ipswich; M.D.; C. L.; Nous verrons.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Eberle, Thirsk; Dr. Hargreaves, London; Mrs. Morgan; Messrs. Trehearne and Co., London; Dr. Mackay, Esk; Dr. Stables; Messrs. Carless and Co., Devizes; Dr. Serjeant, Brixton; Messrs. Lewins and Co., Manchester; Mr. Fryer, Gloucester; Dr. Chill, Highgate; Dr. H. Fox, London; Mr. Maymont, Aberdeen; Messrs. Benson and Co., London; Dr. Johnston, Sheffield; Mr. Bailly; Messrs. Marshall and Co., Stoke Newington; Mr. Hamilton, Lesmaghow; Dr. Bramwell, Edinburgh; Mr. Maw, Bradford; Mr. Webb, Bury; Mr. Hewer, Wigan; Mr. Mercier; Mr. Holtby, York; Mr. Purkes, Burton-on-Trent; Dr. Daunt, Shirley; Dr. Thomson, Luton; Messrs. Edis and Co., Huntingdon; Mr. Beresford, Gosport; Mr. Stilliard; Dr. Wilson, Dover; Mr. O'Grady, Hyde; Mr. Cooper, Plymouth; Senior; Secretary, Devon Infirmary; M.P., Southport; Dornan, Waltham Abbey; Secretary; Beta; H. P. N.; Bon, Edinburgh; Measom; Agnus; W. S.; M.R.C.S., Alfreton; Medicus, Barnsley; Medicus, London; Smith, Bath; J. W., Anglesea; House-Surgeon; M.R.C.S., London; M. M.; Swallow; M.D., Old Kent-road; Confidential, New Brighton; Delta; G. H. B.; Practitioner; X.; M. A. L.; Unqualified, Brigg House.

Canadian Royal Templar, Freeman, Marlburian, Western Mail, Alnwick Guardian, Marlborough Times, South Wales Daily News, &c., have been received.

Medical Diary for the ensuing Week.

Monday, April 19.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. John Morgan: Notes of a case of Littré's Hernia.—Dr. Day: Two cases of Simple Meningitis in Children, their Difficulties in Diagnosis.

Tuesday, April 20.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Lockwood: (1) Congenital Fatty Tumour from Sole of Foot; (2) (for Mr. W. Adams) Fatty Tumours from Palm of Hand; (3) Abnormality of Colon.—Dr. Sharkey: Meningeal Hæmorrhage.—Mr. E. H. Fenwick: Stone impacted in Prostatic Urethra.—Mr. Arbuthnot Lane: The Pathology of Rheumatoid Arthritis.—Mr. R. Williams: Colloid Cancer of a Uterine Fibro-myoma.—Dr. Charlewood Turner: Specimens of Pulmonary Thrombosis.—Mr. R. W. Parker: Obliterative Tracheitis and Bronchitis in Congenital Syphilis.—Dr. Dalton: Tumour of the Ventricle from a case of Diabetes.—Mr. Mansell-Moullin: Primary Sarcoma of Spermatic Cord (card).—Dr. Silcock: Glandular Epithelioma from the Lung of a Dog (card).

Wednesday, April 21.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 8 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.

Thursday, April 22.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, April 23.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, April 24.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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Croonian Lectures
ON
SOME POINTS IN THE PATHOLOGY OF RHEUMATISM, GOUT, AND DIABETES.

Delivered at the Royal College of Physicians of London, April, 1886.

By P. W. LATHAM, M.A., M.D., F.R.C.P.,
DOWNING PROFESSOR OF MEDICINE, CAMBRIDGE; SENIOR PHYSICIAN TO ADDENBROOKE'S HOSPITAL.

LECTURE III.

MR. PRESIDENT AND GENTLEMEN,—The metabolic function of the liver may be interfered with in diverse ways. From the stimulating effect of food during digestion in the stomach or duodenum two things should take place in the liver—dilatation of the vessels of the gland and certain changes in the gland cells; results which may be compared to those obtained from the submaxillary gland by stimulating the chorda tympani, the metabolic events being dependent upon the absorption and transformation of certain constituents of the blood by the hepatic cells, and this action controlled by the nerve fibres in connexion with these cells. But these two processes, vascular dilatation and metabolic activity, are independent of each other. The vessels may dilate, but if the terminal portions of the nerves of the secreting cells are paralysed, the blood will pass through the gland more or less unchanged; and the same effect will be produced by paralysing the nerve either at its central origin or along its course. We know that, as regards the innervation of the tongue and the sense of taste, there are nerve filaments which respond only to particular kinds of stimuli; so it is not unreasonable to assume that, distributed to the liver cells, there are various nerve filaments, one set regulating the transformation of saccharine, the other the nitrogenous elements conveyed to the cells by the portal circulation; and if either set be paralysed, we should have the metabolism of the corresponding elements interfered with. How far the secretory power of the liver cells is influenced by the vagus is not very clear; but the vessels are under the control of the dominant vaso-motor centre, which is located in the medulla oblongata, where also we have the nucleus of the vagus. If, then, there is a want of harmony between the vascular dilatation and the action of the liver cells—if blood containing the products of digestion is passing through the liver in larger quantity than the cells can act upon (whether that inaction be due to exhaustion of the cells themselves or to exhaustion of the secretory nerves in connexion with them), then there will be imperfect metabolism, and consequently the formation of uric acid in the manner I have described. So far as the imperfect metabolism of the saccharine elements is concerned, we have illustrations of what I mean in the results which take place from the "diabetic puncture," or, as shown by Dr. Pavy, from section of the sympathetic filaments ascending from the superior thoracic ganglion, or from the removal of the superior cervical ganglion.

There may be also imperfect metabolism of nitrogenous material, in another way—viz., if too much is introduced into the portal vein from the alimentary canal. The portion then which is least readily acted upon (viz., the glycocine) will not be transformed, and so the formation of uric acid is promoted. We see the same thing constantly even when the liver is in a healthy and normal condition, if it has too much work imposed upon it—that is, if more nitrogenous material is introduced into the portal vein than can be transformed in the gland. And so an occasional indulgence at the table is very generally succeeded by the appearance of urates in the urine. If the liver cells are already exhausted by long-continued over-stimulation, with how much greater difficulty will the perfect metabolism of nitrogenous food be effected!

In either of these modes, then, arising from defective changes in the liver, uric acid may be formed in excess, and then eliminated, or circulate as a poison in the blood. Why in some cases is it eliminated as urates or as uric acid in the urine or as renal or vesical calculi, without any arthritic symptoms? Why in others does it develop the arthritic symptoms to which we give the name of gout?

If the kidneys are sound, as in the majority of people below middle age, the uric acid, unless in large excess, will be excreted directly it is formed, and there is little overflow of the product into the circulation; if the urine has a neutral reaction, it will appear as urates of ammonia, soda, &c.; if, however, other acids, such as lactic acid, are formed at the same time and eliminated by the kidneys, the base will be separated, and uric acid, as such, excreted, and, according to the amount, will give rise to gravel or renal or vesical calculi. But gradually the kidneys may become weakened or diseased, and then, as the blood passes through them, the acid is formed, and a portion passes on and is not eliminated. Being an abnormal product, we are making no violent assumption in saying that it will act as an irritant upon some portion of the nervous system. We have seen how distinctly the similar body caffein acts as a stimulant to certain portions of the nervous system. According, therefore, to the susceptibility or sensitiveness of different portions will be the outward manifestations of this irritation. Such a susceptibility or sensitiveness of the nervous system is constantly observed in different individuals. In some the nerve of smell is much more easily stimulated by certain odours than in others. In some, again, the nerves of taste recognise differences in flavour which are totally imperceptible to others. In children, too, and in persons in enfeebled health, how readily is pyrexia developed by irritation of the nerves of the intestine or the digestive glands from improper diet!

If the nucleus of the vagus is the sensitive spot, then gastric uneasiness, asthma, or cardiac irregularities might be developed.

Dr. Buzzard has suggested that in locomotor ataxia "the frequency of the coincidence of gastric crises with the osseous lesions gives reasonable ground for the hypothesis that the latter may depend upon an invasion of a part of the medulla oblongata closely adjacent to the roots of the vagi. It is only as a working hypothesis that I make the suggestion. Is there something which we may call provisionally a trophic centre for the osseous and articulatory system in the immediate neighbourhood of the roots of the vagi? As I have suggested on a previous occasion, the discovery of such a centre would materially help us to explain the remarkable association of cardiac complications with the joint-affection of acute rheumatism, as well as the sweating characteristic of this disease, and the occasional hyperpyrexia which occurs in it. And it might also help to throw light upon the obscure pathology of arthritis deformans."[1] In a subsequent paper he further adds: "In a communication brought before the Pathological Society of London, in February, 1880 (Transactions of the Pathological Society, 1880), I made the suggestion that the gastric crises depend upon irritation of the nuclei of the vagus by sclerosis. At that time I had no anatomical evidence to offer in support of the hypothesis, which was based upon the paroxysmal character of the attacks, so completely in accord with that characterising the attacks of lightning pains. It appeared evident to me that if sclerosis, which, when it attacked nerves of common sensation, produced pain, came to invade the nucleus of the vagus, it might be expected to give rise to symptoms like those of the gastric crises. During the meeting of the International Medical Congress in London, Professor Pierret, of Lyons, has shown me sections of the medulla oblongata which he has lately made from a case of tabes with gastric crises. I was greatly interested in his demonstration that the fasciculus gracilis in immediate relation with the nuclei of the vagus exhibited distinct sclerosis."[2]

Professor Roy and Dr. Graham Brown have recently stated[3] that "in the curarised dog stimulation of one uncut vagus with an induced current causes contraction of the bronchi of both lungs, the contraction being usually powerful, but to this there are exceptions. Section of one vagus usually causes a marked expansion of the bronchi of the correspond-

[1] On the Affection of Bones and Joints in Locomotor Ataxy, and its Association with Gastric Crises, by T. Buzzard, M.D. 'British Medical Journal, 1881, vol. i., p. 333.
[2] Transactions of the International Medical Congress, 1881, vol. ii., p. 27.
[3] Proceedings of the Physiological Society, May 10th, 1885.

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ing lung, which may be preceded by a slight temporary contraction, apparently due to the stimulus of the section. Stimulation of the peripheral end of one cut vagus always causes a much more powerful contraction of the bronchi of both lungs than when the uncut nerve is stimulated with the same strength of induced current," and that these and other experiments enable them to understand how asthma may be produced.

If portions of the spinal cord, in connexion with the nerves distributed to the joints are more than usually sensitive, this sensitiveness or susceptibility being either inherited or acquired, then stimulation or irritation of these portions would lead to changes in the respective joints similar to those which result from nerve wounds or from injuries to the spine. At first the uric acid might produce little effect, but with repeated or constant stimulation, these portions of the spinal cord would become more susceptible to the action of the morbid product, and so nutritive changes or inflammation would be developed in the joints connected therewith. Suppose for a moment that the portion of the nervous system most susceptible to the action of the uric acid is the vaso-motor centre, the dominating portion of which, as we know, is located in the medulla oblongata, what effects should we expect to follow? The most powerful vaso-motor nerves are those which act upon the bloodvessels of peripheral parts—e.g., the toes, fingers, and ears,—while those that act upon central parts seem to be less active;[4] consequently we should expect the toes and fingers to be first affected, and just as by stimulating the sympathetic nerve of the sublingual gland we have contraction of the vessels and altered secretion from the gland, so in the toes and fingers we should have contraction of the vessels and the metabolism of the parts more or less modified. In addition to contraction of the vessels caused by impulses affecting the blood-supply, there are impulses affecting directly the activity of the protoplasm. The constructive metabolism about the joints is stimulated, whilst the blood-supply and destructive metabolism are lessened, and so there is increased development or growth about the part. Further, the blood which goes to the part contains sodium urate; consequently this is deposited, along with the other substances, in the metabolism or inflammatory changes which take place in the tissues around the affected part.

But whilst the vaso-motor centres may be directly stimulated by the irritant, they may be also stimulated by irritation of the efferent or sensory nerves. Stimulation of the centripetal end of a divided efferent nerve causes increased blood-pressure. Have we not here, then, an explanation of the phenomena of a gouty paroxysm? The uric acid stimulating both the sensory nerve, and through it or independently the more active portion of the vaso-motor centre, causes pain in the joint and contraction of the vessels; the pain increases with the continued stimulation, but after a time the nerve is exhausted or paralysed, as we know is the case from continued stimulation of other nerves—as, for instance, in tetanising a muscle. The vessels now dilate, destructive metabolism is stimulated, there is relief from pain, and with the relief another indication of paralysis of the sympathetic shows itself—viz., more or less perspiration. A similar explanation may, I think, be given of the mode in which arthritic symptoms result sometimes from nerve wounds. The wound may be such that the sensory or efferent fibres in the nerve are injured, whilst the vaso-motor and other fibres are intact. From the irritation set up either by the cicatrix or otherwise, the sensory fibres, and through them the vaso-motor centres, are stimulated in the manner I have just described as occurring in gout, but as uric acid is not the irritant and is not circulating in excess in the blood, there is no deposit of this substance in the metabolic changes taking place in the joint. And, further, if irritative inflammatory or degenerative changes take place in the spinal cord anywhere along the course of the sensory nerves, by which the sensory nerves are stimulated, this would lead to stimulation of the corresponding portion of the vaso-motor centres, and so to the development of those symptoms which we know under the name of arthritis deformans, or rheumatoid arthritis. In this way we can easily understand how dysmenorrhœa may be the starting-point of this joint affection—a clinical fact which has been recorded by Dr. Ord.

Among the peculiar local affections in connexion with gout, we have, as pointed out by Dr. Graves, congestion of the lobes of the ear; a singular affection of the teeth, which consists in an insuperable desire to grind them; the occurrence of tic douloureux of several branches of the fifth pair; and daily paroxysms of intense heat of the nose, which continues for three or four hours, the part becoming first of a bright and then of a purplish-red colour. All these symptoms may, I think, be ascribed to irritation in that portion of the nervous system where the roots of the fifth nerve and the vaso-motor centre are in close proximity—namely, in the medulla oblongata. To this spot I shall have to refer again.

But independently of any functional or organic change in the liver or its nervous connexions, there is a third way in which uric acid may be developed, and that is from the excessive formation of glycocine in the muscular tissue, in the manner I have already referred to as the result of what is commonly called a feverish cold. This glycocine, passing in the blood to some glandular organ—the liver or spleen it may be,—is there conjugated into hydantoin, and afterwards further transformed into uric acid. If the nervous system and the kidneys are sound, this product is eliminated by the kidneys, and the attack subsides. But suppose the individual who is exposed to damp or cold has been previously reduced in strength, is tired out or exhausted—that is to say, his vaso-motor system or some portion of it is in a weak state, the weakness either developed from bodily or mental exhaustion, or, it may be, inherited. Then following the chill there would be the same effects produced as I have described when referring to the effect of cold applied to the skin, but the vaso-motor centre being enfeebled, the nerves regulating the vessels of the muscular area would be more completely paralysed by the external cold, and when reaction, induced in some degree by the lactic acid, sets in on the surface of the skin, there would be less power in the muscular nerves to recover from that paralysed condition; and more than this, so far as these vaso-motor elements are concerned, the morbid products are still circulating in the system, and the vaso-motor centre not having recovered itself, the continued stimulation by glycocine or uric acid on that exhausted centre no longer excites it, but gives rise to further exhaustion, and consequent further dilatation of the vessels in the vascular area connected with it, and more complete falling asunder of the molecular elements of the tissue.

Let me illustrate what I mean by reference to the sciatic nerve.

"Division of the sciatic nerve of a mammal causes dilatation of the small arteries of the foot and leg. Where the condition of the circulation can be readily examined—as, for instance, in the hairless balls of the toes, especially when these are not pigmented—the vessels are to be seen dilated and injected; and a thermometer placed between the toes shows a rise of temperature amounting, it may be, to several degrees."[5] "But the dilatation so caused after a few days disappears; the foot on the side on which the nerve was divided becomes not only as cool and pale, but frequently cooler and paler than the foot on the sound side. If the peripheral portion of the divided nerve be stimulated with an interrupted current immediately or very shortly after division, the dilatation due to the division gives place to constriction: the sciatic nerve acts then quite like the cervical sympathetic, except, perhaps, that this artificial constriction cannot be maintained for so long a time, and is very apt to be followed by increased dilatation. If, however, the stimulation be deferred for some days, until the dilatation has given place to a returning constriction, the effect is not constriction but dilatation; the nerve then acts, so far as its vaso-motor fibres are concerned, like a muscular nerve, and not like the cervical sympathetic."[6] So also with regard to the mylo-hyoid muscle. Section of the nerve produces dilatation, but the dilatation is transient. The vessels speedily return to their former calibre, and then it is found that stimulation, of whatever strength, of the peripheral portion of the divided nerve brings about, not constriction, but dilatation. If, then, the vaso-motor fibres of the muscular nerves have been weakened, the result would be that the normal stimulating effect of uric acid on the vaso-motor elements connected with motor nerves generally would be transformed into a depressing or paralysing effect; the vessels of the muscular area would be still further dilated; the molecular constituents of the tissue would be loosened; hydration and oxidation would go on causing fresh development of heat; there would

[4] Landois and Stirling: Physiology, 1885, p. 893.

[5] Foster's Physiology, fourth edition, p. 199. [6] Ibid., p. 209.

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be the continuous formation of glycocine and lactic acid, the glycocine giving rise to uric acid, which accumulating in the system, produces its deleterious effect in modifying the function of the nervous system; the lactic acid dilating the smaller arteries[7] and stimulating the sweat centres, passing off in part by the skin. With increased stimulation of the paralysed centre of the muscular nerves complete dilatation of the vessels in the muscular area will take place; the molecular constituents of the tissue now fall completely asunder, the $CH_2\begin{cases}OH\\CN\end{cases}$ and $C_2H_4\begin{cases}OH\\CN\end{cases}$ being entirely hydrated into glycollic acid and lactic acid with the rapid production of heat, and the heat is further developed by the ready oxidation of these products. In this way to some extent the so-called hyper-pyrexia of rheumatic fever is produced.

But whilst uric acid affects in this way the vaso-motor fibres of muscular nerves, it also affects the nutrition of the joints. I have endeavoured to explain how it does so in gout, producing first of all contraction of the arteries and constructive metabolism by the stimulating effect of the poison on the sensitive nerve centres, followed by dilatation of the arteries and destructive metabolism when the centres are exhausted. In rheumatism, however, the dominant centre is exhausted to begin with, and so we have destructive metabolism and vascular dilatation, preceded by very slight, if any, constructive metabolism and contraction of the vessels. In gout the uric acid is the result of modified innervation of the liver or exhaustion of the hepatic cells, and so there is non-transformation of the glycocine and the consequent formation of uric acid. In rheumatism the glycocine results from changes in the vascular area and in the metabolism of the muscles, and along with its formation there is also the formation of lactic acid by hydration, both from the cyanalcohol $CH_2 \cdot CH_2\begin{cases}OH\\CN\end{cases}$ and the cyanalcohol $CH_3 \cdot CH\begin{cases}OH\\CN\end{cases}$; the nutrition of the joint is modified, as above described, by the uric acid, but the nutrition is further modified by the presence of the lactic acid in the blood, producing dilatation of the arterioles, more particularly of those in the cutaneous area. In this manner, then, I venture to suggest, are the characteristic changes about the joints in acute rheumatism developed.

Again, if the dominant vaso-motor centre is in an enfeebled or exhausted state, and irritative, inflammatory, or other changes take place in the spinal cord along the course of or adjacent to the sensory nerves, by which these nerves are stimulated, we should have, quite independently of the presence of uric acid in the blood, destructive metabolism and vascular dilatation about the joints, the extreme effects of which are seen in Charcot's disease accompanying locomotor ataxia. Regarded in this light, Charcot's disease bears the same relationship to arthritis deformans that rheumatism does to gout.

In a similar way, also, I would explain the joint affection known as gonorrhœal rheumatism. Here we have prolonged irritation of the sensory nerves of the urethra, acting through an enfeebled or weakened vaso-motor centre, and in this way the nutrition of the joints in connexion with that centre is modified.

I have referred to that portion of the sensory tract in the medulla oblongata in the neighbourhood of the nucleus of the vagus, the root of the fifth nerve, and the dominant vaso-motor centre, as the part which controls the nutrition of the joints, and which is more particularly affected by external cold. The following facts give support to this view and can be explained on the same hypothesis.

Cases occur in which the solitary local affection associated with a feverish cold is an outbreak of herpes on the lips, nose, or buccal mucous membrane, the so-called "febris herpetica." "We find a sharp attack of fever in a child or young person without any local cause; we expect the onset of some serious disease, but our anxiety is soon allayed: in a few days there unexpectedly appears on the lips, nose, or cheeks, a closely-packed group of vesicles, which at once removes our uncertainty and shows us that we have to do, not with the early stage of one of the more serious fevers, but with a feverish cold which will end favourably in a day or two."[8] Here we have, as the result of "catching cold," disorder of nutrition showing itself in parts supplied by branches of the fifth nerve—viz., the labial and nasal branches of the superior maxillary nerve.

Rheumatism not infrequently after a short interval follows tonsillitis. Attention was prominently called to this a few years ago by Dr. Kingston Fowler, and I have seen several instances where it has occurred. Now we may assume either that the condition of the central nervous system in the individuals so affected is such that slight injurious influences, such as the effect of a slight chill or exposure to cold acting upon the central nervous system, will produce an attack of quinsy, whereas more severe injurious influences will cause rheumatic fever; or we may assume that in quinsy the continued irritation of the sensory nerves distributed to the tonsils produces exhaustion of some portion of the dominant vaso-motor centre, and as in quinsy uric acid is largely developed, this acting on the enfeebled centre exhausts it still more and develops the arthritic symptoms of rheumatism in the manner I have described. Either hypothesis will illustrate my argument. The tonsillar nerves are derived from the fifth nerve—the middle descending branch from Meckel's ganglion—and from the glosso-pharyngeal portion of the eighth nerve. This branch of the fifth, to which I have referred, is derived from the larger root of the nerve, which may be traced back to the lateral tract of the medulla oblongata immediately behind the olivary body, and is connected with the grey nucleus at the back part of the medulla, between the fasciculi teretes and the restiform columns. The deep origin of the glosso-pharyngeal may be traced through the fasciculi of the lateral tract to a nucleus of grey matter at the lower part of the floor of the fourth ventricle, external to the fasciculi teretes. Both these nerves receive filaments from the superior cervical ganglion of the sympathetic.

The occurrence of arthritis in the course of hemiplegia, a point to which I referred in my second lecture,[9] would at first sight appear antagonistic to the theory which ascribed the joint symptoms to neurotic changes in the medulla oblongata. But it only requires a little reflection to show that it gives the strongest support to the theory. Following apoplexy there is descending sclerosis of the lateral columns, which proceeds slowly. When it shows itself in the medulla, irritation may be set up around the degenerating portion, and this, extending to the grey matter and anterior cornua, may set up the arthritic symptoms, which sometimes show themselves in from fifteen days to a month after the apoplectic seizure.

As regards megrim, Dr. Edward Liveing[10] writes: "There can be no question, then, I think, as to the frequent connexion of megrim, whether in its blind, sick, or simply hemicranial forms, with a gouty diathesis and its occasional replacement by fits of regular gout." Some years ago I endeavoured to prove[11] that megrim was due to vaso-motor disturbance—to uncontrolled action, or as I should now say to stimulation of certain branches running from the superior cervical ganglion of the sympathetic followed by exhaustion. Dr. Haig in a recent number of the *Practitioner*[12] asks the question: "May not excess of uric acid in the blood cause such vaso-motor irritation?" Certainly, and in persons who are subject to megrim, whose sympathetic ganglia have this sensitive constitution, the causes which will lead to the formation of uric acid in the system will with tolerable certainty develop an attack of this particular disorder.

Again, with regard to chorea. If the vaso-motor fibres proceeding from the upper cervical ganglion to form the carotid plexus have through prolonged stimulation become exhausted or weakened, there would be, as the result of that exhaustion, vascular dilatation and perivascular change in the track of the middle cerebral artery. But there would also be nutritive changes in the nerve cells of the brain and exhaustion of their metabolic powers. We should, in fact, have a similar condition produced to that of the submaxillary gland when the chorda tympani is stimulated after the injection of atropine, and, *as far as the nerve cells are concerned*, the same result would be produced as ensues from embolism. Their coördinating action would be paralysed in both cases, and such changes would produce the incoördinated movements of chorea. Nor is it difficult to

[7] Gaskell: Journal of Physiology, vol. iii., p. 18.
[8] Ziemssen's Encyclop., vol. xvi., p. 241. London, 1877.
[9] THE LANCET, April 10th, page 675.
[10] On Megrim and Sick-headache, 1873, pp. 404, 405.
[11] On Nervous or Sick-headache. Cambridge, 1878.
[12] March, 1886, p. 181.

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suppose that sudden shock would give rise both to vaso-motor paralysis and to inhibition of the assimilating power of the nerve cells. Dr. Dickinson has made out very clearly that it is in the tract of the middle cerebral artery and in the posterior and lateral parts of the grey matter and in the upper portions of the cord that vascular dilatation and perivascular change take place both in chorea and diabetes, and I venture to suggest that they are induced in the manner I have indicated.

Will the theory I have here advanced offer any explanation of the shifting character of the rheumatic affection? My application of the theory is as follows: Vaso-motor centres are distributed throughout the whole spinal axis. "They can be excited reflexly, but they are also controlled by the dominating centre in the medulla oblongata."[13] "Now this *general* vaso-motor centre in the medulla oblongata is really a *complex composite centre* consisting of a *number* of closely aggregated centres, each of which presides over a particular vascular area."[14] Some of the nerve cells or some portions of this dominating centre may be more readily exhausted by the continued stimulation of an irritant circulating in the blood than the others, and after the development of the irritant (uric acid) in the system it will of course produce exhaustion first in these particular cells and in the subsidiary ganglia in connexion with them, and so lead to dilatation in the vascular area directly under their control. The other cells in the dominating centre and the subsidiary ganglia in connexion with them, possessing a healthy tone, will be stimulated to action in the normal manner and contraction will take place in the vascular areas connected with them. This action itself would have the effect of driving more blood to the paralysed vascular area and intensifying the symptoms there. But with continued stimulation of these healthy centres, exhaustion will sooner or later be induced; further stimulation increases the exhaustion, and then dilatation of the vessels under their control will be induced; with this dilatation in a new area, the amount of blood in the parts primarily affected will be lessened, and simultaneously will the symptoms which were associated with this increased blood-supply be modified or lessened.

If at any time a joint has suffered injury in any way, this joint will be more sensitive than natural, perhaps more easily fatigued, and we can readily understand that this condition must be associated with some change in that part of the central nervous system which controls the nutrition and sensation in the joint; that this spot in the central nervous system will be more sensitive, more easily acted upon by irritating causes than other parts; that by the irritation the nerve cells in the part will be more easily exhausted, and therefore in rheumatic individuals this particular joint will be the one first affected, and perhaps solely affected, in all attacks of rheumatism. A most interesting case of "Inflammation of the Joints following Injury of the Spine," which is recorded in THE LANCET by Mr. Wherry,[15] illustrates, I think, very well the development of arthritic mischief from irritation of the central nervous system, the irritation chiefly localised in the medulla oblongata, and affecting the vaso-motor centre.

Dr. Dyce Duckworth, in an extremely suggestive and able essay,[16] contends that gout is a primary neurosis, and that the portion of the nervous system specially involved is situated in some part of the medulla oblongata. I hope that what I have advanced will tend not only to confirm this view, but also—to use the words of Sydenham, which he quotes—to clear up and explain some of "the difficulties and refinements of the disease itself."

(To be concluded.)

[13] Landois and Stirling's Physiology, London, 1885, p. 854.
[14] Ibid., p. 898. [15] April 3rd, 1886, p. 643.
[16] Brain, vol. iii., 1880, pp. 1 to 22.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST.—The thirty-seventh anniversary dinner in aid of the funds of this institution was held at Willis's Rooms on the 8th inst., the Duke of Connaught presiding. The hospital, established in 1848, contains accommodation for 164 patients, and, whilst its annual expenditure amounts to £10,000, its ordinary income does not exceed £3500. In the course of the evening the secretary read a list of donations and subscriptions, amounting to £2342, of which £1272 had been raised in the East-end of London.

Gulstonian Lectures

ON

SPASM IN CHRONIC NERVE DISEASE.

Delivered at the Royal College of Physicians of London, March, 1886.

BY SEYMOUR J. SHARKEY, M.B., F.R.C.P.,
ASSISTANT-PHYSICIAN AND JOINT-LECTURER ON PATHOLOGY AT ST. THOMAS'S HOSPITAL.

LECTURE III.

(Concluded from p. 730.)

III. FUNCTIONAL SPASMS.

THE result of our consideration of those diseases which produce many varieties of spasm, and which are represented by gross lesions of the nervous system is, that a very large proportion must be put down to the credit of the cerebral system of fibres, or pyramidal tract. The spinal mechanisms are less prolific causes of these affections; but those spasmodic conditions which do occur in connexion with them have been considered under the heads (1) Peripheral—Motor Nerves; (2) Afferent Nerves; (3) Centres. It is only reasonable to suppose that, if functional spasms resemble those which result from gross lesions, they may admit of a similar explanation. In nerves and muscles which during life have been the seat of motor disorders, we may find no naked-eye or microscopic pathological changes after death. But clinical observation shows that, so far as function is concerned, marked changes have occurred. Now we know that healthy function must depend upon fine molecular re-arrangements which are at present a closed book to us; and we conclude that, if molecular changes form the basis of healthy function, they form that of pathological conditions also. If this be so, it is legitimate to argue that the molecular changes in question might affect the same parts which are the usual seats of the grosser lesions, and consequently give rise to similar abnormalities of function; and then the anatomical classification which has already been attempted in the case of tangible disease might serve also for those cases which are the result of impalpable alterations in nerve and muscle. I propose, therefore, to consider shortly certain forms of functional spasm, and I shall use the same divisions for classification which I have already used for grosser diseases.

1. Do functional disorders of the cerebral motor mechanism, or pyramidal tract, produce spasmodic conditions at all resembling those resulting from gross disease? They do. In hysteria not only does hemiplegia occur, but hemispasm, both fixed and mobile, is not uncommon. There is this difference between the hysterical conditions and those which are seen in gross disease—the leg is affected most, the arm less, and the face not at all. But the facts observed in gross disease, where the leg is usually less affected than the arm, are probably to be explained mainly by the fact that the vessels which bleed most frequently and interrupt the functions of the internal capsule are those which are situated towards the anterior part of its motor division—that part, in fact, which contains the fibres controlling the face and arm. But apart from these points, the spasmodic contractions of the leg and arm are similar in the two conditions. In functional diseases there is simply removal of the voluntary impulses which, in health, travel down the pyramidal tract. The muscles and nerves of the limbs remain practically healthy, and if rigidity is not too great the tendon reflexes are increased. Fevers and other exhausting conditions—such, for instance, as that of the patient with anæmia to whom I have already referred—may give rise to increased reflexes, and even to clonus and rigidity. Moreover absence of portions of the motor area of the cortex, such as, is occasionally seen congenitally, is accompanied by non-development of the corresponding portion of the pyramidal tract, and gives rise to spastic conditions like those found in hemiplegia. Absence of the voluntary impulses, then, is enough to give rise to the phenomena in question; and certain cases of hysteria have died after long-continued contraction of limbs, and the most careful examination with the microscope has failed to disclose any palpable pathological changes. Such a case is recorded by Dr. Bristowe

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in *Brain* for October, 1885. This case I often saw myself, and, as Dr. Bristowe remarks, "at the end of two years she seemed as well in general health as when she first came to the hospital; but she was suffering from headache, sickness, ophthalmoplegia externa, complete anæsthesia of the right side, with rigid paralysis of the arm and leg, and repeated hæmorrhages of both ears." Dr. Hadden made a most complete microscopical examination of the central nervous system in this case, but found no evidences of disease. As we know, however, that mere absence of the voluntary motor impulses along the pyramidal tract is sufficient to give rise to this condition, it is legitimate to conclude that suppression of the functions of this tract is the cause of functional hemispasm. We are still further supported in this view by cases like that just quoted, where there is at the same time clear evidence of suppression of the functions of the sensory area as well.

Clinical and pathological observation has shown that monospasms having similar characters may be produced by certain limited lesions of the motor convolutions; and after what has been already said, it is not too much to assert that when spasm limited to a leg or arm occurs in hysteria, it is due to suppression of the functions of the pyramidal tract, which in health controls the action of the affected member. In discussing the question of athetosis and other allied mobile spasms, we arrived at the conclusion that they were due to affections of the same tract of fibres, which were not severe enough to stop the passage of voluntary impulses. Now, similar conditions occur in hysteria, and may probably be explained in the same way. Weir Mitchell, in his work on Nervous Diseases, records cases of "hysterical motor ataxy" and of "hysterical athetosis." It appears probable that changes, ending in greater or less functional abeyance of the pyramidal tract, lie at the root of unilateral, and sometimes of bilateral spasm, both in functional and in gross disease. The only difference is that in the latter case we can appreciate by our present methods of investigation the alterations which have been wrought, while in the former they are hidden from our view.

There is another class of functional spasmodic affections which are hardly represented among the forms of spasm due to gross lesions, and which I believe have their origin in suppression of the functions of certain portions of the pyramidal tract. I refer to those conditions which are sometimes termed "professional hyperkineses." They include histrionic spasm, writers' cramp, pianists' cramp, telegraphists' cramp, &c. The striking peculiarity of these affections is that, when a voluntary effort is made to perform the accustomed muscular acts, spasm of the muscles involved occurs and prevents further efforts. Before this stage of the affection is reached great fatigue often accompanies endeavours to work. In a considerable number of cases, at any rate, the muscles can be employed in other ways without difficulty. What has occurred is probably that after long-repeated acts of the same kind that part of the pyramidal tract which is used gets fatigued, and its functions are partly suppressed, so that a condition of "latent contracture" of the muscles, over the voluntary actions of which it presides, is developed; the lower centres are "let go," as Hughlings Jackson says, and are in a state of "hyper-physiological activity," just as the spinal centres of one side are in hemiplegia accompanied by slight rigidity.

In describing "latent contracture" in connexion with hemiplegia from gross disease, Ross says: "The patient may perform all the simple movements of the limb, and probably with undiminished power; but when his attention is specially directed to the movements, as when he wishes to perform any manual operation requiring a little dexterity, the muscles instantly become rigid, the fingers are flexed on the palm, and the deformity which was present during the period of fixed contracture reappears." Surely this description suggests the true explanation of professional spasmodic affections, which present symptoms resembling very strikingly those which Ross portrays.

Erb divides the professional hyperkinesis into spastic, tremulous, and paralytic. The tremulous cases are perhaps due to similar but slighter paralytic affections of the pyramidal tract, and the condition probably resembles in kind though not in degree, paralysis agitans. The pathology of the latter disease is not known, but those cases which one meets with where rigidity of the limbs and exaggerated reflexes occur, suggest forcibly degeneration in the pyramidal tract as the physical basis of the affection. The paralytic variety of the professional hyperkinesis is probably the result of extension of disease to the motor cells in the anterior cornua of the cord, at any rate in those cases where marked atrophy occurs[1]. I should remind my hearers, in passing, that the term "pyramidal tract," as used here, includes not only fibres but the motor cells of the cortex in which they originate.

2. We have seen that spasm of muscles resulting from gross disease of the pyramidal tract has its representative among functional diseases; let us now consider that which owes its origin to affections of peripheral motor nerves. Is it likewise represented among functional disorders? Actual gross pathological changes in motor nerves give rise to muscular spasm, as has already been pointed out, in two ways—the one direct, and the other indirect. In the latter case, certain muscles atrophy and disappear, and, undergoing cicatricial shortening, produce distortion; or else their opponents, being left to act in their absence, give rise to abnormal positions of the limbs. Now, one of the striking peculiarities in functional nerve disease is the absence of such degeneration and destruction of muscles. Hence we should not expect to find any functional spasms which were due to such indirect causes; nor do we, so far as I know. We also came to the conclusion that direct irritation of motor nerves is a very rare originator of spasm; and there is no reason to suppose that it is less rare as a cause of functional affections. Nerve centres seem much more prone than nerve fibres to functional disorder. I am not sure that the latter condition, originating in centres, may not so affect even peripheral nerves which are connected with them as to give rise to symptoms which are found in gross disease only when peripheral nerves are involved. Dr. Norris, of Windsor, sent a girl, aged sixteen, to me for treatment in the hospital, who had lost the use of her left hand for eighteen months. She was a strong, healthy girl, and free from evident hysterical tendencies. The affection commenced with swelling and blueness of the fingers, such as is seen in chilblains; and the hand was cold and numb. When she came to me the hand was completely paralysed and had a swollen puffy look; the skin was paler and smoother than that of the right hand, and the backs of the fingers far less wrinkled. The left hand was much more influenced by external conditions than the right, and rapidly became warm when covered and cold when exposed. She got suddenly well after the application of a blister to the wrist, but then lost power in the left leg; the latter also suddenly recovered power. But although slight alterations, such as those which were observed in this patient, may occasionally occur in peripheral motor nerves in cases of functional disease, I am not aware that they give rise to muscular contraction.

3. Nor is there any proof that chronic spasm is produced by molecular changes of afferent nerves alone. Even in gross disease of an afferent nerve giving rise to reflex spasm, the lesion is often so trivial as to make it very probable that functional disorder of the centres is present as well, and is the main factor in the production of spasm. When speaking of reflex spasm from gross disease, I pointed out certain cases of what appeared to be rhythmical spasm due to affections of tendons; and I cannot help thinking that this class has frequent representatives in functional diseases. But they are due more to the abnormal condition of the centres than to that of the peripheral nerves. There can be no question that one of the peculiarities of nerve centres in hysteria is their abnormal irritability; so that slight afferent impressions give rise to muscular acts, which pass with great ease into neuro-muscular habits. Such a condition is well exemplified in cases due to imitation. The patient sees a certain form of muscular spasm, and the idea produces the same in her. For instance, a healthy girl, aged seventeen, came to my out-patient room complaining of involuntary movements in her right hand and tongue. On examination, it was seen that the thumb was rhythmically adducted, and there was simultaneous flexion of the fingers, most markedly of the index-finger, which moved in such a way that she appeared to be rolling something between it and the thumb. At the same time she was troubled by being suddenly unable to finish a sentence, owing to the tongue refusing to act properly. The girl worked in a confectioner's shop, where one of her comrades became affected with uncontrollable movements in the left hand and catching in her

[1] See Brain, vol. vi., p. 233: "A case of Sawyer's Cramp," by G. V. Poore, M.D.

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speech. After a short time my patient became similarly affected.

The following is another case of suddenly developed neuro-muscular habit, though it originated in a somewhat different way. A healthy, dark-haired girl of sixteen, who had never had any illness, and had no evident neurotic peculiarities, went for a row on the Thames with some friends in the summer of 1885. She rowed without much intermission for five hours, which was to her quite an unaccustomed length of time for such recreation. She used to row every morning at Wandsworth, where she was at school, but only for an hour at a time. About an hour after returning from this long row her arms began to twitch, and movements continued uninterruptedly, and remained of a precisely similar kind, up to Dec. 29th, 1885, when Dr. Bristowe, under whose treatment she had been, very kindly asked me if I should like to see her. Both arms were the seat of similar and synchronous movements occurring regularly about 160 times a minute. They consisted of rapid elevation and retraction of the arm at the shoulder and of the scapula, partial flexion at the elbow, and slight extension of the wrist; in fact, they bore a very marked resemblance to the movements of the arms and hands in rowing, the extreme rapidity of the "stroke" making up for the limited extent of the movements. In these rhythmical contractions it is not at all improbable that the slight stretching of the tendons of the affected muscles which naturally results from the action of their antagonists gives rise to another contraction, and so on for an indefinite number of times. Such a condition, though much less marked, is sometimes seen when the spinal centres are cut off from connexion with the cerebral cortex by gross disease.

A case of caries of the cervical vertebræ was under my care in St. Thomas's Hospital last summer, in which paraplegia with rigidity had been present for five years. The legs were always flexed at the knee and hip, but could be extended by continuous gentle traction. As this was being performed, movements of flexion and extension, which were involuntary, occurred. When the tendons of the flexor muscles were stretched, the latter contracted, and in so doing they put the extensor tendons on the stretch and so caused their contraction. Weir Mitchell has noticed these "alternate spasms" in hysteria, in which, as he remarks, the action of the flexors calls the extensors instantly into play, and this, in turn, summons the flexors into activity. "These spasmodic motions," says he, "were the more curious in the last case I saw, because of the general and profound paresis, which made every volitional effort excessively difficult." Such an absence of voluntary power in the case of which Weir Mitchell speaks shows that the functions of the cortical motor centres were in abeyance. Instances of alternating spasms are far from rare in hysteria, and probably owe their presence to excessive irritability of the spinal centres, and the development of a habit through the intermediation of tendon reflexes. "Saltatory spasm" is a good instance of this class of cases.

4. The fourth and final heading under which we have to compare spasmodic conditions arising in connexion with gross nerve lesions, with functional disorders, is disease of the spinal motor centres. We have already seen that tangible pathological alterations in these cells give rise to paralysis and subsequent atrophy of muscles, but we could quote no facts to show that muscular spasm ever originates from such disease. Those impalpable molecular changes which result from the anatomical separation of the cerebral motor centres from the spinal centres produce a condition of hyper-physiological activity of the latter, to which many spastic conditions are due. Does abnormal functional activity ever exist primarily in the spinal centres and result in spasm? This is a question which is very difficult to answer. In the case of gross lesions which interrupt the continuity of the pyramidal tract fibres, even where no actual spasm has resulted, there exists a condition of excessive excitability of the spinal centres, which gives rise on the slightest provocation to rigidity of muscles. An injury, even of a trivial nature, may in such cases produce contracture. Exactly the same state of things is found in hysterical subjects; and Charcot, in his lectures on Nerve Disease, gives instances of the most trifling injuries suddenly producing spasmodic conditions of limbs in such patients. But we must remember that persons may have those peculiarities of their nervous system which are usually embraced under the term "hysteria" without ever presenting striking emotional or other tendencies which are wont to call attention to the existence of the disorder. The first evidence of the latter may be the sudden supervention of spasm from a very slight external injury. If this condition of the spinal centres depends mainly upon the amount of cerebral control exerted over them by the functional activity of the pyramidal tract, it is evident that there must be infinite gradations between the normal and abnormal. Indeed, it is impossible to give any strict definition of health and disease. All we can say is, that the more cerebral control retires into the background the more likely are spasmodic conditions to come to the fore.

It is quite impossible to answer the question, whether hyper-excitability of the spinal centres occurs in the absence of diminution of cerebral influence to account for it; but it probably does. We know that strychnine, in certain doses, produces an excitable condition of the spinal centres, which Charcot has likened to that which is seen in "latent contracture" due to gross lesions of the pyramidal tract, and to hysteria. In comparing strychnism with the latter, Weir Mitchell says:[2] "Perhaps I shall in a measure clear your minds as to the nature of what I mean by functional spasms if I recall to you the influence of strychnine in large doses, such as you have seen given here many times. You will remember that, in certain spinal maladies, such as those of syphilitic birth, it is my habit first to give iodides in heavy doses, then to suspend them for a time, and to give strychnine up to the limit of physiological endurance—that is to say, until I cause an approach to spasm. When, for example, you give hypodermically from one-fifth to one-eighth of a grain daily, the patient will have little or no annoyance, if you are careful to insist that he remain at absolute rest in bed for two hours after each injection. If there be any tendency to spastic twitchings of the muscles, the will is competent to control them, unless—and this is the point I would make—the patient attempts to exercise. Should he do this, the effort results at once in irregular movements of an incoördinate character, and in slight or more grave spasms of the muscles employed. While at rest there is no obvious trouble, but voluntary movement occasions spasms, which are the offspring of the poison. They are, in a word, functional spasms, and would not be seen at all with a limited use of strychnine, were it not for the efforts of voluntary action." If, then, a substance circulating in the blood can directly produce this condition of the spinal centres, in which they may almost be said to be watching their opportunity to produce muscular contraction, it is not improbable that molecular alterations may arise from other causes, and produce a similar excitable condition of these centres. We know, however, little, if anything, about the changes which act thus. What are called phantom tumours of the abdomen, and sometimes of other parts, may have some such origin; Weir Mitchell records one in which all the abdominal muscles had remained violently contracted for a year. But whether this be the explanation of such cases or not, the hyper-physiological activity, due to lack of cerebral control, which exists in the spinal centres of some subjects, is probably the principal factor in a very large number of tonic and clonic functional spasms.

In the comparison which has been attempted between the results of gross disease on the one hand, and molecular or so-called functional alterations on the other, the pyramidal tract stands prominently forth as the greater offender in the production of muscular spasm. Its action is indirect, it is true, as it only looses the reins of the spinal centres, which it should keep well in hand. Still, it rules the situation. Spasm rarely ensues directly from injury or disease of peripheral motor nerves, and although it frequently results from reflex causes, it is very likely that the spinal centres are, in a considerable proportion of cases, more at fault than the afferent nerves. It may be thought somewhat curious that, in speaking of diminution of cerebral control, the voluntary motor tract should alone have been referred to as liable to suffer from depression of its functions. But the only reason why it has been thus signalled out is that these lectures have dealt with motor phenomena. The sensory functions of the brain suffer, too, in a very striking manner, so that complete hemianæsthesia is far from a rare occurrence in hysteria, the loss of function being evident in the realm of the special senses, as well as in that which has to do with common sensation. And although at first sight these functional defects appear to be confined to one side,

[2] Lectures on Diseases of the Nervous System, especially in Women p. 100.

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careful investigations show that they are not. For in cases of hemianæsthesia, both fields of vision are contracted, although that on the anæsthetic side is the most affected. Again, in cases where the loss of function appears to be confined to the sensory area, a careful comparison of the muscular power on the two sides will show that this is not so. In a case of the kind which I lately saw, I found that on the hemianæsthetic side the patient could only reach 45 on the dynamometer scale, although this was the right side, while with the left she reached 50. In such hysterical patients it is probable that nerve power is deficient in all parts, and on both sides of the brain, although this deficiency is more marked on one side than the other, and more so in some portions of that side than in others. Considering how late the pyramidal tract develops in man, and what a high pitch of evolution it represents, it is not to be wondered at if it is one of the first parts to suffer in the process of dissolution.

If we are right in considering deficient nerve power, especially in the brain, as the condition which is at the root of functional nerve disease, the term "neurasthenia," a product of modern times, would be a more suitable general title for such disorders than the older term, "hysteria." When we review the history of nerve disease in families, we cannot but conclude that people are born with very different physical bases both in their nervous and other systems; and no line can be drawn between those that are normally stable and enduring under unfavourable circumstances, and those who are liable to lose equilibrium. Some patients would remain perfectly well had they not accidentally met with some catastrophe, and then they get into the category of hysterical patients. And yet there are many of their friends and acquaintances who are as liable to functional disorder as they are, and who yet may never have their weakness brought to light, owing to their not having been exposed to a sufficiently severe trial. Even small portions of nerve centres may become hysterical, if I may be allowed to say so—as, for instance, in writers' cramp, pianists' cramp, and other professional hyperkineses. All that we know of this matter is, that functional nerve disease, even in the case of apparent exceptions, such as spasm, is due to deficiency of nerve power. How the condition is actually brought about we cannot tell. Some think the centres are starved by contraction of their nutrient vessels. It seems to me more likely that the nerve centres are exhausted by their own action. Thus, sudden emotional excitement may bring on hysterical phenomena, indicating nerve exhaustion, such as hemi-anæsthesia, paralysis, or spasm. It is important to remember, too, that exhaustion of one arena seems to affect the whole system. This may indicate that the various differentiated centres draw nerve force from some common supply. Considering the enormous amount of cells which are found in the cerebral grey matter, many without evident connexions, is it going too far to suppose that a large number of these are factories for the production of nervous energy, which is necessary for the continuous and regular action of the highest centres, and which flows in increasing quantities towards those centres which are from time to time brought into action? Constant supply would mean constant power in all centres; and as the latter are all bound together so as to produce a physiological equilibrium, constant power would involve constant control of one by the other. Where the store of constantly produced force (represented, of course, by structural peculiarities) is by inheritance small, or where it has been exhausted by unnatural calls upon it, there would be insufficient to supply all the centres, and those to which the nerve paths are most freely open by habit would command it, while others would be starved, and loss of equilibrium, or the natural control of one centre by the healthy action of others, would be the inevitable result. If we do not suppose any such reservoir of nerve energy, how can we explain the exhaustion of all by the excessive action of some centres? Why is a person who has had excessive mental work less able for the time to do active bodily work? and why when bodily fatigued are we less ready to do intellectual work?

But I have gone, I fear, too far into a region of speculation, which it is hardly legitimate for me to have even entered with so small an equipment of facts. I shall therefore say no more, but bring these lectures to a conclusion by offering an apology for having chosen a subject which is so extensive in range, and at the same time so obscure and little understood, that my treatment of it must fall far short of that which is expected on occasions like the present.

ON AN

IMPROVED OPTOMETER FOR ESTIMATING THE DEGREE OF ASTIGMATISM AND OTHER ERRORS OF REFRACTION.

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ABOUT nine years and a half ago I published a description of a cheap and simple form of optometer for estimating the degrees of astigmatism.[1] Since then at least one new method of ascertaining the existence of astigmatism and estimating its amount has been introduced, and many improvements have been effected in the older methods. The novel plan is that which was first employed by M. Cuignet of Lille, and is commonly called keratoscopy or retinoscopy.[2] The introduction of this method has had almost as great an influence upon ophthalmic practice as that of the ophthalmoscope itself. It is at once simple, certain, and *objective*, and in the majority of cases it is sufficiently precise. In young children it is almost the only available plan. There are, however, some conditions in which it is less applicable—such as nebula, or leucoma, or irregularity of curvature of the cornea, small pupil, anterior or posterior synechia, uvea on the capsule of the crystalline lens, haziness of the lens itself or of the vitreous, or a darkly pigmented fundus. It is true that many of these disqualifications may be removed by the use of atropine or other mydriatic. But there are not a few objections to the indiscriminate employment of mydriatics for working out errors of refraction. The temporary abolition or embarrassment of the power of accommodation for some hours, or even days, is by no means the worst of these objections. At least two cases have lately come under my observation in which a solution of atropine applied to the eyes for the purpose of dilating the pupil in order to facilitate the estimation of hypermetropic astigmatism by retinoscopy very speedily gave rise to an outbreak of subacute glaucoma in both eyes. Even without this untoward experience, I have always, as far as possible, endeavoured to avoid using mydriatics for the purpose of estimating errors of refraction, but especially in hypermetropes, in whom the tendency to glaucoma is greater. In all cases in which retinoscopy is difficult, or where great precision is desirable, other methods must be employed. Personally, I prefer Green's tests or my own optometer. With the latter I can in most cases obtain trustworthy results without the use of atropine, though in some instances the result is only approximately correct. But this objection applies to any other single plan or to any combination of plans. In difficult cases it is, therefore, always well to employ at least two different methods, each corrective or confirmatory of the other.

Though the optometer which I now employ is in principle the same as that which I originally described, I have from time to time introduced modifications calculated to increase its efficiency. These modifications have, however, never been formally described, but have been for the most part suggested to various opticians and instrument-makers, who, wishing to copy the optometer, have asked me for information about the working out of some of the details. The chief modifications are—(1) a graduation of the horizontal bar, in accordance with the dioptrical system; (2) an improved dial card; and (3) a vertical bar of adjustable cylindrical lenses. These may be more particularly but briefly described.

(1) Since the year 1879 the horizontal bar has been divided on its upper surface not only into inches and tenths, but also into *focal lengths* of dioptrical lenses and quarters, from three dioptres to forty. These focal lengths I call *dioptrostads*.

(2) The radiating lines on the dial card are indicated not only by the Roman numerals I. to XII., but also by a double row of Arabic numbers. Each number of the lower row records the angle which the corresponding line makes

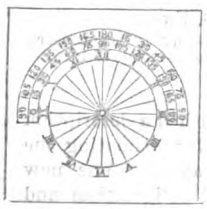
[1] THE LANCET, Oct. 28th, 1876.

[2] For an excellent account of so-called "retinoscopy," see article by Dr. Charnley, Royal London Ophthalmic Hospital Reports, vol. x., p. 344.

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with the horizon, beginning from the left; and each number of the upper row serves the twofold purpose of indicating—first, the line which is at right angles to its fellow in the lower row; and, second, the position of the axis of the correcting cylindrical lens. (Fig. 1, and Fig. 2, *j*.)[3] For example, the line at right angles to 135°, running from between I. and II., is seen to be 45°, which will be found to run from between X. and XI. As the two principal meridians of the eye in regular astigmatism are at right angles with each other, it follows that if the line 135° be in one principal meridian, the line 45° will be in the other principal meridian, and so for every other line. The radiating lines may be fine and of equal thickness throughout, or, preferably, they may gradually increase in thickness from the centre to the periphery, as in one of Green's astigmatic disks.

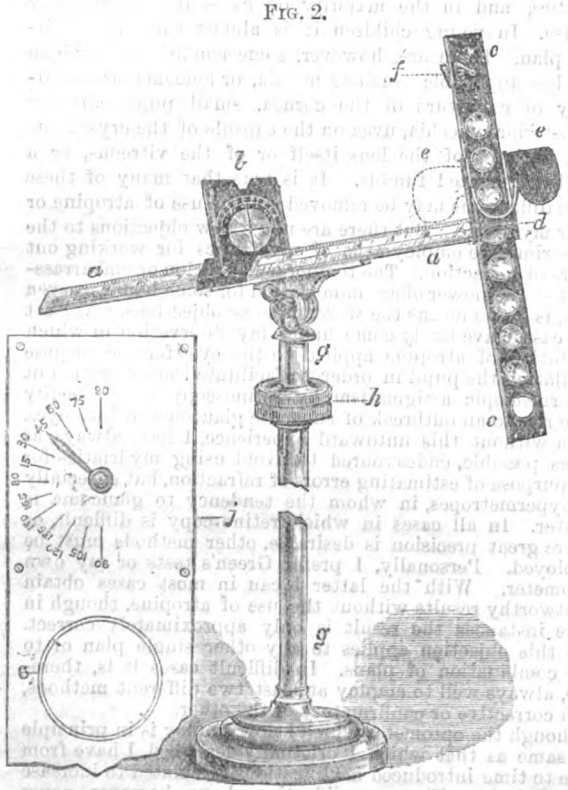
FIG. 1.



Reduced rather more than one-half.

(3) I have always recognised the advantage of having cylindrical lenses affixed to the instrument, but for a long time there seemed no way of carrying this into effect except by a disk like that on Javal's original optometer. To any such arrangement I have always objected, chiefly for the reason that the disk prevents the eye under examination from getting close to the instrument, and compels the patient to twist the head to look out of the outer canthus. Both these conditions tend to vitiate the result. The difficulty has at length been overcome by using a vertical bar of concave cylindrical lenses. (Fig. 2, *c* and *j*.) By a simple arrangement, worked out, now more than eighteen months ago, by Messrs. Pillischer of New Bond-street, all the cylinders may, by turning a tap (*f*) be rotated simultaneously, so that the axes of all the cylinders are always parallel. The cylinders are set by making the indicator on the plate (*j*) point to the number which on the dial card is in the upper row opposite the line most clearly seen at the greatest possible distance in the examination about to be described. The axes of all the cylinders will then be at right angles with this clearest line. The concave cylindrical lenses contained in the vertical plate are 0·5, 1·0, 1·5, 2·0, 3·0, 4·0, 5·0, and 6·0 dioptres. It would be easy to increase the number so as to have finer gradations, but practically these are enough. If, for example, 2·0 D were not enough to correct the astigmatism, while 3·0 D over-corrected, it is clear that 2·5 D would be within 0·25, or $\frac{1}{100}$th of an inch of perfect correction.

FIG. 2.



The optometer should be used in the following way: 1. A convex lens having been slipped into the clip at *d*, in order to make the eye about to be examined artificially short-sighted, the eye is placed as close as possible to this lens and made to look, with head erect, straight through its centre at the dial card beyond on the plate (*b*). (See also Fig. 1.) The lens (myopising lens) which will be required will vary with the refraction of the eye. It is best to select a lens which brings the far point to about 8 in., or 5 *dioptrostads* from the eye. In hypermetropia 8 D to 12 D, or even more, may be required; in myopia 1 D to 3 D may suffice; and in high degrees of myopia—that is, more than M = 8 D—no lens will be needed. The opposite eye should be excluded by the screen (*e*). The height is adjusted by means of the telescopic stem (*g*) and the screw collar (*h*) 2. The dial plate (*b*), placed at first beyond the point of distinct vision, is slowly approximated to the eye until at least one of the radiating lines is seen *clearly and distinctly* throughout its whole length. After this the plate should not be moved, and its distance from the eye should be noted in dioptrostads (δ). Under the circumstances the line is seen at the greatest distance from the eye, and therefore in the principal meridian of *least curvature*.

If *all* the radiating lines come into view with equal clearness at the same greatest distance, there is no astigmatism; but if *one or two* lines be clearly seen, while the others, and especially those at right angles to them, are blurred, there is astigmatism, which may be corrected by placing a suitable concave cylindrical lens in front of the eye, with its axis at right angles to the clearest lines. The suitable lens is the weakest which makes all the lines equally clear. This is ascertained by sliding the vertical bar of cylindrical lenses, properly adjusted, in the groove at *d*, till correction is accomplished. The weakest cylinder that will do this represents the *amount* of astigmatism.

This completes the examination. It only remains to interpret the results.

1. As already stated, if *all* the radiating lines come into view at the same greatest distance there is no astigmatism. (*a*) If the greatest distance in dioptrostads (δ) equals the number of dioptres (D) in the myopising lens, there also is no other error of refraction: $D = \delta$. (*b*) If the greatest distance have *fewer* dioptrostads than there are dioptres in the myopising lens, there is hypermetropia equal to the difference between the two: $H = D - \delta$. For example: If D have 8 dioptres and δ 5 dioptrostads, then the hypermetropia will be 8 − 5, or 3 D, and the patient will require a correcting lens of this strength. (*c*) If the greatest distance have *more* dioptrostads than there are dioptres in the myopising lens, there is myopia equal to the difference between the two: $M = D - \delta$. If D be 5 dioptres and δ be 8 dioptrostads, M = 5 − 8, or −3. D; and the patient will need a concave lens of this strength.

2. If only *one line or two lines* are clearly seen at the greatest distance, there is astigmatism. The refraction of the meridians in which these lines are seen will depend upon whether the distance at which they are seen be *beyond* or *within* the focal length of the myopising lens, as shown above; $x = D - \delta$. (*a*) The astigmatism is, as already stated, represented by the *weakest* concave cylindrical lens which set at right angles to the clearest line makes all the lines clear. (*b*) The correcting lens for distance will be the combination of the spherical lens found by the above formulæ and the weakest concave cylinder which corrects the astigmatism. If $D = \delta$, no spherical lens will be needed, and the cylindrical lens alone will suffice; if D be greater than δ, a convex spherical lens will be needed in addition; and if D be less than δ, a concave spherical lens.

[3] Optometers containing most of the improvements in the marking of the bar and in the card were, I believe, first made by Messrs. Pickard and Curry, of Great Portland-street, about six years ago.

AT the annual meeting of the governors of the Princess Frederica's Convalescent Home for Married Women, at Hampton Court, on the 16th inst., a highly satisfactory report was presented. During 1885 the annual subscriptions and donations had considerably increased, the total income for the year amounting to £796.

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THREE EPOCHS IN MEDICINE.[1]

BY M. CHARTERIS, M.D.,
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GENTLEMEN,—In this concluding lecture I desire to briefly draw your attention to certain facts connected with the history of medicine which stand boldly out as means for averting disease and death. I allude to three epochs: (1) Vaccination; (2) Antiseptics; and (3) Hydrophobia. I am induced to do this because we are at the present moment passing through the third epoch, the results from which seem to be very momentous and far-spreading. To a great extent these epochs are distinguished by circumstances obscure in their origin and deduced from observations of common life. All men can see the sun, the moon, the stars, the sea, and the wide expanse of earth, but it requires the man of genius to raise these, as it were, from their surroundings and enhance them by the beauty of song and verse. This idea is revealed notably by the incidents which led up to Jenner's great discovery.

Jenner was a distinguished student in London, and had the privilege of the friendship and instruction of John Hunter, yet he settled in a country practice, and, notwithstanding great inducements, never forsook the field of his early labours. He cared not for fame, for he lived for mankind. Thus he simply states when requested to go to London and make his fortune, "Shall I, who even in the morning of my days sought the lonely and sequestered paths of life, the valley and not the mountain—shall I now, as my evening is fast approaching, hold myself as an object for fortune and for fame? My fortune from what flows from my profession is sufficient for my wants; and as for fame, what is it?—a gilded butt for ever pierced with the arrows of malignancy." As Jenner rode or walked on his daily rounds through one of the most fertile of English country districts, he meditated much on disease, and particularly on that disease which spared neither sex nor age, and which, when not fatal, rendered its victim for the future unseemly and pitted. Small-pox was a dreaded scourge, recognised as the hereditary curse of mankind, and as an inheritance which neither time nor medicine could remove. The practice of inoculation introduced by Lady Mary Wortley Montagu robbed it of some of its terrors, for small-pox so imparted gave rise to a milder form of disease, and there was little if any chance of a fatal issue. But small-pox perpetuates small-pox. All were not inoculated, and in proportion as inoculation was actively undertaken the centres of contagion were multiplied and almost every home was converted into a hospital. Inoculation therefore did not diminish—nay, it actually increased the mortality from small-pox. Country gossip averred that milkmaids who contracted cow-pox when they handled the teats of diseased cows were not afterwards attacked by small-pox. It was only gossip. It might be an idle tale. Many men had heard it before and scouted the idea. It was not so with Jenner. He investigated the matter, and step by step, not in a day, or a week, or a month, or even a year, but after he was forty-nine years of age, he was led to formulate his conviction "that in a certain condition the pustule imparted its protective power to the human constitution." It was, moreover, a protective power from disease in its most repulsive form. Around small-pox there are no æsthetic qualities, no fair features, which in some cases of illness seem to purge away the grosser clay and leave in death's embrace an image pure and bright. The sick room in small-pox is permeated with a loathsome odour from the ripe pustules; the face is swollen, the eyes closed, and in the bloated countenance no gleam of intelligence rests. Yea, even a mother's love I have seen recoil from such a spectacle. The country surgeon, the middle-aged man, was lost in reverie, for he foresaw that in future years this terrible affliction would be removed from the human race, that the lines of beauty would never be scarred, and that glad mothers in every land would bless the name of Edward Jenner. No wonder, when this prospect brightened before him, he wrote: "While the vaccine discovery was progressive, the joy I felt at the prospect before me of being the instrument destined to take away from the world one of its greatest calamities was often so excessive, that, in pursuing my favourite subject among the meadows, I have sometimes found myself in a kind of reverie. 'Tis pleasant for me to recollect that these reflections always ended in a devout acknowledgment to that Being from whom this and all other mercies flow." The progress of vaccination was rapid. It was adopted in America, India, and other colonies, and the continental nations hailed it with delight. Honours flowed upon Jenner. Napoleon had a medal struck in commemoration of the discovery, and presents in money were forwarded to him from the capitals of our Indian presidencies. A touching tribute was sent by five native Indian tribes in America, in which they said: "We shall not fail to teach our children to speak the name of Jenner. We send with this a belt and a string of wampum in token of our acceptance of your precious gift, and we beseech the Great Spirit to take care of you in this world and in the land of spirits."

When I was a student in Edinburgh Joseph Lister lectured on surgery as an extra-mural teacher, and we were not then impressed with his abilities. He was slow and hesitating in his speech, spoke with diffidence, and as an operator lacked dash and rapidity. He was, however, the son-in-law of Syme, and he had possibilities which he has since worthily fulfilled. Appointed to the Chair of Surgery in this University in 1864, he was also made a surgeon in the Royal Infirmary, and in this latter sphere he evinced those thoughtful qualities which have rendered him famous. The surgical hospital of the infirmary was unhealthy, as well it might be, for circumstances afterwards showed it was built on a charnel-house. Behind the lowest male accident ward, a few inches below the ground, with only the basement area intervening, there was found on investigation the uppermost tier of a multitude of coffins, which had been placed there at the time of the cholera epidemic in 1849. The result of this proximity to the ward was evidenced by the fact that compound fractures with open wounds always assumed a bad type and developed pyæmia. Measures were adopted to remedy this nuisance, and were successful. Yet from this polluted atmosphere Lister apprehended how germs aided putrefaction, and subsequent experiments which he made on animals, under antiseptic precautions, showed no trace of putrescence. Based on these facts, he proved that wounds by accident or resulting from surgical operations could be rendered clean and wholesome. Lister did not, however, rush into print with the information all at once. Not until he had carefully satisfied himself on every point, and until conclusive evidence had been accumulated, did he publish his observations in THE LANCET. The sensation produced was marked. It evoked a new era of surgical practice. It surprised and fluttered the timid dwellers in the peaceful dovecots of orthodox routine surgery. Their wonder was intense when they learned how from the odour of a cemetery, round which the slimy Molendinar creeps, a Glasgow professor and a hospital surgeon deduced correctly the antiseptic process of treating wounds. So carefully founded on fact were his conclusions that the surprise deepened into gratitude, and they were accepted without much cavil. THE LANCET thus summarised the importance of the discovery: "If Professor Lister's conclusion with regard to the power of carbolic acid in compound fractures should be confirmed by further experiments and observation, it will be difficult to overrate the importance of what may be called his great discovery. For although he bases his surgical use of carbolic acid upon the researches of M. Pasteur, the application of these researches to the case of compound fractures, opened abscesses, and other recent wounds is all his own." The great characteristic of Lister is his thoroughness. He assumes nothing. He tests the experiments of others. He is open to conviction, and he is never dogmatic. In a word he is a man to be trusted, and hence he occupies a unique position in the scientific world. As a lecturer he greatly improved after he was appointed to this University. His voice was carefully modulated. He never spoke quickly; always distinctly; repeated when necessary his sentences to emphasise his lectures. In 1874 he dedicated to Pasteur his "Researches on Antiseptics," which he says, "for the last nine years I have been trying to bring to perfection. Allow me to take this opportunity of sending you my most cordial thanks for having, by your brilliant researches, demonstrated to me the truth of the germ theory of putrefaction, thus giving me the only principle which could lead

[1] Lecture delivered at the conclusion of the winter course on Therapeutics at Glasgow University.

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to a happy end the antiseptic system." Pasteur, it is stated, received this dedication with the most lively satisfaction.

We are living at present in the epoch of the cure for hydrophobia introduced by M. Pasteur. The principle of his method is as follows. The saliva of a rabid dog is the usual medium of communication to a human being. The dog bites and by the insertion of the saliva into the flesh, the poison is introduced. By the blood it is carried to the nervous centres of the brain and spinal cord, and after a certain length of time symptoms of hydrophobia are developed. If now a portion of the brain or spinal cord of a rabid dog is placed after trephining under the dura mater of a rabbit, rabies will develop in the rabbit as a rule after an average incubation of about fifteen days. But the virus so communicated can be intensified in virulence. By the same method the virus from the first rabbit is communicated to a second, from the second to a third, and so on until at the end of the fiftieth inoculation the incubation period is only seven days. The spinal cords of these rabbits are thus rabid throughout their whole extent, with a constant and definite degree of virulence. From one of these rabbits the spinal cord is taken, with due antiseptic precautions, and is suspended in dry air. The virulence, slowly disappearing, is finally extinguished. In this way the cords of rabbits can be had at a different stage of virulence. Soup of a certain kind is mixed with a fragment of cord, not in a very virulent state, and is injected under the skin of a dog. After an interval usually of two days, injections from more recent, and therefore more virulent, cords are used, until a time is reached when a portion of a very virulent cord is injected—i.e., of a cord which has only been kept in the dry air for a day or two. What is the result? The result is that the dog is completely protected. No symptoms of rabies can be produced either by the direct bite of another rabid dog or by injection of rabid matter. Pasteur so experimented with fifty dogs without a single failure, and then he justly considered he could test the experiment on a human being. On July 6th, 1885, an Alsatian boy (Joseph Meister) was brought to his laboratory who had undoubtedly been bitten by a rabid dog, and whose condition was such as to justify the supposition that hydrophobia was incubating in his system. Half a syringeful of a cord that had been kept for fourteen days was injected on the 6th, and on succeeding days injections were made from cords which had been kept for shorter periods, until at the end of ten days half a syringeful was injected of a cord which had only been kept one day. The 6th of July, 1885, was therefore the birthday of the cure of hydrophobia.

It may interest you to know what kind of a man Pasteur is. I was fortunate enough to see him at the last International Medical Congress in London in 1881, and to be so near him that I remember well his physique. He walks with a slight limp, for he once had an attack of hemiplegia due to continuous nervous strain from prolonged examinations with the microscope. He is about middle height, and rather stouter in his development than Frenchmen usually are; his head is massive, and planted on broad shoulders; his eyes are yellowish-brown; his forehead markedly wrinkled; his face full, and his beard short, scant, and grizzled. The whole appearance of Pasteur indicates decision of character, and his career shows that he pursues science from no selfish or pecuniary motives. His laboratory or hospital is open to the inspection of all duly qualified medical men. He exacts no fee, and he courts inquiry of anti-vivisection views. When men, or rather ladies, scoff at his present efforts, they should remember that Pasteur has a character to lose, for he discovered the cure for the silkworm disease, for splenic fever, for fowl cholera; that he defeated the great chemist Liebig in the assertions he made about acetic fermentation; and, further, that in all his researches his strongest wish has ever been to benefit his fellow-men. In a public assembly he uttered these remarkable words when upbraided for cruelty: "I never had the courage to kill a bird in sport, but when it is a question of experiment I am deterred by no scruples. Science has the right to assume the sovereignty of its aims."

Pasteur's treatment of hydrophobia is as yet *sub judice*, but we must all hope that the Royal Commission lately formed to investigate the matter will be able to give a highly favourable report. If Pasteur's idea is true, there is no doubt it has a wide applicability. It is simply the conception of Jenner carried out in another form. Attenuate the virus of small-pox and you destroy the fatality and virulence of variola. Inoculate other animals with the poison of rabies, and from this weakened virus safety seems to be secured to the bitten sufferer if recourse to the proceeding is effected in time. Go further; why remain content with small-pox and hydrophobia? Every seventh death in our country is due to phthisis in some form or other. A child from a phthisical parent, in nine cases out of ten, will, in his growing youth or mature manhood, be attacked by tubercle. That statement is about as certain as any yet made on the etiology of disease. Koch's bacillus stamps a peculiar identity on tubercle, and this bacillus can be isolated and cultivated. It does not originate, but its imprint is a true and unfailing sign of, pulmonary phthisis. Inoculate rabbits or guinea-pigs with this bacillus, and from these inoculations let hereditarily tainted consumptive patients be vaccinated before the constitution is sapped and its vigour impaired. It is a possibility that a safe and simple course of tuberculosis would follow, as safe and perhaps as simple as the vaccine vesicle of childhood, and complete immunity in after-life from the disease might be the result.

It is a painful and humiliating fact that now all original investigations are checked in Britain. We read of Pasteur's work. We cannot accredit or discredit it. We are surrounded with such careful legislation that not a guinea-pig or a rabbit can be sacrificed by a scientific inquiry without the licence of the Home Secretary. If we apply for the licence, we are asked why it is wanted. Is it for idle curiosity or to enlarge the sphere of knowledge? We are considered bloodthirsty men, and we are supposed inhumanly and wantonly to torture the lower animals. A more unjust charge was never made against a noble profession. The examples I have indicated show how humanity has been benefited by the efforts of these men. Advancing science cannot be stayed by odious whisper or sensational laws. Able and enthusiastic workers are ready to take the field in this country to expiscate facts from the domain of credulity and conjecture. Great is truth, and it will prevail, and I venture to say, before a decade passes, that the generous instincts of our newly enfranchised countrymen will sweep away from us every trammel which impedes honest experimental research having for its only object the relief of human suffering. Let us appeal as a profession from sentimental Cæsars to the people whose weal we desire; and let us ask with united voice that the land of Jenner, of Hunter, and of Lister should be as free for scientific inquiries as that of Pasteur and Virchow. Then, and not till then, will our true position among nations be resumed—a position which is ours by right from the mighty men renowned in medicine and surgery and allied sciences which this country has produced, and of whom we are justly proud. We will then lead the way.

CAN PNEUMONIA OCCUR AS THE DIRECT RESULT OF EXTERNAL VIOLENCE?

BY OCTAVIUS STURGES, M.D., F.R.C.P.,
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IT is no very rare experience to find pneumonia and bodily injury in near association, yet the precise nature of the relationship is still open to dispute. At the present time, when the pathology as well as the causes of this disease are being sought out from a wider field than heretofore, the question with which I have headed this paper has something of new interest. On this account the case of a child lately admitted into the Hospital for Sick Children under my care is worthy of record. It illustrates some of the difficulties that beset us in a correct interpretation of facts, and gives occasion for a brief review of existing opinion upon this subject. The following narrative is abridged from very full and careful notes taken by Dr. Thomson, house-physician.

Charles T——, aged eleven, an ill-nourished, pigeon-chested child, dirty and neglected, was admitted to the Alexandra ward on the morning of Jan. 9th. He was much collapsed, the face pale, and extremities cold and clammy. The breathing was very shallow and rapid; respiration 50. Pulse 176, regular and very compressible; temperature 103°. Lips and tongue dry and cracked. Though drowsy and indifferent, he could yet answer questions, and when

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moved gave sign of pain in the right chest. There was no tenderness, however, at this place, and no bruising anywhere. When left undisturbed the breathing became slightly stertorous. On physical examination, a patch of impaired resonance was made out below the right scapula, and here the breathing was faint and the bronchial and the vocal fremitus exaggerated. There were rhonchal and sibilant sounds generally throughout the chest, but nowhere crepitation. From such physical and general signs it was concluded that the child had pneumonia in an early stage; but so grave was the prostration and so enduring, notwithstanding free stimulation, as to suggest that there must be something more, as yet unseen, which would be presently revealed. The history obtained, partly from the patient and partly from his mother, an inaccurate, unintelligent woman, was to the following effect:—On the day before admission the boy went to school as usual. Between three and four in the afternoon he came home complaining that while on his way to meet his father, a big boy who happened to be passing had hit him a severe blow with his fist on the right side of the chest. He walked home with difficulty, perhaps a mile, feeling the pain, which movement seemed to aggravate. He had also headache and a sensation of nausea, and it was observed that he would restrain cough owing to the pain it gave him. On reaching home he rapidly grew worse, and, after a restless and feverish night, was brought to the hospital early next day in the condition already described. On a rough calculation some fourteen hours may have elapsed between the time of the blow and the time of admission, but so far as could be gathered only a very short interval between the assault and the appearance of serious symptoms. The apparent origin of the symptoms was sufficiently remarkable—especially, as will be presently seen, when these had fully developed—to make strict inquiry desirable as to the child's previous health; and accordingly, Dr. Thomson, by dint of much questioning, succeeded in eliciting from the mother, on her second visit, some important additions to her original statement. These were to the effect that the boy had "shivered a little two days before the blow"; that he had complained of his throat; and that the mother, who was far from being an anxious observer, had noticed that he "looked ill," and told him to remain at home; and, finally, that on Jan. 5th, three days before the blow, he had been out in the snow all day and got wet through. The after-progress and termination of the case may be dismissed in a few words. The day after admission all the characteristic signs of consolidated lung became apparent as regards the upper third of the right side. Prostration continued; the temperature on the third day reaching 104°. Then came a critical fall of six degrees on the fifth day from admission, and along with it all serious symptoms vanished, and a few days later the boy was convalescent. This crisis, it should be observed, corresponded with the sixth day of illness reckoning from the blow, with the eighth reckoning from the shivering, and with the ninth reckoning from the wetting.

Before considering the character of evidence which this case affords, let me glance for a moment at the authorities. Is external violence (short of lung laceration) capable of producing lung inflammation having all the characters of true lobar pneumonia as regards its course, duration, and end? Fully stated, that is the question. Grisolle, an excellent authority on matters of fact of this kind, hesitates; he hardly admits the possibility of such an occurrence, and uses *à priori* arguments against it; yet he quotes examples, as I will mention presently, of pneumonia resulting from heavy lifting. Dr. Frederick Roberts, also a valuable guide, owing to the wonderful discretion and impartiality with which he brings together the opinions of various authors, places "injury to the chest" among "the exciting causes" of pneumonia[1]. Dr. Bristowe speaks of "the direct action of mechanical irritation," but does not appear to include in this expression external injury.[2] Dr. Wilson Fox, in his well known Treatise,[3] says "injuries and blows to the chest are occasionally followed by pneumonia"; yet he admits that "the mechanism of such cases is obscure," and the single example which he supplies from his own experience is, as he himself seems to imply, far from conclusive. Of earlier authorities, Sir Thomas Watson dismisses the causes of pneumonia in precisely six lines,[4] and in none of the six does he mention injury. Going further back still, we come to foot-note references copied from author to author, and to which time and tradition have given a sanctity seldom invaded by any close inspection. Amongst these is a case quoted by Andral,[5] where the writer himself remarks that the almost complete absence of fever on the fifth day after the accident (a fall from a height) would have negatived the theory of pneumonia were it not for the sputum and the crepitant râle. Modern criticism might not irreverently suggest that at the time these words were written the new-born authority of physical signs was becoming too absolute, while an impartial reading of Andral's description leaves the impression, not that pneumonia was excited immediately by the fall, but that there was an interval of five or six days, and then a true pneumonia with crisis ("amelioration étonnante," in Andral's words, which even his treatment could not always suppress) on the fifth day. So far as authority goes, therefore, we shall violate no canon in regarding this question as an open one. The existing diversity of opinion was exhibited in a very practical way a few years ago in the course of a legal action, in which I was consulted, brought by the relatives of a man who had died of acute lobar pneumonia some two or three weeks after a railway shaking. Compensation was sought at the hands of the company, on the ground that the accident had directly contributed to the man's death; and the medical evidence appealed to on the occasion was described by sober observers as "conflicting."

The case we are now concerned with would seem, at first sight at all events, to give an affirmative answer to the question—Can injury cause pneumonia? After some search, indeed, I am unable to find another so explicit. At the time of the blow the boy was without complaint and walking the streets. It gives him violent pain and he gets home with difficulty. The general symptoms of pneumonia—dyspnœa, fever, pleural stitch—set in almost immediately, and a few hours later, when first medically examined, the physical signs of that disease are discovered. Here surely is proof, the sort of proof we are accustomed to rely on in such matters—better proof, I would go so far as to say, than is afforded either by Andral or Wilson Fox,—that a blow on the chest is a possible cause of pneumonia. And upon first information, in spite of previous experience and preconceptions, I felt compelled to adopt that view.

But further inquiry gave a somewhat different colour to the case. It was ascertained that four days before the injury the boy got wet through, and that he afterwards shivered and looked ill. Now, pneumonia from exposure to cold and wet is common enough, while pneumonia from a blow is, to say the least, very rare. In this contention of causes, therefore, we must prefer the former, and adopting that hypothesis the case stands thus: Pneumonia had already commenced in this boy's right lung when he was dealt a violent blow just over the seat of it. The effect of this violence, acting upon a deformed and yielding chest, was to add to the already commencing trouble a symptom of its own, general collapse; and as this collapse gradually yields, so the proper physical signs of pneumonia develop, until at length the affection declares itself in typical completeness.

A similar explanation would seem to apply not only to external violence, but also to violent muscular effort on the patient's own part. It applies, I believe, to examples quoted by Dr. Grisolle,[6] where pneumonia was attributed to lifting heavy weights. "A violent pain was immediately felt, and in a few hours symptoms of pneumonia declared themselves." Now, if it be difficult to conceive of severe accidents (laceration of lung being put out of the question) producing pneumonia, still more is it difficult to conceive that lifting a burden might have that result. But it is quite easy to suppose that sudden exertion of this sort might *discover* pneumonia. Such extra demand upon the muscular strength, and such extra inspiratory effort as heavy lifting demands, would be exactly calculated to find out a pneumonia which as yet, while the patient was at rest, had given little notice. In like manner other acute affections are sometimes brought to light by means of accidents which could have no possible share in starting them. I remember a sweep carrying forth his bag of soot one morning and falling heavily under its weight. He was brought to hospital in serious collapse, and found to be in the second week of enteric fever, of which he died.

[1] Roberts, p. 399, fifth edition. [2] Bristowe, p. 403, fifth edition.
[3] Reynolds's System, vol. iii., p. 615.
[4] Watson's Lectures, vol. ii., p. 89, third edition.
[5] Clinique Médicale, tome iii., p. 293.
[6] De la Pneumonie, p. 144.

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But while it may be doubted whether either external violence, short of lung laceration, or sudden exertion, ever directly excites pneumonia, there is ground for the belief that both one and the other may give occasion for it. For there is a form of the disease of which the predisposing cause—sometimes so far as seems the sole cause—is deterioration of vital energy, a condition to which at present we can apply no more precise expression. Whatever lowers vitality invites pneumonia. In virtue of that principle, severe bodily injury, as well as over-fatigue or alcoholic excess or destitution, or even mental anxiety, may weaken the power of resisting the disease and make its invasions the easier. Pneumonia of this origin needs the more to be recognised, inasmuch as it is a grave and often fatal disorder with quite a different outlook from the pneumonia of exposure. To such category would belong, in my belief, the case just quoted from Andral, possibly also the case of the railway passenger, and other examples which I might quote from my own experience, where individuals debilitated by some injury, but apparently on their way to recovery, die quite unexpectedly by the intervention of a pneumonia of such limited area as to seem at first a mere trifle.[7] Considerations of this sort make us properly cautious in accepting injury or overstrain as efficient causes of pneumonia. Granting that individuals may be up and about in every stage of that disease,[8] granting also that the early symptoms of pneumonia—dyspnœa, pain on deep inspiration, and general muscular weakness—are precisely those which extra exertion or a blow directed against the chest or diaphragm would call into activity and prominence, and it is inevitable amongst a hardworking and boisterous race that accidents of this sort should from time to time call attention to the disease, and appear in the light of causes of the symptoms which they precede.

There is a further question, which I have here expressly excluded, in regard to injuries causing actual laceration of lung tissue, with or without rib fracture. Can such laceration set up true lobar pneumonia? I have no personal knowledge of such an occurrence. But my friend and colleague, Dr. Barlow, has been good enough to tell me of a case of his own which is possibly of that sort. A young stonemason had a heavy stone slab fall on his chest, knocking him down with a very severe blow, yet without fracture of ribs. "He was taken home, and within a day or two developed a typical apex pneumonia. This resolved, but after resolution there was a curious hectic temperature, a condition lasting a considerable time, the morning temperature being normal and the patient meanwhile feeling well and ultimately recovering perfectly," Dr. Barlow adds, "At the time I did not think much of the immediately antecedent injury, but I remember the fact very definitely." Even here it cannot be said for certain that the apex pneumonia was not an intercurrent affection due to the nervous shock of the injury. The facts might be taken in that sense by any reader with predilections of his own in reference to efficient causes of pneumonia. It is indeed the prevalence of predilection on one side or the other which makes the need for further investigation at the hands of independent observers possessed of the rare ability to keep their facts and their theories in separate compartments.

The sum of my contention comes to this. Pneumonia does undoubtedly sometimes follow injury, whether to the chest or elsewhere. In some instances the disease is not really caused by the injury, but only brought to light through its agency; in others it is its indirect consequence—due, that is to say, not to any immediate harm done to the lung, but to nervous shock which, whether it arise from injury or over-fatigue or any other cause, produces a condition of the system favourable to the development of pneumonia. Shall we say, then, that bodily injury is a predisposing but not an exciting cause of pneumonia? It may be so. But as a matter of fact, and notwithstanding that in a country like ours there is generally "weather" to appeal to, the exciting cause often escapes us. That cause, which we call in scholastic phrase "predisposing," be it injury or sewer-gas poisoning, or alcoholic excess, is all that we see. To us it is the *sole* cause. And so it may seem that I demolish the very distinction I have been insisting on. Not so. The distinction is a very real and tangible one, and it is intimately connected with the pathology of pneumonia. For if the relationship of cause and effect be of the nature I have tried to indicate, not only do we bring bodily injury, regarded as a source of pneumonia, within the compass of a large class of causes all acting through the nervous system, but, further, we go far to establish the fact that this pulmonary affection, the true lobar pneumonia of definite duration and orderly sequence of symptoms, is not a lung inflammation merely, but the local expression of a wider, and often of a nervous, disorder.

[7] See British Medical Journal, 1879, vol. i., p. 100.

[8] The number of instances in London alone where people are found in the streets dead or dying of pneumonia in an advanced stage, yet which has never been suspected, is not small. Hospital practice, though it gets a share of these cases, does not adequately represent their frequency. For that we must go to Poor-law infirmaries and coroners' inquests. And not only is this true of what is absurdly called "latent pneumonia," it is true of the acute disease as well, as the following example shows. A working man of middle age, well proportioned and developed as to his frame and muscles, who had been feeling out of sorts for some days, was yet able to take active part in a meeting for political discussion ending with whiskey-and-water. On his way home he met with a fatal accident, falling headlong down some stone steps and fracturing his skull. Post mortem, part of his right lung was found to be solid, and on section and microscopic examination it proved to be a specimen of typical benevolent pneumonia, probably in course of resolution.

HYDROPHOBIA AND THE TREATMENT OF BITES OF RABID ANIMALS BY SUCTION.

BY SURGEON-MAJOR R. PRINGLE, M.D.,
LATE OF THE SANITARY DEPARTMENT, H.M.'S. BENGAL ARMY.

THE treatment now being carried on in Paris for hydrophobia in the stage of incubation, or, to write more correctly, the treatment of conditions which may possibly develop into hydrophobia unless successfully checked by a specific line of treatment, is most deservedly attracting the greatest attention, not only on the Continent, but in this country also; and if continued precautions are not taken to stamp out, or at all events to limit, the disease, by curtailing the means of disseminating it, the subject of this treatment, in the not very distant future, will call for some separate action on the part of the British Government for cases of hydrophobia in the British Isles. Hydrophobia is still in our midst, and only waits the means of propagation, lately supplied in the "plague of dogs," to enable it to burst into another epidemic. On March 19th the stringent police regulations regarding the muzzling and control of dogs expired, and, though these have been renewed in a less stringent manner, yet, as no steps have been taken as regards dog licences to limit if possible the increase of "uncared-for dogs," in a short time the numbers reduced by passage through the "lethal chamber" will soon be made up, and we shall then have again to face conditions peculiarly favourable to the rapid and extensive development of rabies. I yield to none in my fondness for dogs, but the question is *now* not one of likes and dislikes but of public health, and the statistics of bites inflicted by animals supposed to be rabid, if we may judge by those connected with M. Pasteur's experiments, exhibit a prevalence of rabies which appears to call for special action, and, as I believe, demands in the interests of the public health a continuance of the present police regulations on the subject.

Acting on the advice of friends, I have been induced to condense the remarks I made at the meeting held in the Sanitary Institute in London last month, when Professor Horsley read his paper on Hydrophobia. On this occasion I took up the subject of treatment by suction in the case of bites inflicted by rabid animals, as opposed to the ordinary method of applying caustic, or even the actual cautery; and in bringing the following to the notice of the public through the columns of THE LANCET, I do so in the earnest hope that that which was so successful in my own case and in those I shall give hereafter may prove equally so in others. It is sad to think that the present means employed to destroy the virus of hydrophobia seem to be so utterly useless, that to be bitten by a mad dog *now* means a certain looking forward to the most distressing and painful of deaths. In gratitude, therefore, for my own escape, and I repeat in the earnest hope of being able to impart to others the sense of security, or rather immunity, which I realised in an epidemic of hydrophobia, even when having to attend cases of the disease (and this ere the six months had passed since I had been bitten by an undoubtedly mad dog), I enter into the details of the treatment in question, and shall endeavour to do so in a manner which will enable

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all to practise it, with, I doubt not, the same success which attended my own case.

The other day several people were bitten by a mad dog at Peckham, and more would have been similarly injured had not a brave workman, *pro bona publico*, courageously seized the dog and despatched it, though not before it had bitten him in thirteen places! During the year 1885 I collected the newspaper notices (of which several were inquests) of every case of rabies which has occurred in and around London, and an analysis of these discloses some remarkable data regarding the primary treatment of the bites, and the apparent utter futility of the means employed, I might say in nearly every case almost immediately after the bite was inflicted, to prevent fatal absorption of the poison into the system; and perhaps the saddest feature in these melancholy records of suffering is the fact that, judging by analogy, had the treatment I adopted in my own and the other cases, given in detail hereafter, been carried out, some, if not all, of the sufferers might have escaped the most painful disease to suffer from, and the saddest to witness. In every case except one, that which occurred at Blackheath, and proved fatal with the most distressing symptoms, either caustic or the actual cautery seems to have been used, and we are informed that the wounds healed without at the time any unfavourable symptoms, and yet *in every one of these cases rabies followed and proved fatal.* Another point is worthy of note: in one case in London four persons were bitten by the same dog, and the period of incubation in each case was different, as the record of the fourth closes with—"This is the last of the four persons bitten by the same dog, and all have died of hydrophobia." This variety in the period of incubation is an important point for M. Pasteur to note, as it would tend to the conclusion that the period of incubation is regulated by individual circumstances and conditions in a manner and to an extent not noticeable in any other disease that I know of, the period varying in my own observations from three weeks to six months. There are other important points to which I might draw attention, observable in the previous histories of the dogs affected, which are carefully given in some of the cases, but it would require too much space to allude to them here. The chief objects I have in writing are—(1) to point out the treatment which has been eminently successful in my own practice after bites inflicted by cases of unquestionable rabies in a man, a dog, and a jackal, and particularly in the case bitten by the jackal, which seemed to be a perfectly hopeless one; and (2) to advance an opinion as to the probable cause of the present extraordinary prevalence of rabies, which would seem to be almost epidemic, and the best means of stamping it out. The pattern cases which I will take to illustrate my treatment occurred in India, and were as follows. The first, that by a dog, was my own case; the second, that by a man, happened in the person of one of my native medical subordinates; and the third, that by a jackal, was the case of a native gardener.

In 1860, when in medical charge of the station of Cuttack, in Bengal, while sitting at breakfast, and now and then giving my little dogs, which were house dogs, something to eat, a little English terrier suddenly dashed across the room from one of the corners and seized my hand, putting a tooth nearly through one of my fingers, and having done this rushed out of the room. This little dog was the favourite of all, and I at once concluded that it must be mad to have done what it did, and, taking my knife out of my pocket, laid my finger open where the tooth had entered, and then when the blood flowed sucked the wound and spat out the blood. I also applied a ligature to the base of the finger and got some tepid water, and putting my hand into it made it bleed freely and continuously, and then, when it had, as I thought, bled sufficiently, bound up the wound. I did not kill the dog, but had it caught by means of a light bamboo suddenly and carefully dropped over its back, and, slipping a collar (with two light but strong chains attached) over its neck, safely secured it, as I was naturally anxious for my own satisfaction if possible to prove the dog was not mad. All was in vain; I kept the animal alive for three days by dipping a sponge in strong soup and then presenting it to the dog, who seized it, thus making him unintentionally swallow the amount which he squeezed out of the sponge by the bite. Now, in this case there could not be a doubt that the dog was mad when it bit me, though, of course, it may be urged that perhaps there was not enough poisoned saliva to infect me, and every case of recovery is open to this question. But judging from the appearance of the dog when caught, I am satisfied that the promptness and thoroughness with which I extracted the poison was the means of saving my life.

The second case, that of the chief native medical subordinate attached to the Station Hospital at Cuttack, occurred some five or six weeks after I was bitten, and, being the medical officer in charge of that hospital, I had an opportunity of watching the case throughout. A poor native suffering from hydrophobia was here admitted, and his agonies were such that I ordered a sedative to be given. The sight of the fluid brought on a violent paroxysm of spasm, and, with a shriek more like the yell of the animal that had bitten him (a jackal), he seized the subordinate by the back of the hand with his teeth, though he quickly let it go, and no time had to be lost in treating the subordinate, who, as was to be expected, was in the greatest alarm. I had the hand at once washed with tepid water, and a ligature applied round the wrist. I then with a knife made all the portions of injured skin bleed freely, and after seeing that the subordinate had no injured surface on the lips or mouth, induced him to suck the wound, which he did, and subsequently I applied a cupping-glass, and when I felt sure all the poisoned saliva had been removed, I dressed the wound in the usual manner, and, as in my own case, it healed up rapidly, and was followed by no bad consequences whatever. When we remember how very trifling a scratch will suffice to satisfactorily admit vaccine lymph, if active, into the system, we cannot be too careful in our search for the marks of dogs' teeth. Till death ended the sufferings of the patient in the hospital, he had to be held by the knot of hair on his head usually worn by natives of Orissa, as involuntarily, apparently, he tried to bite, with the view, I suppose, of preventing fluids being given to him, as he knew the suffering that followed the attempt to swallow them. In this case there could be no possible doubt about the quantity of poisonous saliva present when the bite was inflicted, as it was trickling from the poor sufferer's mouth, and yet the treatment effectually prevented any of the virus finding its way into the system of the subordinate.

The third case was the most serious of all, and occurred while I was encamped in the Government Botanical Gardens at Saharupur. The man was raking under a bush, when a jackal rushed at him and seized him by the cheek, and, inflicting a fearful wound, ran off into the gardens. The cry of "mad jackal" was raised, and the gardeners soon finished him, as he had apparently laid down under the bush to die when disturbed by the rake, and was so weakened that he was soon run down and killed. When I saw the animal there could be no doubt of this being a case of hydrophobia in the last stage, and when the man was bitten the poisoned saliva must have been in large quantities on the animal's mouth and lips. My tents were a hundred yards distant, and the man was brought to me at once. The wound had a dreadful appearance, and it seemed hopeless to think of removing all the virus. There was, however, only one bite, which included almost the entire cheek. I first of all washed the cheek and wound with tepid water, and then with a knife from my pocket-case made the parts bleed freely wherever the teeth had entered, and by means of a tumbler and a little spirits of wine extemporised a cupping-glass. There was, however, a spot where this mode of extraction could not be applied, and I felt nothing but the mouth could extract the poison here. Immediately the man was brought to my tent and I had seen him, I asked if he had any relatives in the gardens, and on being told he had a brother I sent for him at once. When he came, after examining his mouth and lips to see if they were free from conditions likely to favour absorption of the poison, I pointed out to him how he might hope to save his brother's life—viz., by sucking out the poison in the part where I could not apply the extemporised cupping-glass. He at once put his mouth to the wound and sucked it freely. When I thought he had removed all the poison, I dressed the wound in the usual way, and it healed quickly. As a precaution after each suction of the wound and spitting out of the blood, I made the man thoroughly rinse his mouth with tepid water. I heard of both these men years after, and was told they neither of them ever suffered in the least, either from the bite or the suction of the wound. In this case I used neither caustic nor the cautery, as I felt to be effectually applied they would almost certainly lead to the sloughing of the cheek. The result of the suction proved that it was most successful and simple,

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while in every case this mode of treatment facilitated and expedited the healing action in the injured, it may be lacerated, parts. I dwell at length on this case, as it is a characteristic one as regards the treatment I recommend, and undoubtedly seemed a peculiarly hopeless one. I can only add, therefore, that none need despair after the recovery of this case and the harmlessness of the operation of suction. Without doubt it is always better for the person bitten to suck the wound himself; when this is impossible, as in the case of the gardener, then the act of suction can be safely done by others, if the precautions taken in the case of the gardener's brother are carefully carried out.

During my thirty years' service in India, being very fond of dogs, I had not only a considerable number, but also a great variety, and among them only two cases of hydrophobia occurred: one, the case of the terrier which bit me, and the other that of a well-bred spaniel, which I used for pheasant shooting in the Himalayas. The case of the former exhibits the treatment I recommend, and that of the latter the mode of preventing the disease spreading. These two dogs illustrate also the very opposite symptoms as regards their behaviour to their master. The terrier, my pet dog, without any cause or warning other than sulking for a little time, rushed at me and bit me; the spaniel, my sporting companion, passed me on the road, as if it wished to avoid me. I at once felt something must be wrong with the dog, and on my return home the servants told me it was missing. On looking for it near the house, I saw it lying in the shade of a bush, gasping, in a condition of fully developed rabies, and, getting a gun, I shot it at once, before it had started on its mad race and bitten, and thus infected, either man or beast.

Now I would close with a word or two regarding what seems to me the cause of the present epidemic of rabies and the mode of stamping it out. Though nothing but the virus of rabies can produce rabies, yet when segregation favours the spread of the disease, as is the case now, an epidemic quickly results. My Indian experience has satisfied me that if the subjects likely to be affected are limited, the tendency of the disease is to die out, otherwise rabies would be an alarmingly common disease in that country, whereas it is, everything considered, a rare disease. Rabies, without doubt, is a disease due to a special virus, and not to conditions of living or food, otherwise I should have seen numbers of cases of the disease among the dogs and jackals at Juggernauth, where, at certain periods of the year, the food of these animals used to be human corpses, generally the victims of cholera, and little else, and yet among these dogs and jackals in their natural state I never saw a single case of the disease in four years. Thus it will be possible to stamp out the disease, not by removal of the conditions credited (?) with the production of the disease (as if they exist they are unknown further than the insertion of the virus), but by the reduction of the causes which propagate it, and which have lately increased to an extent which would have been incredible had not the results of the late police action told in unmistakable terms what a "plague of dogs" we have been suffering from. One case of rabies till very lately had the power of propagating the disease to an extent which was impossible thirty or forty years ago. Let us, therefore, aim at reducing the number of uncared-for dogs to be met with by a dog suffering from rabies, and we shall then reduce the cases of the disease, till the last mad dog is put an end to, before it has spread the contagion; but this can never be the case with such numbers of uncared-for dogs about. The owner of a dog exhibiting suspicious symptoms should be obliged to place it under supervision, or be answerable for it, so that if rabies is developed, while under this supervision the dog may be destroyed and the possibility of that characteristic symptom of hydrophobia, the mad-dog race, which is the most fertile source of the dissemination of the contagion, effectually prevented.

Blackheath, S.E.

A FEW days ago a beautiful obelisk of red granite, erected by a few friends to the memory of the late Dr. Alexander Hogg, of Workington, in the new cemetery of that town, was unveiled with appropriate ceremony. Dr. Hogg was medical officer of health for the town, and during his short but successful practice of four years and a half endeared himself to all. He died on Nov. 2nd, 1883, while on a visit to his father's house, Larbert, Stirlingshire, at the early age of twenty-six years.

A CASE OF DELIRIUM TREMENS CAUSED BY CHEWING TEA.

BY W. B. SLAYTER, M.D., L.R.C.P. LOND., M.R.C.S. ENG.,
LATE CONSULTING SURGEON, PROVINCIAL AND CITY HOSPITAL, HALIFAX, NOVA SCOTIA.

ON November 10th, 1879, I was summoned by a lady to see her female servant. The girl complained of sleeplessness, nervousness, and repeated twitchings of the muscles of the face and extremities, which would continue for several minutes at a time. These symptoms had been present for several months previously. Her mistress informed me that the girl had been acting strangely for several days. She was wandering in her mind at times, and imagined people and evil spirits were about her seeking to do her harm. She had not slept for several nights, and on one or two occasions had been found at night wandering about the house. Pulse 96 and small; tongue dry and brown; eyes suffused; irregular action of the heart-weight at præcordia; sallow complexion. A dose of bromide of potassium and hydrate of chloral gave her a good rest for the night, and next morning she was sent home to her mother.

At 4.30 A.M. on the 13th I was again summoned to see her. Some men had found her walking about one of the wharves of our city, in the neighbourhood of her mother's house. They tried to persuade her to go home, but she broke away from them and endeavoured to jump off the end of the wharf, when she was caught and taken to her home. I found her with a pulse of 110°, a very dry and brown tongue, suffused eyes, no marked increase of temperature, violent delirium, and tremulous hands and arms—in short, the well-marked symptoms of delirium tremens. Her mother informed me that she had complained of a good deal of pain in the abdomen, and on examination I found a smooth, quite hard tumour in the right iliac region, half as large again as an ordinary orange. Owing to the violent delirium I was unable to find out whether it was tender to the touch or not. A hypodermic injection of morphia somewhat relieved the nervous symptoms. A brisk cathartic brought away a mass of hardened fæces, followed by a large quantity of a thickish tarry-looking excreta, which seemed to be made up of tea-leaves in different stages of maceration, quite a large proportion, probably a third, being tea-leaves quite unchanged in appearance or colour. Bromide of potassium and chloral in a few days quieted the nerve-centres; good nursing, proper diet, and tonics soon restored the patient to her usual health. After the action of the cathartic I found the abdominal swelling somewhat lessened in size, but it was not until several doses at intervals had been administered that the tumour entirely disappeared. After each dose a quantity of tea-leaves were expelled. In about three weeks the evacuations were normal in appearance, and her general health was fairly restored.

I had lost sight of this patient until October last, when I was once more summoned to see her. It is not necessary to again enter on a history of the case. The same well-marked symptoms of delirium tremens were present; there was no tumour to be found, but the evacuations contained a plentiful supply of tea-leaves. The same course of treatment soon restored her to health, and I trust a longer continuance of tonics and building-up treatment may succeed in preventing a recurrence of the symptoms. The patient informed me that when about seventeen years of age she went to one of the New England towns to work in a factory, and there contracted the habit of chewing tea—a habit, she stated, quite common amongst the factory girls. She thought she chewed on an average about half a pound of tea daily, and some days more. It made her feel better able to work. Of course, as to quantity her estimate may not be depended on. She had never been addicted to alcoholism, and ascribed her attacks solely to the tea-chewing. She tried to give it up, but felt so nervous and fidgety as to be compelled to return to the old habit. This second attack caused me to copy from my case-book the notes taken at the time. The only points of importance are the *cause* and the *repeated and continuous muscular twitchings*. Of course most physicians have met with many cases of great nervousness and fidgetiness occasioned by excessive tea-drinking, but I cannot find any record in any of the works on medicine or materia medica within my reach of such severe symptoms being induced by tea-chewing. Ringer tells us that "the

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Physiological Committee presided over by the late Dr. Hughes Bennett concluded that the *motor nerves are unaffected.*" The long-continued repeated muscular twitchings would seem to contradict this portion of the committee's report.

ROTHELN: A POINT OF DIAGNOSIS.

By JAMES GREY GLOVER, M.D.

THE extreme infectiousness, notwithstanding the comparative harmlessness, of German measles makes it very desirable to find early indications of its presence. I have been struck lately in two or three cases with the fact that the earliest symptom to excite the notice of the patient has been a swollen gland in the neck at the back of the sterno-mastoid muscle. One young lady lately consulted me about such a gland of a considerable size, and without any obvious explanation in its neighbourhood. Four days later the rash of Rotheln appeared and explained the mystery, and the single gland had become the usual chain on both sides of the neck. When the disease is prevalent, or already exists in a family, and a swollen cervical gland in a young person appears without obvious reason, it may be suspected that the disease is already in the system. The occurrence of cervical glandular enlargements is of course one of the commonest and most interesting notes of this least pyrexial of the eruptive diseases, and the early appearance of the symptom coincidently with the rash, or even a day before, as Dr. Goodhart describes in one case, is also known. But its appearance four or five days before the eruption seems worth noting for diagnostic purposes.

Highbury-place, N.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

SEAMEN'S HOSPITAL, GREENWICH.

ULCERATIVE ENDOCARDITIS; ANOMALOUS SKIN ERUPTION; INTESTINAL ULCERATION; DEATH; NECROPSY.

(Under the care of Dr. CURNOW.)

DURING the last few months, especially since the delivery at the Royal College of Physicians of the lectures on Malignant Endocarditis, we have published several cases of ulcerative endocarditis, but none of them have presented the unusual features of the following case, which is well worthy of record. The difficulty of diagnosing the exact cause of the disease in the absence of evidence of cardiac mischief was insuperable. We are indebted for the following notes to Mr. E. H. Booth, M.B., house-physician.

James K——, aged forty-five, was admitted on March 12th, 1886. On examination his condition was found to be as follows: He was lying deep down in the bed; face flushed; pupils dilated; excited and delirious—so much so that all attempts to procure a history failed. His tongue was rather enlarged, red, dry, and glazed. Temperature 103·5°; pulse 120, very weak and fluttering. Decided œdema of feet and ankle; effusion in both knee-joints; well-marked purpuric rash on both legs, mostly on the inner sides; purpuric blotches on the inner side of the thighs, and a few purpuric spots on the front of the thighs. There were erythematous patches with petechiæ over the parts exposed to pressure—i.e., over both hips, shoulders, and elbows. There were a few livid red patches over some of the joints of the hands. A few petechiæ were scattered over the surface of the abdomen and chest, also a few spots, looking very much like typhoid spots in character. His abdomen was distended and tumid; resonant all over. During the first night he was in the hospital he passed a very loose stool, greenish, and tinged also with a little blood. Heart listened to very carefully; beating rapidly, and sounds very feeble; no bruit to be heard. Chest resonant all over; moist sounds at both bases; no other physical signs. Urine very acid; sp. gr. 1026; loaded with albumen; deposit of urates; no blood or casts.

It was thought that the patient might be suffering either from pyæmia or severe typhoid. He was given five grains of quinine every four hours, and twelve ounces of brandy were ordered. His temperature, taken every two hours, kept between 103° and 104°, in spite of wet packing. He gradually sank, and died on the night of the 13th.

Post-mortem examination.—A good deal of cadaveric lividity. Rigor mortis marked. Abdomen opened. The small intestines were rather distended; pale, but presenting at intervals patches of congestion pointing to ulceration. The intestines were opened up, and there were discovered about fifteen to twenty ulcers; the majority of these were round, with ragged edges; each ulcer was surrounded with a large patch of congestion; at one or two places the ulcers were longitudinal in direction, and occupied Peyer's patches. At a few other places were patches of congestion, and in the centre of each patch a small grey hard nodule about the size of a pin's head, and not unlike tubercle in appearance. Most of the ulcers were in the lower part of the ileum, but one or two small ulcers existed near the duodenum. Heart: Old pericarditis, there being dense adhesions over most of its surface; the pericardial cavity remaining contained a small quantity of semi-purulent matter; heart not enlarged; right side normal; aortic valves thickened, especially towards the edges; mitral valve thickened; along the edges was a continuous fringe of fine granulation and ulceration; at one spot the ulcer was about half the size of a threepenny piece. Kidneys enlarged, pale; capsules not adherent; all over the surface were seen a number of small yellow spots, each surrounded by a halo of congestion, each spot being a minute abscess; on section it was pale and dotted all over with minute abscesses and points of congestion. Spleen much enlarged; about three times the normal size; very soft and congested; no infarcts to be distinguished. Lungs very œdematous and congested; almost black with congestion towards bases; no infarcts to be distinguished.

The case is of peculiar interest from the difficulty in arriving at a diagnosis, the anomalous character of the eruption, and the numerous ulcers in the intestines from infarcts carried from the diseased valves. It is most uncommon to find so many intestinal ulcers from this cause.

ST. GEORGE'S AND ST. JAMES'S DISPENSARY.

CASE OF ERYTHEMA NODOSUM; REMARKS.

(Under the care of Dr. FRANCIS HAWKINS.)

MARY D——, aged thirty-five, married (no children), tailoress, born in London, was admitted on Aug. 30th, 1885, complaining of sore-throat, thirst, anorexia, and constipation. She had been ill about one day. Her father was a Pole. He died from abscess of the lung. Her mother, a Frenchwoman, died in an asylum. She has four sisters. Two are quite well and have never been ill. One older than herself had an illness (erythema nodosum) similar to her own four years ago. The other sister, also older than herself, had a fit four years ago; the medical attendant pronounced it epilepsy. She has had frequent repetitions of the fits, and last August was placed in an asylum, where she still remains. There is one brother quite well. There is no history of rheumatism ever having occurred in the family. Her home is comfortable. She works at her calling away from home. Eleven years ago (at the age of twenty-four) the patient had pains and swelling in the ankle-joints, and a few red painful spots on her legs. Her medical attendant informed her she had rheumatic fever, but she was up and about the whole time. From this attack she entirely recovered, and remained perfectly well until four years ago (at the age of thirty-one), when she felt weak and had sore-throat, for which she went as an out-patient to King's College Hospital. Three days after attending there she felt pains in her joints, and some spots came out on her legs, similar to the spots which came out seven years previously This time the spots came out on the arms as well as on the legs. (It was about this time that her sister also had pains in her joints and spots on her legs similar to those on the patient; her sister has never had a second attack.) From this she soon recovered, and continued quite well until the 30th of August, 1885, when

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she was admitted to the dispensary complaining of sore-throat, &c. She is a stout woman, with a full, red face, and dark hair.

The patient was treated for ordinary sore-throat, and in three days returned complaining of having spots on her legs. At this time she had one spot, red, prominent, and very painful when touched, situated over the right tibia; and one over the left tibia, similar in character, but smaller in size. On Sept. 2nd she complained of much pain from these spots, and, being unable to walk, took to her bed. On the right leg was a swelling about the size of a hen's egg over the anterior border of the tibia, elevated, red in the centre, resembling a bruise at the circumference, and very painful to the touch. On the left leg was a similar but smaller swelling over the tibia and near the ankle. Smaller spots, but of like character, existed over the styloid processes of the right and left ulnar. There was no marked heat or increase of temperature.

Sept. 8th.—Left arm: One spot between the second and third phalanges of the left hand; a few spots on the outside of the arm near the insertion of the deltoid. Right arm: Wrist swollen, and very painful; elbow also swollen; some spots on the arm. Left leg: Bruise-like appearance of spot, as before mentioned; fresh spots on inside of leg and behind the knee. Right leg: Same spot present, and still looking like a bruise.

12th.—Fourteen spots on left arm, mostly on the extensor surface. Spots on leg still present. Right arm: Twenty spots, varying in size from that of a pea to that of a sparrow's egg. Wrist and elbow-joints still somewhat swollen, but less painful.

18th.—The spots all present, presenting a bruise-like appearance.

22nd.—Spots very faint. Patient got up on the 21st. On each occasion of a note being made the temperature was taken, but on no occasion had it risen. Circulatory system: No cardiac murmur perceptible. Urinary system: Examined on first occasion only; urine then clear; no albumen.

Remarks by Dr. HAWKINS.—While there is no history of rheumatism or rheumatic tendency in the family antecedents, we have a marked neurotic history, the mother having died in an asylum, and a sister having epilepsy frequently for four years, and then having to be placed in an asylum; then we have erythema nodosum in another sister; and we have recurrence of the disease in the case under review—the first time when twenty-four years old, the second when thirty-one years old, and the third when thirty-five years old. The former attacks were, I think, beyond doubt erythema nodosum; the patient herself recognised the resemblance between this attack and her former ones, and the resemblance of her disease to that from which her sister suffered four years ago. This case may be said to resemble rheumatic fever in the following points: Thirst, anorexia, constipation, and sleeplessness; the appearance of the spots and swelling of the joints being preceded on two occasions by sore-throat, then pain and swelling of the joints. It differs, however, from rheumatic fever in there being no rise of temperature and no sweating; and there was no cardiac affection left.

MOUNT GAMBIER HOSPITAL, S.A.

ABSCESS OF BRAIN; CYST CONTAINING NECROSED BONE; DEATH; NECROPSY; REMARKS.

(Under the care of Mr. A. WORSLEY POWELL, Assistant Colonial Surgeon and Medical Officer.)

H. V——, a German, aged twenty-six, three years resident in the colonies, was brought to this hospital by the police on the evening of Feb. 18th. Before the police found him it appears he had been lying in a tent for three days unattended and in a semi-comatose state. When reported Dr. Ockley of Penola was sent for and ordered the man to be removed to this institution. Dr. Ockley's notes are as follows:—"H. V——, semi-comatose, with loss of speech. Pupils contracted, with only semi-sensibility. Evidently oppression on brain, probably embolism from some injury or obscure obstruction of the circulation. No opportunity for treatment. Forwarded to Mount Gambier Hospital."

On admission the deceased, aided by a porter, walked to his bed, but he could neither speak nor hear. He seemed in a state of great stupor. Temperature 104·6°. Pupils contracted and insensible. He passed a very restless night, tossing about and moaning continually. There was no paralysis.

Feb. 19th.—At 6 A.M. by signs he asked for his trousers, seemed much better, and drank some milk, the temperature being 104·8°. He sat upright in bed for nearly half an hour but still could neither speak nor hear. Questions were written, but he did not seem to understand them, making no signs in reply. When asking for his trousers he pointed to his legs and then to some trousers belonging to a patient in the next bed. When his trousers were brought he put them on and seemed satisfied. At 7 A.M. he had a slight epileptiform seizure and relapsed into a semi-comatose state. At 4 P.M. he had strong convulsions, vomited a large quantity of watery fluid, and died shortly after midnight.

Necropsy.—Body well nourished. No external marks of injury either on head or trunk. No traces of syphilis. When removing the skull-cap the saw ran through the left parietal bone immediately above the ear, and a large quantity of pus (greenish in colour and of offensive odour) rushed out. The bone here was but a mere shell, and for a space of about one inch in circumference could easily be broken with the finger-nail. The dura mater was very firmly adherent to the bone and could not be separated over a space of about two inches square. The finger, when introduced into the opening whence the pus was coming, passed immediately into a large cavity, the size of a small orange, the cavity leading into the lateral ventricle. About midway, lying loosely in this cavity, a cyst was found. It was hard, black, and resembled in size and shape a small Barcelona nut. It measured an inch and a quarter in diameter. On opening the cyst, the membrane of which was very tough, there were found three small pieces of necrosed bone. The pus and bone were, of course, verified under the microscope. The heart and lungs were quite healthy; the liver was very much congested, and weighed 5½lb.

No history concerning the deceased could be gathered by the police, but on the day following his death a friend who had emigrated with him, and had been his constant companion for some years, was seen by Mr. Powell, who obtained from him the following history: When deceased was fourteen years old he fell from a ladder on to the iron wheel of a barrow, striking his head. He was unconscious for some days, and very ill for over two months. Since then he had had frequent "fits," which left him weak for two or three days. He had had none of these "fits" after coming to the colony until about fourteen months since, so that there was an interval of nearly two years. He suffered greatly from his head, complaining of constant and violent headache. He had frequently taken medical advice for this, but always without relief. He also complained of being severely troubled by cramp. He was a temperate, hard-working man; could do a hard day's work with any man, except for a few days after the "fits." He had been working up till February 13th. He never had any symptoms of paralysis.

Remarks by Mr. POWELL.—I am not aware whether any similar case is recorded. In vol. i. of "Holmes's System of Surgery," third edition, a case is mentioned of a cyst containing pus following diseased temporal bone. In this case there was no disease of the ear, there had never been any discharge from it, and the temporal bone was quite healthy. There was no sign of any scar on the scalp over the injured bone. It seems marvellous that in such a case the man should be able to work and go about with all his faculties unimpaired until a few days before his death.

Medical Societies.

MEDICAL SOCIETY OF LONDON.

Littre's Hernia.—Simple Meningitis.

THE last ordinary meeting of this Society was held on Monday last, Mr. R. Brudenell Carter, F.R.C.S., President in the chair.

Mr. J. H. MORGAN read a paper on a case of Littre's Hernia. Having described Littre's original cases, he proceeded to relate his case, which was interesting, in addition to its rarity, from the circumstance that no gangrene of the herniated portion of the intestine occurred. The patient was an elderly woman aged sixty-four, who had suffered from constipation for from two to three years, and had also vomited considerably. Some blood was passed per rectum from time to time. Purgatives and enemata were ordered

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to overcome the constipation, but tenesmus, with the passage of blood and mucus, only resulted from this treatment. Some umbilical pain was complained of. She was admitted into Charing-cross Hospital in a state of exhaustion. There was no local tenderness at any part of the abdomen, and but slight tympanites. A large flaccid protrusion of the vagina containing bowel presented many excoriations on its mucous surface. There seemed to be no reason for regarding the obstruction of the bowels as situated in the vaginal protrusion. Belladonna and opium were ordered. The temperature was 97° and the pulse 92. There was little vomiting, but it was stercoraceous on one occasion. Mr. Morgan performed a limited laparotomy, and the colon was found collapsed, but the patient was not able to bear further operation and died the next day. At the necropsy the lungs were œdematous and the left ventricle of the heart hypertrophied. There was a Littre's hernia, involving but a small portion of the circumference of the small intestine, and protruded a short way into the femoral canal; there was no gangrene of the herniated protrusion. The uterus was greatly atrophied; there was double rheumatic arthritis of the hip-joints. The symptoms as described by Littre were detailed, showing that in this form of hernia the bowels acted regularly; there was seldom hiccough and vomiting, which was never stercoraceous; the herniæ never attain a large size. In Mr. Morgan's case several of the alleged symptoms were wanting, and the case looked more like one of malignant disease of the colon.—Mr. FREDERICK TREVES pointed out that the name of the surgeon was Littre (without an accent), who flourished in 1700. He believed that Littre's first case was really a Meckel's diverticulum, which had become filled with concretions, and contained in a hernial sac. Most of Littre's hernias were of femoral origin, and occurred more frequently in females; it was limited to enterocele, the omentum not being involved, and more common in old than recent hernia. The obstruction of the intestines in strangulated hernia was probably not mechanical, but due to nervous influences. He considered that in Littre's hernia the symptoms were the same, though milder than those of ordinary strangulation. In cases of operation for strangulated hernia, Mr. Treves said that he now generally adopted a method which appeared to him to give the very best results in the way of combating collapse, especially in old people. The stomach was emptied of its feculent contents by means of the stomach-pump, and about a pint of hot water used to wash the organ out thoroughly. In addition to removing collapse, it prevented the vomiting due to the anæsthetic. The injection was made just before the abdominal sutures were inserted.

Dr. W. H. DAY read notes of two cases of Simple Meningitis. The first case was that of a girl aged twelve, who had all the symptoms of tubercular meningitis. The post-mortem examination showed intense congestion of the pia mater, without any tubercles to be detected by the naked eye. Enlargement of the glands of the abdomen was the only other abnormality detected, and this was said not to be tubercular. The second case presented similar difficulties in diagnosis; it was also a girl, aged ten.—Dr. ISAMBARD OWEN asked on what precise anatomical points he had established the diagnosis of meningitis in the first case, which had lasted for fourteen weeks.—Dr. C. H. F. ROUTH testified to the difficulty of diagnosis in the early stage of diseases of children.

ACADEMY OF MEDICINE IN IRELAND.

Duties of Medical Officers of Health.—Muscular Anomaly of Right Upper Extremity.—Nerve-supply of Short Muscles of Thumb.

IN the sub-section of State Medicine, held on Feb. 4th, the PRESIDENT (Dr. Jacob) delivered an address on The Poor-law Medical Charity System of Ireland.

Dr. EDGAR FLINN read a paper on the Duties of Medical Officers of Health in England and Ireland contrasted. He referred to the great disadvantages under which the Irish health officer laboured in the execution of his duties, and deprecated the system of appointing dispensary medical officers as medical officers of health, and the paltry stipends of ten and fifteen pounds a year that they received. There were few medical officers of health who took any great interest in the sanitary condition of their districts, and those who furnished their boards with monthly reports were unheeded, and but scant notice taken of their suggestions. In England, on the contrary, the recognised duty of the urban or rural sanitary authorities was the health of the people; the medical officer of health was obliged to make monthly or fortnightly reports, which were duly discussed, and the officer's suggestions promptly acted upon. The sanitary condition of the towns and villages throughout Ireland showed very plainly to the most careless observer whether the provisions of the Public Health Act were carried out and enforced or not. It was yearly becoming more evident that the Irish Local Government Board would have seriously to consider the question of districts and unions being combined for the better administration of the Public Health Act. In lieu of there being such a plurality of medical officers in each district and union, with a superintendent medical officer of health, there should be one or, at most, two who should be men free from the cares of practice, with special sanitary knowledge, and whose pecuniary interests would not be perpetually at war with a fearless discharge of their duties. This combination of districts had worked very well in England, and it was one of the main reasons why the Public Health Act was so thoroughly and efficiently carried out. The same combination of districts should hold good in Ireland.—The REGISTRAR-GENERAL said he was one of the earliest persons who took an interest in promoting the very service which Dr. Flinn had condemned. One of the reasons for adopting the present system at the passing of the Public Health Acts, 1874-78, was that the English system had worked so badly that it was desirable to try something else in Ireland. The best health officers had to retire consequent on the authorities letting that system go to pieces. The want of independence of Irish medical officers applied equally in England. If the medical officer were not paid a large salary, or had no private practice, he could not be independent; and if in private practice, there was a possibility of some of his patients being on the board. The unions in the west of Ireland could not supply funds to maintain public health officers independent of private practice. There were reasons why the dispensary medical officer should be also the best officer of health. In a large number of infectious cases the dispensary doctor was the medical attendant, and he was accordingly enabled at once to isolate such cases and stop the spread of the disease. Thus the notification of the infectious disease was avoided, and the necessary precaution taken, without the difficulty experienced in cases of compulsory notification by an independent practitioner. Moreover, the dispensary doctor saw many things dangerous to health as he went through his district, and these he remedied at once. Hence the advantage of combining the two offices. Apart from certain difficulties and occasional mistakes, there was in Ireland the best sanitary system of police that existed in the world.—The PRESIDENT said he was in the happy position of concurring with both Dr. Flinn and the Registrar-General. The Irish system deserved many animadversions, while, at the same time, he was sensible of the desirability and importance of having the medical officer of health one and the same with the dispensary medical officer. In Ireland there was a corps of 860 officers, who went every day in the week into places where there was most likelihood of the existence of dangers to health. They were their own informants, and therefore he preferred a widely scattered service, such as the Irish dispensary service, to a concentrated, centralised service, such as Dr. Flinn advocated. But the Irish medical officers were badly paid, and worked under discouragement.—Dr. FLINN, in reply, said he bowed to what Dr. Grimshaw had said, but, at the same time, repeated, from what he had seen here and from his experience in England, that he could not forego what he had stated in his paper. In England the combination of districts had been a success. The districts were well managed, and there never was any difficulty.

In the sub-section of Anatomy and Physiology, held on Feb. 11th, Dr. BROOKS exhibited the Pisi-uncinatus Muscle, as one of exceptional rarity, which he had discovered in dissecting a hand.

The Chairman (Dr. HEUSTON) made a communication on a Muscular Anomaly of the Right Upper Extremity, which consisted of two sets of muscular fibres, the lower of which passed from the latissimus dorsi across the first stage of the brachial artery, while the upper, taking origin from the cartilages of the sixth and seventh ribs, crossed the axilla

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and third stage of the axillary artery, to be attached with the former set of fibres into a broad triangular tendon, the external border of which passed over the biceps and pectoralis major to be attached into the deltoid, while from its inferior angle a tendon passed to the internal condyle of the humerus.—Dr. FRAZER asked what was the exact relation of the upper muscle as a homologue to the third pectoral found in birds of powerful flight?—Dr. BROOKS considered the chondro-epitrochlearis as a very rare muscle. In two or three sessions of hard work he had not met with a single specimen.—The CHAIRMAN, in reply to Dr. Frazer, said none of the fibres bore any relation to the coracoid process.

Dr. BROOKS read a paper on Varieties in the Nerve-supply of the Short Muscles of the Thumb. He said his object was to show that, in a large proportion of cases, the outer head of the flexor brevis pollicis received a nerve-supply from the deep branch of the ulnar nerve, whereas in all the English text-books the outer head was described as being supplied by the median only. Dr. Brooks then alluded to the different ways in which various authors had described the thumb muscles, and quoted the description in the last edition of Quain's "Anatomy," in which the outer or radial head of the flexor brevis is shown to consist of two parts—a larger superficial portion and a fasciculus springing from the deep origin of the muscle. He had invariably found that when one of these portions received a supply from the ulnar, the nerve also extended to the other.—Dr. HENRY KENNEDY said one important aspect of the subject was how far nerve-supply and muscular change accounted for the extraordinary difference that existed in different individuals as regards the use of the hand; for instance, in painting, carving, playing, writing, &c. Again, there was a remarkable difference in the power different people had of facial expression. Thus, Garrick, with the slightest movement, could express the idea he wanted to convey without saying a word. Another important aspect of the subject was that of its bearing on local disease of nerves. Recent investigations indicated that tabes dorsalis, locomotor ataxy, and writers' cramp were not dependent on the spinal cord at all, but on local disease of the nerves themselves.—Dr. FRAZER said their knowledge of animals and of the nerve and arterial supplies was in a transition state. What they had been in the habit of calling anomalies were now referable to the real causes in muscular anatomy as being the representatives of things in other animals, and under other conditions, pointing to the existence of a law.

CAMBRIDGE MEDICAL SOCIETY.

A MEETING of this Society was held on March 5th.

Primary Encephalo-scirrhus of Common Bile-duct.—The PRESIDENT (Dr. Bradbury) read the notes of the case of W. L——, aged fifty-five, married, a laundry-man, admitted on Nov. 5th, 1885. His mother had suffered from rheumatism, and one brother had died of phthisis; there was no former history of new growths. He had served in the army during the Crimea and the Indian mutiny, being invalided home from the latter for virulent ophthalmia, which led to total blindness in both eyes. He had gonorrhœa when in the army, but no syphilis, and drank heavily of both beer and spirits in youth, but not of late. His present illness began with slight cold on September 16th, followed by vomiting and pains in the abdomen. On October 15th jaundice first made its appearance; and from this time the patient began to lose flesh and suffered much from itching of the skin. The heart was found to be normal, and a few râles were heard in the lungs behind. Liver dulness began at the sixth interspace, and extended to the lower border of the rib cartilages in the nipple line; slightly tender on pressure, but no irregularity or swelling detected. Urine 1020, dark-brown colour, acid, no albumen or sugar. The patient continued in much the same condition, colour varying slightly from time to time, with gradual loss of flesh and strength, being at times troubled with diarrhœa, till November 30th, when a small abscess appeared over the right eye; from this time other abscesses appeared, always in the subcutaneous tissues, principally on the thighs and abdomen, but nothing was ever felt over the liver, and the patient gradually sank on February 10th, 1886. The temperature remained normal till the abscesses became general, and then fluctuated from 101° to 103°. The treatment was principally with nitro-hydrochloric acid, taraxacum, and gentian. At the necropsy, the gall-bladder was seen to be much distended and pyriform in shape. The liver was firm, tough, and elastic, not enlarged; there were a few yellowish-white nodules on the surface, in size much the same as tubercular granulations. The gall-bladder was distended with mucus, otherwise healthy. A probe could be passed with ease up the common orifice of the bile and pancreatic duct, and into the common duct, and thence to the portal fissure, but not up the cystic duct or pancreatic duct; the mucous membrane extending for half an inch from the apex of the ampulla seemed quite healthy; immediately above this the mucous membrane was found completely destroyed to the extent of one-third of an inch, and replaced by a somewhat firm stricture with an irregular surface; then the mucous membrane again abruptly commenced, as also the dilatation of the common bile-duct. On the under surface of the right lobe of the liver was found a large abscess firmly adherent to the liver substance, and connected with the pelvis of the kidney by a small fistulous opening. Both kidneys were congested and bile-stained, and scattered through their substance were numerous small yellowish-white bodies, some of the older ones presenting a distinct puriform centre. The spleen was somewhat enlarged and soft, and the pericardium showed a layer of recent coagulated lymph. The bladder contained from two to three ounces of grumous pus, similar to that in the abscess surrounding the right kidney. The microscope showed the stricture to be an encephalo-scirrhous carcinoma, and the nodules in the liver and kidneys small abscesses. The President said it appeared to be a case of primary cancer affecting the common bile-duct, and he was unable to find any case on record. The abscesses appeared to be secondary to the one about the right supra-renal body, but the causation of this one was doubtful.

Primary Malignant Disease of Prostate.—Mr. CARVER showed this specimen, taken, post mortem, from a man aged sixty-six, who was admitted to Addenbrooke's Hospital on November 4th, 1885. He was at this time suffering from frequent painful micturition. The urine contained no blood, pus, phosphates, or albumen, but he complained more particularly of fulness and discomfort after food, with epigastric tenderness and constipation. For the last four or five years the bowels had acted, as a rule, only after aperients. On admission he was rather emaciated. Pulse 54, regular; arteries slightly knotty. Examination per rectum showed the prostate to be enlarged, and on its right side a nodular projection could be felt about the size of a cherry; another of similar size was felt about the situation of the right vesicula seminalis. Fourteen days after admission he had complete retention of urine, relieved by catheter. He then complained of pain in the right hypochondriac region. The liver rapidly enlarged, and the surface was felt to be distinctly nodulated; the abdomen was tympanitic and distended. He died on December 14th, 1885. At the necropsy the prostate was found much enlarged with new growth, the growth bulging into the rectum (which was healthy). Two tumours, each about the size of a small hen's egg, were found adherent on each side to the bladder and rectum and to the pelvic wall, so that on removing the bladder these tumours were cut through. From the outer side of these a chain of secondary tumours and enlarged glands about the size of filberts stretched upwards along the pelvic walls and iliac vessels to the lumbar glands, which were similarly affected. There were a few deposits on the mesentery and many on the parietal peritoneum, especially on the under surface of the diaphragm, and there was much fluid in the peritoneal cavity. There were numerous secondary deposits in the liver, and on the visceral and parietal pleura. Microscopic examination showed the deposits were medullary in character.

Aneurysm of Arch of Aorta.—Mr. MARTEN showed this specimen, from a man aged forty-one, who had had symptoms of an intra-thoracic aneurysm for more than two years. During life a pulsating tumour was detected under the right sterno-clavicular articulation. At the necropsy this was found to be a secondary aneurysm springing from an aneurysmal dilatation of the whole aortic arch. It extended upwards in front of the innominate artery, and contained a firm laminated clot, which projected into the aorta. The upper part of the sternum was eroded by this aneurysm, as were the bodies of the third and fourth dorsal vertebræ. During life surgical interference was proposed with a view to tying the right subclavian and carotid, but it was evident that no benefit would have followed.

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Occipital Meningocele.—Mr. LAURENCE HUMPHRY showed an example of this affection. The tumour was nearly as large as a child's head, and protruded through an opening in the occipital bone, about an inch in diameter. A vertical section had been made through the head and tumour slightly to one side of the median line. It was a simple meningocele, and contained no brain. Its cavity was continuous with the fourth ventricle and posterior subarachnoid space, and the dura mater lining its walls was thickened in parts, forming bands, but there were no septa or loculi. The *iter a tertio* appeared to be closed, but there was no hydrocephalus. The cranial bones were remarkably thin, the fontanelles and sagittal suture widely open. At the posterior inferior angle of the parietal bone there were two or three spots, where ossification was defective; these were about the size of a split pea and covered by membrane.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

A MEETING of the above Society was held on March 5th.

Cardiac Hypertrophy and Kidney Disease.—Dr. CHURTON showed specimens in support of the view that granular kidneys are accompanied by cardiac hypertrophy only when there is also widespread disease of the systemic arteries. The kidneys were in this case markedly contracted and granular; there was little atheroma of the aorta and none of other arteries; weight of heart, 9½ oz. In a case shown by way of contrast the kidneys were normal to the naked eye; stripped perfectly well; there was only slight microscopic change; the entire aorta and the coronaries were very atheromatous; valves of heart competent; the renal trunks were rather stiff and dilated; other arteries were also diseased; weight of heart, 17½ oz. He had notes of several other cases to the same effect.

Asphyxia from an Orange-pip in the Trachea.—Mr. MAYO related a case of the above. The patient, a child aged eight, was brought in a state of rather urgent dyspnœa, with a history of having swallowed a button. Symptoms pointed to the obstruction being in the trachea or left bronchus. Tracheotomy produced a partial relief; inversion was tried without success. The child died from gradual asphyxia about eighteen hours after swallowing the orange-seed, which was found, post mortem, fixed about the middle of the trachea and almost completely occluding it.

Ether Inhaler.—Dr. PURDY showed and described Dr. Blaikie Smith's ether inhaler. In its employment the patient does not rebreathe his expired air. The advantages of safety, simplicity, and economy are claimed for it.

Defective or Scanty Menstruation.—Dr. BRAITHWAITE read a paper on the treatment of some cases of this affection by Dr. Greenhalgh's stem. He spoke of potassium permanganate as useless, and detailed attempts to provoke menstruation in certain cases by the introduction of caustic, and afterwards pieces of cotton coated with pitch and other such "foreign bodies" into the uterus. He had found, however, that the rubber stem invented by Dr. Greenhalgh by far the best method, the only objection to it being that previous dilatation by a tent was necessary.—Mr. MAYO and Mr. TEALE recommended rapid dilatation under ether by means of sounds. The latter had done this in about fifty cases, with only one in which any ill effects had followed. The canal should be dilated up to the size of No. 12, and no harm was produced by a slight laceration of the cervix. There was then a free vent for pent-up secretions. He had seen bad results from using tents.—Dr. FARQUHAR spoke of the uselessness of permanganate and apiol, but had obtained good results from iron and aloes and pilocarpine.—Dr. BRAITHWAITE, in reply, said he had never seen bad results from the use of tents if they were dipped in thymol soap and covered with iodoform before introduction.

Distension of Gall-bladder treated by Aspiration.—Dr. IRVING read a paper on a case of this kind. The patient, a woman of sixty, of previous good health, was suddenly seized with severe epigastric pain, gradually spreading to the right hypochondrium, with tenderness. There was slight jaundice and an area of dulness in the region of the gall-bladder, both of which increased. The icterus then decreased, but the motions remained pale. A syringe inserted into the dull area drew off a light-brown fluid. Three days after there was much bulging apparent, extending over most of the right side, as far as the crest of the ilium. Sixty-two ounces of yellowish-brown, partly viscid fluid were withdrawn by an aspirator, followed by great relief. The fæces still remained pale, but five days after there was a copious evacuation per rectum of fluid similar to that aspirated, and except on one day, on which there was a rigor with pyrexia, the patient made a rapid and uninterrupted recovery. The fluid examined by Dr. Sims Woodhead of Edinburgh contained a sediment consisting mostly of cholesterine and bile pigment.—Mr. MAYO ROBSON preferred the operation of cholecystotomy, in cases of this kind, to aspiration.—Mr. TEALE referred to a case of extreme epigastric pain, with a lump in the position of the gall-bladder, completely relieved by an hypodermic injection of morphia.—Dr. EDDISON thought that the operation of opening the bladder was a severe one, and in acute cases generally unnecessary.—Mr. LAWFORD KNAGGS recommended aspiration as preliminary to operation, as the distension itself might be partly a cause of the obstruction.—Dr. GRIFFITH spoke of the harmlessness of aspiration, and referred to a case of cancer of the pancreas, where the gall-bladder was aspirated three times, the first operation drawing off quite clear fluid; afterwards it was of a green colour.—Dr. BARRS thought that further evidence was needed as to the particular class of case suitable for cholecystotomy, as the operation was not without danger, and there had been no case of death from distension of the gall-bladder.

At a meeting on April 2nd the following subjects were brought forward.

Injuries to Joints.—Mr. MAYO ROBSON read a paper on a series of cases illustrative of the treatment of severe injuries to joints, and referred to the following cases, all of which had been under his care during the past year, and had been treated antiseptically by means of perchloride of mercury solution (1 in 2000) and dry dressings, and in every case a sound movable joint had resulted. (1) Compound comminuted fracture of the patella, with wound of the knee-joint; (2) compound comminuted fracture of the humerus, with wound of the shoulder-joint; (3) compound fracture of the humerus, with wound of the elbow-joint; (4) compound dislocation of the astragalus backwards; (5) suppuration in the knee following injury, treated by incision and drainage; (6) suppurating hæmatoma of the knee-joint in a man aged seventy, treated by incision and drainage. Several of the cases were shown.

Mr. EDWARD ATKINSON showed three patients who had been recently under his care in the Leeds General Infirmary. 1. A man aged thirty-seven, the subject of popliteal aneurysm, in whom ligature of the femoral artery was followed by gangrene of the foot, for which amputation had been performed through the calf by a long posterior flap, while the contents of the sac were still unconsolidated. 2. A boy of fifteen, who had suffered primary amputation of both arms for an accident in which he had fallen in front of some railway waggons with both limbs outstretched across the metals. The left arm had to be amputated through the shoulder-joint, and the right within two inches and a half of the head of the humerus. Both had healed rapidly without a bad symptom. 3. This was a case of enormous left inguinal hernia in a man of fifty-five, who had been admitted with urgent symptoms of strangulation. Taxis had been freely used before admission. The sac was found to be tense and dark-coloured, and on being opened a quantity of dark grumous serum escaped. Nearly, if not quite all, the ileum was in the sac, and at two points the gut was ruptured. The adherent sac was too large to be stripped and removed. The patient was under ether for an hour and three-quarters. He had no general peritonitis afterwards; and though suppuration of the sac retarded his recovery, it resulted in contraction of the cicatrix, which brought the ring within the control of a truss.

The Mountain Cure in Heart Disease.—Dr. CLIFFORD ALLBUTT read a paper on this subject. After calling attention to the growing practice of recommending exercise rather than perfect rest in some cases of heart disease, and referring to Oertel's papers, he described the plan adopted in Germany of graduated exercise by ascending hills, known as "the mountain cure." The patient, under careful supervision, was urged to walk certain paths of gradual ascent. The distress at first felt somewhat subsided, with the occurrence of perspiration, which, when the patient had attained his "second wind," was very profuse. The walks were extended each day; the diet was

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largely nitrogenous, and much fluid was drunk. Dr. Allbutt remarked that cases for this treatment must be very carefully selected, as it would probably prove rapidly fatal to cases of aortic regurgitation or atrophic conditions of heart.—Dr. CHURTON thought that in some of these cases there was a contracted condition of the pulmonary arterioles, caused by impurity of blood, which would be overcome by the free elimination produced by exercise.—Dr. C. S. SMITH referred to a recent paper, in which he had put forth views similar to those advocated by the speaker.—Dr. BARRS thought that in the class of patients generally seen in hospital practice the usual treatment by rest and drugs was comparatively satisfactory.

Pasteur's Inoculations.—Dr. C. M. CHADWICK read a paper on M. Pasteur's Treatment for the Prevention of Hydrophobia. Having recently visited Paris with a view of forming an opinion on the subject, he shortly reviewed M. Pasteur's previous work, and proceeded to follow his investigations from his first case in 1880, when he discovered the presence of a microbe in the saliva (probably only an attendant on the virus, and not the true virus of rabies) and its rapidly fatal effects. Passing then to the inoculation from dog to dog under the skin, he showed how M. Pasteur expedited the process by direct inoculation under the dura mater. The uncertainty, however, of the results led to the passing of the virus through a series of rabbits, with the effect that the length of the inoculation period was much reduced. The different results obtained in dry air from those in a moist atmosphere of carbonic acid were then explained, several of the cases having been detailed at some length and commented upon. He advanced the three theories as to the *rationale* of the treatment—viz., the diminishing of the virulence, the lessening of the quantity of the virus, and finally, what appears most likely to M. Pasteur, the probable growth of some material antagonistic to the proper development of the primary virus. Having detailed the daily processes at the laboratory both for the keeping of the supply and the method of treatment adopted, he eulogised the excellent work and marvellous modesty of the discoverer of the process.—Mr. WHEELHOUSE pointed out that the cases sent to M. Pasteur from Bradford had all passed the usual incubation period of hydrophobia, as shown by one having proved fatal. Mr. LODGE gave some particulars as to the recent Bradford cases. Thirteen persons were bitten on that day, but it was uncertain whether more than six were by the rabid dog. The usual post-mortem appearances were found in the dog's body, such as foreign matter in the stomach, though there was nothing known absolutely pathognomonic of rabies.—Mr. MCGILL pointed out the small but unknown proportion of cases of hydrophobia occurring among persons bitten by rabid animals as leading to fallacies in drawing conclusions as to the process.

The discussion was adjourned.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

A MEETING of the above Society was held on March 11th, Mr. R. J. Pye-Smith, President, in the chair.

Fœtal Monster.—Dr. ALFRED ROBINSON showed a specimen of a Sycephalic Monster—subvariety "Miops."

Cholesterine in Retina.—Mr. SNELL introduced a boy, aged ten, with Cholesterine in the Retina. He had been observed to be blind at two years of age. Now there was detached retina, which was much thickened at all parts, but especially so at the nasal side (right eye), where the glistening cholesterine plates were detected even by the naked eye, and were rendered very distinct with focal illumination on the mirror. The plates were clearly fixed in the retina, which appeared a littly wavy at parts. Mr. Snell remarked on the unusual condition, and said that cholesterine had been found in most parts of the eye.

Large Urinary Calculus.—Mr. THORPE exhibited a large Mulberry Calculus removed by lithotomy. It weighed four ounces and a half and measured two inches and a half in diameter. The patient was aged sixty-five, and died five days after operation. Great difficulty was experienced in the removal of the calculus, and some unavoidable injury resulted to the soft parts.

Carbolic Acid Poisoning (?) treated by Cocaine.—Mr. W. D. JAMES related this case, occurring in a man aged thirty-five. On the evening of Nov. 19th he took a dose of carbolic acid instead of the mixture ordered. He does not appear to have swallowed any. Lips blistered; buccal and pharyngeal membranes looked coated with milk; pupils dilated; pulse uncountable, partly attributed to fear. Intense pain on swallowing. Administered oil; ordered eggs and milk, a poultice to throat, and ice to be sucked. Next day no sleep; pain worse. On the 21st the area of pain had extended all over the chest; voice hoarse, and laryngeal pain with each breath. Harsh, dry respiration in larger bronchi. Temperature 102·3°. At night the pain was intolerable; voice almost entirely gone. He was ordered one-sixteenth of a grain of hydrochlorate of cocaine in water every three hours; ice and poultice continued. Next day the patient was up, and on the 24th medical attendance ceased.

Perforating Ulcer of Foot.—Mr. C. ATKIN read a paper on this subject, and drew attention to the peculiar deformity of the toes met with in some instances.

A meeting was held on March 25th, when the following specimens were exhibited.

Sarcoma of Cervical Vertebræ.—Mr. W. W. BANHAM showed a specimen of Sarcoma originating in the bodies of the third and fourth Cervical Vertebræ, infiltrating and softening the bone, and so compressing the cord.

Cystic Disease of Kidney.—Mr. BANHAM also exhibited this specimen of surgical kidney, in which a number of cysts had developed. The cysts were filled with cheesy matter. The case was one of bladder mischief, and the walls were found much thickened; there was a sinus in the ischio-rectal region, and the bladder was perforated in the posterior wall and led to a cavity in the perineum.

Rupture of Intestine.—Mr. LOCKWOOD exhibited this specimen from a lad, who had been kicked in the abdomen on the evening of March 20th. He was admitted into the public hospital under the care of Dr. Keeling; he was sick and complained of pain after the accident. The next morning he was twice sick; the abdominal pain was increased; there was no external sign of injury; he died at 4.30. At the necropsy there were signs of recent peritonitis, and a rupture in the gut about the junction of the jejunum and ileum.

Constricted Intestine with Rupture.—Mr. LOCKWOOD also showed this specimen from a patient of Dr. Keeling's. He had been operated upon for strangulated hernia. The intestine was ruptured.

Mr. KILHAM exhibited a specimen of Ruptured Aorta from a man aged thirty, a tramp, who fell suddenly dead whilst scrubbing the floor; and a specimen of Diverticulum of Ileum from a man aged fifty-eight, who died of cancer of the liver. It was situated about a foot from the ileo-cæcal valve, and projected from the lower border of the ileum.

Mr. C. F. COOMBE exhibited specimens of (1) Fatty Kidney; (2) Cirrhotic Kidney, Hæmorrhage into Pons; (3) Tubercular Kidney, Caseous Degeneration.

The Present Position of Therapeutics.—Dr. HUNT, after a brief retrospect of the history of therapeutics, went on to show that medicine was influenced by fashion, which arose from certain remedies being associated with certain diseases. Another influence that was brought to bear on medicine was public opinion. He thought that experimental research had not been successful in establishing therapeutics on a true scientific basis, and that the principle of arguing from a physiological condition to a morbid one was not sound, and did not in practice correspond with theory. It was further shown that medicinal agents can never be called curative, their only use being to treat symptoms. Another character of modern therapeutics was its approach to surgery and the influence surgery had brought to bear on the medical art. Dr. Hunt mentioned the value of certain recent drugs in certain morbid conditions, and concluded by giving his opinion on the relation that should exist between the medical man and the public.

At the meeting on April 8th,

Mr. JEFFREYS exhibited a large Biliary Calculus the size of a pigeon's egg, passed per anum.

Mr. GARRARD exhibited a Breast removed for Cancer.

Popliteal Aneurysm.—Dr. KEELING introduced a patient, aged thirty-two, for whom he had ligatured the femoral artery for Popliteal Aneurysm, with most satisfactory result. Flexing the limb and the application of a tourniquet had been tried at first without benefit. The artery was tied with a catgut ligature and antiseptic precautions were adopted. The patient, who was the subject of cardiac

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disease, made an uninterruptedly good recovery.—Remarks were made by the President and Mr. Garrard.

Perforating Ulcer of Stomach.—Dr. BARTOLOMÉ related particulars of a case in which death resulted from Perforating Ulcer of the Stomach. The patient had been suddenly seized with severe abdominal pain, after partaking of a hearty tea, death resulting in twenty hours. For some time previously she had complained of pain below the ensiform cartilage, but the symptoms, Dr. Bartolomé said, were not characteristic of gastric ulcer. The specimens were exhibited, showing a large perforation in the posterior wall of the stomach.

Malignant Disease of the Throat; Laryngotomy; Pyæmia; Pneumonia; Death.—Mr. KILHAM related this case. The patient was a man aged fifty-three; he was admitted into the Workhouse Hospital on January 16th with extensive cancer of the soft palate, uvula, both sides of the fauces, and the base of the tongue, and large swellings at the angles of the jaw of about six months' duration. Laryngotomy was performed for urgent dyspnœa on Jan. 22nd. On Feb. 2nd the right shoulder became painful, with effusion, and on the 4th the left was affected. On Feb. 7th pneumonia set in, and he died on the 10th. At the post-mortem examination a large abscess was found under the right sterno-mastoid; both shoulder-joints contained pus; the submaxillary glands were indurated, and the malignant disease had extended to the epiglottis,

Fever.—Mr. BROWNING read an interesting paper upon this subject. He commenced with a brief review of the views held by Cullen, Watson, Addison, and Alison. Sir Wm. Jenner was the first to fully differentiate the various characteristics of typhus and typhoid. Admitting that, in typical cases of these two forms of fever, there is but little difficulty in making a differential diagnosis, yet the author of the paper claimed that there are numbers of cases in which the characteristics of each are not so clearly marked, and in which a diagnosis is a matter of considerable difficulty. Mr. Browning put two questions to the meeting. First, is it possible to have typhus fever without a rash of any kind; and, if so, does it frequently happen? Secondly, Is there any specific form of fever known as typhoid which is not enteric—i.e., with Peyer's patches unaffected? To the first of these questions, as the result of his own personal experience, he was inclined to answer in the affirmative. He believed he had seen cases in which all the well-marked features of typhus have been present, except the rash. To the second question he did not feel in a position to make any definite reply.

MIDLAND MEDICAL SOCIETY.

A MEETING of this Society was held on Wednesday, March 17th, Mr. Lawson Tait, F.R.C.S., in the chair.

Mr. JORDAN LLOYD showed a boy who had had well-marked symptoms of an Abscess in the lower end of the Tibia. The bone was trephined and a small collection of pus evacuated, from which time the symptoms rapidly subsided.

Mr. EDWARD FREER exhibited a Divided Plaster Jacket for Spinal Curvature.

Dr. CARTER read a commentary on a case of Enteric Fever.

Transfusion Apparatus.—Mr. LAWSON TAIT showed the apparatus used by Professor Annandale of Edinburgh in transfusion, and read the following account of the operation. 1. The vein having been selected and exposed, a double catgut ligature is passed around it; the vein at the lower part of the wound is then securely ligatured. An opening is next made in the vein and the glass nozzle inserted, pressure being kept up on the india-rubber tube. The other ligature is now tied with a single knot around the vein and nozzle, and the ends held by an assistant. 2. The giver of the blood is meanwhile bled into the glass measure containing two ounces of the phosphate of soda solution; this will require six ounces of blood. This vessel must be kept at a temperature of about 100° by means of hot water in a basin, and the blood and solution stirred carefully with a glass rod during the remainder of the operation. 3. The glass syringe is now filled with the mixture of blood and solution, care being taken to expel all the air. The syringe is next inserted into the small piece of indiarubber tubing, from which pressure can now be removed and the blood very slowly injected. The syringe must be kept warm by means of hot flannel cloths. The point of the syringe should be directed downwards to avoid the entrance of air into the vein. When the syringe is emptied, pressure is again made on the tubing and the syringe refilled as before. After all the blood is injected the glass nozzle is removed from the vein, the ligature at the same time being tightened and secured. The wound in the skin is then stitched up. The time occupied in injecting the eight ounces of the mixture (about three syringefuls) should be about twenty minutes. The phosphate of soda solution consists of one ounce of phosphate of soda to twenty ounces of distilled water. This solution should be freshly prepared, and one part mixed with three parts of blood. All the apparatus should be carefully washed with distilled water.

Azoturia.—Dr. SUCKLING showed a specimen of urine passed by a man aged forty-seven, who complained of insomnia and restlessness. The urine was acid, sp. gr. 1030. A copious deposit of nitrate of urea was at once thrown down on adding nitric acid, and the percentage of urea, by Squibbs's process was 3·4. The average daily quantity of urine was forty-four ounces. The patient was ordered milk and farinaceous food; immediate relief followed.

Dr. SUCKLING also showed a well-marked case of Post-hemiplegic Tremor.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.

A MEETING of the above Society was held on Friday, April 2nd, R. E. Carrington, M.D., President, in the chair.

Stricture of the Urethra.—Mr. JOHNSON SMITH, F.R.C.S., read a paper on Stricture of the Urethra. He dealt with the various methods of treating the stricture by dilatation, and advocated gradual continuous dilatation. He laid great stress on the utility of a hot bath and the internal exhibition of opium before attempting to pass an instrument in cases where great difficulty might be expected. A good discussion followed, in which the President, Dr. Purvis, Mr. Lockhart, Mr. Moore, Dr. Moon, Mr. J. P. Purvis, Dr. Johnston, and Dr. Ernest Clarke took part.

Paroxysmal Hæmoglobinuria.—Dr. ERNEST CLARKE showed the urine of a patient under his care in the Miller Hospital. The patient was thirty-five, married, had suffered a great deal from rheumatism, and was admitted into the hospital to have some adhesions in the elbow-joint broken down. While in the hospital she had two attacks of hæmoglobinuria, there being a week's interval between each. The attack consisted of a rigor, during which the temperature rose to almost 102° from normal; this was succeeded by a rapid fall of the temperature to normal, accompanied by profuse sweating, and shortly followed by the passage of porter-coloured urine. The urine gave the blood-test with guaiacum, and precipitation of albumen with heat and nitric acid; under the microscope no blood-discs were seen, but only masses of yellow pigment. The patient had lived the first fifteen years of her life in Cambridge and latterly in Lewisham—both somewhat aguish districts; she had never had any other form of ague. The last few years she had been subject to attacks of paroxysmal hæmoglobinuria after exposure to cold; she had sometimes had an attack at night when in bed. The patient wore an anxious expression, and her skin had a very "earthy" appearance. The special interest of the case lies in the fact that the patient is a female, and that she had the attacks at night. It is also interesting to note the association of rheumatism.

WOLVERHAMPTON AND DISTRICT MEDICAL SOCIETY.

A MEETING of the above Society was held on Thursday, March 4th, F. E. Manby, F.R.C.S., President, in the chair.

Amputation of Breast for Cancer.—Mr. VINCENT JACKSON exhibited a woman aged fifty-eight, whose right breast he had amputated thirteen years since for cirrhous cancer. At the present time she is in good health. There is no evidence of any return of the disease. Four years previously to the operation an unmarried sister had her left breast removed for the same disease, and she also continues quite well. Mr. Jackson stated that this case and two others, one being an example of the removal at the same time of both breasts, were the only instances of a long survival after excision of the breast out of the total number of cases in which he had performed this operation.

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Paralysis following the Injection of Iodo-glycerine for the treatment of Spina Bifida.—Dr. LYSETT exhibited a girl aged six years, who at birth was the subject of spina bifida over the upper part of the sacrum, forming a tense sessile tumour the size of an orange, having an ulcerated surface of the area of a crown-piece, which, on healing, formed a thin membranous covering to that portion of the sac; becoming thinner through expansion, it was tapped when she was six weeks old. An ounce and a half of fluid was drawn off, and forty minims of iodo-glycerine injected, with a negative result, the sac refilling. A week afterwards, about an ounce of fluid was withdrawn, and the injection increased to a drachm and a half, causing the sac in a few days to become obliterated, but coincidently with shrinking, however, came loss of sensory and motor power in the legs, with incontinence of fæces and urine, the paraplegia, which has persisted, being complete below and incomplete above the knees. Hydrocephalus also commenced immediately after the operation, and gradually increased until the third year, when the fontanelles closed without developing any more phenomena or impairing mental power. The horizontal circumference of the head now measures twenty-two inches. In the report of the committee appointed by the Clinical Society of London to inquire into the subject of spina bifida, there is a case recorded where paralysis supervened and persisted after the cure of the tumour, and appeared to be due to the treatment adopted. In several cases temporary paralysis occurred, which passed off in a variable time; once complete paraplegia, which subsequently disappeared. In three cases hydrocephalus set in subsequently to the cure of the spina bifida. Of the various operative measures, that by the injection of iodo-glycerine is recommended in preference to any as promising the greatest success, though the table of results shows that of 71 cases only 35 recovered, 27 died, 4 were relieved, and 5 unrelieved; and as evidence of the frequency and serious nature of this affection, it appears that it caused no fewer than 647 deaths in 1882, of which 615 were in children under one year of age.

Reviews and Notices of Books.

The Essentials of Materia Medica and Therapeutics. By ALFRED BARING GARROD, M.D., F.R.S., Consulting Physician to King's College Hospital. Eleventh Edition. Edited by NESTOR TIRARD, M.D., Professor of Materia Medica and Therapeutics at King's College. London: Longmans, Green, and Co. 1885.

A Handbook of Therapeutics. By SYDNEY RINGER, M.D., Professor of the Principles and Practice of Medicine in University College. Eleventh Edition. London: H. K. Lewis. 1886.

WHEN a work has attained the dignity of an eleventh edition we hardly know whether to congratulate the author or tender him our respectful sympathy. The first blush of success is over, the congratulations of friends are forgotten, and he keenly feels that it is no easy matter to keep pace with the progress of a subtle science which day by day advances with giant strides. There are two courses open to the popular author: either he may endeavour to keep his book what publishers call "a going concern" by his own unaided efforts, or he may retain the services of a young and active junior. The latter is the plan which has been adopted by Dr. Garrod. The first edition of his well-known work on Materia Medica was published as far back as 1855, the author being then Professor of Materia Medica, Therapeutics, and Clinical Medicine at University College. It was at its first appearance a modest little book containing a great deal of valuable information in its 280 odd pages. It was nearly ten years, however, before another edition was called for, and by that time the author had seceded from University College and had accepted a professorship at the rival school. The fourth edition appeared in 1874, and was the first, we believe, issued under the able editorship of the late Dr. Buchanan Baxter. The present work has been revised and edited, "under the supervision of the author," by Dr. Nestor Tirard of King's College. Dr. Garrod in his preface says: "The task of re-editing the book has been mainly entrusted to my friend and former pupil, Dr. Tirard, who has devoted much time to the study of the therapeutic action and chemical properties of many important medicines, and upon whose ability and accuracy I can fully rely." The book has increased somewhat in bulk, but the changes in the text are fewer and of less importance than might have been anticipated. There have been some alterations in type and sundry paragraphs have been introduced from the British Pharmacopœia; but beyond that there is really very little fresh worthy of record. The assertion that cocculus indicus and picrotoxine are not used internally in medicine is a legacy from the first edition; a great many papers have, however, been written on the subject during the last ten years, and many will remember that in 1875 the Academy of Medicine of Paris awarded a prize to Planat for his investigations into the physiological action and therapeutic uses of these drugs. We must, however, congratulate Dr. Garrod and Dr. Tirard on the eleventh edition of the work.

Of Dr. Ringer's well-known "Handbook of Therapeutics" we can only speak generally in terms of praise. The first edition was not published until 1869, but we have no hesitation in saying that it has practically revolutionised the science of which it treats. We turn with pleasure to the articles on Pilocarpine, Muscarine, Gelsemine, Nitro-glycerine, Duboisine, and Hamamelis, all of which give indications of good, sound, original work. The great feature of the present edition is the chapter on Cocaine, by Dr. Dudley-Buxton, Administrator of Anæsthetics at University College Hospital, who is also responsible for the articles on Chloroform, Ether, Nitrous Oxide Gas, Bichloride of Methylene, Ethidene, &c. Dr. Buxton has performed his task in a manner which marks him as a clear and lucid writer. We must confess that we are somewhat disappointed with some of the more recent contributions, although we fully admit that an author can hardly be expected to be equally conversant with all branches of his subject. The brief notes on Cascara Sagrada certainly fail to do justice to this valuable remedy for chronic constipation. The absence of reference to the published papers of other investigators gives at times an appearance of egotism to the work, which we are sure is unintentional. The whole book is still badly edited, and stands sadly in need of thorough revision. When Dr. Ringer gravely informs us that his friend, Mr. Joseph Bartlett, has *recently* employed actæa racemosa in the treatment of lumbago with considerable success, we cannot help feeling that he is strangely oblivious to the passage of time. He expresses his obligation in graceful terms to Dr. George Bird, who has assisted him with so many editions. Notwithstanding these imperfections, Ringer's Therapeutics will always be popular both with practitioners and senior students.

Contributions to Pathology and the Practice of Medicine. By JOHN RICHARD WARDELL, M.D. Edin. London: H. K. Lewis. 1885.

THE author of the essays contained in this handsome and bulky volume passed away from the scene of his labours shortly after the work was published. He was widely esteemed, and was indefatigable in medical research. The variety of subjects treated in the book, which remains as a memento of the man and a record of his life work, testifies to the wide experience he gathered. The volume is mainly valuable as embodying the results of that experience, for its contents range from the lengthy essay upon Relapsing Fever, written as a graduation thesis more than forty years ago, to the articles upon Hypertrophy of the Heart, contributed to "Quain's Dictionary of Medicine," and those on Diseases of the Spleen, Diseases of the Pancreas, Enteralgia, and Peritonitis, contributed to "Reynolds's System of Medicine." Amongst the more important papers —there are no fewer than fifty in all—are those upon

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Enteritis, Ulceration of the Bowels, on Pleuritic, Serous, and Purulent Effusions, Chronic Ulcer of the Stomach, Carcinoma of the Stomach, and Typhoid Fever. They strike one as the product of an able mind, and contain many instances of accurate and careful observation. The following statement of the results of 36 cases of pleural effusion is worth quoting. It illustrates well the progress that has been made in the treatment of this condition:—"Of the 36 cases above given 24 were in males and 12 in females. The average of their ages was twenty-four years; 10 were from two to ten, 8 from ten to twenty, 5 from twenty to thirty, 8 from thirty to forty, 1 from forty to fifty, 3 from fifty to sixty, and 1 was aged sixty-five. In 12 the disease occurred in the *right* side, in 23 in the *left* side; 17 recovered through medical treatment, and various external applications were employed to promote *absorption*. In 17 the *trocar* or *aspirator* was employed. In 6 the fluid drawn off was *serous*. In 11 the secretion was *purulent*. In 2 the instrument was introduced, but no fluid was emitted on account of adhesion of the lung to the chest wall and plastic formations. In one instance a spontaneous opening had existed for more than twenty years. In some closures of the passage the cannula was employed with great relief. In one sudden death occurred from syncope after the operation had been decided upon; three quarts of purulent fluid were found in the left chest, and also that the kidneys were diseased. In one case the purulent formation existed seven years and a half, and full and perfect recovery resulted. Thirty-one of the 36 *recovered;* one was relieved and lived many years after, though the opening remained unclosed, and 4 *died*." We would gladly extend our quotations did space permit, but must be content to refer the reader to the book itself. In spite of its somewhat heavy style, it cannot fail to instruct as well as to suggest material for thought, whilst the hopeful views taken by its author on the progress of scientific medicine in the essay that closes the volume—an essay written apparently but a few months before his death—show how fully he appreciated all the advances made during his time and within his knowledge.

The Races of Britain. A Contribution to the Anthropology of Western Europe. By JOHN BEDDOE, M.D., F.R.S. Pp. 271. Bristol: Arrowsmith. London: Trübner and Co. 1885.

DR. JOHN BEDDOE is already well known by his valuable work on the "Stature and Bulk of Man," which was published some twenty years ago. The present work, as he tells us in the preface, is an expansion or development of a manuscript essay which in 1868 carried off the great prize of the Welsh National Eisteddfod. It is replete with interesting facts, and will rivet the attention of all those who are interested in the history of our own people. Dr. Beddoe was induced, he tells us, to take up this subject in consequence of the difference of opinion that formerly existed in regard to the colour of the hair of the Celts, and he resolved to make observations on colour phenomena on a large scale, which might afford to anthropologists some trustworthy material on which to build, or at least to test the permanence of characteristics which were by some treated as fugitive, by others as well-nigh everlasting. He has himself come to regard the colour of the hair and eyes as very permanent. He thinks it does not vary in the same family or in the same tribe more than the form of the head. He acknowledges the great difficulty that exists in determining from ancient writings the precise meaning which should be attached to these expressions indicating colour, and even in modern observations differences in description are met with which, as he rightly observes, cannot be duly estimated without a knowledge of the personal equation of the observer. Thus, most French anthropologists say that the majority of persons in the north of France are blond; whereas almost all Englishmen would say they were dark; each set of observers setting up as a standard what they are accustomed to see around them when at home. Dr. Beddoe dwells on the lamentable defect of craniological measurements of English ancient and modern skulls, and gibbets the late Dean MacNeile, who destroyed, unmeasured and undescribed, the fine mediæval ossuary at Ripon. The only collections now remaining are those of Hythe, Rothwell, and Micheldean.

In regard to the persistence of prehistoric races in Britain, Dr. Beddoe thinks that the palæolithic race, which Boyd Dawkins maintained to be the ancestors or relatives of the Esquimaux, may have left some descendants, the traces of whom may be seen in the modern population of Wales and the west of England, characterised by the oblique or Chinese eye, and other Mongoloid characters.

From various evidence Dr. Beddoe concludes that the Belgæ were a Celtic-speaking, and to some extent in blood and physique a Celtic or Celtiberian people in Gaul, Asia, and Britain; the Galatians being the representatives of the Celts in Asia. He does not appear to think that the Roman occupation left any deep or extensive ethnic changes in Britain. The influence of the Anglo-Saxon Conquest and period is very complex, and is given by Dr. Beddoe in great detail for each part of the country. Then follows an account of the effect on the population of the Norman Conquest.

The work is illustrated by many maps and by numerous tables, the preparation of which must have cost Dr. Beddoe infinite pains and trouble, but which add greatly to the authority of his statements. There are also some excellent drawings of characteristic faces and heads. The treatise will interest everyone who desires to obtain some information of the origin of the men and women by whom he is surrounded in any part of the country.

Lectures on Dietetics and Dyspepsia. By Sir WILLIAM ROBERTS, M.D., F.R.S. London: Smith, Elder, and Co. 1885.

THE experimental observations to which Sir W. Roberts has so fruitfully devoted himself are doing much to instruct the profession upon the very important subject of food and its digestion. We already owe him much for the light he has thrown upon the preparation and digestibility of foods, and in the publication of these lectures he has added to our indebtedness. The reader of this book will find therein very satisfactory explanations respecting the relative value of such common food accessories as tea, coffee, cocoa, and alcohol, based on experiments upon artificial digestion (salivary, gastric, and intestinal). In some cases the results obtained will come as a revelation; but as they in the main harmonise with prevalent ideas respecting the etiology of dyspepsia, it would be mere folly to cavil at them because they are only laboratory researches. Nor could the questions be tested in any other way. We shall not anticipate the reader's pleasure by any extracts from the book. Some of its conclusions were brought under notice by the author in his address at Cardiff; and we may content ourselves with recommending practitioners to study the facts for themselves; for they are presented in a manner which enables them to be readily understood, and their bearings upon digestive derangements easily grasped.

THE decision by which a medical man named Moore, of Thornton Heath, obtained a verdict for £600 damages against the Lambeth Waterworks Company for injuries sustained by falling over a fire-plug above the level of the pavement, was on the 17th inst. reversed by the Court of Appeal, which held that the company, being under no obligation to repair the pavement, had been guilty of no negligence.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN.—The anuual meeting of this Society will be held at the Holborn Restaurant on Tuesday, May 18th, at 6.30 for 7 P.M.

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THE LANCET.

LONDON: SATURDAY, APRIL 24, 1886.

BY the verdict of the jury at the Central Criminal Court on Saturday last another celebrated case has been, legally speaking, removed from the catalogue of crimes, though left by that verdict in an atmosphere of suspicion. However strong was the suspicion, there was certainly not sufficient evidence to prove beyond all reasonable doubt that a murder had been committed. The whole course of the BARTLETTS' married life seems to have run in such peculiar grooves, and to have been directed by influences so unnatural, that, to say the least, it was well-nigh impossible to measure with accuracy the full meaning of any particular circumstance connected with it, when judged by the light of circumstantial testimony alone. Reading between the lines, however, it may be gathered that, although to outward appearances Mr. and Mrs. BARTLETT lived on mutually affectionate terms, there was much to render their existence anything but happy and contented. When the principles of *Esoteric Anthropology* are made the guide of wedded life, the instincts and cravings of human nature find no fitting opportunity for their normal manifestation and satisfaction. We were glad to read the condemnation passed by the learned judge who presided at the trial upon literature which, whatever the intentions of the author, is fit only to be burned by the public hangman. It is little to the credit of the deceased man that he not only indulged in such unsavoury mental aliment, but allowed and encouraged his young wife to join him in his errant course. We are not now concerned so much with the psychological aspect of the "Pimlico mystery" as with its physiological and medico-legal bearings; still, wherever crime is alleged there is usually motive suggested, and naturally one is eager to inquire into the antecedents of the parties charged. Now, although we fully subscribe to the verdict of acquittal, we cannot help thinking, if the evidence bearing upon Mr. DYSON'S position in the home of the BARTLETTS be accepted as true, there was room for grave suspicion against the two persons originally charged in the indictment, considering the facts which transpired on and after the 28th of December. That these suspicions fell short of proof was acknowledged by the prosecution when they decided to offer no evidence against Mr. DYSON, and by the jury when they brought in Mrs. BARTLETT "Not guilty."

In the Scotch Courts the verdict on Saturday would have been "Not proven," certainly a more logical way of recording the finding in the present case. There is one exception that might be taken, perhaps, to the general soundness of the summing up of Mr. Justice WILLS: we refer to the question of the probabilities of suicide. It is true there was nothing to show that the deceased contemplated putting an end to his existence; but with a mind like his—if not unsound in a technical sense—distorted by morbid sensations and beliefs anything but indicative of mental equilibrium, and with a body weakened by many days of suffering and sleeplessness, it is not too great a stretch of the imagination to suppose that, seeing the "instrument" ready to hand, he may have been seized with an irresistible impulse to use it; without assuming design or prior intent to commit a felonious act upon himself. Then, again, the chloroform may have been taken accidentally by the deceased; or wilfully, but in ignorance of the consequences likely to ensue; or whilst in a half-dazed condition when waking from unrefreshing sleep. The purchase of the chloroform by Mr. DYSON at the request of Mrs. BARTLETT, the certain death of Mr. BARTLETT by swallowing the drug, and the disappearance of the bottle which contained it, formed a chain of events which required all the forensic talent of Mr. CLARKE to loosen and unlink to the satisfaction of the jury.

That the chloroform gained admission to the stomach of Mr. BARTLETT during his lifetime there could be no shadow of doubt, for there were unequivocal signs of its irritant action upon the mucous membrane. And in the absence of any other discoverable cause of death—although, if we remember rightly, no mention was made of a chemical examination of the urine, or of inspection of the spinal cord or suprarenal capsules—the inference was fair that deceased succumbed to the combined irritant and narcotic effects of chloroform. In fact this was not seriously challenged by the counsel for the defence. According to WHARTON and STILLÉ, "when death has been produced by the internal use of chloroform its local irritant action has evidently been the chief cause of the fatal result." To this dictum we must emphatically demur, since the exhaustion that would naturally follow the continued action of such a powerful irritant is minimised by the toxic and soporific effect of the poison absorbed into the system. The acute inflammatory action set up in the stomach by swallowed chloroform fails to induce fatal shock, just because the sensorium is lulled into quietude and stupor. A parallel example is furnished every day by the performance of otherwise painful operations whilst the patient is in a state of anæsthesia. In Mr. BARTLETT'S case the inflamed and eroded area was situated on the posterior surface of the stomach in the direction of the œsophagus; but this is just what might have been expected, whether the chloroform was administered by himself or some other person, providing the body lay on the back during the greater part of the time that elapsed between the act of swallowing and the advent of death. As an argument in support of the contention that Mrs. BARTLETT was responsible for the administration, it was practically worthless.

Let us suppose for a moment that Mrs. BARTLETT actually gave the chloroform to her husband. We then have to ask, What are the alternatives as to the means adopted? In the first place, it might have been by inadvertence—a supposition that may be discarded without further consideration, for the pain and stifling effect would have sufficed at once to have led to a recognition of the mistake; and of course this holds good as regards the theory that Mr. BARTLETT was the sole active agent of the misadventure. Having eliminated the question of accident, we now turn to the accusation set forth in the indictment. The Attorney-General, in his opening speech for the prosecution, to all intents and purposes told the jury that before they could convict they must satisfy themselves that the deceased was first stupefied or rendered

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insensible by inhalation, and that while in this condition the fatal draught was administered. Nor, on the supposition of Mrs. BARTLETT's guilt, could he consistently with a show of probability have followed any other course. It would, to our minds, have been idle to expect the jury to be convinced that the chloroform was given solely in the liquid form, disguised or not by admixture with alcohol or other fluid. Mr. CLARKE, in his able address, asked the jury to believe how utterly unlikely it was that Mrs. BARTLETT should select for the carrying out of her alleged purpose a drug which hitherto had not been employed to compass homicide. The pleading on this point was not devoid of all show of reason, but to adopt it as unanswerable would, if followed to its logical conclusion, amount to this: that a jury ought not to convict a prisoner of the crime of murder, because there was no precedent as regards the means recorded in the history of forensic medicine. PALMER was convicted and hanged for having poisoned COOK by strychnia, although the alkaloid was virtually unknown to the criminal law, and in spite of chemical analysis having failed to discover it in the stomach and tissues of the victim. So, too, in LAMSON's case, there was little or nothing in the form of previous experience to aid the investigation of the question of poisoning by aconitine.

Stripped of its associated elements of motive and suspicion, the proof of Mrs. BARTLETT'S alleged guilt could only rest upon the ability of the prosecution to tender trustworthy evidence as to the likelihood of the accused succeeding, in the first place, in administering chloroform by inhalation to a sleeping man, and, secondly, in giving a fatal liquid dose of the same drug to a person in a state of narcotic stupor. The testimony of Dr. STEVENSON and other witnesses showed that, although each act might be accomplished, it would, nevertheless, be a task of no ordinary difficulty, and, in short, so arduous and uncertain of attainment that a medical man, possessed as he would be of special experience and knowledge, might fail in the attempt. At a trial for attempted murder by the administration of chloroform vapour, which took place on Jan. 18th, 1871, at New Bloomfield, Perry County, Pa., Dr. MAURY said: "I experimented with chloroform on six sleeping persons. Out of that number all resisted more or less. Two men woke up immediately, and one remarked, 'You are trying to give me something.'" With opinions stated so guardedly, and rightly so, we maintain that the verdict returned in the BARTLETT case will meet with general approval by the profession. Since writing the above we have read in the daily journals a letter from the foreman of the jury, in which he says eleven of their number were in favour of finding that deceased took the chloroform himself, either from a desire to procure sleep or with the intent to commit suicide.

Concerning the necrosis of the jaw and its attendant symptoms, Mr. LEACH formed the opinion that Mr. BARTLETT was the subject of mercurial poisoning. In support of this diagnosis was the fact that, in addition to the swelling of the gums and the salivation, Mr. BARTLETT suffered from diarrhœa and hæmorrhage from the bowels. Unfortunately, the liver, kidneys, &c., were not preserved for analysis, or valuable evidence might have been thereby attained, since mercury is a poison which has a tendency to accumulate in the tissues. The only reasonable theory advanced at the trial to account for the exhibition of mercury supposed that Mr. BARTLETT may have taken the mineral for the treatment of a real or fancied disease, which a certain article found in his dress was intended to prevent. But this was nothing more than conjecture.

The case must now, and probably will for ever, remain where the jury have left it; but it will certainly long be remembered on account of the prominence given by it to the effects of poisoning by liquid chloroform.

EVER since the discussion on the case of the late President GARFIELD, in which MARION SIMS took a leading part, the question of the treatment of perforating wounds of the abdomen has attracted much attention in the United States. The most important result up to the present is a paper recently read by Professor F. S. DENNIS at the New York Medical Association, and published in the *Medical News* of Philadelphia. The purport of the paper is to show that the proper course in cases of stab and gunshot wounds involving the abdominal cavity is to explore the wound and search for and treat any visceral lesion, applying strict antiseptic treatment throughout.

Penetrating stab-wounds of the abdomen are first dealt with. Dr. DENNIS relates cases showing the difficulty of determining whether a viscus is injured or not, and the hopelessness of wounds of the intestine if only palliative measures are adopted. Two patients were exhibited in whom Dr. DENNIS had met with great success. In one of them a loop of protruded intestine had received two wounds, one two inches long; these were sutured and the bowel returned. In the other there was no prolapse, only a penetrating wound four inches above and three inches to the left of the umbilicus. The abdominal cavity was opened in the middle line, and the whole of the abdominal viscera were systematically examined. No injury was found. Both patients made good recoveries. The latter case is similar to one recently published by Mr. ARTHUR E. BARKER. Other cases are quoted to show the possibility of finding and suturing wounds of the intestine, and of thoroughly cleansing the peritoneal cavity from blood and other extravasations. Professor DENNIS gives a table of fifteen cases in which this line of practice has been successfully followed by himself and other surgeons; Mr. BARKER'S case raises the number to sixteen.

Dr. DENNIS next deals with cases of penetrating pistol-shot wounds of the abdomen. He relates two cases of his own. In one he found a wound of the liver, from which there was profuse hæmorrhage; in the other he detected seven wounds of the intestine, each of which was sutured; but in addition there was alarming venous hæmorrhage, which it was impossible to control. Death occurred in forty-eight hours, and it was then found that the intestinal wounds were firmly closed, and that "the iliac veins" were wounded. Seven cases are to be found in surgical literature where in this form of injury the abdominal cavity has been explored and cleansed and wounds of the intestine closed, the patients making good recoveries. Dr. DENNIS has only found one case recorded in which laparotomy was performed simply for a ruptured intestine, and in that case the patient died.

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The conclusions that Dr. DENNIS arrives at may be thus stated. Wounds and ruptures of the intestine are certainly fatal if left alone. A properly conducted laparotomy adds little or nothing to the danger of the injury. Suture of wounds of the intestine has been proved to be a successful procedure. Although a wound of the intestine may be readily diagnosed in some cases by emphysema, by the detection of gas in the peritoneum, or by the flow of fæces from the external wound, in many other cases the surgeon is unable to assert with confidence that the bowel is *not* injured. Hence it is a justifiable procedure to explore the abdominal contents even when there is no positive evidence that they have been injured. The exploration, Dr. DENNIS thinks, is best made through an aperture in the linea alba, and not by enlarging the initial wound. This exploration, too, must be thorough and complete. In one of his cases no less than ten wounds of the ileum were detected. The surgeon must, therefore, not be content with finding and treating a single visceral lesion, but must carefully examine in an orderly manner the whole of the abdominal contents. Quite as important is the care expended to prevent the infection of the peritoneum with septic organisms, and the adoption of means for their removal if already present. Dr. DENNIS is a staunch upholder of antiseptic surgery, which he would have carried out with scrupulous attention to every detail. The antiseptic agent he prefers is bichloride of mercury. There are several other points raised more or less incidentally in this paper, but those to which we have alluded suffice to indicate its importance and value.

It is interesting to note that the late Professor GROSS, when writing on Wounds of the Intestine more than forty years ago, recommended just this line of treatment. He clearly saw the only direction in which surgery could hope to deal successfully with such cases. Our modern improved methods of wound treatment have rendered the course of action then advised not only practicable, but successful.

IT is but seven years ago that a paper by Mr. W. H. POWER on Diphtheria and Milk, read before the Pathological Society, led to a more general consideration of the question whether "cow as cow and milk as milk" were not concerned in the production of some of the more common infectious diseases of man; in other words, whether some malady of the cow were not the cause of milk infection. Mr. POWER'S reasons for urging the probability of this origin of human infectious disease were, firstly, that milk had on several occasions been definitely shown to have given rise to such disease amongst its consumers; and, secondly, the insufficiency of any evidence tending to show that the milk could have become infected after leaving the cow. The suggestion was received with some incredulity, and by some persons with apparent indignation. With regard to diphtheria and its possible relation to garget, it was pointed out that had Mr. POWER "been better acquainted with comparative pathology, or sought to be informed by those who have made cattle diseases their special study, both chemically and experimentally, he would not have troubled the Pathological Society with a hypothesis that admits of the clearest refutation," and, subsequently, "that it was not unlikely legal proceedings would be taken against the author or the Pathological Society."

Probably expression would not have been given to these adverse opinions if it had been more fully recognised that evidence tending to incriminate the cow could only be obtained by a minute analysis of all the circumstances relating to the infection of the milk drinkers. Until this evidence existed a study of cow diseases was only deemed of interest in relation to the welfare of these animals. Their ailments were valued as important only to the extent in which they interfered with cow health, and an ailment which caused nothing but a trivial indisposition, and which did not obviously affect the quantity and quality of the milk, was reckoned as a matter of small concern. So it was concerning cow-pox until JENNER showed the relation of this disease to small-pox, and so it has been since with all other slight maladies of the cow.

It does not, however, require much consideration to show that the more serious disease in the human may have its origin in a much slighter affection in the bovine animal. The relative severity of the symptoms produced by inoculation of small-pox virus in man and in the cow alone teaches this lesson. Nor is it difficult to believe that if "cow as cow" is the cause of disease in man, the malady from which she suffers and which infects man must be of not uncommon occurrence, for the ordinary human infectious diseases are too widely distributed for their origin to be rare. But the more common the cow ailment, the less has it been thought worthy of exceptional consideration. Mr. POWER, in the paper to which we have referred, pointedly remarked that, although it was affirmed that no serious illness had occurred among the cows supplying the milk which undoubtedly gave rise to diphtheria, "this affirmation does not exclude occurrence of cold or other minor ailment among cows." He has not had to wait long for further reasons for thinking that such ailment could give rise to human diseases of serious import. At this moment we are told of a certain malady occurring among cows at a time when the milk produced by them disseminated scarlet fever. The evidence that this malady caused scarlet fever is not yet forthcoming. If there is such evidence, it must be awaited until Mr. POWER'S report on the recent outbreak of scarlatina in West and North London is published; but, in the meantime, a paper which Dr. JAMES CAMERON, the medical officer of health for Hendon, has presented to the Epidemiological Society may be regarded as a notable one, although it does not profess to go further than give account of the clinical features of the affection, of which we hope to learn more from Mr. POWER and Dr. KLEIN at no distant date.

Dr. CAMERON'S story is, briefly told, of the introduction into a cowshed of certain newly purchased cows, and of the appearance of disease first among these and afterwards among other cows in this and other sheds. He describes the affection as a specific contagious disease of not infrequent occurrence, appearing usually in the first instance amongst newly-calved cows, and capable of being communicated to healthy cows by direct inoculation of the teats with the virus conveyed by the hands of cowmen. The symptoms of the disease are those of constitutional disturbance, of discharges from the eyes and nose, of vesicles on the teats and udder, and of an eruption on the hind quarters, accompanied, in severe cases, with sore-throat; and we are told the affection

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can be communicated by inoculation to man, and seemingly, though perhaps in another form, by milk. Into greater detail we need not enter here; but assuming that the milk will be found to owe its infectivity to the ailment Dr. CAMERON has described, it is obvious that a very great advance will have been made in our knowledge of the pathology of human infectious disease. We appear, indeed, to be on the threshold of a discovery which may be only second to that of JENNER in its ultimate results. Etiologists have been baffled again and again in their efforts to discover the cause of cases of infectious disease occurring under circumstances that rendered it almost impossible that they should have resulted from antecedent cases. The possible relation of such disease to affections of the lower animals has recently been kept more prominently in view, but the inquiries which have been made in this direction have proved barren, except in so far as they have tended to eliminate other conditions from suspicion. At last there appears some prospect of greater success, but if this is to be attained, the study of bovine maladies must be approached in a way very different from that followed heretofore. They must be thought of in their pathological rather than their commercial relations, and certainly the best results will follow if in any further investigation their possible bearings upon the public health are more willingly recognised.

ONE of the most hopeful signs of the times in the matter of hospitals is the growing activity of those officially connected with them, whether honorarily or otherwise. This activity finds vent and expression in many ways, but chiefly through the Hospitals' Association, which is fast justifying its existence. We have recently once or twice called attention to papers read and discussions which have followed the reading of them at the meetings of the Association; notably to one on the hardship of levying local rates on hospitals, seeing they do so much voluntarily to keep the poor from becoming paupers; and another on sectarian nursing. Both these papers treat of matters of much importance, and are calculated to have practical consequences. The first gave great demonstration of the claims of hospitals to be exempted from rating, and has led to the introduction of a bill for this purpose, which is receiving powerful Parliamentary support from members on both sides of the House. The other has done much to show that sectarianism in nursing in London hospitals is the exception, and finds little favour in the best hospitals.

The annual report for the year 1885 of the Hospitals' Association is before us, and confirms our estimate of the uses of the Association in bringing together those who have special interest or skill in hospital matters. The report suggests that there are three main directions in which the Hospitals' Association can do work of real value to the hospitals and to the public. First, in the collection of facts and data concerning hospitals; secondly, in the appointment of sectional committees; and, thirdly, by the establishment of a journal to disseminate information and serve as a means of communication between hospital workers. In furtherance of the first object a central office has been opened at Norfolk House, Norfolk-street, Strand, where, under an assistant-secretary, all papers, books, and other documents will be methodically arranged and preserved for reference by members and others. This in itself is a great matter, and will tend to diffuse information and promote a healthy rivalry in administration and efficiency. We do not notice in the report any indication that the subject of hospital account-keeping has engaged the attention of the Association. This would furnish an admirable topic for a paper. We do not know any better way of promoting soundness in hospital administration or increasing public confidence in our hospitals than by trying to introduce a sound and uniform system of account-keeping. Under the second head a sectional committee on hospital nursing and domestic management has been appointed at the suggestion of Miss WOOD, the Lady Superintendent of the Hospital for Sick Children, Great Ormond-street, and includes a dozen of the lady superintendents of the principal metropolitan and provincial hospitals. They contemplate establishing a register of nurses, and giving certificates of those duly trained. The public confidence in nursing is hindered by the uncertainty of qualification and character. It will be a great gain to organise a system by which public guarantees of fitness can be given. The Committee is even entertaining the question of establishing a national pension fund for nurses and others engaged in hospital work. This seems, to us at least, rather premature, and likely to distract the attention of the Society from work strictly within its competence. On the whole, the Association gives a good account of its stewardship. It has not tackled the great question of hospital support. Perhaps it is wise in postponing this question to others affecting the efficiency and usefulness of hospitals. If these can be promoted, the public will be more quick to open its large purse and to relieve the great anxieties of those who administer these splendid charities. Those interested in the welfare of hospitals cannot do better than join the Hospitals' Association, which owes much of its success, if not its existence, to Mr. H. C. BURDETT, who is a striking illustration of the fact that a very busy man can find time to render the most valuable help to hospitals.

Annotations.

"Ne quid nimis."

THE ROYAL COLLEGE OF PHYSICIANS.

THE special Comitia for the purpose of electing a President of the College of Physicians for the ensuing year was held on the 19th inst. There was a very large attendance of Fellows—indeed, the largest on record,—and the cordial manner in which the result of the election was received proved that there could be no question as to the desirability of Sir W. Jenner being invited to hold office for another year. The proceedings were commenced by the presentation to the College of a portrait of Sir H. Pitman. The presentation was made on behalf of several Fellows by Sir Risdon Bennett, who, in graceful and well-chosen language, pointed out the great services rendered by Sir H. Pitman, and the esteem in which he is held. The portrait, which is a very successful one, is by Mr. Ouless, R.A., and is to be exhibited in the Royal Academy; the copy which it is proposed to give to Lady Pitman was exhibited at the College on Monday. Sir W. Jenner endorsed Sir Risdon Bennett's remarks, and Sir H. Pitman feelingly replied. The President, Sir W. Jenner, then delivered his annual address. He passed in review the affairs of the College

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during the past year, in the course of which he alluded to the action taken by the College to promote a scheme for giving greater facilities to students desirous of obtaining medical degrees. He expressed the hope that the two Colleges would be enabled to erect lecture-rooms and laboratories on the site adjacent to the new Examination Hall, so that provision might be made for instruction of the highest class in certain subjects. He then proceeded to sketch the careers of the eleven Fellows who had died during the past year—namely, Dr. Ed. Wells, Dr. A. B. Shepherd, Dr. T. R. Heslop, Dr. J. W. Wardell, Dr. Jas. Russell, Dr. F. Harris, Dr. Gavin Milroy, Dr. S. Monckton, Dr. S. Sutro, Dr. F. Weber, and Dr. W. A. Guy. It is needless to say that the characters and works of these deceased Fellows were described in discriminating and befitting language. On the motion of Dr. F. Farre, a vote of thanks was accorded to the President by acclamation. The election was then proceeded with, the result being that eighty-nine votes were recorded for Sir W. Jenner, and forty were distributed amongst eight other Fellows. The Registrar having declared the result, which was received with loud applause, Sir W. Jenner briefly thanked the Fellows for having done him the unusual honour of electing him for the sixth time to preside over the greatest medical institution of the country.

PROFESSOR GAUTIER ON NEW LEUCOMAINES.

THE interesting researches carried out during some years by the distinguished chemist of the Collége de France resulted in the discovery of a group of bodies resembling vegetable alkaloids, or rather the alkaloids which had been found by himself and others, to which the term ptomaines, or cadaveric alkaloids, is now applied. But the importance of his discovery lies in the fact that these bodies, to which he gave the name Leucomaines, are found in healthy living matter, and there is every reason to believe were produced by the chemical changes of assimilation and disassimilation. Whether this is the exact truth can only be proved by the results of future observers; but the physiologist is often rather shy of accepting the results of the chemist, armed as the latter is with powerful agents of chemical destruction, and it is often urged that he has himself produced the bodies he has found. Putting this question on one side, the importance of the new views to the subject of medicine can easily be seen. The living being is constantly manufacturing in his own tissues agents which can produce disease or death. We have not the same necessity to search for the ever-present etiological factors of cold and damp, or too hastily summon the microbes to explain our diseases. This discovery was, as might be imagined, seized with delight by the anti-microbists; they had scientific evidence on which to found their opinions, and it must be said that they have in no way neglected to push the theory to its logical consequences. Ever since Professor Gautier's first paper at the Academy of Medicine, about two months ago, the subject for discussion has been the same—the leucomaines *v.* the microbes; and lately a fresh support has been given to the anti-microbists by the announcement from the Professor of two new leucomaines, the poisonous properties of which are undoubted. The first body is called "adenine." It was discovered by M. Kossel of Berlin in the pancreas and spleen, and was described in Hoppe Seyler's *Zeitschrift* of March 11th. It appears to exist in all animal and vegetable cells, and can be extracted from them by neutral reagents; and, further, it appears that it is derived in the cell from the nuclein—a body already known,—since under the influence of water and heat the nuclein produces adenine, phosphoric acid, and albumen. Adenine itself can be wholly transformed into hypoxanthine or sarcine—thus showing its near relation to the bodies we vaguely call nitrogenous metabolites; but a more interesting relation is hydrocyanic acid. The formula of prussic acid is HCN; the formula of adenine is $H_5C_5N_5$, and cyanide of potassium can be produced from it. The second body was isolated by M. Morelle from the spleen. This organ was chosen by the advice of Professor Gautier because of its undoubted purifying action on the blood, being the place where alkaloidal and similar noxious products of metabolism are retained. The physiological properties of this leucomaine were tested, and it was found to be a paralyso-motor, with a powerful action on the medulla oblongata. A small quantity injected under the skin of a guinea-pig appeared at first to produce nothing abnormal, with the exception of immobility, a refusal of food, and some swelling near the point of injection for the first forty hours, but by degrees the depression and suffocation increased, and the animal died asphyxiated. At the necropsy were found congestion of the lungs with subpleural ecchymoses, general œdematous infiltration of the liver, spleen, and kidneys, and a certain hardness of the ventricles, appearing to indicate the arrest of the heart in systole.

THE REPORT OF THE MINES COMMISSION.

THE long and interesting report just published by the Commission on Accidents in Mines abounds in the practical results of much careful investigation, which has been reluctantly suspended by those engaged in the work. The inquiry, as was to be expected, has been distinguished by the variety of its subject matter. With regard to ventilation, the Commissioners agree that there is need for improvement. The sectional area of the shafts might well be increased in many collieries. The improved methods of shortening the air-courses now coming into use might be more generally applied. The employment of two parallel intake drifts, of which one forms the travelling road, is also worthy of more extended trial. Supervision of workmen, according to the report, has grown in efficiency, there being now one overseer to every twenty or even twelve men. The subject of timbering or supporting the walls of passages receives due attention, and some hints are given as to the avoidance of "miscellaneous" accidents not peculiar to pitmen. The paragraphs most fruitful in fresh suggestion are those which deal with accidents due to explosion. The mischievous effect of coal-dust in dry mines as an aid to such mishaps is well brought out. The Commissioners have experimentally proved that a percentage of marsh gas amounting to 5 per cent., or even 4 per cent., of atmospheric air is decidedly explosive. Half this proportion, however, though not in itself dangerous, and though impossible of detection by ordinary lamp tests will explode if the air be laden even lightly with fine dry coal-dust. Now, it may happen that in blasting, particularly if gunpowder be used, an overcharge in the blast-hole, or the want of sufficient "tamping" or packing with damp non-non-inflammable material, will result in the projection of the heated products of explosion, with flame, into the air of the mine. Such an event is dangerous in dry mines, though little gas be present. The coal-dust is soon alight, the explosion spreads by contact of its particles and their admixture with small quantities of fire-damp, and the worst consequences may follow. It is probable that some of the obscurer causes of accident may be thus explained. To avoid such risks the following rules have been laid down:—1. Before using powder for blasting let coal-dust be removed from that part of the mine as far as possible, and the remainder saturated with water. 2. Where this cannot be done, some other explosive than powder, which flames too readily—lime cartridge or dynamite in conjunction with water—should be used. The latter compound, indeed,

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is reported to be safe even in the presence of an explosive mixture of air and fire-damp. Experienced men alone are to be employed in blasting; naked fuses and hot wires are strongly condemned; and the only means of ignition advised by the Commissioners are electric apparatus and such miners' fuses as are contrived with an appliance which fits over the blast-hole and secures their ignition while preventing the ingress of air. In conclusion, two points are specially insisted on—namely, the general employment of indicators which will show the presence of 1 per cent. of marsh gas, and to be used once or twice daily by men appointed to examine the mine, and the substitution of reliable safety lamps for naked lights, in all mines which are dusty or liable to invasion by gas. Lamp stations under ground—i.e., central points where lamps may be lit—must be carefully managed, and the more inflammable oils discarded or allowed only under certain precautions. The opinion of the Commissioners with regard to lamps is somewhat instructive. The older Davy, Clauny, and even Stephenson types have in great measure lost their value, in consequence of the rapid passage of air induced by free ventilation. A current of 800 ft. per minute in an impure atmosphere may, in spite of the wire-gauze, effect an explosion in any one of them. More recent kinds, as that of Gray and others, resist the force of a current moving at the rate of 3000 ft. per minute. Any lamp, however, is dangerous if loose in its fittings, and the only safeguard which has so far suggested itself is that every article of the kind before it is carried underground should be tested in an inflammable mixture of air and gas, which will suffice to indicate any faults of structure. Once lit it must in every case be locked. Electric lighting is already to some extent in use, and may come to be more generally adopted. It is admitted that, while it does not, like the oil-lamp, serve for test purposes, its lighting power is much greater and the risk from its use much less. The Commissioners close their report with a wish that ambulances adapted to the work of rescue in pit accidents were established throughout the coal districts, a wish which will not fail, we hope, to be realised.

CHOLERA ON THE ADRIATIC COAST.

THE cholera, which for some months past has broken out in isolated attacks in the north of the Adriatic, has made a further extension, the seaport of Brindisi being now affected. On the 15th inst. the disease was declared to be simply of a sporadic type, but the Egyptian authorities at once subjected all arrivals from Brindisi at Alexandria to seven days' quarantine; and later information is to the effect that the Austro-Hungarian Government have, in view of the unsatisfactory state of Venice, ordered seven days' quarantine for all goods coming from Italy. From Rome, too, comes news that the Sanitary Board admit that the cholera at Brindisi is of the Asiatic type, and it has itself ordered the imposition of seven days' quarantine at all Italian ports as regards arrivals from ports on the Adriatic coast.

HEMIANOPSIA.

THE March number of the *Archives de Neurologie* contains an almost exhaustive article on Hemianopsia by Dr. Seguin of New York. The value of the symptom in diagnosis is summed up in a few propositions, which, so far as our present knowledge goes, may be regarded as accurate. Lateral hemianopsia always indicates an intracranial lesion on the opposite side to the loss in the field of vision. Lateral hemianopsia with immobility of the pupil and neuritis or atrophy of the optic papilla, especially if in combination with symptoms of disease of the base of the brain, is due to alteration in the optic tract or of the lowest visual centres on one side. Lateral hemianopsia, or an analogous geometrical obscuration of the visual field, associated with hemianæsthesia and ataxic or choreiform disorders of movement in one half of the body, without obvious hemiplegia, is probably due to a lesion of the postero-lateral part of the optic thalamus or of the posterior division of the internal capsule. Lateral hemianopsia with complete hemiplegia (becoming spasmodic after some weeks) and hemianæsthesia is probably caused by an extensive lesion of the internal capsule about its knee and posterior limb. Lateral hemianopsia with typical hemiplegia and aphasia, if the right side be affected, together with more or less anæsthesia, is almost certainly due to an extensive superficial lesion in the area irrigated by the middle cerebral artery. Lateral hemianopsia with slight motor weakness of one half of the body, especially if combined with disturbance of the muscular sense, would probably be due to a lesion of the inferior parietal lobule, the angular gyrus and subjacent white matter extending deeply enough to injure or compress the optic radiations in their path towards the visual centre. Simple lateral hemianopsia without motor or sensory troubles, is due to a lesion of the cortical visual centre on the opposite side.

PUBLIC HEALTH IN TASMANIA.

PUBLIC HEALTH legislation is extending in the colonies. Under the Public Health Act of 1885, passed by the Parliament of Tasmania, each local board is required to appoint a medical officer of health; bye-laws may be made as to many subjects, including control over meat, milk, dairies, &c.; analysts may, and in some cases shall, be appointed, and clauses deal with the prevention of adulteration; the protection of infant life is specially dealt with by means of control over houses of persons receiving infants for nursing and otherwise; infectious disease must at once be reported by the local board to the central board, which has power to make regulations in such matters, and hospitals, ambulances, &c., may be provided under the statute; special powers are also vested in the Governor in Council to isolate houses and even streets in which infection prevails; and penalties are provided for the exposure of infected persons or things. As regards many nuisances, whether connected with trades, animals, or otherwise, the Tasmanian Act follows much in the lines of the English Public Health Act, but it has the advantage of simplicity in dealing with pigs, for it is expressly provided that no person shall keep any swine or a pigsty within 100 ft. of any house in any city or town, or within 50 ft. of any house in a rural municipality. Such a provision would, in this country, have prevented the overthrow of useful bye-laws affecting our rural areas, where regulations dealing with this subject are, in view of recent legal decisions, practically useless. Dr. Henry A. Perkins, of the University of Edinburgh, has been appointed President of the Central Board of Health, and we feel certain that much excellent work will be effected under his administration.

NEW APPLICATIONS OF CORK IN THE ARTS.

THE peculiar properties of cork which have led to its application to many familiar uses are probably still very imperfectly understood by the majority of the reading public. A careful exposition of its nature by Mr. William Anderson at the Royal Institution comes therefore in good time, and opens up a prospect of wider and more important adaptations of this singular substance in the arts. The essential character of cork consists in its retentive porosity with regard to air. In other words it is a substance composed of fine closed cells whose walls permit the gradual entrance and storage of air while they resist its ready egress, or the entrance of denser fluids. It is therefore not only a gas-holding but a gas-retaining substance, and as such possesses in a greater degree than any other solid the

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power of allowing cubical condensation from pressure applied in all directions. It is proposed in various ways to carry out in practice this explanation of the nature of cork. It may be employed, for example, in hydraulic apparatus where the air-laden cork will take the place of air itself, and Mr. Anderson was able to show that in some cases, at all events, it was competent to discharge this function. A suggestion was made that the porosity of cork rendered it a fit substance for the construction of overcoats, and greatly preferable to indiarubber in this respect. The latter part of this suggestion we have no difficulty in conceding, and we hope that experience will prove that it is wholly justifiable. Cork underclothing has been advocated by some on similar grounds; but this proposal does not in our opinion guarantee the wearer the comfort and sanitary advantages which are conferred by the use of wool.

THE AMERICAN MEDICAL ASSOCIATION AND THE INTERNATIONAL CONGRESS.

THE meeting of the American Medical Association takes place on Tuesday, May 4th. The meeting will be of more than usual importance. The approach of the time for the International Medical Congress makes everyone anxious for its success, and about the action of any Body or any persons that may influence the event. The American Medical Association is one of those bodies which may do much to mar or to make the Congress. We venture to hope that it will not interfere with the executive committee now appointed and apparently doing good work in organising the Congress. This committee was intended to be quite independent, and we gather from the journal of the Association that this independence will be respected. The death of Dr. Flint is a profound fact and factor in the question. Whatever may have been the differences between him and esteemed contemporaries in the United States, we cannot doubt that his death will greatly obliterate the sense of these and intensify the desire to bring the Congress, for which he laboured so much, to an issue worthy of America and of the cause of international medicine. Probably no other death could have caused quite the sense of loss in medical circles in Europe which the removal of Dr. Flint has caused at this moment. But the best consolation of his friends at home and abroad will be the success of the Washington meeting.

FEMININE PRURIENCY.

WE do not specifically speak of the pruriency of females, though, of course, this vice—for we can call it by no less opprobrious name—attains its highest development in women; but of that particular pruriency which, because females more frequently manifest it, must be regarded as feminine, and which, indeed, has all the feeble filth-love that prompts to the indulgence of prurient curiosity among women of worthless character or debased mind. Hard as it may be to define this graceless quality of the feminine nature, whether occurring in unwomanly women or unmanly men, everyone will recognise its existence, and no right-minded person can regard its manifestation without regret. The judge presiding at the recent trial at the Old Bailey did not condemn this monstrous evil too severely. The fact that women crowded the court, and were not abashed by evidence which no decent newspaper would print, must be held to reflect injuriously on the morals of the day. What, however, is to be said of the mismanagement, or worse, by which a court of justice was reduced to the level of a place of public entertainment of the lowest description? The judge compared it to a "theatre." By so doing he did a wrong to the class of theatrical managers and the Lord Chamberlain. No theatre—in this country, at least—has within the memory of the oldest inhabitant been degraded to the level of the Old Bailey during the recent trial. Why were extra seats provided, or, being provided, why were they allowed to be occupied by women not one whit less despicable than those who brought their knitting and sat and gloated over the spectacle while heads fell under the guillotine? There is blame to cast somewhere, and in the interests of public morality it should be brought home and pressed on the wrong-doers. We cannot determine which is the most significant fact—that women should have been found to crowd the court, or that they should have been permitted thus to disport themselves. We hear of the enfranchisement of women, of their gentleness and purity. Heaven help the morals of this land when the spirit of feminine pruriency displayed in this last public scandal has attained yet higher supremacy, and the Newgate calendar replaces the work of elegant extracts in the boudoir, while the Old Bailey is the chosen place of entertainment for the mothers and sisters of Englishmen.

THE CONDITION OF THE BLOODVESSELS IN EPITHELIOMA.

A NUMBER of observations on the changes in the bloodvessels accompanying epithelioma have been carried out in Professor Ivanovski's laboratory in St. Petersburg by Dr. Nikolai Yakimoff. He divided his cases into two series. In the first, consisting of fifteen cases, the bloodvessels in the locality of the new growth only were examined, and in the second series of five cases the observations extended to the other organs and bloodvessels of the body. These observations show that the bloodvessels not only near the tumour, but generally throughout the body, become affected, both the larger and the smaller having thickened walls and a diminished lumen. The thickening of the walls affects all three coats, the middle and inner coats being more affected than the external. Hypertrophy and hyaline degeneration both occur, beginning in the small vessels and gradually extending to those of larger size. Hypertrophy is caused by the multiplication of the cellular elements of all three coats, but the white blood-corpuscles may assist in the increase of the external and internal coats, especially in that of the intima, when it happens to be affected by endo-arteritis obliterans. Hyaline degeneration proceeds mostly in young cells which are not fully developed, and in old ones in which proliferation is commencing. This hyaline degeneration may commence either in the nucleus or in the protoplasm of the cells, but most commonly does so in the latter.

LEGAL MEDICINE IN ITALY.

SINCE Puccinotti's great work "Trattato di Medicina Legale," followed by his "Trattato Medico-legale sulle Ferite," published more than fifty years ago, this important branch of medicine has rather languished in Italy. Quite lately, however, it has shown signs of recovering. The Cavaliere Nicola De Pedys, a graduate of much distinction in surgery and medicine of the Roman University, has bestowed steady attention on medical jurisprudence, and has put forth a first instalment of his studies, entitled "Delle Malattie simulate, e del modo di riconoscerle e scoprirne la frode" (On pretended Maladies, and on the mode of recognising them and detecting their fraud). For the ability shown in this treatise, and for other evidences of medico-legal skill elicited by the Committee of Examiners of the University of Naples, Dr. De Pedys has been unanimously appointed Professor of Legal Medicine in that seat of learning. Commenting on his appointment, an Italian contemporary says that his treatise "Delle Malattie simulate"—a volume of 450 pages—is a unique book on the subject in Italy, and that its author, in his new sphere of

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professorial work, may be expected to raise the subject of his lectures from the decrepitude into which it has fallen in the schools throughout the peninsula.

FROG'S SKIN TRANSPLANTATION.

SOMETIMES slowly healing wounds with feeble granulations are made to increase their activity in the direction of cicatrisation by transplanting minute fragments of epidermal tissue containing some of the cells of the rete Malpighii on the healing surface. O. Petersen has successfully used the skin from the back of a frog. The slowly cicatrising wound was situate on the back of the neck of a man and had resulted from excision of a malignant pustule. A piece of frog's skin the size of the thumb-nail was washed in a 2 per cent. solution and placed upon blotting-paper, when it was divided into two. The grafts were applied to the wound so that the blotting-paper was interposed between them and the fixing plaster. Two days after the transplantation both fragments of epidermis were found to be adherent. Two days later a fresh grafting was made; the former grafts had become roseate. In a further period of forty-eight hours the pigmentation of the grafts had almost disappeared. The cicatrix resulting after this treatment was found to be of great softness and elasticity. Frog's skin as grafts has been recently employed at some of the London hospitals.

DEATH IN HARNESS.

DR. FRIEDRICH WULFF, a well-known and much-respected St. Petersburg practitioner, while paying a professional visit on the 4th instant, was preparing to examine the patient, when an instrument he held in his hand was heard to drop, and he himself, with the simple exclamation "I feel ill," fell to the ground. Life was found to be extinct. The cause was cardiac disease, which, however, had never but once given him any intimation of its existence, and that was a slight fainting fit about a fortnight previously. He was born in 1829, and had never been seriously ill. He was capable of a large amount of work and required but little sleep, and he died, as he probably would have wished to die, in harness. His medical knowledge is described by the *St. Petersburger Medicinischer Wochenschrift* as encyclopædic, but his favourite branch was surgery, he having held important surgical posts in the Obuchoff Hospital. For many years he was secretary and subsequently vice-president of the Society of St. Petersburg Practitioners, and contributed important papers on tracheotomy, osteomalacia, phosphorus-poisoning, and other subjects, to medical literature.

THE ANTI-VACCINATION DELUSION.

THE opponents of vaccination have lately held their annual meeting. They continue to abuse the most beneficent Acts that were ever passed. It is a curious study to notice the pilgrimage to Paris from every country in Europe and from America of those in danger of hydrophobia to take the chance of safety from a new and as yet unproved kind of inoculation, and the contemporaneous meeting of a few victims of the anti-vaccination craze in Bloomsbury to disparage and denounce the vaccination whose efficacy has been proved to demonstration by the all but absolute immunity of small-pox hospital nurses. Much was made of the freedom of Leicester and other places from small-pox. The test is to come, and then not a few who are now decrying vaccination will either rush off to the vaccination office, as those bitten by mad dogs are doing to M. Pasteur, or pay the penalty of disfigurement or death. After all, small-pox is the schoolmaster that drives people to vaccination and keeps green the fame of Jenner.

THE UNIVERSITY OF LONDON.

WE understand that Mr. Magnus's Committee has drawn up a scheme for reforming the University, but that it will not be ready to lay before Convocation at the annual meeting next month; a special meeting will, however, be called for its consideration late in June or early in July. In the scheme the reference to medical degrees will probably be omitted. At the same meeting Convocation will probably be called on to nominate three Fellows, of whom one may be selected to fill the vacancy in the Senate caused by the resignation of Sir Joseph D. Hooker. The last vacancy was filled by an Arts graduate, so it is now the turn of Medicine and Science to elect a representative. The names of Sir Joseph Lister, Mr. Savory, Dr. Barnes, Dr. Bristowe, and Dr. Wilson Fox have been mentioned as prominent medical graduates, and of Mr. Thiselton Dyer, Mr. Magnus, and Mr. Unwin as graduates in the Science Faculty, from whom a choice might be made; but as Mr. Magnus stood on the Arts side at the last election, he will probably decline to be nominated for Science on this occasion.

PATHOLOGICAL SPLEENS.

DR. YASHVILI describes, in the reports of the Caucasian Medical Society, two interesting cases of pathological spleen. A patient who suffered from malaria was killed by an accident, and the spleen was found to be enlarged, with a closely adherent capsule. In the parenchyma was a collection of pus about the size of a walnut, in the walls of which three osseous lamellæ from one to three centimetres in length were found, all the other organs of the body being healthy. The second case was that of a perfectly healthy man who met with his death by accident. He seems, however, to have suffered at some previous time from malaria. The spleen was found to be diminished in size, being only 7·5 centimetres in length, 3 in breadth, and 1 in thickness. The capsule was membranous, thickened, rough, of a greyish-white colour, and closely adherent to the parenchyma. The latter was of a dark-brown colour, and on section the septa appeared as grey cords and nodes. The author suggests that, as this organ could have been of very little use to its owner, the spleen cannot be an absolutely essential portion of the human economy.

SMALL-POX IN RURAL AND URBAN DISTRICTS.

THE lessening of the death-rate from small-pox in London and other of the larger centres of population is being followed by cases of small-pox in some smaller towns and rural districts. This should put the local sanitary authorities of these districts on the alert. As a rule the advice of the medical officer of health is readily acted on, but in some instances it is ignored or only partly followed. In small-pox it is most important that the advice of the medical officer of health should be taken, and any sanitary authority neglecting to act on such advice incurs a grave responsibility.

"A HOSPITAL MISSION WEEK."

THE suggestions recently made by Dr. Wakley for increasing the amount of the contributions to the Hospital Sunday Fund are being very carefully discussed by a special committee of the Mansion House. One of the chief of these is the holding of a series of meetings in six different parts of London, one daily, in the week preceding Hospital Sunday, at which it is hoped that several eminent speakers would advocate the cause of hospitals. These meetings are to be organised by the hospitals themselves in their respective districts, with

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the help of the Council of the Hospital Sunday Fund. A great opportunity is here given to the hospitals, which, it is to be hoped, will be heartily used by all hospitals. The staffs of hospitals need to rouse themselves in this matter. The enormous multiplication of institutions making a demand on the liberality of the public put hospitals and their quiet unseen work at a disadvantage. We trust that the hospital authorities will exert themselves to diffuse some evidence of their work in the different districts of London. The churches do their part; but it is reasonably thought that more might be done by the hospitals themselves in asserting their claims, and "the hospital mission week," as Sir Edmund Currie happily called it, will afford the opportunity.

SUPRA-PUBIC LITHOTOMY.

IN an article on Rupture of the Bladder in the current number (April) of the *Annals of Surgery*, reference is made to two instances where this lesion followed the distension of the viscus with fluid. One in the hands of Verneuil, where a gentle injection of only 125 grammes was immediately followed by the bursting of the bladder; and one in which the rupture occurred whilst Guyon was preparing to perform hypogastric lithotomy. The latter had thrown 200 grammes of boric solution into the bladder and 300 grammes of fluid into the rectal balloon, but the vesical globe did not appear. A little more fluid was injected into the bladder, and the hypogastrium was distended for a moment, but then suddenly became flat. Death occurred in twenty-two hours, and the necropsy showed the walls of the bladder to be 8 mm. thick, with an anterior perforation 12 mm. long. It is desirable that instances of this kind should be borne in mind now that the revival of supra-pubic lithotomy, as adopted by Petersen, is under the consideration of surgeons. The possibility of rupture of the bladder or intestine occurring is certainly a new element of risk in connexion with the removal of stones which cannot be treated by crushing.

A COLLEGE OF BARBERS.

THE hairdressers would follow suit to the plumbers and be properly diplomated. By all means; nothing could be better advised on their part, or more consonant with the interests of public health and comfort. It is suggested that they should know something of diseases of the hair and skin. Within due limits this may be wise, but we hope there is to be no repetition of the "dentist" bungle, and that the public will not be in peril of a new invasion of *specially*—that is, imperfectly—informed tinkers for a part of the organism. It is the bane of "progress" that each step "onwards and upwards" involves the development of some additional subdivision of skilled labour. We are of those who believe that sooner or later the rage for specialties must be played out, and that then it will be seen that more has been lost than gained by its ascendancy. By all means let barbers be properly trained, and, if needs be, certificated; but we venture to think that the less a pretence to knowledge of skin and hair diseases is encouraged, the better for the craft and for its customers, the public.

SUTURES IN THE HEART.

A PAPER of Block's communicated to the eleventh congress of the German Surgical Society, 1883, on "Wounds of the Heart and their Cure by Sutures," having attracted the attention of Dr. Philippoff of Kharkoff, he determined to make a series of experiments on dogs and rabbits for the purpose of satisfying himself of the truth of Block's assertion that sutures may, under certain circumstances, be applied to the walls of the heart. Though the Russian observer has not as yet concluded his investigations, he has published a preliminary note in the *Russkaya Meditsina* (No. 11) in which he states that the hearts of some animals will bear transfixion with a fine trocar or a needle, also that wounds of the heart in animals may be cured by means of sutures, but by no means always. He found, too, that the pericardium might be opened in dogs without any serious effects, but that wounds of the large vessels at their exit from the heart were invariably fatal.

INFLUENCE OF ATTITUDE ON THE FREQUENCY OF THE PULSE.

THE pulse is more frequent in the erect than in the recumbent posture. This statement holds good in general when the individual is healthy. Graves showed that some cases of hypertrophy of the heart prevented the change of rhythm, and Jorissenne has demonstrated the same circumstance in pregnant women, in whom the heart also becomes hypertrophied. Now M. P. Longe has found that the same invariability of the pulse-rate sometimes obtains during the period of menstruation. There was no hypertrophy of the heart in the cases investigated by M. Longe, but the arterial tension is said to have been higher than usual. It may be that increased arterial tension is the real cause of the phenomenon of invariability of the pulse-rate.

STAINES FEVER HOSPITAL.

A DEPUTATION from Staines waited upon the President of the Local Government Board on the 15th instant, to bring forward their objections to the erection of a hospital for infectious diseases for the use of their district. The attitude of the Staines rural authority is strange in this matter. Having voluntarily united with the town for the purpose, they selected a site, and, with money borrowed under the sanction of the Local Government Board they of their own accord commenced building operations. Then they suddenly turned round, and, alleging reasons of economy, declined to proceed with the structure, and this notwithstanding the prevalence of small-pox and other diseases needing isolation in their midst. We cannot tell what the decision of Mr. Stansfeld will be in the matter, but it is certain that the attitude taken up by the Staines objectors would be best met by a counter-deputation from the more reasonable part of the population who desire to finish the work that has been commenced.

MULTIPLE HYDATIDS.

A RARE case of multiple hydatids is described by Professors Vinogradoff and Kotovshchukoff in the *Russian Medical Review*. A hydatid about the size of a nut was found in the wall of the left auricle immediately under the pericardium. Three were found in the left lung, one of which was as large as an apple; one was situated in the right lung, and the spleen and the liver both contained hydatids. The results of the post-mortem examination had been to a large extent anticipated by the diagnosis which was made during the patient's life. It may be remarked that the base of the left lung gave a dull note, absence of breath sounds, and vocal resonance.

LADY MEDICAL MISSIONARIES.

THE Society for promoting Christian Knowledge has decided to offer a studentship, at the rate of £75 a year for four years, to assist ladies in obtaining a complete medical and surgical training, with a view to their devoting themselves as medical missionaries among heathen and Mahommedan nations. No more useful or Christian work could be conceived than to supply the women in the East with the medical skill which a complete education can alone give.

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"THE OUTPUT" OF GRADUATES IN CHICAGO.

A CONTEMPORARY, the *New York Medical Record*, reports the "total annual output" of graduates at Chicago of a "regular" character as 285, to say nothing of the "total output of irregulars," which reached the appalling number of 215, or only seventy less than the "output" of the regulars. And so we read of the "Miami College" graduating a class of forty, the Medical College of Ohio a class of seventy-eight, &c. The *Record* speaks of this prolific production of medical graduates as "a service to the profession"; and our contemporary, the *Journal of the American Medical Association*, speaks with apparent satisfaction of the regulations and provisions for the better education of medical students. We cannot but rejoice at every report of a lengthening of the curriculum, a better standard of preliminary education, and efficient laboratories for practical work in the American schools; but we confess to reading of the wholesale "output" of graduates, as one might read of the output of coals, with something of misgiving. Graduates are rather to be weighed than numbered.

TRICOPHYTON TONSURANS.

IN a note communicated to the Royal Society (Proceedings of the Royal Society, No. 241) Dr. Thin adduces further evidence in support of his conclusion, arrived at from experiments upon tricophyton tonsurans and previously related to the Society, that the fungus is distinct from ordinary fungi, with which it has hitherto been confounded. The additional evidence is derived from cultivations of the fungus in gelatinised beef-juice, in which it will grow when the spores are quite immersed and excluded from air. The contrast with the growth of penicillium is shown by examining cultures of the two fungi at stated intervals; the penicillium is seen to grow with great rapidity, and to develop the characteristic organs of fructification, whilst "the tricophyton mycelium grows steadily and slowly, with no distinct signs of spore formation, and no trace of organs of fructification."

UNQUALIFIED ASSISTANTS.

WE report elsewhere a painful case in which the death of a man at Hoxton seems to have resulted from medicines prescribed by the unqualified assistant of Mr. Money. As the jury have returned a verdict of "gross negligence," which the coroner said amounted to one of manslaughter, we suspend judgment in this particular case. But we are bound to lose no opportunity of expressing our surprise that many medical men should still continue to employ unqualified assistants as they do, leaving them often in complete or almost complete charge of cases. In many instances the assistant is taken for, and understood to be, the principal, and continues to attend till death appears in view and all control of the case is lost.

OPERATIONS IN COUNTRY HOSPITALS.

SENIOR students are often lamentably ignorant of the vast field for improving their knowledge of surgery which exists in many provincial hospitals to which no medical school is attached—a field which as yet is, comparatively speaking, unexplored, and which is certain in the not distant future to receive more attention than has yet been given to it. Such being the case, no apology is needed for publishing a list of operations which were performed on the 17th ult. (the ordinary operating day) at the North Staffordshire Infirmary. They were as follows:—Colotomy, amputation of thigh, gastrostomy, radical cure of hernia, operations for tumours of testicle and hernia, epithelioma of tongue (excision), condylomata, and malignant tumour of leg (resulting, after consultation, in amputation of thigh). This list is one which will bear comparison with that presented at the majority of the hospitals which are frequented by students of surgery, and is one which, we are assured, is not exceptional in the importance and number of the items of which it is composed.

KOCH'S BACILLI IN ADDISON'S DISEASE.

DR. GOLDENBLUM of Dorpat gives in the *Vrach* (No. 11, 1886) an account of a case of Addison's disease occurring in a young man, in which the suprarenal capsules, which were cheesy, contained Koch's bacilli. The other organs of the body, including the lungs, which were emphysematous, were also examined, but no bacilli were found. The suprarenal capsules were immersed in alcohol and sections made, which were stained by Ehrlich's method. A previous case of Addison's disease in which Koch's bacilli were found in the suprarenal capsules was reported in the *Vrach* (No. 1, 1886), but in that case the diagnosis was somewhat less clear, the body not being distinctly bronzed, though a greyish discolouration was noted; there was also tuberculosis in the lung, which did not exist in Dr. Goldenblum's case.

FOREIGN PROFESSORSHIPS.

THE chair of Practical Pharmacy in the Madrid Faculty of Pharmacy has been filled by the appointment of Dr. Don Ricardo de Sádaba y Garcia del Real, supernumerary professor in the faculty. Dr. S. Kostyurin, of the St. Petersburg Military Medical Academy, has been appointed to the Professorship of General Pathology in the University of Kharkoff. Dr. Nikolai Voronzovski, Professor of Operative Surgery in the University of Moscow, has just died, leaving £2400 to found scholarships, and £1000 to found a library for the Medical Faculty.

IN reporting to Colonel Sir Francis Bolton on the composition and quality of daily samples of the water supplied to the metropolis during March, Messrs. Crookes, Odling, and Tidy state that they have analysed 189 samples derived from the mains of the seven water companies taking their supply from the Thames and the Lea, and "the whole were found to be perfectly clear, bright, and well filtered." They add that the condition of the water was in all respects thoroughly satisfactory.

THE death is announced of Señor Don Eugenio Alau, a Spanish physician, who had occupied the posts of Civil Governor in various provinces, of Rector and Professor in the University of Valladolid, Senator of the Kingdom and Councillor of Public Instruction. He received the Grand Cross of Isabella the Catholic, besides being the bearer of many other honours awarded to him for his distinguished services.

WE understand that at the forthcoming festival of the Royal Medical Benevolent College at the Holborn Restaurant on Tuesday, May 11th, the music will be entirely in the hands of members of the medical profession, including such distinguished amateurs as Dr. Lavies, Mr. Critchett, Mr. Hepburn, and others, Mr. Ganz presiding at the pianoforte.

IN reply to a deputation of anti-vaccinationists, Mr. Stansfeld recently stated that he thought it would be useless to expect the House of Commons to accede to the abolition of compulsory vaccination.

IT is stated that Messrs. Vanderbilt Bros. have given a quarter of a million dollars towards the erection and endowment of a clinical building for the College of Physicians and Surgeons in New York.

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The Times Russian telegrams of April 16th contain information about the Pend-jeh sore which was noticed in THE LANCET of April 10th. This disease is attracting a good deal of attention in Russia. It is now attributed to bacteria in the water of the Murghab valley, and alarm is felt lest an army should be incapacitated by it.

AN Order in Council has been published reappointing, under the provisions of the Medical Act, Mr. John Simon, C.B., F.R.S., and Mr. T. Pridgin Teale, F.R.C.S., to be members of the General Council of Medical Education and Registration of the United Kingdom for a further term of five years from May 23rd next.

ANOTHER of M. Pasteur's Russian patients, the fourth, has, it is announced, died of hydrophobia.

Pharmacology and Therapeutics.

ALETRIS CORDIAL.

WE have received from Messrs. Burgoyne, Burbidges, and Co. specimens of "Aletris Cordial," which is said to be efficacious as a "uterine tonic and restorative." Of this special preparation we have had no experience; but the drug itself, the "Aletris Farinosa," or "Star-grass," of Central America, is familiar enough to all who take an interest in the progress of therapeutical science. The root from which presumably the cordial is prepared has many useful properties, and has long enjoyed a reputation in the treatment of various forms of uterine complaints. A thorough investigation of its medicinal properties is a desideratum.

KENNEDY'S EXTRACT OF PINUS CANADENSIS.

The Pinus Canadensis is presumably the Pix Canadensis or Canada pitch, a resinous exudation from the hemlock or hemlock spruce of Canada and the United States. It is a non-irritating mucous astringent, and is likely to prove useful in catarrh, leucorrhœa, gonorrhœa, and other conditions attended with profuse discharge. It was frequently employed by the late Dr. Marion Sims, and is supposed to be a valuable remedy.

TABLOIDS OF COMPRESSED TRINITRINE.

Trinitrine is the new name for nitro-glycerine, the general adoption of which has been advocated by Dujardin-Beaumetz, Huchard, and other continental observers. Its occurrence in prescriptions is less likely to alarm the susceptibilities of delicate, nervous, or highly-strung patients than the more commonly employed term. The tabloids of compressed trinitrine are made with sugar of milk, which is admirably adapted for the purpose, and dissolves much more rapidly than any of the ordinarily employed excipients. We have made trial of these new tabloids, and find that they answer admirably in cases of angina pectoris, giving prompt relief to the paroxysms of pain. The compound trinitrine tabloids, containing, in addition to nitro-glycerine, nitrite of amyl, menthol, and capsicum, constitute a valuable preparation, and will in all probability speedily replace the officinal formula.

QUEBRACHO BLANCO.

The origin and therapeutic value of the barks known under the name of Quebracho blanco form the subject of an interesting communication by Charles Eloy and Henri Huchard in the *Archives de Physiologie*, published this month. Though long in common use in South America, it was only as recently as 1878 that Penzoldt of Erlangen employed it in Europe. Since that period, however, several physicians and pharmacologists have studied the effects it produces, and the general agreement that has been obtained shows that its effects are constant; and there can be no doubt that a new and valuable drug will by its introduction be added to our materia medica. Botanical investigation has demonstrated that the bark named Quebracho really belongs to four different plants—namely, the Aspidosperms, Quebracho, or Quebracho blanco, belonging to the natural order Apocynaceæ, the wood of which is very hard and furnishes the active principles of which mention will presently be made; the Lexopterygium Lorenzii or Quebracho Colorado of the natural order Terebinthinaceæ, the bark of which is rich in tannin; the Iodina rhumbifolia or Quebracho flogo, of the family of Ilicineæ; and, lastly, the Macharium fœtidum or Quebracho tipa, of the natural order Leguminoseæ. The two last are little known, and perhaps possess no medicinal value. The best barks come from Pilciao, and are obtained, like those furnishing quinine, from the smaller branches of the trees. The active principles hitherto obtained from them are aspidospermine, $C_{22}H_{30}N_2O_2$, considered by some to be identical with paytine; quebrachine, $C_{21}H_{26}N_2O_2$; aspidospermatine, $C_{22}H_{23}N_2O_2$; hypoquebrachine, aspidosamine, and quebrachamine. The most remarkable influence exerted by the bark, as well as by these substances, and especially by quebrachine and aspidospermine, is their power of lowering the temperature of the body. The administration of seventy-five milligrammes per kilogramme of body weight to a rabbit caused the temperature in the rectum to fall to 3° C. in the course of forty-nine minutes. This depression of temperature is associated with some remarkable alterations in the respiratory function. The first effect is to render the respirations deeper, but not more rapid; then after the lapse of a quarter of an hour the respirations become more rapid in the proportion of 11 : 12 in the rabbit and 10 : 11 in the dog, an effect that is persistent for a long time. When larger and toxic doses are given the respirations become arhythmic and shallower till death occurs. Quebrachine is more active and more poisonous than aspidospermine, whilst its antithermic properties are still greater, a diminution of temperature amounting to from 5° to 7° C. having been observed in ten minutes. Other symptoms observed in dogs, when moderate doses of five centigrammes were given by the mouth, were, in the course of a few minutes, convulsions, paralysis of the hinder limbs, and tumultous action of the heart, which lasted for an hour and a half. When recovery took place M. Petrone observed reflex modifications of sensibility, mydriasis, and congestion of the auricle of the ear. Eloy and Huchard, however, did not perceive any mydriasis. In their experiments pure aspidospermine produced spasms of the hind limbs and trembling of the muscles, passing, when the poison was not eliminated, into paralysis, but when smaller doses were given terminating in recovery. The sensibility remained intact. The frequency of the cardiac pulsations fell from 156 to 126, the vessels of the auricle becoming at the same time intensely reddened. In some instances the galvanic excitability of the phrenic nerve was observed to be augmented both with aspidospermine and with quebrachine. Both substances caused hyper-secretion of the kidney, of the glands of the intestines, and of the salivary glands. It is clear from these facts that in quebracho bark proximate principles exist which may prove of great value in the treatment of disease. It has been recommended in dyspnœa, both of pulmonary and of cardiac origin, and has been found to possess some, at least, of the value assigned to it by the American aborigines, who regard it as febrifuge, anti-diarrhœal, and diuretic.

EL KELLAH.

This plant, the Ammi visnaga of botanists, has furnished M. Moustapha with a ternary compound, kelline, having narcotic properties, and in animals inducing vomiting, with paralysis of the hinder extremities, irregularity of the heart, and slowing of the respiration. The fruit has been used therapeutically in the proportion of 6 to 8 per cent. as a tonic and astringent gargle in cases of stomatitis, dental caries, and gingivitis. In daily doses of 150 grammes, the decoction of the seeds has been employed for rheumatism. An ointment made by triturating the seeds of kellah with oil or a fatty substance serves for frictionising the joints and articulations. A decoction of from 18 to 20 grammes of the seeds in 160 grammes of water is said to be efficacious in

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gravel. Finally, the decoction is stated to be a febrifuge, and the leaves are also employed in the preparation of cataplasms.

HOPEINE.

The investigations of Dr. Paul appear (*Pharmaceutical Journal*) to prove that hopeine is an artificial product, which has been manufactured by the admixture of morphine and cocaine. At all events, these two alkaloids were detected in several specimens analysed by him. And as the sources of such alkaloids are of widely different botanical origin, the above conclusion appears probable.

THE FIFTEENTH CONGRESS OF THE GERMAN SOCIETY FOR THE ADVANCEMENT OF SURGERY.

THIS Congress was opened on the 7th inst. at Berlin, in the Aula of the University, the attendance of Berlin physicians and guests being very numerous. Amongst those present were noticed Volkmann, Czerny (Heidelberg), Mikulicz from Krakow, Schœde from Hamburg, Roser from Marburg, Gurlt, Küster, Israel, Bergmann (all four from Berlin), Kœnig from Gottingen, and Thiersch from Leipsic. The Vice-president, von Volkmann, opened the meeting, expressing his regret that the President, the highly honoured von Langenbeck, was prevented by illness from being present at the Congress. As an acknowledgment of the high services of the veteran surgeon on behalf of the Society, he proposed that they should elect him as honorary president. The proposal was accepted with acclamation, and the resolution telegraphed to von Langenbeck at Wiesbaden. Sir James Paget and Sir Joseph Lister in London, who at the last Congress were elected honorary members, sent communications expressing their sense of the honour shown them, and requested that their acknowledgments might be communicated to the Society. The Society has lost several prominent members through death, amongst them being Professor Uhde of Brunswick, Vogt, surgeon at Greifswald, Starke of Berlin, and Burow of Kœnigsberg. All were highly esteemed on account of their personal qualities and extensive knowledge. Five members have left the Society and seventeen have entered, so that the Society now numbers 359 members. Von Volkmann was elected chairman, von Bergmann vice-chairman, von Gurlt (from Berlin) resident secretary, and von Küster resident treasurer. Herrn Schœnborn from Kœnigsberg, Thiersch, Kœnig, Roth from Dresden, and Esmarch of Kiel complete the committee.

The course of addresses was opened by Professor Kraske of Freiburg with a discussion on the Etiology and Pathogenesis of Acute Osteo-myelitis. Roser, Mikulicz, Fraenzel, and others took part in this discussion.

Afterwards Rinne, from Greifswald, spoke on the Drainage of Abscesses of the Abdomen.

The next address was by Professor Rosenbach, from Göttingen, on the Etiology of Traumatic Tetanus in Human Beings. Hitherto, the author observed, no satisfactory explanation has been forthcoming of this affection. The relation of the wound to the tetanus could not be direct. Wounds containing foreign bodies, wounds attended with gangrene, and gunshot wounds in the upper and lower thigh show principally an inclination to cause tetanus. The experiment of injecting blood and matter of tetanised beings into dogs has given negative results, the dog remaining entirely unaffected; but results have been obtained with rabbits, guinea-pigs, and mice. Curiously enough, the inoculation of these animals with earth caused tetanus, with symptoms quite equal to those of traumatic tetanus in man and the horse, the latter often dying of the disease. From a man who, in consequence of frozen feet, had died of tetanus, the speaker received, through repeated inoculation on guinea-pigs and mice, material for microscopic examination, and discovered in it those fine bristle-like split fungi which Nicolaier received from the cases inoculated with garden earth. The fungus is a bacillus, and is most likely the cause of tetanus through the secretion of a sort of strychnine poison.

After an adjournment for refreshment, an address by Dr. Landerer from Leipsic followed on Transfusion and Infusion. The speaker said that the use of a solution of common salt, recommended by Kronecker and Sander, had secured a little better result than had attended the employment of blood. Nevertheless this method was also unsatisfactory, because the introduced liquid contained scarcely any nutritive material, and consequently, after a short revival of the patient, his death could not be prevented if more than 4½ per cent. of the body weight in blood had been lost. He had therefore employed a mixture of one part of defibrinated blood to four parts of the solution of alkaline salt. With this he had obtained good results, even if more than 5 per cent. of blood had been lost. At the suggestion of Professor Ludwig, of Leipsic, a solution of alkaline salt mixed with 3 per cent. of common cane sugar was then used. Trials on animals showed that this operated well, even with a loss of 6½ per cent. of blood; after a fortnight the loss of blood particles was replaced. Various causes were given in explanation. First, the blood particles keep better in a solution of sugar than in a solution of salt; then, again, sugar draws great quantities of moisture out of the parenchymatised webs, and procures in this way nutritious powers for the thinned blood; sugar is in itself nutritious and burns very quickly, therefore quickly brings warmth to the body, increases the pressure of blood, &c.

At the meeting on the 8th inst., a discussion resolved on at last year's Congress concerning Operations on Stone in the Bladder was held. In was opened by Kœnig from Göttingen, and continued by von Bergmann, Trendlenburg, von Volkmann, Schœde, Fürstenheim, Schœnborn, Sonnenburg, Israel, Gussenbauer, Küster, Löbker, and Petersen.

It was decided to bring forward for discussion at the next Congress Operations on Obstruction of the Bowels and on Peritonitis and Perforation of the Gut.

UNQUALIFIED ASSISTANTS AND BRANCH DISPENSARIES.

ON Friday, the 16th inst., Mr. George Collier, Deputy Coroner for East Middlesex, held an adjourned inquiry at the Shoreditch Town Hall relative to the death of Henry Hibbard, aged fifty-four, of 45, Bookham-street, Hoxton, who had been in the employ of Messrs. Barron, Harvey, and Co., wholesale druggists, as warehouseman, for a period of twenty-six years.

Mrs. Ellen Hibbard deposed that on Saturday, March 27th, deceased did not get up, and complained of want of sleep. He sent her to Mr. Money's surgery for a bottle of composing mixture, he having had one bottle before. She went as directed, and deceased took the medicine. He got no sleep, and on the Sunday he had another bottle. On the Monday he was worse. She then went to the surgery and asked the doctor to call and visit the patient, which he did, and told her to call for the medicine, telling her it would be two doses, which were to be given in a little stout. She fetched the medicine and gave it as directed—one dose when she got home (about 3.15 in the afternoon), and the other at 6 o'clock, as the first did not have the desired effect. Shortly after taking the second dose her husband became insensible. She went for the doctor, and Mr. Money himself came. Up to that time she thought that she had been dealing with a properly qualified man, but found then that it was the assistant who had been prescribing for her husband. Her husband died at about 8.15. On Tuesday Mr. Money called and told her it would be all right; that a mistake had been made, as the bottle contained three doses instead of two, and he would have to communicate with the coroner before giving the certificate. He took the bottle away with him. The bottle produced (an ordinary six-ounce medicine bottle) was similar. She did not read the label, although she could read, as she received such plain instructions. She was sure she was told to give the second dose about two or three hours after the first. The assistant admitted that she had followed his verbal directions.

Absalom William Head, 29, East-road, in reply to the coroner, said he was possessed of no medical qualifications. He had been assistant to Mr. Money for thirteen months, but he had been connected with the profession twenty-six years. He had sole charge of this dispensary. Witness first saw the deceased on the 29th ult., when he was delirious. He was quite positive he told Mrs. Hibbard that four hours were to elapse between the doses. He did not tell her there

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were three doses. He found he had got no two-ounce bottles, so he made three doses, and wrote on the label, "One-third part to be taken every four hours in half a glass of stout if relief is not procured."

Mr. Money gave evidence on the last occasion that the death was due to narcotic poisoning. He was now recalled.

The Coroner: If you had auscultated the case should you have had any difficulty in arriving at the conclusion that the heart was diseased?—Mr. Money: I say emphatically (I was present at the post-mortem) that the fatty degeneration of the heart I witnessed was such as could not be determined by the stethoscope.—The Coroner: You concur generally as to the correctness of the post-mortem?—The Witness: Oh, certainly.

Mr. Bagster Phillips, divisional surgeon, H Division, 2, Spital-square, said, in accordance with the request of the coroner, he had made a post-mortem examination of the deceased. Mr. Money and Mr. Head were present. He made the examination on the 3rd inst. As to the general appearances of the body, he said it was fast decomposing. It was well nourished. There were no marks of violence. The coverings of the brain—skin and scalp—were very congested, as was also the substance of the skull. The membranes of the brain were loaded with blood and somewhat thickened, and not healthily transparent. The substance of the brain was venously congested and of a fair consistence. The lungs were loaded with blood. The heart was large, flabby, and the degeneration had taken place somewhat extensively, but was not in a very advanced stage as regarded the fibres themselves. The walls were very thin, especially of the ventricle. The stomach was very large and almost empty. The whole structure of it was degenerated, denoting that the deceased was a very dyspeptic subject when alive. The liver did not indicate intemperate habits so much as the stomach. He should give the opinion, from the condition of the stomach and liver, that the man was of intemperate habits, not to say a habitual drunkard, but a man who indulged in "nips." Spleen, normal; kidneys fairly healthy for a man in such a state of health. Intestines comparatively healthy, but showed the man had not taken much food very recently. His opinion of the cause of death was failure of the breathing power—asphyxia. He should say that death was caused by the medicine acting upon a subject very prone to the action of such medicine in a deleterious way.

The Coroner: Supposing you had been called into a case of this kind, would you have had any difficulty in arriving at a conclusion that the patient had a weak heart?—Mr. Phillips: No, I think not.—The Coroner: Do you think, under the circumstances, the remedies prescribed were proper?—Mr. Phillips replied that this was a very difficult question to answer directly. He should prefer to say that he should have hesitated very much to give such a dose as indicated by the prescription, and there were other remedies he should have chosen rather than chloral and morphia, with a knowledge of the state of the heart of the deceased. He would give it as his opinion that it was unadvisable to give those remedies in such a state as the man was. Had these not been given, the man would not then have died.

The Coroner summed up the evidence and carefully explained the law of manslaughter to the jury, and then observed: I will leave the case in your hands, merely just casually remarking, first of all, upon what I must discountenance, namely—the prevailing practice (for it prevails to a large extent in this neighbourhood) of setting up these dispensaries and putting unqualified assistants in them. If there had been no dispensary of this kind in the neighbourhood, this man's death would not have occurred. There is no reason why, if a man's practice is extending, he should not put up a branch establishment, and attend the poor for a small fee. But I must say these dispensaries are commenced with a deception on the public. In the first place, the public are attracted by the smallness of the fee they have to pay; and, in the second place, they believe they are being treated by the qualified practitioner whose name usually appears upon the door. At the large hospital in the neighbourhood—the London Hospital—all the house-surgeons are obliged to be qualified. Yet here is a system by which any man can come forward and engage himself, and practise upon the public just as he likes. Unless something happens, and he brings himself within the criminal law, he goes on with impunity. Under the circumstances, I think I may call it a most iniquitous system, one that should be put down, and one I always endeavour to put down when opportunity offers.

The jury retired to consider their verdict, and shortly afterwards they returned, and the foreman said their verdict was: 'Gross negligence against the assistant."—The Coroner: That amounts to a verdict of manslaughter.

The assistant was thereupon taken into custody on the Coroner's warrant.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 6100 births and 3585 deaths were registered during the week ending April 17th. The annual death-rate in these towns, which had steadily declined in the preceding four weeks from 29·3 to 20·1 per 1000, was last week 20·3. During the thirteen weeks of last quarter the death-rate in these towns averaged 24·4 per 1000, and corresponded with the mean rate in the first quarters of the ten years 1876-85. The lowest rates in these towns last week were 14·4 in Wolverhampton, 14·7 in Sunderland, 15·3 in Birkenhead, and 15·5 in Cardiff. The rates in the other towns ranged upwards to 25·2 in Plymouth, 25·3 in Portsmouth, 27·1 in Manchester, and 32·3 in Blackburn. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 359 and 363 in the preceding two weeks, were 367 last week; they included 140 from whooping-cough, 114 from measles, 43 from diarrhœa, 26 from diphtheria, 23 from "fever" (principally enteric), 21 from scarlet fever, and not one from small-pox. The lowest death-rates from these zymotic diseases were recorded last week in Hull and Leicester, and the highest in Birmingham, Blackburn, and Portsmouth. The greatest mortality from whooping-cough occurred in Plymouth and Salford; and from measles in Oldham, Bolton, Blackburn, Birmingham, and Portsmouth. The 26 deaths from diphtheria in the twenty-eight towns included 17 in London and 2 in Liverpool. Small-pox caused but one death among the residents of London and its outer ring, and not one in any of the twenty-seven large provincial towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had been 8, 11, and 13 on the preceding three Saturdays, had further increased to 16 at the end of last week; 6 new cases were admitted to these hospitals during the week, against 4 and 3 in the previous two weeks. The Highgate Small-pox Hospital contained 3 patients on Saturday last, one case having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had declined in the preceding four weeks from 917 to 348, were last week 362, and were 105 below the corrected weekly average. The causes of 76, or 2·2 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Sunderland, Bradford, and Wolverhampton. The largest proportions of uncertified deaths were registered in Halifax, Hull, and Newcastle-upon-Tyne.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had steadily declined in the preceding four weeks from 27·9 to 21·2, further fell to 20·5 in the week ending April 17th, but exceeded by 0·2 the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 14·6 in Greenock and 16·2 in Aberdeen, to 22·8 in Glasgow and 24·5 in Perth. The 507 deaths in the eight towns showed a further decline of 17 from the numbers returned in the preceding four weeks, and included 10 which were referred to whooping-cough, 9 to diarrhœa, 8 to measles, 4 to "fever" (typhus, enteric, or simple), 2 to diphtheria, 1 to small-pox, and not one to scarlet fever; in all, 34 deaths resulted from these principal zymotic diseases, against 62, 46, and 39 in the preceding three weeks. These 34 deaths were equal to an annual rate of 1·4 per 1000, which was 0·7 below the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 29, 14, and 11 in the previous three weeks, further declined last week to 10, of which 8 occurred in Glasgow and 2

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in Aberdeen. The 9 deaths attributed to diarrhœa also showed a decline from recent weekly numbers, and included 3 in Glasgow and 3 in Aberdeen. The 8 fatal cases of measles, however, showed an increase; 7 were returned in Edinburgh. Two of the 4 deaths referred to "fever" occurred in Paisley, and the fatal case of small-pox in Edinburgh. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had declined in the preceding four weeks from 204 to 109, rose again last week to 122, but were 9 above the number returned in the corresponding week of last year. The causes of 61, or 12 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had steadily declined in the preceding four weeks from 40·5 to 33·0 per 1000, further fell to 25·0 in the week ending April 17th. During the thirteen weeks of last quarter the death-rate in the city averaged no less than 33·5 per 1000; the mean rate during the same period did not exceed 24·8 in London and 20·0 in Edinburgh. The 169 deaths in Dublin last week showed a further decline of 54 from the numbers in recent weeks, and included 16 which were referred to the principal zymotic diseases, against 18, 15, and 16 in the previous three weeks; 5 resulted from whooping-cough, 3 from "fever" (typhus, enteric, or simple), 3 from diphtheria, 3 from diarrhœa, 2 from scarlet fever, and not one either from measles or small-pox. These 16 deaths were equal to an annual rate of 2·4 per 1000, the rates from the same diseases being 2·3 in London and 2·0 in Edinburgh. The fatal cases of whooping-cough, which had been 6 and 11 in the preceding two weeks, declined again last week to 5. The deaths from "fever" and scarlet fever corresponded with the numbers in the previous week, while those from diarrhœa and diphtheria exceeded the numbers in recent weeks. The 3 deaths referred to diphtheria, were, with the exception of one in February, the first deaths from this disease recorded in the city since the beginning of this year. Three inquest cases and two deaths from violence were registered; and 44, or more than a quarter of the deaths, were recorded in public institutions. The deaths both of infants and of elderly persons showed a considerable further decline from the numbers in recent weeks. The causes of 20, or nearly 12 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

WAR OFFICE.—Army Medical Staff: Surgeon-Major John Butler Hamilton, M.D., to be Brigade Surgeon, vice Oliver Codrington, M.D., retired; Surgeon-Major Franklin Gillespie, M.D., is granted retired pay, with the honorary rank of Brigade Surgeon; Surgeon-Major Daniel Charles Grose Bourns is placed on temporary half-pay, on account of ill-health; Surgeon-Major Ulick Albert Jenings, M.D., is granted retired pay, with the honorary rank of Brigade Surgeon; Surgeon-Major James Henry Ussher, M.B., half-pay, has retired from the Service, receiving a gratuity.

ADMIRALTY.—The following appointments have been made:—Staff Surgeon William Henry Patterson, to the *Sapphire;* Surgeon Clement Alsop, to the *Cockchafer;* Surgeon George Hamilton H. Symonds, to the *Merlin;* and Surgeon Timothy Joseph Crowley, to the *Espoir.*

YEOMANRY CAVALRY.—Lancashire Hussars: Damer Harrisson, Gent., to be Surgeon.

ARTILLERY VOLUNTEERS.—1st Sussex: Acting Surgeon Henry Algernon Hodson resigns his appointment.

RIFLE VOLUNTEERS.—1st Cumberland: Surgeon C. S. Hall is granted the honorary rank of Surgeon-Major.—1st Forfarshire: The undermentioned Surgeons are granted the honorary rank of Surgeon-Major:—David MacEwan and Alexander Campbell. These gentlemen were in our last issue erroneously stated to be members of the 3rd Volunteer Battalion (the Essex Regiment).—2nd Volunteer Battalion, the Royal Welsh Fusiliers: Acting Surgeon H. L. Davies resigns his appointment.—2nd (the Weald of Kent) Volunteer Battalion, the Buffs (East Kent Regiment): Surgeon H. B. Wood is granted the honorary rank of Surgeon-Major.

Correspondence.

"Audi alteram partem."

INJURY TO GENERATIVE ORGANS IN LATERAL LITHOTOMY.

To the Editor of THE LANCET.

SIR,—Will you allow me to amplify the remarks I am reported (in your last issue) to have made at the Clinical Society on the above subject?

In referring to the asserted danger of wounding the ejaculatory duct on one side, or even on both sides, during the performance of lateral lithotomy, as taught by Von Langenbeck and accepted by other authorities, my object was to elicit definite information on the subject. But I did not succeed. On the contrary, Mr. Walsham, in reply to my question, said he had no evidence to adduce, and Mr. Bryant and Mr. Hutchinson, at the close of the meeting, both told me that they had not met with any cases in practice. Nor have I.

It would be really interesting if this question could be definitely settled, as it readily may be, by recording any cases on which the doctrine rests and submitting them to scientific scrutiny. In any suspected cases, evidence must be forthcoming that the results are really due to the lithotomy and are not congenital malformations.

I presume that we should expect the danger to be greatest in those operated upon in early childhood, when available space is limited, and while the tissues are soft and easily torn; and that non-development of the testis or testes would be the lesion to look for. Rupture of or injury to the ejaculatory ducts or vas deferens is inflicted (if at all) by the laceration which follows the extraction of a large stone, rather than by the surgeon's knife; large stones are usually found only among old persons. On the other hand, secondary changes in the generative apparatus are less likely to follow in old persons, and less likely to attract attention. In young children, however, subsequent want of development of the affected organ would be more certain to follow; it would most assuredly attract the attention of parents, and so come within professional cognizance.

It is desirable that the truth on this matter should be known. If the danger exists, it will be a patent argument in favour of the supra-pubic operation, and one, by the way, not advanced by its advocates in the recent discussion at the Royal Medical and Chirurgical Society; while, if the danger is imaginary, surgeons will be glad to know it.

I am, Sir, yours faithfully,

London, April 19th, 1886. ROBERT WM. PARKER.

ZINC PLATES IN IRON BOILERS: A CAUTION.

To the Editor of THE LANCET.

SIR,—During a recent voyage to Queensland, in the capacity of ship surgeon in a new steam-ship recently built in Glasgow, an outbreak of colic occurred towards the conclusion of the voyage, attacking certain firemen, sailors, and others, which, assuming more or less an epidemic character, seemed to suggest some special cause for its occurrence. In one case the cramps were so severe as to suggest the presence of cholera poison, an idea which was fostered from the circumstance of the report of the outbreak of "cholera" on the *Dorunda* steamship, one of the Queensland Government mail and emigrant line, which had preceded us at Batavia. Presumably actuated by this idea, one of the crew, an old fireman, on his own responsibility and without my knowledge, took one of the men then ailing—the "donkey-engine" man, whose symptoms were severe—into the watercloset, stripped him naked, and, having procured a bucketful of hot water into which he placed a handful of mustard flour, gave the man therewith a vigorous sponge bath. I subsequently got the patient into his bunk, and, placing turpentine stupes on his abdomen, gave him a dose of castor oil and laudanum; the latter a line of treatment which I had found serviceable in previous cases, with beneficial results, so that in a day or two he was fit for work again. In addition to the colic there was also noticeable, during the latter part of the voyage, a great tendency to suppuration, boils and the like,

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where the skin was scratched or otherwise broken, or even where exposed to the irritation of the clothing long wet with salt water. I should say that up to Batavia and beyond we had been using Loch Katrine water, supplemented by a small supply from Plymouth, both being of unquestionable quality. Any probable intention of taking in a further supply from the port of Batavia, where we coaled, was at my suggestion entirely abandoned by the captain, especially as he had there been apprised, by telegram, of the occurrence of cholera on the *Dorunda* some time after leaving the port at which we then were; and, in fact, a message had been sent prohibiting the entrance of vessels proceeding to Queensland ports within the harbour of Batavia in consequence of that circumstance, but it arrived too late to admit of the captain's compliance with the order. We were then under the necessity of condensing the sea-water, a task which the chief engineer readily undertook.

In view of the epidemic character of the symptoms of colic and abdominal cramps, one of the engineers suggested the possibility of the zinc plates which were fixed in the "donkey boiler"—whence our supply of water for drinking purposes was condensed—in order to prevent the corrosion of the iron as being the cause—an idea, I may say, not favourably received by some others. I thought it advisable, however, to procure a sample of the water in order to test it for the presence of zinc, which I accordingly did. I may say that the weather was hot and wet, and the quantity of water consumed, especially by the poor firemen in their arduous toil, in the shape of meal and water, was unusually large. In the process of galvanising, or coating iron with zinc, the latter metal not only acts as a varnish or protective, but becomes oxidised, as you are aware, before the iron is so acted upon, even though its surface be exposed. L. L'Hote, in "Comptes Rendus," says: "As to the inquiry if zinc free from any foreign metal decomposes water either on boiling or in presence of dilute sulphuric acid, experiment proves that such is not the case. Pure zinc heated with distilled water in a flask, so arranged as to receive the gases over mercury, gives off no hydrogen on prolonged boiling, nor is it attacked by dilute sulphuric acid. The presence of iron in the proportion of 3 to 5 in 100,000 enables it to decompose water. Traces of arsenic and antimony have the same effect."

On my return home, and having leisure to prosecute the inquiry, I find, on evaporating a portion of the water in question and testing it, there is decided evidence of the presence of zinc. Hence it will, I think, appear evident that the presence of zinc plates in iron boilers used for condensing water for human consumption is fraught with danger to the health, if not, indeed, to the life, of those consuming the water for any length of time. Although in the case of the ship in question, intended for the coasting trade of Australia, it is probable that condensed water will not often be used, and although unhappily the quality of the water obtainable at some of the ports on that coast is not of the best, and will not suffer from boiling before being drunk, yet the subject, embracing also the very general use of galvanised iron under similar circumstances, I think you will be prepared to admit, is well worthy the attention of those concerned, and, as in cases similar to the above, of investigation by the Board of Trade.

I am, Sir, yours faithfully,

JOHN WARD, M.D.,
Ex-Medical Officer of Health.

Sutton Coldfield, Birmingham,
April 12th, 1886.

LAW AND LUNACY.

To the Editor of THE LANCET.

SIR,—As a forcible illustration of one of the social phases of the deleterious consequences arising from the recent prosecutions of medical practitioners for giving certificates of insanity, I venture to forward to you a few extracts from a letter my wife received from a lady friend this morning. They appear to me to be so brimful of materials for reflection, alike to doctors, lawyers, and the general public, that they ought to be made known. I give the extracts in the lady's own words, for although the language she employs is simply that of a friendly letter, it seems to me to be quite telling enough, and will possibly be all the more impressive by reason of its very simplicity. I suppress, of course, the name of the writer, and as the extracts from her letters are forwarded to you without her knowledge, I hold myself responsible for them. They are as follows:—

"My husband's illness from overwork has taken a very serious turn, after apparent complete restoration. He has some form of brain mischief which makes him believe that he is very rich, and he has been buying everything he fancies for a year past, including land, and entering into terrible expense connected with railway-making. He will take no advice, and I have been consulting doctors in vain for months, hoping to get help to protect him from those preying upon him. But, alas! from the state of the law and the fears medical men are in of the consequences, it has been all in vain, though they admit the need. All his property is involved now; our home is sold up, and our pretty things have all been ruthlessly squandered by a forced sale. I see no end of my troubles, for Mr. —— considers himself still as rich as ever, and is so angry at me for doubting it that I hardly dare go to him. At present I have no home to go to, except to one of his country farm-houses, where he had furnished a part for ourselves."

These extracts are, I think, sufficient to show how recent actions against alienists is beginning to react against the general public, and when viewed in association with Lord Shaftesbury's sad suicide prove that the present state of the Lunacy Law as regards the responsibilities of medical men in signing certificates requires immediate emendation.[1] For while Lord Shaftesbury destroyed his own life, here, in the above-mentioned case, the gentleman destroys the means not only of supporting his life, but that of his family. Every medical man knows how often a few months of well-regulated restraint will suffice to cure an attack of monomania, and how that the individual after recovery may enjoy many long years of comfort and happiness. He equally knows that it is exceedingly rare for any of these cases, except during the incubation period, to possess either sufficient mental power or moral strength to voluntarily place himself under restraint, while the medical treatment of monomania involves quite enough of anxiety without having the additional terrors of the law superadded to it. If Lord Shaftesbury's and the above-described case be not examples of true insanity, my notions of mental disease and moral responsibility, I fear, require important revision.

I am, Sir, faithfully yours,

GEORGE HARLEY, M.D.

Harley-street, Cavendish-square.

THE PERILS OF SUBCUTANEOUS MEDICATION.

To the Editor of THE LANCET.

SIR,—Having just heard from Dehra-Dûn to the effect that my old friend and quondam companion in some Himalayan rambles, Frederick Wilson, Esq., better known as "Shikari" Wilson, died at Mussoorie in July, 1883, of what would appear to be an over-dose of morphia, subcutaneously injected, I wish to take this opportunity of calling attention to the subject, and of intimating at the same time that two such cases of this description have occurred within the sphere of my own individual cognisance. I am precluded by personal or professional reasons from entering into any details respecting these, and I merely alluded to them here to enable me to offer it as my opinion—an opinion which, as you, I think, know, is based on something better than books—that this form of poisonous drug administration is fraught with the greatest danger in that most weakening or worrying malady—frequently recurring or chronic, suppressed, or systemic—gout.

As regards the case of my poor friend, and making all due allowance for the feelings or the exaggeration of a son, the circumstances under which he succumbed are briefly as follows:—"He had just returned (says my informant) from Gungostre — the source of the Ganges—suffering, as usual, from his old enemy the gout. As the pain became intense, —— was called in, and he carelessly injected an overdose of morphia, for my poor father never recovered from the deep sleep it produced, but died about three hours after the injection." And had the Emperor Charles V. or the great Earl of Chatham, who were both undoubtedly victims to this disease, been similarly treated during any of their paroxysms, the history of the Spanish Armada or of the French fleet

[1] This necessity has already been represented in a letter signed "General Practitioner," published in THE LANCET of March 6th last.—ED. L.

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under Conflans might have had to be written in characters different from those of Mottley and Carlyle. "A Yorkshireman from Wakefield, as Colonel Markham described him in his 'Shooting in the Himalayas' (p. 19), fortune in his early life led him to India (in the 11th Light Dragoons); his impaired health sent him to Landour, whence he took a journey in the hills. Returned to England, he was unable to forget the life he led in the Himalayas, which had for him an irresistible charm. Not being overburdened with money, he worked his passage out to Calcutta, and walked straight up to Meerut, a distance of 900 miles, in thirty days. From thence to the hills was an easy trip, where he has been a resident for several years," and where he recently died, as we have just seen. Similar testimony is borne to his capacity and courage, his courtesy and skill, by Mr. Dunlop, B.S.C., in his "Hunting in the Himalayas," as well as by the editor (said to be Mr. Hume) of that pleasant book, "A Summer Tour in the Himalayas," *passim;* and his name and fame were household words in all "shikari" (hunting or shooting) circles in that district. He was, in a word, one of those God Almighty's gentlemen of whom my great namesake used to say that "they carried the title deeds of their estates in the crowns of their hats." But Frederick Wilson carried something more than these in this receptacle. He carried brains and ability of a high order. He also carried in it such energy and honesty, pluck and perseverance, as no discouragement could suppress or opposition subdue, and the consequence is that he has left behind him a name that will not soon die out in those regions, and a heritage and an independence such as any family might be proud of. He showed me many kindnesses, for which I desire to offer, with your permission, these my best thanks, and to offer at the same time, if you will kindly so allow, this little memorial of our friendship as an R.I.P. for his tomb.

I am, Sir, your obedient servant,

Auriol-road, W., March 21st, 1886. WM. CURRAN.

"THROMBOSIS OF THE CORONARY ARTERY DURING ETHER ANÆSTHESIA."

To the Editor of THE LANCET.

SIR,—The case related by Dr. Moxon in your impression of the 17th inst. is full of the greatest interest, not only to the physician and pathologist, but also to those who are in the habit of administering anæsthetics. The vivid picture with which we have been furnished can leave no doubt in our minds as to the proximate or *secondary* cause of death; but, with regard to the remote or *primary* cause, I would deferentially submit that the evidence is not sufficiently conclusive. The charge brought by Dr. Moxon against the anæsthetic agent is a grave one, and it is in the interests of this agent that I would ask to be permitted to say a few words.

Without wishing to doubt the accuracy of Dr. Moxon's conclusions with reference to the age of the thrombus he describes, I think he will admit that the chronic arteritis met with in the coronary artery might at any time have eventuated in thrombosis. It must be remembered that ether is frequently administered to patients whose arteries are atheromatous to an extreme degree, without any subsequent evidence of thrombosis having taken place during the administration. Surely, cerebral thrombosis and its consequences would be more often observed after ether anæsthesia if Dr. Moxon's explanation of his case be a true one. We should, indeed, expect such untoward results to follow chloroform narcosis in old people with comparative frequency were Dr. Moxon's theories correct; for the low arterial tension often observed under chloroform and the degenerated vascular system so common in old age would be conditions eminently suited for the formation of thrombi in the vessels. I would therefore ask: Might not the thrombosis have had an origin totally independent of the etherisation?

I venture to think that all our energies should be devoted towards restricting the use of chloroform as an anæsthetic, and towards insisting upon the advantages of ether for most cases in which general and prolonged anæsthesia is required. I therefore trust that Dr. Moxon will excuse my calling into question the explanations he has brought forward in reference to his interesting and instructive case.

I am, Sir, yours obediently,

Somerset-street, W., April 19th, 1886. FREDERIC HEWITT.

DEATH FROM ETHER.

To the Editor of THE LANCET.

SIR,—In the very interesting account given by Dr. Moxon in your last issue of a case of death from thrombosis of a diseased coronary artery, the ultimate cause of death is attributed to the inhalation of ether for a small surgical operation three weeks previously. The sole grounds on which this statement is made appear to be that the thrombus seemed to be about three weeks old. One naturally wishes for further corroboration of this statement, as thrombosis is not generally considered to be caused by such agency. I have notes of every case of death which could in any way be attributed to the use of ether published during the past ten years, and I have before me as well a report by a committee of physicians appointed by the Boston (U.S.) Society for Medical Improvement, published in 1861, wherein are notes of forty-one cases in which death occurred within a week or two of ether inhalation. In none can I find any note of abnormal blood-clotting, and in many cases there is mention made of the great fluidity of the blood. Among the cases reported by the American committee are no less than three in which ether inhaled by unqualified persons for sport seems to have produced fatal meningitis within a few days. Cases of this kind are reported both from Rouen and Philadelphia.

A pathologist of Dr. Moxon's experience is hardly likely to have made so serious a charge against ether as an anæsthetic without due reason. May I ask him, through your columns, to refer me to any other cases where thrombosis seems to have been caused through the agency of an anæsthetic?

I am, Sir, yours truly,

Leeds, April 20th, 1886. ERNEST H. JACOB, M.D.

SANITARY LEGISLATION.

To the Editor of THE LANCET.

SIR,—Every year the need of further sanitary legislation is becoming more and more pressing, and, in the interest alike of the public health and a minimum of interference with individual freedom of action in sanitary matters, it behoves the members of those professions which are charged with the care of man's physical being and the construction of his dwelling-places to take the subject into serious consideration, in order not only that the necessary legislation may not be too long delayed, but that it may be shaped and directed by those having the greatest knowledge of the questions involved. Two of the chief things to be aimed at in future legislation are: (1) To simplify and bring into one measure the regulations relating to the powers and responsibilities of public authorities; and (2) to increase the responsibility of owners and occupiers in respect of the sanitary condition of their own buildings.

As a contribution towards the solution of the second point I send you the annexed draft Bill, which is now under consideration by a special committee appointed by the Executive Council of the Sanitary Assurance Association.

I am, Sir, yours truly,

MARK H. JUDGE, A.R.I.B.A.

Park-place Villas, W., April 19th, 1886.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

SUNDERLAND CHILDREN'S HOSPITAL.

THE annual meeting of the Sunderland Children's Hospital was held last week when the twenty-second report was read, showing that during the past year the number of out-patients treated was 967, and the total number of consultations given was 3006, and 122 children had been treated as in-patients. The total number of patients treated during the year, including in- and out-patients, was 1227. It is stated in the newspaper report that there had been no death among the patients during the year, but probably this is a mistake, as it is not likely that over 1000 sick children could come under hospital observation without some fatality.

"A PETRIFIED GIANT."

Under the above heading a paragraph appears in our local papers, giving a very circumstantial account of some petri-

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fied human remains found at Consett, in the county of Durham, in a coal mine. One portion found is said to consist apparently of a part of a body, and the upper part of two legs of a "giant," and measure 7 ft. 1 in. in length, and are said to be evidently portions of a body measuring from 9 ft. to 10 ft. high. The petrified body measures from back to front 14 in., and in width 16 in., and was found in the coal 20 fathoms deep. There were also found at the same place pieces of stone which appear to be petrified fish. I give you the newspaper account, but there is no doubt that some vegetable petrifactions have been mistaken for human remains, for I believe that although remains of mammalia have been found in bogs in a petrified or semi-petrified condition, nothing higher than fishes and reptilia have so far been found in the coal measures. So that unless the skull of this "giant" can be produced, I would very much doubt the existence of human fossil remains at such a depth.

TYNE PORT SANITARY AUTHORITY.

At the last meeting of the Tyne Port Sanitary Authority it was stated that during the months of February and March 1976 visits had been paid to vessels by the inspector. The medical officer's (Mr. H. E. Armstrong) report stated that the principal case during the past three months was that of the s.s. *Nederland-en-Orange*, from Bombay with an Indian crew, three of whom died in this port from the effects of the severely cold weather, and three others were reported to have died at sea from the same cause. The vessel had an Indian medical man on board. Mr. Armstrong states that the warming of the between-decks by steam, and removal there of the crews—several of whom were suffering from the cold, and all of whom were exceedingly depressed and melancholy, was advised, and at once carried out, after which the patients improved and the men regained their spirits. Two others of the crew suffered from illness afterwards, due to the previous cold, and were removed to the Newcastle Infirmary.

A NORTH TYNE CENTENARIAN.

Great interest is taken here in the serious illness of Mr. Joseph Saint of Chollerton, North Tyne. Mr. Saint's case is remarkable, but well authenticated as to longevity. He entered on his 103rd year on Feb. 21st, and was then in fair health, but the late severe weather has seriously lowered his vitality, and his medical man fears that his recovery is very doubtful.

DEATH OF MR. MANFORD OF NEWCASTLE.

I regret to close my letter by mentioning the death, on the 16th inst., of Mr. F. W. Manford, a well-known and respected general practitioner of this city. Mr. Manford was a native of Scotland, but had practised here for nearly forty years. He was a L.R.C.S., and F.R.C.S. and L.R.C.P. Edin. (exam.). Mr. Manford was naturally endowed with a very fine constitution, and was thus enabled to get through an amazing amount of work unaided, for, I believe, it was not until quite of late years that he needed any help in his practice; at last he was induced to take a partner; but it was understood that even before then he had made his fortune. He never had any appointments, always refusing offers of the kind, however tempting, saying that it was best for himself and for his patients that all his energy should be devoted to their care. The immediate cause of his death was, I understand, cardiac disease, for which he was attended by Dr. Philipson and his partner, Dr. Scotland. Mr. Manford, who was in his sixty-fourth year, leaves a widow and four children, and his death will be felt by a large circle of friends and patents.

Newcastle-on-Tyne, April 20th.

ABERDEEN.

(From our own Correspondent.)

MEDICAL EXAMINATIONS AND GRADUATION.

THE winter session at Marischal College closed on March 26th. The "professional" examinations began on the Monday following and were finished on Tuesday of last week. The number of candidates presenting themselves for examination was much larger than usual, more especially for the final or "third professional," for which about eighty-five gave in their names. Of these, only thirty-seven satisfied the examiners, the others were rejected, having failed to pass in one or more subjects. The ceremony of publicly conferring the degrees, "the capping," took place on Saturday. Mr. John C. G. Duffus, M.A., and Mr. John D. Thomson, M.A., received their degrees in Medicine and Surgery, with highest academical honours, and Mr. James Galloway, M.A., Mr. W. Milligan, and Mr. James Murray, received their degrees with honourable distinction. Ten gentlemen were promoted to the degree of M.D., eighteen candidates passed the first division of the first professional examination, fifty were declared to have completed the first examination, and nineteen had passed the second.

GRADUATES' SUPPER.

The young graduates had the usual supper on the night previous to the graduation. Several of the professors and members of the medical staff of the Royal Infirmary and General Dispensary were present. Professor Smith Shand presided, and Dr. McKenzie Booth (in the absence of Dr. Angus Fraser) and Dr. Ruxton acted as croupiers.

APPOINTMENT TO THE CHAIR OF PHYSIOLOGY.

It is officially announced that Dr. John MacWilliam, Assistant Professor of Physiology in University College, London, has been appointed Professor of the Institutes of Medicine in the University of Aberdeen. This is an appointment that meets with approval everywhere for many reasons, but perhaps more particularly because while Dr. MacWilliam is a distinguished physiologist, he is also a graduate of the University; and in the past it has often been felt that sons of our *alma mater* were passed over for graduates of other universities, whose claims did not always seem sufficiently strong to form good grounds for the step taken. Dr. MacWilliam graduated in 1880, when he received the John Murray Medal and Scholarship as the most distinguished student of his year.

MEDICAL OFFICER OF HEALTH FOR THE CITY.

At their meeting on Monday, the Town Council unanimously elected Dr. Theodore Thomson medical officer of health for the city. Before proceeding to the election, a proposal to erase Professor Matthew Hay's name from the list of candidates, because he announced his intention of retaining his appointment as professor of medical jurisprudence in the University, was carried by a majority of three votes. One of the conditions as stated in the advertisement is that the medical officer must devote his whole time to the duties of the office. This Dr. Hay could not strictly do, but as his University duties occupy only one hour a day for fifty days in the year, he could have practically given his whole time to the sanitary department. There were ten candidates for the appointment, but Dr. Hay's name having been struck off the list, the result was a foregone conclusion. Dr. Thomson is at present assistant medical officer in the South-Eastern Fever and Small-pox Hospital, London.

THE FREE LIBRARY AND INFECTIOUS DISEASES.

The Public Health Committee had recently before them a report by the sanitary inspector bearing upon the question of the spread of infection by books borrowed from the public library. In his report the inspector suggests that "when patients suffering from infectious diseases are visited by the sanitary officers, inquiry should be made whether any member of the family or any person living in the house is supplied with books from the library; and if it be found that such is the case, the parties should be asked to send the books to the sanitary office for the purpose of being disinfected before being returned to the library." It is proposed also to supply the librarian with a list of the names of families where infectious disease is known to exist, so that he may be able to assist the sanitary department in checking any attempt to evade the law. The committee approved of the report, and authorised the inspector to carry out his suggestions, and send a copy of the report to the Library Committee, who might still further assist the sanitary department by passing a bye-law enacting that books be not lent out to families known to be suffering from infectious disease.

Aberdeen, April 20th.

A LETTER has been received from the Local Government Board approving of the amended plans submitted for the proposed infectious diseases hospital at Widnes. The building is greatly needed in the district, and it will now probably be commenced at once and pushed forward rapidly.

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PARIS.

(From our own Correspondent.)

REPORT BY M. PASTEUR.

AT the meeting of the Academy of Sciences last week M. Pasteur read the following report of the results of his anti-rabic treatment at his laboratory in the Rue d'Ulm. "The number of persons so treated amounted up to the 12th inst. to 726, including those who are still undergoing treatment. Of this number there were 688 who were bitten by mad dogs and thirty-eight by wolves, the latter being all Russians. The patients belonging to the first category are, with the exception of the little girl Pelletier, who, it will be remembered, died after a few inoculations, all doing well. More than half of that number have passed the dangerous period. Of the thirty-eight Russians who have been treated and are still undergoing treatment, three have died rabic; the others are doing well, but it is impossible to foresee what may happen to them, as there exists a profound difference between the bites of dogs and those of wolves, the proportion of deaths caused by rabid wolves being at least 82 per cent." M. Pasteur then concluded his report in the following terms:—"The above facts demonstrate (1) that the duration of incubation of human rabies caused by the bite of a rabid wolf is often very short, very much shorter than rabies after the bite of a mad dog; (2) that the mortality after the bites of rabid wolves is considerable if we compare it with the effects from the bites of dogs. These two propositions may be sufficiently explained by the number, the depth, and the seat of the bites caused by the wolf, which so savagely attacks his victim, the attack being often on the head and face. The necropsy of the three Russians who died at the Hôtel Dieu, and the inoculation of rabbits, guinea-pigs, and dogs with the medulla oblongata of the first of the patients who died, prove that the virus of the wolf and that of the dog are sensibly of the same degree of virulence, and that the difference of the rabies of the wolf and that of the dog depends on the number and nature of the bites. These facts induced me to inquire whether, in the case of bites from rabid wolves, the method could not be usefully modified by inoculations in greater number and within a shorter time. The results will be eventually reported to the Academy. In any case, for the wolf in particular, it is good to submit the patient to the preventive treatment as soon as possible. The Russians of Smolensk were six days on their journey to Paris, and presented themselves at the laboratory fourteen or fifteen days after having been bitten. They might therefore have commenced the treatment eight days earlier, and one cannot say what might have been the influence of this modification for the three patients who have succumbed."

THE DISPOSAL OF THE DEAD.

The subject of cremation has been recently discussed at the Chamber of Deputies, and it has been decided that the mode of disposing of the dead will be left optional to the friends of the departed unless special arrangements have been made during the lifetime of the latter. The arguments for and against incineration and inhumation I need not reproduce here, as nothing new was brought forward. I may, however, remark that in response to Bishop Freppel as to the impunity that criminals would enjoy if the bodies were subjected to incineration, M. Blatin, deputy, remarked that the examinations in cases of suspected poisoning could be more usefully carried out before incineration. Even after incineration there are poisons which could be found in the ashes.

VINIC ALCOHOL.

The French Senate offers a prize of from 25,000 francs to 50,000 francs to any chemist who shall discover the best practical method for making researches with the view of ascertaining the toxic principles and impurities contained in "vinic alcohol."

I may mention again that the Hygienic Exhibition is to take place on Monday, May 3rd. Among the exhibitors are the Director of the Paris Municipal Laboratory and M. Pasteur.

Paris, April 20th.

MEDICAL NOTES IN PARLIAMENT.

Lunacy Acts Amendment Bill and the Burgh Police and Health (Scotland) Bill.

IN the House of Lords on the 15th inst. these Bills were read a third time and passed.

The Ventilation of the House.

In the House of Commons on the 19th inst., in reply to Mr. Baumann, Sir H. Roscoe said that the Select Committee on the ventilation of the House had brought under the notice of the proper officer of Her Majesty's Board of Works the desirability of at once carrying out the temporary measures referred to in the interim report of the committee for effectually preventing the passage of sewer-air from the metropolitan main drains into the area of the Palace of Westminster. They had received the assurance of that officer that the proposed work, in his opinion, could be executed before the House re-assembled after the Easter recess, and there was every probability that the improvements would be completed by the time the House met again.

Obituary.

CHARLES BOLINGBROKE COOPER, L.R.C.P.L.

WIDE-SPREAD sorrow is felt in Liverpool on account of the death of Mr. Charles B. Cooper, who was quite recently promoted to the office of house-physician of the Liverpool Northern Hospital, having been previously assistant house-surgeon to that institution. The sympathy with his friends is heightened because his death is looked upon as being largely due to his devotion to his work. For some weeks past he had been suffering from crops of furunculi, and one or two of these on his neck had caused him much pain and annoyance. He had been recommended to take a holiday, but was unwilling to leave his work. On April 6th he became jaundiced; on the 8th his temperature ran up to 105°, and an erysipelatous rash appeared on the neck and shoulders, and he was slightly delirious. Two days later the jaundice had disappeared and the erysipelas seemed to be fading away; but on the 11th it appeared on the face, which next day was much swollen. On the 12th the swelling had increased, the colour of the rash was deeper and dusky, delirium returned, respiration and pulse became rapid, and other symptoms of general blood-poisoning appeared, and terminated fatally on the 14th inst. The deceased suffered four years ago from rheumatic fever, which left him affected with cardiac valvular disease, and this no doubt diminished his chances of recovery.

Mr. Cooper was a young man (aged twenty-four) of handsome appearance and of remarkably prepossessing manners, and his funeral was made the occasion of a display of respect which must have been very gratifying to his sorrowing relatives and friends. Previous to the conveyance of the body to the cemetery a service was held in the hospital chapel, and the chaplain, who officiated, in his address passed a high encomium upon the many praiseworthy features in the character of the deceased. The body was borne to the hearse by six quartermasters of the Beaver line of Canadian steamers, in whose ships the deceased had made several voyages as surgeon. At the cemetery a large number of medical and other friends had assembled, amongst whom were many of the physicians and surgeons of the Northern Hospital, Royal Infirmary, and other hospitals, the chairman and several members of the committee of the Northern Hospital, and a large number of nurses. The body was borne to the grave by two of his colleagues and four other friends, former fellow-students, now house-surgeons in the Liverpool hospitals. The coffin was literally buried in wreaths, sent by numerous friends, and laid on the coffin as it left the hospital by the nurses, under the superintendence of the matron, Miss Huguenin, who had herself officiated as a kind and indefatigable nurse during the last week of the deceased's illness.

VACCINATION GRANT.—Dr. Hodgson, of Workington, has received the Government grant for efficient vaccination in his district.

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Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 19th inst.:—

Barker, John, M.B. Durh., Ruth.
Fletcher, Arthur Augustus, M.B. Melb., Melbourne.
Fraser, Robert Nelson, M.D. Kingston, Westmeath, Ontario.
Halkyard, Alfred Lees, L.K.Q.C.P.I., Knatsford.
Hare, Arthur William, M.B. Edin., Edinburgh.
Herbert, Herbert, L.R.C.P. Lond., Leeds.
Kempster, Felix Charles, L.S.A., Battersea.
Nevins, Arthur Edward, L.R.C.P. Ed., Liverpool.
Packman, Alfred Charles Augustus, Sheffield.
Pain, Francis, L.S.A., Dulwich.
Richards, Thomas, Bristol.
Smith, Frederick Osborne, L.K.Q.C.P.I., Queen's-road.
Strickland, Percy Charles Hutchison, West Dulwich.

Admitted on the 20th inst.:—

Biggam, William, M.B. Durh., Sunderland.
Bonnefin, Fernand Henry, L.R.C.P. Lond., St. Paul's-road.
Clarke, James, Fernandez Howard, L.S.A., Gerald-street.
Coleclough, John Arthur, L.S.A., Holloway.
Fletcher, George Rory John, L.S.A., East Dulwich.
Green, Henry Lee, M.D. Penn., Muscatine.
Guthrie, Leonard George, L.S.A., Phillimore-gardens.
Lang, Walter Scott, M.B. Edin., Edinburgh.
Paterson, William Whiteside, M.B. Glasg., Ayr, N.B.
Rake, Herbert Vaughan, L.S.A., Fordinbridge.
Riley, Roland John, L.R.C.P. Ed., Bedworth.
Thomas, William Thelwall, M.B. Edin., Liverpool.
Tyndall, Francis, L.S.A., Liverpool.
Webster, George Alexander, Hobart, Tasmania.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At examinations recently held the following gentlemen were admitted Licentiates of the College:—

John A. Coen, Shuldham H. Dunlop, Martin Fitzgerald, Edward Garraway, Lawrence Geoghegan, Edward W. Hamilton, John C. Jellett, Peter McSwiney, Andrew E. Murphy, William J. Shee, Patrick Stephenson, Charles P. Tennant, Archibald McLeod, and Guy C. L'Estrange.

COLLEGE OF PHYSICIANS IN IRELAND.—At the April examinations the following obtained the licences in Medicine and Midwifery of the College:—

MEDICINE.—Edward George Browne, Clarence Edwin Lloyd Gilbert, Alexander Gordon, Charles William Graham, Henry Charles Groves, Andrew Harris, John Keany, Richard Robert Leeper, Frederic Mercer, Michael Joseph Ryan, Charles William Thompson, Joseph Alexander Tooner, Charles Henry Wild.

MIDWIFERY.—Edward George Browne, George Foott, Alexander Gordon, Andrew Harris, John Keany, Frederic Mercer, Michael Joseph Ryan, Joseph Alexander Tooner.

The undermentioned has been admitted a Member:—

James Charles Hardy Peacocke.

SOCIETY OF APOTHECARIES.—The following gentlemen passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on the 15th inst.:—

Baumgartner, Henry Spelman, Newcastle-on-Tyne.
Coleclough, John Arthur, Holloway.
Evans, Charles Silvester, Harbury-terrace, Fenterman-road.
Fletcher, Geo. Rory J., "Croome," Kelmore-grove, East Dulwich.
Guthrie, Leonard George, Phillimore-gardens.
Kempster, Felix Charles, Oak House, Bridge-road, Battersea.
Thomas, Thomas Nash, Lecka Sobra, Pembrokeshire.

A rich merchant, M. Chludow, has left more than £100,000 and a house to found a children's hospital in Moscow.

ON the 17th inst. a demonstration of friendly and trade societies was held in the East-end of London in aid of the funds of the proposed Cottage Hospital for West Ham.

SIR P. DUN'S HOSPITAL, DUBLIN.—The governors have received £326 towards the Fever Hospital Building Fund, and will commence its construction as soon as a sufficient amount has been obtained.

BELFAST MAIN DRAINAGE SCHEME.—This Bill will be considered in Committee after the Easter holidays, and it is believed that its progress so far as local bodies are concerned will not be much interfered with.

A LABOURER was fined 20*s.* and costs at Shrewsbury last week for having travelled in a public conveyance whilst suffering from small-pox. The defence was based on ignorance of the nature of the malady that had seized the defendant. A similar case was decided at Hartlepool on the 13th, in which a young man was fined 6*s.* 6*d.* and costs for exposing himself in public whilst labouring under small-pox.

GUY'S HOSPITAL.—The Michael Harris prize in Anatomy has been divided between Mr. A. Parkin, of Hightown, Yorkshire, and Mr. R. D. Mothersole, of Colchester. The Beaney Prize of 30 guineas in Pathology has been awarded to Mr. J. W. Washbourn, of Gloucester.

GRIMSBY HOSPITAL.—At the quarterly meeting of the Hospital Committee held recently, the treasurer reported the receipt of a bequest of £1000 free of legacy duty, and £40 as one year's interest thereon, under the will of Mr. John Vere, shipwright.

LIVERPOOL HOSPITAL SATURDAY FUND.—An address to the industrial population of the city has been issued by the Working Men's Committee of the Liverpool Hospital Saturday Fund, in the hope of stimulating interest in the important annual collections in aid of the local medical charities. The collection will this year be made on May 29th.

PRACTICAL ANATOMY AT OXFORD UNIVERSITY.—The guardians of the Reading Union, having been applied to by Dr. Burdon-Sanderson, Professor of Physiology at Oxford, that the bodies of unclaimed paupers might be handed over, under the provisions of the Anatomy Act, to the School of Anatomy at the University, as they have a dearth of subjects for the dissecting-room, have just declined the request by seven votes to six.

REFORMS IN THE DRIFFIELD UNION.—The guardians of the Driffield Union are about to introduce some sweeping reforms, upon the recommendation of the medical officer, who has made a special point of the prison-like restraint in which the paupers live, and in his report contrasted their gloomy lives with those passed by the inmates of Scotch workhouses. The children are to be provided with toys, have greater freedom, and an improved dietary, and there is to be throughout the establishment a less free use of lock and key.

THE POLLUTION OF THE RIVER LEA.—At the meeting of the Select Committee on this subject on the 16th inst., Mr. G. A. Eachus, engineer to the Edmonton Local Board of Health, was examined, and suggested as an immediate and temporary remedy for the existing pollution a thorough flushing of the river. The main want of the entire district was, in his opinion, an improvement of the subsoil drainage and the widening and deepening of the new cut. Mr. Croft, surveyor to the Tottenham Board of Health, also gave evidence, and the committee subsequently adjourned to the 14th prox.

THE PARKES MUSEUM.—An extraordinary general meeting of the members of this Museum was held on Friday, April 16th, Professor Berkeley Hill in the chair. The meeting was called to consider the desirability of amalgamating with the Sanitary Institute, and it was unanimously resolved, on the motion of Dr. G. V. Poore, seconded by Mr. Mark H. Judge, "That it is desirable that the objects for which the Parkes Museum and Sanitary Institute respectively were established should, if practicable, be prosecuted in the future by one corporate body." Further resolutions for bringing about this amalgamation and for applying for a Royal Charter were considered, but it was decided to adjourn the meeting in order that amendments to the resolutions might be sent to the whole of the members.

PRESENTATIONS.—On the 15th inst., Dr. Alfred Carpenter was presented by the Liberals of the Reigate division of the county of Surrey with a silver salver and dessert service in token of their appreciation of the services he rendered and the zeal and ability he displayed in contesting the division at the last election.—A very handsome illuminated address framed in oak has been presented by the Ancient Order of Foresters, Court 2385, to Mr. J. S. Hooker on his leaving Midhurst. The officers of the Midhurst Union Workhouse have presented to Mr. Hooker, on the same occasion, a handsome marble timepiece as a mark of esteem and respect.—A handsome silver inkstand has been presented to Mr. Jeffreys, of Chesterfield, in recognition of his generous efforts on behalf of Dr. Bradley. It bears the following inscription:—"Presented to Mr. Jeffreys by a number of the subscribers to the Bradley Fund, to record their high sense of his generous, self-denying, and successful exertions on behalf of Dr. Bradley. March, 1886." The list of contributors contains the names of many leading members of the profession in London and the provinces.

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THE Russian Red Cross Society had treated more than 500 sick and wounded in their hospital in Sofia when the staff returned to Moscow.

DR. DYAKOVSKI, who has a medico-mechanical institution in St. Petersburg, has arranged to give the students of the Military Medical Academy free instruction in medical gymnastics and massage.

MEDICAL SCHOLARSHIPS.—At St. Thomas's Hospital Medical School the William Tite Scholarship of £30 has been awarded to Mr. Arthur Francis Stabb; the Peacock Scholarship of 40 guineas per annum for two years to Mr. Francis C. Abbott; the third year winter college prize of £20 to Mr. C. H. Eccles; the third year winter college prize of £15 to Mr. Edmund Hobhouse; the third year winter college prize of £10, in addition to second tenure of the Musgrave Scholarship of 40 guineas, to Mr. F. Fawssett; the second year winter college prize of £20 to Mr. Thomas P. Cowen; the second year winter college prize of £10 to Mr. H. G. Turney; the first year winter college prize of £20 to Mr. A. C. Lancester; and the first year winter college prize of £10 to Mr. C. R. Box. At the London Hospital Medical College the Hospital Scholarship, of the value of £20, for proficiency and zeal in clinical medicine, has been awarded to Mr. G. C. W. Wright; and that of £20 for proficiency and zeal in clinical surgery to Mr. H. G. Lys.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—The quarterly court of the directors of this Society was held on April 14th; the President, Sir James Paget, in the chair. Two new members were elected; the deaths of five were reported, including that of Mr. Cooper Forster, a vice-president. Applications for relief were read from sixty widows, nine orphans, and three orphans on the Copeland Fund, and a sum of £1280 was recommended for distribution at the next court. One fresh application was read, and a grant at the rate of £30 per annum was made. The deaths of five widows were announced. A legacy of £50 from the executors of Miss Syne had been received. It was resolved to recommend for election, at the annual general meeting, as a vice-president, Sir William Bowman, F.R.S., in the place of Mr. Cooper Forster (deceased); and Messrs. T. H. Smith, Merriman, Vasey, Hutchinson, and Drs. Potter and Godson as directors in the place of the six senior, who retire. The annual general meeting was fixed to take place at 5 P.M. on May 9th.

BIRMINGHAM AND MIDLAND SKIN AND LOCK HOSPITAL.—The fifth annual meeting of the governors of this hospital was held on April 15th, in the board-room, Newhall-street. The Mayor (Alderman Martineau) presided. The report stated that during the past year 1142 patients were treated for skin disease, 810 for lock disease, and 45 for miscellaneous diseases. The attendances were 13,616. After referring with regret to the death of Dr. Russell and Dr. Heslop, the report showed that the necessity for larger premises became yearly more urgent, and that after careful consideration it was decided to build a new hospital with provision for beds and baths, as originally intended. For this purpose a piece of land had been secured in the centre of the town. The cost of erecting and suitably furnishing the building was estimated at £5000; towards this sum legacies, donations, and the surplus of ordinary income amounted to £1200, so that a further sum of £3800 was needed.

THE LABOURERS ACT (IRELAND).—At an inquiry held by an inspector of the Local Government Board for Ireland last week at Oldcastle, county Meath, as to the schemes promoted by the guardians for the erection of upwards of 200 labourers' cottages, evidence was given showing the urgent necessity for their construction. The medical officers of the union stated that many of the existing labourers' houses were built of bog sods or of old timber, that the roofs were of very little use in keeping out the rain, that some of the houses had no windows whatever, and that others were in danger of falling on the occupants. In one instance, in which there were ten in family, the entire dwelling only measured four yards by two, and an ordinary person could not stand upright in it. One labourer, on being asked to describe his house, said he might as well live under a riddle, as he could count the stars through the roof! There is no doubt that if the Act is properly carried out it must prove of considerable benefit to a large number of the labouring classes.

THE PANAMA CANAL.—M. de Lesseps, who has recently returned from Panama, read a paper at a late meeting of the French Academy of Sciences giving an account of the progress of the great canal works. The sanitary condition of the workmen he described as "relatively good," contrary to the unfavourable prophecies which were freely uttered at the outset. In a hospital with 500 beds, M. de Lesseps found only 300 occupied.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

LEACH, ALFRED, L.R.C.S., L.S.A.Lond., has been appointed Medical Adviser to the St. Gabriel's (Warwick-square) Maternity, vice Dr. J. H. Lavies, resigned.

ROKETT, A. W. CHALMERS, M.A., M.B.Cantab., has been appointed Medical Officer of Health for the Urban Sanitary Authority, Burnham, Somerset, vice D. A. Fraser, M.R.C.S., resigned.

TURNER, NATHANIEL H., L.R.C.P.Lond., M.R.C.S., &c., has been appointed Junior Resident Medical Officer to the Royal Free Hospital, vice H. W. Dodd, resigned.

WALKER, JANE H., L.K.Q.C.P.I., and L.M., has been appointed Resident Medical Officer to the Wirral Hospital and Dispensary for Sick Children, Birkenhead.

WHITFORD, WILLIAM, M.D., M.Ch.Q.U.I., has been appointed Medical Officer for the Fifth and Sixth District of the Parish of Liverpool.

Births, Marriages, and Deaths.

BIRTHS.

BEAUMONT.—On the 16th inst., at Gipsy-hill, Upper Norwood, S.E., the wife of Edgar Beaumont, L.R.C.P.Lond., M.R.C.S. (prematurely), of a daughter.

BUTCHER.—On the 15th inst., as Clydesdale Villa, Windsor, the wife of W. Deane Butcher, M.R.C.S., of a daughter (stillborn).

CROWTHER.—On the 8th inst., at Southampton-row, Russell-square, the wife of William Harding Crowther, L.F.P.S.Glas., L.S.A.Lond., of a son.

DUKE.—On the 14th inst., at The Glen, Lewisham, S.E., the wife of J. C. Duke, M.R.C.S., of a son.

EDWARDS.—On the 16th ult., at Tui Yüen, China, the wife of Henry Edwards, M.B., of a son.

GRAY.—On the 15th inst., at Albert-park, Melbourne, the wife of Charles E. Gray, B.A., M.D., M.Ch., Trinity College, Dublin (late Royal Navy), of a daughter.

MURRAY.—On the 14th inst., at Meadowside, Putney, the wife of G. Stanley Murray, M.D., of a daughter.

PEARCE.—On the 14th inst., at Lennox Villa, Hurstpierpoint, the wife of Henry Pearce, Surgeon, of a son.

RUSHWORTH.—On the 19th inst., at Langdale, Goldhurst-terrace, South Hampstead, the wife of Frank Rushworth, M.B., of a daughter.

SHADWELL.—On the 16th inst., at Lynhurst, Walthamstow, Essex, the wife of St. Clair B. Shadwell, M.R.C.S., L.R.C.P., of a daughter.

SMITH.—On the 15th inst., at Richmond-road, Barnsbury, N., the wife of Gilbert T. Smith, M.R.C.S., of a son.

MARRIAGES.

COLQUHOUN—MACMILLAN.—On the 2nd ult., at St. Matthew's, Dunedin, New Zealand, by the Rev. F. G. M. Powell, Daniel Colquhoun, M.D.Lond., M.R.C.P.Lond. (late Senior Assistant Physician, Charing-cross Hospital), of High-street, Dunedin, to Christian Campbell Macmillan, daughter of Thomas Macmillan, of 31, Ridge-road, Hornsey.

JACKSON—NICOL.—On the 14th inst., at St. Luke's, Westbourne-park, John William Jackson, M.R.C.S., of West-green, Tottenham, to Jane Ann (Jennie), fourth surviving daughter of F. A. M. Nicol, of Leamington-road-villas, Westbourne-park, W.

RAW—LEVIN.—On the 10th inst., at St. Mary's, Stoke Newington, William Edmund St. Michael Raw, L.R.C.P., M.R.C.S., L.S.A.Lond., of Rutland House, Oakfield-road, Penge, youngest son of the late Joseph Raw, to Edith Julia, eldest daughter of Edward Henry Levin, of Amhurst-road, Stoke Newington.

STEAVENSON—TRAVERS.—On the 21st inst., at St. Marylebone Parish Church, William Edward Steavenson, M.D., Downing College, Cambridge, son of the late Rev. Joseph Steavenson, of Shantock Hall, Bovingdon, Herts, to Dorothea Lloyd, daughter of the late Benjamin Travers, F.R.C.S., of Dover-street, Piccadilly.

DEATHS.

FOSBROKE.—On the 12th inst., at Bidford, George Haynes Fosbroke, M.R.C.S., L.S.A.Lond., in his 75th year.

ORWIN.—On the 16th inst., at Palace Chambers, Westminster (after a brief illness), Surgeon-Major Thomas William Orwin, A.M.D., eldest son of the late James Orwin, M.D., aged 47.

PENNINGTON.—On the 11th inst., at his residence, Devonshire-road, Prince's-park, Liverpool, Thos. Pennington, M.R.C.S., L.S.A.Lond., in his 79th year.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, April 21st, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Apr. 15	30·27	E.	47	44	54	51	43	...	Hazy
,, 16	30·21	N.E.	45	42	50	50	42	...	Cloudy
,, 17	30·08	E.	42	40	64	48	40	·02	Overcast
,, 18	29·97	E.	46	44	65	51	41	·01	Overcast
,, 19	29·83	E.	48	45	91	65	41	·15	Cloudy
,, 20	29·81	E.	51	49	82	55	46	·02	Overcast
,, 21	29·99	N.E.	46	43	...	...	43	...	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

UNIVERSITY OF CAMBRIDGE.

A CORRESPONDENT writes:—"For the sake of those who are going to Cambridge next October, it may be worth while to point out that a college is not necessarily a desirable one for a medical student because there are already many other medical students there. Those colleges which have the greatest number of medical students offer no more advantages to them than do other colleges which have few. I should advise those intending to go up to get advice from some resident member of the University who is well up in all the arrangements of the University for medical students; for in this respect the college tutors are very often lamentably deficient, having had little or no experience of such matters. All the colleges are open to medical students. This does not seem to be generally known. Even King's College, which for centuries has been closed to all except Eton men, is now, and for a long time has been, open to all comers, and, thanks to healthy reformation, offers no small advantages to medical and natural science students."

Peter is referred to the Students' Number of THE LANCET, published Sept. 12th last.

Mr. Cresswell.—The usual fee for a *qualitative* analysis is two guineas.

ACTION OF MUSCLE.

To the Editor of THE LANCET.

SIR,—In the report of a meeting of the Obstetrical Society of London on April 7th, published in your issue of April 17th, Dr. Horrocks is quoted as saying that "physiologists have formulated a law that whenever a muscle contracts, its opponent relaxes. This law is applicable to all muscle, voluntary or involuntary." In the same issue, Dr. Seymour Sharkey is reported (page 729) as saying, in his Gulstonian lectures, "Let me here refer to a class of spasmodic affections which appear to have the same explanation as tendon reflexes. Whether explicable as a reflex or purely local phenomenon, contraction of muscles occurs when they are put on the stretch by their antagonists; and this has the effect of controlling and steadying movements which might otherwise be jerky and uncertain." These two quotations appear to be contradictory. Is it not that sphincter muscles only are inhibited or actively dilate during contraction of their opponents, but that opposed muscles acting on joints contract together, though to an unequal degree?

I am, Sir, yours truly,

Ipswich, April 19th, 1886. JAS. NORMAN VOGAN.

ARTIFICIAL COLOURING MATTERS IN WINE.

DR. C. BLAREZ sends to the Bordeaux Medical and Surgical Society, in support of his candidature, a paper embodying the results of various observations he has made on the subject of the noxious effects produced by drinking liquids coloured with certain colouring matters derived from coal. Many of the observations were made on persons who, being medical or pharmaceutical students, were excellent subjects for the purpose. A number of experiments were also made by artificially carrying on the process of digestion with and without the addition of the colouring matters in question. The conclusions arrived at were that sulpho-fuchsine, which seems to be used for the coloration of wine, though it can hardly be looked upon as a poison, is nevertheless capable of setting up a good deal of gastric disturbance, especially if taken habitually by persons whose digestive powers are not very strong, the symptoms produced being generally colic and diarrhœa. The author found that this substance, as well as "Bordeaux red", and safranine, distinctly retarded the peptonisation of muscular fibrine.

House-Surgeon and Subscriber.—The question is a delicate one. We see no reason why a house-surgeon should not in certain cases receive fees for services rendered, provided that it is no part of his agreement with the authorities of a public charity to devote his time entirely to their interest. When, however, the services are given in the hospital, clearly the institution, and not he, is the proper recipient of the fees. The only case, in our opinion, where a house-surgeon should take a fee is when he is called upon to give evidence at an inquest on a body brought in dead. Many hospital surgeons—honorary—refuse to give certificates of incapacity or injury where any litigation is involved.

Messrs. Sampson Low and Co.—The subject scarcely comes within our province.

SOUTH CALIFORNIA AS A HEALTH RESORT IN PHTHISIS.

To the Editor of THE LANCET.

SIR,—In your admirable leader of March 13th, which is now before me, you omit any mention of Southern California as a health resort for phthisis. If you had a practical acquaintance with the foot hills of the Sierra Madre range, you would, I think, class them amongst the finest climates of the world. Physicians in the eastern States of America send dozens of phthisical patients here every autumn; and I should like to point out a few of the advantages of this district to my professional brethren. The air is very dry, which, I believe, is generally considered a great desideratum, and we have no fogs, though they are found in the valley. The elevation is about 1800 feet above sea level. The winter climate is very equable—the days are pleasant and generally sunny, and the nights cool and refreshing. In summer there are, perhaps, half a dozen nights when one can dispense with a blanket, but as a rule one or two are required. Out-door exercise is possible every day, except during rain; but the ground absorbs moisture so readily that in half an hour after a fall of rain patients can walk out without getting muddy. The sea is about thirty-five miles distant, and the breeze from that quarter tempers the heat of summer. There are not many days (perhaps four or five) when the thermometer ranges over 90° F., and the heat is not felt so much as in England at 75° F. I came here about eighteen months ago, after two attacks of hæmoptysis, with a bad history of phthisis. I lost my mother, two brothers, and a sister from that disease. I first went to Los Angeles city; but after a residence of three months there, I found I was not so well, my left lung showing signs of giving way. Upon the recommendation of one of the first physicians in the city, I came out to Sierra Madre, and have done well ever since. I have no cough, and sometimes drive thirty miles a day seeing patients. This settlement comprises about fifty families, and about forty of them include a member who came here for "lung trouble." If patients come here in an early stage of the malady, they are almost certain to be cured. But even in more advanced cases the lives of patients may be prolonged years, instead of weeks. Space will not allow me to enter into details of cases; but, if desirable, I can, on some future occasion, give notes of a dozen cases which have come under my notice. We have pure air, pure water, fine scenery, good and cheap food, with strawberries, green peas, &c., every month in the year, and roses and geraniums in blossom all the winter. We are only sixteen to eighteen days by steamer and Pullman car from London. I shall be glad to answer any queries. I am, Sir, yours truly,

F. C. GRESHAM, M.D., M.R.C.S.

Bromley Knoll, Sierra Madre, Los Angeles County, South California, March 31st, 1886.

A FURTHER CURIOUS COINCIDENCE.

To the Editor of THE LANCET.

SIR,—There is an extraordinary sequel to "A Curious Coincidence," which you published last week. On April 15th—yet another week later—I obtained through a city music-seller two numbers of a musical cabinet, and both were defective. One contained a transposition of sixteen pages, and the other something wholly different from the table of contents printed on the cover. What does such a run of ill-luck in purchasing books portend? Will some modern representative of the genus astrologer or other occult science kindly inform me?—I am, Sir, yours truly,

April 16th, 1886. C. L.

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THE CONSUMPTION OF TOBACCO.

THE Board of Trade returns for the quarter ending March disclose the fact that the consumption of tobacco in the United Kingdom has declined by 340,277 pounds weight, as compared with the corresponding period of last year. For several years up to the present time there has been a gradual increase in the consumption, notwithstanding the commercial depression which has prevailed, more or less, for the past eight years.

L.R.C.P.—There is no one book which contains the whole history of vaccination and statistics. But much information will be found in Seaton's Handbook of Vaccination, and very full statistics in the Reports of the Medical Officer of the Local Government Board for the years 1881 and 1884; also in the report of the German Vaccination Commission. This is now out of print, but a digest will shortly appear in the next volume of the Transactions of the Epidemiological Society (Shaw and Sons).

Mr. McGregor (Atlanta).—The paper referred to has not been received.

CHLOROFORM *v.* ETHER.

To the Editor of THE LANCET.

SIR,—The evidence in the Bartlett case has been of great interest to the public, lay and professional. Our knowledge of the action of such a universally employed drug as chloroform would seem from this case to be very limited, and the tendency of the evidence given must be to make the public more than ever prejudiced against that valuable anæsthetic. That ether ever will supersede chloroform in the general favour of practitioners may be doubted. It has every chance given it, for its praises are everywhere sounded to the detriment of chloroform; but I think if the collective opinion of the profession could be taken, chloroform would poll two votes to ether's one. Patients have often said to me, "Is not chloroform very dangerous? I thought everyone gave ether now-a-days." And that is exactly what a layman would conclude from reading this latest and most sensational trial. I was for a considerable time house-surgeon to a northern hospital where accidents were frequent, and I had a very fair experience in the use of anæsthetics. I can remember distinctly administering the A.C.E. mixture, which, after extended trial, I believe to be the safest and best, to a muscular young man, a collier, who came in with a fractured thigh. He was placed in the separate ward used for first admissions, and on proceeding to set the fracture I found him asleep, very soundly, evidently worn out with pain. I remarked to the nurse at the time that it would be a good case to test the possibility of giving an anæsthetic during sleep, and I applied the A.C.E. mixture as usual on a cone of spongio-piline. I withdrew it as he sniffed and seemed likely to wake, and then applied it again, as he relapsed into slumber, and although he turned over and was restless, he awoke not, and I put up the fracture in the usual way. I well remember his astonishment when, on recovering consciousness, he found his leg bandaged; he regarded the whole transaction as something "uncanny." The A.C.E. is decidedly more irritating to the air-passages than plain chloroform, and the inference would be that the latter might have been very easily given to the sleeper. I have on two or three occasions chloroformed children during sleep; but so, I suppose, has everyone who has had much use of anæsthetics. The A.C.E. seems very safe and handy in obstetric practice for several reasons.

I am, Sir, yours faithfully,

JOHN G. MARSHALL, M.B.Cantab.,
Hon. Surgeon, Mosley Convalescent Home.

St. Margaret's Bay, Dover, April 17th, 1886.

THE REARING OF HAND-FED INFANTS.

DR. NEWHAM of Winslow has had printed on a handbill the letter from Dr. Walker of Spondon, near Derby, which appeared in our columns on Aug. 23rd of last year, on Dr. Frankland's method of preparing artificial human milk. Any effort to spread amongst mothers correct information on the subject of infant feeding is commendable.

Dr. B. Ryley.—We sympathise with our correspondent in the annoyance to which he has been put, but do not see that any good would result from publishing his letter.

Mr. J. Harper's paper is marked for early insertion.

"HEALING BY FIRST INTENTION AFTER OPERATION FOR FISTULA."

To the Editor of THE LANCET.

SIR,—I have read the interesting annotation on the above subject in your last issue (p. 756), describing Dr. Ruidnovski's successful case. A few weeks ago an adult patient presented himself amongst the out-patients at the Western Hospital for Fistula, and he stated that he had recently been discharged from one of the large London hospitals (mentioning its name), where he had had a fistula "sewn up," but that he was just as bad now as before the operation. I examined him, and found that he was suffering from a complete anal fistula, with a long sinus, and as the suture marks were visible I concluded his tale was true. Knowing the surgeon by name who had performed the operation, I sent the patient back to him. I am, Sir, yours faithfully,

Bennett-street, St. James's, April 19th, 1886. SAMUEL BENTON.

TYPE WRITING.

Our attention has lately been directed to the advantages gained by medical men having lectures or papers to be read at meetings copied in type writing. Such copies are read with much ease and comfort, the clearness of the print saving much time and sparing to a considerable extent the eyesight. An office for such work in which ladies are employed has been established, and the quality of the work and the low price at which a single copy can be produced will doubtless induce considerable patronage to a venture which aims at providing what in these days is scarce enough—a suitable employment for ladies whose circumstances compel them to earn, wholly or in part, their living.

Kentigern.—1. Journal of Cutaneous and Venereal Diseases (New York: W. Wood); Annales de Dermatologie et de Syphiliographie (Paris: Masson).—2. Dr. D. Powell's work, of which a third edition has just been published.

THE USE OF THE ELECTRO-MAGNET IN SURGERY.

To the Editor of THE LANCET.

SIR,—Magneto-electricity has achieved such good results in the extraction of metallic substances from the eye, that I would beg to inquire if it has proved as successful elsewhere? I have to record a case of failure, where, in scrubbing a floor, a needle ran into the palm of the hand over the head of the third metacarpal bone, before last Christmas, and broke off. There were no indications of its exact whereabouts, and no suppuration; but some movements of the fingers being interfered with, Dr. H. R. South, R.N., very kindly took the patient on board H.M.S. *Vernon*, and having cut down over the site, applied an enormously powerful electro-magnet without withdrawing the needle, nor did the patient feel any prick or dragging, &c. However, it was there; for on April 3rd, some "soreness" having occurred on the back of the hand opposite the place of entry, I cut down (under Esmarch), and after some probing, felt, and removed, a portion of needle seven-eighths of an inch in length, black and smooth. I am, Sir, yours truly,

April 20th, 1886. W. M. H.

B.—The interest or good-will of a retiring practitioner is generally allowed to extend to his appointments as well as his private patients. He cannot, of course, promise the transfer of either, but it is good for what it is worth. How much it is worth depends on circumstances. Our correspondent is quite at liberty to try for a public appointment so vacated.

Student should apply to the secretary of the college mentioned.

EDUCATION OF DEAF-MUTES.

To the Editor of THE LANCET.

SIR,—In your last issue you refer to the education of the blind in board schools, and, in doing so, express the hope that some day the instruction of deaf-mutes may be included within the widening range of the board school administration. You are evidently unaware that with many school boards this is already an accomplished fact. The School Board for London has classes for deaf-mutes in various parts of the metropolis under the able superintendence of the Rev. Wm. Stainer, whose staff is in part trained at the Fitzroy-square Training College for teachers of the deaf. School boards in the country have followed the example, and I continually receive applications for the supply of teachers for the opening of new classes.

I am, Sir, your obedient servant,

WILLIAM VAN PRAAGH.

The Association for the Oral Instruction of the Deaf and Dumb,
11, Fitzroy-square, W., April 19th, 1886.

X. Y. Z.—The paper by Dr. Austin Flint on the Elements of Prognosis in Bright's Disease was published in the "Journal of the American Medical Association" for January 9th of the present year.

TENDER FEET.

To the Editor of THE LANCET.

SIR,—Perhaps some of your readers would be good enough to suggest a treatment for tender feet. For the last twenty years since my childhood, I have been almost entirely prevented from taking outdoor exercise from the pain consequent on walking; and nothing I have tried has been of any benefit. The apparent cause is thickening of the epithelium on the sole of the foot. I am, Sir, yours truly,

April 20th, 1886. X.

"APOPLEXY WITH COMPLETE HEMIPLEGIA."

To the Editor of THE LANCET.

SIR,—In reference to my case of the above, I beg to say that I myself thought it might have been due to embolism; but there was no previous history to point to any cause of embolism, and the same bruit remained after the seizure. I regret I cannot tell Mr. Boys if the murmur exists at the present date. I am, Sir, yours truly,

Ashburton, Devon, April 13th, 1886. WILLIAM FRASER, M.B.

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ERRATA.—In our report of the meeting of the Medical Society of London, p. 741, referring to Mr. Brudenell Carter's case of Mules's operation, we should have stated that an artificial vitreous body *was* employed.—In the first paragraph of the lettter of our Manchester correspondent last week, the proportion of morphia in the dose of medicine was erroneously stated to be "18¾ grains." It should have been 1¾ grains.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Owen Pritchard, London; Dr. B. Yeo, London; Dr. T. Oliver, Newcastle-on-Tyne; Mr. G. Bischof, London; Mr. Blackett, London; Mr. Mark H. Judge, London; Dr. Newham, Winslow; Mr. Spencer Watson, London; Mr. Van Praagh, London; Dr. Hingston Fox, London; Mr. W. Fraser, Ashburton; Mr. Jamieson, Edinburgh; Mr. Stephen Paget, London; Dr. Philpots, Bournemouth; Messrs. Reynolds and Bransom, Leeds; Mr. Bremner, Banff; Dr. Pasteur, London; Dr. R. Maguire, London; Dr. Charteris, Glasgow; Mr. Dunscombe, Liverpool; Mr. Hadley, Paris; Dr. Griffiths, London; Mr. R. W. Parker, London; Dr. Kreider, Springfield, U.S.A.; Mr. Stamford, Tunbridge Wells; Mr. S. Benton, London; Dr. Penhall, St. Leonards; Mr. F. Hewitt, London; Mr. J. G. Marshall, Dover; Dr. Gresham, Los Angeles; Dr. Oxley, Liverpool; Prof. Latham, Cambridge; Mr. L. Propert, London; Mr. Battiscombe, St. Mary; Messrs. Johnson and Co., Croydon; Mr. J. Allen, Bollington; Messrs. Zimmerman and Co., London; Mr. Vogan, Ipswich; Dr. Pringle, London; Mr. Small, Finsbury; Dr. Steavenson, London; Messrs. Midgley and Son, Manchester; Mr. Spanton, Hanley; Mr. Helton, Bury; Messrs. Doulton and Co., London; Dr. Fenwick, Finsbury; Messrs. Fowler and Co., London; Mr. Hawkings, London; Dr. Harley, London; Mr. Grove, Dorchester; Dr. Bateman, Birmingham; Mrs. Christmas, Eastbourne; Dr. Fox, Finsbury; Mr. Roberts, Penygroes; Dr. Armstrong, South Shields; Mr. Thin, Edinburgh; Mr. Enderlein, Manchester; Mr. Bindless, New Cross; Mr. Davidson, Norwich; Messrs. Brady and Martin, Newcastle-on-Tyne; Mr. Morgan, Clevedon; Messrs. Lee and Martin, Birmingham; Madame Waizimkorm, Austria; Messrs. Lea and Nightingale, Liverpool; Messrs. Livingston, Edinburgh; Mr. T. Fletcher, Warrington; Mr. West, Stoke-on-Trent; Dr. E. H. Jacob, Leeds; Mr. C. H. Wells, London; Pater; X.; Alpha; Kentigern; C. L.; J. G. N., Glasgow; H. B., Manchester; Medicus, Sheffield; N.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Harding, Whittlesea; Mr. Domford, Ely; Mr. Jones, Chester; Mr. Salmond, Alfreton; Dr. Maclean, Swindon; Dr. Rawry, Dundee; Mr. Dick, Burton-on-Trent; Mr. Gray, Dalton-in-Furness; Mr. Goldie, Birmingham; Mr. Pennington, Liverpool; Mr. Berthier, Paris; Mr. Beasley, Warrington; Mr. Girling, Birmingham; Dr. Pooler, South Australia; Dr. Colmer, Yeovil; Mr. Weymouth, Kilburn; Messrs. Knight and Co., Rotherham; Mr. Massingham, London; Messrs. Iliffe and Co., Coventry; Mr. Marsh, Hindley; Mr. Oliver, Halifax; Mr. Moullin, London; Mr. Maw, Bradford; Mr. Guest, Darlington; Mr. Rowley, Barnsley; Mr. Rideal, London; Mr. Mills, Rochdale; Mr. Grant, Wolverhampton; Messrs. Lewis; Dr. Raymond, Sligo; Mr. Hunter, Aberdeen; Miss Minks, Chelsea; Mr. Evans, Oswestry; Mrs. Wheatley, Worthing; Mr. Lambert; Arnold, Edinburgh; L.R.C.S.I., Salford; Cymro; M. O.; Physician; L. M., Snaith; Spes; P. S., Stockton-on-Tees; Surgeon, Bradford; R. G.; Chir.; Alpha, Luton; M.B. Edinburgh; J. F., Leeds.

The Freeman, Charity Record, Dietetic Reformer, Glasgow Herald, Church of England Temperance Chronicle, Newcastle Courant, Kidderminster Times, Tasmanian News, Cheshire County News, &c., have been received.

Medical Diary for the ensuing Week.

Monday, April 26.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

Tuesday April 27.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Dr. Champneys: On the Development of Mammary Functions by the Skin of Lying-in Women.—Dr. Althaus: On Paraplegia from Pott's Disease, and its Treatment by the Actual Cautery.

Wednesday, April 28.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.

Thursday, April 29.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, April 30.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CLINICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Timothy Holmes: A case illustrating the Diagnosis of Interstitial and Subpleural Laceration of the Lung.—Dr. Bristowe: A case of Gummata of the Liver.—Dr. Burnet: A case of Hydatids of the Liver opening into the Right Lung, Excavation of the whole of the Lower Lobe.—Dr. Percy Kidd: Aneurysm of the Aorta, Extravasation of Blood into the Posterior Mediastinum, compressing the Œsophagus and Vagus Nerves, and Rupture into the Abdominal Cavity, associated during life with frequent Vomiting.

Saturday, May 1.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—1.30 P.M. Annual Meeting.

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Croonian Lectures

ON

SOME POINTS IN THE PATHOLOGY OF RHEUMATISM, GOUT, AND DIABETES.

Delivered at the Royal College of Physicians of London, April, 1886.

BY P. W. LATHAM, M.A., M.D., F.R.C.P.,

DOWNING PROFESSOR OF MEDICINE, CAMBRIDGE; SENIOR PHYSICIAN TO ADDENBROOKE'S HOSPITAL.

LECTURE III.

(*Concluded from page 774.*)

HAVING indicated the way in which the symptoms of rheumatism and gout may be produced, let me now appeal to clinical experience, and show how far the results obtained from the practical treatment of these disorders supports the view I have here advanced as to their pathology. If uric acid is the poison, the treatment for both diseases resolves itself into this: to prevent the formation of this substance, and when formed to promote its elimination from the system. The kidneys will in time effect the latter if we satisfy the first condition, and we may do this by seizing upon or eliminating the glycocine from the system; for as this is an essential constituent of uric acid, by removing it we prevent the further formation of that body, and so remove the irritating substance by which the action of the central nervous system is perverted. In gout this may be effected in some measure by benzoic acid. When benzoic acid is swallowed or introduced into the alimentary canal of a mammal, whether herbivorous or omnivorous, it appears in the urine as hippuric acid $C_9H_9NO_3$. The urine of adult herbivorous mammals contains no uric acid, this substance being replaced by hippuric acid, which varies in quantity both according to the food of the animal and the amount of work or exercise it has taken. Hippuric acid is also found, though in much smaller quantity, under normal circumstances, in human urine. Now hippuric acid may be decomposed by boiling it with strong hydrochloric acid into benzoic acid and glycocine:[1]

$$\underset{\text{hippuric acid}}{CH_2\begin{cases}NH\,.\,C_7H_5O\\COOH\end{cases}} + H_2O = \underset{\text{benzoic acid}}{C_6H_5\,.\,COOH} + \underset{\text{glycocine}}{CH_2(NH_2)COOH}$$

This action may be reversed, and by heating benzoic acid and glycocine in a sealed tube to 160° C. hippuric acid is formed.[2] It may also be formed by injecting benzoic acid and glycocine or bile into the blood of a living animal.

According to Kühne and Hallwachs,[3] benzoic acid injected alone into the jugular vein is not converted into hippuric acid, but it is if injected into the portal vein. Meissner and Shepard,[4] however, state that after injecting benzoic acid into the jugular vein of a rabbit, at first benzoic acid alone appeared in the urine, then more and more hippuric acid, and lastly hippuric acid alone. These experimenters maintain that hippuric acid is formed in the kidneys alone; but benzoic acid appearing first alone in the urine in the above experiment would hardly bear out that view, and Salomons,[5] after introducing benzoic acid into the stomach of a nephrotomised rabbit, obtained a decided amount of hippuric acid from the muscles, liver, and blood. Again, when benzoic acid is injected into the portal vein, of some animals at least, it appears as hippuric acid in the hepatic vein.[6] Hippuric acid also appears in the urine when benzoic acid is swallowed or introduced into the alimentary canal. Here it meets with the glycocine in the bile, and as they pass into the liver these are conjugated with elimination of water forming hippuric acid:

$$\underset{\text{benzoic acid}}{C_6H_4\begin{cases}H\\COOH\end{cases}} + \underset{\text{glycocine}}{CH_2\begin{cases}NH_2\\COOH\end{cases}} = \underset{\text{hippuric acid}}{C_6H_4\begin{cases}H\\CO\,.\,NH-CH_2-COOH\end{cases}} + H_2O.$$

The molecule CO . NH when the substance forms part of the tissue being transformed[7] into CNOH, and then living hippuric acid would be represented by the formula

$$C_6H_4\begin{cases}H\\CNOH\end{cases}\\CH_2\begin{cases}\\COOH\end{cases}$$

having a constitution of the same character as that of the molecules of living albumen. But benzoic acid, after passing through the liver, may be transformed in the tissues in two ways—into hippuric acid, either by being conjugated there with glycocine, or combining with the antecedent of glycocine.

In my previous lecture I endeavoured to show that this antecedent of glycocine is methene cyanalcohol $CH_2\begin{cases}OH\\CN\end{cases}$ which, acted upon by acids, would form glycollic acid, but if first treated with ammonia it forms a cyanamide, and then hydrated with acids or alkalies, forms glycocine.

When this substance and benzoic acid therefore are brought together in the tissues we should have

$$\underset{\text{methene cyanalcohol}}{CH_2\begin{cases}OH\\CN\end{cases}} + \underset{\text{benzoic acid}}{C_6H_4\begin{cases}H\\COOH\end{cases}} + 2H_2O$$

$$= \underset{\text{glycollic acid}}{CH_2\begin{cases}OH\\COOH\end{cases}} + \underset{\text{ammonium benzoate}}{C_6H_4\begin{cases}H\\COO\,.\,NH_4\end{cases}}$$

the latter of which when dehydrated being converted into benzonitrile,[8] this becomes

$$= \underset{\text{glycollic acid}}{CH_2\begin{cases}OH\\COOH\end{cases}} + \underset{\text{benzonitrile}}{C_6H_4\begin{cases}H\\CN\end{cases}} + 2H_2O$$

$$= \underset{\text{hippuric acid}}{CH_2\begin{cases}C_6H_4\begin{cases}H\\CNOH\end{cases}\\COOH\end{cases}} + 2H_2O$$

the formula which I have just shown to be that for living hippuric acid.

It is in this way that benzoic acid acts. It seizes upon the glycocine or its antecedent and so prevents the formation of uric acid; it passes out in the urine as hippuric acid, and gouty patients undoubtedly derive benefit from its use. Dr. Golding Bird prescribed it, in conjunction with phosphate and carbonate of soda with cinnamon-water, as a vehicle in gout. Dr. Garrod says: "I can confidently affirm that I have already obtained great advantage in the treatment of these diseases (gout and gravel) from the employment of the benzoates."[10] Doubt has been expressed whether the benzoates do diminish the uric acid excretion or not. Cook[11] states that in a healthy individual the administration of benzoic acid does not stop the formation of the normal amount of uric acid, but masks its presence in the urine and interferes with the murexide test. The later experiments of Dr. Noel Paton,[12] however, clearly demonstrate "that benzoate of soda really does diminish the uric acid secre-

[1] Watts Dict. Chem., vol. iii., 1865, p. 158.
[2] Ibid., p. 158. [3] Jahresb., 1859, s. 638.
[4] Untersuchungen über das Entstehen der Hippursäure. Hanover, 1866.
[5] Zeitschr. f. Phys. Chemie, s. 365, 1879.
[6] Foster's Physiology, fourth edition, 1883, p. 441.
[7] Compare page 627. [8] Watt's Dict. of Chem., vol. i., p. 563.
[9] Glycollic acid and benzonitrile can in the laboratory be transformed into hippuric acid by converting the benzonitrile in benzoic acid and ammonia, this combining with the glycollic acid to form ammonium glycollate, which when heated is transformed into glycocine, and then combining this with benzoic acid, hippuric acid is formed in the usual way.
[10] THE LANCET, April, 1863, p. 373.
[11] Brit. Med. Journal, July 7th, 1883, p. 9.
[12] Journal of Anatomy and Physiology, Jan. 1884, pp. 26 to 32.

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tion." In an abnormal state of things, when there is an excessive amount of glycocine passing unchanged into the blood, the benzoic acid seizes upon this and converts it into hippuric acid; and so, if glycocine be necessary for the formation of uric acid, the amount of the latter must be correspondingly lessened. The remedy, however, must be given in sufficiently large doses, doses large enough to absorb all the glycocine, and then it may not only prevent the further formation of uric acid, but, as Cook's experiments show, it may render the uric acid already existing in the blood more soluble and therefore more readily eliminated by the kidneys.

Salicylic acid, or oxybenzoic acid $C_6H_4\begin{cases}OH\\COOH\end{cases}$ is another remedy which acts like benzoic acid, and this also has been found by Dr. Noel Paton[13] to diminish the excretion of uric acid. When administered internally it passes off by the urine as salicyluric acid—that is, it combines in its passage through the system either with glycocine or its antecedent, for on treating salicyluric acid with fuming hydrochloric acid it is resolved into salicylic acid and glycocine:

$$C_6H_4\begin{cases}OH\\CO\,.\,NH-CH_2-COOH\end{cases}+H_2O=C_6H_4\begin{cases}HO\\COOH\end{cases}+CH_2\begin{cases}NH_2\\COOH\end{cases}$$

salicyluric acid — salicylic acid — glycocine

Consequently, in the system, by seizing either upon glycocine or its antecedent, salicylic acid takes away an essential constituent of uric acid, and so prevents the formation of this body. As the salicyluric acid passes into the living system, the CO . NH would be transformed into CNOH, and the above formula for salicyluric acid would become

$$C_6H_4\begin{cases}OH\\CNOH\end{cases}\qquad CH_2\begin{cases}\\COOH\end{cases}$$

salicyluric acid

or, if salicylic acid combines with methene cyanalcohol the antecedent of glycocine in the tissues, it would then undergo similar changes to those I have described for benzoic acid—viz.:

$$C_6H_4\begin{cases}OH\\COOH\end{cases}+CH_2\begin{cases}OH\\CN\end{cases}=\qquad C_6H_4\begin{cases}OH\\CNOH\end{cases}\qquad CH_2\begin{cases}\\COOH\end{cases}$$

salicylic acid — methene cyanalcohol — salicyluric acid

In gout, uncomplicated with contracted kidney or albuminuria,[14] salicylic acid is often of service.[15] But it is in acute rheumatism that it shows its special power, acting truly, when properly administered, as a distinct specific. Here is a disorder which under different treatment may exist for weeks stationary, so to speak, in its intensity, the great heat, and nervous and vascular excitement, and pain, and swelling being exactly of the same amount to-day as they were weeks ago; a disorder which less than fifty years since was said to be "often such in itself and such in its appalling incidents as to need from time to time that medicine should put forth the full compass of all its powers. Every organ or system of organs which either directly or indirectly can receive the impression of remedies are from time to time called to bear all that they can possibly endure; and it is often only when the powers of medicine are pressed even to the verge of destroying life, that life is saved."[16] And now, with or without the administration of a purgative, as the occasion requires, the patient is placed fully under the influence of salicylic acid, and in from forty to sixty hours, not unfrequently in a shorter time, the pains in the joints have subsided, the limbs can be freely moved, and the bodily temperature has reached the normal condition. But more than this—and here the remedy shows its signal power,—in no case of rheumatism that has come under my care during the last six years, either in hospital or private practice, has there been, where the heart was previously sound, any cardiac complication, such as endocarditis or pericarditis, developed. If this can be maintained and ensured, we have indeed in our hands a most potent remedy. Cardiac complications constitute the chief danger of acute rheumatism, and the danger, if the disease is taken in hand soon enough, may with our new remedy be averted. But certain conditions must be observed to ensure success in the administration of the remedy. They are as follows:—1. The true salicylic acid obtained from the vegetable kingdom must alone be employed. If you have to give large doses, avoid giving the artificial product obtained from carbolic acid, however much it may have been dialysed and purified. An impure acid will very quickly produce symptoms closely resembling delirium tremens. 2. Give the acid without any alkali or base. A very good form is to mix 100 grains with 15 grains of acacia powder and a little mucilage. Allow the mass to stand and harden, and then divide into thirty pills. 3. Place the patient fully under the influence of the drug—that is, let him have sufficient to produce cerebral disturbance—i. e., buzzing in the ears or headache, or slight deafness; with the development of these symptoms the temperature and the pain in the joints will begin to decline. To an adult I generally administer three doses of 20 grains (six pills) at intervals of an hour, and if the head remains unaffected, a fourth dose at the end of another hour; and then repeat the 20 grains every four hours until the physiological effect of the remedy shows itself. In the majority of cases from 80 to 100 grains are enough. In severe cases 140 to 150 grains may be required. Afterwards about 80 grains a day are sufficient, and as the temperature declines smaller quantities will develop their physiological effects, 60 or even 50 grains being then sufficient to produce cerebral disturbance. It would appear that as long as the rheumatic poison is circulating in the system, the physiological effect—that is, the effect it produces in the healthy organism—does not show itself; acting as an antidote, the greater the amount of poison the larger must be the dose of the remedy; but as soon as the formation of the *materies morbi* is stopped, then the excess of the remedy acts as it would in the healthy organism and its peculiar physiological effects are developed. It is a very striking illustration of the difference between the therapeutic effect of a remedy and its physiological action. 4. Give the patient from 40 to 80 grains daily for ten days after all pain and pyrexia have passed away. 5. Let the patient's diet consist entirely of milk and farinaceous food for at least a week after the evening temperature has been normal. On the other hand, if the patient has meat and soup, you may look forward with fair probability to a relapse. 6. Take care to maintain a daily and complete action of the bowels. Calomel is the best purgative, from 2 to 5 grains at night, followed in the morning, if necessary, with a saline draught. This is the most important adjuvant to the action of salicylic acid, and I will presently explain to you why this is the case. 7. Let the patient be enveloped in a light blanket, and with no more bedclothes than are sufficient to keep him from feeling cold. The object of the treatment now is to cool the patient—not, as in former times, to sweat the poison out of him; and the cooler he is kept the sooner will the temperature be lowered. In fever increased heat increases the metabolism just as in a cold-blooded animal.[17]

These are the seven rules upon which I act. I have given the true salicylic acid where there have been both aortic and mitral mischief; and I have also given it in rheumatism complicated with pericarditis, and as yet I have seen no bad result from it. Of course in cases of pericarditis, accompanied with delirium, the use of the remedy requires caution; you cannot tell when the system is saturated with the remedy, and you must therefore trust to smaller doses and other means for controlling the disease. Further, if pericarditis or endocarditis, pneumonia, or pleurisy have been developed, the remedy is powerless over the mischief which is done; it will neutralise the poison producing the mischief so as to stop its extension, but the inflammatory exudations will undergo their usual changes unabbreviated in their course. We see the same thing in tonsillitis. Given early enough, salicylic acid will stop the mischief, but if exudation of lymph has taken place salicylic acid is powerless to cause its absorption.

There is another important point to be noticed here. In my first lecture I showed that from condensation of two molecules of $CH_2\begin{cases}OH\\CN\end{cases}$ lactic acid and carbonic acid could

[13] Loc. cit., p. 25.

[14] Paton's experiments show "that this drug has really an irritating action on the kidneys." Loc. cit., p. 25.

[15] See Dr. Dyce Duckworth's remarks on the use of salicylate of soda in gout. Year-book of Treatment for 1884, p. 81.

[16] Dr. P. M. Latham's Works, New Syden. S[illegible] l., p. 112.

[17] Stirling and Landois: Physiology, p. 451.

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be formed.[18] By seizing therefore upon this antecedent of glycocine, salicylic acid lessens the formation both of uric acid and lactic acid.

During the administration of even large doses of salicylic acid in rheumatism, a certain amount of uric acid is still sometimes excreted by the kidneys. How is this to be explained?

As the molecular constituents of albumen fall asunder, the molecule $CH_2\begin{cases}CNOH\\CNOH\end{cases}$ may become detached, and as it passes from the living tissue the CNOH would be transformed into CO – NH, consequently the above molecule would be converted into hydantoin $CH_2\begin{cases}CO-NH\\|\\NH-CO\end{cases}$ which, having little affinity for salicylic acid, would pass on to the glands, and, conjugated with urea or biuret, pass out of the system as uric acid.

I have referred to the necessity of keeping up daily and sufficient action of the bowels. The benefits resulting generally, in rheumatism, from the so-called purgative plan of treatment have always been recognised by the older physicians as striking and satisfactory. By the judicious use of cholagogue purgatives we eliminate the bile from the intestines and so remove from the system a quantity of glycocine, which if re-absorbed would lead to the consequent formation of uric acid. Calomel is unquestionably of service here. Doubts may exist as to whether it promotes the flow of bile from the liver or not; but when the bile gets into the intestine calomel will cause its evacuation. "The conclusion seems inevitable that mercurial purgatives given to healthy persons cause the escape of large quantities of bile from the alimentary canal."[19] Referring to the three modes of treatment—by venesection, by opium, and by purgatives—which were in vogue at the time, Dr. P. M. Latham says with regard to the last: "As this plan of treatment works prosperously day after day in its immediate effects, so day after day it gives an earnest of the remedial impression it is exercising upon the whole disease. It abates the fever, it softens the pulse, it reduces the swelling, and it lessens the pain. In short, it subdues the vascular system like a bleeding, and pacifies the nervous system like an opiate; and often in the course of a week the acute rheumatism is gone. In three days there is often a signal mitigation of all the symptoms; and in a week I have often seen patients, who have been carried helpless into the hospital, and shrieking at the least jar or touch or movement of their limbs, risen from their beds, and walking about the ward quite free from pain.

"Of this plan, often so striking in its operation, and often so satisfactory in its results, I have some further remarks to make. It is called the purgative plan; yet its purpose is achieved by calomel and purgatives conjointly. The purgatives would not answer the end without the calomel—of that I am quite certain; neither would the calomel answer without the purgatives, unless it produced of itself ample evacuations from the bowels. It is probable, in short, that the remedial efficacy of the plan resides essentially in the calomel; in calomel, however, not as *mercury*, but as itself—*calomel*. If the specific effect of mercury—salivation—arise, it is not only beside our purpose and against our wish, but it begets a serious hindrance to the use of calomel in sufficient quantity for the end in view. Thus the whole plan is frustrated. Having begun one plan of treatment, we are obliged to take up with another. Time is lost, the case is perplexed, the disease is prolonged, and the patient perhaps injured. ..... Now, if in the treatment of acute rheumatism you were to choose one indication and abide by it, and were to trust one class of remedies and to it only, you would find more cases that admit of a readier cure by the method now described than by either of the former two. You would find the aggregate of morbid actions and sufferings, which constitute the disease, more surely reached and counteracted and more quickly abolished by medicines operating upon the abdominal viscera only than by those which influence either the bloodvessels only or the nerves only. You would find in calomel and purgatives a better remedy than in either venesection or in opium."[20]

In the earlier attacks of gout, too, I have often seen marked relief follow the administration of calomel and a saline cathartic. Where there is high arterial tension, as in the gouty paroxysm, this may be distinctly lowered by these remedies. They check the further formation of uric acid which is stimulating the vaso-motor centre and causing the increased arterial tension, by eliminating the bile from the intestines. In some persons calomel has a depressing effect, and when the kidneys are unsound is injurious in its action. Where calomel is inadmissible, a gentle laxative such as rhubarb is often of service. When the object is simply to unload the bowels in a debilitated subject, it is the best purgative. It is said to act chiefly by increasing the peristaltic action of the bowels throughout their entire extent, but especially that of the duodenum. According to Rutherford, it is a cholagogue. Sir Henry Halford recommended it as a prophylactic remedy against gout: a few grains of rhubarb with double the quantity of magnesia every day; or some light bitter infusion with tincture of rhubarb and about fifteen grains of bicarbonate of potash. The saline cathartics probably act only by causing serous evacuations, and in that way carry off from the blood some of the poison contained in it. They may also act beneficially, perhaps, by relieving a congested liver.

The diet is another important point to be attended to in the treatment both of gout and rheumatism. It should be simple and nutritious; jellies and food containing gelatine should be avoided, as this substance furnishes glycocine. Animal food will not itself produce uric acid in a healthy system, as is shown by its absence in the urine of the carnivora; but from all kinds of meat a certain amount of glycocine will be produced, and even if all the rest of the nitrogenous portion after being absorbed into the system were converted into urea, this would necessitate an increased elimination of urea, and consequently a greater tax on the powers of the kidneys. If these powers are weakened, there will be, with an increased call upon the organs, less power to act, and not only the urea, but, still more, the uric acid, would accumulate in the blood. The striking benefit and increased urinary secretion which result in some forms of albuminuria from a skim-milk diet—that is, the simplest of all diets—very well illustrate what I mean here. The presence of urea in the blood may, by its action on the nerve-centres, determine an increased blood-supply to the kidneys, and so, in a healthy state of things, an increased secretion; but if the secretory portion is damaged, or the nerve force controlling it defective, an increased flow of blood to the part, producing a congested condition of the organ, would not expedite, it would rather hinder, the work of the secretory portion. The simpler the diet then, the less tax there will be upon the kidneys, and the better they will do their work. Let the diet be chiefly farinaceous, with just sufficient nitrogenous food to satisfy the wants of the system—and in acute attacks let that be in the form of milk, diluted even if necessary.

The explanation which I have here offered of the symptoms of a gouty paroxysm helps us to understand the beneficial action of colchicum in this disorder. According to Dr. Lauder Brunton[21] this drug paralyses the sensory nerves, the motor nerves and muscles being unaffected. It seems to act best when the bowels are previously acted upon. If in gout, then, uric acid during the paroxysm is stimulating the sensory nerves and through them the more active portion of the vaso-motor centre, and we paralyse the sensory nerves with colchicum, the uric acid no longer produces its effect and the paroxysm ceases; but colchicum has no effect in preventing the formation of uric acid, and after the paroxysm we must endeavour to prevent its recurrence by putting a stop to the formation of the poison, which we may effect by eliminating the bile from the intestines by mercurial or other purgatives, by giving benzoic or salicylic acids and by suitable diet. In large doses colchicum will cause purging, but marked symptoms of collapse supervene, so that it is not safe to exhibit the remedy in this way.

It remains for me to say a very few words with regard to the pathology of diabetes, and to explain why I have classed it together with gout and rheumatism. If the function of the liver be interfered with, so that there is imperfect metabolism of glucose as it passes through the organ, this would be a satisfactory explanation of the origin of the disease, and we should expect in such cases that the urgency of some of the symptoms would be lessened by careful diet and abstention from saccharine and starchy food. But there are other cases in which the diet seems to have much less effect in controlling the symptoms; it is this form that I wish briefly to discuss.

[18] See page 628.

[19] H. C. Wood, jun.: Treatise on Therapeutics, 2nd edit., 1877, p. 435.

[20] Dr. P. M. Latham's Works. New Syden. Soc. vol. i., pp. 123, 124.

[21] Pharmacology, 1885, pp. 968, 969.

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I have endeavoured to show that in acute rheumatism, by the separation of the cyanalcohols $CH_2\begin{cases}OH\\CN\end{cases}$ and $C_2H_4\begin{cases}OH\\CN\end{cases}$ from the rest of the albumineous chain, we have glycocine and glycollic and lactic acids formed, the glycollic acid being oxidised into CO_2 and water, the lactic acid in some measure being oxidised into these products, and in some measure passing off by the skin. But suppose that whilst the vaso-motor fibres of the muscular nerve are paralysed and the vessels dilated, the molecules $CH_2\begin{cases}OH\\CN\end{cases}$ are detached and hydrated into glycollic acid, but only partially oxidised, the result would be that the glycollic acid would be transformed into carbonic acid, methyl aldehyde and water:

$$\underset{\text{glycollic acid}}{CH_2\begin{cases}OH\\COOH\end{cases}} + O = CO_2 + \underset{\text{methyl aldehyde}}{H\,.\,CHO} + H_2O$$

Condensation of six molecules of the aldehyde may then take place, as in plants, forming glucose:

$$\underset{\text{methyl aldehyde}}{6H\,.\,CHO} = \underset{\text{glucose}}{C_6H_{12}O_6}$$

By urari, as I have already stated, we can put a stop to muscular contraction, that is, to the oxidation of the muscular elements and to the formation of CO_2 when the muscular nerve is stimulated. If, then, the tissue be, so to speak, partially urarised, the aldehyde is not oxidised, but condenses into glucose. In urari-poisoning sugar appears in the urine, though "the exact way in which this form of diabetes is brought about has not yet been clearly made out."[22]

Let me carry you one step further in the comparison between rheumatic fever and diabetes. If in rheumatic fever the central part of the nervous system connected with the muscular nerves is so enfeebled that there is complete dilatation of the vessels in the muscular area, and a falling asunder not only of the molecules $CH_2\begin{cases}OH\\CN\end{cases}$, but also of the molecules $C_2H_4\begin{cases}OH\\CN\end{cases}$ and $C_3H_6\begin{cases}OH\\CN\end{cases}$ then by the hydration and oxidisation of these, hyperpyrexia would in some measure, as I have suggested, be developed. But if the complete oxidation of these molecules were interfered with, the $CH_2\begin{cases}OH\\CN\end{cases}$ would give rise in the manner above indicated to glucose. By hydration $C_2H_4\begin{cases}OH\\CN\end{cases}$ would be converted into lactic acid, which, if not completely oxidised into carbonic acid and water, would be first oxidised into carbonic acid and aldehyde:

$$\underset{\text{lactic acid}}{C_2H_4\begin{cases}OH\\COOH\end{cases}} + O = \underset{\text{aldehyde}}{CH_3\,.\,CHO} + CO_2 + H_2O$$

the aldehyde by condensation forming para-aldehyde, a remedy recently introduced as a hypnotic. Hence the drowsiness which shows itself in some stages of diabetes.

If the molecules fall still more completely asunder and the molecule $C_3H_6\begin{cases}OH\\CN\end{cases}$ become detached and hydrated into oxybutyric acid, but only partially oxidised, then from one form of this acid, acetone would be formed:

$$\underset{\text{oxyisobutyric acid}}{C_3H_6\begin{cases}OH\\COOH\end{cases}} + O = CO_2 + H_2O + \underset{\text{acetone}}{CO(CH_3)_2}$$

which appears in the urine towards the termination of the disease. So, then, in hyperpyrexia there is detachment of the molecules from the benzene nucleus, with their hydration and rapid oxidation; whereas in acetonæmia there are detachment and hydration, but imperfect oxidation of the molecules. That is to say (if this theory is correct, and such experiments were possible), by urarising an individual suffering from rheumatism with pyrexia the urine would become saccharine; if hyperpyrexia were present, by urari the disorder would be transformed into acetonæmia.

Now you will find that in some forms of diabetes salicylic acid is of the greatest service, whereas in others no good results from its use. Given in doses of from ten to twenty grains three times a day, I have frequently seen it produce marked improvement, and Dr. Holden, of Sudbury, has shown me notes of cases, about to be published, where rapid amelioration of the symptoms has resulted from its use.

The urine in these cases contains often, in addition to glucose, an excess of uric acid, and the patients suffer from neuralgic pains in the joints and limbs. It also not infrequently contains some substance which dissolves cuprous oxide, and so more or less interferes with the application of Fehling's test. What this is has not yet been determined. My friend, Mr. Pattison Muir, kindly examined some specimens, and made out that it is some substance which readily dissolves calcic phosphate. Possibly it may be glycollic or lactic acid. If further examination should prove this to be the case, it would go a long way to support my view of the origin of this form of diabetes.

I have thus endeavoured to indicate some of the changes in the nervous system, the blood, and the tissues which may take place in diabetes, rheumatism, and gout, and to enlarge upon the text furnished by a far-seeing pathologist,[23] when he wrote: "Disturbance in the nervous system in some form and part may be regarded as a factor in every case of gout. There are reasons enough for thinking that changes in the nervous centre determine the locality of each gouty process, while changes in the blood and tissues determine its method and effects; and that thus we may explain the symmetries of disease in gout—sometimes bilateral, sometimes antero-posterior,—and thus its metastases."

My task is done. It only remains for me to thank you, Mr. President and the Censors, for giving me an opportunity of placing my views before the College, and to the distinguished Fellows and Members who have listened to me. I have brought together a number of facts, and endeavoured to draw certain inferences from them. The inferences may be wrong, but the facts remain; and I trust that in this way, at least, I may have helped to a better understanding of these disorders.

[22] Foster's Physiology, 4th edition, p. 426.

[23] Sir James Paget: Clinical Lectures and Essays, 1879, p. 382.

ABSTRACTS OF THE

Lumleian Lectures

ON THE

ELECTRICAL CONDITIONS OF THE HUMAN BODY.

By WILLIAM H. STONE, M.A., F.R.C.P.

LECTURE II.

HAVING briefly reviewed the first lecture, Dr. Stone proceeded to say that he had estimated the electrical resistance of the human corpse by inserting silver needles through the skin into the flesh, by which means the influence of the insulating, badly conducting skin was eliminated. The result showed that the estimations made on the living human body were correct, for the resistance was found to be slightly higher—at all events, it was not lowered. The chief topic of the second lecture was electrolysis as it occurred in the human body. All fluids acted as electrolytic agents, and so also bodies imbibed with fluid. The classical works of Dubois-Reymond and Count du Moncel on human electrolysis were noticed. The lecturer then exhibited an artificial electrical schema, in which the solutions and poles employed were the same as he had made use of in his determinations of the electrical phenomena of the human body. That polarisation takes place was very evident, and it appears, when physically studied, in the form of increased resistance. The work of Dr. Waller and Dr. de Watteville, published in the Philosophical Transactions of 1882, was also referred to.

As it is clear that electrolysis goes on during the passage of a current of electricity through the body, it is equally clear that there must be an accumulation of electromotive force in the body. The body is therefore a secondary battery which can be charged with electricity; at least, that

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is one way of interpreting the facts of experiment. The body can be charged, and, having its charge, it can also discharge. This fact was demonstrated to the audience by means of the galvanometer. It was first tried on the artificial electrical schema, and then on a living man. An initial "throw" or deflection of the galvanometer was observed when the charged schema or man was brought into electrical communication with the galvanometer. The initial "throw" subsides rapidly at first, but a permanent deflection of the galvanometer remains for some time, showing of course that the body or schema was still discharging. As to this capacity of the body to become charged and to discharge itself, Dr. Stone used to consider that it was of the nature of a condensation of electricity by the body, but he has modified his earlier views owing to certain investigations of Prof. Hughes; so that he now believes, with the last-mentioned authority, that it is a matter of self-induction of the body. The initial "throw" of the galvanometer represents this induction, and the permanent deflection corresponds to the counter-electromotive force. The discharging current continues steadily and for a much longer time than was anticipated.

The results of some observations on certain cases were next given. In one case of sciatica where the leg was greatly wasted, and in which the resistance was somewhat high, the man was charged for thirty minutes with ten bichromate cells, the current passing from foot to foot. The initial "throw" was represented by 250 divisions of the scale. That this was really due in great part to the patient was proved by eliminating the possible influence of the lead contacts. The second case was one of diabetes. The patient was charged with a constant current of fourteen volts for half an hour, passing from the forehead to both feet, in a vessel of water. The resistance was found to be 600 ω, or after correction by Mance's method 543 ω. This case gave a polarisation current of no less than 137 ohm. The electro-therapeutical treatment of diabetes had been shown to be of transient value by M. Semmola. A third case, also of diabetes, was next related. The patient was very ill. His resistance was 1100 ω, or 1020 ω after correction by Mance's method. He gave a polarisation current equal to 145 ω, a very large counter-electromotive force, much larger than has ever been expected.

The resistance of the real man is somewhat less than that of the schema. As experiments already made by Dr. Stone with Mr. Lant Carpenter have shown, the resistance is increased by the polarisation resulting from the passage of the current. The charged body discharges very much after the fashion of a secondary battery. This information opens up a field of speculation in electricity as applied to the animal, and more especially to the human body. Even after but two volts have been used in the charging process, the body continues to discharge electrical force for several hours. Allowance being made for the swing of the galvanometer needle, it was shown that a current as feeble as two volts had the capacity to develop a counter-electromotive force which could be detected for some hours after the charging force had been removed. Two volts was a very feeble driving force, and only just sufficient to oppose and overcome the normal resistance, which might be appraised at about one volt. The electrostatic capacity of the body might be differentiated into a special capacity for condensing electricity and a capacity for electrolysis. But it is very doubtful whether a differentiation ought to be attempted; it was better to say that self-induction of the body took place. These researches have a very important bearing on physiological matters such as the phenomena of "electrotonos." Dr. Stone averred that he had always been sceptical as to the reality of electrotonos. The inconstant and variable results obtained by various authors working at this phenomenon were alluded to. Rosenthal admitted that the rise and fall of the electrotonic state sometimes went one way and sometimes another; and the paper by Dr. Waller and De Watteville, which quoted Fick, Eulenberg, Erb, Sanft, and others, showed what opposite conclusions had been come to. It had been suggested that the inconstant results were due to inconstancy of the nervous matter. But the lecturer humorously suggested that it was too bad to saddle the nervous matter with such inconstancy. The statements of Rosenthal were all consistent with conditions due to polarisation. He considered that too much stress had been laid on physiological points; no care had been made to ascertain whether the physical agent employed was always uniform. Anode and cathode were purely fictitious terms; the current might, for aught we knew, go in the opposite direction. We do know, however, something real about the two terminals and that related to electro-chemistry. The so-called positive terminal oxidises, whilst hydrogen is liberated, and bases are separated from the so-called negative pole. We know also that the passage of the current in the same way produces in the living human body a secondary battery of no inconsiderable power. Again, the phrases "cathelectrotonos" and "anelectrotonos" were unscientific; with weak currents the rise of cathelectrotonos was said to be near the anode; what was the meaning of that? It was probable that the phenomena of electrotonos ought really to be regarded as effects of electro-chemical decomposition in nervous tissue of a polarisation kind. Again, such inaccurate expressions as currents of medium strength were held up to deprecation; we ought to know what the intensity of the current was in ampères. If the electromotive force of the current is sufficiently strong to overpower the counter-electromotive force of the body, electrolysis will take place. But no means have been taken to measure this. Rosenthal admits that the effects are inconstant. There is also a possible error in the tetanising key of Dubois-Reymond, which did not cut off the current entirely from the long circuit. Here the law of inverse proportions also held good; most of the current goes through the short circuit, but some still traverses the long circuit, and this was another source of inconstant effects. If the induction coil be added to the constant current, the problem becomes infinitely more complicated and physically past accurate solution; if the induction coil alone be used, the problem is sufficiently complex. According to Waller and de Watteville,[1] the laws of diffusion are the same for each current; but Dr. Stone asserts that this is a distinctly false assumption. The induced current meets with but half to two-thirds the resistance of the constant, the exact proportion being 1141 ω to 575 ω. In believing that they had to deal with physiological signs alone, authors had fallen into error. As above shown, Dr. Stone maintains that the physical constants have not all been determined. Another point that has stood in the way of accuracy was the employment of over-sensitive galvanometers. Again, the entirely empirical indications of the galvanoscopic frog, no two of which have the same constants—nor can these be determined,—gave false results. So that whilst allowing that the phenomena, though admittedly inconstant, have been well and carefully observed, the lecturer was decidedly of opinion that much of the inconstant results—laboriously misunderstood and ingeniously misinterpreted—would prove to be due to purely physical conditions. The lecturer then demonstrated the telephone method of detecting and estimating electrical currents. It was a method of great delicacy, and had the inestimable advantage that it could be commanded, controlled, and measured. It might take the place of the galvanometer in Wheatstone's bridge, for the telephone could be silenced when the resistances in the two coils were equal.

A CASE OF SO-CALLED HYDROPHOBIA;

WITH REMARKS ON THE NATURE AND TREATMENT OF THIS DISORDER.

By CHARLES W. DULLES, M.D.,

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ABOUT two years ago I had just completed the preparation of a paper on the "Disorders mistaken for Hydrophobia,"[2] in which I had attempted to describe systematically the sources of error which I believed to lie at the foundation of a large number of diagnoses of hydrophobia, when I was suddenly summoned at midnight to the assistance of a colleague who had the care of what he thought to be a case of this disorder. The occasion was welcome, as affording me a new opportunity to study clinically this subject, which has so much engaged my attention; but it was also trying, since I felt that at this very time any error—although it might be due solely to my own incapacity—would seriously compro-

[1] Phil. Trans., p. 963.

[2] See Transactions of the Medical Society of the State of Pennsylvania, vol. xvi., 1884; also Reprint, 8vo, pp. 37, Philadelphia, 1884.

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mise what I believed to be an important truth. With this thought to counsel prudence, I soon found myself in the presence of the patient, and in the midst of such a scene of horror and confusion as those can recall who have been so unfortunate as to witness a case of so-called hydrophobia. The essential features of the case may be described as follows: The patient was a little boy, about eight years old, of previous good health, who had been taken sick on the afternoon of the preceding day, March 16th, 1884. He first complained of a toothache, did not wish to eat, and had some pain in the stomach and in the throat. In a few hours he began to have nausea, and vomited. At first the vomited matter was "phlegm." He was said to have refused absolutely to swallow anything solid or fluid, although when I saw him there was no special prejudice against water; and, in fact, he was induced to take some from a spoon. He had also developed delirium, jumping up and running away from the couch upon which he was placed. He had fever and irregular convulsive movements, and was said to have "barked like a dog." Dr. Chase, having been called to see him, found that a tooth, which the boy said ached, was very loose, and pulled it out with his fingers. Led by the evidences of dysphagia mentioned, and noting the unwillingness to drink, he made inquiry and learned that the boy had been bitten by a dog more than twenty months before. The idea of hydrophobia presented itself to his mind, and he began a course of treatment to quiet the nervous system. This consisted in the administration of bromide of potassium, followed by suppositories of chloral hydrate, and later one-twelfth of a grain of morphia hypodermically, in spite of which the vomiting and the delirium continued. At this point he requested that I should see the case in consultation with him.

On my arrival, I found, in a small room containing a hot stove and crowded to suffocation, a well-nourished-looking small boy sitting on a lounge partly held by his father, tossing himself about, making inarticulate cries, constantly retching, and vomiting a glairy grumous fluid, in small quantity and with great effort. His penis was a little turgid, but not erect. His eyeballs were movable, but they moved slowly, and were directed upwards most of the time. His pupils were widely dilated, so that a mere line of the iris was visible. The corneæ were very dry. The conjunctivæ were congested, and, like the corneæ, were dry. The pulse was very rapid and tumultuous, the breathing catching. The legs, being constantly exposed, were cool, the body was warm, and the head was hot. The heat of the head was most marked at the temples. There was no excessive perspiration. There was great sensitiveness upon pressure on the forehead, which always excited resistance and convulsive movements. The ears were scarlet. The tongue was not especially dry. There was no spitting and no aerophobia whatever. The child was susceptible to the influence of soothing tones, and at intervals he seemed to know those about him, and to attempt to reply to questions. After making these observations we had the child removed to a well-aired room where we could be alone, and a new examination was made, every organ, so far as was possible, being passed in review. The conclusion I arrived at after this examination was that the membranes of the brain were inflamed, both on its convexity and at the base. There was now much jactitation, but the efforts at vomiting were less frequent. The boy had phantasies—stretching out his hands and talking in thick tones to comrades whom he fancied to be present. At times he seemed to be in terror, but at no time was it clear what shape the object which frightened him assumed. He struggled, but without any preternatural strength, against the little restraint which was occasionally required to keep him from getting out of bed. At times he appeared to be pretty calm, but he never was quite himself. Slight pressure on his forehead produced new paroxysms. All this time there was no aerophobia or dread of noise or light. The pupils were always dilated. We decided to give the child no more medicine, but applied cloths wrung out of hot water to his spine. These seemed to afford a little relief. After a while we determined to administer large injections of cool water, in order to produce a soothing effect and to wash away any irritant which might be in the lower bowel. The first injection consisted of over a quart of cool water, and it passed beyond the sigmoid flexure, as we ascertained by a physical examination, and was retained about fifteen minutes. Under its influence the patient was manifestly soothed, and his agitations ceased almost entirely. This injection passed away in instalments. After an interval of about half an hour another injection was given, but this was expelled almost immediately. With neither was there any discharge of fæces. (The necropsy showed the whole bowel to have been washed clean.) After this the patient seemed to be decidedly more comfortable, and we left him in the sole care of his father, who watched over him with great solicitude. His breathing had become quieter, and he had ceased to toss himself about as he had done, when, at 3 A.M., Dr. Chase and I left him, promising to return soon. We did return at 7.30 A.M., and found that the child, after a few hours of comparative peace, had expired quietly at 7 o'clock.

A necropsy was made three hours after death, at which Drs. A. F. Chase, W. E. Hughes, and myself were present. The body was still warm, the chest and throat most so, and the legs were cool. The eyes were partly closed and the pupils less dilated than when we last saw him. Rigor mortis very marked. Face and back cyanotic. On the free border of the upper lip, near its middle, was a small linear cicatrix, which was said to be the mark of a dog-bite received over twenty months before. On examining the head, all the vessels of the scalp were found gorged with blood. On removing the skull-cap, the bone was found to adhere very firmly to the dura mater in a number of places, chiefly along and near the superior longitudinal sinus. The most marked adherence was along the course of the left middle meningeal artery. This was bordered by thickening and roughening of the outer surface of the dura mater. The venous channels of the dura mater were full of dark blood. There were a large number of old adhesions between the dura mater and the arachnoid. These were very marked under the frontal and middle cerebral lobes, and most conspicuous and numerous between the medulla oblongata and the cerebellum. Some adhesions were also found under the cerebellum. The vessels of the surface of the brain were stuffed with blood. A quantity of blood and serum, estimated at three fluid ounces, was found at the base of the brain, in the cavity of the arachnoid. It was thought that about half of this came from the divided vessels. The puncta vasculosa were very well marked, and exuded dark blood. The ventricles did not contain any excess of fluid. The ependyma was injected. There were some delicate adhesions between the walls of the lateral ventricles, and between these and the choroid plexus. On cross section, the left optic nerve showed appearances of congestion, and even of extravasation. At the base of the brain there were many points of adhesion between the arachnoid and the dura mater and pia mater. On the floor of the fourth ventricle there was an appearance of marked congestion, and a few small extravasations the size of a pin's head. In the cerebellum nothing abnormal was found, except the evidence of inflammation of the membranes. There were no signs of recent lymph on the membranes. The lungs were engorged with blood, but perfectly crepitant, though there was some lobular collapse. There was no emphysema. The pericardium was healthy-looking, and contained a normal amount of clear serum. The heart was of normal size, healthy-looking, firmly contracted, and contained in the left ventricle a small quantity of dark clot, with a very little white clot in the pulmonary artery. There were a few small extravasations beneath the visceral layer of the pericardium. The abdominal viscera appeared to be perfectly healthy, except the liver, which had a slightly fatty appearance. The mesenteric glands were large, some the size of a large bean. None were cheesy. The bowels and stomach were almost entirely empty. (It will be remembered that the lower bowel had been washed out.) The gall-bladder was full of greenish-yellow bile. The urinary bladder was healthy, and firmly contracted upon about two drachms of clear urine.

Upon making further investigation as to the history of the child just before his illness, we learned that he had recently had a fall upon his vertex from a height of a few feet. We also found that the history of the bite was as follows:—One summer day (June 20th, 1882) the child was sitting on a door-step eating a piece of bread-and-butter, when a neighbour's dog ran up and snapped at it, in doing which he caught and tore the boy's upper lip slightly. The wound was not cauterised, and it healed without any trouble. The dog was caught and was shot by a policeman, at which the owner was very angry, insisting that the animal was perfectly healthy. No ill effect had followed the bite from the period of its infliction to the present time. In view of what we had learned of the history and from the symptoms

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presented, I had made the diagnosis that this child was suffering from meningitis, and predicted that he would die in a few hours, and that if we could secure a necropsy we should find the evidences of inflammation both on the convexity and at the base of the brain. These predictions were absolutely verified, and I believed then, and I believe still, that the diagnosis was thereby fully sustained. Notwithstanding these facts, Dr. Chase considered the case to be one of hydrophobia. But was it? Let others judge for themselves. For my own part, as I have said, I firmly believe that it was a case of meningitis, and I felt at the time, and feel yet, that this experience justified, in the first crucial test to which they were subjected, the views which are expressed in the paper on the "Disorders mistaken for Hydrophobia," which was then so soon to be made public. Meningitis was one of the disorders about which I had not felt it necessary to argue much, because I thought that little argument would be needed. And yet, as I have said, the gentleman who called me to his assistance in this case insisted then, and still insists—against the evidence, as I believe, and in a line with what, without wishing to be invidious, I would designate as the popular impression—that it was a case of hydrophobia. I will admit that it has as many marks of genuineness as a vast number of the reported cases of hydrophobia. But here is just the trouble. It illustrates the greatest difficulty in getting at a scientific idea as to the nature of this disorder. The usual rule seems to be that, given a certain series of convulsive phenomena with unwillingness to swallow, which are not controlled by ordinary or even by extraordinary measures, and followed shortly by death, the case is one of hydrophobia. If it is followed by recovery it is said to be spurious hydrophobia. The fact that the patient was bitten by a mad dog is confirmatory of, but not indispensable to, the diagnosis. The madness of the dog, and even the fact of a bite or lick, may be assumed from the phenomena presented by the patient. This I believe to be the source of grave errors. If ever we are to have an accurate scientific understanding of what goes by the name of hydrophobia or rabies in men or in animals, we must first learn to define these terms better than they have ever yet been defined. I cannot repeat here what I have elsewhere considered in detail;[3] but I desire briefly to state that I have found that there are no essential differences in the clinical phenomena or issue of cases of so-called hydrophobia attributed to the most various causes: to the bites of a great variety of animals, rabid and healthy, including birds, fleas, and lice (Bollinger, Jolly); to the bites of human beings; to germs distributed in the earth and air (Doléris); to the kissing of a mad dog before it was hung (Bardsley); to drinking the milk of a rabid animal, to suckling (Roucher), and to coitus (Bollinger); to the handling of sabres used in killing rabid dogs (Virchow); and, finally, to a spontaneous origin, the most recent illustration of which was a patient who died under the care of Dr. Dujardin-Beaumetz, in Paris, in January of this very year. In one of the papers already mentioned I have described the occurrence of the symptoms of hydrophobia in a large number of disorders, and I here only refer to it for one of the most interesting and important phases of this literally vital question.

I cannot conclude without saying something in regard to the curability of hydrophobia. My studies have led me to the conviction that the prevailing despair as to the issue of this disorder is a sad mistake. Whatever hydrophobia may be, it cannot be said to be incurable. As genuine cases have recovered as have ever died. There is no better evidence for believing in the occurrence of hydrophobia than there is for believing it has been and can be cured. It is not consistent to hold to the one and to deny the other. To call cases that recover spurious is to beg the question. If there is a definition of hydrophobia which can be said to bear the stamp of authority, it fits a large number of cases which have recovered; and to assume that the disorder is always fatal is to select the worst way either to understand or to combat it. In fact, I think we shall have better notions in regard to the whole subject of hydrophobia, if we compare the disorder to convulsions, and use the word "hydrophobia" just as we do the word "convulsions," to describe a series of phenomena which may be due to various causes. In some cases these causes as yet elude detection; in others a careful search will lead to their discovery. A rational method of treating what is called hydrophobia will never, I believe, be established until we recognise the fact that it is not a single morbid entity, not a specific inoculable disease, but, like convulsions, a series of phenomena, the first step to the treatment of which must consist in remembering that it may be due to a great many different causes, and in endeavouring to find out what is the cause in each particular case. In many cases it will be possible to discover some disease of which the hydrophobic symptoms are merely epiphenomena. This done, the prognosis and the treatment must be made to conform to the diagnosis. When this becomes a custom, we shall less often have deaths from acute meningitis, or pericarditis, or tetanus, or mania-à-potu, or acute mania of any kind, unjustly charged to hydrophobia. Nor shall we then hear so regularly of the fruitless administration of overwhelming doses of morphia, chloral, belladonna, or curare, which are as great a confession of the impotence of medical art as are the violent measures of restraint which are so often employed, and but little less a confession of this impotence than is the act of smothering a patient to death, which *is said* to have been practised in this year of grace in the State of New York!

[3] Remarks on Hydrophobia: Proceedings of the Philadelphia County Medical Society, vol. v.; and Philadelphia Medical Times, Aug. 11th, 1883. Criticisms on the Specific Theory of Hydrophobia: Transactions of the College of Physicians of Philadelphia, third series, vol. vii.; and New York Medical Journal, Dec. 29th, 1883.

NOTES ON A CASE OF

CIRRHOSIS OF THE LIVER PRESENTING UNUSUAL POINTS OF INTEREST.

BY SURGEON-MAJOR F. P. STAPLES,
MEDICAL STAFF.

A SHORT while since I was asked by my friend Dr. Patron, of this city, to see in consultation with him H. R——, a young man sixteen years of age, suffering from ascites, and who had been ill with that symptom for about two months. With the exception of the abdominal superficial veins not being much enlarged, the clinical characters of the dropsy were those of liver cirrhosis, and this opinion was strangely supported by the family history of the patient. Twelve months previously an elder brother had died of that disease, and a necropsy had confirmed the diagnosis; about a year previously to that event a sister succumbed to the same malady, and in her case also the disease of the liver was verified by post-mortem examination. In the case under notice the onset of the disease was very insidious, and it was not marked in any way by pain or other symptom of acute disease. Its progress was characterised rather by a gradual failure of health, and the first tangible symptom observed by his friends was his increasing abdomen. In coming to a diagnosis, we found some slight increase of the splenic dulness, and, as the patient had recently resided in a somewhat marshy district, Dr. Patron suggested an examination of the blood, to the results of which it will perhaps be most convenient next to allude. Altogether three examinations were made—viz., one at the period of the case first referred to, one about six weeks afterwards, and a third about ten days before death, which occurred in about three months from the date of the consultation. In the first examination there was an enormous excess of the colourless corpuscles, and these, without exception, apparently were covered with processes or projections which gave them the appearance of the dried fruit of the black pepper. I did not observe the amœboid movements of these processes described by Mr. Wharton Jones, but my examination was purely a clinical one, and, had it been sufficiently prolonged and repeated, no doubt I should have done so. In addition to these large cells, which almost filled the field of the microscope, there were also a number of molecules or granules, but the normal red corpuscles of the blood were not to be distinguished. In the second examination the large cells were still visible, but they had almost lost the cell or globular shape. They were for the most part somewhat triangular in outline, the processes forming the angles being more or less blunted, and the sides deviating somewhat, generally outwards, from the straight line. In the third examination the large cells had entirely disappeared, and the field was entirely occupied by amorphous particles in a plasma having a distinctly yellow colour.

It will be convenient next to complete the clinical history

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of the case. From the period mentioned its progress was very rapid, and in about two months it was necessary to perform paracentesis. The usual relief to the embarrassed organs of the thorax followed this operation, but the patient suffered considerably from abdominal pain for about a week afterwards. The fluid reaccumulated with great rapidity, and in six weeks or thereabouts there was again necessity to tap him, but the performance of the operation was not desired by his relatives, and did not, in fact, from his then condition, seem advisable. Soon afterwards he was seized with hæmatemesis and died within a few days, death being preceded by an unusually long comatose stage—about seventy-two hours.

The post-mortem examination extended only to the abdominal cavity, permission to make a limited dissection only having been received. The liver, which was moderately contracted, presented the appearance of an ideal specimen of the hobnail variety of cirrhosis. The surface tumours resembled unripe cherries in size and appearance, and on the surface of some of them tortuous bloodvessels were to be seen. On a deep section being made, the division of the organ into spherical lobules, corresponding in size to those visible externally, was well observed. The surface was free from adhesions or other evidence of a peripheral inflammation. Sections under the microscope corresponded in appearance with the illustrations (after Dreschfeld and Young) of this disease in the New Sydenham Society's Atlas of Pathology. The spleen was enlarged, but only to a moderate extent. There was no sclerosis of its tissue, but this was somewhat more soft and friable than normal.

Remarks.—The foregoing case would appear to offer for consideration the following points of special interest—namely: 1. The age of the patient. 2. The fact of his having been the third successive member of the same family who died in adolescence from the disease in question. 3. The abnormal condition of the blood. I am aware that there is nothing extraordinary in the age of the patient, but still it is decidedly exceptional. It may be considered, further, in connexion with the second point, which seems to me to be a unique experience, and more especially when it can be alleged with absolute certainty that in none of the three cases was there a suspicion of any of those agencies with which we are accustomed to associate cirrhosis of the liver. It is to be recorded, however, in regard to one of those agencies, that there was a history of long-continued alcoholic excess on the part of the father of the children. It is true that his death, which took place about five years ago, was not due to liver disease, but to cerebral apoplexy; there is, however, a fair presumption that in his case there were degenerative hepatic changes due to the cause under observation. Did he then transmit to his offspring a diathesis hereditarily determining cirrhotic atrophy of the liver? That seems a fair inference from the detailed medical histories of the children, but in relation to the broad question of pathology the question is a new one, to me at any rate; but if it be possible to answer it in the affirmative from the foregoing experience, it will serve to explain some of those anomalous cases of this disease in regard to which Frerichs has written the following pregnant sentence: "There are undoubtedly causes of cirrhosis with which as yet we are totally unacquainted." There is next to be considered the question of the condition of the blood, and under this heading it is perhaps necessary to allude to the diagnosis of the case. It may be said that the patient was the subject of two intercurrent diseases—viz., cirrhosis of the liver and splenic leucocythemia. Such an impression was entertained during the clinical progress of the case, but obviously it was not supported by the post-mortem examination, and the blood-cells already described, although resembling those of leucocythemia, were larger and much more numerous than are generally the leucocytes, even in advanced splenic disease. How, then, is the condition of the blood to be accounted for? It is not expedient perhaps, in a scientific sense, to offer any explanation from a single case; but it is hoped rather that by placing it on record the attention of pathologists may be directed to a subject which does not yet appear to have received adequate investigation.

Gibraltar.

MR. GEORGE FISHER, M.B., C.M. Edin., a well-known Scotch doctor, was found late on Sunday night lying dead on a sofa in his back shop at Millport, Island of Cumbrae. The cause of death is as yet unknown.

A CASE OF PUERPERAL CONVULSIONS, WITH COMPLICATIONS.

BY W. TYRRELL BROOKS, M.B. LOND.,
PHYSICIAN TO THE RADCLIFFE INFIRMARY, OXFORD.

ON Dec. 29th I was asked to see a case in consultation with Mr. Ballard of this town. The previous history was as follows. Mrs. T——, a young nervous woman, who had been under treatment at intervals for some years for neuralgia and other nervous affections, was expecting to be confined with her second child. On Dec. 19th she was seized with occasional convulsions, accompanied by pain and numbness of the right arm and leg, together with a slight dragging of the right leg in walking. The convulsions increased in severity until Dec. 22nd, when Mr. Ballard was sent for, who, finding the os uteri dilated and labour commenced, delivered the patient of a living child by instruments. After delivery the convulsions continued, but gradually became less severe. One convulsion occurred, however, of a much longer duration than the rest, after which the right side of the body was found to have become weaker than the corresponding side, and in a short time to have become completely paralysed. The convulsions after this became less frequent, and, instead of being general, were now limited to the upper part of the body. The last convulsion occurred on the sixth day after delivery. Ever since her confinement the patient had lain in a state of apathy, without speaking or taking notice of her surroundings. She, however, took readily a considerable quantity of liquid food, though she swallowed with a little difficulty. At first she passed her urine and fæces normally, but on the sixth day after delivery she began to pass them under her.

When I saw her on Dec. 29th she was lying in a state of unconsciousness. When spoken to sharply she endeavoured to put her tongue out, but failed. She followed my movements round the bed with her eyes, but would not follow the movements of my hand when asked to do so. The right leg and arm were completely paralysed, but had not lost sensation. On pricking the right arm or leg with a pin, she uttered a cry of pain, but did not speak, and drew away the corresponding member of the opposite side. Sensation on the left side was unimpaired. She expressed considerable pain when her right leg or arm was suddenly moved. The neck was extended and stiff, and any attempt to flex the head on the chest was resisted, the act being attended with considerable pain to the patient. The pupils were equal and reacted to light. There was not any evidence of facial paralysis. The pulse was 120, tense and hard; the heart sounds normal; respiration 36, rapid and shallow. Over the whole of the upper lobe of the right lung there was bronchial breathing with fine expiratory crepitation. The lochia had continued for three or four days after confinement and then ceased. The tongue was coated and the teeth covered with sordes. The temperature was 101°.

When I saw her again on Dec. 31st there was considerable improvement in the general condition. She had spoken since my last visit, and appeared more sensible. The urine and fæces had been passed normally. The pulse was 120, but much softer; temperature 99·5°; respiration 36. Over the upper lobe of the right lung there was bronchial breathing with abundant crepitation. On Jan. 1st the improvement was still more marked. She answered questions slowly and hesitatingly, but her articulation was perfect. The breath sounds over the right pulmonary upper lobe were softer, and the crepitation still abundant. Respiration 30; pulse 120; temperature 99·5°. There was slight movement of the muscles of the upper part of the right arm and of the right leg. She complained of pain in the head, running down the back of the neck, and although the head could be flexed on the chest, it was accompanied by much pain, together with resistance of the cervical muscles.

On Jan. 4th the patient was practically convalescent. The respiratory sounds over the upper lobe of the right lung were almost vesicular, and the crepitation much diminished. The temperature was normal; pulse 108; respiration 30. There was increased power in the right upper arm and leg, and also some movement of the left lower arm. The patient, though kept scrupulously clean by the nurse, had

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developed a bedsore. Since then the case has progressed favourably, and power has gradually returned to the paralysed side.

Remarks.—The case presents several points of interest. 1. The occurrence of puerperal convulsions, without the presence of albuminuria, in a neurotic patient, which continued for six days after delivery. 2. The supervention of right hemiplegia, which came on slowly after a very long convulsion, and in the course of a few days gradually disappeared. This was unaccompanied by facial paralysis, but was followed by the appearance of a bedsore. The gradual onset of and recovery from hemiplegia points, I think, to the occurrence of a small hæmorrhage in connexion with the internal capsule of the opposite side. 3. The presence of aphasia, which, although accompanied by right hemiplegia, I believe to have been functional. This was indicated by the aphasia having preceded the hemiplegia by two or three days, and also by the fact that the recovery of speech was sudden and complete. 4. The pneumonia, which was an extensive apical one, was of a low form, the highest temperature being 101°. In conclusion, I must thank Mr. Ballard for his kind assistance in the notes of the case, and for allowing me to see the patient during her convalescence.

EXCISION OF THE ENTIRE UTERUS FOR CANCER.

WITH NOTES OF A SUCCESSFUL OPERATION.

BY CHAS. E. JENNINGS, F.R.C.S. ENG., M.S.,
ASSISTANT-SURGEON TO THE CANCER AND NORTH-WEST LONDON HOSPITALS.

(Concluded from page 684.)

DR. WALLACE[1] relates four cases of uterine excision. The first two were vaginal hysterectomies for early cancer, and both patients recovered. The last two were for advanced cancer; one operation was performed by the vaginal, the other by the abdominal, method, and both patients died. With regard to partial excision of the uterus, Dr. Wallace[2] condemns the use of the écraseur, as liable to be followed by hæmorrhage, and as dangerous to the peritoneum and adjacent organs; he also cites a case where it was followed by fatal shock, and therefore he discards the écraseur for amputation. For partial excision Dr. Wallace recommends anterior and posterior semilunar vaginal incisions. The uterine arteries and lower parts of the broad ligaments are to be ligatured at a distance of half an inch from the ureters, and the broad ligaments divided between the ligatures and the uterus. The cervix is to be dragged upon forcibly, and severed as high up as possible with scissors. The stump and flaps are to be washed with iodised water, the vaginal flaps being closed with sutures passed through the stump. Where difficulty is experienced in ligaturing the uterine vessels, Sir Spencer Wells's pressure-forceps are to be applied and left *in situ* for thirty-six or forty-eight hours. This operation is only to be advised for very early cancer.

Dr. Carl Schroeder considers it always possible to extirpate the entire uterus, even if wholly diseased. The adjacent parts of the vagina can also be removed, but this author questions the advisability of operating in such cases on account of probable recurrence. Where cancer of the cervical mucous membrane and of the body of the uterus exists there is always necessity for total extirpation. For extirpation of the uterus, Schroeder advises a circular vaginal incision to be made near the cervix, and Douglas's space to be opened. The fundus uteri (retroflexed) is to be drawn down with a volsellum. The broad ligaments are to be ligatured either singly or in separate portions. Whilst removing the uterus a great deal of tissue is to be left between the ligatures and the organ, otherwise the ligatures will slip. The wound in the peritoneum is to be closed, stitching the pedicles into the angles of the wound. A T-shaped drainage-tube is to be inserted and the end wrapped round with salicylated cotton, which must be renewed as often as it is soaked. The stitches are to be removed in fourteen days. Above all, the uterus must be well drawn down during the operation, a proceeding very difficult where the vagina is narrow and the uterus very much enlarged. Schroeder had seven deaths out of twenty-three cases of vaginal extirpation of the uterus. In his hands supra-vaginal excision gave a death-rate of eight out of sixty-four cases, but recurrence generally took place in those who survived the operation.

Professor Olshausen,[3] in a letter to Sir Spencer Wells, recommended the employment of the elastic ligature for ligaturing the broad ligaments at a late stage of the operation. He employs a drainage-tube and iodoform gauze. The elastic ligatures are allowed to remain *in situ* for two or three weeks. Altogether Olshausen performed twenty-eight operations in two years and a half, three of which were supra-vaginal excisions; of these, all the patients recovered but one with a vesico-vaginal fistula. Out of the twenty-five cases of complete extirpation there were seven deaths—two on the day of operation, three of septicæmia on the second and third day, one of carbolic acid poisoning on the second day, and one of iodoform poisoning on the sixth day. Referring, however, to the last edition of Sir Spencer Wells's work,[4] it appears that up to the end of 1884 Olshausen had thirty-four cases of complete vaginal extirpation, with seven deaths. Since there were seven deaths in the first twenty-five cases, it follows that the last nine operations must have been performed without a death, a circumstance which supports the view that diminishing mortality will accompany increasing operative experience of uterine excision. "Among the cases where there had been no reappearance of disease, two years have elapsed in two cases, in one case two years and a half, and in two cases three years; but in a larger proportion there has been reappearance in between one and two years." Olshausen emphasises the fact that the special danger of the operation is injury to the ureters, which appear to have escaped by stripping them up, together with the loose cellular tissue which surrounds the supra-vaginal portion, by means of the fingers.

On the other hand, a case is recorded in which M. Jules Boeckel of Strasburg[5] *dissected out* the tissues between the uterus and bladder. A urinary fistula from injury to a ureter resulted, for which nephrectomy was performed, and the kidney removed was a healthy one. The patient recovered, left the hospital within six weeks of the first operation, and remained healthy, with the exception of polyuria, passing 1800 grammes of urine daily. She died in the seventh month, and a necropsy disclosed cancerous degeneration of the abdominal glands and parenchymatous inflammation of the remaining kidney.

A case is reported by Dr. Hennig (Leipsig)[6] where the patient had survived vaginal extirpation eight months at the time of communication. There was then no recurrence. The steps of this operation were—(1) anterior vaginal incision; (2) separation by the fingers of the anterior fold of the peritoneum; (3) anteversion of the uterus and enucleation of the organ; (4) removal of a cancerous nodule from the rectum. The wound in the rectum was closed by sutures. The entire length of the uterus was five inches and a half, and the cervix was entirely invaded by the neoplasm. The left ovary and Fallopian tube were removed, also half the right Fallopian tube. Enucleation, without opening the peritoneum, had been intended, but had not succeeded. Considerable peritonitis followed, but little hæmorrhage. A recto-vaginal fistula resulted, which was operated upon four weeks later. Four months afterwards a small recurrent nodule, which had arisen near the site of the fistula, was excised. There was no further recurrence.

Uterine excision by separation of the peritoneum was first proposed and successfully performed by Langenbeck. The woman survived the operation twenty-six years, but the uterus was not cancerous.

Dr. Gusserow,[7] one of the latest writers on uterine extirpation, has collected 253 cases (where the operation was performed by the vaginal method), with a mortality of 23·3 per cent., the list including operations from the time of Sauter (1822), Blundell (1828), and Récamier (1829).

Pfannestiel collects 154 operations up to 1882, with a mortality of 23 per cent.; but after 1882, thirty-six cases, with a mortality of only 8·3 per cent.

Gusserow advises the use of the curette and cautery as preliminary to making the vaginal and peritoneal incisions, so that when the uterus is retroflexed the chance of auto-

[1] Brit. Med. Jour., 1884, vol. ii., p. 1277.
[2] Braithwaite's Retrospect, vol. lxxxviii., p. 380 *et seq.*
[3] Ibid., p. 392.
[4] Diagnosis and Surgical Treatment of Abdominal Tumours, 1885.
[5] British Medical Journal, 1884, vol. i., p. 1262.
[6] THE LANCET, vol. i., 1877, p. 61.
[7] Deutsche Chirurgie, 1886, Lieferung 57.

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infection from the cancerous cervix will not exist. He considers flexion of the organ to be recommended as tending to check hæmorrhage by torsion.

These various modifications of the operation have been detailed because a study of the differences of procedure which they present may serve to afford the basis of a definite plan of operating, which may probably afford greater successes than those which have been devised in the past, and to further this object I have recently practised uterine extirpation upon the dead body, which enables me to submit the following points for consideration:—

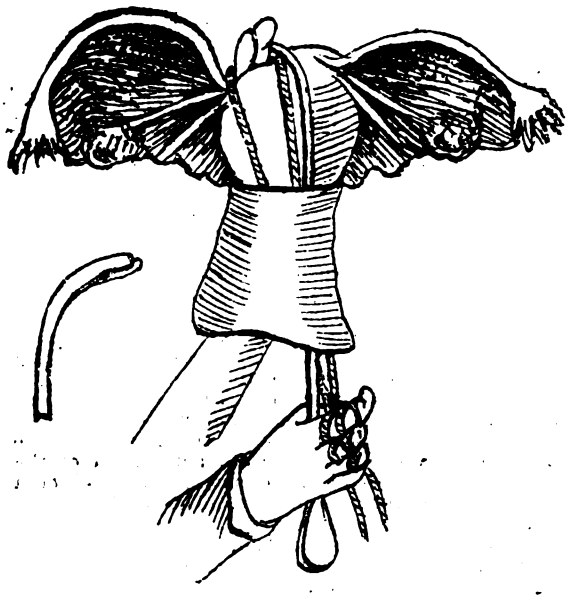
1. There may be two semilunar vaginal incisions or one circular one. If the circular incision be chosen, the divided vaginal arteries can be readily secured by hæmostatic forceps. Before the incision is made the cervix should be well drawn down, thoroughly exposed, and the finger passed along the line of the proposed section, which should be principally made with blunt-pointed scissors, or a probe-pointed bistoury. The bladder should be supported with a staff throughout the operation.

2. The ureters are to be separated from the sides of the uterus with the fingers, and the peritoneum stripped upwards over the organ as high as possible, so that after its removal a funnel-shaped peritoneal flap will remain.

3. The uterine arteries should be secured prior to division.

4. The uterus should not be flexed, since such a course

FIG. 2.



involves greater difficulty in dealing with the broad ligaments, and might add to the risk of sepsis from the cancerous cervix.

5. The broad ligaments are to be secured as follows:—The peritoneal cavity having been freely opened in front of and behind the uterus, by tearing through the peritoneum with the finger-nails, the operator's left hand is to be introduced into Douglas's pouch, and the uterus pushed upwards towards the abdominal cavity in order to gain space. (Fig. 2). A loop of stout carbolised silk must be passed upwards in front of the uterus, by means of a staff shaped like a vesical sound, having a notch for the silk at the top of its beak. This loop can be caught by the tips of the left index and middle fingers at the summit of the uterus, and one end drawn downwards. By a similar manœuvre a second loop can be passed over the other broad ligament. (Fig. 3). Perforated shot are to be slipped upwards, each embracing a ligature, and clamped by pressure with a forceps such as that shown in the engraving, firm traction having been previously made upon the ligatures. The broad ligaments are secured close to the uterus.

6. Two courses are now open to the surgeon. By the first, a stout pair of Wells's pressure-forceps is applied to each broad ligament external to the silk ligatures, and the uterus then excised with scissors. In this case the silk ligatures will have served the purpose of temporarily compressing the broad ligaments and of depressing them into the jaws of the pressure-forceps. The forceps will be allowed to remain *in situ* for some hours in order to prevent hæmorrhage, and the operation completed as in the case of Mrs. R——. By the second course, double ligatures must be applied to the alæ vespertilionis, and these structures divided on either side between the double ligatures. The operation will then be completed by closing the peritoneal cavity, after the manner ordinarily adopted in abdominal operations.

It has been argued that the Fallopian tubes are part of the uterus, and therefore, unless they be removed also, excision of the uterus only, for cancer, is an imperfect procedure. Without discussing this debatable point, I will content myself by stating that after the excision of the uterus in the manner indicated, the operator can, if he please, draw down consecutively each appendage, apply a ligature, and remove it. But in so doing, care must be exercised to avoid including the ureters in the ligatures. Virginity naturally increases the difficulty of vaginal hysterectomy. In one of the operations I performed upon the dead body, the subject was a virgin, and it became necessary to incise the hymen in the median line with scissors. It was not necessary to divide the perineum, and the vagina was readily distended to a size large enough to admit the introduction of the entire hand. Deformity of the pelvis would seriously complicate the operation, and this or other

FIG. 3.



conditions which occasion diminution of the genital passage would guide the operator to choose the abdominal in preference to the vaginal operation, where hysterectomy is advisable.

The term "cancer" is employed in this communication in its most general sense—viz., as signifying a "malignant growth," and not merely as synonymous with "carcinoma." In support of my advocacy of early extirpation of the uterus for cancer—which, if performed after the manner laid down, with the greatest attention to Listerian principles, is not a particularly dangerous operation—it becomes necessary to express some opinion as to the nature of cancer, with the reasons for electing extirpation as a rule in preference to the more usual methods of treatment. The common idea on the cancer question (which is quite wrong) runs thus: "A hereditary and constitutional disease, distinguished by the presence of a tumour, which, if excised, generally recurs and destroys life. Why therefore operate for cancer which can at best retard the disease only, and is a course associated sometimes with a little, but sometimes with grave, danger? Let us pin our faith to harmless remedies and patent nostrums!" Speaking generally, a cancer tumour arises from

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the combination of predisposing and exciting causes. In this, as in some other diseases, the degree of the one class of factors is inversely proportionate to the other. Locality has been recently urged as a cause of cancer, and statistics have been collected which argue forcibly in favour of this opinion. But as to whether certain atmospheric or telluric conditions predispose to or excite cancer, or what such conditions be, though they presumably exist, is quite unknown. Heredity is undoubtedly a most powerful predisponent to cancer. The influence of heredity has been questioned because a family history of cancer has not been forthcoming in a certain proportion of hospital cases; but Sir James Paget has shown that such a history is obtainable from private patients in twice as large a proportion. Add to this the circumstance that even among private patients a family history of cancer cannot always be traced and is very often intentionally suppressed, and the evidence in favour of heredity as a factor in the etiology of cancer becomes irrefragable. Mrs. R——'s case may be cited as a not uncommon instance of hereditary cancer, where the primary growth appeared in two sisters, probably in the same site. Mrs. R—— applied for treatment for cancer of the cervix uteri, with the history that a sister had died of "cancer of the bladder"—i.e., probably uterine cancer extending into the bladder. The *ipsissima verba* of a woman who I recollect consulted me last summer were: "Sir, two of my sisters have died of cancer of the womb, and now I have severe pain in the womb and an offensive discharge." In what respect syphilis influences cancer is questionable. That certain syphilitic lesions are frequently the precursors of cancer is admitted by all; but whether such lesions exert an influence which specifically initiates cancer or not is a matter of doubt. But this remains certain: many cancer-tumours arise from obviously exciting causes, which may be physiological, dependent upon the evolution or retrogression of the organs (e.g., the breast and uterus), or upon the natural decay of the tissues; or extraneous, such as smoker's lip cancer, or chimney-sweep's scrotal epithelioma (where the development of the growth is favoured by the scrotal corrugations which retain the soot). Fissures and ulcers, either simple or of specific origin, not uncommonly form the cradle and starting-point for epithelial growth.

Quite recently, the results of most valuable researches by Schuchardt have been published[3] in reference to his observations on the origin of cancer from chronic inflammations of the mucous membrane and skin:—1. He traces the steps between bucoal and lingual psoriasis and cancer of the cheek and tongue. A case fell under the observation of Schuchardt where psoriasis of the tongue had existed for many years in a dormant condition, but ultimately assumed the character of epithelioma. The tongue having been removed, the transition from the psoriasis to the epithelioma was demonstrated microscopically. The transition steps of epithelium from a chronic inflammation to a malignant growth have thus been proved; but why epithelium, at one time homotopic, may eventually become heterotopic, is the great question in the pathology of cancer which still remains to be solved. 2. Schuchardt also draws attention to the development of cancer of the penis from "psoriasis preputialis," by which he means a condition of phimosis with chronic inflammation of the prepuce. In confirmation of this, I may refer to the well-known origin of epithelioma from venereal warts which have been allowed to vegetate beneath the foreskin. 3. Instances are also adduced of "seborrhagische Hautcarcinome," or cancer arising from chronic inflammation of sebaceous glands.

The mode of origin of epithelioma of the cervix uteri is a hotbed of debate. By some it is contended that fissures, simple ulcers, and erosions of the cervix uteri give rise to no symptoms, produce no inconvenience, and are harmless; by others, that these conditions are a constant source of misery, are a cause of various reflex phenomena, and may serve as a suitable nidus for the development of cancer. With neither view do I entirely agree, but incline to the latter. A small fissure or ulcer of the rectum, a sore spot on the mucosa of the tongue or larynx, unquestionably give rise to a varying degree of distress; how, therefore, an erosion or ulcer on the cervix uteri can never produce symptoms either *per se* or in association with its usual concomitant conditions is difficult to understand. The initiation of cancer by external irritants has been dwelt upon at some length; its frequent origin from leucoma of the tongue, or from fissures and abrasions of the mucosa of that organ, has been proved, together with the logical prevention of cancer by the removal of such small foci by treatment, before they have assumed a chronic condition and become developed into a chronic inflammation. We are therefore constrained to think that fissures and simple ulcers of the cervix uteri, when permitted to run their course unchecked, frequently become the precursors of uterine cancer. At all events, however easy it may be to draw a hard and fast line upon paper of the differential diagnosis of simple chronic infiltration of the cervix and of the infiltration due to malignant disease, or to give the differential diagnosis of simple and cancerous ulceration, yet clinically no more difficult puzzle is presented to the practitioner than to form a correct opinion in many instances which fall under his observation. Such, in outline, is the evidence which supports the view that a cancer-tumour is, whilst small, a purely local affection, and immunity from recurrence usually attends early and *free* excisions of these tumours.

Unfortunately for themselves, patients affected with cancer are not usually presented to operators whilst the primary tumours are in their earliest stages, and the bulk of cases operated upon are in consequence those where the disease has progressed already too far to render the hope of cure by surgical treatment probable.

In conclusion, I venture to say that I have brought forward sufficient reasons to support the hope that vaginal extirpation of the uterus for cancer is an operation which will save life when performed sufficiently early in the course of the disease. In Mrs. R——'s case, Mr. Prowse has reported that the neoplasm has unfortunately recurred in the vaginal cicatrix in the fourth month after extirpation of the uterus. But the disease was far advanced at the time of operation, as shown by Fig. 1 (p. 683). My present feeling is wholly opposed to extirpation of the uterus for cancer of the fundus, chiefly on account of the difficulty which attends the diagnosis and precise determination of the extent of the disease in such cases. The death-rate following such operations will be high, and the chance of immunity from recurrence small. In cases of early cancer of the cervix the limitation of the neoplasm can be ascertained with tolerable certainty; the removal of the upper portion of the vagina together with the uterus would not add much to the risk of the operation, and would notably diminish the probability of recurrence. These are the kind of cases for which vaginal hysterectomy should be afforded a fair trial, and the results ought to be as good, at least, as those of recognised operations for cancer in other parts of the body. Mr. Foreman, writing from Sydney, states that he has excised the uterus for cancer per vaginam five times successfully, so far as the immediate results were considered. From this experience he adds: "I am convinced that, if we only get the cases before the neighbouring parts are infiltrated, the ultimate results would be far better than the removal of cancerous breasts. If a case be too fixed for removal, I leave it alone. In future I shall always extirpate where it is possible to do so."

Park-street, Grosvenor-square, W.

[3] Volckmann's "Sammlung," No. 259.

SMALL-POX EPIDEMICS IN LONDON.

BY HENRY TOMKINS, M.D., B.Sc.,
MEDICAL OFFICER OF HEALTH, LEICESTER.

Now that London is comparatively free from small-pox and the fresh cases arising weekly can be counted on the fingers, and in view of the fact that the Metropolitan Asylums Board are about to take steps for the erection of another large hospital in preparation for what is apparently looked upon as inevitable — another epidemic of this disease,—the time appears opportune to bring forward all or any experience tending to throw light upon this matter. As the result of some years' experience of this subject, I would offer some observations relating thereto under the following two heads: first, the principles which should be followed in the providing of small-pox hospitals, both as regards the interests of the patients and those of the public; secondly, a more efficacious means of coping with the first outbreaks of the disease, in order to prevent its assuming such large proportions as have hitherto at regular intervals

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been an opprobrium to the sanitary arrangements of the metropolis.

1. According to a leading article in THE LANCET of Feb. 20th, the Metropolitan Asylums Board have decided to build a new hospital at Gore Farm for 600 patients. At the late hospital at Darenth accommodation was provided for a much larger number than this. I would submit that the formation of such large establishments is a mistake, and for the following reasons. When the numbers begin to exceed 300, the difficulties of proper administration, supervision, and control are enormously increased, one important factor tending to this being that so large a proportion of the patients are convalescent and practically recovered, and are kept in hospital more as prisoners under restraint, waiting the time when they will be free from infection and fit to mix again with the community at large. Again, if this number be much exceeded, the area from which the cases are brought is much extended, and thus the patients have a further distance to be removed from their homes; and although experience has proved to me that cases of small-pox, if in a fit condition to be removed at all, will, in a proper ambulance, bear a journey of seven or eight miles without any apparent ill effects, still it is desirable on all grounds, financial and social, to limit the distance of removal, so far as this can be accomplished. Again, it has been shown that, on the score of economy, when a hospital exceeds 400 beds the total cost per bed begins to show a marked increase. The objection that has been raised as to the ill effects of too great aggregation on the patients themselves, in addition to that of the surrounding district, should also have some weight. The inmates in the acute stage may be estimated at 25 per cent., and it is these, if any, that suffer most from too close aggregation, and a total of 300 would limit these to some seventy or eighty, a number which it is desirable not much to exceed. It would therefore appear advisable on these grounds, if provision must be made for these large numbers, and this scourge is to be for ever at intervals widespread in London, to select, say, three or four sites—east, west, north, and south—situate beyond the thickly populated districts, where land is less costly, and where ten or twelve acres could be got at a distance not less than a quarter of a mile from any main thoroughfare or human dwelling-houses.

2. But a more important question, perhaps, than the provision of these large hospitals presents itself for consideration—viz., whether it is an inevitable necessity that these epidemics of small-pox are to periodically arise and hundreds of lives be lost thereby, in spite of the protection afforded by vaccination and our improved or supposed improved sanitary arrangements. Are all available means taken at the onset, and in each and every case, to prevent the spread of the infection? All who are acquainted with the details of these matters as in operation in London will agree in acknowledging that they are not. The population of London is fairly well vaccinated, and the greater number of those admitted into small-pox hospitals are found to have been vaccinated in infancy, so that the amount of protection afforded by one vaccination is pretty general; and yet what are the results? My attention has been forcibly directed to this point since undertaking the duties of medical officer of health to the borough of Leicester, so well known as the headquarters of the anti-vaccination movement, and where the vaccination laws are practically to a large extent in abeyance, as at the present time not much more than one-third of the children are vaccinated. This condition of things has now been going on for a few years, so that there must now be some thousands of children, forming a sensible proportion of the 140,000 inhabitants, which is about the present population of the town and district; and yet, with all this susceptible material and the frequent importation of small-pox into the town, and into the most densely populated parts of it, during the last eight or nine years the disease has never got a hold or spread amongst the people. To what is this due? There can be little doubt that it is due to the active vigilance of the health authorities. Compulsory notification of infectious diseases is in force, and it is not too much to say that within a few minutes from the receipt of information of a case the authorities are on its track, and the patient, *nolens volens*, is promptly removed to hospital. But, further, not only is the patient removed, but every effort, and indeed pressure of a most pronounced character, is brought to bear to effect the removal to quarantine wards of all those persons who have been in attendance on or in contact with the patient, there to undergo a fortnight's isolation and observation. In those instances where the friends &c. have not yielded to this pressure and could not be got into quarantine, a daily visit of observation has been made, so that the earliest symptom of any sickness amongst these should be known. By thus promptly removing every case, thoroughly disinfecting the infected premises, maintaining a strict watch on those exposed to infection, and preventing them from mixing with others at school or work, the disease has hitherto been kept from spreading.

I bring this forward as illustrating what vigilant action on the part of those concerned with the care of the public health has been able to accomplish, and that too amongst a crowded population a large number of which is unprotected, and not in any way to advocate the non-performance of vaccination, my views and experience of the latter being shown elsewhere.[1] In fact, one cannot with any degree of equanimity look forward to the future of this community; with a yearly increase in the unprotected portion of the population, it is to be feared that ultimately a Nemesis will overtake the town in the shape of a violent outbreak of variola. As a speaker at the Sanitary Congress held here in September last well said, Leicester may be likened to a town where the brick-built houses are gradually being replaced by wooden ones: for a time a fire occurring may by prompt action be extinguished without causing much damage; but by and by, when all the houses are of inflammable material, a fire will at last occur which will baffle all efforts to extinguish it.

What I wish to insist upon, however, is this: If such results can be obtained in a population of 140,000, why cannot the same be effected in a population of four millions? If these four millions are divided into twenty districts, each with a competent and sufficient staff, and its organisation properly adapted for the purpose to be accomplished, what is there to prevent similar results being obtained in each of these districts as here? To be of any use, action must be prompt, vigorous, and effective; half-hearted measures are useless in coping with this disease; it does not do to stand too much upon ceremony, and possibly at times the actual limit of legal powers may be exceeded if delay is to be avoided: violent diseases often require violent remedies. It is a truism to point out that the essentials for carrying out the above line of action are, first and foremost, the immediate notification of the occurrence of each case; secondly, an efficient staff to act on such information; thirdly, prompt action in removal, disinfection, revaccination, and watching all those who may possibly have been exposed to the infection.

Leicester.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum allorum tum proprias collectas habere, eb inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. GEORGE'S HOSPITAL.

VOLVULUS OF ASCENDING COLON; DEATH; NECROPSY.

(Under the care of Dr. J. OWEN.)

THE cause of the obstruction in the following case is of considerable rarity, and for that reason the case is well worthy of record. Three varieties of incarceration, the consequence of rotatory movement, may take place,[2] and of these this case affords an example of the first—a simple twist of the bowel on its own axis. In previously recorded cases this simple twist has almost invariably been found in the ascending colon, and this case is no exception to the rule. For the following notes we are indebted to Drs. Delépine and Griffiths.

W. W——, aged twenty-nine, was admitted on August 17th, 1885. He was a slightly built man, who had had no illness

[1] The Protection afforded by Vaccination. Manchester: Cornish.
[2] Holmes's System of Surgery, vol. ii., p. 712.

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except acute rheumatism in 1870. He had been in good health, with no loss of appetite, no abdominal pain, and perfect regularity of the bowels up to August 15th, when he was seized with sudden pain across the lower part of the abdomen, with constant vomiting, and that day there was no action of the bowels. Next day the vomiting was less constant, but the bowels remained constipated, and there were pains of a cramping character in the abdomen. There was no history of blow or strain or sudden movement, and no excess or error of diet.

When admitted on the 17th, his skin was cold; temperature 96·4°; pulse small and weak, 82; tongue clean. He vomited occasionally a dark yellow acid fluid, small in amount. His pupils were normal, but there was much restlessness and tremor of the hand. A short systolic murmur was audible over the apical area of the heart. Pulmonary sounds clear. Abdomen tense; umbilicus retracted; dulness (comparative) over right ileo-inguinal region and right flank; hyper-resonance above the umbilicus and over the left side. His pains were referred to the lower half of the abdomen, from one side to the other; palpation gave pain; no coils of intestine mapped out on the abdomen; reflexes over abdomen exaggerated; no vermicular action visible. Three full enemata failed to bring down more than a few scybala. He was given four ounces of brandy, and half a grain of extract of belladonna every two hours. He continued, however, to vomit, almost always ten minutes after drinking. He spoke cheerily of himself, was not collapsed, and about five hours after admission was heard to laugh at some incident; but within an hour and a quarter after that he was seized with muscular convulsions, became cyanosed, and died before aid could be summoned.

Necropsy, twenty-one hours after death.—There were a few adhesions of the pleura, and extensive old pericardial adhesions, with thickening of the mitral valve and slight thickening of the aortic valves, producing incompetency. The thoracic and abdominal organs were apparently healthy. The abdomen was distended, and there were a few ounces of dirty-looking turbid serum in the peritoneal cavity. On reflecting the omentum, the small intestine was found pushed upwards and to the right by a large blackish pouch. On following the small intestine from above, the distended pouch proved to be the distended and displaced cæcum, the ascending colon being twisted a short distance above the ileo-cæcal valve, the distended cæcum extending from the right iliac fossa to the left hypochondrium, forming a large elongated ovoid mass twelve inches in length by six inches wide, its peritoneal coat being torn in several places. The colour of the distended viscus varied from a purple-brown to an almost black colour. The stomach, and the whole of the small intestine contained a large amount of highly offensive flatus and fluid fæcal material. The lower two thirds of the ileum were much discoloured. Beyond the point of obstruction the colon was contracted and quite pale. The appendix vermiformis was still in the right iliac fossa, with the adjacent parts of the cæcum, both joined to the parietes by a mesentery which was much stretched, but otherwise presented no striking abnormality. The volvulus affected the lower part of the ascending colon, which was twisted, so that the anterior surface looked posteriorly—the parts of the right side looking upwards and to the right, the parts of the left side looking downwards and to the left. These relations apply only to the parts in the immediate vicinity of the volvulus. Thus the parts entering into the composition of the distended pouch were derived from the antero-external region of the cæcum and ascending colon and the postero-external wall of the caput cæcum. Before untwisting the volvulus water was passed through the descending colon, but could not be made to pass through the stricture, though on replacing the cæcum in its normal position both water and the contained gases passed freely. The cæcum and the ascending colon being laid open, the mucous membrane of the former was found to be discoloured, softened, and evidently partially destroyed at several points. At the point of obstruction, which was marked by a sudden transition from the dark colour of the distended intestine to the pale colour of the contracted ascending colon, there was a narrow line of deep arterial congestion, but with no great amount of swelling of the mucous membrane. There was no indication of previous constriction at that point, and on removing the constriction by untwisting the intestine the entire obstruction vanished.

The case was therefore one of volvulus of the ascending colon, and presented the peculiarity that no congenital malformation, general in such cases, could be found. The meso-cæcum was not even long enough to allow of any extensive displacement of the appendix vermiformis. It is evident, from the relations of the parts and from the position of the volvulus, that without a saccular distension of the antero-external part of the cæcum no volvulus could have existed, or at any rate have been persistent. It should be noted that there was a *secondary* twist due to displacement of the distended cæcum, which altered the position of parts; but, on untwisting it, the occlusion remained perfect as before.

RADCLIFFE INFIRMARY, OXFORD.

A CASE OF EXCISION OF THE THYROID GLAND; REMARKS.

(Under the care of Mr. HORATIO SYMONDS.)

WE are indebted for the following notes to Mr. George Rodman, M.B.

Rose C——, aged twenty, a housemaid, was admitted during the summer of 1885 suffering from an enlargement of the thyroid gland, which, in addition to being inconvenient on account of its size, gave her trouble in swallowing, and also produced some amount of dyspnœa.

When first seen, the patient, who was a healthy, robust girl, presented the usual signs of a thyroidal growth, involving both lobes, but more especially the right. There was no expansile pulsation of the tumour, nor other evidence of its being a case of Graves' disease. The difficulty of swallowing was not such as would interfere with nutrition, but the dyspnœa produced by exertion prevented the following of her occupation with any degree of comfort. There was no cardiac disease. Several attempts, four in number, were from time to time made, to promote a diminution in size of the mass; the process adopted being that of incising the growth, and then, by the application of the actual cautery to the incisions, promoting the formation of a scar, which, when it contracted, might diminish the blood-supply to the tumour. The girl left the hospital, and returned a month or so later with but little amelioration of her condition. She was then desirous of having a further operation performed.

On Oct. 27th, the A.C.E. mixture having been administered, Mr. Symonds proceeded, with Listerian precautions, to extirpate the growth, and to accomplish this made his incision over the most prominent portion on the right side, in the direction of the carotid vessels. The previous cauterisations had produced adherence of the skin to the subcutaneous structures and made the "shelling out" of the gland more difficult than it is usually found to be. Considerable hæmorrhage was encountered, which, however, was easily restrained by means of Spencer Wells' artery forceps and the application of catgut ligatures to the bleeding vessels. The actual cautery was used at one stage of the operation to check some venous oozing. A thick catgut ligature was passed round the junction of the isthmus and right lobe previous to the removal of the latter. At this stage of the operation it was decided, owing to the pulse giving evidence of collapse, to postpone the removal of the remaining lobe for a time. The skin wound was closed with silk sutures, a drainage-tube being inserted in the lower extremity of the incision. The portion removed was found to weigh twelve ounces, and a stained microscopical section showed it to consist of a simple hypertrophy of the gland, without any alteration in the relative amounts of gland and fibrous tisue.

The patient remained somewhat collapsed for twenty-four hours, but after this period gave no ground for alarm. It was only necessary to dress the wound a few times, and she made so rapid a recovery as to be able to take exercise in the grounds of the hospital three weeks after the operation.

On Nov. 20th Mr. Symonds removed the remaining lobe in a manner similar to that adopted on the previous occasion. The same difficulty, owing to adhesions, was found, and the extension of the growth behind the trachea rendered it necessary to employ great care in avoiding a wound of that tube. A portion of the isthmus was left over the front of windpipe, the left lobe having been separated from this by means of the cautery iron. No considerable hæmorrhage was met with, and there was a marked absence of collapse, as seen on the occasion of the removal of the right lobe. The weight of the left lobe was six ounces.

The subsequent history of the case is a somewhat interesting one, in that it caused some alarm to those attending her.

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Shortly after the termination of the operation it was noticed that she was breathing stertorously, even though thoroughly roused from the anæsthetic. This stridor remained during almost the entire time she was in the hospital, and was especially audible when she was disturbed in any way—e.g., sitting up at the time of the dressings. Three days after the operation her temperature reached 102·4°, and with that she had a troublesome cough, with frothy expectoration and rapid stridulous breathing. The wound was healing well. Her temperature on Dec. 1st had reached its normal standard, but her voice was weak, and she suffered from peculiar paroxysms of an almost noiseless cough. The stridor was still present at intervals. She was up for the first time on Dec. 7th. On account of her continued weakness of voice, a laryngoscopic examination was made, but this was very unsatisfactory owing to her tonsils being large and preventing the insertion of the mirror between them. She continued in the same state till Dec. 26th, when her temperature suddenly rose, and continued high (between 103° and 104°) for several days. There were no other indications of fever. Subsequent investigations showed that she had in all probability caused the thermometer to rise either by its application to a hot bottle or by means of friction. Having been detected in this fraud, she left Oxford within a few days, during which interval her voice returned and she had no stridulous breathing. On Feb. 3rd, 1886, she presented herself at the hospital in good health, and was shown at the meeting of the British Medical Association there.

Remarks by Mr. SYMONDS.—Cases of bronchial and laryngeal spasm, due to irritation of a goitre, ending fatally, will justify the operation of removal of the thyroid gland in many instances of a simple enlargement of that body. It would be well, considering the attendant risk of the operation, which has probably been somewhat over-estimated, to try less active measures in the cystic variety of the disease. The same remark applies to the exophthalmic form when hæmorrhage might prove fatal. A previous cauterisation of the growth would seem to be contra-indicated, as being of not much use, and because of the complication that it leads to should an attempt at excision be made subsequently. The above case did not illustrate the usual comparative immunity from spasm during the day-time, a fact which was forcibly illustrated by the sudden death of a similar case, which happened to be in the ward at the same time, and which occurred from bronchial spasm in the middle of the night, the patient having shown some dyspnœa for several previous nights, though quite free during the earlier portion of the day. The line of incision was adopted as being less likely to injure the important structures met with in this region. Removal of the isthmus was avoided, with the idea that with that portion of the tumour remaining there would be less chance of the patient developing a myxœdematous condition. It remains to be seen whether such will be the case. I have known four other cases besides the one mentioned as dying of bronchial spasm in the ward, in which patients have died suddenly from asphyxia due to gradual compression of the trachea.

LIVERPOOL INFIRMARY FOR CHILDREN.

CARIES OF LAST DORSAL AND FIRST LUMBAR VERTEBRÆ, WITH PARTIAL PARAPLEGIA AND CONTRACTURE OF MUSCLES OF THIGHS, IN A GIRL AGED THIRTEEN; CURED, WITHOUT DEFORMITY, BY A SAYRE'S JACKET WORN CONTINUOUSLY FOR TEN MONTHS.

(Under the care of Mr. MARTIN OXLEY.)

ALICE P——, aged thirteen, was admitted on Feb. 2nd, 1885. It was stated that up to eight weeks previously to her admission she had been in good health. She first complained of pain in the small of her back and in her legs, and suffered most at night. She gradually became very thin, lost her power of walking, and her thighs were drawn up upon her abdomen.

On admission she was much emaciated, looked haggard and worn, and could not be moved without exciting spasmodic movements of the flexors of the legs, which were accompanied by great pain. She was kept in bed for two days, and then had a jacket of plaster applied while in the slings, after Sayre's plan. From the time she had the jacket on her pain ceased, and the tendon reflexes, which had been greatly exaggerated in the thighs, became almost normal. After eight days she could walk about in the ward, but soon got tired. She was sent home, and was not seen until December, 1885. She was then stout and well, and could run up and down the ward without the support of a jacket. Her mother stated that she had gradually got stronger and fatter, and was as well as she had ever been. Another jacket was put on, as the child wished to have further treatment, and as Mr. Oxley always continues the jacket for at least two years after the cure to ensure its permanency.

The girl was again seen last month (April). She is strong and well; can touch her toes with her fingers without bending the knees, except to a very slight degree. She has no pain in the back, nor does she show any deformity. Mr. Oxley has shown her to the members of the Medical Institution, and considers that her case is one of the most remarkable and interesting of the large number which he has treated.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Development of Mammary Functions by the Skin of Lying-in Women.—Paraplegia from Pott's Disease, and its Treatment by Actual Cautery.

AN ordinary meeting of this Society was held on Tuesday last, Mr. G. D. Pollock, F.R.C.S., Vice-President, in the chair.

Dr. F. H. CHAMPNEYS contributed a paper on the Development of Mammary Functions by the Skin of Lying-in Women. After referring to numerical abnormalities of the breasts and nipples, the author proceeded to give thirty cases of the condition described in the title of this paper, occurring between October, 1882, and November, 1884, in the General Lying-in Hospital. The right side was affected in 14, the left in 1, both in 15. The lumps in the right side predominated both in frequency and size. The author then described the situation and characters of the bodies referred to, and their course of development; during lying-in this usually coincides generally with that of the breasts. The secretion was of three principal kinds: (*a*) Granular débris, like the secretion of sebaceous follicles; (*b*) colostrum; (*c*) milk. It was expressed from the situation of the sebaceous follicles, as marked by the situation of the hairs. The whole surface of the lump produced secretion; there was no centralisation. The cases were seen by numerous observers. Three typical cases were given at length, and instances of the following conditions were then described by way of contrast: Extension of mammæ into axillary folds; axillary mammæ with axillary nipples, pores, or ducts; supernumerary nipples without special gland substance (including one case having a typical "axillary lump" in the skin of the right axilla, and also three small "axillary lumps" on the right side, and three rudimentary nipples, two on the right side and one on the left). The cases of "axillary lumps" were believed to be now described for the first time. They seem to prove that in lying-in women the sebaceous follicles of the skin are capable of producing true mammary secretions. The transition from granular material, through colostrum, to true milk, is distinct and unmistakable. They confirm the opinion that the breast is a highly specialised aggregation of highly specialised sebaceous follicles. The least specialised form is that here described, where the skin is merely thickened, and the sebaceous glands may produce true mammary secretions. The next form is that where there is an aggregation of the ducts, which open by one or more external pores. The highest rudimentary form is where a nipple or more are superadded to the last variety. It is also well known that nipples may be developed independently. It is far from improbable that these "axillary lumps" may share the pathological affections of the breast, and even be the seat of abscess. Reference was made to some affections described by Verneuil as "hidrosadénite," and believed by him to be situated in the sweat-glands. A case of "axillary lump," painful during menstruation, was given. The paper concluded with a table of thirty cases of "axillary lumps," giving the side affected, dimensions, when first noticed, largest on which day, state when last seen, secretion, and remarks.—

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Mr. G. D. POLLOCK believed that this was the first paper that had been contributed on the subject.—Mr. ALBAN DORAN said that Dr. Champneys' valuable researches supported the embryological as compared with the morphological view of the mode of origin of supernumerary nipples and glands. If these structures were really relics of organs in our ancestors, then they ought not to be found in the axilla, for in no animals did these glands occur in that situation. That Dr. Champneys' lumps were a specialised form of cutaneous sebaceous glands was highly probable.—Dr. CREIGHTON regarded Dr. Champneys' researches as having been productive of a considerable discovery. He believed, however, that the lumps or glands were not derived from sebaceous glands, but from another cutaneous structure that existed in the human axilla. He had incidentally described this glandular stratum in a paper read before the Society four or five years ago. Similar structures were met with in the skin of the dog. In the human axilla they had been described by Sappey, Kölliker, and Frey. These glands were coated by a remarkable layer of plain muscular fibres. They were composed of peculiar yellow granular cells, were of a larger size, and had a shorter neck than the ordinary convoluted sweat glands. In the Australian platypus Meckel had described them as glandula humoralis lymphatica. The remarkable muscular coating would enable a diagnosis to be made between them and sebaceous glands. This would afford a distinction when an opportunity arrived for an anatomical examination of a case of Dr. Champneys' lumps.—Dr. JOHN WILLIAMS said that during menstruation pain and fulness occurred frequently in the breast. It would be interesting to know, therefore, whether the axillary lumps of Dr. Champneys ever exhibited signs of their existence during menstruation. In one case which Dr. Williams had had the opportunity of watching, some swelling and pain in the axilla corresponding to the position of these lumps were detected.—Dr. BENNETT related a case of swelling in the axilla which was associated at the menstrual periods with sweating; the tumour was removed and found to be an oval flattened lipoma.—Dr. CHAMPNEYS, in reply, regretted that he was unable to show a living specimen. He did not doubt the existence of—indeed he had described—extensions of the mammary gland into the axilla. But the axillary lumps were of a very different nature, as he had shown in the paper. He was inclined to accept Dr. Creighton's view of their origin. These lumps were not perceptible before delivery, swelled after parturition, and again slowly decreased in size; in these features, and in yielding a secretion of milk, they differed altogeher from lipomata.

Dr. ALTHAUS communicated a paper on Paraplegia from Pott's Disease, and its Treatment by the Actual Cautery. The author related the case of a domestic servant, aged twenty, who had had rheumatic fever two years before admission to hospital, and painful paraplegia for about twelve months. The right lower extremity was more severely affected than the left. There was exaggeration of the superficial and deep reflexes and of the galvanic and faradaic responses of the nerves and muscles, and there were certain vaso-motor symptoms, while all forms of sensibility were perfectly normal. There was an angular deformity of the ninth and tenth dorsal vertebræ, the structures above the projecting vertebræ being thickened and indurated, with deficient flexibility of the spine. All the other organs and functions of the body appeared to be normal. The case was therefore diagnosed as one of caries, probably non-tubercular, of the bodies of the vertebræ, followed by external pachymeningitis and some degree of interstitial transverse myelitis. Medicinal treatment having proved ineffectual, the actual cautery was applied by Mr. Pearce Gould on both sides of the deformity, on four separate occasions, with the result that the patient, who had been unable to walk, sit, or stand, recovered, and was discharged cured seven months after admission. The author then discussed the mode of production of the pain, and of the motor, vaso-motor, and secretory paralysis, as observed in cases of Pott's disease, and distinguished three different degrees of pressure and of corresponding severity of nerve symptoms:—1. That in which only the spinal liquid was displaced, while the membranes and the substance of the cord were not interfered with to any perceptible degree; this explained the cases in which there was considerable deformity, but no pain or paralysis in the limbs. 2. That in which there was not only displacement of spinal liquid, but also a moderate degree of external pachymeningitis and interstitial myelitis of the white columns of the cord, caused by the contact with the diseased vertebræ, and accompanied with pain and paralysis of limbs, but without loss of sensibility or reflex mobility. Motion suffered more readily from pressure than sensation, because sensation was more easily conveyed along the nerve tubes, and would persist as long as only a portion of the nerve cells in the grey centre of the cord remained active, and after the posterior columns had been disabled. The case described belonged to this class. 3. That in which there was severe squeezing and consequent inflammation of the entire substance of the cord. In such cases we observed clinically all the symptoms of complete transverse myelitis *in loco morbi*. The author recommended an early resort to the use of the actual cautery in all cases of Pott's disease where symptoms of paraplegia are beginning to be developed. Under the influence of powerful counter-irritation the inflammation in the bones and the dura mater ceased, there was absorption of morbid products, and the compression and inflammation of the cord were relieved. Although there was probably always some degree of myelitis in addition to the pachymeningitis, the recovery of function could be explained by assuming that a considerable number of nerve tubes had not perished, and that when compression was removed these were enabled to resume their normal activity. When the third stage of the disease had once been reached recovery was plainly impossible; loss of sensibility was therefore a much more ominous symptom in cases of Pott's disease than paralysis.—Mr. G. D. POLLOCK had found the actual cautery of much value in a variety of cases of injury and chronic inflammation of bones and about joints. He related a case in illustration. The skin was percussed by a button heated to whiteness.—Dr. B. O'CONNOR remarked on the completeness of the recovery in the case recorded. Did Dr. Althaus consider that there was more advantage in the use of the actual cautery as compared with setons?—Mr. FITZROY BENHAM had seen several cases where rest had sufficed to cure the disease. If the paralysis did not improve in these circumstances, the disease was advancing. He agreed that where sensation was affected the disease was more advanced.—Dr. ALTHAUS replied that two large strokes were made by the sides of the spines. Formerly the cautery was used for disease of the spinal cord itself, and without any good effects, and had therefore fallen into disuse. The cautery certainly shortened the course of the disease in his case. He preferred it to the seton, as it was more speedy and less painful.

PATHOLOGICAL SOCIETY OF LONDON.

Congenital Fatty Tumours of Sole of Foot and Palm of Hand.—Abnormality of Colm.—Meningeal Hæmorrhage due to Aneurysm.—Pathology of Rheumatoid Arthritis.—Hydatid Tumour of Recto-vesical Pouch.—Colloid Cancer of Uterine Fibro-myoma.—Thrombi in Pulmonary Artery.

AN ordinary meeting of this Society was held on Tuesday last, Dr. J. S. Bristowe, F.R.S., President, in the chair.

Mr. C. B. LOCKWOOD exhibited Congenital Lipomata of the Soles of the Feet from an infant aged thirteen months. They were symmetrical and had existed since birth. They were without a capsule, and the lobules of which they were composed were whiter and not so large as the ordinary fat of the part. Such tumours were exceedingly rare; the only others with which he was acquainted were described in the fourteenth volume of the Pathological Transactions by Mr. Gay. They had the ordinary structure of lipoma microscopically, and no special malignant tendencies, as Mr. D'Arcy Power testified. He also showed a Lipoma of the Palm of the Hand from a young lady aged twenty-four; it was removed by Mr. W. Adams; was probably congenital, though first noticed at three years of age.—Mr. ROGER WILLIAMS had seen five specimens of congenital fatty tumours, and one of these occurred in the palm of the hand; in none of his cases were the bones involved.—Mr. R. W. PARKER remarked that congenital lipomata were not encapsuled as a rule; they usually occurred in places where fat was not generally or but scantily found, as in the scrotum.—Mr. J. H. MORGAN described a case of tumour of the palm of the hand, merely a hypertrophy of the normal tissue of the part. He referred to a case of fatty

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tumour removed by Mr. T. Smith from the pelvis of a girl, growing from bone.

Mr. LOCKWOOD also showed a specimen of Undescended Colon from an anencephalic monster. The colon was adherent to the right lobe of the liver, and the mesentery had failed to descend into the right iliac fossa. This descent of the colon did not take place till about the end of the tenth week; perhaps the occurrence of a peritonitis causing adhesion to the liver accounted for the non-descent of the colon. In his specimen the testicle had descended normally. With undescended colon the testicle also usually remained in the abdomen, as Geoffroy St. Hilaire and others had pointed out. Normally, there were bands passing between the testicle and colon, and it was supposed that the descent of the testicle was the efficient cause of the descent of the colon. The present case did not militate against this view, notwithstanding the facts.—Dr. NORMAN MOORE suggested that some peritoneal bands might be of non-inflammatory origin; could the natural bands referred to be the source of some of the peritoneal bands?—Dr. S. WILKS said that he had examined many stillborn syphilitic children, and peritonitis was not uncommon; it might occur in other conditions. Dr. Peacock had observed that some forms of congenital heart disease were of inflammatory intra-uterine origin. In a case in which Mr. C. Symonds had operated the cæcum was twisted on itself and thrown over to the other side, where it was fixed by adhesions, no doubt the result of peritonitis.—Mr. LOCKWOOD, in reply, referred to the meso-testis that sprang from the outer edge of the psoas muscle. He believed that many abnormalities were simply effects of actual intra-uterine disease, preventing normal evolution.

Dr. SEYMOUR SHARKEY read a case of Meningeal Hæmorrhage due to rupture of an aneurysm of the left middle cerebral artery. The patient, a married woman, aged fifty-one, was admitted under his care into St. Thomas's Hospital on Sept. 12th. Six months previously she had an attack of gout in the feet and attended as an out-patient. On Sept. 10th, whilst at work, she felt suddenly ill and vomited. She laid down on the bed for a short time and then tried to get up, but fell in her attempt to do so. She was then found to have lost the use of her right arm and leg, and she became unconscious and remained so until admitted two days later. She had right hemiplegia and hemianæsthesia and aphasia. She was drowsy, had a brown dry tongue and partial loss of control over the evacuations, and died on Sept. 17th, one week from the day on which she was taken ill. At the necropsy chronic renal disease and hypertrophy of the left ventricle of the heart were found. Slight extravasation of blood was seen in the membranes covering the anterior half of the left hemisphere of the brain and at the base; and a large hæmorrhage occupied and distended the left Sylvian fissure. It had formed a hollow cavity in the temporo-sphenoidal lobe, and had exerted great pressure on the other parts of the brain which form the boundaries of the fissure. It had separated the convolutions of the operculum from those of the island of Reil, and had flattened the lenticular nucleus and internal capsule, so much so that the knee of the latter was obliterated and its posterior and anterior divisions formed almost a straight line. The blood had not, however, ruptured the substance of the brain. The source of the hæmorrhage was a small aneurysm on the main trunk of the Sylvian artery. This case was an interesting example of the effects of pressure in interrupting the functions of the nervous system. The loss of sensation might perhaps be ascribed to the disorganisation of the hippocampal convolution, but the motor paralysis and aphasia seem to have no other explanation than the pressure of the effused blood upon the island of Reil and neighbouring convolutions and upon the central ganglia and internal capsule. It would have been impossible to distinguish the case clinically from one of hæmorrhage into the substance of the brain in the region of the internal capsule. In reply to Dr. S. Wilks, Dr. Sharkey said it was impossible to ascertain the condition of the special senses, owing to the patient's mental condition with aphasia.

Mr. ARBUTHNOT LANE referred to a paper in the Transactions of the Pathological Society, 1884, in which he had attempted to prove that Charcot's disease was rheumatoid arthritis altered by modifications in the vitality of the osseous and nervous systems. He now went a great deal further, and stated that in his belief rheumatoid arthritis was not a disease, and that the pathological conditions which we are accustomed to regard as the expression of this disease are but the result of force frequently or suddenly applied, as by a heavy blow. In previous papers, which were contained in the Transactions of the Medico-Chirurgical Society, Pathological Society, and elsewhere, he had shown that the transmission of pressure produced many important changes in the bones and joints. In the less movable articulations, as in those of the spinal column and pelvis, it caused the destruction of the articular cartilages or fibro-cartilages intervening between the bones and the formation of marginal osteophytic growth, so as to form large bosses or processes of bone, which frequently fused with similar processes from adjacent bones and so obliterated the joints. It also caused the development along the lines of tension of processes of bone, which extended along the ligaments or over the fibro-cartilages, and frequently united with similar projections from the neighbouring bones. He described instances of these conditions, all of which were regarded as products of the so-called disease, rheumatoid arthritis. In more movable joints, as in those of the extremities, pressure, exerted repeatedly and over a long period, produced changes identical in character with those just described, but altered in appearance by the greater mobility of these joints: these are the gradual removal of the articular cartilage covering the opposing surfaces of bone, an increase in the thickness of the articular lamella of bone, and its progressive eburnation on the complete removal of the cartilage. Coincident with these changes, bone is deposited on the margins of the articular surfaces, producing an extension of their areæ. The opposing eburnated surfaces of bone by their friction mutually destroy each other, and by this means a very considerable alteration in the shape of the articular ends is produced. To obviate, or rather to oppose, any displacement of the altered bones, a compensatory osseous growth is formed along the margin of the articular surface and frequently in the ligaments, and should the mutual trituration of the bones result in displacement, accompanying the gradual displacement, there is an abundant formation of new bone. The amount and rapidity of these changes vary much in different individuals, and depend on the vitality of the osseous system. If a movable joint be struck a violent blow, the changes produced are similar to those just described, but they progress with much greater rapidity. Instances of this last condition in the case of the hip-joint are sometimes described as rheumatoid arthritis due to injury, and in others as interstitial change in the neck of the femur, producing shortening. These changes are one and all described as rheumatoid arthritis, rheumatic gout, or arthritis deformans, and he maintained they are due, as he described them, to injury. The reason that so-called rheumatoid arthritis is so common in man as compared with the lower animals is that he so often bears burdens whose weights are transmitted at what is a great mechanical disadvantage, and his joints, as the hip and shoulder and the first metatarso-phalangeal, are much more exposed to injury than they are in the lower animals. In animals who carry or drag heavy burdens, as horses, pressure changes are frequently seen. This is less frequently the case with animals portions of whose bodies are exposed to violent strain in the pursuit of their prey, as serpents &c. Having, as he supposed, proved his point as to the identity of so-called rheumatoid arthritis with a condition which certainly cannot be regarded as other than physiological, he classified the results of the transmission of force under three headings, the first two of which he had already described:—1. The effect of pressure repeated very frequently and over a long period of the lifetime of an individual. 2. The influence of heavy pressure applied at one time, as by a heavy blow. 3. The effect of pressure exerted over many generations upon a part. This last effect of the transmission of pressure, which does not produce conditions whose character is far removed from rheumatoid arthritis, he believed to be a most important factor in the process of evolution, and he exemplified this by comparing the changes in the pelvis and lumbar spine of the coal-heaver with the similar parts of the mylodon, and with the fusion of the last lumbar vertebra with the first sacral, which is occasionally seen in man and not uncommonly in the higher apes. He then compared the condition of backward displacement of the fifth lumbar vertebra, which he has described, with a condition of dissociation of the first sacral vertebra in man, which he had found very frequently, and showed that these conditions were due to the similar transmission of superjacent force.—

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Dr. NORMAN MOORE could not accept the view of the traumatic origin of joint changes in rheumatoid arthritis. In individuals suffering from emphysema or arterial disease the joints frequently showed degeneration of their cartilage, which changes were regarded as also related to age. In many members of the animal kingdom ankylosis of the joints occurred. Mr. Lane had quoted the case of the mylodon robustus, but the guillemot also exhibited similar changes that could not be attributed to strain or pressure. In his experience the sterno-clavicular joint was the least liable to present alterations of the kind in question.—Mr. LOCKWOOD criticised some of Mr. Lane's views. The feeble nutrition of afferent nerves was difficult to establish, and he asked whether the author still adhered to his opinion of the cause of fracture and ossification of the costal cartilages.—Mr. C. SYMONDS could not accept the author's hypothesis; he did not regard the changes spoken of by Dr. Moore as of a degenerative kind, for proliferation was their chief and earliest feature. He could not believe that rheumatic arthritis was simply due to chronic strain on the joints.—Mr. W. ADAMS dissented from the author's views, and agreed with those of Dr. Norman Moore; some constitutional cause was surely at work in the production of osteo-arthritis.—Dr. E. CLARKE alluded to the view put forward by Dr. Garrod, that the big toe being exposed to injury was the reason of its being the chief seat of local gout.—Dr. J. S. BRISTOWE also agreed with Dr. Moore that rheumatic arthritis was not the result of pressure. Bedridden patients sometimes developed the disease. He observed that Mr. Lane did not regard osteo-arthritis as a disease; if it were not, what was it?—Mr. A. LANE was fully aware of the facts and hypotheses that had been advanced; he would leave to the future the acceptance of his views which had in no measure been shaken by the observations made in the discussion.

Mr. ROGER WILLIAMS showed a specimen of Colloid Degeneration occurring in a Uterine Fibro-myoma, taken from a single woman aged forty-three. The specimen was referred to the Morbid Growths Committee.

Mr. E. H. FENWICK exhibited a Hydatid Tumour of recto-vesical situation. It occurred in a man aged fifty, who during life presented a large tumour in the left iliac fossa; it gave him much pain; the bladder and urine were healthy, but constipation was obstinate, though relieved by purgatives. At the necropsy a large bilobed hydatid cyst was discovered between the bladder and rectum; the upper lobe was of the size of a fœtal head, and the lower that of a large pear. A secondary cyst also existed in the liver. There were fifty such cases on record, some pressing on the bladder, and others on the rectum; they did not open into the peritoneum unless by accidental rupture. He believed that leakage from the hepatic hydatid cyst was more plausible than the theory of their subperitoneal origin.—Dr. NORMAN MOORE had examined two such cases in the post-mortem room; their existence was not suspected during life. In one, rupture into the peritoneum occurred, with sudden death; in the other, rupture, followed by peritonitis, ensued. There were no hydatids elsewhere in these cases.—In reply to Dr. Ernest Clarke, Mr. FENWICK said the patient died from the effects of a combination of morphia and drink.

Dr. CHARLEWOOD TURNER showed Thrombotic Masses in branches of the Pulmonary Artery, which he regarded as of similar nature to the fibrinous vegetations formed in the valves of the heart in consequence of valvulitis. The thrombotic masses were of varying size, some nearly two inches in length, and began at the bifurcation of large branches of the artery where the blood-current was certainly not slow. He believed that an endarteritis of the pulmonary artery was the cause of the thrombotic mass being deposited from blood, which had also become deteriorated from the normal by various diseases. The specimens were interesting when taken in conjunction with those of aortitis shown at the last meeting of the Society. The question also arose whether infarcts in the liver and spleen and elsewhere might not sometimes be due to the development of thrombi as the result of local endarteritis and consequent thrombosis, rather than to genuine embolism. It was interesting to note that in some infarcts no source of embolism could be discovered.

The following card specimens were shown:—Mr. Mansell Moullin: Primary Sarcoma of Spermatic Cord. Dr. Silcock: Glandular Epithelioma from the Lung of a Dog. Dr. Goodhart: Internal Rupture of Liver. Dr. Handford: Supernumerary Nipple in a Man.

HARVEIAN SOCIETY.

Bulbar Paralysis.—Peculiar Form of Choroiditis.—"Nodding Spasm" (Spasmus Nutans).—Cyanosis from Heart Disease.—Excision of Knee-joint.—Albuminuric Retinitis.—Left Lateral Hemiopia.—Dislocation of Crystalline Lens.

A CLINICAL evening was held on April 15th, J. Hughlings Jackson, M.D., F.R.S., President, in the chair.

Dr. BROADBENT showed a case of Bulbar Paralysis. J. H——, a stonemason, was admitted into St. Mary's Hospital on Jan. 29th, 1886. He had served in India, and there suffered from syphilis, sunstroke, dysentery, ague, &c. One year before admission he had begun to lose his voice, and had difficulty in swallowing, the food collecting in the sides of the mouth, necessitating manipulation with the fingers, the saliva dribbling away. These conditions and a gradually increasing muscular weakness had continued, with occasional remissions, until admission, when he was found to be unable to speak except in a whisper, every syllable being produced by a long forcible expiration. The vocal cords were seen to be widely separated, and could only be partially approximated on phonation. The tongue was small and shrunken, and could be moved from side to side, although only partially protruded. There was impaired movement of all the facial muscles of expression, general muscular wasting, with paresis, traces of the reaction of degeneration, increased superficial reflexes, and good sensation. Since admission there had been a general improvement in all these symptoms, the chief trouble arising from the profuse amount of saliva which frequently blocked the pharynx and larynx. When shown, the condition presented all the foregoing symptoms, the patient complaining also of pain in the left side of the face and head, with occasional nausea. The expression of the face was fixed, the eyes being very bright. The sight, however, was impaired, the ophthalmoscope showing pallor of the centre of the discs and very small vessels. The pupils reacted to light and accommodation, but were somewhat contracted. Hearing was also impaired. The heart's action was weak but regular. Respiration chiefly abdominal. The patient walked with a stiff but steady gait, but had great difficulty in getting upstairs or in rising from a seat, owing to weakness of the extensor muscles of the thigh, which, in common with most of his extensor muscles, were wasted, and exhibited to a slight extent the reaction of degeneration. The superficial reflexes were exaggerated, and there were ankle and thigh clonus in the left leg. Sensation was complete. Treatment had consisted of rest in bed, with thirty grains of iodide of potassium daily.—Dr. MAGUIRE related a case of chronic polio-myelitis, with rigidity and excess of reflexes, in which the symptoms of bulbar paralysis showed themselves towards the end of the case. Sclerosis had been found spreading from the anterior horns to the lateral columns, and a microscopic hæmorrhage had been discovered in the nucleus of the vagus. There had been no renal disease in the case.—Dr. BROADBENT, in reply to questions, stated that the extent of previous antisyphilitic treatment of the case was not known. The larynx had probably been affected by the syphilis. Iodide had been given lately.

Mr. JONATHAN HUTCHINSON exhibited drawings of a Peculiar Form of Choroiditis, in which, with a very extreme degree of disease in the choroid, sight had been well recovered.—The PRESIDENT related a similar case which had occurred in association with locomotor ataxy.—Mr. JULER had seen a few such cases in which there appeared to be no trace of syphilis.—Mr. HUTCHINSON advocated the use of antisyphilitic remedies in all such cases.

Dr. STEPHEN MACKENZIE exhibited two infants, aged respectively nine and fifteen months, each presenting a series of more or less Rhythmical Movements of the Head, partly consisting of a nodding of the head forward and partly of a rotatory movement, the latter being more marked in one case than in the other. In each there was nystagmus, which, in one case, was almost entirely confined to one eye. The nystagmus was increased, or evoked if absent, by restraining the movements of the head. The nodding movements ceased during sleep. There were no ophthalmoscopic changes. In neither case was there decided evidence of

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rickets. In both the nodding spasm came on without apparent cause. Dr. Mackenzie pointed out that they were examples of a rare form of spasm which had been well described by Henoch. It occurred especially during the dentitional period, and usually terminated spontaneously, often after the eruption of a tooth. Henoch drew attention to the association of movements of the eyes with those of the head as indicating the close anatomical relation of the roots of origin of the spinal accessory and upper spinal nerves, which supply the throat and neck muscles, with those of the oculo-motor communis, supplying the muscles of the globe.—Dr. BUZZARD described a case of rotatory movements of the head, with uniocular nystagmus. The fundus of the eye was normal, and the case improved under bromide of potassium.—The PRESIDENT thought that the movements were allied to those seen in the chorea of dogs, which had been shown to be due to affections of the anterior cornua.—Dr. GAIRDNER (Glasgow) observed that the cases were new to him. He related a remarkable case of nodding and rotatory movements of the head in a young girl, ultimately proved to be due to deception, which for years had defied detection. In these cases hysteria was out of the question.—Dr. BRISTOWE had never seen a case similar to those exhibited. Was the symptom the same as that sometimes seen in old people? He quoted the case of a boy, much given to tricks, who had adopted just such a nodding movement; and two other cases of movement of the occipito-frontalis, which had been described as nystagmus of the muscle. Both of these had recovered.

Dr. LAYCOCK exhibited a patient with marked Cyanosis, of congenital origin.—Drs. SANSOM, BROADBENT, and STEPHEN MACKENZIE believed the case to be one of congenital imperfection.

Mr. A. J. PEPPER exhibited a case in which he had performed Excision of the Knee-joint with marked success. An attack of erysipelas had complicated the case, notwithstanding the use of spray and gauze.—Mr. HUTCHINSON advocated the use of irrigation by a spirit and lead lotion in all cases of excisions of the knee, or of compound fractures and dislocations. By this means his cases had always been free from erysipelas, and wounds frequently healed within eight days.

Mr. JULER exhibited the following cases:—1. Albuminuric Retinitis, occurring in a woman during the eighth month of pregnancy. The patient had noticed her vision becoming dim about six weeks before delivery. The child was born at full term six weeks ago, but the vision was still very bad (⅔ and Sn. 6). The retinæ presented numerous large white spots with recent hæmorrhages, and there was some neuritis. The urine still contained one-eighth albumen. Was the renal affection induced by the pregnancy, and would the induction of premature labour have prevented the retinitis? In three previous pregnancies there had been no ocular symptoms. 2. Left Lateral Hemiopia, occurring in a woman aged thirty, who was attacked four months ago with slight paralysis, inducing partial loss of motion in the left arm and leg and total loss of vision over the left half of each visual field. There was no loss of any other special sense, or of ordinary sensation on either side of the body. The motor nerves had apparently regained their function, but the fibres of the optic nerves showed no sign of improvement. 3. Dislocation of Crystalline Lens in a man aged fifty. He had suddenly found the right eye misty whilst in the erect posture, but on stooping so as to bring his head between his knees he was able to read even small print. The lens could be seen floating in the bottom of the vitreous chamber during the erect, and in its normal place in the stooping, posture.

An interesting discussion followed.

YORKSHIRE ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—At a meeting of the members of this Association on March 28th, Dr. Goldie read a paper on "Some of the Difficulties that Medical Officers of Health have to contend with relative to Infectious Diseases." A discussion followed, in which several members joined. The reading of a paper by Dr. Wilson on "An Outbreak of Diarrhœa caused by Tide-locked Sewers" having been postponed, it was resolved that it was desirable that a conference of medical officers of health and others interested in sanitary science should be held during the Congress of the Sanitary Institute at York in September next, such conference to be called by, and on the authority of, the institute as part of the business of the Congress.

Reviews and Notices of Books.

A Treatise on Amputations of the Extremities and their Complications. By B. A. WATSON, A.M., M.D., Surgeon to the Jersey City Charity Hospital, to St. Francis's, and to Christ's Hospital at Jersey City, New Jersey, &c. Illustrated by upwards of 250 engravings and two full-page plates. Philadelphia: P. Blakiston, Son, and Co. Edinburgh: Young J. Pentland. 1885.

THIS work is stated to be the outcome of more than twenty-five years' devotion to the study of the history of amputations and to all the questions pertaining, directly or indirectly, to these operations. The first chapter deals with the history of amputations, and the author shows considerable research and careful reading. He gives an accurate and fairly full account of the gradual development of the art and science of amputation, and points out when and by whom the main improvements in older methods were introduced. This chapter contains much interesting information, and is very valuable for reference: it appears to us to be the most useful part of the whole book, as it contains facts not easily gathered elsewhere. The immediately succeeding chapters deal with the conditions affecting the results of amputations, the various methods of amputating, the instruments employed, &c. These subjects are treated at considerable length, long quotations from other authors, particularly English and American, being freely introduced. The fifth chapter is devoted to an account of special amputations, and is freely illustrated by woodcuts. We notice some omissions—such, for instance, as Roux's amputation at the ankle-joint, and Furneaux Jordan's method of amputation at the hip-joint. Both of these are well-recognised procedures, which certainly ought to have found a place in such a work as this. Again, although the preservation of the periosteum is mentioned in the historical sketch of amputations, we find no further reference to subperiosteal operations. In such omissions as these, and in the very free use made of the descriptions of other writers, we miss traces of a master hand, although it is impossible not to recognise the author's diligence and care. The treatment of amputation wounds is discussed in two chapters; all the methods now in vogue are described and fairly weighed, and Dr. Watson expresses his confidence in Sir Joseph Lister's method of dressing wounds. A long chapter of nearly 150 pages is devoted to a discussion of the selection and application of artificial limbs. This section is well illustrated, and contains much valuable information in regard to artificial limbs of all kinds. The concluding chapters are occupied with a consideration of the causes, symptoms, and treatment of the complications of amputation wounds, hæmorrhage, delirium, pyæmia, septicæmia, erysipelas, gangrene, osteomyelitis, and tetanus. The author has evidently laboured hard and conscientiously at his task, and has succeeded in supplying a want, but we cannot forbear expressing our opinion that a freer exhibition of the critical faculty would have greatly added to the value of the work.

Illustrations of Unconscious Memory in Disease, including a Theory of Alteratives. By CHARLES CREIGHTON, M.D. London: H. K. Lewis. 1886.

THOUGH the author has intentionally omitted to say anything of those diseased states where the application of the doctrine of morbid habit is "obvious and universally acknowledged," he has extended it in "unlikely directions," showing, for instance, that mesoblastic tumours are due to revived embryonic activity, that catarrh is a return to a more primitive kind of cellular activity, and that the so-called "stomach cough" is in reality the dregs of a former cold or irritation in the air-passages which may perhaps

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have been forgotten. There is a most interesting chapter on Whooping-cough, which, whether agreed with at first sight or not, should start a valuable train of thought in the mind of the practitioner whenever a case or a number of cases of this affection comes under his observation.

"Many practitioners are sanguine in using remedies to stop the paroxysms from the outset. In what class of cases is that treatment successful? Writers on the subject do not usually distinguish one class of cases from another; or, if they do, it is in order to place in a 'spurious' class all the cases which do not suit the dogma of continuous reproduction of the specific disease by contagion. In my view, it is just those cases of whooping-cough caught by healthy subjects which are the spurious; while the real cases are those in which the paroxysmal cough is the sequel of a feverish catarrh, sporadic, epidemic, or belonging to measles." Dr. Creighton goes on to suggest that vigorous alterative or habit-breaking treatment is suitable for older and stronger children who have caught the disease from others, while in the younger children the paroxysms are a kind of postponed reaction, "bound to come out sooner or later, and the sooner the better."

A large number of other diseases are discussed in relation to unconscious memory—e.g., neuralgia, skin diseases, diabetes, and even syphilis and cancer. Some interesting remarks will be found on page 44 on the Hahnemannian doctrine of specifics. Altogether this little work of some 200 pages teems with interesting and suggestive points, and will well repay perusal even by those who might be disposed to take alarm at the highly philosophical "prologomena on memory and organic memory" which form the subject of the opening chapter.

OUR LIBRARY TABLE.

Elements of Practical Medicine. By ALFRED H. CARTER, M.D. Lond. Fourth Edition. London: H. K. Lewis. 1886.—This is a really useful and practical student's text-book, and has deservedly met with considerable success. It is written in plain language, and is by no means encumbered with detail, whilst all speculative reasoning is put aside. It is such works as this which are of the greatest value to the beginner in medicine, and of use to him in attending his first course of systematic lectures upon the subject. Having carefully studied these outlines, the student should then amplify his knowledge by the more detailed works, of which we have so many that are excellent—such as those of Roberts, Bristowe, Niemeyer, and Hilton Fagge,—his choice being determined by the needs he desires to supply, the time at his disposal, and the bent of his own mind. To the unambitious, and those who seek no other knowledge than can be available for examination purposes, it is fortunate that the smaller works, of which the present is an example, have been compiled with so much care; for it must be admitted that the student who knows these "Elements" well, and devotes himself to clinical work, will be possessed of sufficient knowledge to pass the ordinary standard of examinations.

Archiv für Anatomie und Physiologie, 1886. HIS, BRAUNE, und DUBOIS-REYMOND.—*Physiologische Abtheilung*, Heft. I. und II. This part contains—Stolnikow on the Estimation of the Blood-current in the Aorta of the Dog, with five plates; E. v. Fleischl on a Mikrostroboscopic Stimulus Research; W. Filehne on the effects of Xanthin, Caffein, and some Allied Substances; K. Hällstén on the Sensory Nerves and Reflex Apparatus of the Spinal Cord; G. Humilewski on the Influence of Muscular Contractions of the Hind Limbs on the Circulation of the Blood; J. Jegorow on the Influence of the Long Ciliary Nerves on the Contraction of the Pupil; and, lastly, the proceedings of the Physiological Society of Berlin, including essays by Christiani on the Excitability of the Respiratory Centre; Th. Weyl on the Relations of Cholestearin to the Terebenes and Camphors; Lehmann on the Functions of the Corpus Striatum; Benda on Spermatogenesis in Mammals; an account of some Demonstrations on the Ox-heart by Gad, and on the Termination of the Nerves of Temperature by Goldscheider.—*Anatomische Abtheilung*, Heft. I. und II. This part contains: Bechterew on a Special Constituent of the Lateral Columns of the Spinal Cord, and the Origin of the Fibres of the Fifth Pair of Nerves; Braune and Stahel on the relations of the Lungs to Ventilating Air Spaces, and to the Bronchi as Air-conducting Tubes; Stahel on the Relation of the Thickness of the Walls of Arteries to the Blood-pressure; R. Altmann on Improvement of Microscopes; A. Froriep on the Developmental History of the Spinal Column, and especially of the Atlas and Axis; Max Flesch, another case of Peculiar Division of the Internal Carotid Artery in the Skull; Strahl on the Formation of the Cloaca of the Embryo of the Rabbit.

The Rotifera or Wheel Animalcules. By C. T. HUDSON and P. H. GOSSE. Part III. Longmans, Green, and Co. 1886.—This part completes the first volume of the work, a work that may be expected to develop even during the period of its publication beyond the limits originally assigned to it. The authors state in their preface that their treatise contains more than 120 species which were unrecognised when Dr. Arlidge brought out his edition of Pritchard's excellent History of Infusoria; that nearly the whole of them have been added to science by the authors themselves; that about eighty of these new species, chiefly among the Ploïma, have been found by one of the authors during the last fifteen months; and that the other, by the discovery, among other remarkable forms, of Pedalion mirum has put beyond question the fact that the Rotifera in one point at least are closely linked to the Arthropoda. The plates in the present part include drawings of Microcodon, Sacculus, Asplanchna, Synchaeta, Polyarthra, Triarthra, Pteroessa, Pedetes, Hydatina, Rhinops, and Notops. The letterpress contains accounts of many new species, and is well worked up to present date.

Horse and Man; their Mutual Dependence and Duties. By the Rev. J. G. WOOD. Pp. 339. London: Longmans, Green, and Co. 1885.—The object of this work is to promote a more humane system of management of the horse. As it is intended for the use of all who possess or who have charge of horses, it is "couched in language which can be understood by all persons of ordinary education." The points on which the author particularly dwells are the present system of shoeing and the use of bearing-reins and blinkers. He would desire to see all horses ridden or driven unshod, and has collected a mass of information tending to show that this is not only practical, but desirable. Failing this, he strongly recommends the adoption of the "Charlier system," as being in all respects the most advantageous, and in this, as the result of considerable experience, we quite agree with him. He also writes strongly against the absurdity of the "hogged mane," and against the cruelty of the now nearly obsolete practice of "docking" and "nicking." He is also opposed to the generally adopted system of clipping. Although we do not coincide with the author in all his views, we can recommend his book to all who take a practical interest in horses, as containing many good suggestions, and as being likely to lead to a more humane and sensible treatment, a result to be obtained in some measure by a more effectual supervision on the part of the master. The book is remarkably well got up, the illustrations are good, and there is a copious index.

The Journal of Mental Science. April.—The original articles are:—Dr. Achille Foville: The Right of Reclamation of the Insane before the Civil Courts. Dr. E. M. Courtenay: Irish Asylum Dietary. Dr. Savage: Drunkenness in its relation to Criminal Responsibility. "Triboletes": The Psychological Bearings of the recent Matriculation Exami-

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nation of the London University. There are many interesting "Clinical Notes and Cases," of which we specially mention Dr. Wiglesworth's case of Old Amputation of the Left Upper Arm associated with Atrophy of the Right Ascending Parietal Convolution, Dr. H. White on a case of Saturnine Insanity, and Dr. J. Mickle on some Abnormal Forms of Breathing.

The Journal of Heredity. Vol. I., No. 2. Chicago.—This quarterly is a most amusing production, being chiefly a collection of writings by various authors; the amusement comes in from the nature of the subject allowing the introduction of remarkable anecdotes, queer advice, and logical fallacies. Dr. Kellogg's article "Who may not Marry?" has much excited our organs of risibility; but, for all that, the advice given is based on sound principles: "Criminals should not marry; marriage between widely different races is unadvisable; persons who are unable to sustain themselves or a family should not marry; do not marry a person whose moral character will not bear the closest scrutiny."

The Journal of Physiology. Edited by MICHAEL FOSTER. Vol. VII., No. 1.—This part is entirely occupied with Dr. Gaskell's paper on the Structure, Distribution, and Function of the Nerves which innervate the Visceral and Vascular Systems, with four plates.

"Unicode": a Code of Cypher Words for Commercial, Domestic, and Familiar Phrases in Ordinary Use in Inland and Foreign Telegrams. Cassell and Company, Limited.—This telegraphic phrase-book aims at two particular qualities—viz., a low price and a universality of employment. The main features of it is the exclusive use for the cyphers of Latin words which are said to conform strictly to the regulations of the International Telegraph Conferences held in Paris, London, and Berlin. It is claimed that the confusion sometimes arising when the English words generally employed in existing codes for cyphers, read intelligibly, is thus avoided, and that the compilation having been made under the personal supervision of telegraphic experts of long experience, the cypher words are, from their telegraphic construction, the least liable to erroneous transmission by the operators. The cypher words are arranged alphabetically, and the phrases are likewise so arranged, having regard to what is in each the principal or key-word. There are some 120 phrases under the heading "health," which will be found useful as a means of conveying, economically and rapidly, to anxious friends at a distance the doctor's report on the state of the patient's health. At the end of the book is added a selection of cypher words which will never be included in the "Unicode" for permanent use with any specific phrases, but are intended only for private phrases to be arranged specially between individual correspondents. These, we think, might be made very serviceable to the busy practitioner. The employment of Latin words has in the "health" section occasionally rather an odd effect; for instance, the phrase "taken ill" is represented by the cypher word "dysuria"; "attack is considered not serious" by "diploma"; whilst "femur" means "very much better."

THE SUPPLY OF THE PROFESSION.

SIR LYON PLAYFAIR is not the only public man who has had exaggerated fears of not being able to fill the ranks of the profession. Accordingly we feel it our constant duty to keep our eye on the supplies, and we are bound to say that they are more than enough to meet the natural waste, and that they who enter the medical profession of the United Kingdom must reckon on entering a somewhat overstocked profession. The average annual deaths of registered medical men for ten years past have been 585, and the average annual number of additions to the Medical Register has been 1135, giving an annual excess of 550, which, after all further possible deductions, leaves a sure addition to the excess of the profession. The average annual number of medical men added to the Register in the last three years was no less than 1356. The same conclusions may be reached by studying an interesting return which is carefully prepared annually by the Registrar of the Medical Council—the "Medical Student's Register." From this we find that 1884 medical students were registered last year in the United Kingdom—910 in England 639 in Scotland, and 335 in Ireland. The tables and statistics of this Register, and other information it contains, are well worthy of study at the present time, when our legislators are invited to deal very superficially with the reform of our educational and examining system. Two things may be studied here: first, the quarters to which our students repair to pass those preliminary examinations which must be passed prior to the commencement of medical studies; and secondly, the medical schools which they favour for acquiring that education and those qualifications which are to fit them for their future profession. We have made a selection of the chief Preliminary Examinations, and state the number of students registered in 1885 on the strength of having passed them. Giving only the Preliminary Examinations, which were passed by thirty or more students, the facts are as follows:—

College of Preceptors	417
University of London Matriculation	181
University of Edinburgh Preliminary... ...	169
Royal College of Surgeons in Ireland	163
University of Glasgow Preliminary	155
Royal University of Ireland Matriculation ...	126
University of Aberdeen Preliminary	76
Royal College of Physicians & Surgeons, Edin.	70
Cambridge Previous	66
Apothecaries' Society, London	62
Faculty of Physicians and Surgeons, Glasgow.	45
Cambridge Junior Local	43

Only 53 entered the profession with the Arts Degree of any of the universities of the country.

The Medical Schools at which students entered (counting only those Schools with entries above 20) were as follows:—

University of Edinburgh	265
University of Glasgow	164
University of Cambridge...	90
University of Aberdeen	88
St. Bartholomew's Hospital, London	88
St. Thomas's Hospital, London	50
Carmichael Medical College, Dublin	50
Owens College, Manchester	49
Queen's College, Cork	49
Queen's College, Belfast	46
London Hospital	45
Guy's Hospital, London	41
University College, London	39
King's College, London	34
St. Mary's Hospital, London	32
Edinburgh (Extra-Academical Teaching) ...	32
University College, Liverpool	30
School of Physic, Ireland	30
Royal College of Surgeons in Ireland	28
Ledwich Medical School, Dublin	27
Charing-cross Hospital, London	25
Catholic University Medical School, Dublin ...	25
Yorkshire College Medical School	24
Westminster Hospital, London...	21
Bristol Medical School	20

The old method of commencing medical studies by pupilage with a medical practitioner is for the time being in some abeyance, but it is still recognised in the Regulations of the Council, and has been followed in England by 188 gentlemen, the names of whose masters appears in this Register; in Scotland by 11 gentlemen, in Ireland by 31.

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THE LANCET.

LONDON: SATURDAY, MAY 1, 1886.

IT is a noticeable fact, and as far as we remember an unprecedented one, that though a Medical Bill is before Parliament there is no sign of a meeting of the Medical Council. On all previous occasions this body has felt called upon to discuss the nature of such Bills, and even to make recommendations. On some occasions this has been done when there was less reason for such a proceeding than at present. But now when a Bill is before the House subordinating the Medical Council to an unprecedented extent to the Privy Council—in other words, compromising the independent government of the profession—the Medical Council gives no sign. There are also nine or ten medical corporations in the country, whose boast it is that they are the guardians of the interests and the honour of the profession. We do not hear that as yet they have made any communication to the Government indicating that in their opinion the profession is still capable of self-government, and that a Medical Council could easily be devised to which full powers might be extended of maintaining the standards not only of ordinary medical qualification but of medical graduation, and of punishing bodies which are unfaithful to their trust as ordinary examining bodies, or which deal in high titles and low examinations. The fact that Sir LYON PLAYFAIR thinks it necessary to introduce the Privy Council into his Bill between forty and fifty times is about the most damaging fact to the existing authorities, and to the system of twenty rival and competing examining bodies, which we can imagine. The obvious cure for this is to reduce the number of examining bodies and to abolish the system which allows most of them to send a separate representative to the Medical Council. Such were the main recommendations of the Royal Commission on the Medical Acts, composed of the most authoritative public men. Such have been the chief points aimed at by medical reformers for fifteen or sixteen years back. Yet the Bill which is before Parliament practically leaves things as they are. It may be said that there is a provision for recognising, if not securing, the decay of bodies that have outlived their *raison d'être*. So there is. But there is a counter provision for maintaining such bodies in perpetuity. For example, it cannot be doubted that we could most easily dispense with a corporation in each division of the kingdom, and that the Royal Colleges could amply do all the ordinary work required of medical corporations. In England, certainly, the Colleges have determined to leave out in the cold the Apothecaries' Society. But the Medical Bill has not even the courage of its immediate predecessor. It cannot disestablish the Apothecaries' Society. It provides in Clause 5 that in case a medical corporation represents to the Medical Council that it is unable to enter a conjoint scheme, the Medical Council may, of course subject to the Privy Council, appoint any number of examiners to assist at the examinations, and enable it to grant a diploma in all branches, and the right of registration under the Medical Acts. So that one of the possible results of the new Bill, if it becomes law, may be that we shall see the Apothecaries' Company with a few assessors appointed by the Medical Council, and a diploma of one-third the cost of that of the conjoint Colleges, competing with the Royal Colleges of England. Or we may see each corporation in the three divisions asking for the co-operation of the Medical Council for making its diploma complete and continuing the present rivalry of twenty bodies. Another defect of this Bill is that it does not make any attempt to deal more stringently with the great evil for unqualified practice. But in the present Medical Bill no attempt is made to amend the penal clauses of the Act of 1858.

We shall be told that this Bill concedes Direct Representation, and ought to be gratefully received by the profession. It is high time the profession was represented in a Council which it entirely maintains, which has the judicial power of erasing names from the Medical Register, and which, finally, has often shown the want of members familiar with the educational needs of the medical practitioner. But we cannot admit that the addition of four direct representatives to a Council already so big, and so bad in its constitution, will do any adequate good. The Bill is meant to please everybody, and, like all such Bills, it is weak and nearly worthless. It remains to be seen whether the medical members of the House will apply any adequate criticism to the measure, or whether it is to pass like so many other timid and powerless Bills. There are members of the profession in the House who could rise above party or corporation standpoints. The Bill does not pretend to give any power to the Medical Council in the matter of the standards for medical *graduation*, which, as well as the standards of mere competence, are of great consequence to the public and the profession. Without such provisions we may see a general levelling downwards of all the examinations and the degradation of medical graduation.

THE Gulstonian Lectures of the present year covered very wide ground, and touched on most of the problems that the motor side of the nervous system presents for consideration. The motor area of the brain with its appendages, and the similar apparatus of the spinal cord, possess a potentiality for spasmodic disorder which Dr. SHARKEY certainly did not over-estimate. The spastic states that result from disease of the all-important pyramidal tracts have received of late years so much clinical and pathological illustration, that we seem in regard to them to have really acquired some definiteness of information. The production of involuntary or spontaneous movements is an etiological subject which, though in a measure the exact antithesis of that of paralysis, nevertheless cannot profitably be studied apart; for the tendency of all ancient and modern research, both experimental and clinical, is to demonstrate that the two seemingly opposite states are dependent on one and the same morbid process. This notion has been variously expressed by different authorities at different times and in accordance with various circumstances, but none of the expressions appear to us to be more illustrative than that, we believe, of Dr. BROADBENT: Movements are half-way houses to

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paralysis. The old authors' phrase, "irritable weakness," could not have been understood by them so thoroughly as by us, for we have the light of modern physiology to aid our conceptions, but the phrase contains the same germ of truth. The external manifestations of kinetic energy, far from being signs indicative of great potential powers, may be regarded as evidences of an internal instability of molecular processes, from "whose mouths the bits" can be too readily disengaged.

In the region of movements, physicians, like all physiologists, have long distinguished between the apparently continuous muscular contraction and the evidently intermittent spasm, to which the terms "tonic" and "clonic" are respectively applied. Whether there is any essential internal difference between the two forms of spasm is a question that still remains unanswered. It is possible that the problem may be solved in two opposite directions, in accordance with possible differences in the cerebral and spinal motor apparatus. The motor discharging elements of the spinal cord may conceivably emit their energy in a practically continuous fashion, as we may assume they do in the maintenance of normal muscular tone; but such a constant liberation of energy would not harmonise completely with all that we know of the mode of discharge of motor nerve elements; and we have in the phenomenon of tetanus a continuous muscular contraction that is well known to be maintained by regularly interrupted impulses. Further, SCHAEFER and HORSLEY have formulated a law to the effect that nerve motors have a normal rate of discharge of about 8 (or some multiple thereof) per second.

Dr. SHARKEY believes that the chief offender in the production of spasm or any variety of abnormal movement is the pyramidal tract, which includes the cerebral motor centres and their downward paths. On Dr. SHARKEY'S teaching—and we confess to a sympathy therewith,—if the practitioner comes upon a case of tremor, tonic spasm, clonic spasm, coördinated involuntary movements, or tetanic seizures, the chances are that the cerebral motor or pyramidal tract rules the situation—is the etiological master of the morbid phenomena. It is worth while for a moment to ask what all this amounts to. At first sight it might not appear to be a great assertion to make. But a little reflection alters the apparent aspect, and discloses a generalisation which might have been a truism were it not for the fact that so many other explanations have been offered concerning the production of "involuntary," or, as we prefer to say, "spontaneous," movements. A superficial thinker might say: "You assert that all, or nearly all, movements are the result of some disturbance of the pyramidal tracts. Well, there is nothing novel or startling in that, for we have for some time known that there is a motor apparatus in the brain, and if the movements do not originate in that, where should they be initiated?" Carrying this train of thought a little further, such a one would urge that it does not matter whether the impulse is a normal one (the will and ordinary automatism), or an abnormal stimulation, such as hæmorrhage, sclerosis, tremor, and the like. The production of normal movements is probably a question of inhibition. The "way out" of cerebral impulses through the motor area and pyramidal tract may be regarded as the path along which inhibitory impulses go to the spinal motor centres and set free normal movements which are there "represented." It is probable that the causes of disease act in a similar though irregular manner; they "let go" in a disorderly fashion the spinal motor centres, and so, to use Dr. HUGHLINGS JACKSON'S words, we have a "permitted hyper-physiological activity." But if Dr. SHARKEY'S views are correct—and we must confess that with certain qualifications we are disposed to accept them—they have been extricated from much entanglement by his own clear, steady, and judicious intellect. Let us look into this matter a little more closely. Dr. HUGHLINGS JACKSON believes that cerebral rigidity is due to unopposed cerebellar influence, and that cerebellar rigidity, tetanus, and tetanic seizures in cerebellar disease are the outcome of unantagonised cerebral influence. The spinal motor centres are coördinately innervated from the two regions, cerebellum and cerebrum. Dr. SHARKEY has examined this view, and does not appear to share in it. He points out, as Dr. HUGHLINGS JACKSON has truly observed, that the tetanic seizures of cerebellar disease only, in general, accompany tumours of the middle lobe of that organ, and this apparently only when the tumour is large enough or hard enough to press on the pons and medulla. If this fact be granted, then it is plain that the convulsive seizures can, according to all that we at present know, only be caused by an irritation of the grey matter of that region or by some interruption or damage to the pyramidal tracts. Dr. SHARKEY inclines to the latter view. The convulsive centre of NOTHNAGEL lends a kind of support to the former. But what shall we say when a tumour situate below the medulla oblongata is associated with similar tetanic seizures? It must be admitted, with but slight precautionary reservation, that the pressure or damage to the pyramidal tracts is the cause of them. This explanation is not, however, the whole matter. In the early stages of tumours of the middle lobe of the cerebellum tremors with paresis may be observed. The lecturer suggested that the mechanism of their production is identical, and differs but in degree from that of the causation of rigidity or tetanic seizures. If the pressure on or damage to the pyramidal tracts be slight, we should expect a mere interruption, or an imperfect passage of normal impulses to spinal motor centres, and so tremors would result; a further degree of pressure or damage would lead to permanent rigidity; and if the pressure or damage were liable to variations, tetanic paroxysms might result. The theory is ingenious, is simple, and must be admitted harmonises with ascertained facts. To sum up, we may assert that any organic disease of the cerebral motor area and pyramidal tract, provided it damage the essential protoplasmic elements, will give rise to some form of spasm. Cases of congenital absence of motor convolutions, where the pyramidal tract does not develop, support the view that it is not a question of irritation by sclerosing processes, but rather a "letting go" of the spinal motor centres, a removal of inhibition, a permitted hyper-physiological activity of the spinal motor centres. It has been argued that if this were the real mechanism of rigidity, then any sudden rupture of the pyramidal tract should be immediately followed by rigidity. But apart from the fact that the rigidity has

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occasionally been observed to come on very rapidly, Dr. SHARKEY suggests that the spinal motors, long accustomed to restraining influences, may take some time to get rid of their organic memories, and this is a process that would require time, during which the centres are gradually relieved from the burden of their former masters. We know that usually an increase in the knee-jerks precedes, as also does the phenomenon of ankle-clonus, the appearance of rigidity in most cases of hemiplegia due to rupture of pyramidal fibres. But there may be other plausible explanations. For example, it may be that the hæmorrhage causing hemiplegia replaces for a time in an imperfect manner, by stimulating or irritating the divided ends of the pyramidal fibres, the restraining influence of the motor centres. And it is certain that in some forms of disease of the pyramidal tracts deep reflexes are not at first increased, but rather diminished. Here we might suppose that some influence is exerted on the pyramidal tracts that does more than replace the normal inhibition—in fact, constitutes a more powerful restraint. Another interesting matter touched on was the precise meaning of increase in the knee-jerk, the explanation that he and others hold being that reflexes from tendons and muscles may have a period of latency much shorter than ordinary reflex actions. Another point referred to in the lectures was the possibility of the production of spasm from disorder of the spinal motor apparatus, including its afferent and efferent nerves. Most physicians will probably agree with the lecturer in thinking that mere irritation of the afferent nerve is an infrequent cause of spasm; the centre itself either is or soon becomes under the influence of afferent stimulation, in a state of over-activity. Again, although physiologically it is easy to understand that various kinds of stimulation of the peripheral motor nerves may produce spasm, yet pathologically this process does not appear to be of very common occurrence. The subject of functional spasm is one of the greatest interest, and in the progress of civilisation likely to become still more important; for as civilisation advances the motor as well as the sensory processes of the cerebral, as opposed to the spinal apparatus, become more and more developed and strained. In this relation the connexion between hysteria and neurasthenia naturally arises, at least in regard to the motor disorders which are described under these names. Let us look with Dr. SHARKEY once again at the pyramidal tracts, and contemplate the possibilities of their "functional" disease. It is not unreasonable to suppose that under various conditions, which need not here be specified, the nutrition of the pyramidal tracts, including their motor centres, may be lowered or disordered. Hence the various neurotic and hysterical spasms. There is another department of this question that also requires elucidation. The motor cells in the cerebral cortex govern the nutrition of the axis cylinders composing the essential part of the pyramidal tracts; are we to believe that the nutrition of these fibres is equally well provided for throughout their whole extent? Is it not possible, as Dr. GOWERS implied in his address read before the Medical Society of London, at their very terminations, being remote from the centres of nutritional energisation, are more liable to functional derangement? This view was the one Dr. GOWERS adopted in the explanation of hysterical spastic paraplegia and the like. These terminations of the pyramidal tracts are his local inhibitory centres. But truly the subject is inexhaustible, and we must take leave of the present successful Gulstonian lectures by drawing attention to the comprehensive view of Dr. SHARKEY that organic as well as functional disease of the pyramidal tracts is the chief cause of spasm from chronic nerve disease.

OF late years there have been many schemes for the sanitary improvement of dwelling-houses. Some have been accepted as worthy of serious consideration, others have not been regarded as coming within the scope of practical egislation, but they are all nevertheless signs of a growing feeling that houses which are intended as dwelling-places for human beings should be so constructed as to afford reasonable opportunities for the enjoyment of health by their inmates. This was particularly shown by the Housing of the Working Classes Bill, which proposed to extend to unfurnished houses the provision which already relates to furnished houses—namely, that there should be an implied warranty that such houses, when let, are fit for habitation. It is true that this clause did not become law, but nevertheless it was accepted so far as relates to certain houses occupied by persons of the working classes. There is not much probability that these people will, without assistance, avail themselves of the opportunity this Act affords for obtaining compensation when their health has suffered from the condition of the house which they have rented, but the recognition by the Legislature of the principle embodied in the Act is one of the most important of recent advances in sanitary law.

Certain enthusiastic sanitary reformers desire to go much beyond this point, and it has even been suggested that every dwelling-house and other building shall be certified as to its proper sanitary condition, and that the duty of procuring such certificate should be imposed upon the owner or occupier. Such is the proposal of Mr. MARK JUDGE, who has even gone so far as to shape his ideas in the form of a Bill. We doubt much if such a suggestion will be seriously entertained; it has only to be recollected that there are in England and Wales upwards of five million dwelling-houses apart from other buildings, and that the cost of obtaining a certificate would probably not be less on an average than one or two guineas for each house, to show the practical impossibility of such a scheme. It is difficult to estimate what expenses would be incurred in the improvement of houses for which a certificate could not be obtained without alterations, but it is obvious the sum of money needed for the purpose would be a serious obstacle to the acceptance of such a measure. It might, too, be objected that it is unfair to mulct the owner of a house in good sanitary condition in the expense of obtaining a certificate which for him can serve no good purpose; under these circumstances it is the surveyor rather than the householder who would be benefited.

There is nevertheless very much need for the more active enforcement of the law with regard to newly built houses, and this is particularly noticeable in the metropolis, where considerable legislative powers have been conferred upon the vestries and upon the Metropolitan Board of Works. It

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is no exaggeration to say that, with few exceptions, these bodies do not concern themselves to any greater extent with the drainage of a house than to see that the house drain has a communication with the sewer, yet the vestries have since 1855 had full powers to order the drainage to be made in such direction, manner, and form, and of such materials and workmanship, as the vestry shall order. As a result of this negligence drains are laid which leak at the joints and saturate the soil with sewage, no provision whatever is made for their ventilation, and apparatus is daily introduced into London houses which local authorities are urged to prohibit by the model bye-laws of the Local Government Board.

But all the fault does not lie at the door of local authorities. If amusement is legitimate in regard to conditions so deplorable, a paper by Mr. FRANCIS VACHER, the medical officer of health for Birkenhead, will supply it. Mr. VACHER gives an instructive account of examples of negligence and ignorance in the work done by artisans belonging to the building trades. It is a paper we would commend especially to working men, for the writer clearly shows that the artisan is no less a sufferer than the employer for whom he works, or than the occupier of the unhealthy house he has assisted to build. Mr. VACHER pleads for the better supervision of buildings by local authorities and their officers, and recommends the adoption of a course which would enable the uninitiated householder to protect himself by the employment of skilled workpeople. He would open in every centre of population a register which should contain the names of those workpeople who were known to the guilds of their trade to be properly qualified. The Plumbers' Company have resolved to establish "a system of registration in the City of London and seven miles thereof," and a register for qualified plumbers was opened on March 1st. Londoners at any rate will shortly be able to know to whom to trust their plumbing, and it may be hoped that other trades will follow the example which is set them, and that it will at last be possible to ensure that money spent on sanitary improvements will be laid out to the best advantage. The increased liability of landlords for the condition of the premises which they let renders it imperative that they should, in their own defence, employ those who may be trusted to preserve them from actions for damages, and will make the enforcement of sanitary law more acceptable to that numerous class of property owners who now influence local authorities.

Two very interesting cases of Bullet Wounds of the Brain successfully dealt with by operation have been recently reported by American surgeons. The first and more important is reported by Dr. FLÜHRER, one of the visiting surgeons to the Bellevue Hospital, New York. A young man, nineteen years of age, was admitted under his care for a bullet wound over the centre of the forehead. The injury was self-inflicted, and was immediately followed by unconsciousness, which lasted for three-quarters of an hour, after which the patient rose and walked some distance; then he became aphasic, and on admission to the hospital, soon after, was semi-conscious, having paralysis of the right side of the trunk and right limbs, and hyperæsthesia on the left side. After all preparations had been made to conduct the operation aseptically, the scalp was turned aside and the opening in the skull enlarged. Profuse hæmorrhage ensued; this was partly from the superior longitudinal sinus and easily controlled, and partly from a wounded branch of the anterior cerebral artery, the securing of which entailed great trouble, and was only achieved after the loss of a considerable amount of blood. The next step was to explore the track of the bullet through the brain by means of a large probe. The ragged opening of the entrance of the bullet was seen in the first frontal convolution, just at the inner edge of the hemisphere. The probe passed back and slightly to the left for about six inches, when a soft resistance was detected. With the probe *in situ*, a spot was marked on the scalp where its end would emerge if projected. Over this spot the scalp was reflected and the skull trephined. The dura mater, which was entire, was incised, and a little dark blood beneath it allowed to flow out. The opening in the skull and dura mater was enlarged in the supposed direction of the bullet until the finger could be passed in. A slight resistance was then felt in the brain. Instead of exploring this, more of the skull was cut away until a rent in the pia mater was exposed, with a quantity of torn brain-matter lying over it. Into this opening a probe was passed, which struck the bullet at the depth of an inch, and with small dissecting forceps this was then removed. Subsequently the probe could be passed quite through the brain from the anterior to the posterior wound, and into this tract a drainage-tube was passed. The entire operation lasted "about four hours." The subsequent history of the patient may be briefly summarised. A hernia cerebri developed at each wound, but neither of them grew fast or extended rapidly, and eventually both shrank; the wounds healed up, and the patient was restored to health. The right-sided paralysis and the aphasia passed off, and the man resumed his work in a butcher's shop. Subsequently he received a severe blow upon the anterior scar, felt acute pain, and then noticed spasm of the flexor muscles of the right arm and leg, which spread over to the left side. These symptoms recurred once. Under the influence of bromide of potassium the patient had remained free from any bad symptoms for fifteen months at the time when the report of the case was published.

Dr. FLÜHRER founded the treatment he pursued in this case upon the well-known fact that bullets entering the brain very frequently traverse it, and glance off again from the interior of the skull. He therefore advises that when a bullet is known to have entered deeply into the brain, the line of its track should be marked by carefully introducing a probe, and that the skull should be trephined at the spot where the ball will have struck it on the interior; from this second aperture the deflected course of the bullet can be easily traced, and through it the bullet can be extracted. The suggestion is a bold one, and without such a success as Dr. FLÜHRER achieved in the first case in which he practised it, surgeons would probably long hesitate before adopting it. It rests, however, upon a solid basis of fact, and, further than that, the double opening in the cranium is of great advantage in enablir the surgeon to have thorough drainage of his wound

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very important consideration. Unfortunately the effects of a bullet wound of the brain vary within wide limits, not only with the region injured, but with the number and size of the vessels torn across. In many cases the condition is complicated with severe internal hæmorrhage. Where, however, there is no reason to suspect this, and the case appears to be uncomplicated, Dr. FLÜHRER'S suggestion is well worthy of the fullest consideration. Cerebral surgery is in its infancy; the results already attained have shown that it would not be wise at present to set any limits to its development, and we may therefore hope that even penetrating bullet wounds of the brain may prove to be amenable to surgical measures.

The second case to which we would allude is recorded by Dr. C. F. MACDONALD in the April number of the *International Medical Journal*. The patient was a convict who had received a bullet wound of the skull three or four years previously, and had become insane. A scar over a depressed fracture of the skull was detected 1¾ in. above the edge of the hairy scalp and ⅜ in. to the right of the median line, over the right first frontal gyrus, at the junction of its anterior and middle thirds. Pressure upon this spot caused intense pain and "violent bodily agitation." It was determined to explore the seat of this injury, and for this purpose the scalp was reflected, when an aperture in the skull was found, closed over by firm membrane; through this a hypodermic needle was passed in four directions, and on the last occasion clear serous fluid rose into the syringe, and in this way nearly two drachms of the fluid were withdrawn. The wound was then closed. In less than three hours after the operation the man was able to give a clear account of the injury and of his subsequent career, and all symptoms of insanity had vanished. From this time he advanced to complete recovery. Dr. MACDONALD considers that the fluid was contained in a simple serous cyst, as it did not contain any evidence of hydatids or of old hæmorrhagic or inflammatory effusions. Unfortunately the pathology of cysts of the brain is quite obscure. The case, however, is a great encouragement to interfere surgically where cerebral symptoms supervene upon a head injury, even although years may have elapsed.

"ALL work and no play maketh Jack a dull boy"; and yet if Jack be not constitutionally bright and resilient in his temperament he can make very little use of an occasional and brief holiday. Theoretically it is good to stop the machinery now and again and give its bearings time to cool down; but practically this stopping the works and setting them going again takes a great deal out of the apparatus in the way of additional friction. Who among us does not feel so much upset and thrown out of his swing by the enforced holiday—which is just long enough to break the rhythm without being sufficiently long to give a lasting sense of relief—that he sometimes doubts whether the one or two days' respite from routine work is not too dearly bought, when all the trouble and worry of preparing for it, and afterwards making compensation for the delay or neglect of daily duties, are taken into account?

The value of a holiday ought to be estimated on the basis of what it actually does for the worker. Is he the better for it in mind and body a while after it has been enjoyed? We have always contended that public holidays which involve the conversion of our cities into places apparently deserted are mistakes. If Sir JOHN LUBBOCK had only contented himself with bringing in a Bill to compel employers to give their servants a fixed number of days in the year for leisure and enjoyment without specifying the particular days to be observed, he would have conferred a boon on the community of serving folk of all classes without needlessly increasing the number of dead points to be overcome by extraordinary efforts. As it was, we had fifty-four breaks in the annual routine of business-life among Englishmen, and it may have been scarcely worth while to add to the number, particularly as it was, is, and we presume ever will be, foreign to the spirit of English Rule—albeit that is becoming each year increasingly *paternal*—to provide anything in the shape of public entertainment for the people. It is, however, useless to regret what has been done in the matter of Bank Holidays. That their institution was well-intentioned no one for a moment questions; our only doubt is whether the benevolent idea might not have been less inconveniently and more effectively carried out.

For the relief, even momentary though it be, of minds jaded with the monotony or wearied with the tension of daily work, and of bodies aching for the repose of certain groups of muscles, holidays doubtless have their direct advantages. Their chief value is meanwhile probably collateral. They afford opportunities for the stimulation of fresh cerebral centres by diversion of thought, the use of other groups of muscles than those habitually exercised, and in many instances an excursion among new surroundings, which may refresh the sense organs and supply the thinking part with additional material, brought before it in the pleasantest of all ways, by observation and experience. There is also something gained by fresh air and travel, hurried though it be. Physically and psychically, the holiday may be made to fulfil a useful purpose if only it be wisely used. We are not of those who conceive that life must needs be one long strain of duty. There may very properly be seasons of relaxation; or, to put the same remark in other words, the day's duty may, occasionally at least, consist in duty to self—that is, the higher, inner, and true self. Unfortunately there is nothing English men and women so little understand as how to "enjoy themselves." Children have the advantage of us in this respect. The art of *playing* is lost before the average mortal attains to middle age. Perhaps the very wisest and best thing to do would be to make these holidays children's days: to refer the whole question of holiday-making to a committee of young people, none of whom should be over twelve years of age, and to surrender for the particular period determined by the "holiday" the disposal of time and the selection of ways and means to those with whom "enjoyment" is an integral part of existence, and whose birthright it is to be able to make merry without wantonly sinning against light and conscience. Father and Mother Multitude might not altogether like the *vice versâ* experience of being subjected to the tyranny of their own children; but the adverse position would not be a permanent one; and we are disposed to think that, except in such specialties as "hard-bake" and "tip-cat"—which exacting and perilous amusements might be eschewed,—the gain to health of body and mind from a good round of playing and sight-seeing such

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as any well-constituted child mind would devise would be greater than that secured by the majority of our adult schemes and conceptions.

Everything depends on the use made of the holiday, and to this condition attention needs to be more than commonly directed. Speaking generally, we should say that the very smallest practicable amount of good is actually got out of these holidays by the majority of the population. The state of the streets shows only too obviously how large a proportion lose rather than gain by the cessation of labour. The enjoyment of a holiday presupposes a certain capacity for utilising leisure which probably can only be developed by experience. Perhaps in the next generation English men and women may have come to possess the essentials for this self-help in the task of recreation. Meanwhile something may be accomplished by the serious consideration of a business which certainly requires an apprenticeship—that of "being happy." We sometimes regret that there is so little happiness in life. Depend upon it, there is just as much as we ourselves put in, and not a particle more. Those who would find the world a place of peace, and health, and happiness for body and mind must themselves make it so.

Annotations.

"Ne quid nimis."

THE SANITARY CONDITION OF CLERKENWELL.

MR. JOHN HAMER, the Honorary Secretary to the Mansion House Council on the Dwellings of the People, has addressed to the editor of *The Times* a letter which strongly supports the opinion we have ourselves expressed, that the inquiries now being held by Mr. Cubitt Nichols in no sense properly fulfil the intentions of the Royal Commission on the housing of the working classes, when they recommended that a sanitary survey should be made of the different metropolitan districts. Mr. Hamer points out that Mr. Nichols admits "the almost literal accuracy of the complaints made by the Council with regard to 464 premises" which came under their notice as the result of a month's inspection. Mr. Nichols appears to have extended his own inspection only to some fourteen more houses, and yet upon facts like these Mr. Nichols reports to the Home Office respecting the parish with its 7825 uninspected houses, and with its 475—the only ones challenged—found to be bad, "I do not consider the parish to be in a bad sanitary condition." We have no hesitation in stating that we believe if a report had been presented to the Local Government Board by any of its medical inspectors which had not more reason for the conclusions which it contained, it would not have been accepted by that Board. The fact is but too evident that the meaning of the words "sanitary survey" has not been appreciated. The duties and powers of the vestry do not appear to have been sufficiently considered or understood, for the report does not go far beyond an inquiry into the question whether certain statements emanating from the Mansion House Council are well founded. We have already expressed our appreciation of the work which this Council has done, but we cannot acknowledge that any inspection a voluntary association may undertake ought to be permitted to replace the detailed inquiry which should be made by an inspector of the Government. The government of London is too complex to be immediately understood, and in all probability the failure we have indicated is due to this circumstance. In another column we have referred to the powers the vestries possess to ensure the proper drainage of new houses. Have these powers, we would ask, been exercised by the vestry of Clerkenwell? There does not appear to be a single line in Mr. Nichols' report which gives any information on this all-important subject. It would be possible to show, in regard to a number of other points, the insufficiency of the inquiry, and we cannot but regret the loss of an excellent opportunity for learning with thoroughness the sanitary condition of London and the administrative capacity of its local authorities. That the inquiry will be of service we do not doubt, but we fear that the good it will do will be limited to the time any district is the subject of observation; and certainly, so far as we understand the intention of the Royal Commission, a golden opportunity is being lost.

THE SEASONAL PREVALENCE OF PNEUMONIA.

WE are indebted to Dr. Seibert of New York for having more than once directed attention to the close relation existing between those meteorological conditions which favour catarrhal affections and the occurrence of acute (fibrinous) pneumonia. At the present day, when the specific nature of this disease is receiving so much confirmation, it is especially useful to have the question viewed from another side. In his latest contribution to the subject (*Berl. Klin. Wochenschr.*, 1886, No. 17), Dr. Seibert affords conclusive evidence of the above-named connexion. His material was obtained by a collective investigation of returns furnished by members of the New York Medical Society, from March 1st, 1884, to March 1st, 1885. They comprise 768 cases of primary pneumonia, distributed in the various months as follows: January, 71; February, 140; March, 103; April, 73; May, 55; June, 37; July, 26; August, 25; September, 43; October, 62; November, 65; December, 78. A comparison with the average temperature of these months shows a striking correspondence between the lowness of temperature and prevalence of pneumonia; and a similar correspondence is manifested with respect to rainfall, except in the summer months, when, in spite of great humidity, there was a minimum of pneumonia. It is also shown that the prevalence of bronchial catarrh closely coincided with that of pneumonia. Dr. Seibert has not, however, been contented with these general monthly returns, but has placed side by side the results of daily meteorological observations and the date of occurrence of cases of pneumonia during each month of the year. The chart compiled from these data for the month of February will be found in his paper; and it is remarkable how closely the onset of pneumonia follows upon days in which there were combined low temperature, excessive humidity, and high winds. Without attempting to give examples of these relations, it must suffice here to allude to the conclusions at which Dr. Seibert arrives. These results are to the effect that the varying prevalence of the disease can be explained by certain meteorological states which favour its occurrence. These conditions are a low and falling temperature, an excessive and increasing humidity, and high winds. When any two of these factors concur, pneumonia prevails to a greater extent than when only one of the factors is present; whilst if all three factors are in operation, then pneumonia is exceptionally frequent, the frequency lasting as long as the meteorological conditions obtain. The same states of weather favour catarrh, and catarrh predisposes to pneumonia. That pneumonia is more prevalent in spring than in autumn is due partly to the greater liability to exposure after residence in hot and ill-ventilated rooms during the winter, as well as probably to the greater humidity of spring. Finally, the author does not wish it to be inferred that these meteorological conditions are the sole

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factors at work in exciting pneumonia; his opinion rather is that by exciting catarrh they render individuals more vulnerable, and susceptible to the influence of the pneumonic virus. In this way his observations can still be made to harmonise with the doctrine of the specific nature of pneumonia.

THE NEW ASYLUM FOR LUNATICS IN MIDDLESEX.

WE must disclaim the least thought of influencing the Middlesex magistrates. They are far too conscious of the worth of their own opinions to care a cent for ours. We have often tried to induce them to look at matters from a point of view even slightly different from that which they have elected to take, without even a suspicion of success. We doubt whether there exists a power which could, by the most stupendous exertion, convince a Middlesex magistrate against his will, and, if there be, we are perfectly certain the worthy magistrate so convinced would be of the same opinion still. Not even in matters strictly medical do the members of this remarkable and interesting board yield place to the doctors. What it takes ordinary mortals many years of hard study to master, comes to a Middlesex magistrate, the moment he is raised to the Bench, as by inspiration. Certain of their number have as good as told us this, and so impressed have we been that it has set us thinking whether a short way of settling the medical education question would not be to abolish all the colleges and schools, and simply move the Government to make additions to the Middlesex board every year as the public necessities called for new medical practitioners. This being so, we must apologise for the impertinence of suggesting that, as it is decreed that there shall be a fourth or fifth—we forget which it is—asylum for the insane in Middlesex, the entire novel enterprise of building a *hospital*, properly so-called, should be attempted, just to settle the economic question whether an institution specially designed for curative purposes would not, as we have so often contended, do incomparably more to save the ratepayers' money than the most commodious caravansera devoted to the safe custody and accommodation until death of as large a lot of mixed lunatics as can be decently crowded within its walls.

CEREBRO-SPINAL FEVER.

FOR the last few years the annual death-rate of the Nara Gaol has been unusually heavy. Nearly three-fourths of the deaths recorded every year have occurred during the cold season—from October to February. Dr. P. H. Dadachanjee has forwarded a pamphlet on this subject, pointing out the probable nature of the disease causing the excessive mortality. After examining the history of the epidemic, and inquiring into the causes, of which prominence was given to season, overcrowding, bad water-supply, unhealthy locality, and the hardships of gaol life, he discusses the symptoms, course, and treatment of the disease, and comes to the conclusion that it was cerebro-spinal fever, which generally occurred in two forms. In the rarer and more acute, usually called the explosive form (meningite foudroyante), the onset was very sudden, and the patient from the very first complained of intense general prostration. Intense headache, vertigo, and irrepressible vomiting of bilious matter, contracted pupils, bloodshot eyes, temperature about normal or not above 100·5°, pulse 130 to 150, and delirium, ending in coma and death in from thirty-six to forty-eight hours, were the chief symptoms. In the milder and more frequent form the disease ran a slower course. Rigors followed by headache, flushed face, and suffused conjunctivæ, with photophobia, were observed. There was some vomiting, pyrexia up to 103° and 105°, and delirium. In some cases the disease progressed slowly towards defervescence, so that convalescence began about the tenth day, though headache and occipital pain remained for some time. Rheumatic pains in the lower limbs, petechiæ, and spasmodic twitchings were observed occasionally. The death-rate was about 70 per cent. The necropsy showed signs of inflammation of the membranes of the brain and cord. In the explosive form intense congestion of membranes only was detected. In other cases lasting more than five days, lymph, not uniformly distributed, was discovered filling up the sulci between the convolutions, but usually more marked about the anterior lobe and base of the brain. In the spinal cord considerable exudation occupied the subarachnoid space.

THE PASTEUR COMMISSION.

THE Commission of Inquiry into the system carried out by M. Pasteur to prevent the development of hydrophobia, which has been appointed by the British Government, has now commenced its investigation. The Commission consists of Sir H. Roscoe, M.P., who moved for the appointment of the Commission in the House of Commons, Sir James Paget, F.R.S., Dr. Lauder Brunton, F.R.S., Dr. Burdon Sanderson, F.R.S., Dr. Quain, F.R.S., Principal Veterinary Surgeon G. Fleming, of the Army Veterinary Department, and Mr. Victor Horsley, F.R.C.S., of the Brown Institute, the latter acting as secretary to the Commission. Sir H. Roscoe, Drs. Brunton and Sanderson, and Mr. Horsley are now in Paris, and before long the British public may look forward to the issue of a report which will enable them to appreciate the value which properly attaches to the processes adopted by M. Pasteur. The composition of the Commission renders it quite unnecessary to indicate the nature of the evidence which should be sought for; but we may say that, so far, no reports which have come under our notice have given sufficient evidence that their compilers have eliminated the many sources of error which have to be dealt with before any trustworthy opinion can be expressed as to the methods carried out in Paris. An exhaustive and searching inquiry tending to such elimination is, above all things, that which is wanted.

A GALLANT DEATH.

UNDER the above heading a relative of the late Surgeon Joseph Heath, who fell during the operations in Upper Burmah, writes some interesting particulars to the *Newcastle Daily Leader*. Dr. Joseph Heath was well known and intimately connected with the North of England, and one of his last official acts before he went to India, and while stationed at York, was to go to Newcastle to inspect one of the city ambulance corps. The following account is given in the article above mentioned as to the particulars of his death. The Saignain Fort, of which Dr. Joseph Heath was in medical charge, having been repeatedly threatened by Dacoits, a force was, on Saturday, Jan. 9th, sent from Mandalay in a couple of river steamers to their relief. On account, however, of the shallowness of the water, the steamers could only land troops at a spot above the fort, about a mile; hence, on their arrival, a council of war was held to discuss plans of operation, and at its conclusion, about 4 P.M., Captain Smyth, Lieut. Armstrong, and Dr. Heath were ordered to proceed to the vessels, the mission of the latter being to consult about hospital carriage for the column. When about midway on their journey, the three were pounced upon by a couple of mounted Dacoits, armed with spears, and accompanied by fifteen or twenty followers on foot, armed with guns and dahs (swords). The Dacoits fired, and Lieut. Armstrong and Dr. Heath were wounded. Dr. Heath, however, kept the assailants at bay with his revolver, and then, managing to mount Lieut. Armstrong on his back, carried

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him along until he fell mortally struck by a second shot. Captain Smyth (the only one who escaped scot free) had then the unspeakable grief of being obliged to leave Dr. Heath's side, but managed to drag Lieut. Armstrong along until the troops, hearing the firing, came to his assistance, and the Dacoits fled. The writer further says: "That the three were allowed to leave the fort unattended when the surrounding country was known to be swarming with Dacoits is to us an impenetrable mystery, though on Dr. Heath, as a non-combatant officer, no blame for this can possibly rest." Poor Lieut. Armstrong, who was severely wounded in the face, succumbed in a few days. But one of his first acts after arriving at the hospital was to write on a scrap of paper in reference to Dr. Heath: "He was killed carrying me on his back."

MAMMARY FUNCTIONS OF THE SKIN IN LYING-IN WOMEN.

THE breast may be regarded as a highly specialised sebaceous gland, or, at least, as a highly specialised cutaneous gland. It may have developed out of the indefinite blastema of the epiblast, either directly or through the intermediary stage of a sebaceous gland. The distinction made by Dr. Creighton at the discussion of Dr. Champneys' paper on Tuesday last, at the Royal Medical and Chirurgical Society, will, in view of deeper embryological considerations, appear to be of not great importance. For it is plain that the glandular structures to which he referred must have originated from epiblastic germs, as the sebaceous, sweat, and mammary glands have also done. That a sebaceous gland is also a miniature breast must be regarded as theoretically proven from a chemical standpoint. Milk is a chemical compound in certain proportions of albumen, fat, and sugar, and analysis of sebaceous matter also yields fat and a small proportion of proteid and carbohydrate. Dr. Champneys' most careful and detailed description of the "axillary lumps" forms the result of an equally sedulous research, which, so far as is known, is unprecedented, and therefore original in the true sense of the word. The lumps that he described as situate in the axilla may for all practical purposes be regarded as mammæ. Their evolution follows step by step that of the mammary glands in parturient women, and there are some grounds for believing that they may be the seat of similar pathological affections. Further, Dr. John Williams bore testimony to the effect that, like the breast, the axillary lumps may show changes during menstruation.

ALCOHOL IN COLONIAL HOSPITALS.

THE great discussion on the use of alcohol in hospitals, for patients or officials, has extended to the colonies, and grows warmer at home. We have no objection to offer to this state of matters, so long as it is conceded that medical men are to be the judges of the necessity for it in patients. Other officials of hospitals must come to such terms as the hospital authorities and they can agree on. We should approve of the offer of an equivalent in money to all nurses, servants, &c. But whether a patient is to have alcohol must be decided by the same authority that decides whether he is to have quinine or bromide of potassium. While stoutly maintaining this point, we would urge on all hospital physicians and surgeons, as we have on private practitioners, that the responsibility of the prescription is great. If a man who has been abstemious comes into a hospital and finds that a great medical authority orders him a pint of stout a day or a few ounces of brandy, he is very apt to continue the use of the same when he leaves the hospital, and to think he has medical sanction for it. *A fortiori*, this would be the case of a man who was not abstemious. There is one other reason, and it is a very strong one—viz., that the attention of a large section of the public is strongly directed to this question, and that the existence of something like harmony of practice is desirable. A correspondent in the *New Zealand Times* gives the following as the expenditure per in-patient of the hospitals named. The information has been taken from the report of the Newcastle Board, the *United Kingdom Alliance News*, the Report of the Melbourne Hospital, and the return forwarded to the Wellington Hospital Committee: — Wellington Hospital, 14*s.* 10¾*d.*; St. George's Hospital, London, 4*s.* 8¼*d.*; Middlesex Hospital, London, 4*s.* 2*d.*; Melbourne Hospital, 3*s.* 8*d.*; Liverpool Southern Hospital, 3*s.* 4*d.*; University Hospital, London, 2*s.* 7¼*d.*; Queen's Hospital, Birmingham, 2*s.* 1*d.*; Southland Hospital, 1*s.* 6½*d.*; Edinburgh Hospital, 1*s.* 5*d.*; Westminster Hospital, London, 1*s.* 1*d.*; Manchester Infirmary, 9½*d.*; Leeds Hospital, 7½*d.* It will be gratifying to the English public to find that compared with New Zealand our English hospitals are extremely moderate. But the discrepancy between 4*s.* 8*d.* per head in St. George's Hospital and 1*s.* 1*d.* in the Westminster, or 7½*d.* in the Leeds Infirmary, is unseemly, and unlike the uniformity of science which we ook for now in therapeutics. We are sure that English physicians will treat this subject as a grave one, from both a moral and scientific point of view.

MICRO-ORGANISMS IN TYPHOID.

AFTER examining microscopically the bowel, mesenteric glands, spleen, liver, kidneys, lungs, heart, and brain in fourteen typhoid fever cases, Dr. Mirles of St. Petersburg concludes that the short bacilli of Eberth and Koch may, with great confidence, be accepted as always present in this disease, but that, in addition to this type of bacillus, colonies of three kinds must also be reckoned as characteristic of typhoid: 1. Small colonies in the deep layers of the intestine and in the walls of the capillaries of the heart muscle. 2. Medium-sized colonies of comma form. 3. Large ones of map-like shape, found especially in the mesenteric glands, the spleen, and in the substance of cerebral hemispheres. The author is inclined to agree with Klebs that some relation exists between the symptoms observed during life and the organs in which micro-organisms are found. In one case, for instance, where there had been violent and prolonged delirium, numbers of colonies of various sizes were seen in sections of the cerebral convolutions. He thinks also that the early development of cardiac weakness in uncomplicated cases of typhoid depends upon the existence of micro-organisms in the heart muscle, which are gathered in small colonies in the capillaries, and he suggests that it is much to be desired that careful observations should be made in typhoid of the exact condition of the pulse and of the sounds of the heart.

EPILEPTICS IN WORKHOUSES.

IT is much to be regretted that when the agitation about the sick in workhouses issued in Hardy's Act the retention of epileptics in workhouses was not altogether prohibited. Manifestly, they form a class of patients for whose safety the most effective provision ought to be made. The epileptic fit comes on too suddenly to admit of any precaution being taken by the sufferer for his own safety, and the insensibility which ensues is so profound that, as a recent deplorable occurrence at Falmouth unhappily shows only too forcibly, the victim may fall with his face on a fire and be actually burnt to death in that position, without power to move and probably without consciousness. To leave persons who are known to be subject to such seizures without protection is simply an act of barbarism. Another sort of protection is needed for those epileptics who, in the intervals of their fits, either just before or immediately after them, are liable to

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paroxysms of cerebral excitement, alternating with depression, in which they are prone to commit, with or without consciousness, deeds of violence to themselves or others. Obviously, persons afflicted with this terrible disease in either of its forms are not fit inmates for a workhouse. Nor, indeed, are they fit for an asylum for the insane. It would be sound policy, in an economic not less than a medical sense, to provide special institutions for epileptics in every county. Unhappily there are more than enough to fill a large building, which should be constructed and furnished with a particular view to their comfort, and, in such cases as admit of remedy, cure. We venture to think that good would result from the incentive to further efforts to grapple with this malady which would be created by the erection of hospitals for the reception of epileptics alone.

THE VOLUNTEER MEDICAL STAFF CORPS AT THE EASTER MANŒUVRES.

AT both Dover and Portsmouth the members of this corps took a prominent part during the march on Friday and Saturday and at the field-day on Monday. The main body of the corps went to Dover, where, under the direction of Surgeon H. R. O. Cross, Grenadier Guards, excellent opportunities were afforded for work. On Friday a section of a field hospital was pitched, dressing and collecting stations were formed, and stretcher-bearer parties sent in search of the wounded, &c. On Saturday the number of sick, owing to the heat and the long march, was very large. The five ambulance waggons were full, and the surgery waggons had to be used for sick transport. The cases met with were cardiac excitement, sunstroke, epileptiform seizures, diarrhœa, kicks from horses, blows from passing vehicles, and the like. A mule with litters on Friday and cacolets on Saturday did excellent work in reaching the top of the almost perpendicular downs. On Monday but few of the troops fell out, though one or two curious accidents occurred; amongst others, the impaction of a small pebble in the front of a man's thigh was the most odd. Dr. Hearn, Principal Medical Officer of Queensland, Australia, who was attached to the bearer company during the Easter manœuvres, extracted the pebble, which was lying at a depth of two inches from the surface. Three bearer companies marched past at Dover, with a mule and cacolets, five ambulance waggons, five water-carts, and two surgery waggons. The military critics pronounced the appearance of the corps to be smart and workman-like and the march past to be good. The Portsmouth company earned unqualified praise from all onlookers, both for its appearance and efficiency.

CHOLERA IN THE VENETIAN PROVINCE.

ROVIGO, Padua, and other districts of the Venetian province have for the last two years been visited with cholera of the Asiatic type, but only sporadically. That the disease has never acquired any great diffusion or intensity is ascribed by the sanitary authorities there to the vigilance with which they have put in practice the treatment recommended as long ago as 1836 by Dr. Namias of Venice, and carried out with unvarying success by Dr. Tunisi of Padua, in his capacity of medical officer with the Italian forces in the Crimea and in Sicily (*vide* THE LANCET, Oct. 10th, 1885, p. 694). That treatment, summarised in a few brief instructions by the Cavaliere Bianchi, prefect of Venice, and distributed throughout all the towns of the province, is, in substance, the following. Cholera has two periods, that of preliminary diarrhœa and that of the graver symptoms, vomiting, cramp, extinction of voice, suppression of urine, &c. The former is always curable, the latter rarely so. The moment cholera has appeared in a community, every family should be provided with a phial containing from ten to fifteen grammes of laudanum, of which, on the slightest suspicion of diarrhœa, fifteen or twenty drops should be taken every half-hour in a teaspoonful of water. After the fourth or fifth dose the diarrhœa either disappears or is so diminished that the dose may be reduced and taken at longer intervals. For adults the laudanum taken from first to last may amount to from four to six grammes. Of 200 cases of choleraic diarrhœa treated promptly in this way, Dr. Tunisi, during the cholera epidemic at Messina in 1867, did not lose one; while the only deaths occurred among those who did not apply the treatment till the preliminary stage had passed and the graver symptoms had set in. His little book "Cura Specifica del Cholera" (Vicenza, 1885) was widely distributed throughout Spain last year, and proved highly serviceable in the visited localities.

PERNICIOUS EFFECTS OF ILLEGAL DRUG-SELLING.

THE evils of "doctors dispensing" have frequently been pointed out, and general practitioners are ridiculed and looked down upon by their continental brethren for "keeping pharmacies." The plan has certain advantages, however, as may be seen by a paper in a Russian medical journal (*Russkaya Meditsina*, No. 13) by Dr. A. A. Okinchits, showing that in the provinces, even in the largest towns, people are in the habit of getting their doctors' prescriptions made up at "pharmaceutical stores," which are kept and worked by utterly unqualified persons, who may have served their apprenticeship to grocers or coal merchants, and are wholly ignorant of the nature and properties of the medicines they both prepare and dispense. This kind of dispensing is of course illegal, but the transgressors are so cautious and cunning that it is a very difficult matter to catch them. They frequently keep the more active drugs—that is, those which none but licensed pharmacists have the right to sell—labelled as totally different and innocuous substances, and so any police official who may come to inspect is led to suppose all is right; probably, too, a judicious "tip" would quickly remove his suspicions, even if aroused. Occasionally, however, some mistake occurs which cannot be entirely hushed up. A doctor having prescribed some sulphate of atropine for a patient to use as eye drops, and the prescription having been made up at one of these "pharmaceutical stores," kept by an unauthorised person, a child saw the lotion and drank it, but was none the worse, the fact being that the sham pharmacist, from motives either of knavery or ignorance, had sent plain water—as it happened, a very providential error. These illegal stores keep all the quacks and "witches," who practise on the credulity of the peasantry supplied with the powerful mercurial and other preparations they are accustomed to employ, so that they act as disseminators of poison to an incalculable extent, and it is time that some stringent methods for their suppression were resorted to.

THE PERIL AND PLAGUE OF NARCOTICS.

SCARCELY a week passes without some sad proof of the folly of a reckless or insufficiently careful use of narcotics. It is almost to be regretted that so many agents capable of producing mimic, or poisoned, sleep are known to the profession and to the public. It is now the exception, instead of the rule, to find a man or woman of middle age who is not more or less addicted to the abuse of morphia, chloral, bromide of potassium, or some one of the many sleep-inducers or pain-relievers which the nineteenth century has distinguished itself by evolving for the care and comfort of our less enduring and increasingly sensitive and excitable humanity. It is nothing to the purpose that the deleterious effects of these potent drugs, when taken habitually, even in

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small quantities, have been again and again exposed. Practitioners have, as we do not scruple to insist in and out of season, much responsibility for the growing fashion of taking narcotics or anodynes by mouth or hypodermically. It is so pleasantly facile to prescribe a remedy which is sure to give present relief, whatever may happen in the future; and those who have learnt to purchase unconsciousness or ease at what seems to be a very small price are only too ready to renew the experience when any fresh cause of sleeplessness or pain arises. Sooner or later some strong measure will need to be taken with the view of arresting this really serious "habit" of taking sedatives, which is extending its influence and gaining strength year by year. Meanwhile, we do very earnestly counsel our readers to refrain from having recourse to these drugs themselves, and to use their authority with patients in condemnation of a demoralising and disastrous practice. The victims of the abuse must not simply be counted by those who die of it, but by those who are left to drag out miserable lives, the victims of "cravings" and nameless and numberless sufferings, which morphia, chloral, bromide—now cocaine—and a host of insidious poisons, are the active agents in producing.

TESTIMONIALS.

WE all know that there are testimonials and testimonials. There is the routine formula, which is apt to be given almost promiscuously to all applicants, and which comes to be appraised at its true value. In a recent discussion at Southampton it was proposed to alter a rule which prohibits the appointment of physicians and surgeons to the Royal South Hants Infirmary unless they have resided three years in the town. The motion was carried by a small majority, but not by the necessary majority of two-thirds. In the course of the discussion and in opposing the motion, Dr. Lake spoke very slightingly of testimonials. "Speaking of the worthlessness of testimonials," he said: "A man of the reputation of Sir William Fergusson would sign anything—his own death warrant. He had been known to sign testimonials which students had written themselves." The report is from the *Hampshire Advertiser*. We cannot but believe that Dr. Lake is in error in this particular statement. But there is undoubtedly room for much more care and discrimination in giving testimonials, which are often given to persons on very inadequate knowledge of character and career.

THE NIGUA IN MEXICO.

SOME researches by Señor Donaciano Cano y Alcacio on the Nigua are noticed in the April number of the Mexican journal *El Observador Médico*. This insect, which is popularly known under various names (chigoe, chique, sikka, tunga, pique, &c., and scientifically as Ryncoprion penetrans and Pulex penetrans), has been referred by different entomologists to the Aptera, Hemiptera, and Diptera, according to the characters of which each took special note. Señor Cano believes that it is the male insect only which by its growth under the skin gives rise to the troublesome lesions which are due to the nigua, and which are sometimes followed by phagedænic ulcer, gangrene, or tetanus. The prophylactic measures consist in cleanliness, seeing to one's boots, examining the feet at night, and avoiding localities known to be infested by the insect. For poor people who cannot get proper coverings for their feet, and who may be obliged to frequent the nigua's habitats, he advises a turpentine application to the feet. The only treatment is to remove the animal. For this a large blunted needle is required. Care must be taken not to rupture the abdomen, which is the largest and most superficial portion of the body. This is sometimes partially adherent to the skin, and if so a little dissection must be practised, as in the case of wens. Often, however, either by pressure or with a little manipulation with the blunt needle, the insect can be very easily dislodged. At the commencement of the operation a dark liquid is generally seen spirting out like a fine spray from the animal. This is due to the irritation causing it to act on the defensive. The liquid may probably be of a fæcal nature. Where purulent collections exist, the cavities should be carefully and frequently washed out with antiseptic and insecticide solutions. At the Mexico Military Hospital a 1 per 1000 sublimate solution is first employed, and afterwards strong solutions of boracic acid. When there is gangrene Señor Montes de Oca wraps the part up in calcined gypsum, which arrests the offensive odour, limits the gangrene, and prevents the absorption of septic matters by the healthy tissues. The natives employ tobacco applications to the sores after getting rid of the insect, but this is not in any way necessary, and is liable to cause considerable inconvenience.

RISKS OF INTERMITTENT WATER-SUPPLY.

THE dangers of the intermittent system of water-supply to houses is well illustrated by an event which recently happened in Marylebone, and of which Mr. Wynter Blyth gives account in his last report. When the water was turned off by the water company's officer, a vacuum was created in the water main, and a quantity of coal gas which had escaped from a leak in the gas pipe in the ground was sucked in; when the water was again turned on, coal gas was delivered into the house with the water. In houses where the ground becomes saturated with filth by defective drainage, it is probably of no uncommon occurrence for the water to be polluted in the mains by filth of this nature. Coal gas is easily detected, but it would be quite possible for more dangerous gases to enter the main without recognition. The risk is most easily avoided by the adoption of the constant system of supply, but even constant service must be occasionally interrupted when necessity arises for the repair of water mains. The provision of a stop-cock to every house would go far to obviate this danger.

THE HISTORY OF THE GENEVA CONVENTION.

AT its first meeting on April 19th, the President of the Third Congress of the Italian Surgical Association conferred on the senator, Professor Palasciano, on Dr. G. Mazzoni, assistant in clinical surgery, and on Dr. Di Fede, of the Military Hospital in Rome, the prizes for the memoirs presented by them on this subject, the competition for which was announced at a meeting of the Association in April, 1883. These memoirs are designed to revindicate for Italy the honour of having been the first to suggest the humanitarian movement in aid of the wounded in war, a movement which culminated in the international treaty known as the Geneva Convention. It was the deplorable condition of the wounded in the Crimean and Italian campaigns that impelled Palasciano to propose at a meeting of the Accademia Pontaniana at Naples on April 28th, 1861, that an international treaty should be concluded for neutralising the sick and wounded in war, and for augmenting, without limit, the sanitary *personnel*. In June of the same year Arrault recommended, instead, that the sanitary *personnel* only should be neutralised; and in 1862, Henri Dunant of Geneva, in his attractive book, "Un Souvenir de Solferino," proposed the creation of squadrons of hospital volunteers to reinforce the official sanitary staff. The Geneva Society of Public Utility started a conference apparently with the object of advocating the scheme of Dunant, but really with the result of making its own the humanitarian project of Palasciano. Hence it is that the Geneva Convention, in

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consequence of the aforesaid conference and of a treaty negotiated through an International Congress, has come to be popularly considered as a Swiss creation. Round the name of Dunant has gathered a tradition, or rather legend, fostered by his compatriots, who have not failed to give special prominence to his work and to the Geneva Convention, whilst relegating to silence or insignificance the really initiatory part borne by the Italian surgeon. It is the merit of the above-mentioned memoirs, particularly those of Mazzoni and Di Fede, to have established by incontestable proofs the priority of Palasciano in the great international organisation on behalf of the sick and wounded soldier; and the publication of the two latter—which, it seems, supplement and reinforce each other—will, it is confidently hoped, bring the professional mind of Europe to the same conclusion with that of Italy, that it is to Italian initiation that humanity owes the inspiration and origin of the Geneva Convention.

CHOLERA IN EUROPE.

THE outbreak of cholera in Brindisi does not appear to be extending, but, on the contrary, the latest news is to the effect that it is rapidly diminishing, and that but few deaths have occurred from it. The only news of cholera during the past week has been that from Brindisi, and intelligence from other parts of Italy is to the effect that, with the exception of the northern portion of the Adriatic, the peninsula is quite free from the disease. In Naples special precautions are being taken, by way of cleansing and otherwise, to prevent any recurrence of cholera, and although some complaints are made as to the method of distribution of the new water-supply, yet great confidence is expressed that this excellent water offers a safeguard not heretofore experienced by the Neapolitans. We could, however, wish that cleanliness in the matter of drainage and sewerage were possible under existing circumstances, but so long as the present system continues the narrow thoroughfares in the lowest parts of the city must be offensive, and the bay in the vicinity of the shore must remain little better than a great offensive cesspool. No effort should be spared to secure such a system of drainage and of sewage disposal as will free Naples from these grave sources of nuisance and danger to health. The inhabitants of Sicily, forgetting their protests of last year, are again calling for protection by means of a rigid quarantine system, which can only isolate them from the mainland.

WHAT DOCTORS PRESCRIBE.

THE subscribers to the *Chemist and Druggist* have been asked to send to the editor 10,000 prescriptions. And one of the members of the editorial staff of that journal has set himself the task of arranging this motley mass of statistics into such a shape that certain, in a measure, interesting facts are brought prominently forward. According to this somewhat haphazard, and by no means, we should think, representative mode of collecting physicians' prescriptions, the conclusion may be drawn that the inhabitants of this sometime favoured isle suffer largely from diseases of the imagination. But the imagination is a function of the whole or some part of the nervous system. Hence a further deduction. This conclusion may not be a just inference, but the premisses on which it rests are these: Spirits of chloroform, sal volatile, glycerine, and syrup of orange-peel take high places, as drugs most frequently prescribed; to these we may add bromide of potassium, which ranks second only to chloroform. Most of these may be grouped under the heading "placeboes." Wine of ipecacuanha, sulphate of quinine, bicarbonate of soda, carbonate of ammonia, liquor ammoniæ acetatis, potassii bicarbonatis, and spiritûs ætheris nitrosi are the other members of the group of twelve drugs most frequently ordered. Several of these minister to the disorders of the respiratory tract, and the time of the year may have some influence on their use. But, as we said at the beginning, the information cannot be regarded as representative. If the statistics of some hospitals and dispensaries were taken, we believe that bicarbonate of soda, rhubarb, and gentian would exceed the other drugs in respect of frequency of prescription. Further, spirit of chloroform and syrup of orange-peel are mainly used as adjuncts.

A DEGREE-GIVING MEDICAL FACULTY UNCONNECTED WITH A UNIVERSITY.

IT has been assumed by the opponents of the scheme for constituting the combined Colleges of Physicians and Surgeons a medical faculty, with power to confer medical degrees, that such a faculty, standing by itself and unconnected with a more or less complete university, would be an anomaly, and that there is no precedent, on this side of the Atlantic at least, for the existence of a body having power to confer medical degrees apart from a university. This, however, is a mistake. One of the most flourishing medical schools in Europe precisely exemplifies this state of things. We refer to that of St. Petersburg, the title of which is the Imperial Military Medical Academy, and which is regulated by the Ministry of War, and has no connexion with the University of St. Petersburg, which, though very complete in other respects, entirely lacks a medical faculty. It must not be supposed that the Military Medical Academy merely supplies the place which the Netley School does in this country. It is complete in itself, and, moreover, has the power of conferring the titles of "Vrach" or Licensed Medical Practitioner and Doctor of Medicine. As in the medical faculties of the other Russian universities—Moscow, Kazan, Kharkoff, the St. Vladimir in Kieff, Warsaw, Dorpat, and the Alexander in Helsingfors,—all students have to pass the examination for the title of "Vrach"; and only those who do this with distinction are permitted, after a further period of study, to become a candidate for the Doctorate, for which an original dissertation has to be presented, implying a good deal of patient research. The points proved have to be publicly defended by the candidate against all comers. Several of these dissertations, which are all printed in the Russian language, are now before us. They state on the title-page that they are "for the degree of Doctor of Medicine," and they bear the certificate of approval of the "Conference of the Imperial Medical Academy," being signed by the "scientific secretary," no reference whatever being made to any university. It may be added that the entrance examination for admission to medical study or to any of the university faculties implies a considerable acquaintance with classics, mathematics, and modern languages. It is held at the gymnasia or public schools, and embraces the subjects taught in the final or eighth class, which is probably superior to the majority of English sixth forms.

DR. OTIS ON HEALTH-RESORTS.

DR. OTIS, of Boston, has lately read before the Suffolk District Medical Society an important paper on Health-resorts. He says at the outset that he is not a partisan of any special place as a universal elysium for those afflicted with lung troubles; each individual case should be fully studied and sent to a place which seems to meet its own special requirements. He is convinced that a long continuous residence in a climate which has been found to suit the case is what gives the best results. "It takes a long time to become acclimated if the change is at all radical," and after that comes the benefit. Dr. Otis has "almost come to the conclusion that no physician has any right to advise a

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patient to this place or that unless he has first visited it himself and thoroughly investigated its advantages and defects." The southern resorts in the United States may be divided into those of the coast, interior, and mountains. Of the coast resorts, those in Florida are generally selected, and it is a matter of opinion whether the Atlantic or Gulf of Mexico shore is the more favourable. One fact he lays considerable stress upon is that it is exceedingly difficult to get good food in the south. In the discussion which followed, several speakers expressed their entire approval of Dr. Otis's warning as to the great importance of being thoroughly acquainted with a locality before advising the removal to it of a particular patient.

THE HAIR ROOTS AS INDICATORS OF BODILY OR MENTAL DISEASE.

DR. J. POHL-PINCUS, of Berlin, has recently, in a *brochure* entitled "Polarised Light as a means of recognising Irritable Conditions of the Nerves of the Scalp," announced that by an examination of the hair roots by polarised light peculiar changes may be observed whenever the patient suffers from physical irritation or mental excitement. This statement is the result of investigations which have now been going on for twenty-five years, and the later observations in the course of the research have uniformly confirmed those made earlier. The hair bulbs are divided into three groups, as follows:—Group A: If, in healthy conditions of the body and mind, the hairs that fall out daily are examined microscopically by polarised light, the enlarged bulbous end of the root will show a white contour, and a yellowish or brownish-red centre. Group B: In all irritable conditions of moderate grade, all painful conditions of any organ, also in emotional disturbances of moderate grade, without any apparent bodily disease, the bulbous end of the hair root increases in length and breadth (in proportion to the irritation), the central part appears under polarised light of a violet, blue, or bluish-green colour, separated from the white contour by bands of yellow and red. Group C: In higher grades of bodily disease or mental disturbance, the bulb becomes still larger, and the bluish centre changes to green, yellow, or orange. A few hairs of the B and C types are found in normal conditions, especially in those more advanced in life. Dr. Pincus gives thirty-one cases showing the effects of painful disease, but more especially of depressing emotions, upon the appearance of the hair root. The conclusion to be derived from these researches is that bodily disease or mental excitement causes circulatory disturbances, and in consequence a change in the normal nutrition and pigmentation of the hair. This is only in accordance with previous observation, and the chief merit of Dr. Pincus's plan lies in his obtaining a means by which very slight and temporary changes in tissue growth can be detected and approximately measured.

FOREIGN MEDICAL PROFESSORSHIPS.

DR. A. VOGEL, Professor of Special Pathology at Dorpat, is resigning on account of his health; he will, however, be able to continue to practise privately. Dr. F. Penzoldt, Extraordinary Professor in Erlangen, has been appointed to the Professorship of Pharmacology in the same university. It is stated that Professor Kussmaul, of Strasburg, contemplates resigning his chair and settling in Heidelburg. Professor Späth, who holds one of the obstetric chairs in Vienna, has applied for his pension.

A TELEGRAM from the Viceroy of India, dated April 27th, states that cholera has broken out amongst the troops at present engaged in Burmah. Fourteen deaths have already occurred, but all possible precautions are being taken to prevent the disease from spreading.

AT the Conversazione for which invitations have been issued by the President and Council of the Medical Society of London on Monday next, visitors will have the opportunity of inspecting the unrivalled collection of works by the great water-colour masters, which have been lent, by the kindness of Mr. James Orrock, for the occasion. Besides these there will be on view specimens from their galleries which have been sent for the occasion by the generosity of Messrs. Doulton. Various forms of electric lighting applicable to medical work will also be on view, and the proceedings are to be enlivened by the band of the Royal Artillery.

PROFESSOR V. FRISCH, of Vienna, who had recently returned from a visit to Paris, reported the results of his investigation into M. Pasteur's inoculation method to the Society of Physicians at Vienna. He said that M. Pasteur had unreservedly supplied him with every information, but owing to the prolonged period of incubation which often characterises hydrophobia, he held it to be premature at present to report definitely upon the utility of the practice. He also considered that the results should be controlled by experiments upon animals.

WE hear that Dr. Rolph Leslie, of the University of Toronto, Canada, and St. Thomas's Hospital, London, has been decorated with the Order of Leopold by the King of the Belgians for his services on the Upper Congo.

THE Council of University College, Cardiff, has presented a strongly supported memorial to the Lord President of the Council urging the desirability of establishing a medical faculty at Cardiff in connexion with the University College.

THE following members of Parliament are showing a great interest in the Charities Rating Exemption Bill:—Sir Julian Goldsmid, Sir Robt. Fowler, Messrs. Ernest Baggally, H. W. Lawson, O. V. Morgan, and Sir Algernon Borthwick.

La Gazzetta degli Ospitale (April 21st) reports a communication by Dr. Sacchi to the Medical Academy of Genoa on Tracheotomy in Croup. Of five children on whom he performed the operation, two survived.

PROFESSOR CORFIELD will commence his course of lectures on Hygiene and Public Health at University College by an introductory lecture on Tuesday, May 4th, at 4 P.M.

A RECENT law enacted in Georgia requires all preparations of morphine to be dispensed in scarlet paper with a scarlet label having the name of the contents in white letters.

THE eighth National Medical Congress of Italy, which was to have met from the 2nd to the 6th of May at Palermo, has been adjourned on account of quarantine.

THE death is announced of Dr. Thaon, of Nice, well known for his work on Tuberculosis. He was forty years of age.

EIGHTEEN persons were, on the 27th of March, at Leicester, fined 10*s.* each for neglecting to have their children vaccinated. For the same offence there are now in the same town about 14,000 summonses to issue, besides many thousand notices.

THE work of alteration at the Leeds Fever Hospital, commenced in August last, is now completed. Accommodation is provided for over 100 patients, the average number of inmates in the old premises having been for the first few years about 20.

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INDIAN HEALTH STATISTICS.

No. I.

THE twenty-first Annual Report of the Sanitary Commissioner with the Government of India for the year 1884 gives the usual information regarding the health of the European and native armies, the gaols, and the civil population, with a statement of the expenditure on sanitary works, military and civil, during the year. In one respect, however, an important change has been made: the papers on scientific subjects, which formerly appeared as appendices to the report, have been omitted, as it is intended to publish them in future in a separate volume under the title of "Scientific Memoirs by Medical Officers of the Army of India." It is hoped that the establishment of such an annual volume will be appreciated by the profession, and will prove a stimulus to medical officers to carry out original investigations on subjects connected with their special work.

During the year 1884 the average strength of the European troops serving in India was 54,996. The admissions into hospital were in the ratio of 1513 per 1000, the deaths of 12·56, the invaliding to England of 31·74, and the constantly non-effective from sickness of 67·99. With the exception of the invaliding, these ratios are all higher than those of the preceding year, but the death-rate was still much below the average. The following table shows the incidence of sickness and mortality in each of the three Presidencies:—

	Average strength.	Annual ratio per 1000 of strength.			
		Admitted into hospital.	Died in India.	Invalided to England.	Mean daily sick.
Bengal	33,486	1662	11·68	31·84	70·5
Madras	10,735	1109	8·53	31·82	57·6
Bombay ...	10,725	1455	19·39	31·36	65·5

In all the Presidencies there was an increase in the rate of admissions into hospital. In Madras there was a marked reduction in the deaths, which amounted only to 8·53 per 1000, or little more than 1 per 1000 above the average of infantry serving in the United Kingdom; there was a slight increase in the mortality in Bengal, and a very marked one in Bombay. The latter, however, was due to the high death-rate among the troops serving in Southern Afghanistan, averaging 1441 men, for if they are deducted the deaths in the remainder of the Bombay European Force were only in the ratio of 11·74 per 1000, or slightly above that of Bengal. The invaliding from Bombay was considerably less than in 1883. In Bengal and Bombay there was a marked increase, and in Madras a slight decrease in the mean daily sick. The increase in the admissions in all the Presidencies was chiefly in the class of fevers, but in Bombay also in venereal diseases, and of the latter there was likewise an increase, though much less marked, in Madras. The great excess of deaths in Bombay was caused by cholera, and there was an increase also in those by enteric fever and by violence; the decrease in the mortality of Madras was chiefly in enteric fever. The ratio of deaths by it during the year was 3·31 in Bengal, 1·07 in Madras, and 2·05 in Bombay. In Bengal the disease proved most fatal at Morar, Agra, Gwalior fortress, Dinapore, Lucknow, Meerut, Mooltan, Sialkot, and Rawalpindi; in the Bombay Command at Quetta, and in Madras at Secunderabad. At Bangalore 60 cases were returned, but with only one death—a circumstance which throws considerable doubt on the accuracy of the diagnosis of the cases. September and April were the months in which it was most prevalent, and January and February those in which the smallest number of cases occurred. The mortality was much greater, in proportion to the numbers serving, among the men under twenty-five than above that age, and during the first two years of service in India. It is worthy of note, however, that in 1884 the death-rate from enteric fever in the newly arrived regiments (during their first year of Indian service) was lower than in the army generally, in the proportion of 2·33 to 2·74 per 1000. It is stated that in the great majority of cases "no clue whatever can be found to the causation of the disease in any local insanitary conditions." At Sitapur the medical officer attributed it to the unsatisfactory state of the latrines, and this opinion appears to be confirmed by the fact that "after the proper glazed earthenware pans were supplied, the latrines became perfectly free from stench—in fact, from any smell; the health of the troops improved; there were no more admissions for enteric fever; and a very considerable decrease in the number of admissions for diseases of the digestive system."

Cholera did not prevail to any great extent among the European troops in 1884, the admissions having amounted only to 2·7 and the deaths to 1·95 per 1000 of the strength; the mortality in the three Presidencies respectively was—in Bengal 1·34 (or slightly above the ratio of the preceding year), in Madras 0·95, and in Bombay 4·85 per 1000 of the strength, the last being greatly in excess of the average of previous years. But this excess in the Bombay force occurred chiefly among the troops employed in Southern Afghanistan, for if they are omitted, the death-rate amounts only to 1·40 per 1000, or very little above that of Bengal. In a force of 1088 men marching in Southern Afghanistan, forty-nine cases with thirty-nine deaths were reported in the month of December, which gives a ratio of 45·04 and 35·84 per 1000 of the strength. The report does not furnish any details of this outbreak, or of the measures adopted to check it. In Bengal, Meerut was the station which suffered most, the cases having been twenty-nine with thirteen deaths in a force of 1682 men; Allahabad and Dinapore also had an undue proportion of cases.

Venereal diseases continue to be a source of much inefficiency in the army in India, the admissions having amounted in 1884 to 294 per 1000, considerably in excess of the average of previous years. The increase was shown in all the Presidencies, but was most marked in Bombay.

The most prevalent causes of invaliding from India are anæmia and debility, usually a consequence of fever, hepatic affections, phthisis, heart disease, and rheumatism.

The influence of age on the mortality of the European troops in India is shown to be as follows:—Death-rate under twenty-five, 11·06; from twenty-five to twenty-nine, 9·99; from thirty to thirty-four, 9·71; and thirty-five and upwards, 13·66. The excess in the younger ages is due entirely to two diseases—enteric fever and cholera; omitting these the ratios would run—6·45, 8·16, 9·58, and 12·67 per 1000 living at each age.

The death-rate of the officers in 1884 was 9·17 per 1000, or 3 per 1000 lower than in the preceding year. Among those of the British army it was 10·30, and of the Indian army 8·11, the difference being chiefly in deaths by accident and violence. That of the women was 17·50, being lower than in any year of the preceding decade; 10 per cent. of the deaths were caused by childbirth and abortion.

The average strength of the native army was 114,827; the admissions into hospital during the year were in the ratio of 1042, the deaths from all causes 12·22, the discharges by invaliding 20·62, and the mean daily sick 33·2 per 1000. The relative health of the native armies of the three Presidencies was as follows:—

	Ratio per 1000 of strength.		
	Admissions.	Total deaths.	Daily sick.
Bengal	1193	12·56	35·5
Madras	836	11·82	30·9
Bombay	1153	14·35	36·1

In all three Presidencies there was an increase in the admissions and mean daily sick, but a decrease in the deaths compared with the results for the preceding year. The excess of admissions in all was chiefly caused by the prevalence of fevers; in Bengal there was also an increase in dysentery, and in Bombay in respiratory diseases. Enteric fever furnished only 18 cases and 11 deaths in the whole army. There was a marked exemption from cholera, of which only 135 cases and 82 deaths occurred, being in the ratio of 1·7 and 0·71 per 1000 of the strength; half of the deaths and rather more than half of the cases occurred in the Madras force. There were 46 cases and 27 deaths at Secunderabad, and 16 with 4 deaths at Madras; in Bengal the greatest number of cases occurred at Dinapore, where there were 12, of which 5 died. The most fatal class of diseases in all the Presidencies is that of the respiratory system, which in Bombay gave rise to one-third of the total deaths.

The summary of the sanitary sheets of native troops

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shows that a considerable amount of overcrowding exists, and that there is still much to be done in improving ventilation, water-supply, diet, and conservancy before the state of the army can be considered satisfactory.

NEGRO MORTALITY IN THE UNITED STATES.

IN Volume XI of the Report upon the last census in the United States, dealing with mortality and vital statistics, are to be found some interesting statistics bearing upon the mortality among the coloured population, mainly consisting of negroes. In the southern portion of the States the rate of mortality of the coloured population, amounting to nearly 7,000,000, is reported to have been equal to 17·28 per 1000; whereas the recorded deaths among the more than 43,000,000 of the white population of the States did not exceed 14·74 per 1000. There can be no doubt, and indeed it is freely and fully admitted by the census authorities, that these reported rates very considerably understate the true rates of mortality among the population of the United States, probably to the extent of nearly a third. It is further admitted that the deficiencies in the enumerator's returns of deaths are "greater for the coloured than for the white population," so that these figures do not fully indicate the excess of mortality among the negroes, although they show in equal numbers living 117 deaths among the coloured population to 100 among the whites. Taking twelve Southern States that contain the largest proportions of coloured population, it appears that the recorded death-rate was 14·04 among about 8,000,000 of white population, and 17·22 among rather more than 5,000,000 of coloured population; these figures give 122 deaths among the coloured population to 100 in an equal number of the white population. That even these figures very considerably understate the real excess of mortality among the coloured population may safely be inferred from the following facts. There are thirty-one cities in the United States in which civil registration of deaths is more or less completely affected, and in six of these so-called registration cities—namely, in Baltimore, New Orleans, Washington, Louisville, Richmond, and Charlestown—a very considerable coloured population was enumerated. The population of these six cities at the last census amounted to 933,038 persons, of whom 697,157 were white and 235,881 coloured. The facts given in a table in the Census Report show that the recorded death-rate in the census year 1879-80 was equal to 21·41 among the white and to 36·62 among the coloured population of those six cities. Thus the mortality among the coloured population was in the proportion of no less than 171 to 100 in an equal number of the white population. It is acknowledged that even in these so-called registration cities the record of deaths is by no means complete, and there is good cause to assume that the registration deficiency is greater among the coloured than the white population, from which it follows that even the 71 per cent. excess of mortality in the coloured population understates the real excess of mortality among the negroes residing in six of the largest cities of the southern States of America. It should be stated that the general mortality in these southern cities considerably exceeds that which prevails among the cities in the northern States, the result propably of climatic influence; but, sanitary condition (in the broadest sense of that term) being equal, it would be natural to expect that the effect of the southern climate would be more fatal to the white than to the coloured population. The above figures afford conclusive evidence of the defective sanitary condition of the negro population, especially in the southern cities. One of the main causes of the excess of mortality among the coloured population is stated to be the excessive rate of infant mortality that prevails therein. It is admitted that the facts available for calculating infant mortality in the United States are only less defective than are those from which the death-rates at all ages have to be calculated, but as regards the numbers of births and of deaths under one year of age the census report says, "The defects and errors tend to neutralise each other, since the greater the deficiency in the reports of deaths of infants, the greater also is the deficiency in the reports of births." A table in the report gives the rate of infant mortality measured by the proportion of deaths under one year to recorded births in certain sub-divisions of the United States, called Grand Groups. In six of these Grand Groups the relative proportions of infant mortality in the white and coloured populations are separately shown. It appears that the mean proportion of infant mortality in these six Grand Groups was as 188 in the coloured population to 100 in the white population. This certainly shows a still larger excess of mortality among the coloured population than any previous test, but as the proportion of excess in the coloured mortality in the thirty-one registration cities, at all ages, was 71 per cent., it is evident that the excess at other ages is not much less than that of the mortality in infancy. As regards the causation of the excess of mortality among the coloured population, it may well be imagined that, defective as is the mere record of the numbers of deaths in the United States, the information bearing upon the causes of death is still more untrustworthy. The tables given in the Census Report, moreover, bearing upon this branch of the subject, only give the relative proportions of deaths from the different causes to the total deaths among the white and coloured populations; this comparison does not give sufficiently approximate indications of the rates of mortality from these diseases in the two populations to afford the means for trustworthy deductions. It may be noted, however, that the proportional numbers of deaths referred to scarlet fever, diphtheria, enteric fever, diarrhœal diseases, cancer and tumours, diseases of the nervous system, diseases of the circulatory system, and diseases of the urinary system are considerably larger in the white than in the coloured population; while, on the other hand, the proportional numbers of deaths from measles, malarial fever, venereal diseases, scrofula and tabes, consumption, pneumonia, affections connected with pregnancy, and accidents and injuries were considerably larger in the coloured than in the white population. It appears, therefore, as Dr. Billings states in his report, "that the coloured race is peculiarly liable to certain forms of disease, and is less liable than the white race to certain other forms of disease; but when we take into account the effects of climate and soil moisture, the great majority of the coloured population being in the south, it is hard to say whether the negro in this region under the same circumstances as the white would be shorter lived or not." Dr. Billings asserts that "in the rural districts the mortality of the negro is not excessive"—meaning, presumably, in comparison with the mortality of the white; but it must be borne in mind that he has admitted that the mortality statistics of rural districts are more defective than those of urban districts, and that the defect of the records is still greater among the coloured than among the white population. It may be fairly doubted, therefore, whether trustworthy means exist for testing the real excess of negro mortality in the rural districts. At the same time, it may readily be believed that it is in cities and towns where the negro is "brought into close contact with the evils and vices of civilisation that he dies so rapidly." Dr. Billings acknowledges the importance of the questions: "How far the excessive mortality in the coloured population is due directly to race characteristics—that is, to less vital force or capacity to resist disease and death; and how far it is due to the fact that the great mass of the coloured population is poor and ignorant, lives in the midst of unhealthy surroundings in the dampest and dirtiest parts of cities, has poor food, and is in other respects unusually exposed to well-recognised causes of disease." It is pointed out that the statistics of the negro population are in the main the statistics of a poor working-class population, and it is suggested that, if it were possible to show separately the mortality statistics of a similarly poor and ignorant class of the white population—the tenement-house population of the northern cities,—they would probably show an excess nearly equal to that in the coloured population. Whether this would prove to be the case or not, the marked excess in the mortality of the negro population is beyond question, and points conclusively to the unfavourable sanitary conditions under which this population lives, especially in the larger cities of the Southern States.

DEATH OF THE NORTH TYNE CENTENARIAN.—Mr. Joseph Saint, the North Tyne centenarian—mentioned last week in the letter of our Newcastle-on-Tyne correspondent—died on Tuesday at Chollerton, in his 103rd year; he had been confined to his bed only a fortnight.

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THE EXHIBITION OF THE ROYAL ACADEMY OF ARTS.

THERE are very nearly 2000 works of art collected within the walls of the Academy this year, and one cannot refrain from the thought that in this time of depression there must necessarily be a large percentage of these which is destined to remain unsold. To have one's picture exhibited is to pass, but to dispose of it for a good round sum is to take honours, and at the present time the honours list must necessarily be small.

It would be out of our scope, even if the short survey which we have made permitted of it, to attempt any detailed criticism of the works exhibited. Our business is really confined to directing attention to such as, from one cause or another, are likely to prove of especial interest to the medical profession. But we cannot shut our eyes to the fact that there is a collection of great, perhaps unusual, worth to be seen this year.

The bronze statue which Sir F. Leighton exhibits, termed "The Sluggard," is a work of extreme originality and interest. A young male figure, of beautiful proportions, is indulging in that stretching of the limbs which is so recreative after fatigue, and the attitude assumed gives the artist ample scope for displaying his knowledge of human anatomy. The right lower extremity is firmly, perhaps a trifle too stiffly, planted on the ground, and forms, as it were, a pedestal, allowing free and graceful play to the muscles of the other limbs. The work is very remarkable, and will deserve most careful study.

In portraits of members of our profession the exhibition is unusually prolific. An admirable likeness of Dr. Wilks, by Miss Emily Merrick, meets us in the first room, where also is one of Mr. T. A. Rogers. Mr. Ouless has been busy amongst us this year. He sends the portrait of Sir Henry Pitman, which was unveiled at the last Comitia of the Royal College of Physicians; and in the third gallery, one of Dr. Burdon Sanderson, presented by his personal and scientific friends. This is a good study of a fine head, not perhaps everything that could be wished as a mere likeness, but an admirably suggestive portrait, which is better than a startling likeness. In Gallery No. 11 Professor Humphry appears—another excellent portrait, which has been painted by Mr. Ouless. We are not so much pleased with the portrait of Dr. Hermann Weber, by Mr. Burgess; that admirable artist has not, we think, been quite so successful in picturing the power as he has in rendering the amiability of his sitter's face. Surgeon-General Longmore, C.B., lecturing to a class on some ophthalmic subject, is a pleasant portrait, by Mr. George Reid. There are also portraits of Mr. Clinton Dent, by Mr. Wirgman; of Dr. Frankish, by Mr. Dampier May, the latter well painted and true; nor must we forget that of Brigade-Surgeon Wallace, by Mr. Hacker. In the department of sculpture we find a marble bust of the late Mr. W. C. Worthington, a well-known provincial practitioner, by Mr. Roscoe Mullins; and a large statue of the late Sir Erasmus Wilson, which is to be executed in bronze and erected in front of the Sea-bathing Infirmary at Margate. In the same department is a marble bust of Sir James Paget by Mr. Boehm, and a plaster cast of the statue of John Hunter presented by the Queen to Oxford University Museum; this is by Mr. Richard Pinker.

The members of our profession who from time to time out of their scanty leisure have contributed as amateurs to the Exhibition are this year not represented. But we note with much pleasure a charming bit of still life—a vase containing daffodils against a background of tapestry—the work of Miss Edith Brinton. Those who remember the late Dr. Brinton, the brilliant physician whose early death so many friends have mourned, will see with interest that the artistic talent of the father lives again and is full of bright promise for the future of his daughter.

THE annual meeting of the supporters of the Herts Seaside Convalescent Home was held at Watford on the 16th ult., when a highly satisfactory report was presented.

THE people of Gateshead propose to establish a Children's Hospital in commemoration of Her Majesty's jubilee.

AMERICAN PUBLIC HEALTH ASSOCIATION.

THE fourteenth annual meeting of the American Public Health Association is to be held at Toronto on Oct. 5th to 8th. The following topics have been selected by the executive committee for discussion: (1) The disposal of the refuse matters of cities and towns; (2) the condition of stored water-supplies, and their relation to the public health; (3) the best methods and the apparatus necessary for the teaching of hygiene in the public schools, as well as the means for securing uniformity in such instruction; (4) recent sanitary experiences in connexion with the exclusion and suppression of epidemic disease. Mr. Henry Lomb, who last year offered prizes for the best essays on sanitary subjects, offers for the present year 1750 dollars to be awarded as prizes on the following subjects: (1) The sanitary conditions and necessities of school-houses and school life; (2) the preventable causes of disease, injury, and death in American manufactories and workshops, and the best means and appliances for preventing and avoiding them; (3) plans for dwelling-houses—(*a*) the cost not to exceed 800 dollars; (*b*) the cost not to exceed 1600 dollars. The local committee of arrangements at Toronto have already actively begun the work essential to a large and successful meeting.

WILLS OF MEDICAL MEN.

THE will and codicil of Mr. John Moulden Burton, surgeon, late of Lee-park Lodge, Blackheath, who died on Feb. 10th last, were proved on March 23rd by Mr. Mark Noble Buttanshaw, and Mr. Herbert Campbell Burton, M.R.C.S., and Mr. George William Burton, the sons, the executors, the value of the personal estate amounting to upwards of £35,000. The testator bequeaths £500 and his furniture and household effects to his wife; his surgical instruments to his son, Herbert Campbell; and legacies to his coachman and another. The residue of his real and personal estate is to be held upon trust to pay the whole income to his wife for life; at her death various legacies are given to his children; and the ultimate residue is to be divided between all his children.

The will and codicil of George Kitching, M.D., late of Enfield, Middlesex, who died on Feb. 2nd last, were proved on March 17th by Mr. Albert George Kitching, M.P., the son, the acting executor, the value of the personal estate amounting to over £19,000. The testator leaves all his real and personal estate upon trust for his wife, Mrs. Mary Ann Kitching, for life; and at her death to and upon trust for his said son.

The will and codicil of Sigismund Sutro, M.D., late of No. 37A, Finsbury-square, who died on Feb. 19th last, were proved on March 17th by Mrs. Helena Sutro, the widow, and Mr. Maurice Gerstley, the executors, the value of the personal estate exceeding £17,000. The testator bequeaths his furniture and effects and £100 to his wife; £1000 to each of his sons; £100 to the German Hospital, Dalston; £1000 upon trust for his brother Max for life; and a complimentary legacy to his executor, Mr. Gerstley. The residue of his real and personal estate he leaves upon trust for his wife for life; at her death he gives a further legacy of £1000 to each of his sons; and the ultimate residue is to be divided between all his children.

The will of Mr. Henry Strangways Hounsell, of Woodlands, Torquay, physician, who died on Feb. 22nd last, was proved on March 15th by Mrs. Emma Nathalie Hounsell, the widow, one of the executors, the value of the personal estate amounting to over £6000. The testator leaves all his real and personal estate upon trust for his wife for life, and then for his two children.

The will and codicil of John White, M.D., of Bath, who died on Feb. 6th last, was proved on March 25th by the Rev. Bedford Hartnell and Mr. Henry Kinneir, the executors, the value of the personal estate amounting to nearly £5000. The testator bequeaths his furniture, plate, pictures, household effects, surgical and medical books and instruments, horses and carriages, to his son William Acramen White; and an annuity of £70 to the Rev. George Hillhouse Helling for life, to be continued to his wife Charlotte if she survive him. The residue of his real and personal estate is to be

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held upon trust for his said son for life and then for his children.

The will of Mr. Charles Milne, surgeon, of 161, Brixton-hill, who died on Dec. 13th last, was proved on March 29th by Mrs. Elizabeth Milne, the widow and sole executrix, to whom he gives, devises, and bequeaths all his estate and effects, real and personal, for her own use and benefit absolutely. The value of the personal estate exceeds £1300.

The will of Mr. James Henry Brooks, surgeon, of Henley-on-Thames, who died on Jan. 24th last, was proved at the Oxford District Registry on March 30th by Mr. Bransby Brooks, the son, the value of the personal estate being under £1000. The testator, in the events which have happened, leaves all his property, real and personal, to his children.

The will and two codicils of Mr. John MacDonogh, late of No. 15, Clapham-park-road, surgeon, who died on Jan. 9th last, have been proved by Mr. John Frederick Henry Betts, and Mrs. Catherine Jane Betts and Mrs. Annie Emily Mills, the daughters, the acting executors. The testator bequeaths his personal estate to his children. All his freehold lands and hereditaments in the county of Sligo he leaves upon trust for his sister Eliza for life; and then, subject to the payment of £100 to each of his other children, to his son Augustus William.

The following legacies have recently been left to hospitals and other charitable institutions:—Mr. John Field Swinburn, J.P., of Stone Hall, Acocks-green, Worcestershire, three-twentieths of the residue of his property to his trustees to divide in such proportions among such of the hospitals in Birmingham or elsewhere, and such of the schools and churches in Birmingham or elsewhere connected with the Established Church, as they in their discretion shall select as recipients.—Mrs. Harriett Annie Richardson, late of No. 7, Campden-hill-road, Kensington, £1000 to the Hospital of St. John of Jerusalem and St. Elizabeth, 47, Ormond-street, and £30 to the Hospital for Incurables of St. John of God, Seoxton Catterick, Yorkshire.—Miss Frances Caroline Churchill, of Colliton House, Dorchester, £200 to the Dorset County Hospital.—Mr. John Dennison Hargreaves, of Woodlands, Staffordshire, £300 to the Royal Hospital for Incurables.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

On the Recurrence of Enteric Fever in Kidderminster, by Dr. FRANKLIN PARSONS.—The recurrence of enteric fever in Kidderminster led to Dr. Parsons being again instructed to visit and report upon the state of the borough in connexion with this disease. Between August and December, 1884, the estimated number of attacks was 1500, and there were 108 fatal cases. In the first quarter of 1885 the disease had greatly subsided; there were only 3 deaths, and of these 2 were of persons whose illness probably commenced in the previous quarter. In the latter half of 1885 the disease tended again to increase, 35 cases, with 11 deaths, being reported, multiple cases occurring in some houses. The cases were found to have been scattered about the town, with occasional clusters in certain localities. At most of these places sanitary defects were found, more especially house-drains badly trapped and unventilated, or otherwise in bad order; but these defects were at once remedied. Inquiry into the cause of this recurrence failed to associate it with the use of any contaminated milk, and no sufficient grounds have been found for regarding the disease as due to any contamination of the town water at its source. There are, however, intermissions in the supply which are suggestive of danger; and Dr. Parsons gives an instance of this in the house of a medical man whose family have suffered severely, and this notwithstanding the fact that the alterations carried out in connexion with the house-drainage had aimed at securing his dwelling from further danger from without. Dr. Parsons enters into some detail as to the action of the Corporation since the preceding outbreak. The provision of a new water-supply in place of the lower well had been, it was generally understood, decided on; and it will be with some regret that many will learn that this scheme has been abandoned, partly for financial reasons, and partly because it was believed that the well had been made water-tight by a concrete stopping, so that leakage was impossible. The circumstances associated with this lower well were such as to cause some anxiety, and for this reason, rather than because of proof of the fever having been due to any contamination of the general water-service, we should have been glad to learn that all risk had been finally avoided. At this stage Dr. Parsons refers to a joint report which he has made with Mr. Arnold Taylor of the Engineering Department of the Local Government Board; but the latter report does not appear to have been published, and the public are therefore somewhat in the dark as to the value of the concrete lining of this well. The Corporation will, by the provision of a new reservoir, get rid of much of the danger attendant on intermissions in the water-service; several of the main sewers have been relaid; automatic flush tanks and means of ample ventilation have been, and are being, applied to the sewers, and the old catchpits in the course of the sewers have been done away with. A new pattern of ventilator has been tried. It is furnished with a contrivance intended to deodorise the sewer air. This consists of a sieve of asbestos fibre inserted over the opening of the shaft, and dipping at the edge into an annular trough containing a solution of a permanganate. There are two of these sieves, one above the other, and the intention is that the permanganate solution shall rise by capillary attraction and be distributed over the sieves, and that the sewer air in passing between the meshes shall come in contact with it and be deodorised. As a matter of fact, it was found that the red colour of the undecomposed permanganate did not extend more than an inch from the margin of the sieve. Whatever the value of this deodorising contrivance, the arrangement will probably do more harm than good if it hinders the free passage of fresh air into the sewers. Other works have been carried out, since 1884, in connexion with the removal of the nuisances attendant on the midden-privies, but there are other matters which still remain to be adopted. Altogether, the Corporation may be credited with having evinced the desire to remove conditions associated with the serious epidemic of 1884, and the recrudescence in the autumn of 1885 may possibly have been nothing more than such seasonal reappearance of heretofore dormant infection, such as might have been anticipated after an epidemic like that Kidderminster suffered from in the previous autumn.

Diphtheria in the Registration District of Mansfield, by Dr. GRESSWELL.—This is a very elaborate report, embodying a description of the sanitary condition of the towns and villages in the registration district in question, as also an account of the prevalence of diphtheria in them. This disease has somewhat persistently prevailed since 1856 in several portions of the district, and notably in the parishes of Mansfield and Sutton-in-Ashfield, which together embrace more than one-half of the population of the district; and there have been a number of deaths from diseases under the names of which diphtheria, when its existence is as yet hardly suspected, is very apt to be registered. Dr. Parsons had already reported on Sutton-in-Ashfield in 1883, and the total diphtheria deaths during 1882-84 were ninety-eight in number. The disease was found to have been spread by the agency of schools and by means of children congregating in large numbers—even fifty at a time—at funerals and around the houses of former school-fellows who had died of the disease. In fact, as originally pointed out by Dr. Parsons, there had been unrestricted personal communication between healthy and sick, and the chief industry of the place—i.e., the manufacture of stocking hose—afforded peculiar facilities for the transference from family to family of any current infection. Under these circumstances, it necessarily became difficult to say how far the unwholesome conditions under which the people were found to be living, and which are described in detail, co-operated in the production and the diffusion of the infection. But, in addition to this, Dr. Gresswell brings forward a group of cases tending to support the view he has before expressed, to the effect that persons living under the sanitary circumstances he has detailed are liable, after an attack of diphtheria, to suffer almost constantly from a chronic inflammation of the tonsils, and are peculiarly liable to reacquire or to redevelop genuine diphtheria. Neither in Sutton nor in Hucknall-under-Huthwaite, where a prevalence of diphtheria occurred, were any proper arrangements made

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by the sanitary authority to secure the isolation of the sick. In the rural district of Mansfield most of the diphtheria which has occurred during recent years would appear to have been related, directly or indirectly, to cases in Sutton or in Mansfield, the two chief centres for markets and fairs; and facts were readily forthcoming in illustration of the influence which intercourse with infected persons had had upon the spread of the disease. It is also worth noting that during the period under discussion there was a very general prevalence of sore-throat in the rural sanitary district of Mansfield, concurrent with, and likely enough antecedent to, the diphtheria in Sutton, the disease being variously styled "simple sore-throat," "follicular tonsillitis," and "diphtheritic sore-throat." The malady was associated with a good deal of prostration in those affected, and by some of the medical practitioners it was regarded as infectious. It is not clear what was the relation between this sore-throat prevalence and the diphtheria; but a considerable proportion of those cases which have been recognised as being diphtheritic in the rural sanitary district appear to have been traceable to antecedent cases of the throat affection in Sutton or in Mansfield.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5598 births and 3456 deaths were registered during the week ending April 24th. The annual death-rate in these towns, which had been equal to 20·1 and 20·3 per 1000 in the preceding two weeks, declined last week to 19·8, and was lower than in any previous week of this year. During the first three weeks of the current quarter the death-rate in these towns averaged 20·1 per 1000, against 24·1, the mean rate in the corresponding quarters of the ten years 1876-85. The lowest rates in these towns last week were 12·3 in Hull, 13·8 in Leicester, 14·6 in Bristol, and 15·3 in Birkenhead. The rates in the other towns ranged upwards to 26·3 in Bolton and in Manchester, 27·8 in Blackburn, and 34·5 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 363 and 367 in the preceding two weeks, further rose last week to 382; they included 155 from whooping-cough, 114 from measles, 33 from diarrhœa, 30 from diphtheria, 23 from "fever" (principally enteric), 25 from scarlet fever, and 2 from small-pox. No death from any of these zymotic diseases was recorded last week in Halifax, whereas they caused the highest death-rates in Preston, Plymouth, Bolton, and Portsmouth. The greatest mortality from whooping-cough occurred in Manchester, Plymouth, Bolton, and Portsmouth; and from measles in Plymouth, Preston, Bolton, Blackburn, and Portsmouth. The deaths from diphtheria in the twenty-eight towns included 16 in London, 2 in Wolverhampton, 2 in Birkenhead, 2 in Bolton, 2 in Oldham, and 2 in Cardiff. Small-pox caused 6 deaths among the residents of London and its outer ring, 1 in Birkenhead, and not one in any of the twenty-six other large provincial towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had increased in the preceding three weeks from 8 to 16, further rose last week to 17; 6 new cases were admitted to these hospitals during the week, against 3 and 6 in the previous two weeks. The Highgate Small-pox Hospital contained 2 patients on Saturday last, one case having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 348 and 362 in the preceding two weeks, declined last week to 318, and were 97 below the corrected weekly average. The causes of 74, or 2·1 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bradford, Sunderland, Portsmouth, Brighton, and in four other smaller towns. The largest proportions of uncertified deaths were registered in Halifax, Oldham, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had steadily declined in the preceding five weeks from 27·9 to 20·5, was 20·7 in the week ending April 24th, and exceeded by 0·9 the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 13·1 in Perth and 13·9 in Paisley, to 22·1 in Aberdeen and 25·0 in Glasgow. The 511 deaths in the eight towns showed an increase of 4 upon the number in the previous week, and included 15 which were referred to whooping-cough, 9 to measles, 9 to diarrhœa, 5 to "fever" (typhus, enteric, or simple), 5 to diphtheria, 3 to scarlet fever, and not one to small-pox; in all, 46 deaths resulted from these principal zymotic diseases, against numbers declining from 62 to 34 in the preceding four weeks. These 46 deaths were equal to an annual rate of 1·9 per 1000, which was 0·3 below the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had declined in the four previous weeks from 29 to 10, rose again last week to 10, of which 14 occurred in Glasgow. The 9 fatal cases of measles showed a further increase upon recent weekly numbers, and included 4 in Edinburgh and 4 in Leith. The 9 attributed to diarrhœa, on the other hand, corresponded with the number in the previous week, and were 5 below the number in the corresponding week of last year. The 5 deaths referred to "fever," including 2 in Glasgow, showed an increase of one upon the number in each of the previous two weeks. Of the 5 deaths from diphtheria 3 occurred in Glasgow and 2 in Edinburgh, and all the 3 fatal cases of scarlet fever were returned in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 109 and 122 in the preceding two weeks, declined last week to 100, and were 18 below the number returned in the corresponding week of last year. The causes of 63, or 12 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had steadily declined in the preceding five weeks from 40·5 to 25·0 per 1000, rose again to 27·3 in the week ending April 24th. During the first three weeks of the current quarter the death-rate in the city averaged 28·4 per 1000; the mean rate during the same period did not exceed 19·3 in London and 17·6 in Edinburgh. The 185 deaths in Dublin last week showed an increase of 15 upon the number in the previous week, but included only 8 which were referred to the principal zymotic diseases, against 16 in each of the previous two weeks; 4 resulted from whooping-cough, 3 from "fever," 1 from diarrhœa, and not one either from small-pox, measles, scarlet fever, or diphtheria. These 8 deaths were equal to an annual rate of 1·2 per 1000, the rates from the same diseases being 2·4 in London and 1·8 in Edinburgh. The fatal cases of whooping-cough, which had declined in the four previous weeks from 12 to 5, further fell last week to 4. The 3 deaths referred to "fever" corresponded with the number in each of the previous two weeks. Only one death was attributed to diarrhœa, against 3 in the previous week. Five inquest cases and 2 deaths from violence were registered; and 78, or considerably more than a third, of the deaths were recorded in public institutions. The deaths of infants were fewer than in any recent week, while those of elderly persons showed an increase upon the low number in the previous week. The causes of 20, or nearly 11 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

ADMIRALTY.—The following appointments have been made:—Fleet Surgeon George Campbell, to the *Euphrates*: and Staff Surgeon Robert Bentham, to Chatham Hospital, temporary; Surgeon Samuel Keays, to the *Royal Adelaide*.

YEOMANRY CAVALRY.—Derbyshire: Surgeon Frederick W. Wright resigns his commission.

ARTILLERY VOLUNTEERS.—1st Devonshire: Acting Surgeon E. J. Domville resigns his appointment.—1st Lincolnshire: Surgeon Thomas Newby, M.D., is granted the honorary rank of Surgeon-Major.—2nd East Riding of Yorkshire: William Barter, Gent., M.D., to be Acting Surgeon.—1st North Riding of Yorkshire: Acting Surgeon Geo. Pilkington resigns his appointment.

RIFLE VOLUNTEERS.—4th Volunteer Battalion, the Devonshire Regiment: Surgeon Joseph Harper is granted the honorary rank of Surgeon-Major.—1st Durham: Surgeon S. W. Broadbent is granted the honorary rank of Surgeon-Major.—3rd Durham (the Sunderland): Acting Surgeon R. J. Collie, M.D., to be Surgeon.—1st Volunteer Battalion, the

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Prince of Wales's (North Staffordshire Regiment): Surgeon W. Dawes is granted the honorary rank of Surgeon-Major.

VOLUNTEER MEDICAL STAFF CORPS.—Surgeon W. H. Platt is granted the honorary rank of Surgeon-Major; Richd. James Reece, Gent., to be Surgeon.

Correspondence.

"Audi alteram partem."

THE EXAMINATION IN MATERIA MEDICA AT THE ENGLISH CONJOINT BOARD.

To the Editor of THE LANCET.

SIR,—That the Royal Colleges of Physicians and Surgeons should have limited their demands from candidates for examination in materia medica is a change which is in accordance with the almost unanimous opinion of those who have formed any opinion on the subject; but a careful study of the synopsis and schedule for the first combined examination, issued on the 11th ult., yields some results which are rather astonishing.

The principle of scheduling the more important drugs is excellent, and the limitation of the practical part of the examination is also good; but the details are surely open to criticism. There are only twenty drugs in the whole Pharmacopœia with the physical properties of which the candidate is expected to show practical familiarity. A medical student who is unable to recognise, for instance, any preparation of ammonium, sodium, or potassium (saving only the permanganate), who cannot identify nitrate of silver, or any salt of iron, or nitrous ether, quassia, glycerine, tannic acid, gallic acid, camphor, turpentine, nitrite of amyl, cantharides, or cod-liver oil, need have no fear, it would seem, of failing to pass a practical examination in materia medica at the new Examination Hall. He must be aware of the dose and use of quassia, but not necessarily of those of gentian or calumba. He is excused any knowledge of the appearance, dose, or use of nitrate of potassium, podophyllin, copaiba, creasote, cubebs, santonin, pepsin, croton oil, or even castor oil. He must recognise the chlorides of mercury, and have theoretical acquaintance with its oxides and iodides (although only one iodide is now officinal); but he is no longer required to give any account of "blue pill," "blue ointment," or "grey powder" (unless these are supposed to be included under oxides of mercury). The white precipitate and the nitrate would also be beyond his ken.

The gratitude of the students will be unbounded. Such are some of the results of the combined wisdom of the two learned Colleges. It was open to them to ask for a really useful practical acquaintance with the Pharmacopœia of every-day practice, or, on the other hand, to omit all practical examination. For either of these courses something might be said, but what can be urged in favour of the present arrangement it is difficult to see. It can scarcely be expected to be permanent.

During the last few years the staff of each medical school has had to make an almost annual rearrangement of the curriculum to meet the continual variations in the demands of licensing bodies, but we should count the labour light if it were possible to perceive a steady approximation to a settled and satisfactory system.

I am, Sir, yours obediently,
JOHN B. HELLIER, M.D. Lond.,
Lecturer on Materia Medica and Therapeutics in the Yorkshire College.

Leeds, April 24th, 1886.

THE PRIZE SYSTEM.

To the Editor of THE LANCET.

SIR,—Your columns announce earlier than usual the attractions the medical schools have for students. Prizes and exhibitions appear in great numbers. I send you an extract from the evidence given by Sir Benjamin Brodie before the commissioners appointed to inquire into the regulations affecting the sanitary condition of the army, upon being asked what he thought as to giving prizes to medical students. Few teachers had more experience of the question of medical education. It would be interesting to know the opinions of the present race of medical teachers, and whether there are any records of the comparison between those who pass their examinations and those who are "referred" as to being prizemen. Sir Benjamin says:—

"I have much doubt myself about giving competitive prizes in examinations. It may work well in schools and colleges, but when you come to professional examinations (I do not speak about the Civil Service) I do not think that competitive prizes will answer; for, after all, they will be obtained chiefly by those who are crammed, by the men of good memories, and not by those who work. It seems to me that the man who thinks will not have the advantage that he ought to have. I would limit the prizes to one class founded upon cases. I believe the ordinary prizes do very little good. For some time past the teachers in the medical schools have been in the habit of giving prizes to students, yet, notwithstanding this, they are found to be not so well qualified for examination at the College of Surgeons as they were twenty years ago; and hospital surgeons and teachers are now satisfied that these prizes do no good; nay, more than that, that the best men do not get them. These prizes operate in this manner: a man wants a prize; he gets books, reads up the subject, and this kind of work keeps him out of the dissecting-room and the wards of the hospital. Yet these are the only places where he can get knowledge that he can apply to practice, and learn to observe and think."

I am, Sir, yours &c.,
F.R.C.S.

April, 1885.

MR. KNOWSLEY THORNTON'S CASES OF SPLENECTOMY.

To the Editor of THE LANCET.

SIR,—Four years ago, when by your indulgence I presumed in the pages of THE LANCET to condemn splenectomy in leucocythæmia as a "useless and deadly experiment," and at the same time published the records of twenty-nine cases in which the operation had been performed in different parts of the world (during a period of 333 years), and called attention to what up to that date appears to have escaped the notice of operators, the "fearful fatality" of the measure in leucocythæmia, testified to by the fact that "whereas out of thirteen splenectomies in which leucocythæmia was absent no less than eight recoveries were recorded, out of the sixteen in which the latter disease was present there was no instance in which the patient recovered even from the primary effects of the operation"; and when I was also indiscreet enough to regard the operation as altogether unjustifiable in the light of these statistics, and to employ arguments to this effect in reply to a leading surgeon, who took me to task for my rashness,—I regret to say that no high surgical authority then came forward to support my too feeble voice. Although the leading surgeon above referred to did not perform splenectomy in the case of leucocythæmia then under his care, which at first he thought of doing, and although several eminent gentlemen expressed doubts as to the use of the operation in leucocythæmia in the discussion that followed Mr. Warrington Haward's case of splenectomy read before the Clinical Society (*vide* THE LANCET, April 1st, 1882), and Mr. Haward himself declared, in speaking of his case, that he should not have consented to operate had the newly published statistics been then before him, still it is only within the last few days that splenectomy has been distinctly condemned as unjustifiable in leucocythæmia by an authority of Mr. Knowsley Thornton's standing.

But what additional evidence have we obtained since February, 1882? Six splenectomies have been recorded during the four years which have intervened since that date. Out of these, five have been performed for diseases of the spleen, unassociated with leucocythæmia (Knowsley Thornton two, one recovered, one died; Billroth, of Vienna, one, recovered; Spanton one, died; Credé, of Dresden, one, recovered), two of which died and three recovered; and one for leucocythæmia (by Franzolini, of Turin), which, contrary to the assertion of Mr. Knowsley Thornton, who recently stated at the Medical and Chirurgical Society "that all the cases in which leukæmia was present were fatal," recovered, and four months afterwards the leucocythæmia, which had gradually subsided since the operation, had entirely disappeared.

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Now, although these cases by no means strengthen the position I assumed on this question four years ago, I think I may fairly congratulate myself that I am not now alone in the opinion which I still entertain.

I am, Sir, yours faithfully,

Yarmouth, April 23rd, 1886. H. COLLIER, M.D. (Brux.)

INTRA-UTERINE AMPUTATION, WITH OTHER DEFICIENCY OF PARTS.

To the Editor of THE LANCET.

SIR, Having been in harness for a good many years as a general practitioner, it has been my lot to have had a good share of midwifery, but, of all the cases I ever attended, I never met with an instance of such a marked deficiency in a newly-born babe as I did on April 5th.

Mrs. W——, aged twenty-two, a primipara, who had been under my care for six weeks previously, suffering from false pains now and again, with a sanious, glutinous discharge, was on that date seized with labour. Upon examination, the os was found fully dilated and the breech presenting, and on passing my right index finger over the hip the left limb was easily brought down, which was perceived to be amputated nicely at the middle third of the leg, and the stump firmly healed, apparently a successful case of circular operation. In my attempt to bring down the other, it was felt to be stiff and unyielding; a steady traction was therefore applied to the stump, by which means the little fellow was soon launched into the world. According to the young mother's calculation, her son and heir had made his appearance about a month before its proper time; however, he looked bright and intelligent enough, though he presented the following oddities, in addition to the amputated leg: the right lower limb was straight as an arrow from the hip to the ankle, the knee ankylosed, and the rotundity of the structures of both thigh and leg lost, the foot twisted upon itself inwards (talipes varus), and the toes simply in a rudimentary state; the limb was constantly kept firmly flexed to the right shoulder, soldier-like, presenting "shoulder arms," substituting in this instance the leg for the arm. As for the left, or amputated leg, it was firm and well developed, and moved about with the greatest alacrity. The right hand had the index, the long, and the ring fingers fully developed, with the thumb and the little finger in a rudimentary state. Again, the left hand had only the index and the long fingers intact, a trace simply of the others left. A search was now made for the missing or amputated part, which was found along with the placenta expelled, a plump waxy-looking piece, sufficiently formed to ascertain that the foot corresponded with its fellow—i.e., clubbed. Finding the little fellow so sadly equipped for the battle of life, those most intimately connected were very anxious to know whether he might or not cease to exist. However, to the greatest relief of all concerned, he died naturally four hours subsequently.

I am, Sir, yours faithfully,

Brynmeurig, Bethesda, April 10th, 1886. JOHN WILLIAM.

ROTHELN: A POINT OF DIAGNOSIS.

To the Editor of THE LANCET.

SIR,—Dr. Glover, in THE LANCET of April 24th, mentions a case in which he detected an enlarged gland in the neck appearing *before* an attack of rötheln, and throws out the suggestion that in an epidemic of this disease this condition may enable us to diagnose rötheln before the rash appears.

Lately we have had an epidemic here of rötheln in a large school that I attend, thirty-two boys in all being attacked, and of these five or six had swelling of the cervical glands for several (four or five) days before the rash appeared, and one boy had swollen glands, but no rash at all ever showed itself. Fully half the boys attacked had enlargement of the cervical glands *after* the rash disappeared, one of the usual sequelæ. As far as I can find out, very few English writers on medicine give a good description of rötheln. The best and truest of the accounts I have come across is in the Practice of Medicine by the late Dr. Fagge, and that is copied from the German (Ziemssen's Handbuch).

I am, Sir, yours faithfully,

York, April 25th, 1886. W. H. JALLAND.

EDINBURGH.

(From our own Correspondent.)

UNIVERSITY GRADUATION CEREMONIAL.

ON the 21st inst. the Annual Graduation Ceremonial in Divinity, Arts, Law, and Science took place in the United Presbyterian Synod Hall, which is placed at the disposal of the University authorities for their more important academic gatherings. Lord Inglis, the Chancellor of the University, presided over a crowded meeting of University *alumni* and of the general public. The interest of the occasion was greatly enhanced by the presence of a number of distinguished men on whom the honorary degrees of the University, D.D. and LL.D., were about to be conferred. Prominent amongst these was Dr. Mouat, distinguished alike by his medical, scientific, and administrative achievements in British India, a graduate of Edinburgh of nearly fifty years' standing, who was very warmly received on his presentation for the LL.D. degree. An enthusiastic reception was also accorded to Sir Charles Wilson, the Oriental scholar and explorer, and the hero of the Upper Nile, who presented a most distinguished appearance in his military attire, resplendent with the innumerable medals and orders of which he is the honoured possessor. Sir Charles Nicholson, formerly Chancellor of the University of Sydney, Emeritus Professor John Wilson, of the Chair of Agriculture in Edinburgh, and Mr. John Small, the University librarian, were also amongst those who had the honorary LL.D. degree conferred upon them. A large number of Masters of Arts, Bachelors of Divinity, and Doctors and Bachelors of Science were then capped by the Chancellor.

PROFESSOR BUTCHER'S ADDRESS.

Professor Butcher, of the Chair of Greek, then addressed the assembled graduates, choosing for his subject the "Unity of Learning, its relation to the Life of the Nation, and the Narrowing Effect of too Highly-developed Specialisation." Referring to the Faculty of Arts, he characterised it as a token of the unity of all learning, dealing as it does with those studies which may be included under the title of Philosophy, and related on the side of Ethics and History to the Faculties of Law and Theology, and on that of Mathematics and Physics to the Faculty of Medicine. It is thus the opponent of that spirit of specialism which the professor complained is now supposed to have superseded the spirit of philosophy, and which has not only annexed the several sciences, but has pushed itself also into the domain of morality. Here it shows itself in the form of a departmental supervision exercised over morality in its several aspects; but as, though there be many virtues, there is one unity of Righteousness, so, though there be many branches of science, there is one unity of Knowledge. The more the number of the special sciences is augmented the greater is the danger that they will become mere *disjecta membra* of knowledge, unless this tendency is held in check by the influence of some system of constructive thought which will harmonise their results and reduce to unity their highest generalisations. In applying this principle to the study of medicine, Professor Butcher took the opportunity of combating the opinion of Professor Huxley, recently expressed, to the effect that there might in certain conditions be a danger of broadening the significance of M.D. into "Medical Dilettante." He quoted the dictum of Galen, that "the best physician is also a philosopher," as one that would command the general assent of the profession, and he pleaded that, however skilled a man may be in his own craft, he should not let that craft usurp the whole universe. The remainder of the address dealt with the popularisation of learning, as distinguished from its vulgarisation, and the means of attaining it, and concluded with a strong plea in favour of co-operation in teaching, instead of pure competition, as the principle upon which the requirements of true learning are most beneficially fulfilled.

UNIVERSITY COURT.

It has been decided by the University Court that the University shall in future confer a degree in Music, and shall give diplomas for schoolmasters, a first step towards the formation of a "Faculty of Education."

EDINBURGH ROYAL HOSPITAL FOR SICK CHILDREN.

Sir Alexander Christison, Bart., M.D., has been appointed a manager of this Hospital, in the room of the late Dr. Angus

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Macdonald. The vacant post of assistant-physician to the Hospital has not yet been filled up; a number of candidates for the appointment have submitted applications and testimonials to the Board of Directors, and it is expected that the appointment will be made within a few days.

Edinburgh, April 29th.

IRELAND.

(From our own Correspondent.)

ROYAL COLLEGE OF SURGEONS.

YESTERDAY (Wednesday) there was a large gathering of the Fellows and distinguished visitors to witness the conferring of the Honorary Fellowship of the College on Professors Huxley and Pasteur, Sir James Paget, Sir Joseph Lister, Sir Spencer Wells, and Mr. J. Marshall, the unveiling of the Dease statue, and the opening of the Butcher Museum. His Excellency the Lord-Lieutenant, the Countess of Aberdeen, and the Prince and Princess of Saxe-Weimar having arrived at the College, a procession was formed, which passed up the grand staircase and through the anatomical museum into the board-room. Sir Charles Cameron, the President, in an able speech, dwelt on the merits of the six gentlemen upon whom the College had conferred the Honorary Fellowship, and introduced Sir James Paget, Bart., the only one of the Honorary Fellows present, the others being prevented by unavoidable circumstances from attending. It was expected that Mr. Marshall would have been there, but an attack of bronchitis almost at the last moment caused his absence, while the death of Lady Wells rendered the presence of Sir Spencer Wells impossible. The diploma of Fellowship (*honoris causâ*) having been conferred on Sir James Paget, a suitable reply was returned by that gentleman. Mr. William Stokes, the Vice-president, in a short but eloquent speech, then handed to his Excellency the first copy of the "History of the College," edited under the authority of the College by Sir Charles Cameron. Mr. Rawdon Macnamara, representative of the College in the General Medical Council, next moved a vote of thanks to their Excellencies, which was seconded by Sir George Porter, Surgeon-in-Ordinary to Her Majesty, and acknowledged in appropriate terms by the Lord-Lieutenant. Mr. McDonnell moved, and Mr. Wharton seconded, a vote of thanks to the Prince and Princess of Saxe-Weimar for their presence there that day, and the Prince having replied, the procession was re-formed and returned to the entrance hall. The President having briefly referred to Mr. Dease, one of the founders of the College and its first professor of surgery, requested the Countess of Aberdeen to unveil the statue, after which his Excellency declared the Butcher Museum open, and the proceedings terminated.

A meeting of the Council will be held next Tuesday, to elect examiners for the ensuing year. I understand that of those elected last year two at least will not seek re-election. The history of the College and of Irish surgery and medicine, which has been compiled by Sir Charles Cameron and will be published by authority of the College, will shortly be issued, and it is understood that any surplus accruing from the sale of the work will be handed over to the Royal Medical Benevolent Fund Society of Ireland. In addition to a history of the College the work will contain: firstly, an account of the medical books published in Ireland up to the beginning of the nineteenth century; secondly, a history of the Dublin Guild of Barber Surgeons; thirdly, an account of medical teaching and examination in Ireland prior to the foundation of the College; fourthly, biographical sketches of the Presidents of the College; fifthly, an account of the College and private schools of anatomy and surgery; and sixthly, more than 300 biographical sketches of the professors of the College and the teachers in the private schools.

ADELAIDE HOSPITAL, DUBLIN.

The Committee of Management have undertaken the erection of a home for the nursing staff and apartments for the lady superintendent on the site of the house formerly used for the compounding of medicines. When completed it will be found of great benefit to the hospital. From the annual report, it appears that the hospital obtained during the year £6599, which included a sum of £712 from pay patients. The institution is admirably managed, and well deserves the support it receives.

HEALTH OF DUBLIN FOR MARCH QUARTER.

The deaths recorded in the Dublin registration district were equal to 33·4 per 1000. As regards the respective rates of mortality in the several grades of the population, it appears that the deaths in families of the "professional and independent class" were equal to 17·5; in the "middle class," 32·1; among the "artisan class and petty shopkeepers" it was 26·5; and in the "general service class" and the "inmates of workhouses" combined, it was 43·2 per 1000 of the population.

ACTION AGAINST THE LOCAL GOVERNMENT BOARD.

Dr. Hugh Davies, late medical officer of the Newport Workhouse, was appointed to this office in 1874, but by an order made by the Local Government Board last September the Newport Union was dissolved and amalgamated with the Westport Union. He applied to the guardians for compensation for the loss of his appointment, which was refused; and he finally entered an action against the Local Government Board for £3000 damages. This was decided in favour of the Board last week, as it was proved that there was no contract of service between the parties, and that the defendants had acted within their legal rights in dissolving the union. Dr. Davies, besides being refused any compensation, will have to pay the costs of the action.

By the death of Dr. Taggart a vacancy has arisen for the Coronership of the Southern Division of the County of Antrim, and two medical practitioners are candidates for the post—viz., Dr. McNinch, of Ballyclare, and Dr. Wilson, of Kells.

The Belfast Corporation are about to borrow £20,000 from the Board of Public Works in order to defray the cost of erecting a free public library in that town.

Dublin, April 29th.

Obituary.

EVORY KENNEDY, M.D., T.C.D.

ON Good Friday the subject of this notice passed away at the ripe age of seventy-eight. Dr. Kennedy practised formerly in Dublin as an obstetric physician, and was an ex-Master of the Rotundo Lying-in Hospital. He was a Justice of the Peace and Deputy Lieutenant for the county of Dublin, and held a high position in the city, in which he practised. He obtained the degree of Doctor of Medicine of the University of Edinburgh in 1827, and of the University of Dublin in 1839, and the same year was elected a Fellow of the College of Physicians in Ireland, of which he became the President in 1854–5. He filled various posts with credit and efficiency, among others that of President of the Irish Medical Association and Consulting Physician to the Dublin Eye and Ear Infirmary. He was a Corresponding Member of the Medical Society of Hamburg, Vice-President of the Société d'Afrique, Paris, Honorary Member of the Hunterian Society, Edinburgh, Honorary Fellow of the Edinburgh Obstetrical Society, &c. His contributions to medical literature included: "On Utero-placental Circulation and Placental Souffles," "Vesico-vaginal Fistula," "Tartar Emetic in Obstetric Practice," "Purpuric Puerperal Fever," and an excellent monograph on "Congestion, Inflammation, and Ulceration of the Uterus," published in the *Dublin Medical Journal* in 1847.

SURGEON-MAJOR TAGGART, M.D.

GENUINE and genuine sorrow was felt in Carrickfergus on Saturday evening, April 10th, when it became known that Dr. Taggart had passed away, and shutters were immediately put up in every shop window, whether great or small. The sad event was not unexpected, as the deceased gentleman had been in declining health for a considerable time past, and some weeks ago it was known that, notwithstanding the care bestowed on him by several of the most eminent medical men in Ulster, his recovery was hopeless, rapid consumption being the cause of death, at the comparatively early age of forty-seven years. Dr. Taggart was the son of the late William Taggart, Esq., of Thornhill, Antrim. He was educated at the Queen's College, Belfast, and held his degree of M.D. from the Queen's University in Ireland; he was

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also a licentiate of the Royal College of Surgeons of Edinburgh. He came to Carrickfergus in the year 1859, and by his courteous manner, gentlemanly deportment, and skill in his profession, he soon built up an extensive and lucrative practice. He was coroner for the southern division of county Antrim, and also for the county of the town of Carrickfergus, and the sometimes trying and difficult duties in connexion with these offices were discharged by him with the utmost impartiality. He succeeded the late Dr. L'Estrange as surgeon-major of the 2nd Brigade, North Irish Division, Royal Artillery, and was a general favourite with his brother officers and the men. He also held the post of certifying factory surgeon for the Carrickfergus district and surgeon to the Sheil's Almshouses, Carrickfergus. In politics Dr. Taggart was a moderate Conservative, and at the last contest in the month of November he was returned in the Conservative interest as one of the municipal representatives, but he did not long enjoy the honour thus won, as the entire election was soon set aside by the Court of Common Pleas, and a new one ordered, which has not yet been held. The deceased leaves a widow and five children, for whom much sympathy is felt in the bereavement they have sustained.

JOHN MATTHEWS, M.D. ST. AND., L.S.A.

THE friends of Dr. Matthews, of Colebrook-row, Islington, were painfully surprised on Monday morning to find his death announced in the obituary of the daily papers. Though he was seventy-three years of age, he did not seem so, and might have been seen till within a few days of his death actively walking his round. He died of pneumonia, which has been so fatal this year, and which there is reason to believe he incurred by close attention to a little patient with a similar attack, to whom he paid evening as well as morning visits. Dr. Matthews will be greatly missed, not only by his patients, to whom he was a thoughtful and valuable adviser, but by his medical friends and neighbours, who often benefited by his kindness and intelligence. He was one of the oldest and most valued members of the Islington Medical Society, and frequently contributed interesting facts in the discussion of cases. Dr. Matthews was born in London and was the son of Dr. John Burggreen Matthews, M.D. Edin., who at one time practised in Canada, and the grandson of Lieutenant John Matthews, R.N., author of "A Voyage to the River Sierra Leone," and, if we mistake not, Governor of that Colony. Dr. Matthews was educated at the High School, Edinburgh, and at Dawlish. He received his medical education at St. Bartholomew's. He was tall in stature, of strong physical constitution, and, though of somewhat sensitive temper, was thoroughly upright and kind. He was thoughtful and well read. His religious views were broad. He was well-known in connexion with the microscope. In the year 1874-5 he was President of the Quekett Microscopical Club, to which he contributed many papers: one on the History of Corals, another on an instrument which he called the "Micro-megascope." He also invented an instrument for cutting hard sections. He edited the second edition of "Davies on the Microscope." Dr. Matthews had a very decided mechanical gift, and if there was any other profession which he would have adorned and liked more than his own, it was that of an engineer. He leaves a wife and one child to mourn his death, which will be felt too by his professional brethren in Islington, who greatly respected him.

WILLIAM RAYNER, M.D.

THE late Dr. Rayner of Stockport, whose death we have already announced as having occurred on April 8th, was born in Stockport, and received his professional education at University College, London, and Middlesex Hospital, being in 1832 admitted a member of the Royal College of Surgeons of England and a licentiate of the Apothecaries' Society. After a brief attendance at the hospitals of Paris, he returned to England and settled down to the practice of his profession in his native town. In 1841 he took the degree of M.D. at the London University, and since Dr. Storrar's death he was one of the oldest, if not absolutely the oldest, of those possessing that degree. In 1853, and again in 1854, Dr. Rayner was elected Mayor of Stockport, and subsequently for eighteen years he served the town in the capacity of an alderman, his position being largely that of an adviser, particularly in regard to matters affecting the public health. In 1855 he was placed on the Commission of the Peace for the borough, and was appointed subsequently a magistrate for the county of Lancaster. Dr. Rayner was a vice-president of the Stockport Infirmary, and also filled at one time or other almost every local office of influence or importance that either ability could attain or the suffrages of others could confer upon him.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on April 21st:—

Armstrong, Sidney Joseph, L.K.Q.C.P.I., Wakefield.
Arnold, Francis Sorell, Oxford.
Baker, Walter Robert, L.R.C.P. Lond., Kilburn.
Bennett, Frank Albert, L.S.A., Birmingham.
Davidson, Harold, L.R.C.P. Lond., Forest Gate.
Hare, Edward Christian, L.R.C.P. Lond., West Bath.
Henderson, James Threapland, L.S.A., Witney.
Lawson, Bernard Sloane, L.R.C.P. Lond., Harley-street.
Oliver, Francis George, L.R.C.P. Lond., Nejapatain, India.
Riddell, Andrew Wilson, L.R.C.P. Lond., Bristol.
Roome, Stanley Molesworth, L.R.C.P. Lond., Cork.
Tabor, Charles James, L.R.C.P. Lond., Reading.

Admitted on April 22nd:—

Bett, William, Holbeach.
Brodrick, Harry Edward, Bury St. Edmunds.
Bright, Eustace Frederick, Bournemouth.
Burton, Leonard William, Burton-on-Trent.
Chapman, Robert Hugh, Richmond
Colman, Walter Stacy, Peterborough.
Collingwood, George Trevor, Brockley.
Cundall, Thomas William, York.
Deacon, George Edward, Methersett.
Gough, Henry Edward, Manchester.
Graham, William Percival Gore, Cambridge.
Greenwood, William, Ossett.
Halsted, George Ezra, Newark.
Joly, Joseph Eugene Numa, L.R.C.P. Lond., Oppidem-road.
May, Chichester Gould, Dublin.
Nairn, Robert, Kennington-road.
Redmayne, Thomas, Newcastle-on-Tyne.
Smith, Frank Wyatt, B.A. Cantab., Sherborne.
Tatham, Ernest John, Highgate.
Trevor, Edward Fitzgerald, Harlesden.
Turner, Clifford Winslow, Leeds.
Walker, John Thomas, Rexborough.
Webster, Percy Samuel, L.R.C.P. Lond., Lincoln.
Williams, George Rowland, L.R.C.P. Lond., Stroud-green.
Woakes, Arnold Beaumont, Hanley-street.

Admitted on April 26th:—

Blomfield, George Wills, L.S.A., Hastings.
Bowden, Walter, Hilldrop-crescent.
Cholmeley, Henry Patrick, Duke-street, Adelphi.
Colquhoun, William Brooks, L.R.C.P. Lond., Upper Clapton.
Cross, Robert George, Petersfield.
Davis, George William, L.R.C.P. Lond., York-road.
Dixson, Charles Frederick Lyne, Camden-road.
Evans, William Edward, Torquay.
France, James Mead, Guildford-road.
George, William Hotten, Probus, Cornwall.
Georges, Absalom, Percy-circus.
Hill, Walter James, Bath.
Howell, Arthur Anthony, Wrexham.
Lyster, Arthur Edward, L.S.A., Walthamstow.
Michelmore, George, Gloucester-street.
Pagden, Trayton Charles, Epsom.
Spoor, William Joseph, Gloucester-place.
Tredinnick, Albert Stephen, St. Austell, Cornwall.
Walker, Cyril Hutchinson, Great Yarmouth.
Wallis, Charles George, Woolwich.

Admitted on April 27th:—

Bidwell, Lawrence, L.R.C.P. Lond., Lee-terrace, Blackheath.
Burnside, Eustace Augustus, L.R.C.P. Lond., Richmond-road.
Clay, William Rudolph, L.R.C.P. Lond., Westwick-gardens.
Evans, Charles Hotham, L.R.C.P. Lond., Winchmore-hill.
Gore, Alfred Joseph, L.R.C.P. Lond., Victoria, Australia.
Langton, Charles Baring Tyndal, L.R.C.P. Lond., Medora-road, Brixton.
Parker, Charles Arthur, L.S.A., Claxby, Lincolnshire.
Sprigge, Samuel Squire, Milner-terrace.
Ward, Stanley Edward, L.S.A., Haverhill, Suffolk.

Admitted on April 28th:—

Bockell, Edward, L.R.C.P. Lond., Ramsey.
Christmas, Charles Denn, L.S.A., Hammersmith.
Daniels, Charles Wilberforce, M.B. Cantab., Manchester.
Fisher, Alfred, L.R.C.P. Edin., Liverpool.
Grenfield, Henry Osborne, L.R.C.P. Lond., Calstock, Cornwall.
Holyoake, Hubert, L.R.C.P. Lond., Droitwich.
Melhuish, John, L.S.A., Crossfield-road.
Mitchell, Walter Frederick, L.S.A., Granville-square.
Nevins, John Ernest, L.S.A., Liverpool.
Norman, Frederick, L.R.C.P. Lond., Tavistock-street, Bedford.

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Rigden, Alan, L.R.C.P. Lond., Thurlow-place.
Thomas, Thomas Nash, L.S.A., Solva, Pembrokeshire.
Vallance, Ernest, L.R.C.P. Lond., Stratford.
Varley, George, Stanningley.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF EDINBURGH AND FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—At the April sittings of the Examiners, held in Glasgow, the following candidates passed the respective examinations for the triple qualification conferred by the three Scottish medical corporations:—

FIRST EXAMINATION.—John A. Calderwood, Arthur F. Crinan, Luther Watson, and R. P. Williams, Glasgow Medical School; A. H. H. Watson and M. Campbell Wright, Edinburgh School; H. C. Pauli and G. C. Giles, Leeds School; Walter Cheadle, Owens College; John Stewart and William A. Wales, Queen's College, Belfast; E. S. Leyburn, Dublin; and M. V. C. Marquis, Bombay.

SECOND EXAMINATION.—C. Carruthers, J. F. Challinor, G. Evans, John Rogerson, J. Kenrick Jones, and Archibald M'Arthur, Glasgow School; Alfred A. Adie and M. C. Wright, Edinburgh School; W. F. Cooper, Queen's College, Birmingham; Louis P. Jackson, King's College, London; Daniel Henderson, Queen's College, Belfast.

THIRD EXAMINATION.—William Ed. Bennett, Leeds School; William Colquhoun, Arnold Edward Thorpe, and Horace K. Young, Glasgow School; George Robert Nelson and John Wingfield, Edinburgh School.

The following were admitted Licentiates of the Royal College of Physicians and the Faculty of Physicians and Surgeons of Glasgow under the regulations in force prior to October, 1884:—

George W. Eglinton, Liverpool School; Ed. J. Foulston, Leeds School.

ST. ANDREWS UNIVERSITY.—The following registered medical practitioners having passed the required examinations, received the degree of M.D. on April 21st:—

Adam, Edward, M.R.C.S., L.K.Q.C.P.I., Liverpool.
Boustead, Robinson, M.R.C.S., F.R.C.S. Ed., L.S.A. Lond., Brighton.
Bowie, Alex., M.B. C.M. St. And., L.R.C.P., L.R.C.S. Ed., London.
Davis, H., L.R.C.P. Lond., M.R.C.S., L.S.A. Lond., Wallington.
Gunn, Alexander, L.R.C.P., L.R.C.S. Ed., Edinburgh.
Hume, Frederick Henry, M.R.C.S., L.S.A. Lond., London.
Knight, Charles Frederick, M.R.C.S., L.S.A. Lond., London.
Macdonald, Keith Norman, L.R.C.P. Lond., F.R.C.P. Ed., L.R.C.S. Ed., Cupar Fife.
McMunn, J. Alex., M.B. C.M. St. And., L.R.C.P., L.R.C.S. Ed., Alderney.
Scowcroft, J. Edwin, L.R.C.P., F.R.C.S. Ed., F.F.P.S. Glasg., Bolton.
Skirtliff, E. Matthew, M.R.C.S., L.S.A. Lond., Kingston-on-Thames.
Willson, Henry, M.R.C.S., L.S.A. Lond., London.

ABERDEEN UNIVERSITY.—At the recent examinations for medical and surgical degrees, the following candidates obtained the degree of M.D.:—

John Hector Anderson, M.A., James Mackenzie Booth, M.A., William Geddie, John Inglis, M.A., Peter William M'Donald, M.A., Forbes Robertson Mutch, M.A., John Reid, M.A., James Taylor Robb, M.A., William Stericker, M.A., Peter Alfred Sullivan, M.A.

The following candidates obtained the degrees of M.B. and C.M.:—

Charles Mitchell Aird, Henry Angus, Charles Arthur Arnold, Joseph Marshall Barnes, John Fairbairn Binnie, M.A., Gregor Burgess, A. Wilson Chapman, Alexander Forbes Chisholm Clark, Frank Lang Collie, William Davidson, James Steel Dickie, *John Charles Grant Duffus, M.A., George Forbes, †James Galloway, M.A., W. Greig, Alex. Gordon R. Ingram, M.A. J., Thomson Lewis, Philip J. Lumsden, Donald George Gordon Macdonald, John Malcolm, †William Milligan, Alexander Milne, Alfred Mackay, †James Murray, Charles Reid, John Russell, M.A., William Scatterty, M.A., David Alexander Shirres, Alexander Simpson, M.A., John Wesley Smith, Robert Ben Tydd Stephenson, John Taylor, *John Duncan Thomson, M.A., William Donald Urquhart, George Williamson, M.A., Reginald Graham Wills, George Nicol Wilson.

* Highest Academical Honours. † Honourable Distinction.

SOCIETY OF APOTHECARIES.—The following gentlemen passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on April 22nd:—

Alexander, Sidney Robert, Essex Lodge, Upper Norwood.
Fowler, John Bucknill, Thornton, Hereford.

AN interesting work on medical curiosities and history has been published in Spanish from the pen of Don Luis Comenge.

ON April 21st, Dr. Charles M. Chadwick delivered a lecture on Pasteur and his Work, to the members of the Leeds Philosophical Society.

ACCORDING to the *Cologne Gazette*, the wife of an inhabitant of Niehl has twice within eleven months been delivered of triplets.

NORTH-WEST LONDON HOSPITAL.—A Fancy Dress International Fair is to be held at the Athenæum, Camden-town, on May 3rd and two following days, in aid of the funds of the above hospital.

OLDHAM INFIRMARY.—The funds of this charity have been augmented to the extent of £1000, under the will of the late Mrs. Redfern, of Knutsford.

VACCINATION GRANT.—Mr. Durdin of Desford, Leicester, has received the Government grant for efficient vaccination in his district.

ON April 15th, Brigade Surgeon Ramsbotham and the officers of the Medical Staff at Alexandria gave a ball, which was well attended.

GUY'S HOSPITAL BIENNIAL DINNER. — The Guy's Hospital Biennial Dinner will be held early in July on the same day as the annual distribution of prizes, at which ceremony, it is hoped, H.R.H. the Duke of Cambridge will preside.

BOMBAY EYE AND EAR INFIRMARY.—At a meeting of the subscribers to this institution, held on Feb. 11th, the first report, dealing with a period of fourteen months, was presented. The number of patients who had received the benefits of the charity was 2780 for diseases of the eye, and 777 for aural diseases. The visits made by these patients were 19,109, a daily average of 54·4. The receipts amounted to 3602 rupees, and the expenditure to 2451 rupees, of which sum 825 rupees were expended in starting the institution. The hospital is open for the treatment of all persons, without distinction of caste or creed, and the committee earnestly appeal for further pecuniary support.

MEDICAL PRIZES AND SCHOLARSHIPS.—At *St. Bartholomew's Hospital* the Kirkes Gold Medal and £30 scholarship has been awarded to Mr. W. H. Hamer, B.A. At *St. Thomas's Hospital* the Mead Medal has been awarded to Mr. Samuel Walton Wheaton; the Cheselden Medal to Mr. John Herbert Tonking; the Solly Medal, and a prize in money, to Mr. Ernest Solly; and a bronze copy of the Mead Medal to Mr. Henry John Macevoy, he being distinguished by special proficiency. In the winter session prize list of the *Westminster Hospital* the Treasurer's Prize has been gained by Mr. L. Lewis; the President's Prize, by Mr. J. R. Plant; Chemistry Prize, by Mr. L. Lewis and Mr. E. J. Pritchard; Medicine Prize, Mr. H. B. Brackenbury; Surgery Prize, by Mr. C. Burt.

UNIVERSITY OF LONDON.—At a meeting of the Senate held on April 28th, the following gentlemen were appointed Examiners for the ensuing year: — Chemistry: Professor J. Emerson Reynolds, M.D., F.R.S.; Professor T. E. Thorpe, Ph.D., F.R.S. Botany and Vegetable Physiology: Professor Bayley Balfour, M.D., D.Sc., F.R.S.; Professor F. Orpen Bower, M.A. Comparative Anatomy and Zoology: Professor E. Ray Lankester, M.A., F.R.S.; Professor Alexander Macalister, M.D., M.A., F.R.S. Practice of Medicine: Wm. H. Broadbent, M.D.; S. J. Gee, M.D. Surgery: Wm. Morrant Baker, Esq.; Professor Christopher Heath. Anatomy: Professor D. J. Cunningham, M.D., C.M., F.R.S.E.; Professor John Curnow, M.D. Physiology: Professor E. A. Schäfer, F.R.S.; Professor Gerald F. Yeo, M.D. Obstetric Medicine: F. H. Champneys, Esq., M.A., M.B.; John Williams, M.D. Materia Medica and Pharmaceutical Chemistry: J. Mitchell Bruce, M.D., M.A.; T. Lauder Brunton, M.D., D.Sc., F.R.S. Forensic Medicine: Augustus J. Pepper, Esq., M.S., M.B.; Thomas Stevenson, M.D.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ATTHILL, ROBERT C., L.R.C.P.Ed., L.F.P.S.Glas., L.S.A.Lond., has been appointed Medical Officer for the Elmstead Division of the Fifth District of the Tendring Union.

BROWNE, GEORGE HENRY, L.R.C.P.Ed., L.F.P.S.Glas., L.A.H., has been reappointed Medical Officer of Health for the Brynmawr Urban Sanitary District.

BRYANT, HENRY V., M.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Castor District of the Peterborough Union.

EASTON, GEORGE FREDERICK, M.D. Univ. Edin., L.R.C.S., has been appointed Medical Officer of Health for the Alnwick and Canongate Urban Sanitary District, Northumberland, vice Davidson, resigned.

FOXWELL, ARTHUR, B.A., M.B. Cantab., has been appointed Pathologist to the Birmingham Hospital for Women, vice Dr. Saundby elected Consulting Physician.

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FRIZELL, THOMAS, B.A., M.D., M.Ch., L.M., R.U.I. (late House-Surgeon and House-Physician to the London Hospital), has been appointed Government Medical Officer to the Roebourne District of Western Australia.

GRIFFIN, INNES, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer of Health for the Banbury Urban Sanitary District, vice Grimbly, whose appointment has expired.

HODSON, FRANCIS OCTAVIUS, L.K.Q.C.P.I., has been appointed Medical Officer to the District Hospital, Government Medical Officer and Public Vaccinator for the Walgett District, New South Wales.

LAWFORD, JOHN BOWRING, F.R.C.S.Eng., has been appointed Assistant Ophthalmic Surgeon to St. Thomas's Hospital.

LAWTON, HERBERT ALFRED, L.R.C.P.Lond., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer of Health for the Poole Urban and Port Sanitary Districts, vice Vernede, resigned.

MACVIE, ADAM, M.D. Univ. Edin., has been appointed Medical Officer of Health for the Baildon Urban Sanitary District, Yorkshire, vice Smyth.

MONTGOMERY, SAMUEL, L.R.C.P.Ed., L.R.C.S.Ed., has been reappointed Medical Officer of Health for the Ovenden Urban Sanitary District, Yorkshire.

PAGET, CHARLES EDWARD, L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer of Health for the Appleby Urban Sanitary District.

PARKINSON, SIDNEY G., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer to the Workhouse of the Wimborne and Cranborne Union.

PERCIVAL, FRANK, has been appointed Assistant Medical Officer to the Lunatic Hospital, The Coppice, Nottingham.

PESKETT, A. W. CHALMERS, M.A., M.B.Cantab, has been appointed Medical Officer of Health for the Urban Sanitary Authority, Burnham, Somerset, vice D. A. Fraser, M.R.C.S., resigned.

PINKERTON, JAMES, M.D., Q.U.I., has been appointed Medical Officer for the First District of the Parish of Liverpool.

REVINGTON, GEORGE, A.B., M.B., B.Ch., has been appointed Junior Assistant Medical Officer to the Prestwich Asylum.

SHARP, EDWARD, M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the Truro Urban Sanitary District.

THOMSON, THEODORE, M.A.Aber., M.B.Lond., L.R.C.P. & L.R.C.S.Ed., has been appointed Medical Officer of Health for Aberdeen, vice Simpson, resigned.

TURNER, HENRY C., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Fourth District of the Steyning Union.

Births, Marriages, and Deaths.

BIRTHS.

CLARE.—On March 29th, at Sutton's Pasture, Vere, Jamaica, the wife of Henry L. Clare, M.B., District Medical Officer, of a son.

LANKESTER.—On the 25th ult., at Gwendwr-road, West Kensington, W., the wife of Herbert Lankester, M.B.Lond., of a son.

NISBET.—On the 16th ult., at Devonshire-road, Princes'-park, Liverpool, the wife of J. Tawse Nisbet, M.B., C.M.Ed., of a daughter.

POWER.—On the 19th ult., at Bloomsbury-square, W.C., the wife of D'Arcy Power, M.A., M.B.Oxon., F.R.C.S.Eng., of a daughter.

WELLS.—On the 22nd ult., at Belsize-park, N.W., the wife of Poulett Wells, M.B., of a son.

MARRIAGES.

ALEXANDER—FINDLAY.—On the 26th ult., at 4, Rowallan Quadrant, The Observatory, Glasgow, by the Rev. Dr. Drummond Belhaven, U.P. Church, Thomas Gray Alexander, M.B., C.M., M.R.C.S.Eng., of Glasgow, to Anna Graham, daughter of John Findlay.

HABERSHON—DAVIES.—On the 28th ult., at Menai-bridge, Anglesey, Samuel Herbert Habershon, M.B.Cantab., M.R.C.P., only son of Dr. Habershon, of Brook-street, Grosvenor-square, to Catharine, second daughter of Richard Davies, Esq., M.P., of Treborth, Bangor.

HENDERSON—BALFOUR.—On March 7th, at the Cathedral of Holy Trinity, Shanghai, Wm. A. Henderson, L.R.C.P.Ed., L.R.C.S.Ed., of Chefoo, to Jessie Elizabeth, third daughter of Joseph Balfour, of Athelstan House, Brighton, Sussex.

DEATHS.

JACKSON.—On the 24th ult., at Barnstaple, Devon, Henry Jackson, M.R.C.S., aged 35.

KENNEDY.—On the 22nd ult., at Queensberry-place, S.W., Evory Kennedy, M.D., D.L., of Belgard, Clondalkin, formerly President of the King and Queen's College of Physicians, Ireland, aged 79.

LITTLER.—On the 5th ult. (suddenly), at his residence, Embden-street, Manchester, John Watson Littler, M.R.C.S.Eng., L.S.A.Lond., the dearly-beloved husband of Mary Ann Littler, and the only son of the late Dean of Battel.

MATTHEWS.—On the 22nd ult., at Colebrooke-row, Islington, John Matthews, M.D.

ORWIN.—On the 16th ult., at Palace Chambers, Westminster (after a brief illness), Surgeon-Major Thomas William Orwin, A.M.D., eldest son of the late James Orwin, M.D., aged 47.

SEAGRAVE.—On the 23rd ult. (suddenly), at his residence Oakhurst, Sunninghill, Berks, William Seagrave, M.R.C.S., in his 71st year.

TAGGART.—On the 10th ult., at his residence, Carrickfergus, Surgeon-Major D. R. Taggart, M.D., Coroner, County Antrim and County of the Town of Carrickfergus, aged 47 years.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

BOOKS ETC. RECEIVED.

BAILLIÈRE, TINDALL, & COX, King William-street, Strand, London.

A Text-book of Naked-eye Anatomy: being an accompanying text to Masse's Plates. By James Cantlie, M.A., F.R.C.S., &c. Third Edition. pp. 475, with 113 Plates.

CHURCHILL, J. & A., New Burlington-street, London.

Materia Medica and Therapeutics: Vegetable Kingdom, Organic Compounds, Animal Kingdom. By Chas. D. F. Phillips, M.D. pp. 1081.

A Manual of Medical Jurisprudence. By Alfred Swayne Taylor, M.D., F.R.S. Eleventh Edition. Edited by Thos. Stevenson, M.D.Lond. pp. 837.

HIRSCHWALD, A., Berlin.

Klinik der Verdauungskrankheiten. Von Dr. C. A. Ewald. I. Die Lehre von der Verdauung. Zweite neu bearbeitete Auflage. S. 197.

KEGAN PAUL, TRENCH, & Co., Paternoster-square, London.

The Springs of Conduct: an Essay in Evolution. By C. Lloyd Morgan. pp. 317.

KIMPTON, HENRY, High Holborn, London.

The Alkaline and Non-alkaline Treatment of Acute Rheumatism. By C. S. Taylor, M.D., B.Sc.

LEWIS, H. K., Gower-street, London.

A Manual of Operative Surgery. By Lewis A. Stimson, B.A., M.D. Second Edition. pp. 506, with 342 Illustrations.

Bath, Contrexéville and the Lime Sulphated Waters, with their Use in Medicine. By John Macpherson, M.D. pp. 54.

L'INSTITUTE DE MÉDECINE DOSIMÉTRIQUE, Paris.

Compendium de Médecine Dosimétrique, ou Matière Médicale, Chimique, Pharmaceutique, Pharmacodynamique, Clinique. Par le Dr. A. Van Renterghem de Goes (Zelande). pp. 941.

LONGMANS, GREEN, & Co., Paternoster-row, London.

The Rotifera or Wheel Animalcules. By C. T. Hudson, LL.D., and P. H. Gosse, F.R.S. Part III.

Transactions of the Obstetrical Society of London. Vol. XXVII. pp. 355, Illustrated.

MACMILLAN & Co., Bedford-street, London.

Micro-organisms and Disease: an Introduction to the Study of Specific Micro-organisms. By E. Klein, M.D., F.R.S. Third Edition, Revised. pp. 267, with 121 Engravings.

PENTLAND, YOUNG J., Edinburgh.

Diseases of the Mouth, Throat, and Nose. By Dr. Philip Schech. Translated by R. H. Blaikie, M.D., F.R.C.S.E. pp. 302, with 5 Illustrations.

SAMPSON LOW, MARSTON, SEARLE & RIVINGTON, London.

A System of Practical Medicine by American Authors. Edited by Wm. Pepper, M.D., LL.D.; assisted by Louis Starr, M.D. Vol. IV.: Diseases of the Genito-urinary and Cutaneous Systems; Medical Ophthalmology and Otology. pp. 887.

SCOTT, WALTER, Warwick-lane, London.

Plain Facts about Infant Feeding and Management. By C. S. Redmond, L.K.Q.C.P.I., &c. pp. 82.

SMITH, ELDER, & Co., Waterloo-place, London.

On Asthma, its Nature and Treatment. By Horace Dobell, M.D. pp. 32, quarto, Illustrated.

WOOD, WILLIAM, & Co., New York.

A Reference Handbook of the Medical Sciences. By various Writers. Edited by A. H. Buck, M.D. Vol. II. pp. 814, profusely Illustrated.

Index Medicus, Vol. VIII., Nos. 2 & 3.—The Doctrine of Evolution in its Application to Pathology; by Wm. Aitken, M.D. (Macdougall, Glasgow).—University College Magazine, Liverpool.—A Selection of Chess Problems; by C. White, Surg.-Major. (Morgan, Holloway).—La Langue Intérieure et les diverses Formes de l'Aphasie; par Prof. G. Ballet. (Baillière et Cie, Paris).—An Introduction to the Pathology of Cancer and Tumour Formation on the Basis of Evolution; by W. Roger Williams, F.R.C.S.—Annual Medical Report on the Straits Settlements Civil Hospitals for 1885; by T. Irvine Rowell, M.D.—Patents and Patentees in Victoria; by Richard Gibbs, Registrar-General of Victoria.—The Right Mode of Respiration in regard to Speech, Song, and Health; by C. J. Plumptre. (Trübner).—The Influence of Sewerage and Water-supply on the Death-rate of Cities; by E. F. Smith.—De la Oftalmía Purulenta dél Recien Nacido; por el Dr. M. J. Osio.—The Home Artist; conducted by Mrs. A. Heron, Chicago.—Acute Nephritis in Lambs; by W. Roger Williams, F.R.C.S.—Description of the St. Marylebone Infirmary, Notting-hill; by H. Saxon Snell.—Archives Slaves de Biologie; dirigées par MM. Maurice Mendelssohn et Ch. Richet. (D. Nutt, Strand).—Contribution à l'Etude de la Périarthrite du Genou; par Dr. T. H. P. de Tavera.—Holiday Notes in East Anglia.—Transactions of the Obstetrical Society of London, Part I.—Recherches sur l'Action Physiologique et Thérapeutique de l'Acétophenone; par M. A. Mairet et M. Combemale.—Ueber das primäre Erysipel des Kehlkopfs; von Dr. F. Massei.—Zur Prognose der Gehirnsyphilis für practische Aertze; von Dr. O. Braus.—Der Blutkreislauf der Ganglienzelle; von Prof. Dr. A. Adamkiewicz. (Hirschwald, Berlin).—Compensation for Personal Injuries on Rail, Road, and River; by T. J. W. Bennett, F.R.S.L.—Estadisticas de la Inoculacion Preventiva del Cólera Morbo Asiatico.—De l'Antipyrine dans la Thérapeutique Infantile; par le Dr. Moncorvo. (Berthier, Paris).—Good Words, Sunday Magazine for April and May, Leisure Hour, Sunday at Home, Boys' Own Paper, Girls' Own Paper, April and May.—The Heretic, April

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Medical Diary for the ensuing Week.

Monday, May 3.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
ROYAL INSTITUTION OF GREAT BRITAIN.—5 P.M. General Monthly Meeting.
SOCIETY OF ARTS.—8 P.M. Dr. B. W. Richardson: Animal Mechanics (Cantor Lecture).
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Dr. R. Douglas Powell will deliver the Annual Oration. At 9.15, Reception by the President and Conversazione. The Band of the Royal Artillery will be in attendance.

Tuesday, May 4.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Arthur Gamgee: The Function of Circulation.
PATHOLOGICAL SOCIETY OF LONDON.—8 P.M. Mr. R. W. Parker: Obliterative Tracheitis and Bronchitis in Congenital Syphilis.—Dr. Hale White: Pathological Histology of Hydrophobia.—Dr. Payne: Granuloma Fungoides.—Mr. Eve: Granuloma Fungoides of Foot.—Dr. Handford: Hepatic Abscess Secondary to Pelvic Inflammation.—Dr. Norman Moore: Primary Cancer of the Thyroid.—Dr. N. Dalton: Congenital Stricture of Small Intestine.—Dr. Carrington: Double Intestinal Stricture.—Mr. Davies-Colley: Spinal Abscess destroying Right Kidney and opening into Duodenum.—Dr. Silcock: Psoas Abscess with Formation of New Bone in Sinus.—Dr. Turner: (1) Tubercular Arteritis; (2) Miliary Tubercle in Pulmonary Artery.—Dr. Mott (for Dr. Steeves): Malignant Growth of Lip, with Melanosis. A number of Specimens will also be exhibited.
SOCIETY OF ARTS.—8 P.M. Mr. Ernest Hart: Japanese Art Work.

Wednesday, May 5.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.
SOCIETY OF ARTS.—8 P.M. Adjourned Discussion on Dr. C. Meymott Tidy's paper on The Treatment of Sewage.
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown. Dr. Matthews Duncan: On Elasticity, Retraction, and Polarity of the Uterus.—Dr. Amand Routh: A case of Serous Perimetritis.—Dr. Champneys: On the Artificial Production of the so-called Lymphatic Varix.

Thursday, May 6.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Dewar: The Alkaloids.
SOCIETY OF ARTS.—8 P.M. Mr. Edward Coombes: The Commerce and Industries of New South Wales.
HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Mr. C. M. Handfield-Jones: On Sudden Death in Pregnancy, Parturition, and the Puerperal State.—Dr. W. Ewart: On some Practical Points in Percussion and Auscultation of the Chest.
OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8.30 P.M. Exophthalmic Goitre, its Symptoms, Pathology, and Treatment. Communications will be made by Drs. Wilks, Bristowe, Hughlings-Jackson, Sharkey, Hill-Griffith, and Samuel West, and by Messrs. Lunn, Higgens, Silcock, &c. Living and Card Specimens at 8 P.M.

Friday, May 7.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
SOCIETY OF ARTS.—8 P.M. Mr. B. H. Baden Powell: Indian Manufactures from a Practical Point of View.
WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—8 P.M. Mr. Percy Dunn: Morbid Specimens.—Dr. Ball: A case of Multiple Warts.—Drs. Ball and Colcott Fox: Cases of Hereditary Syphilis.—Dr. Colcott Fox: Some cases of Bone Syphilis in Infants.—Dr. Scanes Spicer: A case of Chronic Cerebral Abscess following Otitis Media, with account of post-mortem examination.—Dr. Clippingdale: Educational Over-pressure of Young Children.
ROYAL INSTITUTION OF GREAT BRITAIN.—9 P.M. Mr. Frederick Siemens: Dissociation.

Saturday, May 8.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Ernst Pauer: How to Form a Judgment on Musical Works.
SOCIETY OF ARTS.—3 P.M. Prof. George Forbes: Electricity.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, April 29th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia. in Vacuo.	Max. Temp. Shade.	Min. Temp.	Rain fall.	Remarks at 8.30 A.M.
Apr. 23	30·06	N.E.	52	49	105	67	44	...	Fine
,, 24	30·05	E.	52	50	103	69	48	...	Overcast
,, 25	30·03	E.	55	50	104	62	46	·03	Fine
,, 26	30·03	N.E.	59	54	104	68	45	...	Fine
,, 27	29·93	N.E.	50	46	105	68	45	...	Fine
,, 28	29·64	E.	52	50	79	62	48	·03	Raining
,, 29	29·89	E.	40	39	82	50	39	·25	Raining

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

SCIENCE AND THEOLOGY.

R.L., M.D.—We do not succeed in making our position intelligible if our readers are unable to understand that we protest against the affirmation of neology; on the obvious ground that nothing positive can be based on a negative. It is absurdly illogical to assert that there cannot be a soul or a future state simply because the investigations of biologists have not resulted in the discovery of either. The scientist, *as such*, must be agnostic in the sense of knowing nothing of a soul or a future; but he has no reasonable ground for denying their existence. He simply does not know. He may go so far as to say these things are unknown: but he has no right to declare that they are unknowable, much less can he deny their existence. So far as he is concerned, there may be a soul and a future, and religion may be true. As a *scientist*, he has simply nothing to do with the subject. As a *man*, he is free to believe or disbelieve what he pleases. This being our view, it would be inconsistent for us to join issue with the materialist, or to attempt to bring science to the aid of religion. The time has not arrived—whether it ever will or not we have no means of judging—when there shall be a science of religion. At present the subject matter of religion is, in a scientific sense, unknown. There are, however, in all times and places those who worship "the Unknown."

L. H. Masser.—The office is at 27, Chancery-lane, where information may be obtained.

Dr. Wiglesworth (Rainhill).—Yes, in an early number.

TENDER FEET.

To the Editor of THE LANCET.

SIR,—In reply to "X" in your last issue (p. 815), will you allow me to say that I can fully sympathise with your correspondents, having been for many years a sufferer from tender feet, for which the easiest of boots afforded no relief. It occurred to me that the complaint might be due to some low form of vegetation affecting the skin, derived perhaps from the leather of the boots. Acting on this theory I was led to try the remedy used at the Cape for destroying the fungus (oïdium albicans) affecting the cuticle of the vine leaves. I dusted the feet with sulphur, and found immediate relief, but the remedy was attended with inconvenience. I afterwards tried the simplest of antiseptics—common salt,—and found it to answer perfectly. The plan I follow is, after the morning bath, to sponge the feet with a strong solution of salt (three tablespoonfuls to half a pint of water), afterwards drying lightly.

I am, Sir, yours truly,

April 29th, 1886. CAPENSIS.

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GAOLS IN GEORGIA, U.S.A.

JUDGE JOEL BRANHAM of Georgia has been reading the State authorities a salutary lesson on the hygienic treatment of prisoners, as the following speech will show:—"A great many of the county gaols in Georgia are a disgrace to our civilisation. They are built with no reference whatever to the comfort of those who may be compelled to occupy them, while from a sanitary point of view they are often hardly fit to be occupied by animals, let alone human beings. With few exceptions, they are not furnished with the means of ventilation, and the bad air which the prisoners are compelled to breathe often breeds diseases. Then, again, many of them have no provision for being warmed in cold weather, and much suffering has resulted from this cause during the past winter. The law does not seek to punish a man by freezing him or depriving him of pure air. For this reason, I have made it a point to charge the grand juries wherever I held court to carefully investigate the gaols, and see that they are furnished with proper heating apparatus and the means of ventilation. There should certainly be some State supervision over all prisons, both county and municipal. I have long advocated the appointment of an inspector of such prisons, with plenary powers to enforce all laws pertaining to them."

M.R.C.S.—Our correspondent's experience will no doubt be a warning to him not to attend and give evidence at an inquest without a subpœna duly served. For all that, we maintain that when a coroner asks, through his constable, a medical man to attend an inquest, he is morally bound to tell him that he cannot pay a fee, or, failing such notice, to pay it. We advise our correspondent to lay the facts before the Home Secretary. He owes this as a duty to himself and to the profession.

Physician has not enclosed his card.

SIX MONTHS' EXPERIENCE OF SANITARY WOOLLEN CLOTHING AND BEDDING.

To the Editor of THE LANCET.

SIR,—I should be glad if you can give me the opportunity to render to your readers a short account of the effects in my experience of the use of sanitary woollen clothing and bedding. If I may judge from my own case very many who may have read or heard more or less of Dr. Gustav Jaeger's propositions with regard to dress have dismissed them with little ceremony as pedantic or as well enough for those who are not acquainted with the virtues of good English underclothing, &c. To all such I would say "Don't." The experience of several winters led me to look forward to the last with grave apprehension as prolific of severe and exhausting catarrhs, followed by increased susceptibility and renewed attacks. In October, I, for the first time, saw an exposition of Dr. Jaeger's views in his excellent little volume "Health Culture," and was so impressed with their soundness that I adopted the sanitary woollen clothing and bedding advocated by him in their entirety. The result has been complete immunity from colds and a very marked increase in my capacity for work. I have not put on a great-coat night or day, have slept with an open window in bedroom, and have been able to enjoy the luxury of an open cab instead of a close brougham. Instead of alternating feelings of heat and cold, there has been a uniform and most agreeable glow of warmth. I have, without any alteration of diet or regimen, lost 7 lb. in weight, and (which will, I believe, tax the credulity of some) have witnessed the disappearance of a lipoma of the nape of the neck, which had existed for some years, and had suggested the necessity for an operation. These latter facts powerfully illustrate the truth of Dr. Jaeger's contention that the complete and continuous action of the skin drains the organism of water and superfluous fat. I would say, further, that the feeling induced of perfect health is not the least of the recommendations to adopt the system. I may mention that of the many who have, more or less, fully addicted themselves to it from my example or advice I have not known one who has been disappointed. Lastly, I would add a word on the need there is, if the full benefit to be derived is wished for, that nothing but pure wool should enter either into dress or bedding.

I am, Sir, yours faithfully,

JOHN PENHALL, M.D., F.R.C.S.

St. Leonards-on-Sea, April 17th, 1886.

Inquirer.—1. The public vaccinators are paid at a certain rate for each successful case by the boards of guardians. The minimum fee is eighteenpence for every vaccination done at an appointed station situated at or within a mile from the residence of the vaccinator or in the workhouse of the union or parish; not less than two shillings for every vaccination done at any station over a mile and under two miles distant from his residence; and not less than three shillings if the station be distant over two miles. It should be noted that these are minimum fees, and that the guardians are permitted to pay more. It is right therefore that the public vaccinator should be properly remunerated, and when he can obtain better terms he should do so.—2. Public vaccinators are appointed by the boards of guardians, subject to the approval of the Local Government Board.—3. The Government grant for efficient vaccination is a maximum fee of one shilling for each successful case.

Dr. Auld (Wick).—Yes; as early as possible.

VENANZIO LUPACCHINI.

"LA cura della Idrofobia e la Scoperta di Pasteur"—such is the title of a paper in the *Nuova Antologia* of April 1st, which may be recommended as perhaps the most succinct, while most exhaustive, account of the malady and of previous attempts to cure it yet given to the public. The author is the distinguished physiologist, Signor E. Mancini. Italy, indeed, has special reason to study, and to try to find a remedy for, hydrophobia, if only for its having cost her so many valuable lives, of which few have been more valuable than Lupacchini's. That brilliant physician, classical scholar, and mathematician, to whom the text of Celsus owes so many felicitous emendations, met his death from the bite of a dog under circumstances so remarkable as to deserve recapitulation. On June 14th, 1774, when in his forty-fifth year, a favourite spaniel bit him on the back of the left hand and on the external malleolus of the left foot. Having treated the wounds as seemed best at the time, they caused him so little inconvenience or mental disturbance that he ceased to think of them, being fully persuaded that the dog was not mad. A year passed, and still there was nothing to arouse suspicion. But in the July of 1775 he began to complain of a certain torpor in the left side, and this he treated with the bath, but not so successfully as to conquer the disquieting sensations. The malady first declared itself as hydrophobia in the month of August; but the symptoms once more disappeared until the last day of September. Again the bath was resorted to, and, by way of gratifying his anxious friends, he went to the sanctuary of San Domenico a Cucullo, celebrated throughout his native Abruzzi for the cures it wrought on the faithful. But on the way to this shrine he was overtaken by most violent hydrophobic convulsions, so that he had to alight at Aquila, where the malady continued to declare itself more and more till the night of October 22nd, 1775, when a final, agonising convulsion put an end to his torments. Medical scholarship was thus deprived of a most useful and brilliant light, in one who has not inaptly been described as "an eighteenth century Littre."

Mr. J. S. Dunlop.—We do not quite see what is meant by the term "Medical Assurance Companies."

INFANT FEEDING: COD-LIVER OIL.

To the Editor of THE LANCET.

SIR,—In reference to the annotation on infant feeding which appeared in your issue of April 17th (p. 756), permit me to suggest a mode which I have adopted for many years with unfailing success—I allude to the addition of cod-liver oil to the food of hand-fed infants. Swiss milk is one of the best substitutes for mother's milk, and many infants thrive upon it remarkably well. But we constantly meet with cases in which no kind of artificial food is of benefit, and the poor little creatures waste away, many of them dying of sheer inanition. Now, in these cases cod-liver oil comes in with admirable effect. It is most conveniently given in this way:—Let the nurse dip the end of her little finger in the oil, and put it into the child's mouth. This may be repeated five or six times in the twenty-four hours. In such small quantities, not only does it never disagree, but the child sucks it off the finger with avidity and evident pleasure. It may be administered in this way to the youngest infants. By this simple and inexpensive expedient I have seen many infants who were absolutely starving for want of the natural foods become fat and plump and happy in an almost incredibly short space of time. The oil has the effect of enabling the child to digest other food, which it could not retain on its stomach without it. The great mistake in hand-feeding is to resort, as is commonly done, to preparations of vegetable production which are not suited to the organisation of infants, who are clearly intended to live on animal food; and if that provided by nature, in the form of mother's milk, cannot be given, then the milk of some other animal should be substituted, perhaps with the addition of a little gelatine. But with the aid of cod-liver oil, as I have suggested, any good pure milk will agree with and nourish the child.

I am, Sir, yours obediently,

London, April 26th, 1886. S. YELDHAM, L.R.C.P.Ed., M.R.C.S.

Vigilans.—In a circular of a hydropathic institution we notice that medical men are offered £1 a month for patients recommended by them, and who stay not less than one month, and £2 if they stay three months or longer. We think that this is objectionable. Medical men in advising places of change to their patients are supposed to be acting on purely professional considerations. This supposition would be marred if any commercial considerations were introduced into the question.

F.R.C.S.Eng. (exam.) has omitted to enclose his card.

"KISSING THE BOOK."

To the Editor of THE LANCET.

SIR,—I think we might with advantage take a leaf out of our American cousins' book. I was called upon to give evidence in an American court of law, and when the oath was administered I had to lift up my right hand.

I am, Sir, yours truly,

Sierra Madre, March 31st, 1886. F. C. GRESHAM, M.D., M.R.C.S.

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THE BARTLETT CASE.

WE have received a letter from *Mr. T. L. Nichols*, M.D. Univ. New York, U.S.A., the author of "Esoteric Anthropology," enclosing an "Appeal for Justice" against the opinion expressed by Mr. Justice Wills on the character of the book in question. But it is obviously impossible for us to insert strictures on the comments of a judge (even if we differed from him) written at the length and in the strong terms of the appeal.

Thames.—If the election is annual, or the present holder of the appointment vacates it, by death or otherwise, our correspondent's candidature must be successful, if proper representation be made to the Central Board.

Mr. J. G. V. West.—Short notes of the case would be acceptable.

PNEUMONIA AMONGST SOLDIERS.

To the Editor of THE LANCET.

SIR,—Will you allow me to call the attention of the military authorities to the desirability of the soldiers on guard wearing their great-coats when on sentry? I have frequently noticed them with only the tunic, the bitterest east wind blowing hard all the while, and I dare say their under-vests are not at all too warm to protect them against the severity of the weather. Would not this in a great measure account for the "unusually heavy mortality (chiefly chest complaints) amongst the younger soldiers," as recorded? I am, Sir, yours faithfully,

April 24th, 1886. A SANITARIAN.

Enquirer.—We think that the particulars should be given if asked for, if it is intended to press the claim legally.

Enquirens.—Parkes or Wilson.

HOODED GIG OR BUGGY.

To the Editor of THE LANCET.

SIR,—Will any country practitioner who has habitually used a hooded gig or buggy give me the benefit of his experience as regards its comfort in driving long distances on hilly roads—as to whether the occupants are fairly well protected from bad weather, and as to whether any inconvenience is experienced in driving against a head wind when the hood is up? Such information would be thankfully received by

Yours faithfully,

April 26th, 1886. A COUNTRY DOCTOR.

Alpha.—We know of no systematic account of the post-mortem appearances in cases of persons dying from eating poisonous or tainted fish. In some instances nothing abnormal has been discovered, and in most, we imagine, nothing more would be seen than the effects of an irritant. The symptoms generally point more to a toxic agent than to a fatally irritant one.

S.B. is referred to the Medical Directory.

CORRIGENDA.—In the fifth line of the first paragraph of Mr. Eyles' Note on Malarial Icterus and Hæmoglobinuria, in our issue of Jan. 30th, for "spasm" read *plasma*; and in the sixth line of the fourth paragraph, for "hæmoglobinuria" read *hæmoglobinæmia*.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Brailey, London; Prof. Latham, Cambridge; Dr. Savage, London; Sir R. N. Fowler, London; Mr. Vincent Jackson, Wolverhampton; Mr. Godlee, London; Dr. Whitson, Glasgow; Mr. Jalland, York; Dr. Charteris, Glasgow; Dr. H. V. Carter, Bombay; Dr. Hellier, Leeds; Mr. Percy Dunn, London; Dr. Tucker Wise, London; Mr. T. L. Phipson, London; Mr. A. Wright, Romford; Mr. F. Vacher, Birkenhead; Dr. Sutton, Sittingbourne; Messrs. Slazenger and Sons, London; Mr. Eyles, Gold Coast; Mr. J. Robertson, Edinburgh; Dr. Lewins, London; Dr. T. L. Nichols, London; Mr. Haslam, Birmingham; Messrs. Stevenson and Howell, London; Dr. Findlater, Dufftown; Mr. Nairne; Mr. Sell, London; Dr. W. F. Taylor, Brisbane; Dr. Barr, Glasgow; Mr. D. Evelyn; Mr. Hopkinson, Notts; Mr. Benton, London; Mr. Shirley, Stoke-upon-Trent; Mr. Leitershofen, Homburg; Messrs. Eason and Son, Dublin; Mr. Packard, Suffolk; Mr. MacMunn, London; Mr. Potter, London; Mr. Hastings, London; Mr. Hughes, London; Mr. Fulton, Canada; Mr. Kippex, Stamford; Mr. Clark, Aberdeen; Mr. Sutton, London; Mr. Rothua, Beeston; Mr. Fry, Swindon; Messrs. Shiell and Small, Dundee; Dr. Lowe, Burton-on-Trent; Messrs. Jevons and Ryley, Liverpool; Mrs. Pratt, Bournemouth; Mrs. Goodman, Upper Clapton; Mr. Brewster, Bootle; Mr. Freeman, London; Miss Barlow, Blackheath; Mr. Haveling, Paddington; Messrs. Oppenheimer and Co., London; Mr. Senior, Norwood; Mr. Jeaffreson, Newcastle-on-Tyne; Mr. Lacy, Wandsworth; Dr. Spooner, Clapton; Mr. Scott, Manchester; Mr. Sharples, Preston; Mr. Reed, London; Mr. Abbs, Dewsbury; Mr. Gray, Maidstone; Mr. Grant, Tomintoul; Mr. Milne, Ladywell; Mr. Stilliard, Birmingham; Mr. Berkeley, Burton-on-Trent; Dr. Oldham, Manchester; Mr. Berthier, Paris; Mr. Barton, Norwich; Dr. Fenwick, London; Dr. Meldon, Dublin; Mr. Byrt, Shepton Mallet; Mr. Armstrong, Manchester; Messrs. Orridge and Co., London; Messrs. Allsopp and Co., London; Mr. Stooke, Newton Abbot; Dr. Gramshaw, Walton-on-the-Naze; Mr. Williamson, Leeds; Mr. Jackson, Bradford; A Samaritan; Thames; Vendor; F.R.C.S.; Surgeon, R.N.; Subscriber; A. P. S.; M.R.C.S.E.; P. S., Swanage; T. Med.; Mrs. T., Blackburn.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Eberle, Thirsk; Mr. Boyveau, Paris; Mr. Willan, Leicester; Dr. Williams, Norwich; Dr. Coumbe, Twyford; Mr. Forster, London; Mr. Leith, Forfar; Mr. McClelland, Glasgow; Mr. Squire, London; Mrs. Hitch, St. Leonards-on-Sea; Mr. Cameron, Edinburgh; Dr. Vincent, Manchester; Mr. O'Grady, Hyde; Mr. Whitford, London; Mr. Loveridge, Broadstairs; Mr. James, Yorks; Mr. Turbshaw, Mold; Mr. Hartnell, Notts; Mr. Lambton, Rochdale; Mr. Williams, Oxon; Mr. Rideal, London; Mr. Morgan, Hornsey; Dr. Morton, Kilburn; Mr. Wilson, Anerley; Mrs. Goodman, Clapton; Mr. Beach, London; Dr. Leckin, Pontypridd; Lieut. Beresford, Gosport; Mr. Julien, Newark-on-Trent; Dr. Constable, Ash; Mr. Elliott, Carlisle; Messrs. Tillotson and Son, Bolton; Mr. Rhodes, Manchester; Mr. Lawrence, Tunbridge Wells; Mr. Hopkinson, Notts; Mr. Garland, Leith; Messrs. Beal and Son, Brighton; Dr. Collier, Gorleston; Mr. Yeldham; Mr. Bickerton, Liverpool; Mr. Huxtable, London; Miss Rocky, Devon; Dr. F. J. Money, London; Dr. Findlater, Norwich; Dr. Beaumont, Southampton; Medicus, Sheffield; M.D.; Medicus, Yorks; Medicus, Edinburgh; F. W., Devonport; Medicus, Salop; Sydney; Surgeon, Devon; Medicus, Barnsley; A. B., Ramsgate; Matron, Bridgwater Infirmary; X. Y., Pontypridd; Medicus, Falmouth; Medicus, Manchester; Premium; Omega, Hull; G. H.; N.; M.R.C.S.; Omega, Brighton; A. B., Manchester; Delta, London; C. H.; Salopian; Medicus, Walthamstow; H. B., Dalston; F. J. B.; C. A., Bristol; C. A. M.; Alpha; M. X.; B. D. F.; Z. A.; M.A.; Sigma, Tipperary; Humerus; M. P., Southport; Thyra; T., London; Tenax, Devon; Nemo, Leeds; Matron, Peterborough.

Retford News, Hampshire Advertiser, Hackney Express, Freemason, Burton Chronicle, Halifax (Nova Scotia) Citizen, Times of Egypt, Glasgow Herald, Aberdeen Daily Free Press, City Press, Western Mail, &c., have been received.

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ABSTRACTS OF THE

Lumleian Lectures

ON THE

ELECTRICAL CONDITIONS OF THE HUMAN BODY.

By WILLIAM H. STONE, M.A., F.R.C.P.

LECTURE III.

DR. STONE said that in the second lecture he had shown the effects of polarisation which occur in all electrolytes and in the human body to an extent not previously measured, as far as he knew. The important bearing of polarisation on electrotonos was also discussed. He had to make two corrections. In the skeleton form of Mance's method a minus was omitted between the two terms of the numerator A – B. This he believed led him to describe the formula as one of multiplication. "The product divided by the sum" was so familiar to electrical workers that the mistake was natural. The method really used was the difference of the compound quantities designated A or B divided by that called C. Dr. Ord also suggested that he had not made the demonstration of the two sounds in the induction discharge quite clear on the telephone. This experiment was therefore repeated in another way.

Coming to the subject of the third lecture proper, Dr. Stone said the account of induced currents was in every text-book. Induced currents are momentary, occur at make and break; the current in the primary coil induces also an extra current in the opposite direction, which therefore weakens the effect of make, whereas on breaking the opposite effect takes place. Induced currents came early into physiological and therapeutical use because of their obvious effect on the sensory nerves, of their action on muscle as a stimulant, and on account of the remarkable work done by Duchenne. Duchenne used a clumsy and primitive induction coil, though he accomplished a vast amount of work, and isolated several new nervous diseases, by testing the reactions of muscles to stimulants. But his coil was merely a convenient stimulus—it had no electrical value. For testing the contractility of muscle it is still unequalled. It is also most valuable as a means of keeping up the irritability of muscle which has been damaged by the metallic impregnation of lead, or from which, by nerve injury or more deep-seated lesion, motor nerve influence has been cut off. This induction coil is really a muscle stimulant, and very little more. It may also be used, though with more caution, to test sensation. Here, however, individual differences of temperament step in, the tolerance to induced currents being extremely various in different persons. At fairs and market gatherings the "try your strength" devotees of electricity merely test the individual's capacity to stand a particular amount of induced current. This form of electricity may do good service in stimulating ever so deep-seated a muscle as the diaphragm in asphyxia or suspended animation. In the lecture-room, too, it is most convenient and effective for physiological demonstration. But here its use should end. At present, as a means of physiological research, it is unsafe. The lecturer much regretted that some recent researches as to localisation of cerebral function had been founded on the use of induction currents. There is not only no proof that the current passes through the region included between the poles, but there is conclusive reason to believe that it diffuses itself widely and irregularly in all directions, with enormous differences of density. Further, it is doubtful if it ever traverses a moist substance like brain tissue at all, or only starts a series of laminated polarities something like a condenser. In a feeble conductor a polarised state is set up which is the very reverse of transmission of current. There are, however, two very different kinds: induced and alternating currents. The latter obtained from a commutator and battery are the best. It has been asserted in a medical journal that it is impossible to measure induced currents. But this is not true. They may be measured by three methods: (1) Kohlrausch's dynamometer, in which the moving needle of the galvanometer is replaced by a moving coil; (2) Dr. Stone's instrument with a very light aluminium coil, this metal being the largest known conductor of electricity; and (3) A modification of this, a simpler form, in which two sheets of ordinary very soft annealed iron are employed; they rapidly change their polarity, and may be regarded as part and parcel of the circuit going to them. He believed that this would prove the dynamometer of the future for medical purposes. The induced currents could also be measured by the quadrant electrometer with which Professor Stocker and Mr. Gregory had made determinations. The lecturer next showed Kohlrausch's combined induction coil and meter bridge, with telephones used as galvanometers. He showed that with induced currents the resistance came out different from that obtained by the constant current, being about one-half to two-thirds of that observed with the latter. Thus the resistance of the St. Thomas's Hospital porter was found to be 600 ohms as compared with the 1160 of the constant current. The telephone became silent when 600 ohms had been introduced to balance the resistance given by the porter. Now this, though it renders this elegant method untrustworthy for the measurement of resistance, is a physiological fact of considerable importance. It is susceptible of several explanations: 1. The human body, like all imperfect conductors, is really probably more permeable to high tension than to low tension currents. Indeed, Dr. Stone considered that his experiments fairly demonstrated this. 2. It is probable that, with rapid intermission, the current does not really pass at all, or not fully until it is annulled by the next current in the opposite direction. The human body under the circumstances would be like the leaves of a book in a stratified or laminated state; or, more closely, like an elastic body transmitting the waves of sound, with alternate phases of condensation and rarefaction, represented in this case by positive and negative polarities. The same argument was illustrated by the early experiments of Du Moncel. 3. An alternating current ought to show too low a resistance, as Dr. Oliver Lodge has suggested to Dr. Stone, because of its electrochemical capacity, which it would treat like conductivity. If we were to measure the resistance of a perfect condenser it would not come out infinite, even if the insulation were perfect. The second and third headings of explanations gave Dr. Stone grounds for believing that the body had a condenser action. 4. There is probably considerable self-induction. The possibility of this playing a part was brought out very strongly before the lecturer by Professor Hughes's highly suggestive paper read before a meeting of the Society of Telegraph Engineers.[1] There is still some controversy as to the mathematical interpretation of his facts, but the lecturer himself believed that in the main the facts point to a new direction of research which may be utilised by physiologists. Mr. Hughes divides the current into stable and variable periods. The continuous current is stable; the alternated or interrupted, variable. It is with the latter that induction takes place. Instead of the time-honoured hammer of the induction coil, Professor Hughes employs his own invention, the microphone, or, better, a small contact-breaking clock. This enables the ordinary meter bridge to be used for measuring resistance. [A successful experiment was then made with the hospital porter.] Or this method may be combined with Professor Hughes's sonometer. Dr. Stone showed a simpler form in which the induction coil slides along a bar. [Another successful experiment was here performed.] If these coils be set up at measured distances, and an interrupted current passed through the primary coil, the living human body, and a known resistance in the secondary circuit, on either side of the telephone good measures can be obtained. It is a question of balance; when the currents in the two circuits are exactly equal the telephone is silenced. By this means the resistance in the human body can be measured. But there is a still further modification of the instrument which Dr. Stone exhibited and explained, though he had not yet had the opportunity of taking any measurements therewith. This modification is also due to Professor Hughes, and is a most ingenious combination of the meter bridge with the sonometer. By its aid the lecturer hoped to balance resistance in the body and self-induction of the body independently; up to the present, however, no certain results had been obtained.

General considerations.—There is a vast field open for

[1] Electrician, Feb. 5th, 1886, p. 127.

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research; indeed, the whole basis of physiological electricity requires strengthening and re-examining. It is a stately building of which the foundations are unsafe, and until these are made firm the whole superstructure is in danger. If, on the other hand, it be done, we shall in the course of the necessary explorations come on many precious discoveries. Already the analogies between nerve force and this great physical force are becoming strong. One such on inhibition was published in *Nature* by Dr. Lauder Brunton. There were many analogies also between the duplex submarine cable and nerves; the indications in both were made at the far end, and nothing occurred at the near end. Dr. Stone urged that nature must have worked on one plan. He was disposed to believe that there was a real analogy between the cable and the nervous system. Many were the hopeful directions for electrical work—its therapeutic use in muscular enfeeblement, lead paralysis, cases of neuralgia, locomotor ataxy, and progressive muscular atrophy. He believed, also, it proved of service in loosening chemical compounds administered by the mouth; the metals were set free from their salts—mercury, arsenic, zinc, and silver. It possessed also a decided eliminative action; he himself had collected three milligrammes of copper from the urine of one patient. Colonel Bolton, a well-known and trustworthy advocate of electricity in therapeutics, also regarded it as a hypnotic; whilst, again, its influence on the vaso-motor system was amongst its most well-known effects.

Clinical Lectures on DISEASES OF THE EYE.

Delivered at the Nottingham and Midland Eye Infirmary.

By CHARLES BELL TAYLOR, M.D., F.R.C.S.,
SURGEON TO THE INFIRMARY.

LECTURE II.

GENTLEMEN,—The female patient you have just seen is sixty-five years of age, blind from cataract in both eyes, and exceedingly deaf. The male patient is a labouring man, toil-worn, weather-beaten, and seventy-five years of age. He has been blind some months from cataract in the left eye, and the right is dim, although he can still see to go about with it. I saw these patients for the first time this evening, and propose to operate at once, using artificial light; before doing so, however, permit me to comment upon several questions which have arisen in connexion with these and other similar cases.

What is cataract? Cataract is an opacity of the lens. How is it that so many aged persons suffer from cataract? Well, I suppose we must look upon cataract in aged persons as one of the natural phenomena of life—the culminating point in that process of hardening, shrinking, and degeneration which the lens undergoes in common with other tissues as we grow older, and which seems natural to us all. When, for example, an average individual attains the age of forty and upwards, he requires glasses. Why is this? Simply because the lens has become too hard to fulfil its usual function in the process of accommodation for near objects. As time passes on, this—shall I call it natural sclerosis?—increases, until in certain cases the normal relationship of the lens fibres is so changed that it becomes opaque; the patient cannot see, and the surgeon cannot illuminate the fundus of the eyeball: that is cataract. The lens has become opaque, and, so far from assisting vision, constitutes an actual obstruction to the passage of the rays of light. Would it be possible to restore the transparency of the lens? What a momentous question! As well ask would it be possible to restore youth. And yet there is no doubt that by judicious treatment the progress of senile cataract may be retarded. I have seen benefit from electricity, and quite marvellous results, in certain cases caused by accident, or complicated with gout, diabetes, and albuminuria. In both these patients, however, the lens is quite opaque—the cataract is fully formed. There is no possibility of any clearing up. The obstruction must be removed, and this can only be done by operation. What operation shall we perform? Will any surgical procedure short of actual removal of the lens from the organism—that is extraction, as it is called—suffice? I fear not. If we attempted in either of these cases to disintegrate, macerate, and dissolve the lens *in situ* by repeated needle operations, we should in all probability only excite iritis, to which aged persons are especially liable. Very likely the inflammation would prove uncontrollable, and we should be driven to extract at last under far more unfavourable conditions than exist at present. Would it be wise, in obedience to the ancient precept, "Squamam in oculis emovendam potius quam extrahendam," to attempt to depress the lens, dislodge it from the axis of vision, and thus permit the reproduction of images upon the retina? I do not think so. The lens is apt to rise again, or act with all the pernicious influence of a foreign body in the vitreous chamber; so that, although I am not at all disposed to deny that such an operation may be occasionally successful, the risk is too great, and I should not dream of attempting it in either of these cases.[1]

It is clear, therefore, gentlemen, that our only resource is extraction. What is the best method of performing extraction? In order that you may appreciate this question it will be necessary to glance at the history of the operation, which may be said to have commenced in 1752, for although, as the quotation from Pliny just cited proves, there can be no doubt that a method of extraction was known to the ancients, it was not until that date, when Daviel presented his classic memoir to the French Academy, "Sur une nouvelle Méthode de guérir la Cataract par l'Extraction," that the actual removal of the lens from the eyeball assumed its proper place as a recognised operation in contemporary surgery. Daviel operated while seated himself and facing his patient, who also occupied a chair on a lower level. He used a lance-shaped knife, and incised the lower half of the circumference of the cornea, delivering the lens through the natural pupil. When successful, the flap operation, as it is called, left nothing to be desired; but fifteen eyes in a hundred were irrevocably lost, and twenty more so damaged that it is a matter for special wonder that no serious attempt at improvement was made until 1860, when Herr von Graefe, the celebrated professor of Berlin, announced, as the result of the daily examination of eyes recently operated on, that the part of the eyeball which took the initiative in the destructive inflammatory process was the portion of iris contused during the exit of the lens, and that this stretching and bruising was consequently the *teterrima causa* of subsequent disaster and loss of sight. Acting on this hint, Mooren, of Dusseldorf, excised the piece of iris corresponding to the flap some weeks before extracting; and Schufte, at that time Von Graefe's assistant, seeing the small proportion of eyes lost after iridectomy—about one in five hundred—simply performed that operation in the ordinary way, and then scooped out the lens with a spoon. Shortly afterwards Graefe published his famous memoir on linear extraction, placing the wound in the plane of the lens entirely outside the cornea. Jacobson, of Kœnigsberg, and Pagenstecher, of Wiesbaden, followed with similar sclerotic incisions both upwards and downwards, the latter removing the lens with its capsule entire by means of a large spoon. I visited Graefe's, Pagenstecher's, and Mooren's cliniques at this time in order to study their various methods of operating, and, after careful investigation of the whole subject, arrived at the conclusion that Schufte's incision in the corneal margin was the best, and that it needed but to be slightly enlarged in order to enable us to extract the lens without the objectionable scoop or the use of any traction instrument whatever. After operating in this way with most brilliant success upon a number of cases with an incision combined with an iridectomy, and comprising only one-third of the upper segment of the cornea, I published an account of the procedure in the *Ophthalmic Review* and *Edinburgh Medical Journal*, and it has since been universally adopted as the operation *par excellence* for cataract by ophthalmic surgeons both at home and abroad. They call it a "modified Graefe," but it is really the operation I described

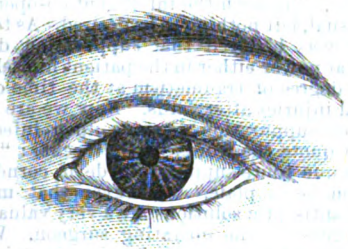
[1] In illustration of the occasional success attending depression, I may remark that some years ago I extracted cataracts from both eyes for an eminent practitioner of medicine, who had so successfully operated by couching, as he termed it, upon his own brother (a clergyman) that his patient was able to resume his duties as rector of a large parish.

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at that time, Graefe's original method having been so completely abandoned that it is now popularly said that nothing remains of it but the knife. I have also endeavoured in certain cases to preserve the pupil, while securing at the same time the advantages of an iridectomy, by excising only the periphery of the iris, leaving the sphincter untouched and free in the anterior chamber—an operation which possesses many advantages both optical and æsthetic, but which is rather difficult to perform. I have here a patient, a lady seventy-five years of age, on whom I operated last week in this way. When the upper lid is in its natural position, the eye, as you see, looks perfect (see Fig. 1); but when the lid is raised the coloboma in the periphery of the iris is revealed (see Fig. 2).

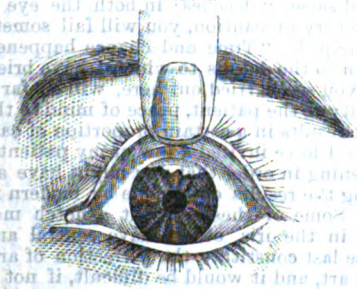
Let us see now, gentlemen, *en résumé*, what the last twenty years have done for us. Graefe discovers, or thinks he discovers, that the bruised iris is the sole cause of disaster;

FIG. 1.



Mooren cuts the Gordian knot by excising the portion likely to be injured; Schufte follows with iridectomy scoop and small incision; Graefe adopts a linear incision entirely outside the cornea; I propose a small flap in the corneo-sclerotic junction; other distinguished operators place their incision entirely in the cornea. Have we arrived at the *ne plus ultra* of ophthalmic surgery? Must we rest and be thankful, or shall we go back and make a selection from the labours of our distinguished *confrères*, adopting some of their suggestions and rejecting others? Well, it seems clear that modern surgeons are right in abandoning Graefe's linear extraction. The wound is too far back; the danger of prolapse of the vitreous is too great. A vast iridectomy is necessary in order to prevent strangulation of the iris at the angles of the wound. There is great risk of bleeding into the anterior chamber in the early stage of the operation—a most embarrassing complication; and the site of the wound is such as to excite well-grounded fears of sympathetic

FIG. 2.



ophthalmia; moreover, the best results will not bear comparison with those obtainable by flap extraction. The division of the operation into two parts, as in Mooren's method, is so manifestly objectionable, that it is clear that this operation must be reserved for those cases in which it is necessary to perform iridectomy as a preliminary on account of glaucomatous or other complications. The profound anæsthesia insisted upon by Jacobson before operating renders his method too dangerous for general adoption, and the traumatism and frequent loss of vitreous attending the use of Pagenstecher's spoon will preclude its general use. As to Liebreich's, Lebrun's, and Warlomont's modification of Kuchler's transverse incision of the horizontal meridian of the cornea, these operations all, especially when the lower section is adopted, cause a certain amount of subsequent astigmatism, which prevents our obtaining the best visual results; and the operation I have spoken of as my own, though it appears to me as perfect as any combined method can be, involves, like all the rest, a mutilation of the iris, which leaves much to be desired, and, inasmuch as it is not always necessary, will certainly never be adopted to the absolute exclusion of other methods by which the pupil is preserved entire.

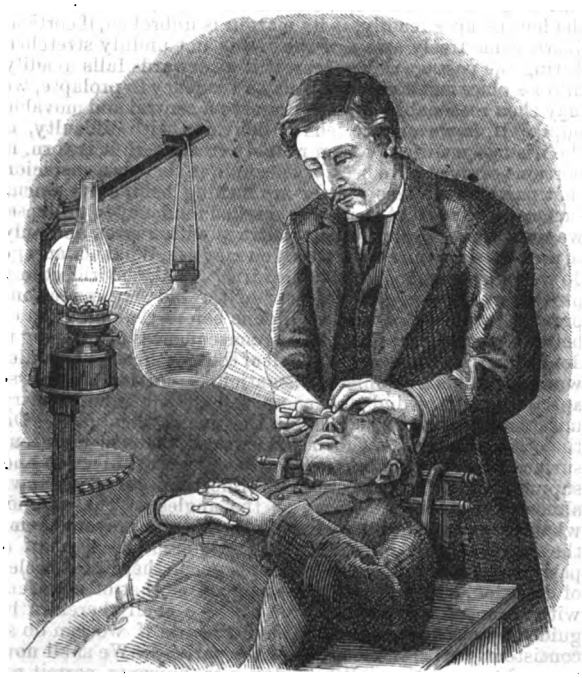
We must always aim, gentlemen, at the highest, and the highest indication of success in cataract operations is a central and movable pupil; we may not be able to secure this in every case or even in a very large proportion, but we ought in a certain percentage, and in order to do so we must adopt what the late Mr. Critchett denominated a method of eclecticism. We must enlarge the wound to four millimetres, or more if necessary; we must bring it forward in the cornea, or place it back in the sclerotic junction, according to circumstances. We must select, not our patients, but our operations, and be guided by each step of the operation what the next step shall be. For instance, I have been asked whether I intended to perform iridectomy in either of the cases now before us. Well, I cannot answer that question at present; the reply in each case must depend on the conduct of the patient, the peculiar nature of the affection, and the size and consistence of the cataract as revealed upon the operating table. If either of our patients should prove as indocile and as utterly wanting in self-control as the deaf man on whom some of you saw me operate last week, I shall be compelled to excise a portion of iris in order to prevent prolapse. If, on the contrary, the patient gives evidence of a certain amount of self-control, if the lens escapes readily, if its margin is unbroken, if cortical débris come freely away, if the iris is not unduly stretched during the passage of the lens, if it afterwards falls readily into its place and does not display a tendency to prolapse, we may then reasonably hope to preserve a central and movable pupil. If, however, the lens is delivered with difficulty, if the iris has manifestly been roughly treated, if it is torn, if portions of uvea have been brushed off, if there is a suspicion that particles of lens matter are lurking behind its uncut surface—above all, if it shows a marked tendency to prolapse, we must excise a portion, but always with regret and only to prevent subsequent disaster. You may ask, What advantage do we get by excising a portion of iris? Well, the iridectomy prevents prolapse—that bugbear of the old flap operation; prevents bruising of the iris if done before the operation or before the exit of the lens, and the consequences of bruising if done after; permits more easy exit of the lens through a smaller wound, and also complete evacuation of cortical débris, so apt to be left behind and cause subsequent inflammatory mischief when concealed behind the uncut membrane. On the other hand, when the iris is excised there is more cut surface, more wound exposed to the danger of infection and suppuration. The dissection of iridectomised eyes shows almost invariably adhesions at the angles of the wound, whatever precautions may have been taken to prevent them; the eye is visibly mutilated; and although the sight of a patient with an upward coloboma is good, there are circles of diffusion, and it is not quite as good as that of a patient with a central and movable pupil. We shall therefore be guided by circumstances, and save the iris if we can do so consistently with the security of the patient. We shall now proceed to operation. Before doing so, however, permit me to call your attention to the method of illumination which I always use at this time of year. The light is obtained from an ordinary paraffin lamp, and the rays are concentrated by a lens in the shape of a globe of water—a simple apparatus, which may be used without preparation in any cottage or private house, an ordinary water-bottle held by an assistant sufficing for the lens. (Fig. 3.)

Remarks after operation.—I do not know, gentlemen, whether you are aware of the fact, but statistics tell us that a preponderating fatality has always attended operations for cataract upon the left eye. This is doubtless due to the greater difficulty of operating upon the left eye, a difficulty which I have endeavoured to obviate by using a bent knife, which I devised some years ago, and which you noticed, although the left eye was selected for operation, was, in the case of the male patient, held in the right hand. With this knife I would rather operate upon the left eye than upon the right, since the natural tendency of the eyeball to roll inwards, to be pushed before the knife, is in your favour if the left eye is selected for operation, and against you if the right is the subject of extraction. As those of you who were near enough to see remarked, the iris in this case persistently prolapsed after removal of the lens, and I was therefore compelled to excise a portion for safety's sake. With this excep-

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tion the operation was completed without misadventure. In the female patient, the tendency of the iris to fold over the edge of the blade of the knife was, as you noticed, evaded by a *tour de main*, and the wound so managed as to form a small flap situated in the upper segment of the corneo-sclerotic junction; the capsule was then punctured, the lens extruded, and the operation completed, leaving, in this case, a central and circular pupil. I shall speak directly as to the local anæsthetic which was used and the antiseptic precautions which were adopted throughout; before doing so, however, permit me to answer one or two questions which have been addressed to me. I have been asked whether the male patient's great age did not contra-indicate operation? whether the patients would not have been better for some preliminary treatment? and whether it would not have been desirable to have administered some general anæsthetic? I will reply to these questions *seriatim*, and first with regard to age. Age *per se* is certainly no contra-indication. Cataract is a disease of old age, and if we did not extract for patients advanced in life we should not operate at all. I was once called to see a gentleman suffering from cataract in his eightieth year, and strongly recommended operation; his wife, however, would not allow him to submit, on account, as she said, of "his great age." Six years later she died; the widower then sent for me, was operated on, and

FIG. 3.



recovered most excellent sight—so good that he was able to complete an archæological work on which he was engaged when his sight first failed. I have operated with perfect success upon both eyes in a patient over ninety, and upon a considerable number between eighty and ninety years of age. Lord Lyndhurst, the then Nestor of the House of Commons, was operated upon in his ninetieth year. The first eye was lost, but, with characteristic courage, he underwent the operation again and recovered excellent sight with the second eye. In fact, the hard senile cataract is more readily extracted than the less mature varieties of the same affection; and although persons of great age are generally very feeble and suffer from various senile affections, this, so far as my experience goes in hundreds of cases, does not seem to interfere very materially with the success of the operation. As to preliminary treatment, no doubt it is of the utmost importance that patients undergoing operation should be in a fair state of health. No doubt preparatory treatment similar to that adopted in the training of athletes would increase our chances of success if it were possible to carry it out, but experience teaches us that directions of this kind are never carried out at home, and admission to hospital only has a depressing effect. So that I think that the advice to persons about to be operated on may be summed up in two lines:

"Great temperance, open air,
Easy labour, little care."

You cannot train old people; and beyond this it is difficult to go. With regard to anæsthetics, when I commenced practice it was the custom to use chloroform in almost every case; subsequently ether was very generally employed; but for years past I have operated without any anæsthetic, and but for the splendid discovery of cocaine should have continued to do so. Chloroform I found from time to time gave rise to most distressing symptoms of impending dissolution. Ether caused great excitement. Both were followed by dangerous vomiting, and although the latter is incomparably safer than chloroform, the drunken violence both before and after is more dangerous, and I have known it on three occasions to provoke attacks of bronchitis, one of which proved fatal. Cocaine was employed in the cases we are now discussing, and its effect in numbing sensation, without interfering with the intelligent co-operation of the patient, as usual, left nothing to be desired. As to antiseptics, formerly it was believed that suppuration depended on deficient vital power either in the patient himself or the part injured, the degree of traumatism at the time of operation, or accidental injuries afterwards. Now we are assured that every case of suppuration depends upon infection of the wound. To quote the words of De Wecker: "Aujourd'hui nous savons que toute suppuration de la cornée est due à une infection de la plaie." However that may be, it is certain that antiseptic solutions are a very valuable addition to the resources of the operating surgeon. What is the best antiseptic to use? Well, bearing in mind the most important of all maxims in surgery, "Primum non nocere," I think you will find for general use a saturated solution of boracic acid the best. If you wish to be specially safe against microbes and macrobes, the same solution containing the twenty thousandth part of a grain of corrosive sublimate may be employed. As to after-treatment—if the slight pain which the patient experiences as the effect of the cocaine goes off does not pass away, but increases, bleed, inject morphia, and apply cold compresses; if suppuration threatens, use hot aromatic fomentations, with pressure bandages and throughout antiseptic dressings. Von Graefe objected to local bleeding for the first three days after extraction—I hardly know why; but when I attended his clinique in Berlin he strongly advised the students to avoid local bleeding for the first three days after extraction, preferring to take blood from the arm. In any way, whatever you do, you must kill the pain. *Obsta principiis*—stop the beginning, and before it begins if possible. I have taken twelve ounces of blood from the temple with the artificial leech myself in one case, and in another used seventy leeches; in both the eye was saved. In spite of every precaution, you will fail sometimes; that cannot be helped. "Time and chance happeneth to all"; but attention to the details to which I have briefly alluded, and which you see carried out here, will so far as possible ensure security to the patient, peace of mind to the operator, and brilliant results in a certain proportion of cases.

Gentlemen, I have invited a few of my patients to attend here this evening in order that you might have an opportunity of seeing the results obtainable by modern methods of extraction. Some of these present a notch more or less conspicuous in the iris, others have central and movable pupils; these last constitute the perfection of art, since art is to conceal art, and it would be difficult, if not impossible, for you to say whether they had been operated on or not. I introduced some patients, the subjects of double extraction treated in this way, to the notice of the members of the Clinical Society of London in 1878, and have since accumulated quite a number of similar cases. At the next lecture I hope to show you some novel methods of treating external and internal squints.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.—At the annual meeting on April 29th the following officers for the ensuing year were elected:—President: Dr. Cleaver. Vice-President: Mr. R. J. Pye-Smith. Treasurer: Mr. G. S. Taylor. Secretary: Mr. Simeon Snell. Additional Members of Committee: Dr. Keeling, Dr. Dyson, Dr. Porter, Mr. Thorpe, and Messrs. Garrard and E. Skinner. Pathological Committee: Dr. Gwynne, Mr. Atkin, Dr. S. White, and Mr. F. Harrison.

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EXOPHTHALMIC GOITRE, AND OTHER CASES WITH ENLARGEMENT OF THE THYROID.

BY EDWARD SQUIRE, M.D., M.R.C.P.,
PHYSICIAN TO ST. GEORGE'S AND ST. JAMES'S DISPENSARY, ASSISTANT PHYSICIAN TO THE NORTH LONDON HOSPITAL FOR DISEASES OF THE CHEST.

CASE 1.—Mary Ann V——, aged fifteen years and two months, came under my care in January, 1884, when the following notes were taken. She is short for her age (5 ft. ½ in.), and has never menstruated. The thyroid is enlarged, especially the right lobe, and this has been noticeable for three months. The neck is dark-brown in colour. The circumference of the neck over the thyroid is 12 in. The eyes are slightly but obviously prominent, and her mother says she has noticed this for the past three years; she attributes it to a fright. The heart's action is very violent; the apex beat is in the fifth space, but displaced to the left about an inch outside the nipple. There is a loud *bruit de diable* in the neck, and a hæmic murmur over the base of the heart. There are choreic movements in the left arm. A sense of constriction is felt in the throat on swallowing. In January of this year I had another opportunity of examining her. She has grown much taller, and menstruation began three months ago and is regular. There are still prominence of the eyes, enlargement of the thyroid, over-action of the heart, and a loud anæmic bruit in the neck; but she considers herself much better than when I first saw her.

CASE 2.—Emma W——, aged twenty-two, married two years (no children), was admitted in February, 1884, complaining of severe frontal headache and loss of appetite. The thyroid is considerably enlarged, and has been so for three months; its size varies, being larger at the menstrual period, and then causes difficulty in swallowing. The neck now has a circumference of 15¼ in. The eyes are sometimes painful, and project; this varies in extent with the variations in the size of the thyroid. There is excessive cardiac action, and faintness sometimes occurs. Menstruation is irregular, scanty, and painful. There is a brownish pigmentation of the face.

CASE 3.—Matilda R——, aged twenty, single. This patient came under observation in July, 1882, with sore-throat. She is stout, but not strong. The thyroid is much enlarged, the circumference of the neck being quite 14 in. She has always had a "full neck," but for the last four or five years it has at times been noticeably swollen, especially since she came to London three years ago. The last time it was as large as it is now was eleven months ago. It has been very big for the last three or four days, and is worse in the morning when she wakes, when it seems high up in her neck, "up to her chin," and causes a sensation of choking. She is now unable to fasten the collar of her dress. Menstruation is regular, though scanty, and is now present. The heart's action is very weak, but she complains of pulsation in the thyroid. There is a loud venous bruit in the neck, and a soft apex murmur. On Aug. 16th she had a hysterical fit in the evening, and states that before she came to London such fits were of frequent occurrence.

CASE 4.—Mrs. B——, aged twenty-two, married twelve months, and has one child three months old, which she has not been able to suckle. She was admitted in September, 1883, for cough, and had deficient resonance over the apex of the left lung. The thyroid is enlarged, and has been so for three years. It varies in size, but no connexion is noticed between the increase of the neck and the menstrual period, which has been regular. There is a loud anæmic bruit in the neck, but no hæmic murmur in the chest.

CASE 5.—Eliza R——, aged twenty, single. This patient, who is a stout well-grown girl, came under my care early this year complaining of lumbar pain. The thyroid is perceptibly enlarged, but causes no discomfort. The eyes are not prominent, and there is no over-action of the heart, though the patient complains of palpitation on exertion or after hurrying. There is a *bruit de diable* in the neck, and a soft hæmic apex murmur. Menstruation is regular, but scanty.

Remarks.—In the first two of the above cases we have examples of exophthalmic goitre, presenting singly no points of particular interest. They are described to be compared with those that follow. The first is a well-marked case, though the age of the patient is below that at which the disease is most common. The second, though a slight case, has all the essential symptoms—exophthalmos, enlargement of the thyroid, and increased cardiac action. Both of these show indications of the dark colouration of the skin which has been noticed in Graves' disease, and which is supposed to bear an analogy with the pigmentation seen in Addison's disease, depending on alterations in the sympathetic nerves and ganglia. The remaining cases are wanting in some one or more of the cardinal symptoms of Graves' disease, and cannot be so named if the concurrence of the three mentioned above is essential. According to the usual definition they are so; but the late Dr. Hilton Fagge, speaking of exophthalmic goitre,[1] warns us to be on the look-out for "slight cases in which one or two of the cardinal symptoms may be absent"; and Trousseau also insisted on this point, retaining the name "exophthalmic goitre" even when there is no exophthalmos.[2] Case 3 has enlargement of the thyroid, but with no prominence of the eyes; and the cardiac action is weak, instead of being over strong. She is anæmic and hysterical—conditions often associated with exophthalmic goitre; here the thyroid increases in size at the catamenial period as in Case 2. Case 4 has thyroid enlargement, which varies in degree, but without the periodicity noticed in these two cases. She has, like the last cases of the series, palpitation, but no exophthalmos. From one point of view, Cases 3, 4, and 5 would appear to be examples of simple anæmia, in which enlargement of the thyroid occurs as one of the symptoms. The question then arises, whether the enlargement of the thyroid may not be a result of laxity of the tissues—a loss of tonicity—due to malnutrition from impoverished blood-supply. Over-action of the heart is also a frequent symptom in anæmia, and we have only the exophthalmos to explain to bring Graves' disease down from its position as a separate disease to the level of several other conditions which were loosely spoken of as diseases in themselves (such as albuminuria and jaundice), and are now recognised as merely symptoms. Begbie mentioned chlorosis and anæmia as powerful factors in inducing Graves' disease, but later writers consider it more probable that anæmia is a result.[3] If so, it is sometimes a very early result, preceding some of the diagnostic symptoms of the disease. Graves himself thought that palpitation was the cause of the other two cardinal symptoms. Investigation with a view to discover a pathological cause for Graves' disease, has produced no very definite result. Some observers have found degenerative conditions of the cervical sympathetic, which have been found wanting by others in necropsies on patients who were the subjects of undoubted exophthalmic goitre. It would appear, therefore, that the prominence of the eyes is not dependent on this condition of the sympathetics alone. Exophthalmos has been ascribed to repletion of the orbital vessels, as the bronchocele to a similar condition of the vessels of the thyroid, which repletion is due to loss of vascular tone. The loss of tone in the vessels is explained as a result of paralysis of the vaso-motor nerves of the thyroid, head, and neck. May not this depend on the want of healthy blood-supply to those nerve-centres in common with the rest of the tissues. In anæmia we have many signs that the tissues suffer from the supply of impoverished blood. Muscular weakness is common; weakness of nerve-control is shown by the easily induced palpitation and cold sweats from slight shocks or emotions in these patients, and by hysterical manifestations; and vascular want of tone explains the swelling of feet and ankles. Caleb Parry describes[4] twelve cases of enlarged thyroid in women and one in a man, of which four of the female cases and that in the male he describes as associated with head symptoms. The remaining eight—of which the first, observed in 1786, has her eyes "protruded from their sockets"—he speaks of as "enlargement of the thyroid gland in connexion with enlargement and palpitation of the heart"; and places them under the heading "Diseases of the Heart." Three occur in youngish unmarried women, and are associated with palpitation; the remainder, including that with exophthalmos, are in older women, and appear to be associated with heart disease. In one of the former the

[1] Principles of Medicine.
[2] Trousseau's Clinical Medicine. New Sydenham Society, 1868, vol. i., pp. 557.
[3] Vide Ross: Diseases of the Nervous System.
[4] Unpublished writings (1825).

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enlargement of the thyroid is attributed to a fright, and the tumour enlarges at the menstrual period. In all, throbbing of the carotids is noted. On these cases he makes the following comments: "Enlargements of the thyroid gland are not uncommon in females about the period when the body is fully formed and the menses are in a sort of wavering state. After both these points are completely established, they generally disappear if the health is otherwise good.....It is indeed true that these swellings occur most often and in the greatest degree in young females who have led sedentary lives, and who are of what are called relaxed and nervous habits." It has appeared to me that slight enlargement of the thyroid is not uncommon in anæmic and emotional women. If this occur without exophthalmos and palpitation, we look on it merely as a symptom of the general condition; but if all three are present in the same patient, we give a different name to the illness, and seek a different pathological cause. Advance in science usually tends towards simplification in classification. Have we not in this case arrived rather at greater complexity?

A CASE OF
COMPOUND FRACTURE OF THE PATELLA; PARTIAL NECROSIS OF ONE OF THE FRAGMENTS; RECOVERY WITH MOVABLE JOINT.

WITH NOTES OF NINETEEN OTHER CASES OF COMPOUND FRACTURE OF THE PATELLA.[1]

BY G. R. TURNER, F.R.C.S. ENG.,
DEMONSTRATOR OF ANATOMY AND JOINT LECTURER ON PRACTICAL SURGERY AT ST. GEORGE'S HOSPITAL; VISITING SURGEON, SEAMEN'S HOSPITAL, GREENWICH.

F. S——, aged thirty-two, married, sustained a compound fracture of the left patella by striking his knee against the kerbstone. The fracture was transverse, and over it was a nearly horizontal contused wound two inches and a half long, which freely communicated with the cavity of the joint, which was filled with blood-clot; separation of fragments, half an inch to an inch. The joint was syringed out with carbolic lotion (1 in 20), and full aseptic precautions used in the dressing and subsequent treatment of the case, there being no drainage other than that permitted by the wound. The case ran an aseptic course. There was no fever whatever. The wound would have healed readily but for a small sinus leading down to an exposed piece of the lower fragment. A sequestrum came away from this six weeks after the injury. Cicatrisation was soon afterwards complete. The patient has attended as an out-patient. He can now (March 16th) walk about and flex his knee very nearly to a right angle. The fragments are separated by about three-quarters of an inch when the limb is in the extended position; by about an inch and a quarter when the knee is flexed. The lower fragment is widened and irregular; at the outer part the skin is slightly adherent.

This case, I think, presents several points of interest: the transverse direction of the fracture; the little separation of the fragments; the aseptic course, although a portion of one of the fragments necrosed; the question of the immediate treatment of the injury, and when and to what extent passive motion should have subsequently been employed. Compound fractures of the patella are very often comminuted or -<-shaped, but both in Mr. Poland's cases in the fifty-third volume of the Medical and Chirurgical Transactions, and in some others I have collected, it is far from uncommon to find the direction of the fracture transverse. The fragments in compound cases appears often to be less widely separated than in simple ones; this may be due to the escape of fluid from the wound, or from the fact that muscular action has less to do with the causation.

The question of the immediate treatment in this case resolved itself into one either of suturing the fragments or simply leaving the wound alone, for I suppose that in these days of aseptic surgery few surgeons would be found to recommend either excision or amputation to a healthy man of thirty-two with a clean, although contused, wound over a fractured patella. I decided to adopt an expectant plan of treatment rather than suture, for the following reasons: the fragments were not at all widely separated; the injury was nearly twenty four hours old when I first saw the patient, and the case was doing well; there was sufficient drainage already provided by the wound; I could not tell to what extent the fragments were already injured, and, consequently, whether they would bear the strain of wiring. From the subsequent necrosis it would appear that it was well they were not subjected to further mechanical injury. Passive motion was necessarily delayed until the separation of the sequestrum and the final union of the wound. When cicatrisation first occurred there was considerable prominence of a pointed fragment, and it seemed as if very slight violence would cause this to perforate the skin. I have on several occasions flexed the limb as far as I dared, but the fragments being as yet united by fibrous tissue, I have been afraid of stretching or rupturing the uniting band.

It may be interesting to compare the results of Mr. Poland's cases, published in 1870, with some recent cases which have occurred since the more general adoption of antiseptic surgery. In Mr. Poland's eighty-five cases the treatment adopted was "strapping where permissible, ice, leeches, irrigation; and in the suppurating stage fomentations and free incisions, opium, tonics, and support." Mr. Poland divides his cases into those with incised wounds, of which six recovered and two died; those with lacerated and contused wounds, of which thirty recovered and nine died; those associated with gunshot wounds, of which eighteen recovered and threedied; those associated with lesions of other bones, of which ten recovered and six died: total, eighty-four recoveries and twenty deaths. The joint suppurated in sixty-three cases, and of those that recovered thirty-one had more or less complete ankylosis. The above statistics, as Mr. Poland observes, probably give too favourable a view of the result of such treatment, as successful cases more often find their way into newspapers than the unsuccessful. This remark will apply with equal force to the cases I am about to relate.

Mr. Rouse has had two cases at St. George's Hospital. 1. Henry R——, aged forty-seven, fell on to his right knee from a height of from twelve to fourteen feet, striking it against the pavement. There was a small lacerated wound over the patella, which was obliquely fractured across the centre. There was half an inch separation of the fragments, the lower of which consisted of two pieces, the external wound corresponding to a depression between them. Antiseptic precautions were used, and a ham splint applied. The temperature rose on the third day to 101° in the evening, otherwise it was normal throughout. The patient recovered with a perfectly movable joint. 2. Edward B——, aged thirty-three, fell from a cart on to his left knee, sustaining a compound comminuted fracture of the patella, over which was a circular contused wound, "which evidently communicates with the joint, although no synovia escapes." The wound was syringed out with carbolic lotion and dressed antiseptically with carbolic gauze. The temperature rose to 100° in the evening, otherwise it was normal throughout the case. The patient recovered, with a movable joint, without any bad symptom whatever.

Mr. Pick read before the Clinical Society on Oct. 18th, 1875,[2] a case of extensive wound of the knee-joint treated by Lister's antiseptic method, in which the patella was divided by a circular saw and the condyle of the femur wounded. The joint was washed out with carbolic lotion (1 in 40). Suppuration followed, and the patient, a young man aged eighteen, recovered with firm bony ankylosis of the joint.

Mr. Finlay[3] records a case of bullet-wound of the knee-joint in which the patella was "grooved" by the projectile, which finally lodged in the femur. The wound was washed out with carbolised water, the bullet extracted, and carbolic oil employed as a dressing. A little fever followed, but the patient, a man aged thirty-one, recovered with a perfect joint.

Mr. Wheelhouse[4]—Margaret M——, aged twenty-four, fell some twelve feet on to her right knee. Clean transverse wound; fragments half an inch apart; no comminution except one small splinter from upper one. Wound enlarged; joint cleared of blood and washed out with 1 in 20 carbolic lotion. Fragments drilled and wired. No drainage of any kind. Full aseptic precautions. Wound ran an aseptic

[1] Read at the Harveian Society.

[2] Brit. Med. Jour., Oct. 16th, 1875. [3] Ibid., vol. i., 1883. [4] Ibid., June 9th, 1883.

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course. Patient able to flex knee beyond a right angle. Injured patella as sound as the other.

Mr. Jessop:[5]—Robert L——, aged seventeen, fell into a quarry, striking bent right knee on a steel rail. Brought to the hospital eleven hours after this; the wound full of sand and mud. Compound comminuted transverse fracture of patella; fragments separated half an inch; severely contused wound. Wound purified; joint irrigated for nearly an hour. Fragments wired; posterior drainage. Free suppuration followed. Wire removed on thirty-sixth day. Full aseptic precautions throughout. Some adhesions broken down by passive motion. Patient eventually recovered with absolutely perfect movement of joint.

Mr. Ormsby:[6]—James B——, aged twenty-four, was struck by a puncheon on his left knee, receiving a compound fracture of the patella, with two inches' seperation of the fragments. Wound sealed by pad of lint soaked in blood. Evaporating lotion applied; long posterior splint; no bad symptom. Wound healed without suppuration. When discharged he was able to walk without the help of crutches.

Mr. Manser:[7] — B. W——, aged thirty-six. Gunshot wound. Comminuted fracture of femur and patella; lodgment of pointed piece of gun-barrel in external condyle of femur. This was removed. Attempted antiseptic treatment. Erysipelas of thigh, scrotum, and abdomen. Antiseptics discontinued. Symptoms extremely grave, but patient ultimately recovered with firm fibrous ankylosis of knee.

Dr. John M'Diarmid:[8] — J. B——, aged sixty, a female drunkard, leapt out of window two storeys high and struck her left knee against the edge of a cart-wheel tire. Seen twelve hours afterwards. Transverse wound two inches and a half long opening into joint; patella fractured; lower fourth splintered; ligamentum patellæ divided. Loose fragments removed; wound washed with water, and lint steeped in 1 in 20 carbolic oil laid over the knee; long padded Gooch's splint applied. Treated by cold lotions, the wound itself being protected by lint steeped in carbolic oil. Favourable course; recovered; able to bend knee almost to a right angle and to walk up and down stairs.

Volkmann[9] mentions two cases of compound comminuted fracture of the patella, both of which recovered with movable joints. They were treated antiseptically.

Mr. Langley Browne reports a case:[10]—Isaac C——, aged thirty-five, received a wound from an axe on the left knee. Wound oblique, two inches and a half long. Patella divided into two pieces; knee-joint enormously distended with clot, which was turned out. Lister's dressings and treatment were employed. The joint was washed out with carbolic lotion, and was dressed for the first time on the ninth day; there was no pus; it was quite healthy. On the sixteenth day the wound had healed, and a pasteboard and starch splint was applied. On the thirtieth day he was discharged cured (no note as to separation of fragments, method of union, or mobility of joint).

Dr. Stimson:[11]— Edward C——, aged twenty-two, fell from a pillar of an elevated railway, receiving a transverse fracture of the patella below the centre; there was no comminution or bruising. There was a clean-cut transverse wound an inch and a quarter long; the wound was dressed with carbolised gauze. Next day he was first seen by Dr. Stimson. The wound was then enlarged, the fragments sutured with silver wire, and gauze dressings applied. Some suppuration on the outer side of the lower portion of the thigh followed, otherwise the wound did well. When discharged, the patellar fragments had united by a fibrous band a quarter of an inch long. Ten days afterwards he could flex the joint 10° without pain. A month afterwards a small fragment of the patella just under the skin above the drainage opening on the outer side was removed. This had evidently been keeping up suppuration. When last seen the mobility of the joint was increasing.

Mr. W. Thomson:[12]— T. G—— had been operated on by the late Mr. Amplett for ununited fracture of the patella. Osseous union was obtained, but the joint remained stiff. He fell and laid open the knee-joint, refracturing the patella at the seat of the old injury. Excision of the joint was performed, and he recovered with some three-quarters of an inch shortening.

Mr. James has had two cases:—1. A. J——, aged twenty-seven, struck his knee against the sharp edge of a water-plug, receiving a lacerated wound two inches long, communicating with a transverse fracture of the patella, the fragments being widely separated. Cavity of joint freely laid open, and a quantity of blood effused into it. Blood squeezed out; long back splint; foot suspended; interrupted side outer splint; perforated zinc splint on inner side. Joint syringed out with carbolic oil (1 in 20). Lister's dressings and method. Dressed under spray every second day. On the eighth day a rise of temperature to 102°; otherwise no fever. The wound healed on the twenty-eighth day. "Three-quarters of an inch interval between the fragments; able to bend the knee slightly, and states that the amount of flexion is increasing; able to walk ten miles without a stick."[13] 2. C. H——, aged thirty-five, half caste. Twenty-four hours before admission she jumped out of a vehicle while the horse was bolting and fell on to a heap of loose metal, against which her left knee struck with great violence. Compound fracture of the patella ensued, which was greatly comminuted; large lacerated wound across the front of the knee-joint. The wound was thoroughly washed with carbolic lotion and dressed antiseptically. Back splint suspension from cradle. Fever and pain for two days. Incision on the outer side of the joint. Fragments of the patella, which were widely separated and covered with decomposing clot, were removed. The extensor tendon and ligamentum patellæ were approximated by two sutures of gold wire and one of kangaroo tendon. Antiseptic dressings. Some sloughing and burrowing of pus on the outer side of the joint followed. Mr. James remarks: "Severe case; joint filled with road dirt; many hours since accident; from present condition I believe she will have fair joint motion in time."[14]

Mr. Davies-Colley has treated two cases of compound fracture of the patella antiseptically. In one case a silver wire was passed right through both fragments. He saw the man a few weeks ago; he could then walk well. His leg was nearly straight, and the range of movement was only 3°. The patella could be moved a little from side to side. Mr. Davies-Colley writes: "I thought that by passive motion he might improve it considerably, but I dared not bend it forcibly, as the bony union did not extend over the whole breadth of the patella. At the side of the bone was a deep notch left by the removal of a fragment. Since this case I have treated another patient under more favourable circumstances—i.e., from an hour or two after the receipt of the injury. I had not to wire the fragments, and bony union resulted with perfect movement, the condition of the wound having remained aseptic throughout."

I am indebted to Mr. Battle for the following case, which was under the care of Mr. Sydney Jones at St. Thomas's Hospital:—"A. B——, a male, aged nineteen, strongly built and heavy, fell down a lift, striking his knee on a bar below. The wound extended across the tendo patellæ, and there was comminuted fracture of the patella. The wound formed a flap over the front of and into the joint, and carried upward the greater part of the bone. The bone was wired soon after admission, with lateral drainage. The patient recovered, with partial movement. There was good union."

Summary of above cases.

Total cases, 20. All recovered: 12 with good movement, 5 with slight movement. In 3 ankylosis occurred (one after excision of joint).

Antiseptic treatment (without suture): 9 cases, of which 7 recovered with good movement, 1 with partial movement, and 1 with bony ankylosis.

Antiseptic suture: 5 cases, of which 2 recovered with good movement, 3 with partial movement.

Carbolic oil to wound: 2 cases, both of which recovered, with good movement.

Lint soaked in blood applied to wound: 1 case; good movement.

Removal of patellar fragments; suture of quadriceps to ligamentum patellæ: 1 case; slight movement.

Excision of knee: 1 case.

Antiseptic treatment for a time: 1 case; fibrous ankylosis of joint (complicated with erysipelas and lodgment of piece of gun-barrel in condyle of femur).

[5] Ibid., June 9th, 1883.
[6] Dublin Medical Journal, vol. lxxvi.
[7] THE LANCET, Jan. 24th, 1880.
[8] Braithwaite's Retrospect, 1876, vol. ii.
[9] Edinburgh Medical Journal, 1875, p. 796.
[10] Birm. Med. Review, 1881, p. 142.
[11] New York Med. Jour., 1883, vol. xxxvii., pp. 621-624.
[12] Brit. Med. Jour., Aug. 28th, 1882.
[13] Austral. Med. Jour. (Melbourne, 1881), p. 400.
[14] Ibid., 1884.

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ON THE NATURE OF WHOOPING-COUGH;

WITH A DESCRIPTION OF A NEW MODE OF TREATMENT INTRODUCED BY PROFESSOR MONCORVO, OF RIO DE JANEIRO, AND ITS PRACTICAL RESULTS.[1]

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THE disease which I am about to consider, pertussis or tussis convulsiva, and in English chin-cough or whooping-cough, has been known probably since A.D. 1414, and certainly since 1510. It is one of the most common and universal of diseases, and yet its true nature and etiology is as much a subject of controversy now as in the days of Sydenham. There has been no lack of subjects for observation, nor, from its very nature, is there much difficulty of diagnosis, and there is little reason to doubt that in time past the epidemics of whooping-cough recurred with the same regularity as they do now, and, as we know by the charts compiled from the Swedish statistics and published by Professor Arthur Ransome,[2] that they have done so since 1775. Cullen,[3] Brouzet,[4] Pinel,[5] and several others have placed the origin in irritation of the gastric and intestinal surfaces. Padalme[6] associates with these the lungs and the diaphragm. Watt,[7] Allcock,[8] and Laennec consider it as a spasmodic variety of bronchitis, and Broussais[9] adds to this an exaggerated irritability of the mucous lining of the inflamed bronchi. Trousseau[10] and Richard de Nancy[11] believed it to consist of a bronchitis grafted upon a neurosis. Albers, of Bonn,[12] found in three cases out of forty-seven in which a careful post-mortem examination was made the vagus nerve on the right side inflamed, and in one that of the left side. Dr. Charles West[13] records a similar observation in one case out of twenty-four, and remarks that "an appearance so frequently absent cannot be of much moment"; in this case both nerves were affected. Webster[14] considered the true seat of the disease to be the encephalon, and Desruelles[15] was of a similar opinion, and even designated it by the name of "broncho-encéphalite." The peculiarities of this disease, its definite period of incubation (fourteen days), and the frequency with which the epidemic cycles coincide with those of measles, or closely follow or precede them, have not escaped the notice of observers, and have of late years been graphically placed before us in the charts of epidemic disease prepared by Dr. A. Ransome, and published by the Sanitary Association, borne out as they have been by the long series of Swedish statistics, charts of which have been published by the same accomplished physician in the work to which I have before alluded (see note 2). These observations have led many (notable among whom we find Rokitansky and MM. Barthez and Rilliet[16]) to believe the disease to be a specific fever analogous to the eruptive fevers, and some have even gone so far as to assert the identity of measles and whooping-cough. This latter opinion has been supported by Professor Germain Sée.[17] Gueneau de Mussy[18] also admits the very closest relations between these diseases. In this regard also may be here quoted certain replies made by forty-seven medical practitioners, to whom the following questions had been addressed by Dr. Octavius Sturges, who publishes the same in his "Lectures on some of the Distinctive Characters of Disease in Early Life."[19] "1. Have you met with pertussus arising out of catarrh, measles, &c., but, so far as could be ascertained, apart from direct infection? If so, how many within (say) the last three years? 2. In what proportion of such cases has pertussis been prevalent at the same time in the immediate neighbourhood?" Of the forty-seven replies eight say "No" to both questions, ten say "No" to the first and vary as to the second, six are doubtful, but twenty-three say "Yes" to the first question and answer variously as to the second. The main result shows that more than half the number of men engaged in active practice who were appealed to believed themselves to have seen the cough develop from measles or catarrh. He gives a case in detail, which is related by Dr. Donkin, of Westminster and the Shadwell Children's Hospitals, which, as it comes with the name of a competent observer, and is in itself a good example of the cases, I will quote. "Two boys," says Dr. Donkin, "aged three and five, had scarlet fever, and were confined to two communicating top rooms of the house, no one being suffered to see them except their father, a medical man, and a nurse who was constantly with them. For about a week, during the father's absence, another doctor visited them. Both children had marked bronchitis during the fever, and one had broncho-pneumonia. About five weeks after the onset of the scarlatina both began to whoop, and both continued to suffer from typical whooping-cough for many weeks after recovery from all signs and sequelæ of scarlet fever. During the whole time of their isolation a carbolised sheet was hung outside the door, and carbolised vapour or creasote was constantly diffused through the rooms." Dr. Sturges seems to think that this history is not to be accounted for except by a theory of spontaneous evolution, or on the hypothesis that there is no limit of time for incubation or "of space or agent, through which the contagion may travel." I venture, however, to suggest a more homely explanation of this and other similar cases which have not unfrequently puzzled the practitioner. All who have had practical experience of the management of infectious or contagious disease in children at their own homes will agree with me as to the difficulty, even under the most favourable circumstances, of maintaining perfect isolation for any lengthened period, and especially does this become difficult as convalescence proceeds. There was a nurse there; there was a strange medical man, and both he and the father might have visited cases of pertussis: who can say that no neighbour's child could have been admitted to the room? True, there were disinfectants and the carbolised sheet at the door, but this latter popular antiseptic placebo is, in my humble opinion, of more value in the treatment of the parents than protective to the patients, and my experience of vapours of creasote and carbolic acid shows that if they are strong enough to be of any value as antiseptics, they are too strong for the patient; but of this I shall have more to say hereafter. Moreover, if whooping-cough were identical with or developed from either of the exanthematous fevers, we should find their cycles coincide, either absolutely or in sequence, which is clearly not the case.

A glance at Dr. Ransome's charts will show that, though the epidemic cycles of this disease and of measles form arcs of circles of a very similar radius, yet there is no absolute coincidence, the highest points of these curves sometimes preceding, sometimes following, in some cases corresponding to the lowest points of the other, and very rarely coinciding. In the case of scarlet fever there does not seem to be any relation whatever; but in the case of bronchitis and catarrh there is a rough agreement in the curves, not always but very generally coincident. In the case of Sweden the curves are of much greater radius, the highest points being attained in an unbroken series of statistics, extending from 1775 to 1830—in the case of measles at an average interval of a fraction over seven years, and in the case of whooping-cough a fraction under five years.[20] Out of fifty cases of whooping-cough which I have observed for the purpose of this paper, I have found that in no case has the cough either coincided

[1] Read before the Manchester Central Medical Society.
[2] Proceedings of Manchr. Lit. and Phil. Soc., vol. xix., No. 8, 1879–80.
[3] First Lines of the Practice of Physic.
[4] Essai sur l'Éducation Méd. des Enf. et de leur Traitement, p. 25. Paris, 1754.
[5] Des Mal. de l'Enfance, tom. ii. Paris, an. vii.
[6] De la Coqueluche. Paris, 1815.
[7] Treatise on the History, Nature, and Treatment of Chin-cough. London, 1818.
[8] Lectures on Surgery.
[9] Annales de Médecine Phys. Paris, 1824.
[10] Clinique Méd. de l'Hôtel Dieu, tom. ii. Paris, 1868.
[11] Traité Prat. des Mal. des Enf. Paris, 1839.
[12] Quoted by Aberle: De Tussi. Convulsivâ, p. 45. Vindobonæ, 1843.
[13] Diseases of Infancy and Childhood, p. 461. London, 1865.
[14] London Medical and Physiological Journal, 1822.
[15] Traité de la Coqueluche. Paris, 1827.
[16] Traité Clin. et Prat. des Maladies des Enfants, tom. ii., p. 616. Paris, 1854.
[17] Archives Générales de Méd. Paris, 1854.
[18] Clin. Méd., tom. ii., p. 594. Paris, 1875.
[19] Medical Times, July 4th, 1885.

[20] Ransome, loc. cit. (note 2). The exact numbers being for measles an average interval of 7¼ years, and for pertussis 4⅞ years. The numbers for scarlet fever show no kind of proportion, the exact numbers of years intervening between the epidemics being 4, 4, 4, 5, 13, 2, 4 years: but the second, fourth, sixth, and seventh were very much lower figures than the others, and the highest figure recorded is the last. The numbers, it is to be noted, represent the deaths, and that they were registered by what Dr. Berg of Stockholm calls in his letter to Dr. Ransome "ecclesiastical registrars," doubtless meaning the pastors of the various parishes or their equivalents, who may sometimes have made erroneous diagnoses; but this source of error is scarcely likely to have affected in any marked degree the cases of such easily recognised and popularly known diseases as whooping-cough, or even measles, though it may not improbably have some effect upon those of scarlet fever.

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with the outbreak or preceded the eruption; but my wider general experience furnishes me with many cases of convulsive, crowing inspiration simulating croup, which have been relieved by an outbreak of measles; and in several instances the latter disease was followed by whooping-cough. In twelve cases out of fifty the attack of measles was followed by whooping-cough at a period varying from three months to three weeks. In one case there had been a cough ever since an attack of measles twelve months previously, which developed into whooping-cough, while the child was under observation. A recent writer to whom I have already referred, Dr. Octavius Sturges,[21] has promulgated the opinion that the whooping is simply a nervous adjunct to an epidemic catarrh,[22] and he quotes Bouchut[23] thus: "Whooping-cough is transmitted like a large number of nervous affections—like hiccough, vomiting, hysterical attacks, &c."; and he complains that Dr. West has dismissed the notion with something very like contempt. There is no doubt that the disease does present some points of resemblance to the pure neuroses, but have we not overwhelming proof of a definite and distinct period of incubation?—and how upon such a supposition is this to be accounted for? His strongest argument seems to be the immunity of children's hospitals, and in this he is quite corroborated by the experience of the Hospital for Sick Children at Pendlebury, and probably the practice there may give the explanation of the fact. It is the custom to refuse to admit cases where the cough is already developed, and when a case arises it is sent home at once, except in one or two exceptional cases, which have been treated in a special ward. Now the contagion of most zymotic diseases is much less virulent in the earlier stages, and in Pendlebury Hospital, at any rate, the special wards are as carefully isolated from the general wards as are these from each other, and it is probable that the area of infection is less in this disease than in most others. At all events, we do not find that the power of infection is in any degree lost when the patients are removed to their own homes, and although we may allow that, as with other undoubtedly infectious diseases, there may be occasional sporadic cases of whooping-cough, yet we are inclined to attribute these to causes which have escaped discovery from defective knowledge and want of opportunity for complete investigation rather than allow them to form a reason for denying the specific nature of the *materies morbi*.

Continuing our history, not in chronological, but rather in an anatomical order, we find Dr. Ebenezer Watson, of Glasgow,[24] used topical applications to the larynx, and five years later we find him complaining of the little attention which had been paid to this mode of treatment. Gendrin[25] considered that the seat of irritation was in the isthmus of the larynx; and Beau[26] published three necropsies in which he found an exaggerated inflammatory redness of the mucous membrane which lines the supra-glottic portion of the larynx. Dr. West also mentions[27] finding "a state of extreme irritability about the fauces"; and a little later the observations of the former two authors were corroborated by two new necropsies by the late Prof. Parrot. Still more recently Vannebrough[28] by four necropsies, and E. Lelu[29] by two others made in 1874 at the Hôpital des Enfants at Paris, have verified the existence of similar conditions.

(To be continued.)

[21] Lectures on some of the Distinctive Characters of Disease in Early Life. Medical Times and Gazette, July 4th, 1885. Lecture iii.

[22] Sturges, loc. cit. I quote his conclusions here, so as to avoid any misrepresentation. "1. Convulsive (or whooping) cough is a purely nervous phenomenon, the expression of a special liability of childhood in respect of spasm, of which other illustrations are to be found in laryngismus and spasm of the glottis. 2. Pulmonary catarrh in young children may at any time give rise to convulsive cough, and does, as a fact, frequently give rise to it apart from any special infection." Of the second proposition the evidence he quotes does not seem to me to be conclusive.

[23] Maladies des Nouveau-nés.

[24] Edinburgh Monthly Journal, December, 1849.

[25] Gazette Médicale de Paris, 1850.

[26] Archiv. Générales de Méd. Paris, 1856. [27] Op. cit., p. 454.

[28] De la Coqueluche et particulièrement du Siège, et de la Nature de l'Affection. Thèse de Paris, 1859.

[29] Du Siège de la Coqueluche, et de son Traitement. Paris, 1874.

MEDICO-PSYCHOLOGICAL ASSOCIATION.—At the next quarterly meeting of this Association, to be held at Bethlem Hospital, on May 19th, at 4 P.M., Dr. Savage will read a paper, entitled "A case of Insanity cured by removal of the Beard in a Woman;" and Dr. Percy Smith one on "Notes on a case of Ovariotomy in an Insane Patient."

THREE CASES OF ŒDEMATOUS LARYNGITIS THREATENING SUFFOCATION,

SUCCESSFULLY TREATED BY ENDO-LARYNGEAL SCARIFICATION.

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CASES of acute œdematous laryngitis present symptoms of so urgent a nature that usually but little opportunity is afforded of making an accurate laryngoscopic examination on which a scientific treatment may be based. In each of the following cases a satisfactory examination of the larynx was obtainable, and I venture to publish them that others may be encouraged to adopt a similar direct treatment in the dangerous condition of œdema within the larynx. These cases, though differing widely in the character of the primary disease, agree in the severity of the secondary laryngeal symptoms, and in the promptitude with which these symptoms yielded to similar surgical measures. In all complete aphonia was present, and the patients were in such evident danger of a fatal apnœa that tracheotomy instruments were kept ready at hand in case immediate relief were not given by the scarification.

CASE 1. *Solitary syphilitic gumma situated on the cricoid cartilage; gradually supervening œdema of the whole larynx.*—N. Y——, a native of Buenos Ayres, aged forty, of no occupation, was first seen by me in consultation with Dr. Alston on Dec. 13th (the middle of summer here). The personal history showed that, years before, the patient had gone through the usual stages of syphilis, and that he had recently suffered much from pains in his head and in the osseous system generally. Up to this date, however, no nodes or external gummatous formations had ever been observed. Two years previously he had suffered from what appears to have been paroxysmal hæmatinuria, and recovered under treatment at Naples. It must also be noted that he had never been troubled with his throat till the present attack. The patient stated that three weeks previously he first began to complain of pain and difficulty in swallowing, and he also noticed he was getting hoarse. As he was about to embark on a long journey up the river, he consulted his medical adviser, who, without examining the larynx, told him he might go in safety, and prescribed a simple gargle. He returned on the 12th, feeling very ill and breathing with difficulty, but he had not had any actual spasmodic attacks of dyspnœa during the voyage.

When seen on Dec. 13th, he was a tall, thin man, of dark complexion. He had an anxious expression, and the voice was reduced to a mere whisper. Respiration was slow and laboured; the inspirations noisy, but not accompanied by "downward excursions" of the larynx. There was a short, dry cough, and occasionally a scanty mucoid expectoration. He had passed several bad nights, being unable to lie down on account of dyspnœa. He had had no actual spasms—i.e., severe and sudden attacks of dyspnœa, thus contrasting with the other two cases, where this symptom was very pronounced. (I would draw here particular attention to this, as serving, perhaps, to distinguish a gradual œdema from the more acute variety; in the former case the respiratory centre had time to accommodate itself to the increased amount of carbonic acid in the blood, while in the latter the poisoning was more acute.) Externally there was nothing noticeable about the larynx except some tenderness on pressure. On laryngoscopic examination the mouth and pharynx were quite normal. The examination was made by the aid of a Mackenzie lamp, and a good view of the larynx was obtained with ease; in fact, there appeared to be some anæsthesia of the soft palate and parts around (toxic effects of CO_2 circulating in the blood?), which allowed of free use of the small mirror. The epiglottis showed no marked change, the tip and edges being merely somewhat more congested than usual. The larynx proper, however, was intensely congested, the right half being more especially so. The mucous membrane over the arytenoid cartilages and ventricular bands (false vocal cords) was much swollen, the lumen of the glottic opening being reduced to a mere chink, through which the air passed in frothy bubbles. The swelling was not equal on both sides owing to the greater tumefaction of

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the right side, and the chink of the glottis appeared oblique and inclined towards the left. The vocal cords were not visible, being completely covered by the greatly swollen ventricular bands. On the right half of the cricoid cartilage, just behind the corresponding arytenoid cartilage, a whitish swelling was seen, circular in shape, about half an inch in diameter, with its circumference sharply defined, and its surface smooth and glistening, contrasting vividly with the surrounding congested tissues. When touched with the laryngeal probe, the tumour felt elastic and semi-fluid. No ulcerations of any sort were to be seen in the larynx. Reserving the question of the nature of the tumour for discussion later on, it was evident that its presence, in the absence of all other causes, was the cause of the œdema, because the parts immediately surrounding it were intensely inflamed, and the œdema, on the whole, was greater on that side of the larynx.

Owing to the dangerous amount of dyspnœa present, I was afraid to attempt the removal of the tumour at once, but determined to reduce the œdema directly. Accordingly I passed a guarded laryngeal lancet with the aid of the mirror, and made several punctures into the œdematous mass. Some drops of dark blood immediately escaped, and I was quite astonished at the little spasm and irritation excited by the operation. Strong blistering fluid was then painted over the thyroid cartilage in front of the neck, and hot inhalations of compound tincture of benzoin were recommended for five minutes every hour, also ten grains of bromide of potassium with two grains of the iodide to be given every two hours during the night. The effect of the inhalations was to cause a considerable flow of frothy and blood-stained mucus and saliva. Next morning I found that the temperature had become lowered from 101·8° to 100°, and that the patient had slept for about an hour. He was still suffering much from dyspnœa, and finding that the œdema had decreased but slightly, I again scarified, and very freely this time; a more abundant flow of blood was the result, and a strong spasm. I had to change the bromide of potassium for the soda salt and to leave out the iodide, on account of stomach irritation. Next day he was much better, had slept at intervals during the night, and his face had a less anxious expression, but there was still much stridor on inspiration. On the next morning, as considerable improvement had taken place and the chink of the glottis was more open, I determined to cut into the white tumour, believing it to be an abscess. With a long curved bistoury and the aid of the mirror I cut right across it, but with a negative result—scarcely a drop of blood. Then with sharp laryngeal forceps I seized the tumour and removed it easily from its bed; no hæmorrhage resulted, and but slight spasm was provoked. The site of the tumour was pale pink, granular-looking, and was probably eroded cartilage, as it felt rough to the laryngeal probe. On examination, the tumour was of the size of a hazel-nut, of firm consistence, semi-transparent, and its capsule was tough, fibrous, and quite adherent; it had been completely divided by the bistoury. The microscope showed the little tumour to be a typical gumma. The case then went on well to recovery. Some ulcerations appeared along the free border of the right ventricular band, but there was no exfoliation of cartilage or any more œdema. The patient was put on iodide of sodium, and in three weeks' time his voice had almost recovered its natural timbre and he had gone to the seaside to recruit.

Remarks.—The diagnosis of the white swelling lay between abscess and a syphilitic gumma. If abscess, it would probably be of perichondritic origin, and against this were (1) the short history of laryngeal trouble, (2) the little pain, and (3) the slight tenderness on pressure. As a rule, in perichondritis of the larynx there is much pain, and considerable tenderness on pressure externally. Against the gumma was the absence of all other signs of syphilis in the larynx; there were not even ulcerations on the epiglottis. I decided on abscess on account of the physical signs, the white appearance, and the elastic feel to the laryngeal probe. Another point of interest in the case was the tolerance for examination and instrumentation.

CASE 2. *Acute œdematous laryngitis by contiguity from pharyngitis; great swelling of left arytenoid cartilage and ventricular band; endo-laryngeal scarification, followed by recovery, with ankylosis of the crico-arytænoid articulation and permanent immobility of the left vocal cord.*—R. C——, a short, thin, dark-complexioned man, a native of Paraguay, aged forty-six. I was called to see this case in consultation on the tenth day of his illness, which began with acute pharyngitis. The laryngeal symptoms had come on only during the last two days, and were urgent from the beginning. I found the patient propped up in bed, with an anxious expression of face, severe inspiratory dyspnœa, quick and small pulse, moist skin, completely aphonic, unable to swallow on account of dysphagia, and with a temperature of 101·6°.

On examination the pharynx was much inflamed, and the left side was so swollen and the mucous membrane of such a peculiarly livid hue, that I inclined to the opinion that we were dealing with a case of pharyngeal erysipelas. Externally, the left side of the neck was swollen and brawny to the touch, and there was much tenderness on pressure over the left side of the thyroid and cricoid cartilages. The laryngoscopic examination was difficult, and was made by the aid of direct sunlight in the courtyard, to which both bed and patient were conveyed. The epiglottis was found to be excessively red and injected, but not swollen or œdematous. The whole left side of the larynx proper, however, was immensely swollen, and the mucous membrane of a dark livid colour. The right half of the larynx was somewhat congested, and the glottic chink was pushed over and lay obliquely towards the right, but a small portion of the right vocal cord could be seen.

With the aid of the mirror and Mackenzie's lancet, I cut deeply into the œdematous mass in the larynx. About a teaspoonful of dark blood escaped, but such a terrible spasm of dyspnœa resulted that for a moment I thought the patient would succumb. The spasms before this had been frequent but not very alarming. Recourse was had immediately to steam inhalations of compound tincture of benzoin, and blisters and poultices applied over the thyroid cartilage externally. With great difficulty a mixture containing bromide of potassium was swallowed, as the act of deglutition invariably brought on a paroxysm of dyspnœa. In a day or two the urgent symptoms had passed off, and the case subsequently did well. When I last saw him (more than two years after the operation) he had no respiratory trouble, but his voice was hoarse, and he had tumefaction of the left crico-arytænoid articulation, with fixation of the corresponding vocal cord in the cadaveric position.

Remarks.—This case may be put down as one of very acute laryngitis propagated from an erysipelatous pharyngitis, and the paroxysms were frequent and dangerous owing to the acuteness of the laryngeal complication. The permanent injury to the crico-arytænoid articulation is not to be wondered at when we consider the delicate construction of this joint and the septic nature of the inflammation propagated from the pharynx.

CASE 3. *Acute œdematous laryngitis of three days' duration; cause uncertain; extensive œdema of the epiglottis and upper rima glottidis; scarification, with immediate good result.*—C. M——, a Scotch gentleman, aged thirty-six. No history of previous illness, nor had he ever suffered from his throat before. I was called to see this case in consultation with Dr. Ayer, at half-past nine o'clock one morning. I found the patient sitting up in bed with a most anxious expression of face, great inspiratory dyspnœa, short dry cough, dysphagia, complete aphonia, quick pulse, skin moist, pale face, and a temperature of 101°. The illness, which was only of two days' duration, had begun with hoarseness and dysphagia; fever, with headache and loss of appetite, had also been noted. He had passed a sleepless night, was very restless, with threatening paroxysms of dyspnœa, and had got rapidly worse since five o'clock in the morning. Examination, by means of direct sunlight, revealed a normal pharynx. But the epiglottis was immensely swollen and congested, especially its laryngeal surface, which resembled a roll of sausage of a dark purple colour. A glimpse only of the posterior part of the upper rima glottidis could be obtained, which showed a certain amount of swelling and congestion there also; the rest of the larynx was completely hidden by the swollen epiglottis.

As the symptoms were very urgent, I at once punctured the epiglottis with a Mackenzie lancet, but the tough tissue of the epiglottis appeared to resist, and only a few drops of blood escaped. I went home to get a more powerful instrument, and on my return at 11.30 I found that several severe paroxysms had taken place, necessitating the use of nitrite of amyl. The second operation was more successful, about a drachm of dark blood escaping. Blistering and steaming inhalations were then used as in the other two cases, but no bromide was given owing to the dysphagia produced by the swollen epiglottis. The dyspnœa gradually became less, and

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no more paroxysms took place. The urine was found to be albuminous, and the temperature remained above 100° for nearly a week, although the throat gave no more trouble, and the voice was completely restored in a fortnight.

Remarks.—The etiology of this case is by no means clear in the face of what authors state—namely, that the occurrence of extensive œdema of the larynx in simple uncomplicated acute laryngitis is extremely rare. In this case there was a history of rigor at the commencement of the illness, but there were no other symptoms of an influenza type present. The presence of albumen in the urine and the continued high pressure made me suspect an acute diphtheria at first, but a most careful laryngoscopic examination failed to show the presence of any membranous deposit. From the acuteness of the attack, the great swelling in the larynx, and the lingering convalescence (three weeks), with feverishness, I, however, concluded that some zymotic or other septic cause must have been at work.

Buenos Ayres.

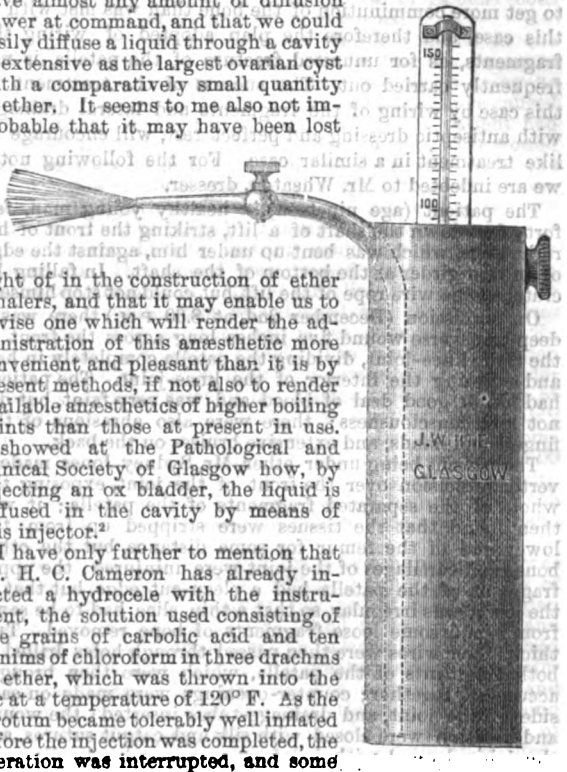
ON A NEW SYRINGE OR INJECTOR FOR SURGICAL PURPOSES.[1]

By ROBERT KIRK, M.D. EDIN.,
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THE object of this instrument is to produce perfect diffusion of liquids injected into closed cavities. With our present appliances we have no means of doing so, and in the case of hydrocele we resort to shaking and manipulation of the scrotum for this purpose—a proceeding, however, which is impossible where internal cavities are concerned. Now, it is a matter of daily observation that liquids are driven and widely diffused by means of vapour, an illustration of which is the familiar phenomenon of a pot "boiling over." Nearly two years ago it occurred to me that in ether, which boils below the temperature of the blood—namely, at 95° F.,—we had an agent exactly suited to the purpose in view. Accordingly I proceeded to treat such cases of hydrocele as came in my way by injecting the sac with ethereal solutions of carbolic acid, heating the liquid to near its boiling point before injection. The acid has been somewhat extensively used for hydrocele in America, though in much larger quantity than I thought necessary, and I have never exceeded five grains in each case. Of four cases thus treated the first three were very successful; the pain was much less than with the iodine treatment—indeed, was practically *nil*, while the recovery was rapid, the patients being allowed to resume their ordinary employments in a week. It is now seven months since the last of these cases was treated, and there has been no return of the affection in any of them. The ordinary piston-syringe, however, proved in all the cases a very unsatisfactory instrument for the purpose, as it was very difficult to draw heated ether into it; and the failure of my fourth case, which was complete, the effusion returning in a few months, was entirely due, as I believe, to the extremely faulty action of the piston on that occasion. This led me to devise the injector I am about to describe.

Experiments in injecting the urinary bladders of oxen with ethereal solutions, while they were held in a vertical position, having shown that a temperature of from 110° to 120° F. was necessary to produce perfect diffusion of the injected liquid, with inflation of the viscus, it occurred to me that the vapour-pressure of ether would of itself be sufficient at this temperature to drive the liquid, and this principle will at once explain the construction of the instrument. It consists, as represented in the accompanying woodcut, of a cylinder into which passes a tightly-fitted thermometer, and which is further provided with a filling aperture, closed by a screw stopper, and lastly, with an exit tube which dips down to the bottom of the cylinder. This tube is furnished with a stop-cock and terminates in a nozzle with a very fine aperture, and of such a size as to fit into an ordinary hydrocele cannula. The vapour-pressure within this cylinder acts on the liquid and drives it through the tube, and the vapour alone cannot escape till all the liquid has been driven out. Such is the vapour-pressure of ether that the heat of the hand expels the liquid with considerable force; at 80° F. it is driven out in a stream six or seven feet long, and at 85° the internal pressure is sufficient to expel all the liquid which the vessel can hold when full. Ether can also be made to drive other liquids at temperatures quite comfortable to the body. Three parts of rectified spirit and one of ether produce sufficient pressure at 120° F. to completely empty the cylinder; and at about the same temperature seven parts of water and one of ether (the latter in this case partly going to form a layer on the surface of the water) are completely driven out. Water dissolves one-tenth its volume of ether, and the value of this addition of the highly volatile agent to it, by enabling it to penetrate cavities and permeate tissues more deeply, must be abundantly obvious.

Here let me draw attention to a fact, although it is one depending on well-known general principles—namely, that though the ether may be superheated in the cylinder, it instantaneously cools on being liberated, so that the hand can be comfortably held in the stream when the thermometer stands at 212° F. This fact may lead to some applications of importance. It shows us that we have almost any amount of diffusion power at command, and that we could easily diffuse a liquid through a cavity as extensive as the largest ovarian cyst with a comparatively small quantity of ether. It seems to me also not improbable that it may have been lost sight of in the construction of ether inhalers, and that it may enable us to devise one which will render the administration of this anæsthetic more convenient and pleasant than it is by present methods, if not also to render available anæsthetics of higher boiling points than those at present in use. I showed at the Pathological and Clinical Society of Glasgow how, by injecting an ox bladder, the liquid is diffused in the cavity by means of this injector.[2]



I have only further to mention that Dr. H. C. Cameron has already injected a hydrocele with the instrument, the solution used consisting of five grains of carbolic acid and ten minims of chloroform in three drachms of ether, which was thrown into the sac at a temperature of 120° F. As the scrotum became tolerably well inflated before the injection was completed, the operation was interrupted, and some vapour and liquid allowed to escape before the remainder in the cylinder was injected. Some liquid was again allowed to escape in the same way—perhaps, indeed, rather too much,—and, as we afterwards thought, quite unnecessarily. The result will be carefully watched and recorded.

Since the foregoing was written the injector has been used, at the suggestion of Dr. Cameron, and with a very good result, to syringe the bladder in a case of subacute cystitis, of which careful notes have been kept. I have also used it to syringe the ears, in this case driving nine parts of water by one of rhigolene, which boils at 86° F. For a vaginal douche the instrument seems to me to be well adapted, the injection of water containing one-tenth of ether at 100° or 110° (along with any antiseptic that may be thought necessary), offering a considerable advantage over ordinary methods.

[1] Subject of a paper read before the Pathological and Clinical Society of Glasgow, March 6th, 1884.

[2] A bladder suspended vertically, and capable of containing 40 oz., was injected and inflated with an ethereal solution of picric acid, and it was shown that the acid was deposited over the entire inner surface of the bladder.

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A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

COMPOUND FRACTURE OF THE PATELLA INTO THE KNEE-JOINT; SUTURE OF PATELLA; RECOVERY.

(Under the care of Mr. SYDNEY JONES.)

COMPOUND fracture of the patella is not an injury of frequent occurrence, and it is important to record the treatment of those cases which do occur. On March 18th of this year a paper was read before the Harveian Society [1] on this subject, and only nineteen cases were mentioned by the reader of the paper as already on record. In cases of this injury, almost always caused by direct violence, it is usual to get more comminution of the bone than was met with in this case, and therefore the plan adopted of wiring the fragments, as for ununited fracture of the patella, is not frequently carried out. The success of the treatment in this case by wiring of the fragments and lateral drainage, with antiseptic dressing and perfect rest, will encourage to like treatment in a similar case. For the following notes we are indebted to Mr. Wheaton, dresser.

The patient (age nineteen), a healthy young man, fell forty feet down the shaft of a lift, striking the front of his right knee, which was bent up under him, against the edge of an iron girder at the bottom of the shaft. In falling he clutched the wire rope of the lift, but could not stop himself.

On admission (December 2nd, at 8.30 P.M.) there was a deep transverse wound five inches long across the front of the right knee-joint, dividing the patella completely in half and exposing the interior of the knee-joint. The patient had lost a good deal of blood and was very faint, but did not lose consciousness; there were also abrasions of the fingers and hands, and extensive bruises on the back.

The patient being under ether, Mr. Sydney Jones made a vertical incision over the front of the joint, exposing the whole of the separated fragments of the patella; it was then found that the tissues were stripped up from the lower end of the femur for some distance, but the other bones and cartilages of the joint were uninjured; the upper fragment of the patella had a clean-cut edge, but that of the lower was irregular, so that a thin slice had to be sawn from it and some loose fragments of bone removed. Two thick silver wires were then passed through holes drilled in both fragments of the patella, which were then brought accurately together; counter-openings were made on each side of the joint, and drainage-tubes inserted; the wound and incision were closed with silk and catgut sutures, and the joint dressed with iodoform gauze and salicylic wool and put up in a straight "excision" splint.

Dec. 3rd.—The patient has recovered well from the effects of the operation, and feels comfortable, but very drowsy. The temperature in the evening rose to 101·4°, when the joint was dressed antiseptically.

5th.—The temperature, which had remained at about 100°, rose to 102·2°; wound dressed, looking very well; very little discharge; no pain; patient takes milk and beef-tea well.

6th.—The patient feels feverish and thirsty; bowels confined. Temperature last night, 103°; at noon to-day, 102·6°; wound dressed; alternate sutures withdrawn; no distension of joint; no bagging; a fair amount of discharge, quite aseptic.

8th.—He complains of pain in the knee; tongue furred; bowels confined; pulse 130; temperature 100·8°; wound dressed; a good deal of superficial inflammation around it; a small collection of pus on the outer side of the patella discovered and evacuated.

12th.—Wound again dressed.

14th.—He coughed up a good deal of tenacious sputum and frothy blood; no pain in the chest; cough slight; nothing abnormal was detected in the chest. Temperature at night 101·4°. He was given five grains of sulphate of quinine three times a day.

16th.—Patient improving; another superficial collection of pus on the inner side of the patella; a good deal of discharge from the joint.

22nd.—The temperature was normal morning and evening, and the patient improving rapidly.

30th.—All the drainage-tubes withdrawn; the tibia was found to be falling back to the extent of three-quarters of an inch, and the malposition was corrected by a pad placed under its upper end.

Jan. 6th.—Antiseptic dressing left off; the wounds are now quite superficial; there is a great deal of inflammatory thickening about the joint; no pain.

Towards the end of January the temperature suddenly rose to 106°, and there was a slight rigor. A large dose of quinine was given, and it had fallen next day to normal. The joint appeared to be progressing favourably, and no complaint was made by the patient. After this time the patient gained strength rapidly, and on Feb. 15th could get about on crutches fairly well. On Feb. 20th he went out; wounds firmly cicatrised; swelling around joint subsiding; patella a little lower than normal; can be shifted laterally, but not upwards or downwards; he can flex the knee about two degrees; no abnormal lateral movement; no hyper-extension possible, the limb being quite straight; no rotation or falling back of the tibia; patient was going about well with crutches and splint; the leg became swollen a little towards evening. He was again seen on May 3rd; there was now no swelling of the leg, but no attempts had been made to flex it. He was anxious to resume work, being able to walk without stick or crutches.

[1] THE LANCET, vol. i., 1886, p. 642.

LEEDS GENERAL INFIRMARY.

CASES OF COMPOUND FRACTURE.

(Under the care of Mr. MAYO ROBSON.)

THE following reports have been abstracted from notes furnished by Mr. Ashton Street.

CASE 1. *Compound Fracture of Patella, with Wound of Knee-joint; Recovery with useful joint.*—J. P——, aged thirty-five, a coachman, was kicked by a horse on the right knee on Dec. 2nd, 1885, and admitted two hours afterwards, when there was found to be a wound of 1½ in. over the front of the right patella, which was the seat of a starred fracture; a probe passed freely into the knee-joint. It was syringed well with perchloride solution (1 in 2000), and dressed antiseptically, no drainage-tube being employed; the limb was fixed on a back splint. Temperature normal throughout. Dressed for the first time on Dec. 12th, ten days after the accident, when the wound was healed. Made an out-patient Dec. 29th, plaster-of-Paris having been applied from the calf to the middle of the thigh, this being left on to steady the limb for three weeks. In March, 1886, he was quite well and able to perform his duties perfectly, the injured knee-joint moving as freely as the uninjured one.

CASE 2. *Compound Fracture of Humerus, with Wound of Shoulder-joint; Recovery with good joint.*—W. C——, aged forty, carpenter. On Dec. 3rd, 1885, while at work, a circular saw broke in two and one half struck his shoulder, knocking him down. When admitted to the infirmary a few hours afterwards, there was found to be a large wound of about seven inches reaching from the tip of the acromion down the arm through the deltoid. The shoulder-joint was laid open, the tip of the acromion was cut off, and the upper end of the humerus was the seat of a severe comminuted fracture. All the parts were thoroughly cleansed and then syringed with perchloride lotion (1 in 2000); two drainage-tubes were inserted, and the wound was brought together with catgut sutures. The arm was fixed to the side with the hand across the chest. The wound progressed favourably, and on Jan. 19th, when it had nearly healed, the arm was freed from its bandages and he was allowed to return home. On March 28th the patient reported himself, with the wound healed and with good movements in the joint, he being able to raise his arm above his head, and to rotate it freely and to place his hand behind his back.

CASE 3. *Compound Dislocation of Left Astragalus, with Fracture; Recovery, with useful joint.*—J. S——, aged thirty-one, a miner, was run over by a waggon and admitted

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to the infirmary within a few hours of the accident with a wound over the inner ankle running from the anterior border of the internal malleolus round the back of the heel to the outer border of the tendo Achillis; through the wound the astragalus was protruded. The internal lateral ligament was but slightly injured, and on this, as a hinge, the astragalus was turned with its upper surface downwards, having been completely torn away from the external lateral ligament; the outer articular surface was broken, but there was no fracture of the malleoli. The flexor longus pollicis tendon was torn from its muscle and had to be removed; the posterior tibial artery was torn, though not bleeding, but the nerve was not injured. After enlarging the wound, the astragalus was separated from its attachments and removed, and the wound was then well syringed with perchloride solution, a large drainage-tube being inserted. It was dressed antiseptically and put up on an anterior wire splint. The wound, which was in a very dirty condition when he was brought in, was evidently not fully asepticised, for it suppurated, and the matter collecting by the side of the tendo Achillis had to be let out by incision. He made a slow recovery, and was discharged on Feb. 5th with a limb which promised to become a very useful member.

CASE 4. *Compound Fracture of Humerus, with Split Fracture into Elbow-joint; Recovery with freely movable joint.*—A. B——, aged ten, a schoolboy, was admitted on July 16th, 1885, six hours after being thrown down by a companion, when there was found to be a wound of 1½ in. in front of the lower end of the humerus just above the flexure of the elbow, communicating with a very loose split fracture opening the elbow-joint, the muscles being much torn. The wound was syringed with perchloride lotion, and dressed antiseptically, a drainage-tube being inserted. The limb was placed on an internal rectangular splint. He was made an out-patient on Aug. 11th, with the wound almost healed, but with much callus around the seat of fracture, impeding the movements in the elbow. The splint was left off five weeks after the accident, and friction and passive movements employed. When seen in February, 1886, all the movements of the joint were very good. He had no pain, and the fracture was quite sound.

Remarks by Mr. MAYO ROBSON.—Before the introduction of antiseptic surgery such injuries would probably have required primary amputation; or even, if at considerable risk to life attempts had been made to save the limbs, suppuration must have occurred in and around the articulations leading to ankylosis, if not necessitating secondary amputation. The chief difficulty is in rendering wounds of this nature aseptic, since the skin is as a rule greasy and dirty, and the muscles and bones are often covered with grit and foreign matters. To effect this the skin is well rubbed with turpentine, which removes the grease and renders it clean and aseptic; and after all foreign matters have been picked out, or if needful scrubbed away by means of a brush, the wound is very freely syringed out over and over again with perchloride lotion (1 in 2000) by means of a Higginson's syringe. A drainage-tube and sutures having been inserted if needful, the wound is covered with a single layer of gauze soaked with perchloride lotion, and over this dry dressings of salicylic wool or silk are applied, the chief guiding principles in the after-treatment being infrequent dressings and fixation of the limb until healing has taken place, after which friction and passive movements help to restore impaired functions.

TIMARU HOSPITAL, NEW ZEALAND.

TWO CASES OF COMPOUND DEPRESSED FRACTURE OF THE VAULT OF THE SKULL; TREPHINING; RECOVERY; REMARKS.

(Under the care of Mr. H. V. DREW.)

CASE 1.—Alex. D——, aged forty-two, a farmer, was admitted on Feb. 15th, 1885. When seen, a few minutes after admission, he was sitting up in bed and quite sensible. He nodded and smiled when spoken to, and in answer to questions said that a heavy horse had reared, and in coming down had struck him on the head with one of his fore-feet, which stunned him for a few minutes, and when he tried to get up he found himself paralysed all down the right side. On removing the dressing from his head a pulsating area the size of half-a-crown was visible, and on examination under chloroform, which was kindly administered by Dr. Hogg, the bone was found to be sunk right into the brain, the same having "welled up" over it. Not being able to remove the bone, Mr. Drew used a small trephine at the extreme margin of the fracture, which enabled him to remove all the fragments—also about half an ounce of brain matter, as near as could be judged, this being completely disorganised. All foreign matter, clots, &c., having been removed and the wound washed out gently with a 1 in 40 carbolic solution, the scalp was laid down without sutures of any sort, a piece of Lister's protective covering the wound; over this was placed a piece of lint wrung out in a 1 in 40 carbolic solution, and then a piece of iodoform wool, with one layer of bandage under the chin and over the head to keep things in their place. Irrigation with a 1 in 40 carbolic iced solution was resorted to, but this had to give way to rectified spirit lotion, as symptoms of carbolic poisoning began to manifest themselves. The patient did not vomit at all. His food consisted of iced milk and chicken broth, with bread later on, and the only medicine he had was an occasional dose of calomel. On the thirteenth day he could flex his previously paralysed leg; on the twenty-fifth day he could extend the same. On the twenty-seventh day he began to recover the use of his arm (flexion only), and on the thirtieth day he could extend the same, though he had not yet recovered the power of pronation or supination. On the thirty-second day he had a bilious attack, and his temperature rose to 101° F. and his pulse to 150, but fortunately by the use of calomel both were reduced in forty-eight hours to normal.

The patient during this attack never vomited in the ordinary acceptance of the word, for he has the power to cause his food to regurgitate at will; and by so doing he avoided the risk which forcible vomiting might have caused him to incur. At the end of eight weeks the patient had recovered all the movements of his arm and leg. The wound had long since healed, though a pulsating area about the size of half-a-crown is visible. The injury was seated over the ascending parietal convolution, and lobule of same (left) as near as could be judged. The wound was perfectly antiseptic, though Lister's dressing could not be accurately adhered to. The wound was dressed every day under a continuous dripping of 1 in 40 carbolic. No sutures were employed, accurate union was effected, and the wound was left alone. The temperature never rose above 99° F., except during the bilious attack. The recovery of flexion before extension of each limb is noteworthy, also the later return of the more complex movements. Slight bagging of the scalp at the back of the head was noticed, presumably due to the escape of subarachnoid fluid, but was soon completely absorbed. The pulse fluctuated between 50 and 90 (except during the bilious attack), and the greatest difficulty met with in conducting the case was the regulation of the bowels. In February last the patient was still well, and was doing hard work.

CASE 2.—John L——, aged forty-five, nurseryman, was admitted on Jan. 2nd, 1886, suffering from the effects of a blow from a 16 lb. hammer, received at the Caledonian Sports. On admission he was found to be conscious and suffering somewhat from shock and a lacerated wound found over the right frontal bone, the greater part of the latter being depressed. The fracture was very extensive, and there was bleeding from the nose, the right eyelid being very tense from extravasation of blood. Dr. Hayes of Temaka was with Mr. Drew at the time, and kindly assisted; and as he agreed as to the advisability of trephining, the operation was at once proceeded with. A small piece was removed with the trephine, and then the large depressed part was raised, and, after some little difficulty, kept in position. The skull was found to be excessively thick (three-eighths of an inch). The scalp was laid down when the bleeding had ceased, and silver sutures were used to unite the incised portion of the wound, the posterior or lacerated part being left open and a small drainage-tube inserted. The wound was dressed as in Case 1, and the patient put upon a clean bed. Towards the end of the operation the patient vomited a large quantity of altered blood, and the vomiting of blood continued throughout the night in spite of sucking ice.

Next day the wound was dressed as before, and the tube cleaned and replaced; no depression was noticeable, and things looked well; pulse 60; temperature 98° F. No vomiting occurred after this. A little milk-and-water (iced) and a little thin gruel were taken. Evening temperature 99·4°. The patient remembered nothing about being brought in or about the operation, though he spoke quite rationally at the

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time. He sees "double," and is completely deaf on the right side; has numbness of skin of forehead, and complete loss of sensation over the area of distribution of the infra-orbital nerve, also of the right lower part of face; his taste is also much affected. Mr. Drew therefore concluded that taken with the vomiting of blood that he had a fracture of the base, as well as the fracture described.

On the sixth day the sutures were completely removed, and on the seventh day the drainage-tube, which had been shortened from time to time. On the twenty-seventh day the patient was sitting up in bed, the wound having been healed for some days. The highest temperature was 99·8° F. on the seventh day, and has since been normal. Hearing has returned, taste and sensation of skin of face much improved, and vision is normal. Patient feels as well as before the accident, and there is no mental or physical defect. He left the hospital on Feb. 2nd, 1886, exactly one month after admission.

Remarks by Mr. DREW.—I attribute the successful results in these two cases, both of which were of extreme severity, and both only forty-two years of age, to the following causes: Symptoms were not waited for, but both patients were immediately trephined; depressed bone was known to exist, and though if left it *might not* cause symptoms, if elevated or removed it *could not*. The ordinary Listerian dressing was not used, as it was feared that the bandaging &c. would not conduce to coolness, and the pressure would have been injurious; but by applying the dressing as described in Case 1, and redressing every day without interfering with the wound, and under a constant dripping of weak carbolic lotion, the same principle was adhered to with precision. Very great care was observed with the food, very little being given for the first week; no friends were admitted for a fortnight, and the patients were kept perfectly quiet in a well-ventilated room and in a subdued light, and the bowels were carefully regulated every third day. The cold lotion undoubtedly retarded the healing process, but this was more than counterbalanced by the immunity from risk of inflammation of brain it ensured, and also the freedom from pain or even discomfort of the patient. I wish to acknowledge my obligation to Drs. Hayes, Hogg, MacIntyre, and Longrove for their kind assistance.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Obliterative Tracheitis and Bronchitis in Congenital Syphilis.—Pathological Histology of Hydrophobia.—Granuloma Fungoides.—Hepatic Abscess secondary to Pelvic Inflammation.—Primary Cancer of Thyroid.—Double Intestinal Stricture.—Spinal Abscess, destroying Kidney and opening into Duodenum.—Psoas Abscess, with formation of New Bone in Sinus.—Tubercular Arteritis.—Malignant Growth of Lip, with Melanosis.

AN ordinary meeting of this Society was held on Tuesday last, Dr. J. S. Bristowe, F.R.S., President, in the chair. The meeting began half an hour earlier than usual. As the executive are endeavouring to complete the work of the session, the next and last meeting is also to commence at 8 instead of 8.30 P.M.

Mr. R. W. PARKER showed specimens of a case of Obliterative Endo-tracheitis and Bronchitis. They were removed from the body of a boy aged fifteen years, the subject of congenital syphilis. He had first came under observation on account of endosteal nodes on both tibiæ, and of a tracheal fistula dating back three or four years, when he was tracheotomised for syphilitic laryngitis by Mr. Elkington of Birmingham. He continued to wear a tube for many months; on its withdrawal the opening had remained patent. It was thought not improbable that the irritation of fine foreign matter (dust, &c.) entering the lungs through this fistula had first started the condition about to be described. Commencing about an inch above the bifurcation, the lumen of the trachea suddenly began to narrow in a more or less uniform manner; a little lower down this narrowing became less uniform but more marked, so that the lumen was reduced to about one-third of its normal size. The left bronchus was almost entirely occluded. The occluding new growth consisted of well-formed fibrous tissue surrounding and separating the mucous glands, which appeared quite healthy. The changes in the trachea were strictly endo-tracheal; those in the bronchi were partly endo-bronchial and partly peri-bronchial, the latter, it was thought, being secondary to interstitial pneumonia set up by the retained secretions. Both lungs were in an advanced state of bronchiectasis. The extent of the occlusion of the lowest part of the trachea and of the primary bronchi was very remarkable, the available area for breathing purposes being little more than that of a large quill. The resemblance of this condition to endarteritis was remarked upon. In reply to Dr. Bristowe, Mr. Parker said that, so far as he knew tracheotomy did not lead to cirrhosis of the lung.

Dr. HALE WHITE showed a series of specimens illustrating the Pathological Histology of Hydrophobia from two men and one dog. The medulla oblongata was in a state of acute inflammation, for the most part limited to the floor of the fourth ventricle and the subjacent nerve-tissue for a depth of about one-third of the thickness of the medulla. It was most marked in the median line on either side of the posterior median fissure. The result of this inflammation was a general blurring of the nerve tissue, so that the normal arrangement of fibres and cells could not be made out; there were many small inflammatory cells in tissue, and under a high power of the microscope they could be seen in large numbers crowding through the walls of the vessels. The inflammatory exudation had a tendency to run in directions determined by the nerve fibres. The nerve cells were implicated, and in many places blurred and indistinct; the nuclei most affected were the vagal and hypoglossal. The dilatation of the minute vessels was extreme, and had in many cases led to their rupture; the hæmorrhages thus produced were all microscopic, and were most numerous immediately under the floor of the ventricle, so that blood could often be seen to be effused into the meshes of the pia mater, but in no place was this membrane itself ruptured. The same condition was observable in other parts of the brain, but to a much less degree, and it could be also seen in the cord to a slight extent. Thus, it will be gathered that the essential lesion in hydrophobia is an acute inflammation of the floor of the fourth ventricle, and that this spreads slightly upwards to the brain and downwards to the cord. In the salivary gland there was some blurring of the secretory epithelium, and a few leucocytes could be seen wandering about among the gland constituents. In one case there was an atrophic condition of the thyroid gland. The vagus and sympathetic nerves and every organ in the body were examined, but they were all found to be healthy with the exceptions just mentioned.

Dr. PAYNE showed drawings and microscopic specimens of Granuloma Fungoides from a man aged fifty-six. The cutaneous affection consisted of scattered, large, red, scaly patches, which became dark red and then brown, and looked like psoriasis or scaly eczema; but, in addition, there were, sometimes replacing the patches, tumours of hemispherical shape, from half a walnut to an orange in size. The man was born in the country, but had passed thirty years in London at a railway station. The diagnosis presented some difficulty, and leprosy was thought of. It was, however, like that described by Alibert as mycosis fungoides, and by others as lympho-sarcoma and general sarcomatosis. A case was recorded under the name of leprosy in the twentieth volume of the Transactions which Dr. Payne regarded as a granuloma fungoides. The internal organs were healthy. The tumours only invaded the skin, and consisted of an infiltration of small round cells, which had essentially the same structure as that of the scaly patches; there was also some evidence of a new formation of connective tissue without giant cells; the structure was not specially lymphatic, and the cells differed from those of sarcomata. Micrococci had been described by Auspitz of Vienna as a copious infiltration of the cells; but the evidence of their nature was not conclusive. Rindfleisch had discovered an undoubted streptococcus, but only within the vessels; these were certainly not present in Dr. Payne's specimens. The foreign observations being post-mortem specimens, the presence of micrococci could be easily accounted for.

Mr. F. S. EVE showed a specimen of Granuloma Fungoides of the Foot. It was limited to the skin and projected from the dorsal surface of the foot; a warty condition existed along the inner margin of the growth, and this papillary condition extended nearly up to the knee. The patient was a man aged fifty-three, a merchant, who had had cardiac disease and albuminuria for many years. There had been

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lupoid-like growths on the left leg, which had left scars and a kind of spurious hypertrophy of the tissues. As the growth was considered to have become epitheliomatous, amputation of the limb was performed, and the patient made a good recovery. Later on a tumour appeared at the upper part of the right forearm, but this sloughed, and cicatrisation ensued; it was regarded as an intermuscular specific gumma by Mr. Hulke. In the buttock also a dense white firm tumour appeared, and exposed the ilium, which became partly necrosed. A sister of the patient showed signs of congenital syphilis. There were many differences from ordinary gumma in the tumour shown, the fibrous tissue being so abundant. As described by Auspitz, and obtained by Gram's method, there were many cells that stained blue in a remarkable way, but this was not due to micrococci.—The PRESIDENT did not think that Mr. Eve's specimen was of the same nature as the first. Dr. T. ACLAND said that Mr. Ballance and himself had been unable by cultivation experiments to demonstrate the existence of any micro-organism. If these were present the outline of the cells would not be so perfect.—Mr. JONATHAN HUTCHINSON, jun., alluded to the case of supposed actinomycosis described by Mr. Treves; his father had a somewhat similar case at the London Hospital, in which the skin alone was involved with lupoid-like growths.—Dr. PAYNE replied that the stained points had nothing to do with nuclei in his sections; they were probably albuminoid granules, and related to vital processes, for they disappeared after death.—Mr. EVE said that in Auspitz's case a scaly eczema preceded the formation of the growth for seven years. He had detected the same kind of cells in syphilitic growths.

Dr. HANDFORD showed specimens of Hepatic Suppuration, probably due to pelvic suppuration, in a woman aged twenty-five, who had led an immoral life. Much pyrexia, cough, diarrhœa, and rigors were the chief clinical signs. The liver was very large and tender, but aspiration failed to strike pus. The necropsy showed a large extent of suppuration in the right lobe of the liver, which weighed 10lb. 6oz. The lobe was honeycombed in all directions, and around this many scattered pea-sized areas of abscesses were detected. There was no sign of hydatid. The spleen weighed 13oz., and the kidneys were much enlarged and flabby. There were abscesses in the caudate nucleus, and one damaged the anterior limb of the internal capsule, but caused no definite symptoms. The Fallopian tubes were distended with curdy purulent fluid. The sigmoid flexure was bound down to the back of the uterine fundus. The sequence of events was probably gonorrhœa, double pyo-salpinx, and pyæmia. In a case recently reported by Mr. Bilton Pollard the sequence of events was gonorrhœa, thrombosis of iliac veins, suppuration of hip-joint, thrombosis of pulmonary artery, and death.—Mr. STEPHEN PAGET said that from certain statistics of 400 cases of pyæmia he had come to the conclusion that the lymphatics had a large share in the distribution and arrangement of the lesions of pyæmia; and Dr. Tilt had published a paper in the Obstetrical Transactions on the importance of lymphangitis in pelvic pathology. The chances of the liver being affected if the bone were the seat of the lesion from which pyæmia developed were one in four, whereas if the bone were not involved the chances were one in twenty. He thought the lymphatic tissues were operative in this connexion, and not the veins, for in twenty cases of pyæmia after venesection only one had hepatic abscess, and that was where it had been performed for acute secondary syphilis.—Dr. S. WILKS considered that pyo-salpinx was a source of danger; in one he had seen brain disease follow, and in another septic pleuro-pneumonia. Morgagni had noticed that certain cases of Fallopian abscess followed gonorrhœa, and were a cause of sterility.—Dr. HADDEN said the description of the liver reminded him of actinomycosis. Had the author taken that view into consideration?—Dr. CARRINGTON said that the portal vein was healthy in instances of tropical abscess that he had seen. The lymphatics probably conveyed the contagium.—Dr. N. MOORE corroborated this view. In only one case had he seen the portal vein diseased.—Dr. HANDFORD had not specially examined for the actinomyces.—The specimen is to be investigated by Drs. Hadden and T. Acland.

Dr. NORMAN MOORE exhibited a specimen of Primary Carcinoma of the Thyroid from a woman aged forty-six, lately under his care in St. Bartholomew's Hospital. The new growth formed a huge mass, which had ulcerated through the skin and into the larynx. It completely compressed one recurrent laryngeal nerve, and pressed on both carotid arteries, and had grown through the upper wall of the arch of the aorta, but without causing extravasation of blood. Secondary deposits were found in the kidneys, on one rib, and in the brain. All the deposits showed great mixture of cells, but in them were groups of well-marked epithelial type, surrounded by numerous connective tissue cells, but with a very ill-developed stroma. The growth seemed to be of epithelial type, probably originating in the walls of the loculi of the thyroid. The duration of the growth was about four months. On the patient's admission to the hospital a large cyst projected from the right lobe, and from this blood-stained fluid was let out, but it rapidly refilled. After a month in the hospital the tumour began to approach the surface, and broke through in a few days as a fungating mass. There was some dysphagia and partial aphonia, but never urgent dyspnœa.—Dr. F. SEMON said malignant growths of the thyroid gland were by no means so rare as was supposed; at least a dozen had been recorded in the past year.—Mr. SUTTON said there were no theoretical objections to the development of cancer in the thyroid gland, for it was of hypoblastic origin.—The specimen was referred to the Morbid Growths Committee.

Dr. CARRINGTON brought forward two cases of Double Stricture of the Intestine. The first was in a man aged forty-nine, who was admitted into Guy's Hospital on Dec. 28th, 1885, under the care of Mr. Bryant. The history was, briefly, that since the previous August he had suffered from griping abdominal pain and obstinate constipation. A mass of growth could be readily felt per anum. Colotomy was performed in two stages, but the operation afforded him no relief, and he died on Jan. 6th. At the necropsy a well-marked cancerous growth with thick everted nodular edges and ulcerated surface was found four inches up the rectum. The stricture was very tight. A second growth with the same characters was found surrounding the ileo-cæcal orifice. No secondary nodules were found in the body. The second case was more complicated, but presented the feature of a double intestinal stricture. The patient was a female aged sixty-one, and was admitted on Oct. 10th, 1885, much wasted and careworn and deeply jaundiced. The illness had commenced ten months before by abdominal pain. She became jaundiced on Sept. 28th. She was obstinately constipated throughout, but only vomited on two occasions—viz., Oct. 10th and 11th. With the exception of a nodule in the tissues surrounding the umbilicus, which was thought to be cancerous, no objective cause of the jaundice was discovered. The viscera on admission all appeared to be healthy. On Dec. 25th the pain became much intensified and the abdomen very tender, and she died the next day. On opening the abdomen fæcal extravasation and acute peritonitis were discovered. The bowel had given way just above the uppermost of two strictures, which were situated three feet above and one foot below the cæcum respectively. The strictures were quite narrow and annular, triangular on section, with the bases on the peritoneal surface. There was scarcely any lumen to the bowel at the upper stricture, and the calibre of the colon at the site of the lower one was certainly not more than half an inch. The gall-bladder contained two faceted gall-stones. The common bile-duct was surrounded by a nodule of growth of the size of a walnut, which had invaded the liver by continuity. The liver weighed 32 oz., and contained a few secondary nodules. There was much thickening and puckering in the portal fissure. The ovaries contained one or two small nodules. No other disease was found.

Mr. DAVIES-COLLEY exhibited the Lumbar Spine, with the Right Kidney and the Duodenum, of a woman aged twenty-four, who had come under his care in Guy's Hospital with angular curvature of the lumbar vertebræ, accompanied by excessive pain in the right lumbar and iliac regions and in the upper part of the right thigh, but without any distinct fluctuating swelling. Under an anæsthetic a lumbar incision was made, and the side of the body of the third lumbar vertebra exposed. Nothing flowed at the time, but in the evening there was a free discharge of foul and turbid pus. No relief of the pain followed. The copious suppuration continued, and was thought to be stercoraceous. In eleven days the patient died, and was found to have extensive disease of the last lumbar vertebra, and, to a slight extent, of the fourth. The right kidney was disorganised, and there was a perforation of the second portion of the duodenum just below the entrance of the common bile-duct. The chief points of interest in the case were: 1. The want of correspondence of the angular projection, which was formed by the spine of the second, third, and fourth lumbar

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vertebræ, with the disease, which had utterly destroyed the body of the fifth and only slightly attacked the fourth lumbar vertebra. 2. The absence of any pus in the urine to indicate the destructive process going on in the kidneys. This was probably due to the occlusion of the ureter having preceded the renal suppuration. 3. The remarkable clinical results due to the perforation of the duodenum. The suppurating cavity appears to have discharged itself by the opening, and in consequence there was no fluctuating swelling in the usual sites of spinal abscess. At the same time, excruciating pain was set up by the food getting into the abscess cavity. This still continued after the operation, and probably the escape of the food through the wound increased the weakness of the patient.

Dr. A. Q. SILCOCK showed a Psoas Abscess with formation of new bone in the wall of the sinus, taken from a child aged five. The psoas abscess was right-sided, and in the wall of the sinus were plates of bone of spurious nature, the canalicular systems not being properly developed. Perhaps the liability to formation of bone in the tendon of the psoas, the quantity of lime salt passing by, and the tendency of chronic inflammation to form bone, were sufficient reasons for the development of the bony plates.—Mr. SHATTOCK raised the question of actinomycosis in Mr. Davies-Colley's case. The communication of the duodenum with the cavity of the abscess reminded him of the description by Israel of cases of primary infection of the intestines with secondary caries of the spine.—Dr. CARRINGTON said that the perforation of the duodenum was so obviously recent that Mr. Shattock could not hold the actinomycotic view if he had been present at the necropsy.—Mr. DAVIES-COLLEY replied in the same strain.

Dr. C. TURNER showed a specimen of Aneurysm of a branch of the Pulmonary Artery in an old cavity in the Apex of the Left Lung, from which rapidly fatal hæmorrhage had occurred. In the lung were also several wedge-shaped masses of recent consolidation and old fibroid areas. The specimens were obtained from a child aged six, who had suffered from pulmonary symptoms for two years and a half since an attack of measles. She had been failing in health for twelve months, and had had occasional attacks of hæmoptysis. She had not been laid up until four months before her death. She improved under treatment, but the symptoms returned with progressive severity a few weeks before death occurred from profuse hæmorrhage, of which there had been no warning. Sections from the neighbourhood of the cavity show great proliferative thickening of the inner coat of the pulmonary arterioles in and adjacent to caseous tracts, and much nuclear infiltration and proliferation of the outer coat of the arterioles and of the interlobular and interalveolar connective tissue, and of that around the caseous tracts and nodules, which contain many giant cells of the kind seen in tubercular lesions. A button-like elevation, which appeared to be another small aneurysmal bulging on a branch of the pulmonary artery, was to be seen in the wall of the cavity near the first. The specimen was regarded as an instance of rupture, and possibly of the formation of such aneurysms as were incidental complications of a progressive phase of a chronic pulmonary lesion, attributable to weakening of the walls of the pulmonary arterioles by peri-arteritis, unattended by obstructive endarteritis of corresponding degree, such as might have produced the cavity and wedges of consolidation and fibroid induration seen in the lungs. The right lung was completely fibrous and retracted. There were cavities in the upper lobe, but no miliary tubercles in the lungs or abdominal viscera. The child's paternal grandparents had both died young, but there was no other evidence of phthisis in the family.

Dr. F. W. MOTT exhibited a specimen of Malignant Melanotic Growth of the Lip from a single woman, aged thirty-seven. It had grown from the upper lip for two weeks when first seen, and had a purplish aspect, softened in the centre and hard at the periphery; no pulsation or induration. The mucous membrane was unaffected. After six weeks the growth was removed, having attained the size of a walnut, by a V-shaped incision. At the end of ten weeks the right cheek and right submaxillary gland were involved with new growths, and another nodule appeared behind the right ear. In four months the scar showed signs of recurrence and the left submaxillary gland became involved. Later still, a fresh nodule appeared to the left of the occipital protuberance; the patient became deaf first on the right and then on the left side. Hæmorrhage frequently recurred, and she died exhausted by it at the end of one year and ten months from the first appearance of the growth. The internal organs were healthy. The situation of the primary growth in the lip was rare; the disease had only spread locally; it was either an alveolar sarcoma with melanosis, or a specimen of carcinoma melanodes with much pigmented fibro-vascular stroma. Kaposi had described such tumours as commencing in buccal glands.

The following card specimens were shown:—Dr. Payne: Trichorexis Nodosa. Dr. Sherrington: Spinal Cord from a case of Friedreich's Hereditary Ataxia. Mr. Ballance: Calvaria showing perforations from a case of Hydrocephalus. Mr. Shattock: Calvaria perforated and ridged in Meningo-encephalocele. Dr. N. Moore: Case of Hydrocephalus. Dr. Handford: Aneurysm of Aorta communicating with Pulmonary Artery. Mr. Eve: Multilocular Cyst of Epididymis. Mr. E. H. Fenwick: Villous Tumour of Bladder. Mr. Churchill: Central Sequestrum of Great Trochanter from a case of Hip Disease. Mr. Targett: Traumatic Hernia through Diaphragm. Mr. Stoker: Cancer of Thyroid. Mr. J. Poland: Old Subcoracoid Dislocation of Shoulder.

CLINICAL SOCIETY OF LONDON.

Interstitial or Subpleural Laceration of the Lung.—Gummata of the Liver.—Hydatids of Liver opening into Right Lung.—Resection of Knee for old-standing Ununited Fracture of Patella.

AN ordinary meeting of this Society was held on the 30th ult., Dr. Cayley, Vice-President, in the chair.

Mr. TIMOTHY HOLMES read a case of Subpleural Laceration of the Lung in a girl aged fourteen years, who had fallen and severely bruised the right breast. There was no fracture of the ribs. The leading symptoms were hæmoptysis, great dyspnœa, and entire absence of breathing in the right lung. The right chest did not move in respiration; it was natural on percussion. These symptoms, with the history of her having a piece of biscuit in her mouth at the time of the accident, led to some suspicion of the impaction of a fragment in the right bronchus; but the progress of the case negatived this idea. The dyspnœa was at first so alarming that tracheotomy almost seemed indicated. Next day, amphoric breathing was heard under the angle of the right scapula, and this soon developed into the physical signs of a large cavity in the lung, but without any sign of fluid or air in the pleura. This cavity gradually contracted and the girl quite recovered. It is noteworthy that subcutaneous emphysema appeared at the right side of the root of the neck on the third day. When last seen, the girl, though in perfect health, had evident physical signs of considerable consolidation of the right lung. In commenting on this case, the author quoted Nélaton's description of the symptoms of subpleural laceration (including emphysema at the root of the neck) as exactly verified by the symptoms here observed. He remarked on the slight attention which was bestowed on this form of injury in most of our text-books, and the doubts which he had himself expressed in his own work as to the possibility of diagnosing the subpleural form of laceration. These considerations, together with the comparative rarity of such cases, would, he believed, justify the publication of this case; but it also contained a feature of its own, which had not hitherto been noticed in the history of the lesion—viz., the entire suspension of respiration in the injured lung. The cause of this phenomenon was discussed, and reference was made to other cases of subpleural laceration.—Mr. A. T. NORTON alluded to a similar case that occurred in a man who was by accident completely buried under a load of sand. There was gurgling and copious hæmorrhage, with pneumonic symptoms, but no pleural signs.—Mr. R. J. GODLEE referred to a specimen shown by him at the Pathological Society some years ago, in which a main bronchus had been torn completely across; could such an accident have happened in Mr. Holmes's case?—Dr. J. S. BRISTOWE suggested that there might have been a pneumothorax if there were perfect metallic tinkling and absence of breath sound.—Mr. T. HOLMES said that there was no question as to there being nothing in the pleural cavity. As the result of laceration of the lung a cavity formed gradually, and gave rise to the physical signs mentioned in the description. He believed that the laceration had involved the tissue of the lung, and not a bronchus. On recovery the lower part of the lung was solid from cicatricial processes. The subcutaneous emphysema was so limited, and only came on at the third

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day, that he believed it could not be due to rupture of a large bronchial tube. The absence of breath sounds was remarkable and difficult of explanation, except on the theory that a large bronchus was obstructed by blood clots.

Dr. BRISTOWE read the notes of a case of Gummata of the Liver, in a boy aged fifteen. The patient was admitted into St. Thomas's Hospital with a tumour in the epigastrium, from symptoms of which he had suffered for six months. The tumour was about as large as a Tangerine orange, and slightly tender. The boy looked healthy; and as no history of syphilis was obtained, and no indications of congenital syphilis were observed, the suspicion that the case was one of visceral syphilis was dismissed. No definite opinion, however, was formed as to the nature of the disease; but on two occasions a fine trocar and cannula were introduced, with the result that they simply penetrated solid matter. The boy remained in the hospital for four months without specific treatment, and with gradual enlargement of the liver, and during the whole of this time presented a hectic temperature (the morning fall being down to the normal or even below it, and the evening rise varying from 101° to 103°) with frequent chills or slight rigors. But his general health remained apparently unimpaired; he did not lose either flesh or strength, he had a good appetite, and slept well. At the end of the four months, a closer inquiry elicited the facts that three of his brothers and sisters had died in infancy; that he had himself, when seven years old, suffered for several months from some affection of his eyes; and that, what had hitherto been overlooked, there were several very faint nebulæ in both corneæ. There was no trace of congenital syphilis. Acting on this information, Dr. Bristowe at once treated the patient with iodide of potassium and mercury. On the fifth day of treatment the morning and evening temperature were both subnormal for the first time; and from this time onwards (with two or three exceptions, when it rose to 98·4° or 98·6°, and one, when under the influence of an attack of tonsillitis, it rose to 102·6°) the morning and evening temperatures remained subnormal until, at the end of two months, he left the hospital. Under the anti-syphilitic treatment the liver diminished in size, all pain and tenderness ceased, and he gained flesh. Excepting for some remaining tumour of the liver, the patient left the hospital apparently well six months from the time of admission.—Dr. CAYLEY had seen a case in an adult where there was rapid enlargement of the liver in the epigastric region associated with considerable enlargement of the spleen; rigors and pyrexia led him to think of suppuration or suppurating hydatid. An incision made by Mr. Hulke detected no pus, and the man ultimately recovered.—Dr. S. P. PHILLIPS said that the intermittent pyrexia had been recognised as occurring in tertiary syphilis by Murchison in a lecture published in THE LANCET about ten years ago.—Dr. BRISTOWE, in reply, asked whether Dr. Cayley's case had been treated specifically.—Dr. CAYLEY replied that it had, but did not seem to improve as the result of it.—Dr. BRISTOWE then ventured to think that Dr. Phillips' remarks had no bearing on his case, for it was not a pyrexia like that of intermittent fever, but a genuine morning fall and evening rise such as occurred in hectic states. He had seen many cases of gummata of the liver, but none in which such a temperature chart obtained. He was aware that intermittent fever had been observed in certain cases of syphilis; indeed, he reported examples of it to the Society some years ago.

Dr. R. W. BURNET read a case of Hydatids of the Liver opening into the Lung, excavating the lower lobe of the right lung. The patient, aged thirty, was admitted into the Great Northern Central Hospital on Sept 18th, 1885, complaining of pain in the right hypochondriac and epigastric regions radiating into the right axilla and right shoulder, and of sickness and vomiting, which occurred without any special relation to the taking of food. The vomited matter was described as being greenish-yellow; she had never brought up blood, and after being sick always felt relieved. She had been losing flesh rapidly. On admission she was anæmic and weak, with an anxious expression of face; tongue red and irritable; temperature 101°; urine dark, acid, sp. gr. 1020, and containing a trace of albumen. On examining the chest, the heart's impulse, diffused and feeble, was seen and felt about or slightly outside the normal position. Cardiac dulness commenced on a level with the nipple and was lost in abdominal dulness. Dulness extended from the fourth rib downwards in front, while behind it commenced at the fifth rib and increased towards the base, where it was absolute. Breath sounds were feeble in front, somewhat harsh posteriorly, and accompanied by a few large crepitations; at the base they were feeble, and not tubular. The left side was fairly normal throughout. The lower part of the abdomen was flaccid, and not tender on pressure; but all over the right hypochondriac, epigastric, and left hypochondriac regions there was no marked tenderness. On the right side there was evident bulging. Dulness was present in the hepatic region from the level of the nipple to one inch above the umbilicus, and continued into the right axilla, epigastrium, and lower third of the left axilla. The patient had never been strong, but there was no history of definite illness until three months before admission, at which time she was slightly jaundiced, and began to suffer from pain in the abdomen, with retching and vomiting. Shortly after she came into hospital the patient was examined under chloroform, and a consultation held with a view to surgical interference, but it was deemed inexpedient to operate. On October 14th, after severe coughing, she brought up a quantity of purulent fluid, and ten days later more of the same fluid and some undoubted hydatid cysts; microscopic examination showed pus, cholesterine crystals, and hooklets. On November 23rd another very severe fit of coughing was followed by expectoration of a large quantity of cysts and pinkish purulent fluid—in all, five pints. The physical signs then considerably altered, the dulness diminished greatly in area, and feeble breath sounds were heard at the right base, but no moist sounds. The patient sank and died on Dec. 10th. At the necropsy firm adhesions united the lower two-thirds of the right lung to the parietes and to the diaphragm; the whole lower lobe of the right lung was excavated and formed a ragged cavity lined with lymph, but with no trace of true hydatid membrane; between this and the liver there was a thick layer of fibroid tissue, with an opening through the diaphragm into the liver; in the liver was a small cavity, and within the cavity a plate of partially calcareous material, bile-stained, and adherent to the wall. Dr. Burnet remarked on (1) the obscurity of symptoms when the patient came into hospital; (2) the absence of any lengthened history of previous symptoms; (3) the question, Could a diagnosis have been definitely arrived at before the appearance of the cysts? (4) what operative interference, if any, should have been adopted.—Mr. HARRISON CRIPPS raised the surgical question of the treatment of hydatid tumours of the liver. In one case he used a trocar and cannula, and then drained by means of catheters left in for months together. In another he employed a fine trocar and cannula; this case suppurated, but only aspiration was afterwards performed. The third case was operated on by incision and total removal of two large hydatid cysts through the wound. All the cases were completely successful.—Dr. F. TAYLOR understood that Dr. Burnet's paper dealt with the question of treatment of hydatid cyst presenting itself in the chest, and not in the abdomen. He narrated an interesting case where the liver was greatly enlarged, with displacement of the heart, whose apex beat was felt in the third intercostal space; considerable dulness was detected in both backs. A puncture was made at the left base and forty ounces of bile-stained fluid withdrawn; at a second puncture a similar quantity was obtained. But nothing was obtained by aspirating over the enlarged liver. A puncture of the right base yielded fifty ounces of hydatid fluid. It was not till this time that the diagnosis was confirmed. Pleurisy and exhaustion led to death. The necropsy revealed a huge cyst in the right side of the chest, and a secondary collection of fluid had displaced the heart.—Mr. R. J. GODLEE did not perceive what treatment could have been adopted before the diagnosis had been made; afterwards incision and drainage might have proved effective. He related one case in which lung and pleura had been ruptured; a large escape of bile-stained fluid followed incision, and though death occurred long afterwards, there was nothing left but a narrow fistulous track.—Dr. J. S. BRISTOWE asked whether it was a safe proceeding to open hydatid tumours by puncturing through the intercostal spaces; in one such case pleurisy developed; at the necropsy his impression was that the puncture had caused death.—Mr. T. HOLMES considered that the point in Dr. Burnet's paper was the question whether an exploratory operation to establish a diagnosis was desirable; any such operation would have been dangerous, and allowed of the establishment of the diagnosis at the risk of the patient's life. Nature had attempted to discharge the hydatids through the bronchial tubes.

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Mr. J. R. LUNN showed a case of Ununited Fracture of the Patella in a man aged forty-four, in which there were four inches and a half separation of fragments, for which excision of the knee-joint was performed, with excellent result. The patient (single) was admitted into St. Marylebone Infirmary in January, 1885. The family history was good. There was no history of syphilis or gout. He scalded his face and shoulders five years ago. He had fractured his left patella sixteen years ago, and union was obtained; he again fractured the same patella six months afterwards, but it never united. He stated "his life has been simply miserable ever since on account of the gnawing pains in the left knee; and everyone used to think he was drunk, as his left knee used to give way under him, though he had worn a splint." On April 14th, 1885, Mr. Lunn excised the left knee-joint, and wired the femur and tibia together with silver wire. The operation was performed antiseptically. Six weeks after the operation the patient's limb was encased in plaster-of-Paris, and he was allowed to get about on crutches. The reason why Mr. Lunn showed this case before the Society was that excision of the knee-joint was so seldom performed after the age of forty-two. In the Med.-Chir. Trans., vol. liii., Dr. Humphreys stated that he excised the knee-joints of forty-five patients, one being as old as forty-seven. In the same volume Mr. Grant gave an account of twenty cases, the oldest being fifty years old. Mr. Lunn's case made an uninterrupted recovery, and with no rise of temperature. The question in his own mind was whether the operation was justifiable.—Mr. T. HOLMES acquiesced in the treatment that had been adopted. Wiring the patella was, in his opinion, a rash proceeding in cases of simple fracture. As to the age at which the knee-joint might be excised, he believed it might be performed at a period of life considerably beyond forty years of age.—Mr. A. PEARCE GOULD considered that Mr. Lunn's case was a successful one. But wiring the patella left the patient with a movable joint. He had performed one such operation on a woman, and there was now a joint having good movement and a strong serviceable limb.

The following living specimens were shown:—Mr. J. R. Lunn: (1) Ulcerating Tumour of Lower Lip, in a man aged twenty-two, of sixteen months' duration; diagnosis uncertain, but father died of sarcoma (? epithelioma) of neck. (2) Frost-bite of both Ears in man. Mr. C. Ballance: Rodent Ulcer of External Ear. Dr. Savill: Ichthyosis Sebacea in a girl.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

Dr. Koch's Gelatine Peptone Water Test.

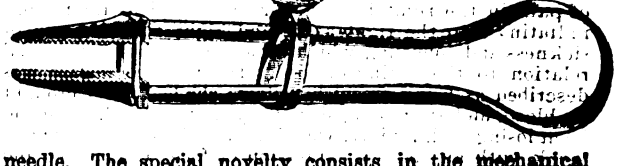
A MEETING of this Society was held on April 16th, the President, Dr. Corfield, in the chair.

Professor G. BISCHOF read a paper on Dr. Koch's Gelatine Peptone Water Test, of which the following is an abstract. The author stated that he had made hundreds of tests, besides a very large number of experiments with the object of testing the method itself. He asked why should the presence of colonies be regarded as affording evidence as to the purity of water. A satisfactory answer to this could only be given in two ways. Either the colonies might behave in the same way as chemical poisons, being harmless in certain numbers and injurious or poisonous in others; or they must be held to be evidence of some other conditions which affected health. He was convinced that the former was not so, at least not within a very wide limit, say within a million colonies per cubic centimetre, which was a much larger number than any likely to occur in potable water. In proof of this he had taken a sample of New River water, which would still have been called "very good" in quality by Dr. Koch had it contained even twice the number of colonies it did contain. This he kept for six days in a sterilised flask protected against aerial infection, and then found that instead of one liquefying colony he had 540, and instead of a total of fifty-three he had 770,000 colonies per cubic centimetre. Although the sample on the sixth day compared unfavourably as regards numbers of colonies, both with New River water from the company's main to which 1 per cent. of sewage had been added, and Thames water at London-bridge, in such a number of colonies were hurtful we should have known this long since from experience, as water was frequently kept longer on board ship and under much more unfavourable conditions. The only other way of connecting the colonies with purity or quality was if they indicated something else which was injurious to health. This, in his opinion, could only be pollution. He therefore asked, Did the conditions upon which the development of colonies depends warrant any such conclusion? Temperature was perhaps the most important of those conditions, because near the freezing-point development was entirely stopped, whilst it was aided in a most marvellous way as gradually 30° to 40° C. were reached. Of scarcely less importance was the time allowed for development, or, as it would be called in the case of water, storage; next came food, and lastly aeration and light. It was evident that temperature, storage, and light had no necessary connexion with pollution. As regards aeration, it was well known that when there was a deficiency of oxygen the development of microphytes was checked. Therefore, as the deficiency of oxygen generally coincided with impurity of water, the latter would actually check, as far as aeration went, the development of microphytes. Food, the only remaining condition, was always the result of pollution; but even in distilled water, which certainly was not polluted in the common sense of the word, and where there was but a scanty trace of food, very large numbers of microphytes were sometimes developed. Referring once more to the sample of New River water kept for six days, he would ask, if in such water, containing so few organisms, and which was generally so pure, such enormous numbers of microphytes could be developed by storage pure and simple, was it justifiable to say that the number of microphytes depended upon pollution? Thus, there seemed to him an insurmountable difficulty in judging of the sanitary condition of water by the number of colonies, which might or might not be a proper standard in any given case. Nevertheless, he was convinced of the value of the method for a great many laboratory experiments, but in testing water it should be applied with discrimination, and no attempt should be made to compare totally different waters by those numbers. In concluding, the author stated it had been laid down that the presence of many different kinds of microphytes was, *cæteris paribus*, an indication of danger, but he had not seen a single report in which this suggestion had been acted on, and he therefore believed that sufficient advance had not yet been made to allow of drawing definite conclusions from this criterion. The search by the test for specific microphytes, such as were the cause of zymotic disease, did not, for two reasons, rest on a much more satisfactory basis: first, our knowledge of these microphytes was as yet very limited; and, secondly, several of those organised poisons known to us could not at all be cultivated in gelatine peptone, at least not under the ordinary conditions of the test.—In the discussion which followed, the President, Mr. Wynter Blyth, Dr. Klein, and Mr. Cassal took part.

New Inventions.

NEW PRESSURE AND TORSION FORCEPS.

THIS instrument is equally serviceable for four distinct surgical purposes. 1. It can be used as a temporary clamp to arrest hæmorrhage. 2. It forms a very efficient torsion instrument. 3. It serves for the application of a ligature to a divided vessel. 4. It can be used also as a needle-holder, and it is adapted for the introduction of every kind of



needle. The special novelty consists in the mechanical contrivance by which the opening and fixing movements are performed. The points are controlled by the rotation of an oval-shaped collar. In the long axis of this collar the blades are separated by their own recoil, but as soon as they are both turned into its narrow segment they are securely fixed and the points are placed in close contact with each other. One of the blades is loosely fixed by a ring to the

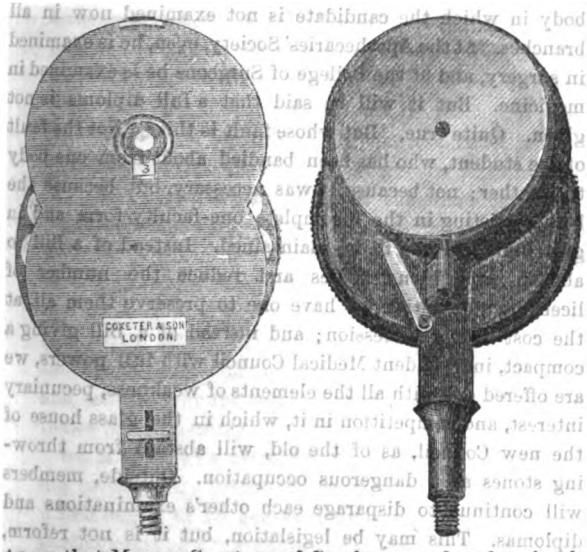
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end of the collar, which thus forms the centre of rotation and imparts to the collar a sliding motion, so that the blades can be closed at any point as far down as the spring. This sliding movement of the collar greatly facilitates the manipulation of the forceps, and also gives a gradation of pressure and grip at the points. For needle-holding it will be found convenient to work the thumb lever near the shoulder; but for fixing a mass of bleeding tissue the forceps can be readily closed just above the handle. When employed as a clamp for spirting vessels during an operation, the sliding collar can be rotated with great ease and rapidity, and this device will certainly be preferred by many operators to the ordinary sliding and spring catches, and also to the serrated teeth fixed on the ring-handled forceps of Tait and Péan. The instrument is very neatly made by Messrs. Maw, Son, and Thompson.

J. WARD COUSINS, M.D. Lond., F.R.C.S.,
Senior Surgeon to the Royal Portsmouth Hospital, and to the South Hants Eye and Ear Infirmary.

A STUDENTS' OPHTHALMOSCOPE.

THE importance of the ophthalmoscope in medical as well as in ophthalmic practice renders it very essential that every student should acquire dexterity in the use of the instrument as soon as possible after he commences his hospital work, otherwise the most valuable opportunities of gaining experience are lost to him for ever. As a matter of fact, scarcely any student learns to use the ophthalmoscope efficiently until he has one of his own. Unfortunately the cost of really useful instruments prevents many students obtaining one as soon as is desirable. We are glad, therefore,



to see that Messrs. Coxeter and Son have produced a simple but excellent ophthalmoscope at a price (15s.) which brings it within the reach of every student. It is a refraction ophthalmoscope, with eight lenses, each ¼ inch in diameter, fixed in a revolving disc. The mirror can be placed in either of two sockets, in one of which it can be tilted for the direct examination. A bi-convex lens and neat case are included in the price. On trial of the instrument, we have found it perfectly satisfactory and equal to much more costly ophthalmoscopes. It is, indeed, easier to use than many instruments on account of the large size of the back lenses.

"OSTERODE" HEALTH CLOTHING.

MESSRS. SLAZENGER AND SONS, of 56, Cannon-street, have sent us samples of their "Osterode" Health Clothing, and also of the unmanufactured article, which is wool grown in a district in the Hartz Mountains. From an examination of the above, and also from personal experience of the comfort derived from wearing the clothing, we can say that Messrs. Slazenger have introduced a highly commendable commercial article. The wool is peculiarly soft, and the woven goods are free from roughness and irritating properties; in fact, the clothing closely resembles silk in its softness, durability, and pleasant wear. We cannot, from our own knowledge, testify to the special curative and prophylactic properties of the various forms of vestment claimed for them by the manufacturers in the treatment of rheumatism, but at the same time we are justified in saying that Messrs. Slazenger's goods are well calculated to enable the wearer to avoid chills and colds, and we can conscientiously recommend its adoption both for winter and summer wear. The prices of the various articles are comparatively low.

THE FELLOWSHIP OF THE COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—As a provincial surgeon, I was pleased to learn through your columns that the Council contemplate admitting Members of fifteen years' standing to the Fellowship on passing the second examination—that in surgery, surgical pathology, and surgical anatomy. This is, I think, as it should be. It will permit many Members, whom accident and the nature of special surroundings compel to practise largely as operating surgeons, to obtain the Fellowship, and be an inducement to them to work up to the standard required by this diploma.

I should like to know when the Council intend to make the necessary alterations in their bye-laws, so that the proposal can take effect. I hope they will not wait until the new Charter has been obtained, for under the most favourable conditions a long time must elapse before that can be accomplished.

I am, Sir, yours &c.,
May 3rd, 1886. M.R.C.S.

STUDENTS AND THE MEDICAL BILL.

To the Editor of THE LANCET.

SIR,—The imminent probability that the Medical Bill now before the House of Commons, and which has already been read a second time, will ere long become law, renders it particularly desirable that an early attempt should be made to secure such amendments of its clauses as are necessary in the interest of all classes of the profession. A uniform standard of minimum qualification, and the adoption of a descriptive title by which every registered medical practitioner shall be designated, are the points which are especially important from the student's point of view. They were urged by a deputation of metropolitan students of medicine before Mr. Mundella when the ill-fated predecessor of the present Bill was in process of abortion, and the success then achieved encourages the hope that a similar deputation to Sir Lyon Playfair at this crisis may result equally satisfactorily. May I ask your powerful aid in this matter, and suggest that a meeting of students be held at each hospital in London, when one or two delegates should be appointed to represent the majority on the proposed deputation, and it might be desirable to hold as well a general meeting of students and others at some centrally situated spot. If done at all, this thing must be done quickly, and I shall be glad to receive communications on the subject from gentlemen willing to organise the necessary gatherings at the various hospitals.

I am, Sir, yours truly,
CHAS. H. WADE, B.A. Oxon., M.R.C.S., &c.
Beauclerc House, Upper Norwood, May 5th.

*** The interest of students in an amendment of our medical examining system is obvious, but it is little considered. Corporations lay heavy burdens upon them of money and of examination, and pay little heed to the simplification and the absolute fairness of the ordeals by which they are to be tried. They have a somewhat despairing feeling of helplessness, but they have a right to ask a minister who claims to be protecting the public from unqualified practitioners to protect them from unreasonable exactions on the part of the examining bodies, and, when they have gained professional titles, to have them duly respected.—ED. L.

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THE LANCET.

LONDON: SATURDAY, MAY 8, 1886.

THE subjection of the Medical Profession to the Privy Council proceeds with little protest but our own. As we have already said, it seems not impossible, if the present Parliament does not come to a premature dissolution, that Sir LYON PLAYFAIR may carry his Medical Bill. It was read a second time on Monday night, and the Committee fixed for Monday, the 17th inst. In medical politics Sir LYON PLAYFAIR has always been an *opportunist*. When it might have been in his easy power, fifteen years ago, to obtain direct representation for the profession, he did not move a finger to get it inserted in a Bill which would have given far better Conjoint Boards than this, and which would actually have removed the scandal of so many examining bodies, so likely to survive under this Bill. He has left others to fight the battle of direct representation, and now, when it is fought and won, and the principle everywhere conceded, he, with all the powers of a Vice-President of the Council, brings in a Bill to add four direct representatives: TWO to represent, as Dr. FOSTER said, 16,978 practitioners in England, *one* to represent 2372 practitioners in Scotland, and ONE to represent 2500 practitioners in Ireland. The other elements of the Council are to be unchanged. What justice is there in such a proposal as this? What fairness to the practitioners of England in their numerical proportion of seven to one in the other divisions of the kingdom? Still more, what is the good of such an arrangement? What could four direct representatives do against twenty-four representatives of universities and corporations which not only have pecuniary interests, but which interests the profession knows have been constantly uppermost in the consideration of their representatives in the Medical Council, and which the present Bill does not dare to interfere with, whatever justice to the profession or to medical students with the ordeal of ever-accumulating and more exacting examinations may demand? But we are told by Sir LYON PLAYFAIR that this Bill secures certain great improvements — especially *two*. It provides that every person entering the profession shall be examined in each branch of practice — *Medicine*, *Surgery*, and *Midwifery*; and, secondly, that if the examining bodies fall short of a good standard, as even certain Royal Colleges are said to have done, under the demoralising conditions of rivalry and competition, which will be largely perpetuated under this Bill, the Medical Council may, *with the concurrence of the Privy Council*, disqualify that unworthy body. May! Sir LYON PLAYFAIR knows well that such a power has resided in the Medical Council ever since it was a Council. He knows well, too, that the Council has never either dared or cared to exercise it, though some of the different bodies of which the Council consist have and still continue to hold the most contemptuous views of each other's examinations. This mutual disrespect of bodies that still stand well in their own eyes is a most painful fact to all acquainted with the state of matters, and is doing much harm. A remedy should be found for it in a well-constructed Medical Council, with perfect independence, and with duties of supervision not only over diploma-granting bodies, but over universities which grant degrees, so that the character of medical graduation be duly maintained. Instead of that, in this Bill universities are only regarded as corporations, and their standards will not be criticised further than to see they come up to the mark of securing bare competence. Let the House of Commons, then, not be misled by Sir LYON PLAYFAIR'S rosy accounts of the absence of opposition to his measure on the part of the examining bodies. Their silence is his condemnation. They do not oppose the Bill because it does not reform them. It practically leaves them alone, and leaves them in full possession of their representation in the Medical Council; and, for aught we know, will leave them to compete with each other and to despise each other, as at present, to the great injury of the profession and of that good and respectful feeling which ought to obtain between analogous bodies in different divisions of the kingdom.

But we shall be told that the Bill secures examination in all branches of the profession—medicine, surgery, and midwifery: as if this were a great boon to be thankful for. This is secured already. There is scarcely one examining body in which the candidate is not examined now in all branches. At the Apothecaries' Society, even, he is examined in surgery, and at the College of Surgeons he is examined in medicine. But it will be said that a full diploma is not given. Quite true, But whose fault is this? Not the fault of the student, who has been bandied about from one body to another; not because it was necessary, but because the bodies existing in the incomplete one-faculty form and in great numbers had to be maintained. Instead of a Bill to abolish superfluous bodies and reduce the number of licensing authorities, we have one to preserve them all, at the cost of the profession; and instead of a Bill giving a compact, independent Medical Council with full powers, we are offered one with all the elements of weakness, pecuniary interest, and competition in it, which in the glass house of the new Council, as of the old, will abstain from throwing stones as a dangerous occupation. Outside, members will continue to disparage each other's examinations and diplomas. This may be legislation, but it is not reform, and it excites in us neither admiration nor gratitude. To crown all, the new Medical Council is scarcely to take a step without the consent of the Privy Council, which is mentioned between forty and fifty times in this Bill. We must still hope that some adequate and effective criticism will be applied to it by some independent and intelligent member of the profession in the House.

DR. MAUDSLEY contributes to the current number of the *Fortnightly Review* an interesting paper on "Heredity in Health and Disease," wherein he sets out in an orderly and intelligible shape the laws which govern the inheritance and transmission of disease, so far as these are ascertained. It is needless to say that this is admirably done, and that the reader will find light and leading in the perusal. Meanwhile Dr. MAUDSLEY would seem to write with the feeling that what he has to say is new; whereas,

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though not perhaps as widely known as they ought to be, the principles of heredity, so far as they are expounded in this article, have certainly been before the profession and the public for some years at least. Even in respect to the utilisation of disease-tendencies and disease-immunities in the rectification of faults and liabilities of the organism Dr. MAUDSLEY has been anticipated. This is how he states the case: "Here, then, we perceive the opening of a most interesting and fruitful line of medical inquiry, not yet ever seriously attempted, namely, the production and the elimination of constitutional disease-tendencies and disease-immunities in the offspring by the combinations of different parental disease-tendencies and immunities. And not of disease-tendencies only of the same kind as the parent has. If a child have a disease unlike that which either parent had, it may nevertheless owe it to them; for there is abundant reason to believe that variations may occur in morbid heredity, just as they do physiologically." Dr. MAUDSLEY must be well aware that "the eradication of disease" by developmental processes has been repeatedly discussed and enforced by medical writers. Thus it has been suggested to meet the tendency to tubercular disease by the calling out of energies incompatible with the consumptive habit, and to seek the repression of undesirable characteristics whether of body or "mind"—to use the conventional phrase—by the development of other characteristics, trained, so to say, across them. And it has been again and again contended that the individual must be studied, if any good is to be done, in the light of the ancestral inheritance. And that the well-known rules which govern the improvement of stock by "cross-breeding" and the introduction of new "strains" should be, as far as practicable, applied to the improvement of the race and breed of man. There is nothing new in the suggestion. This much it is necessary to say on the point of originality in respect of the views set forth in this paper before. They have been for many years past before the profession and the public, and they are illustrated and enforced by the experience of every intelligent practitioner in the country.

Dr. MAUDSLEY'S essay will do excellent service by bringing prominently before the reading community principles which ought to be generally understood. As it was contended years ago, "Nothing is done to cut off the entail of consumption, gout, hereditary brain and nerve disease, or a score of other transmitted constitutional affections. Excepting vaccination as preventive of small-pox, we have no systematic plan of treatment for the elimination of those congenital tendencies and potentialities from which spring some of the most formidable diseases. The omission is, however, one of grievous consequence to youth. When the young man or the young woman comes to face the toil and risks of life, the strength of body and mind is found to be impaired, and existence itself handicapped by the burden of entailed constitutional weakness and disease. To cut off the entail completely, it would be necessary that at least two or more lives should be placed under discipline. Parents and children must both avoid modes of life and practices calculated to increase the mischief, and further prejudice the estate. The sins of the fathers are visited upon their children, even to the third and fourth generation. Many a youth falls a victim to consumption or brain disease because his father or grandfather elected to gratify his coarse animal appetites and lead a vicious and dissipated life. When the inheritor of organic peculiarities, thus acquired and transmitted, himself adds recklessness to danger, the result can scarcely fail to be signal disaster. What are called 'morbid germs' would probably be more accurately described as abnormal developments or states of the system, which render the phenomena of disease likely to occur. When these states begin in disorder of function, the irregularity speedily reacts on the organism, and, in obedience to the law of natural development, produces a change of structure corresponding to the disease. In the course of two or three generations a morbid peculiarity of the physical system—whatever it may be,—which at first was an effect, begins to operate as a cause, and thus the disease by which the change was wrought in the system is rendered *hereditary*, being reproduced by the special morbid type of development to which it gave rise. Thus is how it comes to pass that certain families are distinguished by what is known as a 'consumptive physique," while others are 'asthmatical,' 'gouty,' and the like. It is not sufficient, nor is it wise, to wait until the children of gouty, rheumatic, asthmatic, or bronchitic parents, and those labouring under other known diseases, exhibit the formulated symptoms of a constitutional taint. Before this point is reached the young organism will have suffered serious injury by the occult workings of the malady. Preventive medicine should recognise the evil and grapple with it while it is still burrowing in the dark. Specific diseases known to exist in a family should be treated in every member without waiting for indications. The maxim 'Let sleeping dogs lie' is often of value in dealing with adults, but it is inapplicable in the case of children; because in the child-state, and while the organism is still in process of development, the constructive forces can be enlisted in the work of cure."

This is the practical moral, as regards the individual, of the story Dr. MAUDSLEY has to tell, though it was pointed and printed years ago. The moral as regards the race is that parents should be so selected and combined that their offspring may be healthy, the resultant of the two paternal forces, which will of course differ from both in *plus* and *minor* characteristics and qualities, being something foreseen by science and intentionally developed. Dr. MAUDSLEY recognises and gives expression to this idea, and yet he has not, apparently, so much faith in the application of the principle he expounds as the doctrine he preaches certainly justifies and would seem calculated to inspire. He says: "It is not possible to predict what will be the exact mental qualities and bodily features of the child of two persons whose characters we know very well, nor so much as to tell what its sex will be." It would have been better to say—The present state of knowledge does not enable us to make these vaticinations with certainty; because it is obviously only the defect in our comprehension of facts which renders the foresight required so difficult as to be unattainable. There can be no actual obstacle in the way of foretelling both sex and character, physical and mental. Dr. MAUDSLEY vies with Professor HUXLEY in his admiration of DESCARTES, and, like the Professor, hails him as the originator and father of modern philosophy. No one will dispute the position thus taken

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up, though there may be some who would qualify the praise lavished on DESCARTES by both HUXLEY and MAUDSLEY. We commend the paper on "Heredity in Health and Disease" to the attention of our readers for its perspicuity and practical value as a contribution to the recent literature of a subject which is inadequately understood by the outside public. We cannot, however, concede to Dr. MAUDSLEY a claim to originality.

THE short-sightedness of the enemies of vaccination is shown in nothing more than in their opposition to compulsory public vaccination. The very fact that the State compels vaccination ensures in the long-run the safety of vaccination. The State feels its responsibility for having the work done well, and very effectually impresses this wholesome feeling on all its agents in the performance of the operation. Those who do well are rewarded, and those who do not do well suffer loss. We record almost weekly the award of grants to public vaccinators for their work—that is to say, a certain extra payment, over and above the ordinary vaccination fee, for each case realising certain tests of good vaccination, such as the production of four separate good-sized vesicles which shall leave marked foveation or pitting, thus defined: a *first grade*, with scars having collectively at least half a square inch total area; or a *second grade* (admitted only in cases of a first award), with scars less than the above, but having collectively at least one-third of a square inch total area. The report of individual awards gives little idea of the extent of good public vaccination. Rather must this be gathered from the Annual Report of the Local Government Board. The fourteenth Annual Report is before us—that for 1884–5; and from this we learn that about two-thirds of the public vaccinators vaccinate so as to get awards. Thus the medical staff of the Board visited 245 unions containing 1096 vaccination districts. To the vaccinators in 729 of these districts special awards were made by the Board on the reports of inspectors as to the quality of vaccinations performed. Unfortunately there is no such public record or report of the excellence of the vaccination performed by private practitioners, much of which would bear a favourable comparison with that done by public vaccinators. There is another illustration in this Report of the way in which a system of public vaccination promotes care and purity of vaccination. A great supply of vaccine lymph is maintained by it, enabling the Local Government Board to give lymph to practitioners who apply for it to start a local series of vaccinations. Practitioners can be now supplied either with human lymph or with calf lymph. But the point we are concerned with just now is this, that all lymph so supplied by its officers to the Local Government Board is carefully examined, and that such is the pains taken to secure satisfactory lymph, and such the success, that of 11,447 applications dealt with during the year, no suggestion of resulting syphilitic disease was heard of in any one case, and the Board was able to speak with thorough confidence of the purity and efficiency of the lymph.

We rejoice to see, in the main proof of the continued public confidence in this greatest of all devices for averting death and disease. In St. Pancras a remarkable vaccination census was taken, which showed that of 25,917 persons over one and under ten years of age, no less than 25,692 or more than 99 per cent., had been vaccinated; while of 112,425 persons over ten years of age, 71,213, or 63 per cent., had been vaccinated once; 39,835, or 35½ per cent., more than once; and only 1377, or less than 1½ per cent., were unvaccinated. Those who have discovered the beauty of small-pox and the horror of vaccination may well be staggered at the persistence of the "great delusion," but men of common sense will see in facts like those of St. Pancras and other populous unions, such as those containing Birmingham, Leeds, Blackburn, &c., where the unvaccinated only reach 1·4 per cent., an ample justification of the Vaccination Acts, and satisfactory evidence that on the whole they are appreciated by the people.

THE growth of Provident Societies, more especially amongst the industrial classes, is regarded, and very justly so, by men of all shades of opinions as one of the most hopeful features of modern social progress. If the system of assurance against sickness and death could be made universal, workhouses would disappear, the pressure on hospitals be vastly relieved, and private charity might to a great extent be dispensed with. Parliament has recognised, though somewhat tardily, the national importance of the provident movement, and for its stability special statutes have been enacted. It therefore becomes a matter of general concern to be informed by an officially appointed actuary of high repute that his valuation of the assets and liabilities of a provident institution has resulted in establishing a deficiency of £115,994. Such is the pith of a published report, dated 21st January last, by Mr. HOWARD S. SMITH, actuary, at Birmingham, on the Cannon-street Male Adult Provident Institution in that town. The deficit is happily not an actual one in cash, as the audited balance-sheet for 1885 proves a total in hand and in first-class securities of £83,185 1*s.* 2½*d.* No less satisfactory is it to note that no question of malversation is raised. Everything is in order, and the management is stated to have been unimpeachable; but the nominally *provident* institution appears to be travelling on *improvident* lines in paying out more than it is justified in doing according to the scale of contributions. Generosity seems to have once more outstripped prudence.

The objects of the Society are twofold: the relief of members in case of sickness or any other infirmity such as would render them incapable of working for their support, and to render assistance on the death of a member or his wife. Last year the Society had 9598 members. The payments for sick relief reached £12,613 10*s.* 5*d.*, for medical attendance and medicines £1375 11*s.* 9*d.*, and for members' and wives' funerals no less than £3213. The medical staff includes twenty-six legally qualified practitioners, and, additionally, seven consultants to whom the Society pays regular fees, when on duly certified urgency a consultation is deemed necessary. When it is added that the annual income of the institution is £16,600, and that within the last ten years the members have received, exclusive of medical attendance, £123,444 8*s.* 10*d.*, nothing more need be said to prove that the adverse actuarial reports are matters of weighty general interest. Mr. HOWARD S. SMITH, whom we have already quoted, regrets that his report must be unfavourable, and his eminent predecessors said substan-

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tially the same. In 1871 Mr. F. G. P. NEISON (an investigator and writer of great reputation on friendly societies' statistics) reported that for the provident institution under consideration to be in a sound financial condition, its accumulated funds should be increased by at least £21,244 1*s.* 11*d.* This deficiency had risen to no less than £96,679 at the end of 1879, when the state of affairs was investigated (pursuant to 38 and 39 Vic., cap. 60, sec. 14) by Mr. A. J. FINLAISON, the actuary to the National Debt Commissioners, who very plainly set forth "the gravity of the position of affairs." All the actuaries have agreed that the chief cause which is weighing down the financial balance with such increasing weight is the liability at death without adequate provision. As a sick society we conceive this provident institution might be practically solvent, according to the members' present payments; but as a sick and life insurance society the present financial disequilibrium, which is remediable, may prove disastrous insolvency. But a very small increase in the payment of each member, not more than twopence or threepence weekly, might stem the downward current, and in a few years restore stable prosperity The whole question is to be considered at a special general meeting of the members of the Society to be held in the Birmingham Town Hall on the 27th inst., at 8 P.M. Conceding to the fullest that in such a mutual society every member has a right to vote on the ultimate disposal of the common property, thousands of men in public meeting assembled are not the most competent court of appeal from a decision pronounced independently by such actuaries as Mr. HOWARD SMITH, Mr. NEISON, and Mr. FINLAISON. It may be difficult to convince many of the 9600 members that a society with £83,000 may be insolvent; but a little reflection will satisfy anyone that a provident institution with £1000 may be rich, and one with a thousand times that amount hopelessly bankrupt: it is a question of the proportion of liabilities to assets. The members of the Cannon-street institution are all growing older—drawing nearer to times of sickness and to the certainty of death; their ranks are being steadily increased, and yet their capital is shrinking, whereas it should be rapidly accumulating to meet inevitable future demands. One fact not to be overlooked is that the experience of sickness of the members has exceeded the computation, and the medical officers may assist materially in checking this source of loss by limiting sickness allowance to proved inability to work. Malingerers are difficult to detect; and in times of bad trade like the present many men lack the best stimulus to shake off slight ailments. But, with every economy, the deficit must grow, unless the substantially unanimous advice of the actuaries be acted on.

Suggestions have been thrown out to reduce the expenses of management, and to alter the system of administering medical relief by appointing two or three surgeons exclusively to attend to the members. Such proposals in the pending crisis recall ABRAHAM LINCOLN'S famous warning against the imprudence of "swopping horses while crossing a stream." No one has impugned the ability or the integrity of the Society's management, and every member living within a radius of three miles has a choice of any one of the twenty-six members of the regular medical staff. It is not questioned that these gentlemen have long enjoyed the public confidence, and that they discharge their duties with ability and conscientiousness. It would be a mistake to divert attention into a side issue, when it should be riveted on the great fact which the actuaries have established, and on the remedies which in principle they have advised. If the present benefits are to be maintained, the members' contributions must be increased; if these are to stand as at present, payments at death must be abolished, and sick pay may have to be reduced. The Society has been in existence forty-five years, it has done an incalculable amount of good, and may have before it a long life of increased and honourable usefulness, if only the great principle of thrift be practised—to make present sacrifice for future good.

AMONG the agenda for the consideration of the members of Convocation at their annual meeting on the 11th inst. the proposals for reforming the constitution of the University of London occupy a prominent place. The Special Committee nominated by Mr. MAGNUS in December last has apparently matured a scheme, which Convocation will be formally asked to receive. The scheme, however, has not yet been printed and circulated, so that its consideration will probably be postponed until the end of next month, when a special meeting must be summoned. The points of resemblance and difference between it and Lord Justice FRY'S scheme will be keenly scrutinised, and we shall be much surprised if there be found sufficient improvements therein to justify the obstruction and the delay in pushing the reforms forward. Meanwhile Mr. TYLER and Mr. SPRATLING are anxious that Convocation should settle the matter offhand, and hence they will move resolutions of their own. Mr. TYLER'S proposals are: an increase in the number of senators nominated by Convocation, and the limitation of their tenure of office to a term of years; the formation of a Congregation, composed of the Senate, certain members of Convocation, examiners, and representatives of affiliated institutions, to advise the Senate on the examination regulations; an increase in the powers of Convocation; and the establishment of University lectureships. Mr. SPRATLING'S proposal goes much further in the direction of bringing the Colleges into closer connexion with the University and of giving some direct influence to their representatives, and in this respect approaches much more nearly to Lord Justice FRY'S plan of reform. But all these suggestions must have been before Mr. MAGNUS and his committee, and will doubtless be dealt with in his report, so that Convocation will probably refer these resolutions also to a special meeting. The position of reform is greatly altered by the recent additions to the Senate, for Mr. HENRY MATTHEWS, Q.C., and Dr. PYE-SMITH, were active members of Lord Justice FRY'S Committee, and are bound to urge the speedy consideration of the question. But what is the Executive Committee of the Association for Promoting a Teaching University doing? An exceedingly able letter has been drafted and sent to the various teaching institutions in London of university rank, to the medical schools, to the Senate of the University of London, and to the professional corporations, but, so far as we can gather, no action has resulted therefrom except in the University itself. Sir EDWARD FRY has shown his continued interest in the movement by moving for a Committee of the Senate

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to consider and report on the letter, and, if necessary, to confer with the Executive Committee. It will be indirectly, by favouring internal reform in the University of London, and by compelling the London Colleges of Physicians and Surgeons to follow in the line of the opinions of those advocating the establishment of a Teaching University, or in being joined thereto, and so increasing the literary and scientific elements in their examinations before they can be granted the power of giving degrees, that this Association will justify its existence, rather than by any direct action of its own.

Annotations.

"Ne quid nimis."

UNCERTIFED CAUSES OF DEATH IN LARGE ENGLISH TOWNS.

THE Registrar-General reports in his Annual Summary for 1885 that the causes of more than 4000 deaths registered during that year in twenty-eight of the largest English towns were not certified, signifying that in this large number of cases no legal certificate of the cause of death under the hand of a registered medical practitioner or of a coroner was produced to the civil registrar at the time of the registration of the death. It further appears that these deaths were in the proportion of 2·3 per cent. of the total deaths registered in those towns during the year. This proportion was slightly below the proportions that prevailed in the preceding three years, when they were 2·5, 2·6, and 2·4 per cent. respectively. It may readily be imagined that in a certain proportion of deaths, more especially of those of infants and old people, there may not be such medical attendance during the last illness of the deceased person as the Registration Act contemplated when it fixed the obligation of furnishing certificates of the cause of death upon medical practitioners. There seems no good reason, however, why this proportion of what may be called necessarily uncertified deaths should vary very widely in different towns, although the proportion may be to some extent dependent upon the social condition of their populations—that is, upon the relative amount of the poorer classes. The varying proportions of uncertified deaths in the twenty-eight large English towns cannot therefore be referred to this cause. It appears that during 1885 the proportion of uncertified deaths was equal to 1·1 per cent. in London, against 1·2 and 1·3 per cent. in the preceding two years. In the twenty-seven provincial towns the percentage of uncertified deaths averaged 3·2, or nearly three times that in London, and ranged from 0·6 in Plymouth, 1·2 in Brighton, and 1·3 in Portsmouth, to 4·8 in Liverpool, 5·6 in Hull, 6·1 in Sheffield, 7·0 in Halifax, and 7·5 in Oldham. With reference to the five last-mentioned towns, it may be noted that they also showed a large excess of uncertified deaths in each of the four years 1882, '83, '84, '85; and that the proportion of uncertified deaths has been remarkably stationary in Liverpool and Hull, while it has shown a constant tendency to increase in Sheffield and Oldham. It may be pointed out that the numbers of uncertified deaths and of inquests are almost invariably in inverse proportion to each other. The proportion of inquests to total deaths in the twenty-eight large English towns during last year averaged 6·4 per cent., scarcely differing from the proportions in recent years; the proportion, however, in each of the five towns above mentioned, with the largest excess of uncertified deaths, was very considerably below the average. The highest proportion of inquest cases in these five towns was 4·8 in Liverpool, whereas Halifax and Oldham, which had the largest proportions of uncertified deaths, showed the absolutely lowest proportions of inquest cases—only 2·9 and 2·7 per cent. respectively. It cannot be doubted that the high proportions of uncertified deaths in these five towns afford a tolerably accurate gauge of the amount of unqualified medical practice prevailing therein; and it is only necessary to refer to the reports of proceedings in police and coroners' courts to prove how much of this unqualified practice simply means imposition on the ignorance and carelessness of the poor. In the present condition of the law respecting uncertified causes of death, the co-operation of the coroners of our large towns appears indispensable to protect the poor from this dangerous form of imposition.

CHOLERA INTELLIGENCE.

So far as Europe is concerned, definite news as to cholera is still confined to Brindisi and the Adriatic coast. But unfortunately the disease is extending, and this under circumstances that must cause the greatest anxiety. Thus, the city of Venice is infected, and its sanitary circumstances are not such as to give hope that at this season of the year the disease will be merely of a sporadic type. On May 5th ten cases and three deaths took place there, and there can be but little doubt that these are not the first attacks. Then, again, the disease has extended inland as far as Vicenza, an important town lying on the line of railway between Venice and Verona, and rather more than midway between the two places. Nine cases were reported there on May 4th, and two more on the 5th. The first rumour of cholera in Venetia, during the present European epidemic, dates as far back as September, 1884, when two deaths occurred there. Off and on, rumours of isolated attacks have been renewed, and since the commencement of the year the disease has been scattered about the coast line as well as inland. Under these circumstances, the sudden announcement of so many cases in the province, together with the extension into a neighbouring province at the commencement of the hot weather, bode ill for North-eastern Italy. Several cases still occur daily at Brindisi, with occasional deaths; but in that port the disease is said to be abating, and to be losing its more distinctive characters. A private letter published in Vienna further states that the disease has been imported into Salonica by Italian sailors, and that there are cases in the hospitals there.

"EXHIBITIONS."

WE hail the opening of another "Exhibition" in London on grounds of public health and happiness. This huge melancholy city has positively no open-air amusement for the public except such as these exhibitions afford. The "gardens" which supplied our fathers and grandfathers with places of resort, where it was possible to spend some portion, at least, of a fine evening out-doors without being wholly deprived of the means of entertainment, have been improved off the face of the earth. It is therefore most satisfactory to find that, by fortuitous circumstances no doubt, the progress of enlightenment and enterprise has provided us with a substitute. It is devoutly to be hoped that those who have shown so much good-will to the public in organising the summer exhibitions of the last few years will not grow weary of their kindly service, and that the public will, by their patronage of the entertainments provided for them, justify, and in some part requite, the effort made to serve them. We have long felt, looking at the matter from a health point of view, that something ought to be done to supply London with the means of out-door amusement available for the summer evenings, and for the classes whose only time of leisure occurs after the

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business hours of the day are over, as well as for those who can resort to such pleasurable scenes by day. Certainly no more admirable attraction or means of entertainment could well be devised than that afforded by the Exhibition which Her Majesty graciously opened on the 4th inst., and which the public owe mainly, if not solely, to the good taste and loyal enterprise of the Prince of Wales. The community will not be slow to appreciate His Royal Highness's most excellent help in this matter. Edinburgh and Liverpool are similarly favoured with exhibitions, and we doubt not that their appreciation of the value of the boons conferred on them will equal our own. There is a black lining to every silvery cloud, and it is to be regretted that the managers of theatres and some tradesmen are not as much advantaged by exhibitions as the general public. Perhaps when once the habit of seeking amusement away from home in the summer evenings is gradually formed by the pleasant education we are undergoing, those whose business it is to provide the public generally with entertainment may find their coffers more quickly recouped. Trade must beget trade, so that in the long run the shopkeeper cannot possibly lose.

BERI-BERI.

AN industrious investigation of some of the circulatory conditions that obtain in the Japanese "kakké" or beri-beri has been undertaken by Dr. Wallace Taylor, with the production of some valuable results. In none of the cases was there organic disease of the heart or arteries, and no functional derangement other than that attributed to the influence of the "kakké." Sphygmographic tracings revealed a very sudden and high upstroke, with precipitous descent from the apex of the percussion wave and marked dicrotism. The first deviation of the circulatory system in kakké from the normal is one of cardiac excitement. There is also diminished tension, due to loss of arterial tone. The chief causes of danger in the acute disease are found in the impaired condition of the heart and enfeebled circulation. The extent, however, to which the heart and vaso-motor system are affected in the disease is liable to relatively large changes. Dr. Taylor considers that all the conditions of the heart and arteries can be explained by the action of the *materies morbi* of kakké upon certain portions of the cerebro-spinal nerves and sympathetic system. Age exercises considerable influence over the occurrence of the disease, which is most common between sixteen and twenty-eight years of age. One attack of kakké appears to render the patient more liable to subsequent affection. Women are much less likely to be affected than men. Though the female sex in general enjoy a marked immunity, yet in the puerperal state they are very liable to take the disease. It is but seldom that traces of albumen are found in the urine. Partial paralysis of the muscular walls of the bladder is occasionally to be met with. No mention is made of the multiple neuritis, of which so much has lately been written in England.

A CHEMICAL ANALYSIS DESIRABLE.

A LITTLE more than a week since an inquest was held at Sutherland respecting the death of a boy aged six years, who retired to rest one evening complaining of toothache. In the night he vomited, and the next morning he died apparently exhausted. The post-mortem examination revealed some red patches in the stomach, but no other diseased condition that would point to the primary cause of death. We regret that an analysis was not ordered by the coroner; but the jury expressed themselves satisfied "that deceased had died from the effects of excessive vomiting, but what caused this there was not sufficient evidence to show." Exactly; that is just why we contend a further examination should have been made by a skilled analyst.

LIVERPOOL MORTALITY IN RELATION TO WORKS OF SEWERAGE.

IT is now over fifteen years since Dr. Burdon Sanderson and the late Dr. Parkes, at the instance of the Corporation of Liverpool, made a report on several of the more important matters affecting the health of the city. One of the recommendations they submitted aimed at the removal of injurious conditions of sewerage, including especially the provision of adequate sewer ventilation. On receipt of this report the Corporation undertook an exhaustive inquiry into the state of the city sewers, and the late engineer commenced by freeing them from deposit and by providing ventilating manholes or shafts at a distance of not less than 100 yards apart. Mr. Clement Dunscombe, the present city engineer, has followed out the work of improvement, and he now submits a report which shows how large an amount of valuable work has followed on the joint report of fifteen years ago. Gradually the system of sewer ventilation has been perfected, and whereas prior to 1871 there were only "Archimidean" screw ventilators connected with branch sewers in courts, &c., ventilating openings of not less than sixty-three inches in superficial area have now been fixed at a distance of about eighty yards apart along the lines of sewers; this work having been completed in 1882. Indeed, in 1882 as many as 177 miles of sewers had been ventilated, and between 1876 and 1885 as many as 72 miles of new sewers had replaced such as were, by reason of their favouring deposit or otherwise, faulty in point of construction. The passage of road detritus into the sewers by the road gullies was also found to have largely worn the inverts of the sewers, and many of these have now been re-inverted with Portland cement concrete, others being altogether replaced by the best blue bricks, moulded to the respective radii. So, also, the gullies themselves have been so reconstructed that detritus can easily be removed from them before it has a chance of passing into the sewers. Attention has, however, been by no means limited to the public sewers, for bye-laws, which have been confirmed by the Local Government Board, are now in force in connexion with the construction of house drains, and, as Mr. Dunscombe very truly points out, it is found that the highest standard of house drainage is extremely simple and can be carried out at a moderate cost. Bye-laws regulating this subject are, as a rule, of but imperfect service, unless steps are taken to secure their proper administration; and here Liverpool has acted wisely by appointing an inspector for each of the districts into which the city is divided for this purpose, and it is the duty of these inspectors to see that the work is in each case executed in accordance with the regulations and the plans which have been approved in the engineer's department. For all the valuable and necessarily costly work, some result should properly be forthcoming. The work is only just completed, and hence its effects may be expected to show themselves in a more striking manner in the future than at present; but still, it is interesting to note the death-rate of the city during the several periods antecedently and subsequently to the execution of these works. For the ten years 1861–70 the death-rate per 1000 living in Liverpool was no less than 32·5. Between 1871 and 1880, the mean rate had fallen to 28·4, and since then a steady uninterrupted fall has been maintained, until in 1885 we find it standing at 23·7. Mr. Dunscombe would, we feel sure, be the first to admit that many influences, other than improvements in sewerage, have been at work in producing this great saving of life; but whilst this must necessarily be so, we would unhesitatingly assert that, had the state of the sewers remained to this day the same as it was at the date of the Sanderson and Parkes report, much of the substantial reduction in the death-rate which has

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taken place would never have been secured. The experience of Liverpool in this respect should act as an incentive to sanitary authorities in all parts of the kingdom.

THE PRODUCTION OF MALARIA.

THE connexion between forced vegetable decomposition, insufficient drainage, and the rapid rise and fall of streams on the one hand and malaria on the other, has long been recognised, as also has the influence of season in the production of the disease. The matter has received considerable attention in various parts of the United States, where malarial disease constitutes a constant source of danger to health in special localities; and in the ninth report of the Board of Health of New Jersey certain local causes of the prevailing evil are discussed. Thus, the influence of mill-dams is alluded to. At Bound Brook at one time the entire population was prostrated by the various forms of malarial fever. Every year witnessed many cases of the disease, sudden "wilting" of swamp vegetation and sudden changes in the atmosphere and rainfall materially influencing it. A local dam was removed and the swamp was drained, the result being that malarial disease, with its chills and fever, has almost entirely disappeared. In other places, until recently remarkable for healthiness of site, the diversion of streams for artificial ice-ponds and other purposes has added to the pollution of vegetable decay, dams have been constructed for similar purposes, and, as a result, obscure forms of malaria are becoming fairly settled in the localities. In much the same way the influence of decomposing sawdust is regarded as causing malaria. The material, in its putrefactive processes, very much resembles other vegetable matters, and the experience of the Ontario Board of Health is quoted as showing how deposits of sawdust along the shores of streams, and especially on those of bays and ponds, in undergoing decomposition, have led to injurious results, including the production of malarial diseases. Dr. Hargis, who is well known in connexion with his careful observations on yellow fever and other subjects, has stated that on the west coast of Florida, where malaria is seldom found, it has always, when it has appeared, had a saw-mill as its centre. The conclusion come to is that the decay of vegetable fibre is connected etiologically with malaria, and that inspection of streams is necessary to its prevention. In much the same way, it is also regarded that injury to health is likely to ensue if ice-ponds are constructed in marshy spots, the ice itself tending to be unwholesome if cut from stagnant, shallow pools. Indeed, legislation has in some places stepped in to prevent the sale of such ice.

ONE IN A THOUSAND.

A SPARE man, just touching the middle height, with finely-cut patrician face and complexion of old ivory lighted up with a grave smile, or darkened again with sad, pensive eyes—such was Agostino Bertani, head of Garibaldi's medical staff, surgeon-in-chief to the General's "Mille" and in every sense, one in a thousand! Carlyle has said that Mazzini sacrificed to the revolution one of the finest literary faculties of the century: replace "literary" by "surgical" and the same might be said—with at least no Italian dissentient—of Bertani. A distinguished student and graduate of the Medical School of Pavia, he had barely entered on the career for which nature and culture had destined him when he was drawn by an irresistible force into the tremendous conspiracy which started in 1830, exploded in '48, "causing the thrones of monarchs to quake and the horns of the altar themselves to tremble." In 1854 we find him, in the intervals of professional work, conspiring with Antonio Panizzi, of the British Museum, to aid Garibaldi in releasing the noble prisoners of San Stefano; in 1859, on the outbreak of the war that drove Austria out of Milan, organising and superintending the ambulance of Garibaldi's "Cacciatori delle Alpi"; in 1860 completing with silent celerity the preparations for the descent on Sicily which ended in the triumphal march into Naples of the ever-victorious "Mille"—Bertani being one of the seven who ventured in, under the Bourbon batteries, in advance of the main body; in 1862 tending the wounded lion at Aspromonte, where he assisted Zanetti in extracting the bullet whose presence, four centimetres and a half deep under the lower extremity of the tibia, was so ingeniously proved by Nélaton; in 1867 figuring as "il chirurgo nato di tutti i campi rivoluzionari" (the born surgeon of all the camps of the revolution) in the campaign that culminated in the not inglorious defeat of Mentana; and from the completion of Italian Unity in 1870 till his death in Rome on Friday, the 30th ult., holding an isolated position in the Italian Chamber of Deputies—a Liberal on grounds that "Liberals" did not understand—and busied with his great work on the amelioration of the agricultural classes throughout the Peninsula, the results of which are embodied in his masterly "Codice Sanitario." His papers, it is said, will form a memorable book on what may be called the "ambulance system of the revolution," while filling many a gap and solving many an enigma in the as yet but half-known history of the great epopee in which the outstanding figures are Pio Nono, Victor Emanuel, and Garibaldi. Italy, whose troubles as a constitutional State threaten one day to be neither few nor small, will miss him much—long after the dying out of the regret his loss inspires in the contemporary world of science, of literature, of art, *et quantum est hominum venustiorum*.

THE SENSORY NERVES OF THE SKIN.

DR. ALFRED GOLDSCHEIDER has recently communicated to Dubois Reymond's *Archiv* the results of researches he has made upon the nerves by which sensations of temperature and pressure are conducted. He finds that the skin is not in all parts capable of perceiving variation of temperature, and that some parts can only recognise sensations of cold, other parts only sensations of heat. These, which he terms warm and cold points, are distributed between or amongst each other, but never coincide. Their general arrangement is that they are disposed in chains which pursue a slightly curved course. These chains radiate from certain points which may be termed radiation-points or temperature-centres. The chains of the cold points do not in general coincide with those of the heat points, but these radiation points are identical. The cold points are in all parts of the skin more numerous than the warm points. When the cold points are excited by either mechanical or electrical stimuli a punctiform sensation of cold is experienced, and the opposite sensation is felt when the warm points are stimulated. Goldscheider was able by stimulation of nerve trunks to excite excentric sensations of heat and cold. The temperature points were found to be insensitive to pricks and other punctiform pain excitants. Goldscheider admits, therefore, not only the existence of nerves exclusively devoted to perceptions of temperature, but specific nerves for heat and cold. The sensibility of the surface of the body to temperature presents great topical variations, and is directly dependent in any region upon the number and intensity of the temperature points—that is to say, upon the local wealth of temperature nerves,—and go hand in hand with the distribution of the great nerve trunks. Goldscheider also differentiates in the skin nerves of general sensation and specific pressure nerves. The latter terminate in certain points of the skin which are not only especially sensitive to very delicate contact, but contain also peculiar organs which excite a granular sensation on pressure. The pressure points

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are arranged after the same fashion as the temperature points, but are in general much more closely aggregated. Both they and the temperature points supply us with information in regard to locality.

MEDICAL SOCIETY OF LONDON.

THE conversazione of the present year, under the presidency of Mr. R. Brudenell Carter, formed one of the most successful gatherings that has ever taken place at Chandos-street. The walls of the large room were decorated with perfect specimens of water-colour art, the property of Mr. J. Orrock, the well-known collector and artist. There were some of William Hunt's that have given to Ruskin's pen some of its most sympathetic and beautiful sentences; these water colours of fruits, though executed more than forty years ago, are by no means "ghosts of their former selves," but even now depict with so much truth the aspect of nature that the eye almost seemed to see the very translucency of the grapes and the exquisite bloom of the plums. In addition to these there were several examples of De Wint, George Barrett, and Cox. Beautiful specimens of Doulton ware, a thermopile with incandescent lamps by Mawson and Swan, microscopic specimens by Messrs. Baker, and the band of the Royal Artillery were provided for the delectation of the visitors. Dr. Douglas Powell's thoughtful and instructive address on the powers of repair and compensation in the economy contained many original suggestions, was pervaded with a subtle sense of humour, and was full of encouragement and hope for those who practise the healing art. The orator considered that other symmetrical organs than the eye were liable to sympathetic disease, and suggested that reparative processes in tissues set up similar processes in symmetrical organs; besides sympathetic disease we have also sympathetic compensation or repair. Dr. Ord proposed and Sir Joseph Fayrer seconded the vote of thanks to the orator, including a desire that the address should be printed and published. To the energy and business capacity of the secretaries, Mr. J. H. Morgan and Dr. S. West, and of the registrar, Mr. Poole, the great success of the evening must be largely attributed.

PITYRIASIS AND PHTHISIS.

EVERY physician is familiar with the cutaneous eruption occurring frequently on the chest and back of phthisical patients, which passes under the name of pityriasis versicolor or chloasma, and the fact that it is due to the presence of a fungus allied to those which cause favus and ringworm is well known; but no one has at present suspected that its presence had any significance, or that it had any real connexion with the essential lesion of phthisis. It was regarded as a fungus which took advantage, so to speak, of the exhausted and debilitated condition of the patient to take up its abode in his skin, and it occurs in other wasting diseases of a similar nature. That it is contagious and can grow on the healthy skin is shown by the story which is told of the French pathologist Lancereaux, who, wishing for a drawing of the fungus for his plates on pathological anatomy, took some skin scrapings in an envelope in his pocket, and was surprised after a time to find a plentiful crop of the parasite not only on his own chest but on that of his wife. But the fungus has now come before us in a new light, as playing a prominent part in the production of tubercular phthisis. According to the researches of MM. Duguet and Héricourt, the results of which were given to the Academy of Sciences on April 19th, certain cases of acute tuberculosis presented no bacilli or zooglœa forms; but when the tissues were treated with potash (10 to 40 per cent.), a delicate mycelium allied to that of microsporon was discovered; and on pushing the inquiry further it was found that this mycelium was more frequently present than the bacilli, being seen not only in the tubercles but also in the neighbouring healthy tissue. Similar mycelial threads can also be found in the expectoration mixed with the bacilli. When the microsporon furfur is cultivated and injected into guinea-pigs and rabbits, these animals become, without exception, tuberculous, and the same result is obtained by insufflation into the trachea of the crusts of pityriasis. Moreover, the cultures of microsporon furfur, of tubercle produced from the fungus, and those from tubercles of man are precisely the same in character. Cultivations can be made in slightly alkalinised bouillon or in milk, when it becomes possible to distinguish an aerobic and an anaerobic element. The former floats at the surface, and at a temperature of from 30° to 38° C. forms a thick membrane composed of bacilli. The latter is found at the bottom of the cultivation-tube as a mass of granulations and mycelium. The polymorphic character of the tubercle bacillus is thus manifest, and the opinion of Spina receives support as to the variety of the forms of microbes in tuberculosis. The whole question is an interesting one, and it cannot be said to be yet settled whether the various forms of low vegetable life to which we assign names are not phases in the life history of one species modified by chemical and physical conditions. The authors regard their discovery as important from the possibility of obtaining an attenuated virus.

INSANITARY BURIAL.

IN our advocacy of burial, as opposed to cremation, in the disposal of the dead, we have always taken for granted that such burial should be subject to sanitary rule. It would seem that this matter does not yet receive in some districts the attention which is its due. An inquiry held at Chorlton, near Manchester, a few days ago, brought out some strange disclosures as to the state of the parish churchyard. Various persons complained of the nuisance caused in the district by the unwholesome condition of the yard, and the sexton's evidence was even more conclusive to the same effect. It was shown that one grave which had been reopened had immediately to be closed on account of the foulness of its contents. On another occasion a body had been buried no deeper than two feet below the surface of the soil. These facts appear to show clearly that Chorlton churchyard has come to be over-filled, while the mention of bones and portions of coffins thrown up from time to time reminds us that a lighter structure than the usual wooden case is required for sanitary burial.

LUNATICS AT THE THAMES POLICE-COURT.

THE "lunatic at large" has a fair field and no disfavour at the Thames Police-court. There he can air his grievances and count on a sympathetic ear into which to pour the troubles arising out of his delusions. A few days ago the worthy magistrate at this court would seem to have held a reception for the victims of mental disease; or was it by chance that two notable specimens of the insane world appeared before his worship with what were euphemistically called "strange applications"? One applicant, a man about thirty years of age, was anxious for advice as to the acquisition of a sum of money to which he believed himself to be entitled, as a recognition of his merit in the invention of the lifeboat now in general use. The amount supposed to be due to him was considerable, the Baroness Burdett-Coutts having headed the list of subscribers with £10,000 or £19,000, we are not clear which, and it is not a matter of much moment. Another applicant, described as "a strange-looking man," was anxious to obtain protection against some persons who were trying

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to poison or shoot him, and who followed him almost day and night. The "strange-looking man" handed the magistrate a list of the offenders. Mr. Lushington, of course, instantly recognised the first as a case of general paralysis of the insane, and the second as an ordinary case of delusional insanity, with a constantly besetting peril of self-murder or homicide. We are not informed as to the precise means taken for the protection of these two lunatics at large; but there can be no question as to the fact of their having been taken good care of, seeing that in future the intervention of a magistrate is to constitute the all-sufficient safeguard of *proper* treatment for the insane. The magistrate at the Thames Court would not have allowed two dangerous lunatics to leave the court unprotected after so characteristic a disclosure of their diseases.

A NON-TYPHOID PEYERIAN ULCER.

AT the last meeting of the Medical and Physical Society of Bombay, held April 2nd, the President, Dr. H. V. Carter, exhibited six specimens of a form of Peyerian ulcer, which he had not found previously described in current text-books. They had been obtained at necropsies of native patients suffering mostly from fever in the Goculdas Tejpal Hospital, Bombay; and if the most pronounced example were to be regarded as in any sense typical, it would indicate the occurrence, however occasional, of an affection which might not inaptly be termed "Indian enteric fever." Here the patient was a young male Brahman, resident, admitted on the ninth day of illness from the locally so-called "remittent fever," prostrate and anæmic, yet free from diarrhœa, and at no time in the true typhoid state. On the sixteenth day he was suddenly seized with acute peritonitis, and died two days later. The necropsy revealed as coarse lesion only numerous irregular deep ulcers in the ileum, the larger of which were obviously connected with Peyer's patches. In this, as in the other specimens, only some patches and a segment of each were involved (usually near its margin and extending laterally beyond); and elsewhere the lymph-follicles themselves, with adjacent mucosa, even up to the edge of the ulcer, were not especially implicated, the primary lesion being apparently blood-stasis in the submucosa of the follicular areas, where a peculiar abundance and restricted anastomosis of the small blood-vessels normally obtain. Sectional views and other drawings were shown, and it was mentioned that micrococci had been seen within basal blocked vessels and around others at the sides of ulcers, further histological details being reserved for a future meeting. This affection is manifestly different from the catarrhal, peptic, or tubercular ulcerations, and also from genuine typhoid, a specimen of which occurring in a native soldier was shown for comparison; but whether or not it corresponds to what in some Indian museum specimens has been designated "perforating ulcer" of the small intestine remains still uncertain, though there are at the Grant Medical Museum, Bombay, a few such specimens which the author regarded as most probably identical with his own. The ulcers being often small and without much surrounding vascularity, might possibly at times be overlooked; and without close attention, combined with the use of a lens, it might sometimes be difficult to ascertain their real connexion with follicular areas; especially, there being no prior enlargement of the adenoid masses, the relation of the isolated or smaller clusters to the smaller-sized ulcers might not be clearly apparent. Respecting the pathological diagnosis of the larger ulcers as displayed in the case above alluded to, the author quoted as not irrelevant the cautionary remark of Rokitanski (Syd. Soc. Trans., vol. 2, 1849, p. 75) that "an acquaintance with the many anomalies of the typhus process is of such importance that we would not trust the person ignorant of them to judge of a post-mortem examination in a case of acute fever." As to etiology in this preliminary communication, the narrator, dubious as regards any urban "malarious" influence, could only surmise the operation of a "septic" infection different from the "typhoid," though equally pythogenic in its nature and source; considering that the chemical and bacterial components of filth are numerous and variable enough to warrant (comparative experiment upholding) the inference that more than one pathogenous agent may at times be present in the fetid air, water, or soil of a crowded tropical city.

SANITARY IMPROVEMENTS IN IRELAND.

LAST Saturday Mr. Edwin Chadwick, at a meeting of the Association of Public Sanitary Inspectors, referred to the entire neglect of sanitary legislation which had resulted from the devotion of public attention to the exciting political events of the last few years, and pointed out that the most "mud-hovelled" districts in Ireland were the most ravaged by epidemics, and were most marked by crimes of violence and passion. He proposed, as a measure of sanitation, the compulsory subsoil land drainage, and, in some instances, surface drainage, of 150,000 farms in Ireland, which were referred to by the Registrar-General as being too small for the occupiers to live upon them without resources from England, which were now closing against them. In England the voluntary adoption of this measure of sanitation had repaid itself in ten years by a profit of 10 per cent., and Ireland, having a wetter climate than England, was in greater need of this assistance. From the accounts published of Mr. Chadwick's address it is not clear whether he proposes that this work should be undertaken by the State. The great difficulty in Ireland is the want of capital, and though we do not doubt that the investment of money in improving land would make ample return by reducing sickness and mortality, we are afraid the condition of the country is not such as to encourage capitalists to anticipate that they would find a very safe investment in Irish land improvement schemes.

EXTRAORDINARY CÆSAREAN OPERATION.

La Gazzetta degli Ospitali of the 2nd inst. reports the convalescence of a patient who performed the Cæsarean operation on herself on March 28th ult. These are the facts: A peasant woman of Viterbo, aged twenty-three, illegitimately pregnant at full term, at dawn on March 28th last, with a common kitchen knife (*con un coltellaccio da cucina*) opened her own abdomen on the right side. The wound, five inches in extent, was oblique from within outwards and from above downwards. The woman then opened the uterus in the same direction, and endeavoured to extract the fœtus. As this was at full term it could not be readily removed. The mother first drew out an arm and cut it off. To still further reduce the bulk she amputated the head, and then completely emptied the womb, extracting the placenta. She bound a broad bandage very tightly round her body, hid the fœtus in the straw mattress, dressed herself, attended to some domestic duties, and on a cart went into the city of Viterbo to show her sister a cloth bathed with blood, as a menstrual proof of her not being pregnant. On returning home, having walked about for five hours, she vomited and fainted, and the parents called in Drs. Serpieri and Baliva. Thirteen hours had elapsed from the infliction of the wound, and through it the bulk of the intestines had been protruding for six hours. The medical attendants having satisfied themselves of the complete reduction of the emptied uterus, performed abdominal toilette as well as was practicable, replaced the viscera, introduced a drainage-tube, and sutured the wound. The evening temperature was 37·7°; lochia

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natural per *vias naturales*. The woman stated positively that she had had no accomplices. No unfavourable symptoms supervened. The deep wound healed, and was only superficial on the 15th of April, the eighteenth day after the self-performed Cæsarean operation. The countrywoman of Mutius Scævola has proved that the fearless bravery of the Romans lives.

THE OPIUM TRAFFIC.

THE recent discussion in the House of Commons on the opium traffic, while it cannot be said to have added much to our knowledge of the injury inflicted by the free use of this drug, has brought into small compass the economic difficulties which surround the question of its legal prohibition. It is hardly necessary for us in these days to give in detail our professional view of the proper use of opium. On one point, however, we must say something. Sir R. Temple, in his able criticism of the motion introduced by Sir J. Pease, said that "the opium case ran on all fours with the consumption of alcoholic liquors in this country; the question throughout was merely one of temperance." With this opinion, supported though it may be in a way by scientific testimony, we cannot agree. Alcohol, as usually consumed, is rather a luxury than a poison in the ordinary sense. Herein lies its insidious danger. Opium is from first to last a drug and a poison. Its proper place is in medicine, and there only. In turning from the purely medical to the legislative aspect of the subject, we may perhaps be expected to adopt the view of Sir J. Pease—with which, indeed, we have much sympathy,—and to require the direct prohibition of the opium culture, save to the extent required for medicinal purposes. Were it not for the financial difficulty, apparently insuperable at present, and for some taint of injustice which attaches to such a course, we might even go thus far. As matters stand, however, the opening clauses of the motion, which advocate official discouragement rather than prohibition, alone seem to mark the lines of sound policy. As a governing people, we are fairly entitled to diminish, by every legal means, the demand both within and outside of India. If China has been denied her legitimate embargo and desires to impose it, we should allow her to prohibit imports of foreign opium. Within our Indo-Burmese empire, again, we should cease to subsidise opium producers, and should impose necessary restrictions on the sale of the drug. The question of compensation has been carefully gone into in the late discussion, and, indeed, it seems to us to have been much overdone in the speech of Mr. McIver. Should such changes in the way of restriction as we have indicated be gradually carried out, time being allowed for the substitution of other crops for that of opium, the aggregate loss of cultivators and of the Indian Revenue Office will not be likely to demand a ruinous sum in compensation. It is by such remedial measures, we believe, and by stimulating as far as possible a healthy dread of the evils of opium-taking among the populations of India, that we may best atone for past errors of judgment with regard to this much-mismanaged drug.

INOCULATION OF A CONDEMNED CRIMINAL.

THE following is a summary of an account in the *New York Medical Record* of the first attempt to use a condemned criminal for the solution of an important and scientific question at the Hawaian Islands. It appears that, more than two years ago, the Government procured the services of Dr. Edward Arning for the purpose of having a thorough and scientific study made of leprosy. Attempts were made to cultivate the bacillus lepræ, which is uniformly found in great numbers in the diseased parts, but not in the blood, by Koch's method, using various media, but without success. Numerous inoculation experiments upon lower animals were made, but, although the bacilli would grow at the points of inoculation for a long time, the animal never became infected. At last Dr. Arning obtained permission to make an inoculation upon a condemned criminal, whose sentence was commuted to imprisonment for life. With the convict's written consent an inoculation of leprous matter was made in his arm, and bacilli were found in the sore or the scar up to fourteen months after the operation, no constitutional symptoms being observed. One further observation of importance was made by Dr. Arning: he found that in putrid leprous tissues, and even in the body of a leper who had been dead for three months, the bacilli were found in great numbers. This seems to bear against their specific pathogenetic function. Owing to difficulties with the Health Board, it is stated that it is highly probable Dr. Arning will be obliged to discontinue his work of research. With respect to the cultivation of bacillus, Dr. Neisser of Breslau appears to have been more successful than Dr. Arning, for he has recently stated that in a few cases he has observed an exceedingly slow growth, and he also claims to have recognised spores, which the Hawaian observer has, so far, failed to do.

THE RADICAL CURE OF VARICOCELE.

To the large number of operations which have been devised for the cure of varicocele yet another has been added by M. Richet, of the Hôtel Dieu. It is described in the *Revue de Chirurgie* for April by Mr. Picqué, who is disposed to laud it. The vas deferens is first separated from the bundle of veins to be obliterated and held out of the way by a thread of copper wire passed through the scrotum in an armed needle. The veins and the fold of scrotum over them are then grasped by the blades of forceps heated to a red heat, such as M. Richet uses for the destruction of hæmorrhoids. A wound of some size is left, and cicatrisation is obtained in about three weeks. M. Picqué argues that excision of the veins is the best of all the many operations for varicocele, but that it should only be undertaken by those who are quite familiar with the aseptic treatment of wounds. In cases where the surgeon is not confident of his ability to keep the wound aseptic he recommends Richet's operation. We cannot join in such advice. Richet's operation appears, from the description given of it, to be a very rude method of obtaining a result more easily, more quickly, and better obtained by other means.

SANITARY PRECAUTIONS AT BRINDISI.

THE appearance of cholera at Brindisi, though happily thus far attended with no very serious mortality, has already brought out the first signs of panic and ruffianly excess which were only too visible among the poorer Italians during a former visitation. We would fain hope that the scenes of disorder then witnessed may not again be suffered to occur. Personal and household cleanliness, a ready access to materials for disinfection, with such advice as to the management of water-supply as a municipal or parochial authority can easily communicate, will do more to arrest the subtle enemy than any armed exclusiveness of a cordon or a village mob. Practitioners and nurses live in the midst of the contagion, yet by observing such reasonable care they commonly escape its influence. We need not, therefore, despair of seeing even the more ignorant of the public follow their example, and regard this disease no longer as a destroying angel, but as a preventable pest. In the case of Brindisi and other ports the establishment of floating hospitals, of which we have as yet seen no mention, is a measure worthy of consideration. Notwithstanding

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that obstacles exist in the absence of a tide or a considerable river, and the tendency to sickness in cholera which would not be lessened by exposure to rough weather, there are obvious advantages in the scheme if these difficulties can in any way be met.

JUVENILE MUSCULAR ATROPHY OF THE EXTREMITIES.

AT the séance on April 23rd of the Société Médicale des Hôpitaux, M. Joffroy gave an account of a disease which must find a place in our future nosographical literature. It is not exactly new in the sense that this was the first case described, for attention was first called to it by Charcot and Marie some months back. These observers collected the cases observed by themselves and others, which brought the number recorded up to the present time to about thirty. It is possible that as the existence of such a disease becomes more widely known cases will be more common. The disease commences in an atrophy of the muscles of the foot in an infant or young child, and it is very common for several members of the same family to be affected. In an account given by Eichhorst there were ten members in the same family thus afflicted. The atrophy affects also the muscles of the legs, and after a varying period of time attacks the hands and the arms, but never the muscles of the face or trunk. The atrophying muscles often present fibrillary contractions and cramps, and give the electrical reactions of degeneration. The case to which M. Joffroy referred, but which he was unable to exhibit to the Society, as it was a private patient, is typical of the disease. The patient was a girl, who enjoyed good health till the age of five years, when, after a slight attack of scarlatina, it was noticed that she walked with difficulty, and seemed to tumble much more than other children at play. By degrees the foot assumed the shape of talipes equinus, and it was evident that the muscles were wasting; the skin over the feet was cold and red, the sensibility normal, but the muscles failed to react to the faradaic current. Such was briefly the condition of the patient for five years, when, without any other symptom, her hands seemed to be becoming weak, and in three months' time the atrophy of the thenar and hypothenar eminences and interosseous spaces was well marked, and the movements became very limited; she could not play the piano or write; but under treatment she improved, and for the last six months there has been no evidence of the progress of the disease.

SURGICAL CONGRESS IN ROME.

ITALY is making rapid strides towards regaining the high position she held at the Renaissance, and in the century succeeding it, in the medical sciences. Of this the most recent of her congresses—that of Surgery just concluded in Rome—furnishes ample proof. Among the communications which attracted most attention at its sittings were those of Professor Antonino D'Antona of Naples on Ovariotomy, an operation in which he has had a brilliant series of successes, and of Professor Antonio Ceci of Genoa on Extirpation of the Spleen. The subject of this latter operation was a poor girl seventeen years of age, whose splenic enlargement reached to one-fifteenth of the weight of the entire body, being the most bulky of those hitherto extirpated without being followed by the patient's death. Professor Ceci's operation was quite successful, and the girl, after a month in hospital, is now in good health and fit for service. This is the seventh case in which the spleen has been extirpated in Italy, and the second in which it has been done successfully. Professor D'Antona also read a paper on Excision of the Kidney, and produced quite a lengthy *catena* of cases in which the patients had recovered with all the renal functions adequately discharged by a single kidney. These papers will shortly be accessible in a revised form to the profession and the public, and will doubtless be hailed as an earnest of the good work in operative surgery by which Italy is now resuscitating her former and better self.

THE COLONIAL AND INDIAN EXHIBITION.

THE Colonial and Indian Exhibition, which, unlike its predecessors, is imperial and not international in character, was most successfully opened by Her Majesty the Queen in state on Tuesday morning last. A beautiful May day, and the most welcome absence of the easterly winds which have so long asserted themselves, contributed to render the occasion a perfect one. The Queen was received at the main entrance by the Prince of Wales and the Executive President, and the procession, having been formed, proceeded through the building and gardens to the Albert Hall; here, after the singing by the choir of the National Anthem, and an ode written for the occasion, by special desire of the Prince of Wales, by the Poet Laureate, and set to music by Sir A. Sullivan, in which Madame Albani, a Canadian, appropriately took the solo part, an address was read by the Prince of Wales, to which Her Majesty replied, and the Exhibition was then by command of the Queen declared by the Lord Chamberlain to be open.

FALSE JOINT FROM A FRACTURE IN INFANCY.

M. BERGER recently showed a very interesting specimen at a meeting of the Société de Chirurgie of Paris. It consisted of the lower limb of a man fifty-seven years of age, who had received a fracture of both bones of the leg when only nine months old. This was followed by the formation of a false joint which prevented the man from walking. The upper fragments of the tibia and fibula were rounded off, and fitted into cup-like depressions on the lower fragments. The adjacent surfaces were eburnated and coated with dense granulation tissue (not cartilage), and were held together by a capsular ligament continuous with the periosteum and lined by a true synovial membrane. The knee and ankle joints were not ankylosed, as is often the case in such conditions. The whole limb was undeveloped, as the following measurements on the two sides show:—Length of foot 18 centim. as compared with 24 centim.; length of patella 5·0 centim., instead of 6·0 centim.; length of femur 36 centim., as against 39 centim. The muscles were not degenerated; the nerves to the naked eye were healthy; but the skin over the toes was the seat of anæsthesia and local asphyxia. The question raised by M. Berger was, whether these developmental changes were the results of the "false joint," or whether they and it were both due to one obscure trophic affection.

SANITARY FURNITURE.

THOUGH so much has been written concerning domestic hygiene, no general principle has yet been promulgated to govern the construction of furniture. Dr. Gustav Jaeger, however, seeks to supply this want. Admitting the soundness of the theory on which he founds his sanitary clothing reform, Dr. Jaeger further urges that dead wood, as well as cotton, linen, and other vegetable matter, retains its powers of absorbing noxious animal exhalations. These the living plant digests, but the dead fibre or wood only harbours such poisonous gases for a time, and then throws them off again when there is a change of temperature. For instance, if a room is closed for some days, an unpleasant odour will be noticed on re-entering. This is especially apparent in German government offices, where the innumerable shelves and pigeon-holes are made of plain unvarnished wood. Sanitary furniture must there-

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fore be rendered non-absorbent by carefully polishing or painting all the woodwork, both inside and outside; and the same rule applies to the flooring, wainscoting, &c., of all habitations. A room may be cleaned and purified after infectious diseases; but very powerful fumes are required to reach the interior of a closed drawer. From a sanitary point of view, the inside, the unseen, the back parts of furniture equally require to be treated with varnish, paint, or other substance, to render the wood non-porous. In practical Germany, sanitary furniture has become an article of commerce, and in England also we have recently inspected some such furniture. To carry out the above principles, the wood employed was prepared beforehand and rendered non-porous. This process, when applied to furniture made exclusively of wood, such as wardrobes, chests of drawers, sideboards, &c., involves an extra cost of not more than 5 per cent. Old furniture may also be rendered sanitary for a small outlay, by covering the interior and unseen parts with a substance that will close the pores. The "unpleasant feeling" sometimes noticed by those who use upholstered furniture is due to the odorous exhalations stored in the vegetable fibre, and which vitiates the atmosphere of ill-ventilated rooms. The polished wooden seats of our ancestors are preferable, unless the chairs and couches are stuffed and covered with materials of pure animal fibre, dyed with fast wholesome dyes; and this, if inoculated, would necessitate an extra cost of about 10 per cent. All textile material not of animal fibre, such as the stout webbing required underneath upholstered seats, is soaked in a solution which forms an impervious coating and prevents absorption. Carpets and curtains made or adulterated with vegetable fibre are obviously incompatible with this definition of sanitary furniture. White window-curtains, we are assured, will, if examined closely, emit a sour odour when they have been in use for a little time. A woollen curtain would give rise to no such unpleasantness, even when exposed in an inhabited room for a much longer period. Thus, to sum up, Dr. Jaeger maintains that all woodwork should be rendered non-porous, the walls should be painted or the paper varnished, and the upholstery, bedding, carpets, rugs, and curtains should consist of animal fibre sanitarily dyed.

CEREBRO-SPINAL MENINGITIS.

A SERIOUS epidemic of cerebro-spinal meningitis occurred in Gottenberg in 1883. Dr. P. Silverskiold had excellent opportunities of studying the nature of the disease in fifty-eight cases, which he observed with great care and minuteness. After making many bacteriological experiments in pursuance of Pasteur's method, he came to the conclusion that the disease is not due to bacteria. He publishes in the *Eira* the result of his experience. In his opinion the disease arises from malaria, and is not the result of any excessive physical exertion or mental emotion. He founds this belief on the topographical situation of Gottenberg. On the right bank of the river lies the district of Lindholmen, in the vicinity of which are large expanses of marshy ground. Under ordinary circumstances these marshes are covered with water and comparatively innocuous, but during a prevalence of strong east wind they are completely bare; during the west winds, therefore, the marshes are covered, but during the east winds, not only are the marshes bare, but the harbour and the canals are also affected. This occurred in 1883, when there was an unusual prevalence of strong east winds, accompanied by cold dry weather. The water in the harbour fell so low as to deter ships from landing at the pier, and left a large tract of mud; the marshes were laid bare, the canals were so dry that boats could not pass along them, and the sewers, which are ordinarily covered with water, were disclosed to view. Such a large mass of decaying animal and vegetable matter thus exposed to the air could not fail to be a grave danger to health. Those employed in the open air, especially those whose occupations led them to work at the harbour or near the marshes or canals, were most susceptible to infection. On the recurrence of the west winds the epidemic slackened; but on the east winds reappearing, the number of victims increased. Those who lived near the marshy lands were the first attacked; the disease began in separate parts of the town and neighbourhood, and in no case appeared to have been carried by contagion. The complications and symptoms form a long and startling list. From the commencement of the disease the patient loses all appetite, and this disinclination to food continues during the whole course, and even in convalescence. The treatment Dr. Silverskiold found most useful was local bleeding. Choral he considered should be avoided; but morphia he regarded as invaluable.

SARCOMA OF THE RIBS, INVOLVING THE DIAPHRAGM.

M. HUMBERT records, in the April number of the *Revue de Chirurgie*, the case of a woman, twenty-one years of age, who was admitted into the Hôtel Dieu in 1883, with a sarcoma growing from the eighth and ninth ribs on the right side. M. Peyrot attempted its excision, and in so doing wounded the pleura and caused a pneumothorax. He therefore contented himself with removing the superficial part of the mass. The wound healed, and in December of the same year the patient came under M. Humbert's care. The tumour was then the size of a chestnut, ulcerated in the centre, and there were signs of pleural effusion. A second operation was performed; the surface of the tumour was freely exposed, and the seventh, eighth, and ninth ribs, which were involved in it, were divided at each side of it, nine centimetres of the bones being removed. The tissues in the sixth and ninth intercostal spaces were then divided, and the mass removed. The pleural cavity was opened, and a considerable quantity of fluid escaped from it. On cleansing this cavity a hole was discovered at its lower part; this was enlarged and explored, when the liver, colon, and coils of intestine were clearly seen. This wound in the diaphragm was closed with five catgut sutures, and then the superficial structures were sutured. For a day the patient was very collapsed, but convalescence proceeded without complication, and the wound healed except a small sinus at the lower part. Around this sinus a recurrence of the growth took place, and in December, 1885, M. Pozzi performed a third operation, under which the patient sank. The case is mainly interesting as an instance of a wound of the diaphragm which united without any inflammation of the abdominal structures. Considering the impossibility of giving complete rest to this muscle, such a result is particularly satisfactory. Where tumours are known to involve the diaphragm their removal should not be attempted; but if during an operation this muscle is injured, it should be carefully sutured, as in this case.

HYDROPHOBIA IN HOLLAND.

THE Minister of the Interior in Holland has offered to send to Paris at the expense of Government some persons bitten by rabid dogs in Overijssel; the sufferers have, however, all refused to avail themselves of the offer. A man named Leendert Jooren, of Made, who was bitten by a mad dog has consented to undergo the operation of inoculation, and has been sent to Paris. The bodies of the condemned dogs have been sent to the Government Veterinary School for anatomical examination. The law concerning muzzles is strictly enforced, a large district coming within its operation—namely, the whole of North Brabant. The condemned cats and dogs are to be burnt.

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ARTHROTOMY FOR LOOSE BODIES IN JOINTS.

M. KIRMISSON recently presented to the Société de Chirurgie two cases of loose bodies in the knee-joint for which arthrotomy had been successfully performed. He assented to the view that some of these bodies are truly traumatic in nature, being broken off from articular cartilages by violence; while others, the greater number, are pathological in origin. The arrangement of the cells in the cartilage usually allows it to be determined whether a given "loose body" is traumatic or pathological in origin, but in some cases this point cannot be cleared up. M. Kirmisson suggested that the use of a drainage-tube was not necessary after arthrotomy for the removal of such loose bodies, and he also advocated including the synovial membrane in the sutures. Both these points excited considerable discussion. Some surgeons were strongly in favour of abandoning the drain; others argued that it was harmless, and might prevent serious mischief. Cases can be cited in favour of each view. Where the arthrotomy is very simple, and there is no synovial effusion, a drain appears to be unnecessary, and may be dispensed with; but if the operation be prolonged, complicated, and attended with much manipulation of the synovial membrane, or if the joint be the seat of a chronic effusion, it is much safer to insert a drain. Should a drain not be used, it is better not to insert sutures; any exudations then have a free exit from the wound; while if the wound is closed, tension may be excited. The best form of suture would be a "buried suture" of the synovial membrane preliminary to the closure of the superficial wound.

THE CHAIR OF PHYSIOLOGY IN ABERDEEN.

AT the opening of the summer session in Aberdeen, Professor Struthers spoke a few kind and well-chosen words on the appointment of Dr. McWilliam to the chair of Physiology. He traced his career from the class to the chair, and praised him not only for regular and steady work in the daily routine of a student's life, but for acquiring early the love of science and the desire to enlarge its boundaries. He magnified the uses of a university and the office of the professor, which were meant for more than the communication of everyday knowledge. The university should stimulate research and original investigation and the professor who did not show his power in these ways had not justified his appointment.

INSPIRATION OF COLD AIR IN FEVER.

THE effect of breathing cold air has been made trial of in St. Petersburg by Dr. Ivan Voitekevich on a number of patients suffering from various pyrexial diseases, enteric fever, croupous pneumonia, pleurisy, &c. His method of proceeding was to take the pulse and respiration, and also to note the temperature in the rectum, axilla, and on the surface of the chest, and immediately afterwards to apply to the patient's face a mouthpiece connected with a tube communicating with the external cold air, directing the patient to inspire deeply. The mouthpiece was removed during expiration and replaced for each inspiration. The "sittings" were usually continued for from twenty to thirty minutes, but were stopped at once in cases where the patients seemed exhausted or faint, which, however, very rarely happened. The "sittings" were usually repeated morning and evening for several consecutive days. The temperature of the ward was always noticed, and was usually between 60° and 70° F. The external temperature, which was that of the inspired air, was, as a rule, about 20° F. lower. After the "sitting" the observations on the pulse, respirations, and temperature of the patient were repeated both immediately and after the lapse of one and two hours. The results obtained showed that the temperature was lowered but slightly and for a very short time, but that a considerable diminution was produced in the frequency of both pulse and respiration. The patients, too, felt better and slept longer, but this was but temporary. The cold air appeared decidedly to lessen the bronchial catarrh from which they suffered. No evil effects were observed, but, on the contrary, the cold air treatment appeared to act in a beneficial manner.

INTERNATIONAL CONGRESS ON HYDROLOGY AND CLIMATOLOGY.

WE have received from the Foreign Office papers relating to a proposal to hold next October in Biarritz an International Congress on Hydrology and Climatology; the Congress is to be presided over by the French Minister of Commerce and Industry, and the French Government are anxious that members of scientific societies in this country should assist. The Congress will be divided into three sections, and papers are invited on scientific hydrology, medical hydrology, and climatology. The proceedings will last from Oct. 1st to the 8th, and at its close the different thermal and sanitary stations in the Pyrenean district will be visited.

PUERPERAL FEVER IN SPITE OF ANTISEPTIC PRECAUTIONS.

M. HERRGOTT of Nancy, in a communication to the Paris Academy of Medicine, mentions the cases of two women who had been confined in the same ward. In spite of the employment of the most rigorous antiseptic measures, one, who was greatly depressed physically and morally, was attacked by puerperal fever, and succumbed in three days; while the other, who had a very severe labour, entirely escaped the infection. From these facts he deduces the suggestion that, however valuable and true the doctrine of microbes may be in the generality of cases, it is not capable of explaining all the facts of infection. "Too absolute, too general rules lead observers to neglect an essential element in diseases—the patient."

ANOMALOUS KIDNEY.

M. CARTIER describes an anomalous case of kidney formation in a female patient aged twenty-three, who died of fever at the Hôtel Dieu, at Poitiers, in February. The two kidneys were joined in front of the vertebral column by their inferior extremities, forming a kind of horseshoe, embracing the spine. The junction was formed by an intermediary body, whose tissue was of a renal character, and which appeared to be a third renal organ. In addition to two ordinary renal arteries, veins, and ureters, there were three supernumerary arteries, one to each lateral part of the horseshoe and one to the centre or third kidney.

OUR CHANGEFUL CLIMATE.

ONE day in last week the thermometer rose 30° and fell 27°, all in twelve hours. This is an illustrative example of what the weather can do in this country, and collaterally—so far as those who escaped injury are concerned—the episode affords excellent proof of the adaptability of the English "constitution" to a changefulness which not many of the inhabitants of more equable climes could with impunity undergo. Whatever the weather may be for some five or six weeks to come, no prudent person should venture to lay aside winter clothing altogether for the attire appropriate to summer. "Cast not a clout till May be out," and even then make any desired change discreetly, for "fickle as the wind" is a proverb which has more than metaphorical force in England, and which it is well all who value their health should lay very practically to heart.

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DEATH OF TWO PROFESSORS IN HAVANA.

THE death is announced of Dr. don Joaquin Barnet y Ruiz, Professor in the Faculty of Pharmacy of the Royal University of Havana in Cuba, caused by extensive burns produced by the ignition of a quantity of ether in the laboratory. Dr. Planellas Llanos, Professor of Botany and Zoology in the Faculty of Sciences in the same university, has also lately died from illness. He was the son of the present Dean of the Faculty of Sciences in Barcelona, and was a knight of the Order of Charles III. *La Enciclopedia*, a Cuban medical journal, lamenting his premature decease, refers especially to the practical character of his teaching, and the improvements which he made in the botanic garden, which is now in a thoroughly satisfactory condition.

TENDON-GRAFTING.

A BOY, aged fourteen, cut himself in the hand and divided both flexor tendons of the middle finger. Thirteen months later he came under M. Peyrot's care. There was then complete inability to extend the last two joints of the finger. An operation was undertaken. It was impossible to approximate the divided ends of the tendons, so a piece of a young dog's tendon was interposed between them. Unfortunately the wound suppurated, but cicatrisation took place and partial success was attained. The finger could be semi-flexed, and was constantly held partly flexed and therefore less exposed to injury than before; but the tendon was adherent to the scar. There seems to be no doubt that the engrafted tendon is really united to the boy's tendon.

FOR the vacant Chair of General Pathology in Insbruck the names of Dr. Gärtner, assistant to Professor Stricker in Vienna, and Dr. Lowit, assistant to Professor Knoll in Prague, have been proposed.

PROFESSOR WINTER is about to retire from the editorship of *Schmidt's Jahrbücher*, with which he has been connected for thirty-six years. His place will be filled by Drs. Mobius and Dippe of Leipsic.

M. RANVIER has been elected "membre titulaire" in the Pathological Anatomy Section of the Paris Academy of Medicine, the unsuccessful candidates being Voisin, Grancher, and Hanot.

A CONGRESS of medical practitioners and workers in the field of natural science is to be held in Christiania on the 12th of July.

DR. F. BESSEL HAGEN has been appointed to the charge of the Surgical University Polyclinic in Heidelberg.

M. PASTEUR has just been appointed a Grand Cross of the Brazilian Order of the Rose.

PRAGUE is reported to be suffering from a severe epidemic of typhoid fever.

THE REMOVAL OF DUST.—On the 28th ult., at the meeting of the members of the Wandsworth Board of Works, attention was drawn to the fact that during the last four weeks the number of complaints from householders as to the non-removal of their dust was as follows:—Battersea, 215; Clapham, 30; Putney, 109; Streatham and Tooting, 128; Wandsworth, 12. It was very justly considered disgraceful that there should be in four weeks 494 complaints in a district where the sum of £9600 per annum is paid for clearing the dust, and a committee was appointed to take immediate action in the matter.

THE GERMAN MEDICAL CONGRESS.

THE fifth annual meeting of the German Medical Congress took place at Wiesbaden from April 14th to 17th, under the presidency of Professor Leyden of Berlin, in succession to the late Professor von Frerichs.

In opening the proceedings, the PRESIDENT alluded to the aims of the Congress, and the connexion between medicine and science, pointing out that in the direction of therapeutics many problems awaited solution, and here experience was of chief value, corrected, confirmed, or modified by fresh observations.

The first subject discussed was the Operative Treatment of Pleural Effusion. It was opened by Dr. O. FRAENTZEL (Berlin), who pointed out that Trousseau's dictum upon the indications for such interference remained good at the present day. In the case of sero-fibrinous effusions such indications were (1) imminent danger to life, and (2) a large amount of effusion—viz, when in the sitting posture the upper level of the fluid reaches at or above the third rib. He advocated postponement of paracentesis until pyrexia had moderated or disappeared, delaying usually to the end of three weeks, occasionally to the end of a fortnight, but rarely resorting to it earlier, these latter cases being mostly of unfavourable prognosis. At the same time he recognised the evil of delay beyond three weeks. He objected to the dorsal puncture, owing to the thickness of the chest wall and the tendency for fibrine to accumulate posteriorly, but preferred a site midway between the mammillary and axillary lines, in the fifth interspace on the left side, and fourth on the right. Aspiration rendered the operator independent of the influence of lung-pressure in regulating the amount of fluid withdrawn; but not more than 1500 cubic centimetres (i.e., about 50 oz.) should be taken. He described the various precautions necessary, and stated that he had never seen a case of sudden death during paracentesis, nor the supervention of acute pulmonary œdema (the "albumineuse expectoration" of the French), and he attributed the absence of these results to the limitation in the quantity of fluid removed. He has frequently tapped for hæmorrhagic effusion, with good result, even in tubercular subjects; but if there is much blood he does not aspirate, and never removes more than 500 cubic centimetres. In purulent effusions, if no absorption take place after aspiration, a free opening must be made, the site of election being the same as that for aspiration given above. In most cases rib-resection is necessary. After evacuating the sac it is washed out with a solution (½ per cent.) of common salt, and a drainage-tube or metal cannula inserted, the thermometer being taken as the guide for further interference. He spoke also of the treatment of pneumothorax.—Dr. WEBER (Halle) followed, stating that paracentesis was absolutely indicated in cases where the intra-thoracic pressure hampered the circulation, as well as in all purulent and putrid effusions. In complicated cases operation could only be palliative. He would not delay interference too long; formerly, in cases of sero-fibrinous effusions, he waited for subsidence of inflammatory symptoms, but found greater risk of encountering such sequelæ as pulmonary compression, &c., and therefore resorts now to puncture within six or five days with far better results. In serous effusion it suffices to use simply a long tube to act as a syphon. He insisted on the value of exploratory puncture, bearing in mind that the fluid is often clearer and thinner in its upper layers than at lower levels. In empyemata he always employs resection of ribs, and washes out the cavity first with a solution of sublimate (1 in 5000) and then of boracic acid (3 per cent). In children a cure may be obtained in two or three weeks.—Dr. FIEDLER (Dresden) described his hollow needle and syphon-tube, and stated that he had quite abandoned the use of the aspirating syringe. He agreed with Fraentzel that interference should be delayed for three weeks.—Dr. FINKLER (Bonn) pointed out that in less recent effusions it may be absolutely necessary to use the stronger force of the aspirator-syringe, and in certain cases would combine aspiration with washing out of the sac.—Dr. LITTEN (Berlin) agreed with Dr. Weber that paracentesis should be done early, and that the presence of fever was no contra-indication; but he has seen the lung re-expand after an effusion has lasted for twelve weeks. He adopts partial resection of neighbouring ribs in empyema.—Professor JÜRGENSEN (Tübingen) said it was a great advance that all

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empyemata were now radically treated; but he mentioned the liability to amyloid disease in long-continued cases of drainage. He doubted the statement that tuberculosis does not give rise to simple pleurisy.—Dr. HEUESNER (Bremen) uses a cannula and long tube in preference to the aspirator, owing to the fear of increasing the negative pressure, which may cause too great a flow of blood to the thorax.—In reply, Dr. FRAENTZEL said that in tubercular subjects he would only resort to the radical operation as a final measure. The frequency of injections of empyema sacs varied with the case; sometimes they may be needed two or three times a day, in other cases only every two days. It was often not possible to do without rib-resection.—Dr. WEBER added that, except in hæmorrhagic cases, he allowed as much fluid to flow as possible, and did not regard coughing as an indication for discontinuance. He was, on the whole, so contented with present methods as not to desire anything better.

Dr. BRIEGER (Berlin) read a paper on Ptomaines, asserting that one should rather seek to learn the chemistry of bacteria than to discover new forms. He described and demonstrated a large number of poisonous agents which he had isolated in various infective diseases (mussel-poisoning, staphylococcus aureus and pyogenes, typhus, &c.).

Dr. FICK (Wurzburg) read a paper on Variations in Ventricular Blood-pressure in Morphia Narcosis, as estimated by means of an apparatus he has devised. In a dog deeply narcotised by morphia he found a peculiar change from the normal, where the curve suddenly rises in systole, remaining high until the end of systole, when it as suddenly falls to the abscisse, where it remains throughout diastole. Instead of this, in morphia narcosis there is during diastole a slight rise; and this must be attributed to a secondary incomplete systole. Sometimes the diastole is interrupted by several such irregularities of the curve. The phenomenon is explained by morphia interfering with the systole so as to render it abortive; and as these abortive contractions do not suffice to open the valves, they are not registered in the arterial pulse.—Dr. BINZ (Bonn) welcomed the paper as a valuable contribution to pharmacology and as opening the way for other researches. It showed also that morphia is a cardiac poison.—Dr. RIEGEL (Giessen) pointed to the analogy of the phenomena with the pulsus bigeminus and alternans.—Drs. v. Busch and Auerbech also spoke.

Dr. STINTZING (Munich) read a paper on Methods of Electro-diagnosis, in which he advocated the use of Edelmann's galvanometer and his own "unit-electrode" for the purpose of more completely estimating the results of faradaic and galvanic reactions.

Professor ZIEGLER (Tübingen) contributed a paper on the Inheritance of Acquired Pathological Properties. He contended that acquired deformities and diseases are not inheritable, and in support of this referred to the process of impregnation, wherein there is a union between nuclei of the paternal and maternal organisms. Since these nuclei must be regarded as the carriers of inheritable properties, it is very unlikely that acquired properties could be transmitted. Just as difficult is it to accept Weisman's notion of development of generations of germs from an inheritance of acquired disease. It is a fact that a mental disease acquired by traumatism or intra-uterine disorder is not transmitted by an individual to his posterity. Brown-Séquard, in his experiments on inheritance, produced epilepsy in guinea-pigs; but these animals are specially predisposed to nervous disease on the slightest irritation, and it is possible that infection played a part in these experiments. According to Ziegler, malformation and acquired disease are to be referred to primary variations in the germ. These may arise by the union of ill-adapted sexual germs, by derangement of the process itself, and by injury of the sexual germ proceeding from the organism (as in alcoholism, old age, &c.)

(To be continued.)

THE GERMAN HOSPITAL.—On the 5th inst., the forty-first anniversary dinner of the friends and supporters of this institution was held, under the presidency of Prince Christian. It was stated that during last year the number of in-patients at the hospital was 1721, and the total benefited during that period was 25,353. The guests numbered 220, and during the evening subscriptions and donations amounting to £3672 were announced by the secretary.

INDIAN HEALTH STATISTICS.

No. II.

THE average number of prisoners confined in the gaols of India during 1884 was 85,496, a number estimated to be in the proportion of 4·3 per 10,000 of the general population. The admissions into hospital among them were 1025, the deaths 29·11, and the daily sick 36·9 per 1000 prisoners. This shows an increase in the cases, but a decrease in the deaths, compared with the preceding year. The prisons of Bengal were the most unhealthy; those of Madras showed much the lowest death-rate, amounting to only 20·55 per 1000; and those of Bombay furnished the lowest ratio of admissions and daily sick. The great excess of cases in Bengal was from fevers, dysentery, and diarrhœa, and the same diseases, with those of the respiratory system, were the causes of the high rate of mortality in Bengal and Bombay. In the latter the death-rate from respiratory diseases was as high as 9·58 per 1000, while in the Madras Presidency it was only 2·44.

Although there has been a decrease in the general mortality of the prisons, some of them still show an enormous death-rate. Thus, omitting all prisons with an average of less than 100 prisoners, we find that in Bengal, at Rungpore it was 256·5 per 1000, at Banda 156·8, at Jalpaiguri 156, at Mymensingh 148·9, at Chybassa 121·6, at Rajshahai 109·5, at Bogra 107·1, at Purneah 104·2, and at Almora 102·8, the principal cause of death in all being dysentery and diarrhœa. In the Bombay Presidency, the only gaol in which the rate exceeded 10 per cent. was at Nara, where it was 108 per 1000, half of the deaths being from respiratory diseases, and the other half equally divided between fevers, dysentery, and diarrhœa. In British Burmah the mortality in the Akyab gaol was 129·2, and in that of Tavoy 107·8, the high rate in the former being due chiefly to cholera, dysentery, and anæmia, and in the latter to cholera and dysentery. In the convict establishment at the Andamans the death-rate was only 15·75, the most fatal disease being phthisis, the deaths by which amounted to 3·79 per 1000. The troops on duty there also appear to have enjoyed excellent health, the admissions among the Europeans having been only 688 per 1000, with no death, and among the Native troops 826 admissions and 6·52 deaths per 1000. The sanitary sheets received from the gaols, while showing that much has been done to improve some of them, afford abundant evidence of the existence of overcrowding, defective water-supply, imperfect ventilation and drainage, unsatisfactory dietary, and in several of them insufficient clothing.

Although there has been a marked improvement in the registration of births and deaths of the general population in some of the Provinces, it is still so very imperfect as to prevent any reliance being placed upon the recorded results. It would be useless therefore to enter upon any detailed examination of the information on these subjects in the Report, or to constitute any comparison with the results of previous years, when the data were still more inaccurate. The returns show that fevers were by far the most fatal diseases, for of 5,230,756 deaths registered, they were returned as the cause in 3,306,285, or 63 per cent. of the whole. October, November, and December were the months in which the mortality from this cause was highest. Small-pox was very prevalent during the year throughout India, but especially in the North-Western Provinces and Oudh, the Madras Presidency, and British Burmah; the registered deaths by it amounted to 332,904, or 6·7 per cent. of the total mortality. Although every exertion is made to promote vaccination, it is to be regretted that a large proportion of the population remains unprotected. The returns show the numbers vaccinated at the special vaccination establishments and at the dispensaries to have been 5,104,185 in a population estimated at about 184 millions. Cholera was returned as the cause of 287,609 deaths. It was most fatal, in proportion to the population, in Assam, Bengal, Madras Presidency, and British Burmah. In Assam it was very generally prevalent, but was most severe in Nowgong. It broke out in March, reached its maximum in May, and then declined till October, when it was rekindled, and gave rise to many deaths. A very interesting history is given of cholera among the immigrant coolies, who appear to have escaped to a remarkable degree

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compared with the general population. This is attributed to the improved arrangements at the depôt at Dhubri; to the avoidance of overcrowding on board the steamers; to the increased speed of transport, by which the passage has been reduced from sixteen to a little under five days; and to the improved general sanitary arrangements on board, more especially with regard to cook-houses, latrines, general and hospital accommodation. The Sanitary Commissioner remarks that "of the various explanations which have been offered to account for the diminished prevalence of cholera among them of late years, ... that an improved water-supply is the chief cause cannot be accepted, for Dr. Eteson, the present sanitary commissioner [of Assam] writes:—'The coolies, who alone are provided with protected and filtered water, alone get cholera; other passengers, who always draw water over the side and at landing places where the steamer stops and pollution is most probable, never get it. The crews of all the steamers use unprotected water, and are never attacked.'" In the province of Bengal the disease was widely prevalent, but it was most fatal in Orissa. In the Madras Presidency, Tanjore, Tinnevelly, Trichinopoly, South Arcot, and Madura suffered most severely. The greatest number of deaths occurred in January, the disease then subsiding till April; a second outbreak occurred in July and lasted till October; and it again appeared with considerable violence in December. "The cause of the continued prevalence of cholera in the Tanjore district was most probably owing to the peculiarly contaminated water-supply upon which the people are dependent," and of which some details are given in the Report. The question of the removal of persons from buildings in which cholera has broken out is one of so much importance that we must give the results obtained in India as detailed in the Report. "The effect of movement of affected bodies into other, though near, localities was, as usual, most beneficial. Among British troops cholera appeared in twenty-six communities, and in fifteen of these movements were made into camp, in three to different barracks, and in eight the disease occurred in an isolated form, and no movement was considered necessary. In ten of the fifteen movements into camp no further case occurred after movement. At Allahabad, where nineteen cases occurred in all, only one man was attacked after the affected community moved into camp. Only at Meerut was the result of the movement not so strikingly apparent. In this station the affected men were broken up into five parties, which moved into separate camps. In one party nine cases occurred in three different camps, and in another four cases in two camps, but the three remaining parties escaped without further attack. Amongst Native troops nine of twenty-one affected communities moved into camp, and in only one of them a single case occurred after movement. Amongst prisoners movements were made only at Meerut and Akyab. In the former place only two cases occurred after movement." At Akyab a reference was made to the Inspector-General of Prisons, who directed that "no delay should take place in the matter of removal, but that two-thirds of the prison population should, as soon as possible, be moved into camp. The result justified the expediency of this decision, for no sooner had the removal been commenced, and the gaol population thereby thinned, than the disease began to abate, and speedily became altogether arrested; while of the prisoners who were camped out not one was attacked."

The number of deaths from injuries registered during the year amounted to 76,583, and of these 23,028 were caused by snake bites or by wild beasts.

DR. RICHARDSON'S LECTURES ON ANIMAL OR VITAL MECHANICS.

ON Monday last Dr. B. W. Richardson delivered the first of a series of Cantor Lectures, at the Society of Arts, on "Animal or Vital Mechanics." After a brief introduction, in which he defined as natural or vital mechanics those mechanisms which are produced by nature without the interposition of man or any animal inferior to man, the lecturer placed before his audience a series of photographic and diagrammatic illustrations of numerous natural mechanical parts — the valve, the lever, the camera, the pouch, the screw, the tube, the vesicle, the column, the cord, the pulley, the muscle, and the joint. He then drew a comparison bearing on originality of design between natural and human genius for invention. On this subject there were two views: one, that natural and human inventive skill are independent of each other, though alike in character; the other, that human inventive skill is an imitation or copy from the natural—an idea which even men of scientific attainment had supported.

The lecturer, in treating on these two hypotheses, while admitting that man could not be said to have invented anything that did not exist in nature, and therefore only re-created the created, and while also admitting that in many mechanical works of nature man might find many copies, maintained, nevertheless, that the human faculty for mechanical invention is quite independent, and that man in invention as often recopied from himself without intention, as he did from nature, also without intention. As an artist man is an imitator; as an inventor he is original; the phenomena included in mechanical problems being to him abstractions, like good and evil, space and time. In support of this view, Dr. Richardson urged the following reasons: 1. That if man in his inventions were a mere copyist, he would rank lower in this respect even than insects, which were mechanics, but certainly from no studied imitation from natural objects. 2. That if man had learned all his inventions from the inventions of nature he would have been a naturalist first, and a mechanician afterwards. But, in fact, he is a wretched naturalist; a splendid mechanic. 3. That the attempts of man to copy from nature in mechanical work had been amongst the least successful of his mechanical results, as shown in his attempts from and even before the time of Borelli to make a flying machine. 4. That the skill of man in all his great mechanical results is cumulative, has its origin in smallest beginnings, and progresses step by step onwards by human skill alone. This was illustrated in the development of electricity, from the first experiment of children rubbing pieces of amber up to the telephone and microphone, in the whole of which mighty development, although the phenomena and their causes might have been found in nature, man stood alone as the inventor, without going to Nature for any copy of her designing. 5. That if man had been a direct copyist from Nature, in his mechanical work, he would not have produced such perfect mechanisms as those which he has constructed, since it is one of the most remarkable of facts that many of the most important natural instruments (for example, the eye-ball) are imperfect in details of construction, unfinished, to use a workman's term, and liable to deviation in action. On the whole, the evidence is in favour of the belief that man is endowed with independent powers of invention. This, however, does not take away from the study of Nature as a teacher. Her apparent errors may be guides; she may reveal secrets if she be carefully followed; she may certainly suggest economy of power and of adaptation; and she is ever deserving of consultation as the omnipresent and primitive mechanical organiser and worker.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Wem Rural District.—It is satisfactory to note that according to the report of Dr. R. F. Giles not a single death resulted in 1885 from any one of the specific infectious fevers, and this in a population of 10,565. But it is stated that there were one or two isolated cases of diphtheria, and under these circumstances 2 deaths from "non-spasmodic croup" may be regarded with some slight suspicion. In the general sanitary improvement which is going on, we would note that the town of Wem has received an abundant supply of good water, and the house connexions with this public service are steadily increasing. Action is also being taken in the same direction under the Public Health (Water) Act, and wells which are polluted are being closed. Clive and Shawbury call for similar activity on the part of the authority. Bye-laws are also wanted to regulate the construction of new buildings. It is often felt that because a district is not yet very populous, such regulations are not needed; whereas it is hopeless to prevent the evils of bad

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building when places ultimately do become populous, in which building has been proceeding without any adequate restrictions. It is in the early stage that bye-laws do the most good. The death-rate for 1885 was 18·45 per 1000; it was much the same in 1884, and for a rural district this can by no means be regarded as being as low as it should be.

Willesden Urban District.—Dr. Branthwaite has the satisfaction of pointing out that in this district, with a population which has increased with immense strides till it has nearly reached 39,000, whereas the death-rate was 21·7 per 1000 at the beginning of the decade, it is only 16·2 at the present time. During the year 1885, small-pox was somewhat prevalent, 31 cases coming under notice. Of these, 13 were treated at home and 18 were removed to the hospital. But something of a permanent character in the way of hospital provision is much needed for this district. In the meantime disinfection is carefully carried out in all houses where infectious diseases have been known to exist. The infantile death-rate of Willesden is a very unsatisfactory feature, for the deaths of children of one year and under are as 17·2 per cent. of the births. Dr. Branthwaite again urges the need of a crèche in South Kilburn, and in the district abutting on Willesden-lane. In his opinion it would lead to the saving of many lives.

Helmsley Rural District.—Routine work continues to be made in this district and to disclose matters calling for continued activity. The risk of well-pollution has been shown to exist in Harome as the result of last year's systematic inspection, but in the case of Helmsley this question has been most satisfactorily dealt with. It is now four years since a case of enteric fever came under Dr. Low's notice in the district, and in this special instance it was regarded as due to the recrudescence of a poison ten years old. The death-rate for the district during 1885 was 16·15 per 1000 living.

Bedford Rural District.—During 1885 the general death-rate of this district on a population of 23,666 was 18·5 per 1000. Scarlatina and diphtheria were the two infectious diseases which most called for notice. As regards the latter, Dr. Prior quotes extracts from a large number of reports of the medical inspectors of the Local Government Board, and he concludes that the main outcome of the investigations referred to has been to show how strong is the evidence in favour of contagion as the great means of propagation of diphtheria, and how weak and unconnected by comparison is the evidence as to other causes. Hence he urges that it is only in the organisation of a proper system of disinfection and of isolation that safety against the diffusion of the disease can be found.

Barnsley Urban District.—Although the death-rate for 1885 was considerably below that for the preceding two years, it reached 21·9 per 1000, and as such was in excess of that for England and Wales. A serious effort has been made by the Town Council to deal systematically with infectious disease, and a fee has been offered to medical practitioners for reporting such cases. This system, to be complete, needs, as Dr. Sadler says, a well-ordered fever hospital; but we think his views as to securing the removal of first attacks are involved in difficulties which are somewhat imaginary. In other districts the same fears have been expressed, but the anticipated drawbacks have tended to disappear when adequate provision has been made. Barnsley has the advantage of an abundant and excellent water-service, of a good system of sewers and sewage disposal, and of a system of refuse removal carried out by the authority's own officials. It is also now required that in all new houses a disconnecting syphon-trap shall be provided, cutting off the chance of the passage of sewer air into house drains, and additional means of sewer flushing are to be provided. Advance in such directions should, before long, lead to a still further reduction in the rate of mortality.

Barnsley Rural District.—In this district the year 1885 was marked by a lower death-rate than any experienced since 1881; but still it cannot be regarded as a really low one, reaching as it did to 17·8 per 1000. Certain cases of enteric fever were associated with foul effluvia from sewers which, by reason of the drought, lacked sufficient flushing. Scarlet fever was also somewhat prevalent; but it is stated that, in the absence of information as to its occurrence, it was not possible to do much to check it. In several parts of the district the sewage arrangements are unsatisfactory, and the river Dearne remains very foul. When faulty sanitary conditions are met with in connexion with disease, they are, according to Dr. Sadler, remedied by removal or otherwise.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5688 births and 3518 deaths were registered during the week ending May 1st. The annual death-rate in these towns, which had been equal to 20·3 and 19·8 in the preceding two weeks, rose again last week to 20·2. During the first four weeks of the current quarter the death-rate in these towns averaged 20·1 per 1000, and was 3·7 below the mean rate in the corresponding periods of the ten years 1876–85. The lowest rates in these towns last week were 16·1 in Brighton, 16·3 in Hull, 17·1 in Bradford, and 17·5 in Birkenhead. The rates in the other towns ranged upwards to 26·8 in Blackburn, 27·3 in Preston, 27·9 in Portsmouth, and 29·2 in Manchester. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 367 and 382 in the previous two weeks, declined last week to 364; they included 138 from whooping-cough, 104 from measles, 39 from diarrhœa, 29 from scarlet fever, 28 from diphtheria, 23 from "fever" (principally enteric), and 3 from small-pox. No death from any of these principal zymotic diseases was recorded last week either in Norwich or Halifax; whereas they caused the highest death-rates in Plymouth, Preston, and Portsmouth. The greatest mortality from whooping-cough occurred in Bolton, Cardiff, and Newcastle-upon-Tyne; and measles showed fatal prevalence in Birmingham, Blackburn, Preston, Plymouth, and Portsmouth. The 28 deaths from diphtheria in the twenty-eight towns included 20 in London, 2 in Birmingham, 2 in Liverpool, and 2 in Oldham. Small-pox caused 2 deaths in Bristol, 1 in Liverpool, and not one either in London or in any of the twenty-five other large provincial towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had increased in the previous four weeks from 8 to 17, had further increased to 19 on Saturday last; 3 cases were admitted to these hospitals during the week, against 6 in each of the preceding two weeks. The Highgate Small-pox Hospital contained 2 patients on Saturday last, two cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 362 and 319 in the preceding two weeks, further declined last week to 296, and were 94 below the corrected weekly average. The causes of 89, or 2·5 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Brighton, Blackburn, Derby, and Plymouth. The largest proportions of uncertified deaths were registered in Salford, Sheffield, and Halifax.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 20·5 and 20·7 per 1000 in the preceding two weeks, further rose to 23·1 in the week ending May 1st, and exceeded by 2·9 the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 17·4 and 18·5 in Dundee and Leith, to 25·4 in Glasgow and 26·0 in Paisley. The 571 deaths in the eight towns showed a further increase of 60 upon the numbers returned in the previous week, and included 21 which were referred to whooping-cough, 15 to measles, 6 to scarlet fever, 6 to diarrhœa, 2 to "fever" (typhus, enteric, or simple), 1 to diphtheria, and not one to small-pox; in all, 51 deaths resulted from these principal zymotic diseases, against 34 and 46 in the preceding two weeks. These 51 deaths were equal to an annual rate of 2·1 per 1000, which corresponded with the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 10 and 15 in the previous two weeks, further rose last week to 21, of which 18 occurred in Glasgow. The 15 deaths from measles showed a further increase upon recent weekly numbers, and were all returned in Edinburgh. The 6 fatal cases of scarlet fever, of which 4 occurred in Glasgow, also exceeded the numbers in recent weeks. The 6 deaths attributed to diarrhœa, on the other hand, showed a decline, and were 3 below the number in the corresponding week of last year. Both the deaths from "fever" were returned in Glasgow, and the fatal case of diphtheria in Greenock. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 122

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and 100 in the previous two weeks, rose again last week to 123, and were within 1 of the number in the corresponding week of last year. The causes of 74, or 13 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 33·0, 25·0, and 27·3 per 1000 in the preceding three weeks, declined to 24·4 in the week ending May 1st. During the first four weeks of the current quarter the death-rate in the city averaged 27·4 per 1000; the mean rate during the same period did not exceed 19·1 in London and 18·8 in Edinburgh. The 165 deaths in Dublin last week showed a decline of 20 from the number in the previous week, and included 13 which were referred to the principal zymotic diseases, against 16 and 8 in the previous two weeks; 5 resulted from whooping-cough, 2 from scarlet fever, 2 from "fever" (typhus, enteric, or simple), 2 from diarrhœa, 1 from measles, 1 from diphtheria, and not one from small-pox. These 13 deaths were equal to an annual rate of 1·9 per 1000, the rates from the same diseases being 2·4 in London and 3·7 in Edinburgh. The fatal cases of whooping-cough, which had been 11, 5, and 4, in the three preceding weeks, were again 5 last week. The deaths from "fever" showed a decline from recent weekly numbers. Six inquest cases and 4 deaths from violence were registered; and 50, or nearly a third of the deaths, were recorded in public institutions. The deaths of infants were fewer than those returned in any previous week of this year, and those of elderly persons also showed a decline. The causes of 19, or nearly 12 per cent., of the deaths registered during the week were not certified.

Correspondence.

"Audi alteram partem."

FOREIGN GRADUATES AND THE MEDICAL BILL.

To the Editor of THE LANCET.

SIR,—Before the proposed Medical Bill becomes law will you not raise your always liberal voice on behalf of foreign graduates? It is proposed to admit to the Register only foreign degrees which grant the right to practise in their respective countries. This will be a great injustice to all holders of German, Dutch, Swiss, and Brussels degrees, which are quite as honourable as those of America, France, Austria, and Italy, although they do not grant a licence to practise, the State Boards performing this function in Holland, Germany, and Switzerland. The precaution of admitting to the Register only such degrees as are licences to practise may be a useful one for future purposes, but it must be a serious injustice to those who have obtained foreign degrees in the past. To admit an American M.D. to the Register and to refuse a Berlin M.D. will be to bring social obloquy upon the holder of the latter, perhaps even amounting to professional ruin, for the unthinking public will naturally believe that the State recognises the one and stamps the other as inadequate. Surely the least the Government can do is to register all existing foreign degrees properly acquired by already registered practitioners. This is not granting the licence to practise to men holding such degrees, for their British diplomas give them already that privilege; it is merely protecting them from grave injustice, annoyance, and serious professional loss.

I am, Sir, yours truly,

Sheffield, May 4th, 1886. H. J. HARDWICKE, M.D.

TWO CASES OF SPINA BIFIDA.

To the Editor of THE LANCET.

SIR,—In the number of the *Dublin Medical Journal* for March last, I find this remark regarding spina bifida: "As a prognosis is nearly all a surgeon can offer to many spina bifida patients, &c." Perhaps it is too much to expect that by this time, after repeated notices in the journals and the issue of the report of the London Clinical Society, all surgeons ought to be aware that the great majority of such can now be saved both from a fatal prognosis and termination, so far as the malformation itself is concerned. Permit me, then, to mention that since the beginning of this year two cases have been sent to me by other medical men, both of which have been successfully treated. The first of these, a lumbar case aged four weeks, was operated on on Feb. 12th, and required only one injection of the iodo-glycerine fluid. The second, aged three weeks, was injected on March 16th, again on March 30th, and again on April 16th. This is a sacral case. In each the tumour is now shrivelled and flat, and the children are now safe from the risk of death due to the deformity. Further details of these cases may be given along with many others, at an early date.

I am, Sir, yours &c.,

Glasgow, May 3rd, 1886. JAMES MORTON.

SYNCOPE IN ADOLESCENTS.

To the Editor of THE LANCET.

SIR,—Can you afford me a little space to call attention to a clinical fact of some moment, which is not sufficiently known, or, if known, not sufficiently acted upon in the interests of science and for the welfare of our patients.

An adolescent was sent to me with the statement that he had nearly fainted on three different days, but he did not become insensible. He came with the request that I would ascertain the cause of his faintness. Cases of the kind have happened to me under similar circumstances so many times, and their relief at first has been so unsatisfactory and difficult, that my experience may be of value to others, for I have established a fact. I have already incidentally referred to this fact in a former communication, but not so clearly or with such certainty as I wish to do now.

When such cases come under my investigation, I immediately and invariably examine the urine, instead of the heart, and generally find it loaded with albumen. It is therefore highly important that the urine should be examined and the kidneys treated by nitro-glycerine, rather than the heart auscultated and tonics prescribed, "because of the patient's extreme debility and feeble action of his heart, &c." as is usually the case. I have sometimes found, on examination of the heart and pulse, that, besides the marked albuminuria, there exists a heaving heart and somewhat rigid arteries—conditions incidental, I believe, in adolescents, more to the "age of puberty" than to the state of the kidneys. But often, as in a case at present under my care, the heart is really feeble and the pulse totally devoid of the signs of a kidney pulse; and had it not now been my invariable rule to examine the urine in preference to the heart, I should doubtless have prescribed a tonic regimen, to the detriment of my patient. The treatment for the two conditions is so opposite that I do not hesitate thus to call special attention to it: a feeble heart and pulse being relieved by tonics, good food, and stimulants; while congested kidneys are alone cured by a hot bath, nitro-glycerine, an aperient, and milk only as a diet. With such treatment this syncope of adolescents is usually cured in a few hours, and with daily prudence for some time there will be no return of syncope or albumen, and the patient will express himself as vigorous again.

I am, Sir, yours obediently,

CLEMENT DUKES, M.D. Lond., &c.,
Rugby. Physician to Rugby School.

THE USE OF COCAINE IN SURGERY.

To the Editor of THE LANCET.

SIR,—If you are not tired of publishing notes of the various merits of cocaine, the following may perhaps be of interest.

I recently had occasion to stitch up a ruptured perineum some weeks after labour. The first step was the insertion between the edges of the tear of a pledget of cotton-wool soaked in a 20 per cent. solution of cocaine. This was at 12.30 P.M. I then proceeded to get the operating table in order and arrange my instruments, which took twenty minutes. At 12.58 P.M. the patient took up her position in the lithotomy attitude, and I was able to inject two minims of the same solution into either side of the rent painlessly. Leaving that to take effect, I occupied myself with other matters, such as threading needles, &c. At 1 P.M. I was able to pare the edges and insert deep sutures without any pain. The operation took

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some time owing to the irregularity of the rent, and at about 1.25 I had to inject one drop here and there. This enabled me to finish the operation, during the whole of which the patient felt no pain. She conversed freely throughout, and I had the great advantage of her intelligent obedience, instead of the usual restlessness of a patient under chloroform. Thus, in time cocaine is economical, as while it is taking effect the surgeon can be attending to matters which, with chloroform or ether, must be seen to beforehand; and there is also a saving in money, as no assistant is required, and the actual cost will bear comparison with that of chloroform. This operation cost me twenty minims of a 20 per cent. solution, or four grains, which, at 1¾*d.* a grain (the present price), comes to 7*d.*

I have also performed circumcision on a young man at a cost of five minims, or one grain, = 1¾*d.* The operation, including the arrangement of the patient and instruments, occupied twenty minutes only. Of course, in this case the original injection of the cocaine—one drop of a 20 per cent. solution into four separate parts of the prepuce—was painful, but if a very fine needle is used the discomfort is trivial.

Another advantage of cocaine (though a decided disadvantage sometimes) is that, whereas œdema coming on after an operation often strains the stitches more than can well be calculated upon or allowed for at the time, the injection of the drug rapidly induces this swelling; and the tension put upon the sutures in tying them will be found suitable to the subsequent condition of the parts.

I look upon cocaine as a special boon to the general practitioner who has to work single-handed or with inefficient assistance.

I am, Sir, yours faithfully,

Tottenham, May 3rd, 1886. A. OGIER WARD, M.B. &c.

"THE PRIZE SYSTEM."

To the Editor of THE LANCET.

SIR,—Your correspondent, "F.R.C.S.," sends you an interesting extract showing Sir Benjamin Brodie's opinion of giving prizes to medical students. In his autobiography he is still more emphatic, and the opinion of a surgeon so successful in the highest sense of the term must carry weight. He says: "I had leisure to make my own observations, to think and reflect. Nor was this style of education peculiar to myself. I remember when Mr. Abernethy complained that Lawrence would not attend lectures. My friends and contemporaries, Jeffreys and Lawrence, took the same course; and so it had been with Nicolson, who was some years in advance of us. I can easily conceive that, if I had been compelled to sit on the benches of a theatre four or five hours daily, or tempted to compete for prizes as students are, and to get crammed for various examinations, my position in life afterwards would have been very different from what it has been in reality."

I am, Sir, yours &c.,

Wimpole-street, May 2nd, 1886. G. BUCKSTON BROWNE.

TRAINED NURSES IN INFECTIOUS CASES.

To the Editor of THE LANCET.

SIR,—The now numerous institutions for the supply of trained private nurses meet a great public want, and I believe that upon the whole they are well managed and deserve the success which they have attained. Having recently had occasion to make inquiries as to the precautions observed by some of them with regard to infectious cases, I find that there is a considerable difference in their practice in this respect. The rules of the Nottingham and Notts Nursing Association—to quote an example—require that a nurse upon leaving an infectious case shall not only undergo a thorough disinfection of person and clothing, but shall remain in quarantine for two weeks before taking charge of another patient. This is as it should be; and similar rules are enforced at Sheffield, and no doubt at many, if not most, other centres. Recent experiments tend to make us very sceptical as to the entire trustworthiness of many of the ordinary processes of disinfection, and in view of the possibility of a nurse herself acquiring the disease or conveying infection in spite of disinfectants, the period of quarantine must be regarded as a wise and necessary precaution. It is, therefore, with some surprise that I find it ignored by at least one institution, nurses being sent, after ordinary disinfection, to new patients immediately after returning from infectious cases.

In one instance which came to my knowledge recently, a nurse returned from a fatal case of diphtheria and was next day sent to take charge of a case at a distance. This second case also subsequently proved to be diphtheria, and ended fatally. The nurse, being questioned as to the nature of the illness of her former patient, asserted that it was "croup." The diagnosis of diphtheria was made within a few hours after the arrival of the nurse, so that it seems highly improbable that the infection was brought by her, but the possibility of this led to inquiries, and thus to the discovery of the facts already stated. How far other nursing institutions share this custom I cannot say, but such laxity is a source of danger, and is unworthy of an institution which appears to enjoy the confidence of the medical profession and the public. Most practitioners would, I think, hesitate knowingly to expose their patients to the risk of being attended by a nurse fresh from an infectious case, especially where they have no means of judging of the efficacy of the safeguards adopted. In the absence of any provision for obtaining the consent of the responsible medical attendant to such a course, it is incumbent upon the managers of nursing institutions to recognise their full responsibility and to take all reasonable measures of precaution.

I am, Sir, yours faithfully,

B. A. WHITELEGGE, M.D., B.Sc.,

May 3rd, 1886. Medical Officer of Health, Nottingham.

"ON THE RATIONAL TREATMENT OF HYDROPHOBIA."

To the Editor of THE LANCET.

SIR,—The medical profession will be under great obligation to Mr. Richards for the timely warning he has given of the dangerous or fatal dose of the snake poison which was advocated in my paper on the Rational Method of Treatment of Hydrophobia in your issue of January last. Unfortunately for my critic, he has set up a phantom to enjoy the self-satisfaction of seeing it knocked down by his missiles, for he ascribes to me a dose which I am innocent of. In my paper referred to above I suggested one drop of the poison, which my critic has transformed into one grain, which is equivalent to three minims or five or six drops of the liquid poison. Thus, having magnified my dose five times, like the true valiant knight of the fable he has hurled down his weapons of assault for my demolition.

My personal thanks are due to him also for the gratuitous offer of enlightening my knowledge on woorara having been used in hydrophobia, but I would not injure his self-esteem by assuring him that I had the fullest consciousness of the fact. Then, in a spirit of *nonchalance* as it were, he kindly passed over "the crude and incorrect physiological action of the poison," as enunciated in my paper, to attack the most important and vulnerable portion he found in it—the dose. Like other critics of his class, he evidently rejoices in finding fault with the tail of a horse to the exclusion of its body and limbs. But perhaps Mr. Richards, who is superintendent of coolies in Goalunda, is not aware of the fact that in diseased states of the system there is a toleration for medicines with opposite physiological actions. Thus, in delirium tremens and diarrhœa a quantity of opium will be admissible which will be poison in a healthy state. Taking, therefore, my recommendation of dose as one drop and in a diseased condition of the body, I do not think I have overshot the mark and suggested to the profession a fatal remedy, with which I have been charged by him.

I am, Sir, yours truly,

Burdwan, April 13th, 1886. G. C. ROY, M.D., F.R.C.S.

LIVERPOOL.

(From our own Correspondent.)

THE SCHOOL OF MEDICINE.

THE Summer Session of the Medical Faculty of the Liverpool University College commenced on the 3rd inst. The staff of lecturers has been augmented by the recent election of Dr. Edward William Hope, assistant medical officer of health to the City and Port of Liverpool, as lecturer on

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Hygiene. Dr. Hope possesses an eminently practical knowledge of the subject, which his appointment gives him daily opportunities of increasing. Mr. Paul, the lecturer on Medical Jurisprudence, has been called upon to make necropsies and to give expert evidence in several recent important trials, and it is hoped that this course of lectures will be made as practically interesting and instructive as similar courses have been in Edinburgh, Aberdeen, and elsewhere. The anatomical rooms are well supplied with subjects, and this class is fairly well attended. The entries of new names is equal to that of former years, which is very satisfactory, as the depressing influences so often alluded to at the present time must have an effect on medical schools.

DRUNK OR DYING.

Another case has been added to the many in which severe injuries to the head have in their symptoms so closely resembled those of alcoholism as to be mistaken for them. An inquest was held on Saturday on the body of a man, forty-seven years of age, who was found at the bottom of some cellar steps on the evening of the 20th ult. When lifted up he was unable to speak, was very sick, and smelt strongly of drink, but showed no signs of any injury whatever. He was removed by the police as drunk and incapable to the nearest bridewell, where he was seen by the surgeon, who certified that he was fit to remain there. Later on he was transferred to the main bridewell, the surgeon of which also saw him and recommended his removal to the workhouse hospital. He was, however, taken before the magistrates, who permitted his removal home by his friends on condition that they would take him home in a cab and procure him medical attendance. He lingered until the 29th, when he died; and on a post-mortem examination being made by Dr. Powell, it was found that the skull was fractured, but that there was no external sign of this whatever. A witness stated before the coroner that he had seen the deceased a short time before he was discovered, and that he was then quite sober. The jury found that the deceased died from fracture of the skull, though how caused there was no evidence to show, and exonerated the police from all blame.

'WATCH AND WATCH."

The recent loss of the *Oregon*, though happily unattended by loss of life so far as she was concerned, was accompanied by the total loss, with all the crew, of the vessel with which she collided. The present time seems opportune for again calling attention to the dangers which must exist so long as the "watch and watch" system continues. The meaning of the latter is that from the time of leaving one port until arrival at another the officers can never have more than four hours' continuous sleep. The natural consequence of such an arrangement must be that they arrive on the "bridge" in a physical condition the very reverse of that wide-awake state in which they ought to be if lights are to be quickly sighted and collisions avoided. The remedy is a very simple one, and has been for a long time adopted in the engine-room generally, and on the bridge in some steamers. It is by having three watches instead of two, and thus enabling the officers and crew to have four hours on duty with eight hours off. By this means sufficient sleep is procured and greater vigilance guaranteed. The continuance of the "watch and watch" duty cannot be justified, and entails an amount of physical strain which might almost be termed cruelty.

THE APPROACHING ROYAL VISIT.

In view of Her Majesty's visit to this city, which now draws near, the Committee appointed by the City Council to make arrangements for the reception of Her Majesty have wisely issued a notice warning all owners and occupiers of property along the line of route to carefully inspect and secure all projecting balconies and all projections upon which people are likely to congregate. The city engineer is authorised to give all reasonable assistance and advice, and thus by this precaution many accidents may be averted. At the last meeting of the Select Vestry it was resolved to give the inmates of the workhouse a substantial dinner of roast beef and potatoes on Wednesday next in honour of the Queen's visit; and also that they should have some pleasant entertainment in the evening of that day.

ELECTION OF A LANCASHIRE CORONER.

Dr. Joseph Bray Gilbertson has been duly elected coroner for the Hundreds of Amounderness and Leyland. This gentleman, who has acted as deputy-coroner to his late brother, graduated M.D. at Aberdeen in 1859, became a member of the Royal College of Physicians of Edinburgh in 1878, having taken the qualifications M.R.C.S. and L.S.A. Lond. in 1849 and 1850. He is a Justice of the Peace for Preston, and Physician to the Preston and County of Lancashire Infirmary.

Liverpool, May 4th.

MANCHESTER.

(From our own Correspondent.)

THE VICTORIA UNIVERSITY.

THIS University may, ere long, expect to have its affiliated colleges increased by the addition of the Yorkshire College at Leeds. On the 14th ult. a special meeting of the Board of Governors of that College was held, for the purpose of considering the recommendation of the Council: "That steps should now be taken to secure the admission of the College to the Victoria University." It was stated that the capital of the College had increased during the past ten years from £13,276 to £146,000. A resolution was passed: "That the Council be authorised to take steps to secure the admission of the College to the University so soon as the capital funds of the College shall have been increased to such an extent as will provide a sufficient income to cover the increased expenditure to be entailed upon the College by the affiliation." It was estimated that the increased expenditure will amount to only £250 a year, so that this sum should soon be secured. Old Owens College students will regret to hear of the death of one of the oldest of its teachers, Professor Theodores. His name was associated with the College in its earlier and humbler days, long before the handsome pile of buildings had arisen in Oxford-road. Few men in this country had a more intimate knowledge of Oriental languages, and it is stated that he was acquainted with upwards of forty modern languages.

THE MEDICO-ETHICAL SOCIETY.

Among the objects for which this Society ostensibly exists is "the promotion of good-fellowship among the members of the profession," and it has during the past session very successfully prosecuted this part of its *raison d'être*. Last week it held the second social meeting, at which business was soon disposed of to make room for more convivial matters. Judging from the attendance, these social nights are appreciated by the members.

MEDICAL OFFICERS OF HEALTH.

Amongst the many topics brought forward by the Manchester and Salford Sanitary Association for consideration and attention has lately been that of the *locus standi* of medical officers of health, and the committee have forwarded a petition to the Local Government Board pointing out the disabilities which those officials at present labour under, and asking the Board to take steps on certain lines indicated by the Association to secure the appointment of properly qualified men for this work throughout the country, and to render their tenure of office more secure.

THE ROYAL INFIRMARY.

The Board of the Royal Infirmary have sanctioned, on the recommendation of the Medical Committee, the formation of a new appointment—viz., a chloroformist. Hitherto these duties have been undertaken by the assistant medical officers, or, in their absence, by one or other of the house-surgeons. The new post is to be a non-resident one, and have attached to it a stipend of £50 per annum.

PIT-BROW WOMEN.

Much local interest has been caused by the proposals in Parliament to make illegal the employment of women on the pit-brow of coal mines, and much correspondence, both for and against, has taken place in the local papers on the subject. Judging from what one sees and hears, the desire of the women themselves is strongly in favour of being allowed to continue at the work, and although, to a stranger passing, for instance, on the railway through the Wigan district, the first sight of these women attired in semi-masculine costume is likely to produce a strong feeling against such an employment, yet a closer acquaintance with the workers and inquiries into their living and habits show that it com-

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pares favourably with that of female mill hands and factory operatives, while for health and physical vigour the advantage is undoubtedly on the side of the colliery women.

HOSPITAL SATURDAY AND SUNDAY.

The total sums received this year from the hospital collections amount to £7484, £4605 11*s.* being from the Hospital Sunday Fund, and £2878 9*s.* from the Saturday Fund. Considering the large number of unemployed during the past winter, and the exceptional demands upon the generosity of the charitable part of the community, it is satisfactory that the amount has reached so much.

During the past few weeks measles has become very prevalent in some parts of the district and the adjoining township of Withington, and the schools have, by order of the sanitary authority, been closed until the middle of this month.

Manchester, May 3rd.

EDINBURGH.

(From our own Correspondent.)

OPENING OF THE SUMMER SESSION.

THE summer session in the Edinburgh Medical School was opened at the beginning of this week, and it is satisfactory to learn that the number of students flocking to the city is still constantly on the increase. The number of courses of instruction, both practical and systematic, is also considerably augmented. Amongst these additions may be noted Dr. Berry Hart's course on Midwifery and Diseases of Women, at the Royal College of Surgeons; Dr. Caird's course of Operative and Practical Surgery; and Dr. Barbour's course on Obstetrics and Gynæcology. These, and the large series of other courses to which they are additions, form the basis of the far-spreading system of extra-mural education which is so largely developed in Edinburgh, and which, by its active competition with the corresponding curricula within the University, have done much to maintain the efficiency of university teaching. These valuable additions to the strength of the extra-academical school must, therefore, be looked upon as bearing most favourably and directly upon the maintenance of a high standard in our medical education.

IRELAND.

(From our own Correspondent.)

ROYAL COLLEGE OF SURGEONS IN IRELAND.

THE banquet given last week by the President, Sir Charles Cameron, was a magnificent success, and 186 guests sat down to dinner, which was sumptuously served. The toasts were numerous, and included "The Municipality," proposed by the Vice-President of the College, Mr. William Stokes, and "The Medical Licensing Bodies," by Mr. Macnamara. The latter toast was responded to by Sir George Paget, K.C.B., the Provost of Trinity College, the President of the College of Physicians, and the Governor of the Apothecaries' Hall. The *ménu* cards were very elaborate, and, besides bearing the name of each individual guest, had three engravings—viz., the Pole Gate Guildhall of Dublin Surgeons, sixteenth century; the Royal College of Surgeons, Ireland, in 1810 and 1886. The statue of Mr. William Dease erected by his grandson, Mr. O'Reilly Dease, D.L., which was unveiled last week, is placed, as has been previously mentioned, in the entrance hall of the College. It bears the following inscription:—"William Dease, one of the Founders of this College, and afterwards its President, and first Professor of Surgery. Obiit 1798. Sir Charles A. Cameron, Knt., President; William Stokes, Vice-President; William Colles, Secretary. April, 1886."

CARIES OF THE SPINAL COLUMN.

Mr. William A. Elliott, of this city, has had more experience in treating deformities to which the human frame is liable than almost any other surgeon practising in Dublin, and therefore reference to a monograph lately published by him on caries of the spine may be considered as worth mentioning. As Mr. Elliott truly remarks, in no department of surgery has there existed more discrepancy of opinion than respecting the general treatment of spinal caries, but the greatest preponderance of opinion is in favour of the adoption of some form of local counter-irritation, and the use of some mechanical appliance to afford support to the diseased spine. The local treatment Mr. Elliot recommends is the application of small blisters applied at each side of the spinous process of the affected part, and left on only to allow the skin to be reddened, and not intended to produce vesication. As regards abscesses connected with the disease, he adopts the method for opening them recommended by Abernethy—that is, a valvular incision. He considers that mechanical support should be used early, and he points out that the most difficult portion of the spinal column to retain motionless is that which extends from the first cervical down to about the sixth dorsal vertebra. The mechanical appliance he adopts in caries of the cervical vertebræ is made of thick leather, known as "tanned," but not curried, which, before using, is soaked in warm water, so as to make it pliable. The leather is then cut so as to pass well over the shoulders, chest, and back. It may then be made to pass upwards and round the neck, and sufficiently high to allow the occiput and lower jaw to rest upon it. A bandage is then applied over the entire surface of the leather, on the removal of which an accurate mould will be made of the parts; and, when perfectly dry, the instrument should be lined with thick chamois leather, with straps and buckles to keep it firmly on the patient. When the disease is situated in the upper dorsal vertebræ, the appliance can be made available by attaching to its lower and back part a piece of the same description of leather sufficiently long to pass down to the lower part of the dorsal vertebræ, round the body, and made to lace in front; while the corset for cases of caries of the dorsal or lumbar region should nearly close in front, and should extend from the axillæ downwards over each crista ilii.

CORK HOSPITAL FOR WOMEN AND CHILDREN.

The new building was opened last August, and the number of applicants for admission since the new hospital has got into working order shows that the extra accommodation has been taken advantage of by the public. During the past year 203 intern patients were treated in the wards, and the average cost of each bed came to £39 5*s.* Towards the expenses of the building the necessary amount has been subscribed, with the exception of about £400, while Mr. Crawford has generously assisted the board by a donation of £440 towards the furnishing of the new institution.

THE RIVER LIFFEY.

A member of the Dublin Corporation has given notice that at the next meeting he will move for a committee of twenty members to report to the Council on the practicability of carrying out a scheme of intercepting sewers, at a cost not exceeding £120,000.

Dublin, May 4th.

BELFAST.

(From our own Correspondent.)

JOHN WOODS BECK, M.D.

IT is with regret I have to announce the death of Dr. Beck, which took place at his residence in Belfast on May 2nd. Dr. Beck studied at the University of Glasgow, where he graduated in 1839, and since that time he has been engaged in practice in Belfast, so that he was one of our oldest medical practitioners. Prior to the establishment of the Irish dispensaries in 1852 he was one of the Poor-law officers, and during the severe epidemics of cholera which visited this town he took an active part. Although very well known in local circles, Dr. Beck came little before the public. He was most popular among the poor and enjoyed a good reputation as an obstetrician, and was much consulted by them in reference to children's ailments. Dr. Beck had been unwell for the past three months, and died in his sixty-seventh year. One of his sons, Dr. F. E. Beck, is engaged in active practice in Belfast.

THE RIVER LAGAN NUISANCE.

A very influential deputation appeared before our Town Council on Saturday in reference to the Lagan nuisance. This deputation came, first, to express dissatisfaction that no direct provision had been made in the Main Drainage

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Bill for the purpose of cleansing the river; secondly, to urge the Town Council to carry out immediately the connection of the Ballynafeigh sewer with that of the Lagan village in accordance with the original plans; and, next, to protest against Clause 75 of the Main Drainage Bill, which, it was contended, throws upon the borough at large the expense of completing certain sewers, the cost of which should fall on the owners of property in the immediate locality. One of the deputation referred to the triumphant return of Dr. Graham, Alderman in Cromac ward, against the formidable opposition of a gentleman who had been Mayor of Belfast, as one of the proofs of feeling which existed on this subject among the inhabitants. The deputation having been heard, it was proposed to refer their views to a committee, when Alderman Graham, who was returned on the Public Health platform, moved an amendment that orders be given for the immediate completion of Ballynafeigh and Lagan district sewers, and that the executive sanitary inspector be instructed to examine into and report on the sanitary state of the river Lagan, also as to the best means of affording immediate relief, and the probable cost of so doing. Dr. Graham pointed out that, even if the new works should be completed in seven years, the greater part of the sewage now discharged into the river would still remain, and that vast quantity of filthy sludge and fæcal matter would be a source of disease for twenty years after. In the debate which followed, one of the speakers advocated a plan of removing the nuisance—viz., to narrow the stream and put on two sets of floodgates to keep the water always at high level, and then, when the gates were opened to admit lighters, the scour would be so great as to carry the offensive matter out to sea. Dr. Graham's amendment was defeated by twenty-five votes to six, and the matter now stands referred to the Improvement Law and Public Health Committees. It is to be hoped that our municipal fathers will give some real attention to this intolerable nuisance, which is yearly getting worse, and which is certainly a disgrace to a town of such size and prosperity as Belfast.

HEALTH OF BELFAST.

Dr. Browne, officer of health, states that since his last monthly report the medical officers of health of the several dispensary districts have returned only four cases of zymotic diseases as having occurred among the poor—viz., two of typhus and two of scarlet fever. The total births registered in the four weeks ending the 25th ult. amounted to 541, the total deaths to 450, showing a natural increase in our population of 91 individuals. There were 77 deaths among infants under one year of age, and 78 of persons at or above sixty years of age. The average death-rate from all causes in the month was 26·1, from lung disease 11·9, and from zymotic diseases 1·8, in a population estimated at 221,000. The death-rate in children under one year of age was 4·5, and amongst persons at and above sixty years 4·6. The deaths from zymotic diseases show a death-rate of 1·8, a very low figure.

THE VACANT CORONERSHIP FOR SOUTH ANTRIM.

Dr. M'Ninch (Ballyclare), Dr. Spearing, Dr. Taggart, and Dr. J. J. Adams (Antrim) are candidates for the vacancy caused by the death of Surgeon-Major Taggart. Their election addresses have appeared, and a very active canvass of the voters is being made.

PARIS.

(From our own Correspondent.)

THE ASSOCIATION GÉNÉRALE DES MÉDECINS DE FRANCE.

THE twenty-seventh annual meeting of the Association Générale des Médecins de France, which took place on Sunday in the large ampitheatre of the Assistance Publique, was unusually well attended, not only by the Paris members of the Association, but also by a great number from the provinces. There were two circumstances that probably formed the attraction of the meeting: the election of a President and the promotion as Commander of the Legion of Honour of M. Henri Roger, whose tenure of office as President of the Association had just expired. M. Roger has, however, been almost unanimously re-elected for another period of five years, and as soon as he was proclaimed he returned to the seat he had just vacated. He had on his right Baron Larrey, and on his left the celebrated Ricord, who, notwithstanding that he is in his eighty-sixth year, was looking hale and vigorous." He certainly has not changed much in features during the last twenty years; and were it not for a slight stoop and a little slowness in his gait, he would never be credited with his weight of years. He has scarcely a wrinkle on his face, and his hair is still luxuriant, being of an auburn colour, and almost entirely unmixed with white. In reading his report for the past year, Dr. Foville, the General Secretary of the Association, took the opportunity of congratulating M. Roger, not only on his re-election as President, but also on his promotion to Commander of the Legion of Honour. In referring to this latter circumstance, he drew the attention of his hearers to the fact that any Government, of whatsoever character, would in honouring such a man honour itself. The General Secretary, as well as two or three other speakers who followed him, also attested to the prosperous condition of the Association in every respect. Its great utility has been pointed out, and as it possesses a capital amounting to a million and a half of francs, or £60,000, the Association will now be enabled to extend succour to a greater number of applicants (who are, unfortunately, on the increase), which is the principal object of the Association.

M. PASTEUR.

I have had an opportunity of revisiting M. Pasteur's laboratory in the Rue d'Ulm, under the following circumstances:—A young lady, a daughter of Mr. Morisini, the well-known banker of New York who was said to have been bitten by a mad dog, was brought to Paris to undergo M. Pasteur's anti-rabic treatment. The young lady was accompanied by her parents and by Dr. Bulkley, the celebrated dermatologist of New York, who asked me to introduce him to M. Pasteur. This I gladly consented to do, and on Monday morning, the 3rd inst., the day after their arrival in Paris, the young lady was inoculated with the anti-rabic fluid. But before the operation was performed M. Pasteur, as is his wont, inquired particularly into the circumstances of the case. Dr. Bulkley furnished the necessary information and produced a certificate from a well-known veterinary surgeon testifying to the dog having been really affected with rabies. The young lady was bitten on April 14th on the space between the root of the nose and the inner angle of the right eye, which was soon after freely cauterised with the nitrate of silver by Dr. Bulkley. Nineteen days had therefore elapsed between the accident and the inoculation. During my visit at the laboratory it struck me that the hydrophobia scare had not lessened, for the place was crowded with applicants from all parts of the world. M. Pasteur is as zealous as ever, and I learn that the Emperor of Brazil has conferred on the eminent biologist the Order of the Rose.

Dr. Ranvier has been elected Member of the Academy of Medicine, and M. Chauveau Member of the Academy of Sciences in the Veterinary Section, in the room of M. Bouley, deceased.

Paris, May 5th.

THE SERVICES.

WAR OFFICE.—Army Medical Staff: Brigade Surgeon Samuel Fuller, to be Deputy Surgeon-General, vice J. O'Nial, C.B., promoted; Brigade Surgeon Thomas Norton Hoysted, to be Deputy Surgeon-General, vice W. Skeen, M.D., deceased; Surgeon-Major John James Chappell, M.D., to be Brigade Surgeon, vice S. Fuller; Surgeon-Major William Cherry, to be Brigade Surgeon, vice T. N. Hoysted.

ADMIRALTY.—The following notice is substituted for that which appeared in our columns on the 17th ult.:—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Fleet Surgeon William Connolly, M.D., has been placed on the retired list, with permission to assume the rank of Deputy Inspector-General of Hospitals and Fleets.

The following appointment has been made:—Thomas S. Morley, to be Surgeon and Agent for the districts of Burton-on-Humber, New Holland, and Ferriby.

ROYAL NAVAL ARTILLERY VOLUNTEERS (BRISTOL BRIGADE).—William Edwd. Pountney, M.D., to be Surgeon.

THE Leicester Board of Guardians on the 4th inst. passed a resolution, by twenty-six to eight, forbidding prosecutions under the Vaccination Acts.

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ROYAL COLLEGE OF PHYSICIANS.

AT the ordinary Comitia of Fellows of the College on the 6th inst., Sir W. Jenner, Bart., President in the chair, the following gentlemen were elected to the Fellowship:—Edward Seaton, M.D. Lond.; Heinrich Port, M.D. Erlangen; Edwin Rickards, M.B. Oxon.; John Abercrombie, jun., M.D. Camb.; James Kingston Fowler, M.D. Camb.; Nestor Isidore Charles Tirard, M.D. Lond.; Donald McAlister, M.D. Camb.; George Gulliver, M.B. Oxon. Dr. Dyce Duckworth, Treasurer of the College, was elected Representative of the College in the General Medical Council, in the room of Sir H. Pitman, resigned.

The Murchison Scholarship was awarded to Mr. John Stuart Hutton, of St. Thomas's Hospital. There were eleven candidates, all of high order of merit. The President, in making the award, referred to the character and work of Dr. Murchison, in whose memory the scholarship was founded.

A communication from the Association of Persons holding Sanitary Science Certificates, requesting the aid of the College in procuring for the holders of such certificates a right to registration, was referred to the Medical Bill Committee. A communication was also received through the Foreign Office on behalf of a proposed International Congress in Hydrology and Climatology to be held at Biarritz in October.

The Medical Bill Committee presented an *ad interim* report, which was adopted. It pointed out that the 3rd clause of the Bill would deprive the College of its privilege of granting licences to practise medicine, surgery, and midwifery, and recommended that a deputation should be sent to Sir Lyon Playfair on the subject, and that Sir R. Webster, M.P., Sir H. Holland, M.P., and Dr. Farquharson, M.P., be requested to watch the progress of the Bill.

The proposals of Dr. West that standing committees should be appointed upon (1) educational matters, (2) matters of professional interest, and (3) matters of public interest, were then discussed; and the report of the Council, which was unfavourable to the scheme, was carried by a large majority.

MEDICAL NOTES IN PARLIAMENT.

Medical Acts Amendment Bill,

IN the House of Commons, on the 3rd inst., in moving the second reading of the Medical Acts Amendment Bill, Sir Lyon Playfair said that since 1870 twenty-one or twenty-two Bills upon the same subject had been brought before the House, but owing to the interests affected, and the jealousies of the different medical bodies, those Bills had all failed. He trusted that the present Bill would settle all the difficulties which had so much disturbed the minds of medical men. There were 16,000 medical men throughout the country. Those men went upon the Register and practised medicine through the means of nineteen bodies. Those bodies were partly universities throughout the kingdom, but they were also licensing corporations, such as the College of Surgeons, the College of Physicians, and the Apothecaries' Company. At present, through any of those bodies, medical men might go upon the Register and practise, and receive fifty or sixty titles to practise, and a bewildered public had no idea whether those titles signified an efficient qualification for a medical man. A surgeon might attend medical cases, such as measles and scarlatina, without having passed a medical examination at all; or a medical man might go and cut off a leg without having passed an examination in surgery. A surgeon might practise medicine, and a physician surgery, without knowing anything about midwifery. That was the state of the law, and it was a very bad state. In England the College of Physicians and the College of Surgeons had combined to have one qualifying examination both in medicine and surgery. That was a voluntary and not a statutory combination. In Scotland the same thing had been done; but in Ireland no combination had yet been effected. The leading principle of the Bill was this—no man in future could get upon the profession without a qualifying examination, which meant that a man must pass a thorough examination in medicine, surgery, and midwifery. The universities might, under this Bill, continue to give the qualifications they now bestowed, but the corporations, if they desired to form a qualifying combination, must combine together, so that the College of Surgeons would unite with the College of Physicians, and both give a qualifying examination over the area necessary for the medical profession. The Bill provided that the Medical Council, which was established in 1858, should have the power of adding a sufficient number of examiners in order that they might get a qualifying examination. By this Bill four popular representatives, two from England and one each from Scotland and Ireland, would be elected to the Council by the medical men themselves. The Medical Council would also have power to send inspectors to see that the examinations were sufficient and efficient, and if they found a body not doing its duty, they might, with the consent of the Privy Council, disqualify that body from giving qualifications. The Bill further provided that properly qualified colonial medical practitioners should be received on the Register, provided that there was reciprocity between ourselves and the colonies in this matter. He believed that the Bill would settle a long and vexed question, and would enable only those to get upon the Register who were qualified by education and examination in the three great branches of the medical profession.—Sir H. Holland expressed his regret that it had not been thought opportune to make a consolidation of the Acts.—Dr. Foster said that he supported the second reading on behalf of a large body of medical practitioners, but they did not support it so cordially as they would a larger measure of medical reform. For twenty-eight years they had been struggling to amend the Act of 1858; they had seen the failure of many attempts at legislation; and now they were naturally disappointed that the Bill was not wider in its provisions and more sweeping in its reform. For twenty-eight years the profession had been taxed to keep up a Council which had thwarted their desires, and now the representation that was given was inadequate. The three parts of the United Kingdom were disproportionately represented in the proposed Council, having regard to the medical population of each part. England, with 16,978 practitioners, was to have only two directly elected representatives; Scotland, with 2372, one representative; and Ireland, with 2501, one representative. England ought to have four and the other countries one each. Altogether, including the corporate bodies, as the Bill stood, Ireland would have seven and Scotland eight representatives out of the twenty-eight.—Dr. Farquharson said that he was of opinion that many of the charges which had been brought against the medical corporations, particularly in Scotland, had not been borne out by the facts. It was certainly an anomalous state of things that nineteen examining bodies should be allowed to compete for the right of conferring a qualification on a practitioner. He concurred generally with the remarks of the previous speaker as to the constitution of the General Medical Council. It had been a great grievance on the part of the medical profession that they had had no direct representation on this body. The Council might be cut down one-half with great advantage.—Sir H. Roscoe supported the second reading of the Bill. In one respect it had a distinct advantage over its predecessors. It did not suggest any cut-and-dried examination, but by the influence of the Medical Council it endeavoured to bring all the various medical examining boards into harmony, and to raise and establish a standard in each. He was pleased to find that the universities were to have a fair share of representation. It was important to bear in mind that it was teaching and not examination which created the medical man, and every advantage ought to be given to the university in which these subjects were taught according to the highest modern standpoint. While he was sure that the Bill would be received with great satisfaction, he felt that the medical profession was not so fully represented as it deserved to be.—Mr. Addison pointed out that under the present law any man could practise both medicine and surgery if he did not assume a qualification. The Bill before the House did not propose to deal with such a person, and therefore he considered it was defective.—Mr. Bryce ex-

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pressed his belief that the Bill would receive the support of every member of the Commission which inquired into the subject a short time since. With regard to the remarks of Mr. Addison, he pointed out that the Bill did not propose to deal with such a case as that to which he had referred. The Government had not thought it wise to load the measure with such a controversial provision.—The Bill was then read a second time.

The Vaccination Laws.

On the 4th inst., Mr. Robinson asked the Secretary of State for the Home Department whether it was true that Charles Hawyard, mechanic, of Ashford, Kent, had been summoned before the magistrates of that town fourteen times within twelve months, and fined seven times by them for neglect to vaccinate one and the same child; whether he would remit the seventh penalty of 20*s.* and 12*s.* costs imposed on April 13th; and whether he would lay upon the table of the House a letter, dated March 18th last, addressed to the Lord Chancellor by Mr. Baker, who was counsel in the case on the 13th summons, calling attention to the illegality of the proceedings. Mr. Childers, in reply, stated that, as far as any remission of penalty was concerned, he saw no reason to recommend the indulgence of the Crown in favour of any person who persistently refuses to comply with the law. He would ask the Lord Chancellor whether he had any objection to lay the letter referred to upon the table, but doubted whether his doing so would be in accordance with custom.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on April 29th:

Blacker, Edward Spencer, Brighton.
East, Charles Harry, L.S.A., Tittering.
Hains, William Robert Hall, L.R.C.P.I., Plymouth.
Hall, William George, L.S.A., Swindon.
Hubbard, Daniel Lovett, L.S.A., The Grove, Clapham.
Jones, George Burnett Mander, L.R.C.P. Lond., Sydney, N.S.W.
Leech, Arthur Herbert, L.S.A., Woolpit, Suffolk.
Morgan, James Campbell, L.R.C.P. Lond., Blackheath.
Noyes, Alexander Wellesley Finch, L.R.C.P. Lond., Melbourne.
Paine, William Henry, L.S.A., Lewisham.
Paul, George W. Frederic, L.R.C.P. Lond., Ladbroke-grove-road.
Pearson, George Kenneth, L.R.C.P. Lond., St. Peter's-park.
Reddall, Osborne Henry, L.R.C.P. Lond., Denmark-park.
Spiller, Walter Charles, M.B. Edin., Trinity-square.
Stubbs, Percy Belford Travers, L.S.A., Canonbury.

Admitted on April 30th:—

Alexander, Sidney Robert, L.S.A., Upper Norwood.
Anderson, Reginald Beam, L.S.A., Bodmin.
Dimmock, Augustus Frederick, L.S.A., Ely.
Drukt, Arthur Barthold, L.S.A., West Kensington-park.
Ellis, William McDonogh, L.R.C.P. Lond., Lee.
Evans, Charles Silvester, L.S.A., Fentiman-road.
Fletcher, Thomas Johnson, M.B., Northwich.
Gilbert, Clarence Edwin Lloyd, L.R.C.P.I., Paddington.
Haydon, Hillyard William, L.S.A., Highgate.
Pope, Henry Alexander Lepthairia, L.S.A., Donegal.
Pugh, John Williamson, L.S.A., Llabon.
Simpson, George Augustus Garry, L.S.A., Warwick-road.
Toogood, Frederick Sherman, L.S.A., Southampton.
Wilson, John Robert, Caistow, Lincs.

Admitted on May 3rd:—

Buckland, Sydney Charles, Wimbledon-park.
Gage-Brown, Charles Herbert, M.B. Edin., Sloane-street.
Hildyard, Robert Loxham, L.S.A., Newcastle-on-Tyne.
Peake, Solomon, L.S.A., Coventry.
Potts, Walter Alfred Beevor, L.S.A., Amersham.
Shackleton, Thomas Francis, L.S.A., Catford Bridge.
Smith, Henry Craven, L.R.C.P. Lond., Torquay.
Sealy, Francis Marmaduke, L.S.A., Godberton.
Turner, Henry Sweetman, Wandsworth-common.
Williams, David, L.S.A., Carmarthen.
Wright, Alfred John, L.S.A., Mackfield-terrace.

Admitted on May 4th:—

Baumgartner, Henry Spelman, L.S.A., Newcastle-on-Tyne.
Bullen, Frederick St. John, L.S.A., Dulwich-road.
Gaston, Harry Percival, L.S.A., Nettlebed.
Gaudin, Francis Neel, L.S.A., Staines.
Locke, George, L.S.A., Kingsland-road.
Lucy, Reginald Horace, M.B. Edin., Worcester.
Norris, Edwin John, L.R.C.P. Lond., St. Peter's-park.
Ozzard, Albert Tronson, Southsea.
Vernon, Arthur, L.S.A., Macauly-road.
Wheatley, James, L.S.A., Huddersfield.

There were 265 candidates for this examination, of whom 90 obtained their diplomas; 72 were approved in Surgery, and when qualified in Medicine and Midwifery will be admitted Members; 35 candidates were referred for three months, 60 for six months, 4 for four months, and 4 for twelve months; 67 candidates, having previously passed in Surgery, and having passed in Medicine and Midwifery, were also admitted Members.

UNIVERSITY OF CAMBRIDGE.—At a congregation held on April 29th the degree of M.D. was conferred on

Henry Roxburgh Fuller, Gonville and Caius.

And the degree of M.B. on

George Turner, non-collegiate.

UNIVERSITY OF DURHAM.—At the recent examination for certificates of proficiency in Sanitary Science, the following satisfied the examiners:—

Arnold, Ernest Charles, M.R.C.S.
Codd, Arthur Frederick Gambell, M.R.C.S.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—At the April sittings of the examiners the following candidates have been admitted Licentiates in Surgery:—

J. W. Kenrick, W. C. Leitch, Murdoch Mackenzie, and M. M. Williams, Glasgow Medical School; Joseph Robinson, Edinburgh Medical School; J. W. Lichfield, Charing-cross Hospital; Fred. Stephenson, Owens College; G. F. C. Gardiner, Bristol School.

The following candidates have been admitted Licentiates in Dental Surgery:—

Matthew H. Nisbet, Glasgow; J. Spotswood and F. Dale, Sheffield.

SOCIETY OF APOTHECARIES.—The following gentlemen passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on April 29th:—

Gaudin, Francis Neel, Clydesdale, Staines.
Lewis, Philip King, Adelaide-road.
Wright, Alfred John, Markfield, Leicester.

ON the 3rd inst., a Fancy Fair was opened in aid of the funds of the North-West London Hospital, Kentish-town-road.

THE guardians of the Lewisham Union have been recommended by the Local Government Board to purchase land for building an infirmary.

BERLIN CHARITE HOSPITAL.—The building of the new clinic for children's diseases in connexion with the Charité Hospital in Berlin is about to be commenced.

THE Councils-General of the various French Departments have voted sums of money for the establishment of the proposed Pasteur Institute for the treatment of rabies.

THE death is announced of Dr. C. H. Huxtable, of Auckland, New Zealand, from the effects of chloroform which he had inhaled, as was his custom, for the purpose of procuring sleep.

AT a meeting held at Hastings on the 4th inst., it was reported that a sum sufficient to warrant the committee in formally taking over certain premises, which had been presented for the purpose, as a convalescent home, and opening them as such, had been received.

ON the 4th inst., Mr. D. E. Jones, L.R.C.P., F.R.C.S. Ed., Mayor of Cardiff, turned the first sod of the new series of great waterworks to be constructed in the Taff Valley, near Brecon Beacons, at a total cost of over £300,000.

TESTIMONIAL TO DR. TUCKWELL OF OXFORD.—On Wednesday, April 28th, at the Radcliffe Infirmary, a testimonial was presented to H. M. Tuckwell, M.D., F.R.C.P., by the medical men of Oxford and the surrounding district, together with a few of his old fellow-students and friends, teachers at St. Bartholomew's Hospital. The testimonial took the form of a very handsome gold minute repeater watch, with a choicely-bound presentation volume, containing a short address in the names of the seventy-three medical men who had subscribed. The address ran as follows:—"We,

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the undersigned members of the medical profession, desrei to convey to Dr. Tuckwell an expression of the regard we have for him as a physician, whose generous and straightforward conduct has done much to elevate the tone of our profession. We wish to express our sincere regret at his retirement from practice, and more especially for the ailment which has necessitated his doing so. We beg his acceptance of this watch as a token of our esteem and sympathy."

WESTMINSTER HOSPITAL MEDICAL SCHOOL (Winter Session).—The following prizes have been awarded: Treasurer's Prize, Mr. L. Lewis; President's Prize, J. R. Plant; Prizes in Chemistry, L. Lewis and E. J. Pritchard; in Medicine, H. B. Brackenbury; in Surgery, C. Burt.

METROPOLITAN FREE HOSPITAL.—The Prince and Princess of Wales have consented to open the new building for the Metropolitan Free Hospital now approaching completion in the Kingsland-road. The ceremony will take place during the ensuing summer, at a date to be fixed by their Royal Highnesses.

ON the 17th and following two days, it is intended to hold at Prince's Hall, Piccadilly, a bazaar in aid of Morley House Workman's Seaside Convalescent Home. The sum needed to remove the debt on the purchase of the building is £1600, which amount it is confidently anticipated will be obtained.

TRICHINOSIS.—It is stated by a Bavarian medical journal that more than thirty persons have been attacked by trichinosis, in consequence of eating infected meat. In Wandsbeck also there has been an outbreak of the same disease, two persons having died of some thirty who have shown symptoms of trichinosis.

HOSPITAL SATURDAY FUND.—At a meeting of the board of delegates of this fund on the 1st inst., it was announced that the ladies' outdoor collection would be held on July 17th next, the third Saturday in the month, as last year the earlier time of the street collection and an increased number of collectors resulted in a large increase in the total amount realised.

OLD AGE IN ST. PETERSBURG POORHOUSE.—According to the *Novosti* a man has just died in the St. Petersburg poorhouse at the age of 122; he had been an inmate since 1818. He retained his senses to the last. Indeed, it was only about four years ago that he seemed to fail at all, having till then enjoyed excellent health. There is still living in the poorhouse a soldier's wife, who is shown by documentary evidence to be fully 110 years of age.

ST. JOHN AMBULANCE ASSOCIATION.—A course of ambulance lectures (first aid) for ladies was commenced in Sunderland some time ago, and has just been concluded. The class has been conducted by Mr. W. Percy Blumer, F.R.C.S. Edin., and has been attended by a very large number of ladies, who have so enthusiastically entered into the work that upwards of fifty will present themselves at the examination which is about to be held. At the close of the last meeting Mr. Percy Blumer was presented by the ladies with a case of eye instruments as a token of their respect and esteem and as an expression of their gratitude.

TEMPERANCE CONGRESS AT CROYDON.—This congress was opened on the 4th inst., when, after the inaugural address by Canon Ellison, Dr. Alfred Carpenter delivered an address, in the course of which he detailed the teachings of science as to the true chemical and physiological action of alcohol, and pointed out from authoritative statistics that those who abstained altogether suffered less from ill health and had longer lives than moderate drinkers. Dr. James Ridge read a paper entitled, "Is Total abstinence Reasonable?" and Dr. Norman Kerr followed with a paper on "What we know about Alcohol." Amongst the speakers in the evening was Dr. B. W. Richardson.

THE RECENT VISIT OF THE PRINCESS OF WALES TO TORQUAY.—In reply to a communication on the subject of the proposed public commemoration of her visit to Torquay, the Princess of Wales has stated that she is extremely gratified at this expression of goodwill on the part of the people of Torquay, and that if her own wishes were consulted she would like the memorial to take the form of a ward in the hospital, or of any movement which would prove generally beneficial to the people. Her Royal Highness, however, prefers that whatever is done should emanate from the inhabitants themselves, and that they should do what they consider will be best for the welfare of the town.

ROYAL INSTITUTION OF GREAT BRITAIN.—At the annual meeting of this institution, held on May 1st, the annual report of the Committee of Visitors for the year 1885 was read and adopted. The real and funded property now amounts to above £85,000, entirely derived from the contributions and donations of the members. Twenty-six new members paid their admission fees in 1885. Sixty-three lectures and nineteen evening discourses were delivered in 1885. The books and pamphlets presented in 1885 amounted to about 354 volumes, making, with 464 volumes (including periodicals bound) purchased by the managers, a total of 818 volumes added to the library in the year. The election of officers for the ensuing year terminated the proceedings.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—The following gentlemen have been elected Examiners for the ensuing year:—Anatomy and Comparative Anatomy: John Barton, F. A. Nixon, Wm. Thornley Stoker, and Robert L. Swan. Surgery and Surgical Pathology: Charles Ball, E. Stamer O'Grady, William Thomson, and Richard Francis Tobin. Physiology and Histology: E. Dillon Mapother and John A. Scott. Medicine and Therapeutics: M. A. Boyd and R. Hayes. Physics, Chemistry, and Medical Jurisprudence: J. D. Pratt and Samuel H. Webb. Materia Medica, Pharmacy, and Botany: P. C. Baxter and C. H. Robinson. Midwifery and Gynæcology: J. J. Cranny and Henry Croly. Ophthalmology: Arthur Benson and Henry R. Swanzy. Diploma in Midwifery: J. J. Cranny, S. Mason, and Wm. Roe. Preliminary Examination in General Education: F. Davys, Robert Morton, and H. C. Tweedy. Licence in Dentistry: A. W. Baker, Daniel Corbett, jun., Henry Gray Croly, R. Hazelton, Edward Stamer O'Grady, and Henry G. Sherlock.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

AGANOOR, M. S. P., M.B., C.M.Ed., has been appointed House-Surgeon to Gray's Hospital, Elgin, N.B.

CHILD, HERBERT, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Fourth District of the North Bierley Union, Yorks, vice J. H. Naylor, resigned.

GRAHAM, ARTHUR, L.R.C.P., M.R.C.S., has been appointed Third Attending Medical Officer to the Free Dispensary and Provident Medical Institution, Pimlico-road, vice T. H. Battye, M.D., &c., appointed Second Honorary Consulting Physician.

HIRD, THOMAS A., M.B., C.M.Ed., has been appointed Medical Officer for the First District of the Coventry Union.

MURRAY, JAMES, M.B., C.M.Aber., has been appointed Assistant Medical Officer to Murray's Royal Asylum, Perth.

ROBINSON, C. H., F.R.C.S.I., has been elected an Examiner in Materia Medica and Botany to the Royal College of Surgeons in Ireland.

ROBINSON, FREDERICK, L.R.C.P., L.M.Ed., has been appointed Medical Officer for the Eleventh (Thornhill) District of the Dewsbury Union.

ROWLEY, R. J. L., L.K.Q.C.P.I., has been appointed Medical Officer for the Penryn District of the Falmouth Union.

THOMSON, HENRY ALEXIS, M.B.Edin., M.R.C.S., has been appointed House-Physician to the Royal Hospital for Sick Children, Edinburgh.

TRATMAN, FRANK, M.B.Lond., M.R.C.S., L.R.C.P. (late House-Surgeon to the London Hospital), has been appointed Government Medical Officer for the Gascoyne District of Western Australia.

WATSON, THOMAS ALFRED, M.B., C.M.Edin., has been appointed Resident Medical Officer to the Rochdale Infirmary and Dispensary.

Births, Marriages, and Deaths.

BIRTHS.

BARKER.—On the 29th ult., at Harley-street, Cavendish-square, W., the wife of Arthur E. Barker, F.R.C.S., of a son.

CUFF.—On the 4th inst., at 22, Huntriss-row, Scarborough, the wife of Robert Cuff, M.B.Lond., of a son.

MURPHY.—On the 28th ult., at the Barracks, Tipperary, Ireland, the wife of F. H. S. Murphy, Surgeon, Army Medical Staff, of a son.

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WEBSTER.—On the 28th ult., at Bewdley, the wife of Trevor Webster, M.R.C.S., of a son.

WILLIAMS.—On the 29th ult., at Rose Lawn, Kirkdale, Sydenham, the wife of Albert Williams, M.D., of a daughter.

WILSON.—On the 1st inst., at Sparrows Herne, Bushey, Herts, the wife of Daniel Wilson, M.D., of a daughter.

MARRIAGES.

DARLING—COLE.—On the 27th ult., at Innishannon Church, co. Cork, Quintin Richard Darling, L.R.C.S.I., &c., youngest son of the late Richard Sisson Darling, Esq., of Trinidad, to Letitia Victoria, elder daughter of the Rev. John Harding Cole, A.B., of Woodview, Innishannon, co. Cork.

FRASER—HODGSON.—On the 29th ult., at St. Mary's Church, Beverley, John Joynor Fraser, F.R.C.S.Ed., to Edith, fifth daughter of Colonel Hodgson, of Westwood Hall, Beverley.

GODDARD—SKELTON.—On the 5th inst., at St. John's Church, Wembley, by the Rev. Canon Francis Goddard, M.A., uncle of the bridegroom, assisted by the Rev. A. M. Maynard, B.A., Vicar, Charles Ernest Goddard, L.R.C.P.Lond., M.R.C.S.Eng., A.K.C.Lond., second son of the late Lieut. Colonel Goddard, of Kilburn, to Eleanor Lucy (Nelly), eldest daughter of Samuel Skelton, Esq., of Wembley Orchard, Middlesex.

IRVING—SOUTHEY.—On March 1st, at St. Thomas's Cathedral, Bombay, Surgeon-Major L. A. Irving, youngest son of the late Major-General Irving, C.B., R.A., to Ethel, youngest daughter of the late Colonel Southey, M.S.C.

JONES—CODD.—On the 29th ult., at Christ Church, North Brixton, by the Rev. Canon Hussey, D.D., F. Felix Jones, Surgeon, of Llanfyllin, North Wales, youngest son of the late Dr. Jones, of Llanfyllin, to Ada Louisa, second daughter of A. Codd, of Suffolk Lodge, Brixton.

MATTHEWS—GARLANT.—On the 28th ult., at St. Margaret's, Westminster, by the Ven. Archdeacon Farrar, D.D., Valentine Matthews, of 11, Suffolk-street, Pall-mall, to Maude, elder daughter of the late J. H. Garlant.

MAURICE—CROOME.—On the 29th ult., at St. Philip's, Kensington, William James Maurice, M.R.C.S., of Reading, to Frances Margaret, youngest daughter of the late Rev. Thomas Boys Croome, Rector of Siston, Gloucestershire.

MORITZ — WISE. — On the 5th inst., Siegmund Moritz, M.D., M.R.C.P.Lond., of 155, York-street, Cheetham, to Amelia (Milly), eldest daughter of Emanuel Wise, of York House, Cheetham, Manchester.

ORR—GRAHAM.—On the 30th ult., at Brighton-place, Govan-by-Glasgow, William Alexander Orr, M.B., C.M., eldest son of the late Rev. John Orr, of Kilbirnie, to Katherine Harrison, only daughter of the late Rev. William Graham, of Lochwinnoch.

POOLER—JOHNS.—On the 26th ult., at St. Nicholas' Church, Carrickfergus, by the Rev. Canon Pooler, D.D., father of the bridegroom, assisted by the Rev. Lewis A. Pooler, brother of the bridegroom, Edward Leslie Pooler, M.D., of Newtownards, to Emma Margaret, only daughter of Alexander Johns, of Sunnylands, Carrickfergus.

QUILL—GUNN.—On the 28th ult., at St. Peter's Church, Rochester, Surgeon-Major R. H. Quill, M.D., Army Medical Staff, eldest son of the late Jerome Quill, Esq., J.P., co. Kerry, to Marion M., only daughter of William M. Gunn, M.D., Deputy Inspector-General, Royal Navy.

SHAW—CAVE.—On the 29th ult., at the Parish Church, Kingston-on-Thames, Surrey, Harry Charles Costello Shaw, L.R.C.P.Lond., M.R.C.S., eldest son of F. G. Shaw, Esq., H.M.I.S., of Shedden Hall, Ootacamund, Madras, and Heathburn Hall, co. Cork, to Annie, second daughter of E. J. Cave, Esq., of Norbiton Hall, Surrey.

SKIPPER—GAZE.—On the 29th ult., at St. Augustin's, Highbury New-park, Edward Skipper, M.D., of Tollington-park, N., to Emily Elizabeth, elder daughter of Robert Gaze, Esq., of Mundesley House, Highbury New-park.

SMITH — SHEPPARD. — On the 27th ult., at Holy Trinity Church, Paddington, Herbert A. Smith, M.R.C.S., L.R.C.P., L.S.A.Lond., of Ealing, second son of the late Thomas Smith, Surgeon, of Wheatley, to Myra Dixon Sheppard, eldest daughter of W. Sheppard, Surgeon, of Ealing (formerly of Ashford).

DEATHS

CALDWELL.—On the 27th ult. (from paralysis), Joseph Caldwell, R. Staff Surgeon, R.N., M.R.C.S.

CHAWNER.—On the 3rd inst., at Clay-cross, Derbyshire, Emily Sophia Laird, the beloved wife of Alfred Chawner, L.R.C.P.Lond., M.R.C.S., and daughter of William Clowes, Esq., of 86, Holland-road, Kensington (Chancery Registrar), aged 28.

CUMMING.—On the 27th ult., at Ainslie-place, Edinburgh, William Cumming, M.D., F.R.C.P.E., aged 74.

GARDINER.—On the 21st ult., Arthur Gardiner, M.D., M.R.C.S., of London, late of Belfast and Dublin, aged 68.

MUDGE.—On the 3rd inst., at Middleham House, Ringmer, Sussex, John William Mudge, M.D., Deputy Inspector-General of Hospitals, late of H.M.'s Indian Army, Madras, J.P. for Essex, aged 69.

STEELE.—On the 23rd ult., at Blomfield-road, Maida-vale, London, James Dickson Steele, L.F.P.S.Glas., &c., aged 44.

THOMPSON.—On the 5th inst., at Matheson-road, West Kensington, W., James Thompson, M.D. (formerly of Avenue House, Leamington).

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, May 10.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
SOCIETY OF ARTS.—8 P.M. Dr. B. W. Richardson: Animal Mechanics (Cantor Lecture).

Tuesday, May 11.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Arthur Gamgee: The Function of Circulation.
SOCIETY OF ARTS.—8 P.M. Mr. Ernest Hart: Japanese Art Work.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Messrs. Ballance and Edmunds: The Ligature of the Larger Arteries in their Continuity, an Experimental Inquiry.—Mr. Jonathan Hutchinson: Congenital Absence of Hair, with Atropic condition of the Skin and its Appendages, in a Boy whose mother had been almost wholly bald from alopecia areata from the age of six. A series of Microscopic Specimens illustrating the first paper will be on view at 8 P.M.
ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8.30 P.M. Mr. Francis Galton: Notes on Permanent Colour-Types in Mosaic.—Prof. Flower: Exhibition of a Nicobarese Skull.—Prof. Macalister: (1) On some African Skulls in the Cambridge University Museum; (2) On a New Ireland Skull.

Wednesday, May 12.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.
EPIDEMIOLOGICAL SOCIETY OF LONDON.—8 P.M. Dr. Buchanan: Certain Alleged Injuries by Vaccination in North Germany.—Dr. Longstaff: Statistics of Hydrophobia in England.
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Dr. G. M. Sternberg: Micrococcus Pasteuri (Sternberg).—Mr. F. H. Evans: Photo-micrography by the Woodbury Type Process.—Mr. C. D. Ahrens: New Polarising Prism.
SOCIETY OF ARTS.—8 P.M. Mr. J. W. Bund Willis-Bund: The Proposed Fishery Board.
BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens will be shown by Drs. Mansell-Moullin, Fenton-Jones, and others.—Dr. Arthur Edis: Serous Peritonitis.

Thursday, May 13.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Dewar: The Alkaloids.
PARKES MUSEUM OF HYGIENE.—8 P.M. Mr. R. Warrington: Recent Investigations on Well Waters.
SOCIETY OF ARTS.—8 P.M. Prof. R. Meldola: The Scientific Development of the Coal Tar Colour Industry.

Friday, May 14.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
QUEKETT MICROSCOPICAL CLUB.—7.30 P.M. Exhibition of Micro-photographs with the Lantern, by Mr. F. H. Evans, in the Mathematical Theatre.
CLINICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Churton (Leeds): Aortic Aneurysm (arch); galvano-puncture five years ago; formation of subcutaneous outgrowths (recent); galvano-puncture; death twenty minutes after last puncture from rupture of first aneurysm into bronchus; soft clot only in sac.—Dr. Carrington: A case of Rheumatic Hyperpyrexia.—Dr. Percy Kidd: Aneurysm of the Aorta; extravasation of blood into the posterior mediastinum, compressing the œsophagus and vagus nerves, and rupture into the abdominal cavity, associated during life with frequent vomiting.—Mr. Pickering Pick: Impaction of Stone in one Ureter, Atrophy of the Kidney of the opposite side.
ROYAL INSTITUTION OF GREAT BRITAIN.—9 P.M. Prof. John Millar Thomson: Suspended Crystallisation.

Saturday, May 15.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Ernst Pauer: How to Form a Judgment on Musical Works.
SOCIETY OF ARTS.—3 P.M. Prof. George Forbes: Electricity.

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, May 6th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Apr. 30	30·14	E.	41	37	97	55	36	·01	Cloudy
May 1	30·25	E.	44	39	96	61	36	...	Fine
,, 2	30·39	N.E.	51	45	99	57	37	...	Fine
,, 3	30·43	S.E.	50	45	100	65	41	...	Hazy
,, 4	30·45	S.W.	52	47	107	69	42	...	Hazy
,, 5	30·50	E.	53	46	102	73	45	...	Hazy
,, 6	30·37	W.	60	50	...	...	50	...	Fine

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

BONE-SETTERS AND THE PROFESSION.

THE *Hexham Courant* lately published a letter in which the writer praised bone-setters and the work they did, concluding by lauding a medical gentleman of the neighbourhood, who not only tolerates the bone-setter, but assists and co-operates with him. This is a little further than we can go. It is not necessary for us to deny that bone-setters have occasionally been of use—from their very ignorance, perhaps. If persons with injured bones think fit to go to them rather than to those who know something about the joints, be it so. But a medical man is mistaken when assisting and abetting a bone-setter.

Morpeth.—We can only refer our correspondent to the Act, 7 & 8 Vict., c. 15, s. 8, or to the Medical Directory, which contains a summary of the duties of the office.

C. L.—The letter is too long for insertion.

AN INCIDENT IN A CASE OF DIPHTHERIA.

To the Editor of THE LANCET.

SIR,—In reference to diphtheria the following occurrence may be of interest.

We have had a rather serious epidemic in an adjoining village, with some very sudden deaths. In the family I am writing about the baby died after less than twelve hours' illness. Two days after three of the other children were attacked; but after some weeks of treatment they all recovered. One of them (James W——, a boy of about eighteen years) went out of doors, and next day was in bed suffering from a subacute pneumonic bronchitis. One day he complained of pain and tightness in the left side, and on coughing a few times he exclaimed, "Mother, it is gone," at the same time spitting up what I now send you in the bottle. I have not examined it, but put it into a solution of carbolic acid, as when I got it in the evening it was far from savoury. This was ejected about three weeks ago. The lad showed a tendency to phthisis, but has been gaining strength and flesh lately. I am indebted to my senior partner, Dr. W. S. Gervis, for a good deal of the above information, he having chiefly attended the lad. Will you please examine and report on the specimen, and oblige,

Yours truly,

Ashburton, Devon, April 15th, 1886. WILLIAM FRASER, M.B.Dub.

*** The cylindrical mass, measuring about two inches long and one-third of an inch in thickness, and one inch in circumference, was found on examination to consist of a coagulum, in which were thickly embedded oil globules, swollen epithelial cells, a few partially digested muscular fibres, and remnants of vegetable tissue. These characters suffice to demonstrate its true nature, which is not a morbid product, but a mass of partially digested food, mainly milk.—ED. L.

SPANISH MEDICINE.

DON LUIS COMENGE has recently published a Spanish work, entitled "Medical Curiosities, preceded by a Discourse on the Flourishing Condition of Spanish Medicine in the Sixteenth Century and its Subsequent Decadence." Though entitled "Curiosities," there is much serious medical history which, as a reviewer in *El Genio Medico Quirurgico* says, deserves to be read and pondered over, such as descriptions of those who have contributed in past ages to the advancement of medical knowledge, and accounts of their doctrines and works. One chapter is devoted to the history of variolous inoculation, which was commenced in Spain by Dr. O. Scanlan, and a parallel is drawn from the arguments of the anti-inoculationists of those days and the anti-vaccinationists of the present time, together with the opponents of Ferran's anti-cholera inoculations. With regard to decadence of Spanish medicine since the sixteenth century, the reviewer referred to remarks: "Until instruction undergoes a complete change, we shall not advance a step in the direction of progress. Medicine has for some years been in the stage of pure experimentalism, and we Spaniards experiment but little or not at all. In the professoriate there are, it is true, many men of profound knowledge, who are an honour to contemporary medicine; but there are still others who talk to their students about the pathogenetic importance of phlegm, and lecture on typhus, cholera, and other infectious diseases just as teachers at the commencement of this century might have done." With such elements in the professorial staffs, the author and reviewer agree that but little progress is to be hoped for.

R. L., M.D.—We have explained our position, and must decline to open our columns to a discussion of the facts, or fictions, of religious belief.

Simon G.—The coroner has absolute discretion in such a case. Our correspondent does not state the circumstances in which A handed the case over to B.

SEA-SICKNESS.

To the Editor of THE LANCET.

SIR,—Having had some sea experience within the last few years, I would fain join the multitude who have something to say on the vexed question of sea-sickness.

First, then, I want to insist that sea-sickness is simply a form of migraine which is caused by jarring of certain medullary centres and of the membranous semicircular canals by a peculiar external motion. Considered from this point of view, many symptoms which otherwise seem inexplicable are easily accounted for, and its treatment may be rationally conducted very successfully. The sea migrainal-nerve disturbance principally affects the liver chologenetically, but it also increases the secretion of saliva and gastric mucus. The quantity of bile secreted in each individual case is at first very large; but as the case becomes chronic, it is naturally lessened, the secreting cells becoming exhausted. Hence the congested, jaundiced eyes, the bile-stained urine, the bilious vomiting and occasional bilious diarrhœa, in cases of *mal de mer*. The distressing paroxysms of qualmishness are caused principally by the regurgitation of bile into the stomach, and are invariably relieved by emesis. Just before the emesis of bile takes place the heart's action often becomes irregular and depressed. I have seen a lady nearly dead from cardiac failure in sea-sickness. The cause of this, probably, is as follows. The gastric nerve-endings of the pneumogastric, if I may so speak, become irritated by the regurgitated bile, thereby causing cardiac reflex inhibition through the inhibitory branches of the same nerve.

Now, as to treatment. All the much-vaunted specifics, such as bromides, &c., are worse than useless. Common-sense treatment which is palliative I have found answers admirably. First, let the patient lie down on his (or her) right side, with the head low. This has a twofold effect. It relieves the irregular tensive action of the semicircular canals, and to a great extent prevents regurgitation of bile into the stomach. The sufferer should abstain from stimulants, except with food, as the blood is already loaded with bile excreta. A little effervescent citrate with hydrocyanic acid may be taken occasionally (the latter only if the pulse be not depressed, as it has itself a cardio-inhibitory action). If there be much cardiac depression, a minute hypodermic injection of atropia will be found useful. The dry-food *régime*, so popularly believed in, is probably a mistake, as the stomach rejects such food before the assimilation of any of it can have taken place. A bowl of plain soup, a little dry toast, and a glass of port wine taken quickly in the position recommended will often be found successful. If that fail, iced chicken jelly and a glass of iced champagne will frequently be retained. The patient, it is needless to state, should have plenty of fresh air.

I am, Sir, yours truly.

China. M.D. SURGEON, R.N.

EPISTAXIS.

To the Editor of THE LANCET.

SIR,—A young gentleman (a farmer), otherwise apparently in perfect health, suffers great inconvenience from epistaxis, occurring almost every morning and during the day on the slightest irritation to the nose, which is somewhat painful in frosty weather. I have tried every remedy I know of in vain, and shall be very thankful for any suggestions as to treatment. I am, Sir, yours faithfully,

St. Mary Cray, Kent, May 3rd, 1886. ALEX. SHANNON.

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DIGITALINE.

M. LAFON, having examined various specimens sold under the name of digitaline, finds that a number of these occurring in commerce in France, both as amorphous and crystalline powders, are innocent of even a trace of the alkaloid, but M. Nativelle's digitaline, though amorphous and yellow, is, chemically speaking, identical with Merck's digitoxine.

Dr. Waldemar-Marian Phillipowitch (Odessa).—We regret we are unable to comply with the request of our correspondent.

Dr. Vasity (Bucharest).—We cannot extend our exchange list.

F. A. W.—We do not give medical advice.

HYDROPHOBIA: FRESH SUGGESTIONS.

To the Editor of THE LANCET.

SIR,—At the present time, when the greatest minds of the medical and scientific world are likely to be in a special manner directed to the problem of successfully dealing with hydrophobia, we have good reason to hope that something of real, lasting, practical benefit to suffering humanity will be the result of their investigations. I confess to a sanguine expectation that the method of treatment suggested and adopted by M. Pasteur will be found ultimately to succeed; and if such should be the case, we shall all ere long no doubt be placed in a position enabling us to "Go, and do likewise." Meanwhile, this method must be looked upon as being *sub judice*, and while it so remains it behoves each and all of us to exercise our best knowledge and judgment in such a matter, seeing that from the unusual prevalence of the disease in many parts, it is not unlikely we may have to deal with it. Fortunately for us in these northern parts, hydrophobia is of so rare occurrence as to be almost unknown (a single case has not been seen by my senior principal, Dr. Manson, in the course of a busy practice extending over fifty years); but in order to be prepared, should an undoubted case of rabid poisoning present itself, I have resolved upon the following line of treatment.

Local Treatment.—Locally, if seen on the instant, and if possible, complete arrest of circulation in the part by a tight ligature above the wound. After ligature and careful washing, as speedily as possible freeze a circle of skin at some distance from the wound by means of Richardson's ether spray, and, if practicable, excise the part, encouraging hæmorrhage to a judicious degree. When the wound is situated in a part where the application of a ligature would be impossible, a thin-edged tumbler, or other similar contrivance wide enough to include the wound, and firmly pressed down, would serve the purpose of arresting the circulation. The skin might then be frozen around the outer edge of the tumbler, and excision effected. The effect of the ether spray, besides anæsthetising the part for the knife, I presume, would be to interfere with the activity of the absorbents, and so delay general infection. After excision, I propose making a thorough application to the wound of a strong solution of chloride of zinc (℥ii. to ℥i.), which is capable of permeating the tissues for a considerable depth, and is well known for the property it has in rendering wounds incapable of putrefaction for several days, even when in contact with septic material. Should excision of the part prove impracticable, reliance should be placed on the other measures—viz., arrest of circulation by the means above stated, thorough washing of the wound, freezing of the surrounding parts, encouragement of bleeding (by cupping-glasses, &c.), and the subsequent use of chloride of zinc.

General Treatment.—In view of the fact that profuse secretion of a very viscid saliva constitutes a prominent symptom of hydrophobia, with the fact that it contains an abundance of the virus, and the probability that it is the only secretion that does contain it, it has frequently suggested itself to my mind that pilocarpine (from its very decided influence on the salivary secretion) might reasonably be conceived capable of eliminating the virus in the undeveloped disease, by imitating in its action what appears to be the chief effort of nature to rid itself in the developed disease. I suggest that it should be administered by the hypodermic method, and that its physiological effects be kept up for a period of forty-eight hours, or longer, immediately succeeding inoculation. The diaphoretic action of the drug (probably also beneficial) might be increased by the ordinary vapour or blanket bath, with the free use of diluents. In the treatment of the developed disease I would adopt the general measures as above stated, hoping thereby to assist the natural efforts at elimination of the poison, and so tend to the relief of symptoms by removal of the cause. In addition I should depend on bromide of potassium and chloral hydrate as sedatives—bromide of potassium, from its undoubted action in lessening the irritability of sensory nerves, being, I think, particularly indicated.

I am, Sir, yours faithfully,

Banff, April 14th, 1882. JAMES BARRON, M.B., C.M.

TREATMENT OF GONORRHŒA CHRONICA BY MEANS OF GROOVED BOUGIES.

To the Editor of THE LANCET.

SIR,—Referring to the letter of Dr. Atkinson in your issue of April 17th, page 769, I beg to state that there is no doubt that some cases have been cured by injections applied by a suitable catheter. But, on the other hand, I accept Dr. Atkinson's confirmation of that many cases of healing are taken place with my grooved bougies. This is all I maintain. Some cases are better for one method, others for the other.

I am, Sir, your obedient servant,

Berlin, May 2nd, 1882. DR. LASSAR-CASPER.

UNQUALIFIED MASSEUSES IN VIENNA.

A VIENNA medical journal complains bitterly of the patronage afforded to quackery in the form of massage by medical men of the highest position—professors, lecturers, and others—who assist in setting up their female relatives or servants in business for themselves as masseuses. Massage is not a treatment which can safely be trusted to a lay person. It requires a knowledge not only of normal anatomy, but of the nature and course of the disease from which the patient is suffering. As these persons frequently practise without reference to a medical man, it is not surprising that they sometimes go on "massiring" a malignant tumour or a case of tuberculous periostitis for weeks or months, and so do a great deal of harm. "It is a great pity," continues the journal referred to, "that people have taken it into their heads that it is undignified for a physician to practise massage. Men like Mosengeil in Bonn, Busch in Berlin, Bergmann in Stockholm, Johnsohn in Copenhagen, &c., have not been above practising massage. It is greatly to be desired that the medical authorities may see their way, in the interest of the suffering public, to bring this new form of quackery within narrower bounds."

Medicus.—Witnesses are not generally paid for evidence before a Select Committee.

SEVERE CASE OF URTICARIA.

To the Editor of THE LANCET.

SIR,—The following case may be of sufficient interest for insertion in your journal.

R. B——, a man about forty years of age, came to me a week or two ago, complaining of an acute swelling about the groin and penis. On examination, I found the penis very much swollen, and presenting a condition of phimosis. The cellular tissue of the scrotum was also largely infiltrated with serum. The groin on both sides and the upper part of both thighs presented a brawny, erysipelatous appearance, with the skin tight and angry-looking—indeed, at first sight the whole appearance seemed alarming. The other parts of the thighs were more or less covered with wheals and an erythematous rash, as were also the front of the abdomen and the loins. The rash and wheals did not extend above beyond the level of the umbilical line, nor below beyond the knees; the chest, legs, and arms presenting no abnormal appearance. He had a furred tongue, and a quick, full pulse; the temperature was about 100°. It was evidently a case of urticaria, and to all appearance a very severe one. Within twenty-four hours, after complete rest in bed, the administration of a five-grain pill of colocynth and hyoscyamus, and an alkaline mixture, with light diet, the whole thing had cleared away. The patient had partaken very freely of mackerel at supper the previous night.

The peculiarities of the case appear to me to be the localisation of the rash and swelling, its alarming appearance, and the rapid subsidence of the severer signs. I have in my description rather understated the general appearance and the extent of the swelling. The patient had been the subject of acne vulgaris; and I would say in connexion with this that I have noticed that all, or nearly all, patients who suffer from medicinal rashes, or rashes produced by errors of diet or chill, are, or have been, the subjects of acne of sufficiently severe character to leave a few pits or scars as evidence of its past severity. I have lately seen the iodide rash in a lad of eighteen, and a slight rash from atropine (⅛₀ gr. hypodermically) in a woman about forty. The former had severe acne at the time, and the latter showed old scars of it on the shoulders. (The woman, as a result of the dose of atropine mentioned, also suffered from marked delirium and dimness of sight, with some dilatation of the pupils, but had no thirst or dryness of the fauces.) I think the consideration is worth noting, as no doubt the subjects of severe acne must at all times suffer from a certain mal-assimilation of food, with an accompanying deterioration of the quality of the blood; therefore I shall in future advise such subjects to be careful in their diet, and be careful myself in the administration to them of certain drugs.

Believe me, Sir, your obedient servant,

Pangbourne, Reading, May 1st, 1882. W. T. FREEMAN.

A RUSSIAN VIEW OF THE BERLIN M.D.

THE Berlin correspondent of a Russian medical journal makes merry over the mediævalism still lingering in Prussian universities, and especially over the ceremony of the disputation for the doctor's degree, with the dean in his red robes merely playing propriety with classical Latin phrases, and the candidate with his three "friend opponents," who have settled with him about the subjects to be discussed beforehand. All this, says the correspondent, is very different from the procedure in Russia, where there are no traditions handed down from the Middle Ages to be attended to, and the professors are much stricter about allowing candidates to pass, besides which, the young aspirant has, instead of friendly opponents as youthful as himself, masters of the art of wrangling to contend against. Altogether, the writer seems to think it hard that the title of Doctor can be obtained on so much easier terms abroad than in Russia. Comparisons are proverbially odious. It would be instructive to see what Berlin graduates acquainted with the proceedings at Russian universities have to reply to the criticisms of their Russian visitor.

L.S.A.—So far as we are aware, registration only is required

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PREVALENCE OF ANEURYSM AMONGST FOREIGN RESIDENTS IN CHINA AND JAPAN.

AT a recent meeting of the Sei-I-Kwai, Dr. Eldridge, in reporting a case of aneurysm, called attention to the fact that, for some reason as yet unexplained, residents of European blood in the Chinese and Japanese ports are perhaps more subject to this disease than are any other people on earth. In Yokohama, during seven years, aneurysm ranked fourth amongst the causes of death, every case included in the return being undoubted, and nearly all submitted to post-mortem examination.

A Student has not enclosed his card.

Mr. Cantlie is thanked.

"KISSING THE BOOK."

To the Editor of THE LANCET.

SIR,—As all medical men who do not belong to the Society of Friends are expected when giving evidence in England to kiss the Bible, I would suggest that when taking the oath they should simply apply the thumb which holds the Bible to their lips, and not the Bible itself; or they might only bring the Bible within an inch or two of the mouth. The former method, for obvious reasons, is preferable. I may state that the Scotch oath is administered by the judge, the witness holding up his right hand and repeating the words of the oath after him. Dr. Gresham therefore need not cross the Atlantic to take a leaf from our American cousins' book.

I am, Sir, yours truly,

May 3rd, 1886. DANIEL MOWAT, M.B., C.M.

SKIN GRAFTING FROM THE FROG.

Inquirer.—So far as we know, the practice of skin grafting from the frog was first practised in this country by Dr. William Allen of Leadgate, Durham. See his letter in THE LANCET of Nov. 15th, 1884, p. 875.

Dr. John Roberts.—We agree with our correspondent, and shall be prepared to support the amendment he refers to. We should be glad to publish a letter from him on the subject.

A Constant Reader.—Roscoe.

"THE SUPPLY OF THE PROFESSION."

To the Editor of THE LANCET.

SIR,—In the list of medical schools with more than twenty entries published in your journal of last week, I beg to point out that you have omitted the Middlesex Hospital.

I remain, Sir, your obedient servant,

W. CAYLEY,

May 5th, 1886. Treasurer, Middlesex Hospital School of Medicine.

*** The figures are those officially given in the Register of Medical Students, and they do not in every case correspond with the actual number of entries, since many students are registered prior to joining a school.—ED. L.

THE MORPHIA HABIT.

To the Editor of THE LANCET.

SIR,—Could any of your readers give me any information that would prove of use in the following case?

A lady about sixty years of age has taken morphia (1 in 25) hypodermically for some years. During twenty-four hours she will have five or six injections, varying from three to five minims, and occasionally to eight minims. She is now very anxious to give it up, as the forearms and some distance above the elbow are a dense cicatrix, and an eczematous condition of both hands is developing. Would cocaine be useful? Any suggestions would be gladly received by,

Yours obediently,

May 4th, 1886. YOUNG PRACTITIONER.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Moxon, London; Dr. Wiglesworth, Rainhill; Dr. L. Casper, Berlin; Dr. J. Morton, Glasgow; Mr. Buckston Browne, London; Dr. Campell Pope, London; Dr. A. Black, Edinburgh; Mr. Sell, London; Mr. W. Tebb, London; Dr. D. Mowat, Leytonstone; Dr. Cayley; Mr. Anderson Critchett, London; Dr. H. J. Hardwicke, Sheffield; Mr. E. H. Brown, Birchington; Mr. Leeming, Kendal; Mr. Godlee, London; Mr. Kendal Franks, Dublin; Mr. Collier, Oxford; Mr. A. J. Harvey, London; Mr. T. A. Buck, Ryde; Dr. W. E. Dawson, London; Dr. Glanville, London; Mr. J. T. Williams, Oxford; Mr. P. B. Mason, Burton-on-Trent; Mr. T. A. Jones, Tircaradoc; Mr. Habgood, London; Dr. G. C. Roy, Burdwan; Dr. Phillipowitch, Odessa; Mr. Sharman, St. Mary Cray; Mr. Manby, East Rudham; Dr. Gowers, London; Mr. Ogier Ward, Tottenham; Mr. R. N. Jones, Swansea; Messrs. Oppenheimer Bros., London; Dr. Lewin; Dr. W. Allen, Leadgate; Mr. W. Pash, London; Dr. Buck, London; Dr. Althaus, London; Mr. P. Blumer, Sunderland; Mr. Freeman, Pangbourne; Mr. Jones, Chester; Mr. S. Snell, Sheffield; Mr. Mainwaring, Kensington; Messrs. Sumner and Co., Liverpool; Dr. Seaton, Sunbury; Dr. Smith; Messrs. Hall and English, Birmingham; Mr. Vrizenken, Vienna; Messrs. Squire and Sons, London; Lieutenant Beresford, Gosport; Mr. Elliott, Ottery St. Mary; Mr. Fisher, Millport; Dr. Prieger, Ausney; Messrs. Griffin and Co., London; Mrs. Sullivan, Burton-on-Trent; Mrs. Chustman, Eastbourne; Dr. Hassall, San Remo; Mr. Davis, London; Mrs. Carless, Liverpool; Mr. Manton, Marylebone-road; Messrs. Zimmermann and Co., London; Messrs. Leader and Sons, Sheffield; Messrs. King and Co., Lancaster; Mr. Stenhouse, Glasgow; Messrs. Maclachlan and Co., Edinburgh; Mr. Ubberton, Newton-le-Willows; Mr. Griffiths, Bristol; Mr. Ellis, Scarborough; Mr. Clark, Margate; Mr. Barnett, Weston-super-Mare; Mr. Rainer, Ipswich; Mr. Carter, Liverpool; Mr. Collins, London; Mr. Samuel, Manchester; Mr. P. A. Thomas, Liverpool; Simon G.; Morpeth; Philo-Nicotianus; Only a Country Doctor; Bis dat qui citò dat; F.; M.D., Edmonton.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Evelyn, Amoy; Mr. Kinder, Leicester; Mr. Cramond; Mr. Briggs, Bishop Auckland; Mr. Rowley, Barnsley; Dr. Eberle, Thirsk; Dr. Lapage, Nantwich; Mr. Booth, Chester; Mr. Whyte; Mr. Byrt, Shepton Mallet; Mrs. Morgan, Cleveland; Mr. Draper; Mrs. Johns, Carrickfergus; Mr. Allis, Blackburn; Mr. Ashworth; Mr. Bramwell, Stafford; Mr. Watson, Norwich; Mr. Mason, London; Mr. Godfrey, Northampton; Dr. Oldham, Manchester; Mr. Furris, Cumberland; Mr. McGill, Littleboro'; Dr. Bowes, Oldham; Dr. Armstrong, South Shields; Mr. White, Bayswater; Mrs. Newman, Bowness; Mr. Girling, Birmingham; Mr. Maugan, Kensington; Messrs. Hunton and Bolsover, Stockton-on-Tees; Mr. Brewster, Bootle; Dr. Chawner, Clay Cross; Dr. Ems, Eastbourne; Mr. Lake, Boston; Mr. Buckley, Stonehouse; Mr. Godder, Wembly; Dr. James, Pentre; Mr. Arnold, Cheetham; Dr. Creed, Greenwich; Mr. Peyton; Mrs. Hitch, St. Leonards; Medicus, Ripley; Peisto, Exeter; Medicus, Leicester; Medicus, Notts; M.D.; Medicus, Deal; W. C., Kentish Town; M.D., Southport; A., Portobello; Tenax, Brixham; H. F., Hull; Medicus, Battersea; A. B.; Opportunity; M.R.C.S., Hants; Beta; Surgery, Ipswich; Homo, Plymouth.

Herald of Health, Zoophilist, Cape Argus, Telegraphist, Whitehall Review, Imperial Federation, &c., have been received.

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Address
ON
MEDICAL SURGERY,
OR THE
RELATIONSHIP OF MODERN SURGERY TO PRACTICAL MEDICINE.

Delivered before the Manchester Medical Society.

BY JAMES HARDIE, F.R.C.S. ENG.,
PRESIDENT.

GENTLEMEN,—Medicine, in the usual acceptation of the word, is that branch of the healing art which deals with disorders of the viscera of the three cavities of the body, and surgery is that which deals with affections of the limbs and the parts of the body external to those cavities. This very crude distinction is not, nowadays at least, literally correct; neither does it attempt to indicate their essential characteristics, nor the real relationships which exist between the two. I fear that it can scarcely be claimed for the art of surgery that it occupies an equal platform to that of medicine, as might be inferred from this definition. Is it not the case that surgery, in reality, apart from its concern with the accidents of life, is but a last resource, after the failure of medicine? Take the surgery of the limbs if you will—the surgical diseases of the limbs. What are they? Are they not the outcome of the failures of medicine? What of strumous joints, of tubercular diseases of the bones? Is it not the case that they are the result of a failure of the art of medicine? They are the outcome of a depraved condition of the body generally, which it is the province of medicine proper to deal with and prevent, as much as it is its duty to foresee and prevent, in the same cases, the formation of tubercle in the lungs. As surgeons, the tubercular constitution meets us at every turn, when it has passed the stage of a mere condition of the blood-forming organs, or whatever else its ultimate pathology may be.

> "Strangely visited people,
> All swollen and ulcerous. Pitiful to the eye,
> The mere despair of surgery."

Or take rickets. Why should the surgeon have his cases of genu valgum, or bent tibiæ, or twisted spine, had medicine been powerful enough to have arrested the disease, while it could only be spoken of as a disorder of nutrition? What, again, of aneurysm? A man comes to us with an aneurysm of his popliteal artery. Who will deny that it was the province of medicine to have prevented that man's arteries from becoming atheromatous, and to have kept his tissues healthy, until he dropped, like an autumn leaf, sere and yellow, into his grave? I will even take the cases of congenital deformities and tumours. I am not now going to discuss the pathology of either the one or the other; but when the time comes when it shall be fully known, I doubt not, and I think we cannot doubt now, that it will be traced to an evident departure, in one generation or another, from the laws which regulate the perfect formation and development of the healthy frame.

I do not know that medicine will ever be greatly successful in *curing* disease. We can cure syphilis; and, if cured sufficiently early, it may do no harm to the organism. Perhaps it is that we can cure hydrophobia; and if so, it may be that we shall be able to cure zymotic fevers. But these are cured by killing them and getting rid of them, as we cure a tape-worm with a dose of filix mas. We may cure a disease which attacks the body by killing it before it has done much or any harm. But medicine, so far as we can tell at present, must concern itself chiefly with prevention. Most men may not go on drinking whisky without serious damage to their liver and kidneys; and this medicine cannot prevent. The antidote cannot be taken in alternate glasses; the whisky must be locked up, or the morbid impulse towards it must be restrained. So with constitutional disease. As some men are born with an organism so constituted that they are the victims of vicious habits, a fact which the physician has to recognise and deal with, so others are born with organisms so constituted that they are prone to, or become the prey of, tubercle, or of rheumatism, or of gout, or of rickets, or of a carcinoma, or of a sarcoma. This it is the business of the physician to detect, and to direct such a man so to live that the exciting cause of the development of any of these things shall not come in his way. Once developed, the *cure* of his disease is another and much more difficult matter; and so it happens that in time the surgeon has to be applied to to relieve him of his deformity, of his stone, or of his tumour.

Surgery, then, in its relationship to medicine consists in dealing with the gross results of diseased processes; and it will be interesting to us now to survey the progress which it has made in helping medicine to deal with such morbid results. For this purpose I shall revert to the old distinction between medicine and surgery, which I discarded at the beginning of my address, and leave out of consideration altogether the surgery of the parts of the body other than the three great cavities, inasmuch as, from the beginning of medicine, these have been claimed by surgery proper, without regard to the pathological cause of the maladies affecting them.

When surgeons began to extend their domain from the orifices of the body, where diseased structures might be seen with the eye or felt with the finger, the operation of lithotomy was that to which their attention was first directed. In the case of a stone in the bladder, the painful character of the symptoms, while urgently calling for relief, at the same time proclaimed, in many cases at least, the nature of the complaint, which was established beyond doubt when the sound was introduced into practice. In this operation, the accessibility of the organ from the surface, without implicating important parts, and the free drainage from the incision, would no doubt make it quite a successful one, even in the days of rude surgery; and if the case turned out to be one of cystitis instead of stone, it is to be supposed that relief may sometimes have been accidentally afforded.

The same considerations of pain and urgency of symptoms, while the diagnosis was also certain, would lead to the Cæsarean section being undertaken *in extremis*. But here the circumstances of the operation were much more grave. The opening of the peritoneal sac alone—a dangerous vortex to be engaged in, to say nothing of the complications entailed by emptying the uterus—renders this an operation demanding all the resources of the surgery of the present day to offer even a slight chance of success, and one can therefore imagine how timorously it would be engaged in. Compare with this the case of a patient suffering from internal intestinal obstruction. Here, again, there are great urgency of symptoms and grave danger. On the other hand, however, besides the dreaded peritoneum, there lay the doubtful diagnosis, and the possibility that, by waiting, the symptoms might pass off and recovery take place. Thus, while urgency of symptoms and danger to life might impel the surgeon to undertake an operation on the abdominal cavity, yet the grave results to be apprehended from opening the peritoneum barred the way, and the operation could only be justified, in the minds of most, by certainty of diagnosis. This impotence of surgery in dealing with the peritoneum undoubtedly reacted unfavourably on medicine, in so far that it afforded no encouragement to refinement of diagnosis. The operation of ovariotomy did much to deprive the peritoneum of its terrors. The nature of ovarian disease began to be studied, and through the work of Clay in our own town, more than by anyone else, it began to be the recognised duty of the surgeons to attempt to give relief. Thus, something began to be known of the causes which induce peritonitis, and of the methods of preventing it. Much information was gained, and the way paved for the further developments which have occurred under our own eyes. In the case of the colon and kidneys, abdominal organs which might be reached from behind without opening the peritoneum, their depth from the surface, and the danger of infiltration of pus in the surrounding cellular tissue, were considerations almost as repellent as the danger of peritonitis by the abdominal incision.

As regards the thoracic cavity, up to a few years ago nothing surgical was attempted beyond tapping the pleura, or, it might be, in the case of an enterprising physician, the pericardium. The eminently satisfactory result of the

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former at least of these operations when the fluid was simply serous, was sufficiently evident—a literal carrying out of the figurative language of Shakespeare:

> "Canst thou not .....
> Cleanse the stuffed bosom of that perilous stuff
> Which bears upon the heart?"

In the case of purulent effusion, however, surgery remained for long blind and halt, so that in such a case recovery was due rather to happy accident than to an intelligent perception of the difficulties to be overcome and the method by which this was to be accomplished.

Of surgical assistance in disease within the cranial cavity up to the last two or three years the record is almost a blank. On their own account, indeed, as in the case of fractures of the vault, surgeons had been accustomed to deal with injuries to the brain; but with the single exception of tapping the fontanelles in chronic hydrocephalus, I can recall no operation by which an attempt was made to render service to medicine.

And so, sometimes by improved means of diagnosis, sometimes by greater surgical skill, we might have gone creeping on along the fringe of medicine proper, when nineteen years ago Lister, for the first time in the world's history, by applying to surgery the masterly researches of Pasteur on the phenomena of fermentation and putrefaction, enabled us to understand how the various disasters which barred the progress of surgery occur, and some years earlier Chassaignac introduced his drainage-tubes into practice. The peritoneum is opened now without Listerian details, and with marvellous success. Why not before the time of Lister? I am not concerned to uphold the *manner* of Lister's work, but this I do hold, that it was Lister who first taught us that it was by the injurious action of ordinary air on dead organic matter that the host of calamities which hovered around the path of the surgeon was to be accounted for. We thus know the vast importance of the utmost cleanliness in opening a serous sac, and of the protection of it from the entry of foreign material. Thus was Marion Sims able, in 1877, to cut down on the gall-bladder, and by carefully stitching the edges of the incision into it to the wound in the abdominal wall, to prevent the escape of foreign material into the peritoneal sac. This was the first of a large and important series of operative proceedings on the abdominal cavity; and although his patient died, yet to Sims undoubtedly belongs the merit of having shown how to deal, not alone with such cases, but with the similar ones of hydatids of the liver, adherent cysts, chronic abscesses, and so on. But what if foreign or dead material does enter, in spite of our precautions? We may prevent, in ordinary circumstances, the contents of an ovarian sac, or of a gall-bladder, or of an abscess from gaining access to it, but we cannot always prevent the access of blood. It is only now that we are beginning to assess at its true value the invention of Chassaignac. The advantage of draining the peritoneal sac when blood or serum happened to collect in the pelvis was fully demonstrated by Keith, who, if the temperature began to rise in his ovariotomies, boldly incised the pouch of peritoneum forming Douglas's space, with the result of withdrawing a quantity of bloody serum and the immediate amelioration of the condition of his patients. Nowadays, when any fear whatever exists, in these or other operations, of blood collecting in the pelvis, the precaution of inserting a glass tube, on the table, is invariably followed.

Thus, then, the dread of wounding the peritoneum, so long the bugbear of abdominal surgery, has been disposed of, and surgeons are ready, awaiting the summons of the physician. The art of diagnosis has thus been wonderfully quickened, so that diseases which at one time were scarcely ever heard of have become matters of every-day occurrence. The brilliantly successful career of Mr. Tait, in the field of abdominal surgery, must be present in the minds of most of my hearers. His operative successes on the ovaries, on the Fallopian tubes, on the liver, and other parts, show most strikingly the extraordinary advances which surgery has made in this region during the last few years. The kidney and ureters have shared with the other viscera in the general advance. It is no longer necessary for a stone to have reached the bladder before it may come within the reach of the surgeon's art. I well remember—it may be some thirteen or fourteen years ago—a remark made by our distinguished President, Sir William Roberts, in a meeting of this Society, on a case in which a renal calculus was known lying in the ureter by the side of the uterus. The small amount of inflammation had cost the patient his life, and Sir William was acute enough to remark that he thought that, had such a condition been diagnosed, it would have been quite possible for a surgeon to have cut down on the stone, and either to have extracted it or pushed it into the bladder. It is pleasant to recall this incident, for it impressed itself on my mind as a shrewd remark, and it foreshadowed what we are fain to do now. It is scarcely within the scope of my purpose at present to enter into details concerning the operative surgery of the kidney. Nephrotomy and nephrectomy are operations firmly established, and it may be said regarding them that operative surgery has overtaken and is in advance of diagnosis. I fear the happy time has not yet come when the physician shall no longer consider that he has any more to do with the kidney than with the bladder; and therefore we want him to tell us, more precisely than he frequently does, what it is that is the matter. Has the patient two kidneys or only one? Is it an impacted calculus or an abscess? A cyst, or nothing at all?

What of acute intestinal obstruction? To my mind this is still one of the least satisfactory of the medical affections of the abdomen which the surgeon has to deal with. We are called to a patient with a belly swollen and tympanitic; we get a confused history, and are left to grope about as best we can. Nothing comes of it. We know not whether it is a case of ileus, of intussusception, or of strangulation. We perform an operation, and the patient too often dies unrelieved. In this condition there is still much to be done and perfected by the physician in the direction of diagnosis.

The various operations for the amelioration of symptoms in incurable stenosis of the œsophagus and pylorus, gastrostomy, duodenostomy, and gastro-enterostomy, have been attended with a gratifying amount of success. The relief from pain and impending starvation has frequently been so marked that it would be unjustifiable to deny it to a suffering patient, though a respite only from the advance of disease be obtained. This much may, I think, already be affirmed for cases which are at all favourable, though the varying details of operation, as required by the varying conditions to be met with, are points which are still *sub judice*. So, too, let us bear in mind the possibility of digital divulsion of non-malignant stricture of the pylorus and of excision of gastric ulcer.

As regards more grave operative procedures within the abdomen, such as those for removal of malignant disease affecting the pylorus (of which our secretary, Mr. Southam, has recorded a striking case), the duodenum, or other parts of the intestinal canal, the excision of the spleen or of portions of the pancreas, I shall say little. At present I fear we can scarcely regard them as more than bold attempts, with the advantages of modern surgery, to rescue the sufferers from impending death; and when one bears in mind how soon the lymphatic glands become implicated in the case of cancerous disease, I feel that, in that case at least, it is very questionable whether it will ever be worth anyone's while to undergo the immediate risks of such severe operations, with so little assurance of positive future benefit, until we know much more than we do at present of the nature of cancer.

Turning now to the surgery of the thoracic cavity, we find that it is to the use of the drainage-tube more than to anything else that the advances of the past few years are due. Given a case of empyema of recent formation, its complete cure by means of antiseptic drainage is within the power of anyone only moderately skilled in surgical procedures. The lung, being relieved from the pressure of the pent-up fluid, gradually expands and assists in the obliteration of the abscess cavity. But in older cases, in which the expansion of the lung is more or less prevented by thickening of the pleura or the formation of bands of organised lymph, there is a physical difficulty to such a process, and many a one has remained on our hands in a condition of half cure, with a sinus leading into a large suppurating cavity which we were powerless to close. To Estlander belongs the merit of showing how such a state of matters is to be dealt with, and there can be no doubt that his ingenious device of removing portions of the ribs to allow of the otherwise rigid thoracic wall falling in to meet the bound-down lung is a notable addition to the art of surgery. Tapping and drainage of fetid cavities in the lung, and the excision of broken-down and harmful portions of the lung itself, are also operations of which the feasibility has several times been demonstrated.

Much interest has lately been gathered round the medical surgery of the cranial cavity. Gravely to propose to excise

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a tumour of the brain would, only a few years ago, have been received with a smile. But we have got beyond this now. Tumours of the brain have been excised, and will be excised again. We are now endeavouring to find out how far we may safely go in this direction. The *sine qud non*, in operating on the brain, is of course accurate previous localisation of the lesion, and this the advance of neurological science within the last few years has rendered a comparatively easy task. A careful consideration of the nervous phenomena of the case now enables the expert in neurology to determine with the greatest exactitude both the situation and the probable character of a brain lesion. As regards the former, it can scarcely be anticipated that the boldest surgeon will ever venture beyond the accessible parts of the cortex, but with this limitation enough has already been done to show that brain surgery is destined to occupy an important and legitimate position in the future. It may not yet be possible to predicate, in every case, whether the lesion be situated primarily within the brain substance or on its envelope, nor whether it be inflammatory in character or a neoplasm. I venture to think, however, that the gravity of any case, from a surgical point of view, will depend mostly on the answer which may be given to the former of these two considerations. The latter is probably of less importance, apart from the general question of the comparative curability of inflammatory and neoplastic deposits. Obviously it will be less dangerous to remove an inflammatory thickening of the dura mater or a tumour growing upon it, which simply lies upon, and perhaps has induced some absorption of, the brain substance, than to incise the latter and remove a deposit embedded in its substance. A considerable number of successful cases of the former class of operation have already been recorded, notably by Dr. Macewen, of Glasgow. Of the latter, the original case of Dr. Bennett and Mr. Godlee is the best known, and although unfortunately terminating in death, yet its satisfactory progress for a considerable time showed that the fatal event was due to accidental and preventable causes rather than to anything necessarily inherent to the nature of the case. At the same time, I think I shall be borne out by every surgeon of experience when I say that, while in no department of surgery is a failure of strict antiseptics more likely to be disastrous than when brain matter is exposed, in none is it more difficult to conduct a case through the many pitfalls to which we are exposed to a satisfactory termination. Hence the vast importance of a speedy closure of the wound, which is precisely what cannot be attained in such cases, inasmuch as the cavity resulting from the operation has to fill up by the secondary process of healing.

In connexion with cerebral surgery, I may also allude to the suggestion of Dr. Alexander, of Liverpool, to treat certain cases of epilepsy by ligature of the vertebral arteries. Although his later experience has not quite supported his earlier, yet the proposal, and the partial success which has attended it, afford ground for believing that by surgical means it may be possible to influence materially morbid conditions of the central organ of the nervous system. The employment of nerve-stretching, also, in various forms of peripheral neuroses, is now an established and satisfactory operation, of which you have seen several examples at our meetings.

In thus hastily and imperfectly reviewing the relationship of the surgery of the last few years, considerably fewer than those during which I have been a member of this Society, one cannot but feel that its progress has indeed been a triumphant one. The whole course of the alimentary canal has come within its province, the blood-forming, the secretory, and excretory glands have, every one of them, become the prey of the surgeon's knife. So, to a considerable extent, has the entire circulatory apparatus, and even the seat of the intellect itself. To speculate as to where this will end were vain; for even now the art of surgery is not limited to the mere lopping off and casting away of these failures of the art of medicine. Its influence on the economy is manifest. Can we not cure epilepsy by trephining the skull, and thereby modify the whole future mental state of our patient? Can we not prevent or cure amyloid degeneration by cutting off a suppurating joint, and thereby profoundly alter the whole subsequent nutrition of that child? Can we not prevent the occurrence of the cancerous cachexia and irretrievable ruin by the timely removal of an epithelioma? Can we not believe that in the near future we shall be able to prevent the malignant cachexia of lymphadenosis? Who shall deny that it may be surgery, and not medicine, which shall first show how the development of cancer or of lymphadenosis is to be prevented? May not the spleen be prevented from spoiling the whole mass of blood by a ligature being placed around the splenic artery? Who knows how the congenital predisposition to rheumatism or to gout may not be artificially prevented from declaring itself, and thereby bringing in its train the multitude of secondary ills which its subjects are liable to? How shall "dyspepsia" be treated in the next century? By digesting our food in our stomachs as we do in a test tube, or by a surgical operation on the pancreas? Speculative problems these; but we cannot tell how closely surgery may yet walk hand in hand with medicine and be concerned in the control of the very acts of assimilation and tissue formation.

PRACTICAL REMARKS ON EXTRACTION OF CATARACT.[1]

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I BELIEVE that I am not overstating the case when I affirm that before the introduction of cocaine the majority of English ophthalmic surgeons were in the habit of administering an anæsthetic during the operation for extraction of cataract, unless they were able to assure themselves that they had the good fortune to deal with a calm, stoical, and non-spasmodic patient. The advent of the new local anæsthetic has in a great measure broken down our barrier of distrust, and by its aid we are now able to operate successfully on even the most nervous and sensitive of sufferers. But whilst we gratefully recognise the absence of pain which is secured by this valuable agent, we have become aware of certain inconveniencies which, unless duly guarded against, may seriously embarrass an inexperienced operator, and chief amongst these is the partial loss of control over the eyelids which follows on instillation of cocaine, so that the removal of the speculum either after or during an operation for cataract must be accomplished with great care, otherwise a violent spasmodic closure of the lids may produce disastrous results. I can also assure my professional brethren, from personal experience, for I have on more than one occasion kept a speculum in my eye for some minutes, that the forcible separation of the lids by our familiar wire coadjutor produces an almost uncontrollable tendency to squeeze them violently together, and there can be no doubt that the wings of the speculum afford a powerful leverage for the strong spasmodic effort which has so often ruptured a delicate hyaloid membrane and wrecked an otherwise promising operation.

I have therefore adopted a very simple method, which enables me to banish the speculum from all operations for cataract that are performed with cocaine. The chief desideratum is a well-trained and flexible ring-finger. That this digit is too often feeble and not properly under control, is a fact well recognised by pianists and other instrumental executants, and the special exercises that have been devised for its education might also be practised with advantage by ophthalmic surgeons. My plan of operating is as follows:—The eye is steadied with forceps held between the thumb and the two first fingers, whilst the ring-finger is used to elevate the upper lid to such an extent as will enable the operator to make the necessary section. The sensitive natural speculum possesses this great advantage—that it can recognise the commencement of a spasmodic effort on the part of the patient and at once give the necessary relaxation, and as the section is nearing its completion the gradual withdrawal of the finger allows the lids to close gently and without effort. If an iridectomy is to be made, the upper lid should be lightly raised at its edge, with the ring-finger of the left hand, whilst the iris is seized with suitable forceps held between the thumb and the first two fingers. It will thus be seen that the operator is able to dispense with the aid both of speculum and assistant. The above plan is so simple and, with a little practice, so easy of accomplishment, that it may very possibly have been already

[1] Read at the annual meeting of the Société Française d'Ophthalmologie, Paris, April 29th, 1886.

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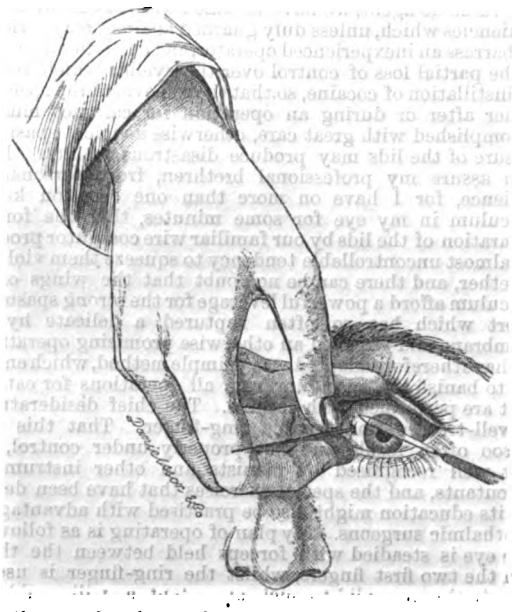
adopted; but as I have seen no mention of it, and as I have already operated by it successfully in a considerable number of cases both in private and at St. Mary's Hospital, I think it right to put my experiences on record. The cases where this method is most difficult of application are those in which the eyes are small and deeply seated, but a little extra patience and care on the part of the operator will surmount these obstacles; and, on the other hand, it is specially suitable for prominent eyes, where the use of the speculum has so often proved hazardous. The knife with which I operate differs somewhat in shape from Graefe's original pattern. It will be seen from Fig. 1 that the blade begins to broaden rapidly immediately below the point, which is central; the back of the knife is bevelled and the blade is rounded, so that in this respect it resembles the

FIG. 1.



Beer's knife, and does not permit a too rapid escape of aqueous. My knife is broader than those in general use; indeed, I understand that several of our foremost operators, both here and on the Continent, now prefer an extremely narrow blade. I have tried every variety of pattern, and have finally decided in favour of that which I have above described, because I find that it facilitates the accomplishment of a smooth and rapid section, and that the iris is less liable to fall in front of the edge of the knife than is the case with more attenuated blades. In making my section, I seize the subconjunctival tissue with forceps just below the spot where I intend to make my counter-puncture. I by no means follow the direction given in some of the text-books to make the puncture and counter-puncture exactly at the same level, because the adoption of that method

FIG. 2.



necessitates the immediate commencement of a sawing movement, which drags upon the globe, and must of necessity leave an objectionable serrated edge to the flap. I am careful to introduce my knife at a lower level than that at which the counter-puncture is to be made (*vide* Fig. 2). The moment that the point emerges, an upward and onward sliding movement imparted to the knife will enable three-fourths of the section to be smoothly completed before any backward motion need be employed, and the least possible amount of violence is thus done to the internal economy of the eye. After the capsule is ruptured, I gently depress the upper edge of the section to prevent it from impeding the exit of the cataract, and if the latter should refuse to quit its home after the exhibition of moderate pressure, I am frequently able to rotate it out by applying a curette to the margin of its under surface. These and other equally useful manœuvres are doubtless well known to all experienced ophthalmic surgeons, but I venture to hope that a trial will be made of the plan I have described, in which, in suitable cases, nature's speculum takes the place of that which we have hitherto used.

ON A NEW METHOD OF ESTIMATING THE CONDITION OF THE RIGHT SIDE OF THE HEART.

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IN September, 1885, I called attention in the columns of THE LANCET to a distension of the superficial veins of the neck which occurs when, under certain circumstances, pressure is exerted over the liver. I have since then had the opportunity of examining a large number of patients presenting both positive and negative instances of this phenomenon, with results of sufficient interest to be worth recording. The physical sign in question is a distension or over-filling of the external jugular veins, apparently from below, with or without pulsation or undulation, which takes place when pressure is exerted in the right hypochondriac or epigastric regions with the flat of the hand, the direction of pressure being backwards and upwards. Before proceeding to make the examination the patient should be placed in the recumbent posture, with the neck slightly extended and the head turned a little to one side, while care is taken that the muscles of the neck are not in a state of tension. The sign is usually best marked on the right side, but may in almost every case be demonstrated on the left side also. It is essential that the movements of respiration should be normally maintained throughout the examination. I have frequently observed a partial filling-in of the supra-clavicular fossa at the moment when pressure is first exerted. This is especially marked in thin subjects, and may be accounted for to some extent, perhaps, by simple mechanical displacement, but is, I believe, chiefly due to an involuntary arrest or modification of breathing, and almost invariably subsides in a few moments. The amount of pressure required varies in different individuals. In rare cases rigidity of the abdominal muscles renders the manœuvre quite impossible. The presence of moderate ascites is no impediment, but excessive distension of the abdomen with fluid or gas renders the necessary manipulation more difficult and sometimes impossible. The pressure should be exercised gradually and steadily, otherwise an attack of coughing is liable to be induced, particularly in cases of bronchitis. The patients rarely complain of any pain or even discomfort, but on the occurrence of the least pain the manipulation should be at once discontinued. The following case affords a good illustration of the phenomenon.

L. W——, aged thirty, was admitted into the Middlesex Hospital in October, 1885, suffering from intense dyspnœa. The face was cyanosed, the lips very blue, and the breathing very rapid and shallow. There was moderate distension of the external jugular veins, which pulsated distinctly and filled from below. Over the heart's apex there was a short systolic bruit, with a line if conduction towards the axilla. The heart dulness was increased towards the right; the liver was not enlarged. Pressure exerted in the right hypochondriac and epigastric regions immediately produced a very marked alteration in the jugular veins. They became very visibly distended, the pulsation at the same time becoming less obvious, and shifting to a spot higher up the vein. This alteration in the condition of the veins persisted as long as the pressure was maintained, but on removing the hand these at once returned to their former state. The patient was treated with full doses of digitalis. On the third day there was a marked improvement in her general condition. The breathing had become natural and all trace of venous pulsation and distension had disappeared. Firm pressure applied as before was now entirely without effect on the veins. Once or twice a scarcely perceptible filling of them below the valves was observed, which was probably due to a slight modification in the breathing.

With a single exception, to which I shall refer again, this

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phenomenon has invariably been met with in cases which showed evidence of great over-distension or failing compensation in the right heart. I believe it to be invariably present in well-marked tricuspid incompetence, whether functional or due to disease of the valves. Of this I have had post-mortem confirmation in at least four cases. But besides these there are a considerable number of cases which ultimately recover, in which the sign is present with varying intensity at one period or other of the illness. Such are instances of mitral valvular disease, whether regurgitant or stenotic, and of chronic pulmonary emphysema, complicated with acute or severe general bronchitis. The question naturally arises, whether the distension in these latter cases (emphysema, &c.) should be regarded as evidence of slight tricuspid incompetence or simply of great over-distension of the right heart falling short of failure of the tricuspid valve. It is to be noted that these are precisely the cases in which the question of tricuspid incompetence has to be considered from a prognostic point of view, and is often left undecided. Venous pulsation is generally absent, and often the cervical veins are but slightly distended. Not infrequently there is undulation at the spot where the distension of the vein ceases. This may be systolic only, or double, and synchronous with the heart beats. (I have hitherto failed to observe the quadruple undulations described by Guttmann.) The valves in the external jugular veins are usually competent, and the veins empty completely with each inspiration. The effect of pressure below the ribs varies in these cases with the amount of obstruction to the venous return. 1. In the least marked cases, the vein, although not perceptibly distending under the pressure, is seen, nevertheless, not to empty completely during inspiration. 2. In others a degree more severe, a moderate distension results; the vein becomes visible as far as the anterior border of the sterno-mastoid muscle, more rarely as high as the angle of the jaw. At the same time the spot where undulation was visible becomes shifted higher up the vein, and the character of the undulation is not infrequently modified, the double variety being replaced by a single systolic flicker, the single variety occasionally disappearing altogether. 3. In cases yet more severe, but in which the usual signs of tricuspid regurgitation are not developed, the pressure sign is often elicited with great distinctness, with or without undulation, and is, I think, here to be regarded as indicating early tricuspid failure. In the second class of cases, which differs from the third in degree only, I am inclined to think that there is great over-distension of the right heart, falling short, however, of regurgitation, possibly with excessive strain on the valve cusps.

The exception above mentioned occurred in a man who had a large empyema on the left side, with considerable displacement of the heart to the right. In this patient the sign was fairly well marked for a considerable time, but ultimately disappeared when he recovered, his heart having then returned to its normal position. I have entirely failed to obtain it in other cases of pleural effusion. The following case illustrates the information which may be conveyed by the absence of this sign.

H. W——, about fifty years of age, was admitted into the Middlesex Hospital in December, 1885, presenting the signs and symptoms of severe bronchitis and emphysema. The external jugular veins were distended, filling rapidly from below, but not pulsating visibly. Examination of the chest revealed nothing beyond marked emphysema and somewhat increased resistance, without dulness, over the upper two right interspaces near the sternum. There was slight bronchitis of the larger tubes. Beyond that mentioned there was no clear evidence of obstruction of veins within the thorax. Firm pressure below the ribs produced no change whatever in the external jugular veins. Relying on this evidence of the absence of tricuspid regurgitation, a diagnosis was hazarded of intra-thoracic growth obstructing the superior vena cava, which was completely verified at the post-mortem examination.

The mechanism of the production of this phenomenon is probably complex. Without presuming to offer a complete explanation, I would suggest that the following factors probably enter into it: 1. Compression of the inferior vena cava by the liver, especially in cases where this organ is enlarged. In my original communication considerable importance was attached to the *rôle* played by the enlarged liver in these cases. I am satisfied from observations in the post-mortem room that a certain amount of compression from this cause is possible. But looking at the nature of the cases in which this sign is met with, and in the face of the repeated observation that enlargement of the liver is not a *sine quâ non*, I am disposed to consider the conjunction casual rather than causal. This factor, however, probably acquires more importance in cases of tricuspid regurgitation, with pulsating liver. 2. Lessening of the inspiratory action of the thorax through interference with the movements of the diaphragm. This I believe to be a more important factor. It may be urged against it that, if true, pressure below the ribs should produce the same effect in healthy individuals. But I think it may fairly be argued that, whereas in health the heart and lungs may, and do almost immediately, adapt themselves to slight modifications of pressure, &c., within the thorax, it does not follow that in disease they possess the same capacity. 3. Direct mechanical interference with the proper movements of the right side of the heart. A glance at the anatomical relations of the right auricle and ventricle to the diaphragm and subjacent liver will suggest the possibility, not to say probability, of such interference.

There can be little doubt that the effect of subcostal pressure, whatever the mechanism of its action, is to put increased difficulties in the way of the proper action of the right side of the heart, so that the pressure sign in cases where the tricuspid value is considered to be still competent is to be looked upon as a measure of the capacity still possessed by the right heart to combat increased resistance. In cases where the tricuspid valve is incompetent, the effect of the pressure is to aggravate the conditions under which the heart is already unable to do its work, with a proportionate increase in the signs of that inability. I venture to think therefore that this subcostal pressure sign possesses undoubted value as a means of diagnosis, and may also afford valuable information as to the progress and ultimate prognosis of many cases in which we are now reduced to mere conjecture for want of some definite, tangible index of the condition and working power of the right side of the heart.

Queen-street, Mayfair, W.

ON THE NATURE OF WHOOPING-COUGH

WITH A DESCRIPTION OF A NEW MODE OF TREATMENT INTRODUCED BY PROFESSOR MONCORVO, OF RIO DE JANEIRO, AND ITS PRACTICAL RESULTS.

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(*Continued from p. 871.*)

So much for the irritation and its seat; but what is the cause of that irritation? We all know the extreme sensitiveness of the parts about the entrance to the larynx, and a local irritant in that position being once granted, we have little difficulty in foretelling the train of symptoms that would be produced. But what is the local irritant, and how is it that the irritation is manifested in spasmodic paroxysms with intervals of repose? We shall endeavour to reply to these questions. We find the first trace of an idea that the cause of irritation might be parasitic, in a theory that it was due to the inhalation of the very minute eggs of some species of insect; but it was Rosen de Rosenstein[1] who, after studying with care the epidemics of this disease in Stockholm in 1743 and 1764, remarked that it only affects those who have never previously contracted it, and that it is not subject to return. He continues (I translate the substance): "One sees by this statement that the cause of the disease is the existence of a foreign matter or an injurious principle, which increases and propagates itself, like that of small-pox, among those who have not yet been attacked." He doubts whether we should attribute that cause to insects, but is quite sure that "the morbific principle insinuates itself partly into the chest by respiration and partly into the stomach, where the nerves are very numerous." Remarking that the irritation develops itself periodically with intervals of perfect repose, he goes on to say that "during that time the secretions accumulate, and, becoming abundant, provoke a new access, which, in its turn, terminates by the expulsion

[1] Dissertatio de Tussi (1742); and Traité des Mal. des Enf., trad. du Suédois par Le Febvre de Villebrune (Paris, 1778), p. 323.

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of the agglomerated mucosities. The nature of the disease," says he, "at this period shows that we ought to destroy the principle in the place where it is seated; and it would be easy to destroy that principle if we knew of an appropriate specific." I have already alluded to the practice of Dr. Watson of Glasgow (see note 24), who applied to the interior of the larynx a solution of nitrate of silver, with, as Dr. West bears witness, sometimes very beneficial effects.

In the year 1867, Poulet,[2] in a communication to the Academy of Sciences of Paris, describes the result of certain researches into the organisms to be found in the respiration of children affected with whooping-cough. "The vapours of the respiration of the little patients," says he, "collected by the method described in my previous memoir, present on microscopic examination a real world of infusoria, in every case identical. The most numerous, which are also the smallest, may be referred to a species described by some under the name of 'monastermo,' and by others under that of 'bacterium termo.' Others, in very small numbers, move here and there on the field of the instrument. They have a rod-like (*bacillaire*) slightly spindle shape; their length is two or three hundredths of a millimetre; their width is scarcely half a hundredth of a millimetre. This is the species that Müller calls 'monaspunctum,' Ehremberg 'bodopunctum,' and that micrographists place among the bacteria, bacterium bacillus. Thus the whooping-cough, by these alterations of the expired air, takes a place in the class of infectious diseases, among which I have already studied, from the same point of view, small-pox, scarlatina, and typhoid fever." In 1870 our own fellow-citizen and honoured *confrère*, Dr. (now Professor) Arthur Ransome, brought before the Literary and Philosophical Society of Manchester a number of original researches upon the "Organic Matter in the Human Breath in Health and Disease,"[3] and "found in a case of measles and one of whooping-cough abundant specimens of a small round-celled conferva, like the penicillium glaucum." These results have also been confirmed, as regards measles, by Braidwood and Vacher. It is, however, since the publication in 1873 of the researches of Letzerich[4] that a clearer pathology has been developed. When we examine the sputum ejected after a typical spasm of whooping-cough, we find it to consist of two distinct parts: a clear, transparent, or semi-transparent glairy mucus, entangling roundish whitish-yellow spots, varying from the size of a millet-seed to that of a lentil. When these spots are submitted to microscopic inspection, they, says this eminent observer, are found to be composed of micrococci disposed in chains. Having submitted certain of these to culture, he found that at the end of five or six days the bacteria increased in volume, and became transformed into vesicles, holding in their interior a large number of spores. "These vesicles finally break up and set at liberty the spores, which afterwards become transformed into bacteria. The culture having been made in solution of starch or of sugar, there is seen the appearance of a mycelium, on which the spores attain their complete maturity. These last were round and of a dark colour." This observer introduced these spores into the tracheæ of different animals, who were each attacked at the end of a few days with laryngo-tracheal catarrh, and afterwards with spasmodic attacks of cough, with lassitude and want of appetite. On post-mortem examination, the writer found the same spores in the mucus of the larynx, the bronchi, and the pulmonary vesicles (*des alvéoles pulmonaires*). These studies of Letzerich aroused the attention of Dr. Henke,[5] who found by an extended examination of the sputa of children affected with whooping-cough that there were always present rounded cellules of from ten to twenty thousandths of a millimetre in diameter, with numerous nuclei and many spores endowed with the power of extensive movement. In simple bronchitis he could never discover any cryptogams such as those always found in whooping-cough, and he consequently considers them as the true cause of the disease. He observed also that the simple addition of a few drops of a solution of quinine to the preparation under the microscope caused the cessation of all movement among the spores. Tschamer de Gratz,[6] having never in numerous examinations found (except, in very rare cases, certain micrococci and bacteria, also observed in a state of health, and especially in the morning expectorations) anything comparable to these in cases of bronchitis, bronchiectasy, and pulmonary tubercle, set himself to examine the expectoration of a large number of children with whooping-cough, and he established the fact of the naked eye characteristics which I have before described. Further, he observed one or two days before the spasmodic or convulsive period, besides epithelial cells and a mycelium reticulated with polygonal meshes, round or ovoid spores, without colour, and variable in number and size. A little later these spores were found to be still further developed, for the most part round, and of a yellowish or even dark-red colour. He also cultivated these organisms in various ways, and introduced them into the tracheæ of hares, with results identical with those of Letzerich. He also found that these corpuscles were analogous to, if not identical with, those that are found in the depressions in the rinds of oranges and citrons in a state of putrefaction, in the form of a black velvety deposit. Carrying his researches to a further point than Letzerich, he abstained for fifteen days from seeing patients with whooping-cough, and carefully examined with the microscope the expectorations which he expelled, without ever finding anything analogous to what we have just described; and at the end of that time he began to inhale the black velvety matter found on the cortex of oranges, previously pulverised. On the *fourth day* he felt a pricking in the larynx which compelled him to cough, and *ten days later* the cough presented all the characters of whooping-cough. At the commencement of the fourteenth day he recognised the spores under the microscope, and the number from that time increased. Similar results also were observed in the case of another person who submitted himself to the same experiments. From these results this writer arrives at the conclusion that whooping-cough owes its origin to the presence of, and the irritation produced by, a cryptogamic parasite upon the mucous membrane of the larynx. The period of incubation he states to be the time necessary for the development and proliferation of those germs, and also to vary with the quantity introduced into the respiratory passages. From the irritation and inflammation caused by their presence on the laryngeal mucous membrane result the primordial phenomena, which precede the period of convulsive cough. He explains the periodicity of the attacks by the necessity that must exist for the effects of the irritation to accumulate before it can produce that reflex action. When the germs are in small number, the constant and abundant expectoration may carry away these cryptogams in numbers exceeding those of their formation, and thus may account for those cases of spontaneous cure which are not unfrequently seen in whooping-cough.

These conclusions, it is but fair to say, have been denied by Professor Rossbach, of Würtzburg,[7] who states that laryngoscopic examination has always shown to him the pharynx, the larynx, and the upper part of the trachea perfectly sound, and without any trace of inflammation. He acknowledges the presence in the broncho-laryngeal secretions of spores and of mycelium, but he says identical with what one observes in ordinary catarrh. But these negative conclusions have not been confirmed by other observers; thus, Meyer Hüm,[8] who made numerous examinations with the laryngoscope in cases of whooping-cough, has always seen inflammation of the pharyngo-laryngeal mucous membrane. Oltramare, of Geneva,[9] comes to the same conclusions as Tschamer as the result of his independent researches. Among many others also, the commentators on the work of the late Professor Steiner, of Prague, have shown themselves fully in accord with the results of the researches of Letzerich and Tschamer. Lastly, Dr. Burger, of Bonn,[10] has supported by new facts the parasitic doctrine of whooping-cough. This author describes a bacillus which he has found in the expectorations of this disease in considerable numbers, and which may be observed with an enlargement of ½ Zeiss. So examined, they are seen under the form of little rods (*bâtonnets*) of variable dimensions, the smallest of them being twice as long as they are wide. When examined by the aid of the apparatus of Abbé, we may easily see that the longest of them present a central constriction, making them resemble somewhat the form of an hour-glass. They were

[2] Comptes-rendus de l'Acad. des Sciences, 1867.
[3] Memoirs of the Lit. and Phil. Soc. Manchr., vol. iv., session 1869–70.
[4] Ueber Lungen-mycose beim Keuchhusten, nebst Angabe einer Methode zur Heilung der Letztern. Virchow's Arch., 1873, tom. lvii.
[5] Deutsches Archiv für Klin. Med., Bd. xii., 1874.
[6] Jahrbuch für Kinderheilk., Bd. x., H. 4, 1870; Schmidt's Jahrbuch, n. f., 1874.
[7] Zur Lehre von Keuchhusten. Berlin Klin. Woch. 1880.
[8] Westererbeitrage zur Pathologie und Therapie der Keuchhustens. Zeit. für Klin. Med., Bd. i., p. 461.
[9] Progrès Médical. Paris, 1881.
[10] Berliner Klin. Wochenschrift, 1883.

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disposed sometimes in chains, sometimes at regular intervals, and again in the form of irregular masses. Coloured with aniline, they showed themselves with remarkable distinctness. They should not, according to the writer, be confounded with the Leptotrix-buccalis, since the spores of the latter, besides their larger size, are accompanied by filaments peculiar to them. From these facts Burger deduces a bond of connexion between these germs and whooping-cough—"first, because one never meets them in any other kind of expectoration; secondly, because they exist in such considerable amount that one cannot doubt their morbific action; thirdly, from the relation that exists between the abundance of the spores and the intensity of the disease."

At this point the inquiry was taken up by Professor Moncorvo, of the Polyclinique, Rio de Janeiro. This gentleman, aided by Professor Silva Araujo, of the same institution, made many microscopic examinations of the matters expectorated, sometimes in the catarrhal and sometimes in the spasmodic stage of whooping-cough; not only in those who had never been treated medicinally, but also in those under treatment and in progress of cure. "In the expectoration rejected immediately before the examination," says this writer,[11] "we discovered a great quantity of little yellowish masses, irregularly rounded, of a size about that of a pin's head, immersed in mucus. These are found in greatest abundance in the expectoration of those children in whom the disease has attained an advanced period of spasmodic cough. When submitted to microscopic examination, without the addition of any reagent or of any colouring matter, we have observed what we are about to describe as the *résumé* of different examinations. We have found pavement epithelial cells, polyhedric, irregular, and provided with a nucleus, globules of pus, more or less numerous small globules (globulins), and a considerable quantity of micrococci; all these elements were immersed in an amorphous matter, strongly glutinous, which constitutes the gangue of that magma. The epithelium cells show themselves under different sizes and diverse forms, and were all provided with a nucleus, and were of a double contour. What we saw of the greatest interest was the infiltration with spores, infinitely small and brilliant, of veritable micrococci, which existed in profusion in the interior of the cells, always keeping the same disposition as in the amorphous substance which surrounded them—that is to say, the disposition in linear series, in chains or chaplets, or in groups, which vary from two, three, four, or more; or, finally, they were isolated and distinct one from another, although close together, on account of their considerable number. That profusion, so that the chains formed by the micrococci crossed each other in different directions under the field of the microscope, became much more marked when the preparation was coloured with picro-carmine or violet of methyl. In all the rest of the preparation the micrococci showed themselves in extraordinary abundance, forming in different points true zoogloea or groups of spores agglomerated by an amorphous unitive matter. The globules of pus were equally filled and infiltrated with micrococci. This element, which predominated in considerable quantity in preparations made with expectoration ejected during the convulsive period of the cough, diminished and became less abundant in those made with the products of expectoration during the latter stages of the disease, principally at an epoch near to that of the favourable termination. They were also in very small numbers in the examinations practised in the catarrhal stage. At the same sitting we have been able to observe the relative proportion between these elements at two different periods of the cough, by examining one after the other the matters expectorated by two children affected with whooping-cough, dating in one case from eight days, and in the other from twenty days. Those of the first, in which the spasmodic phenomena were still vague, contained a number much inferior when compared with that in the second preparation, in which the epithelium cells were extraordinarily infiltrated with spores, and a prodigious number encumbered the field of the preparation. Examined with the naked eye, the matters ejected by the first did not show, as did the second, any great number of the yellowish corpuscles, which were described by Tschamer de Gratz; but we have not met, as did that observer, with mycelium which for the rest we have seen in great abundance in the black powdery matter which develops on the rind of an orange in full putrefaction." He then goes on to say that he has never seen the little rods with central hour-glass construction described by Burger de Bonn, and suggests that he has mistaken chains of spores united two to two in such a manner as to simulate a central constriction for these. "In a great number of our preparations the micrococci were endowed with movement, except when they were made with the expectoration of infants already submitted to the topical application of resorcine. The presence and the proliferation of the micrococci in proportion to the advance of the whooping, and, on the other hand, their diminution and the loss of their movement towards the termination of the attack under the direct influence of treatment, appears to me to constitute indices the most significant of the causal relation between the parasite developed upon the laryngeal mucous membrane and the disease." Even Prof. Rosshach, who was supposed to have contested the parasitic origin of this disease, regards the expectorations as of a nature probably virulent, without explaining in any way the reason of that supposed virulence.

(To be concluded.)

[11] Moncorvo: De la Nature de la Coqueluche et de son Traitement par la Résorcine (Rio de Janeiro, 1883); Della Tosse Convulsiva e della sua Cura con la Resorcina (Archiv. d. Patolog. Inf., Napoli, 1885).

NOTES ON THE CLINICAL VALUE OF THE BACILLUS TUBERCULOSIS.

BY ALEXANDER BLACK, M.B., F.R.C.P. EDIN.

THE experience of the last few years among practitioners as to the value of the presence of the bacillus in the sputum of phthisical patients is varied: some declaring that it is to be detected in almost every case, at least at some period of the history of the disease; others that they have seen it disappear before death; and others, again, arguing against its importance as a factor in diagnosis from its spasmodic occurrence. From an examination of numerous cases, it would seem to me to have a clinical value far beyond what it has hitherto had as an element in diagnosis. The method of detection I have invariably employed has been that of Gibbes, and of this method it can only be said that it has always given uniform results. In every case error in observation was prevented by preparing duplicates. In several cases of undoubted phthisis repeated examination has not discovered any trace of the bacillus, while in other more doubtful cases the finding of the bacillus has at once added certainty to the diagnosis. In the cases of undoubted phthisis where the sputum has been examined and bacilli found wanting, it has been found that the symptoms as apart from the local signs of the disease have been extremely slight, and certainly some of the characteristic symptoms of the disease have been entirely absent—as, for example, the anæmia and night sweats.

In the case of one sputum from a woman aged about forty, who in early years had been the subject of glandular abscesses of the neck, and who at present is suffering from a catarrhal affection of both lungs, as evidenced by the local signs, there has not hitherto been found a single bacillus. This patient complains of nothing save the cough, expectoration, and great debility. An examination of the lungs reveals crackling indeterminate breath sounds over the front of both lungs, with marked impairment of the percussion note at the upper part of the right lung. The patient has no night sweats, and has a remarkably healthy ruddy colour. Her lips are rosy red, as also the interior of the mouth; and the conjunctivæ have their normal appearance. One of this patient's children, aged six, died some short time ago from tubercular disease of the lung, and another, aged eighteen months, died from meningitis. What appears to me the feature of this case is the apparently grave nature of the local signs, and the absence of general symptoms commensurate with the local disease. This, also in connexion with the absence of bacilli in the sputum, is further remarkable.

Another case is that of a man, aged thirty-two, who had a slight pulmonary hæmorrhage. He had formerly been in good health; only one illness can he remember, and that was pleurisy, when he was a lad. For some short time before the hæmorrhage he had not felt well, complaining of

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cough, emaciation, and general debility. What struck me first of all, on seeing this patient, was his extreme pallor, notwithstanding the small amount of hæmorrhage that had occurred—certainly not more than two tablespoonfuls of blood. His gums, palate, and conjunctivæ had the appearance of extreme anæmia. On physical examination the right side of the thorax was found to expand much less freely than the left side. This may have been the result of the old pleurisy, as it had occurred on this side. Percussion revealed a note of higher pitch and shorter duration at the outer part of the base of the right lung. The vocal resonance was much increased here, and the other auscultatory sounds were a loud apparently friction sound and moist râles. The other parts of the lungs seemed perfectly free from disease. The patient also complained of pain at what I considered the seat of the disease. As has been mentioned above, for some short time before the hæmorrhage he had complained of losing flesh, night sweats, and general debility. An examination of the sputum was made as soon as it was untinged with blood, and the examination revealed numerous bacilli. Here, then, was a case the chief feature of which was the extreme anæmia, emaciation, and night sweats, associated with comparatively slight local signs and coincident with the presence of numerous bacilli in the sputum.

One other case deserves mention, that of a young man, a watchmaker by trade, who came to me several months ago complaining of pain in the left side, cough, and expectoration. On examination, a friction sound was heard about the middle of the left side at the seat of the pain; crackling was also present; but there was at this time no impairment of the percussion note. The man gradually from this time became emaciated and anæmic, night sweats and extreme debility being also present. A few days after, the above local signs continuing, there was superadded to them a very marked impairment of the percussion note. The patient continued going on from bad to worse, and it was determined to send him off to some country town (Peebles), where he could at least have the advantage of fresh air and milk. Unfortunately, at this time his sputum was not examined. While in the country he gradually improved, gained flesh, and got rid of the night sweats. Several weeks' residence in the country improved him so much that he determined to return to town and resume work. On examining him on his return, the left side was found to be even worse than on his removal to the country, showing that, at any rate, the physical signs had not improved. The percussion note over the whole side, back, and front was much impaired, it giving the impression that the underlying lung was almost solid. At the upper part of the lung tubular breathing, without moist râle accompanying it, was heard, and at the middle and lower parts of the lung crackling indeterminate respiration. His sputum at this time showed entire absence of bacilli, and what seems remarkable was that the man complained of nothing save his cough. I regret that this man's sputum was not examined before his removal to the country, as I should have expected to have found numerous bacilli. At any rate, the absence of bacilli and of general symptoms on his return is sufficiently striking.

I think most of us who have examined the sputum for bacilli will admit to having seen a general improvement in the patient coincident with a diminution in the number of bacilli. Why this should be it is easy enough to imagine, if they have a causal relation to tubercular disease. It appears to me to be an explanation accounting for the grave symptoms of phthisis pulmonalis apart from the local signs, if we imagine the bacilli to be the origin of some product which, on admission to the blood system, acts as a poison either on the nervous centres, causing vaso-motor and other disturbances, or perhaps acts directly on the blood itself, destroying its hæmoglobin (pre-tubercular anæmia). At any rate, there seems reason to believe in the following assertions:—1. That in those cases of phthisis pulmonalis with grave constitutional symptoms, unaccompanied by local signs or commensurate local signs sufficient of themselves to account for the symptoms, the chances are that the bacilli are present in greater or less quantity. 2. That in those cases where the constitutional symptoms are slight and the apparent local signs great, the chances are that the bacilli are more or less absent. 3. That the first effect of the diminution of the number of bacilli in the sputum will be an amelioration of the general disturbance. Our aim, then, should be directed towards the destruction of the bacilli when present, and preventing them doveloping when the soil is suitable.

I have not spoken of temperature, as my observations are not yet ample enough to draw any conclusion therefrom.

Edinburgh.

SEQUEL TO A CASE OF MYXŒDEMA IN A WOMAN AGED SEVENTY-SIX.

BY C. W. SUCKLING, M.D. LOND., M.R.C.P.

IN THE LANCET last year I published an account of a case of myxœdema in a woman aged seventy-six. Since then the patient remained in the Birmingham Workhouse Infirmary *in statû quo* until Feb. 26th last, when my attention was drawn to her. I found that she was semi-comatose, could not speak or be made to respond in any way to questions put to her. The pulse was 36 per minute, and very feeble; the respiration 16, stertorous; the temperature was 95°. On the 27th the patient was completely comatose. The pulse was still 36; the respirations 12 per minute. The temperature could not be taken with the ordinary clinical thermometers, which were not graduated below 95°, the mercury not rising to within an inch of the first mark on the glass. A thermometer used for taking the temperature of baths was separated from its iron frame, on which was the graduation, and the bulb was placed under the tongue for half an hour, the level of the mercury being marked on the stem with ink. The thermometer was again placed in its frame, and the registration was 76·5°. The next day the pulse was imperceptible at the wrist, the heart-beats being 20 per minute. The temperature, taken the same way as the day before, was 70°. During the day it was taken several times, and varied from 66° to 70°. The patient died the same night. The bath thermometer, immersed in warm water, at the end of three minutes registered 99°, a clinical thermometer 98·5°, so that we must not conclude that the patient's temperature was exactly as recorded. Still, allowing a degree or two, the temperature in this case must be one of the lowest ever recorded during life. Dr. Barling, Professor of Pathology at the Queen's College, has kindly undertaken to report a full account of the necropsy.

Birmingham.

THE CONNEXION BETWEEN GLYCOSURIA AND BILIARY OBSTRUCTION.

BY W. T. WYATT, M.A., M.D. OXON.

IT has been demonstrated by Dr. Wickam Legg, and confirmed by Von Wittich, that ligature of the bile-ducts causes the disappearance of glycogen from the liver, and that after ligature glycosuria cannot be produced by puncture of the floor of the fourth ventricle or section of the cervical sympathetic. It is presumed that the retention of bile within the liver interferes with the nutrition of the hepatic cells, and so prevents them from carrying on their natural function of glycogen formation.

The following clinical case appears to me to support the conclusions drawn from the above-mentioned experiment. A lady, aged sixty, has for some time suffered from glycosuria, and latterly albumen has been present in addition; the amount of sugar excreted usually ranges from ten to twelve grains per ounce, and no material alteration in this quantity occurred when the urine became albuminous. The urine has been always highly saccharine, even when a strictly nitrogenous diet was enforced, a symptom pointing to the fact that a too rapid metamorphosis of hepatic glycogen was the probable source of the excess of sugar in this case. A short while ago this patient became jaundiced, the urine containing both biliary acids and colouring matters, and with the appearance of the jaundice the sugar diminished from its usual amount to a hardly perceptible trace, Fehling's reagent, the picric acid and indigo carmine tests, giving almost negative results. The disappearance of the sugar could in no way be accounted for by alterations in diet, for the appetite and manner of living remained the same as usual. In this case, however, there was undoubtedly

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some obstruction to the bile-ducts, as no bile could be detected passing with the stools, so that a pathological condition was here established analogous in its result to the experimental ligature, for in each case the escape of bile was effectually hindered. If, then, it is correct that the retention of bile within the liver prevents the formation of hepatic glycogen, it necessarily follows that the same retention must greatly diminish the amount of sugar in a case of glycosuria of that type in which the disease is chiefly dependent on a too rapid metamorphosis of glycogen into sugar. In making deductions from a single case, it is well-nigh impossible to separate the *post hoc* from the *propter hoc;* but, at any rate, in this case, coincident with the retention of bile, the amount of sugar excreted fell to zero, and remained so as long as the obstruction lasted—speedily, however, regaining its usual amount of ten grains per ounce as soon as bile was again poured into the intestines.

The whole subject of glycosuria up till now has been elucidated more by the experimental physiologist than by the physician. However valuable such experiments may be, the results obtained from them are often very fallacious, the condition under which they are conducted in many cases being far removed from anything existing in nature, so that confirmation of such observations by clinical work is always highly satisfactory. Of course the phenomena of this case may bear an interpretation differing widely from that which I have assigned to them; still, I venture to think that the biliary retention being accompanied by an almost entire absence of sugar in the urine was not a mere coincidence, but that the two symptoms were related to each other as cause and effect.

Stamford-hill.

CASE OF SUPPURATING KIDNEY; NEPHROTOMY AND DRAINAGE.

BY MICHAEL T. SADLER, M.D. LOND., &c.,
HONORARY PHYSICIAN TO THE BECKETT HOSPITAL, BARNSLEY.

E. N——, aged twenty-two, telegraph clerk, consulted me for the first time on Jan. 18th, 1885, on account of a pain in his right side. He had been ailing for about two years, and had felt more or less of the pain for about twelve months. Since November, 1884, he had lost weight and strength rather rapidly, but had not left his work. Sometimes the pain was very violent, striking up into his head and face in the form of neuralgia. There were also frequent night sweats. The pulse was usually 110 to 120, and the temperature, even in the morning, over 100°. On examination, I found a tumour, which he had not noticed, in the right flank, rounded, ill-defined, semi-fluctuating, extending from the liver down within the crest of the ilium, coming in front to within two inches of the umbilicus, and passing backwards behind the dorsal muscles. The urine, on examination, proved to be albuminous, containing much pus; sp. gr. 1014. At times the urine was for a short time clear and free from pus or albumen. There was no distinct phthisical family history. His father and one sister died of heart disease.

Having arranged for his admission into a private ward in the Beckett Hospital, on March 6th I cut down on the kidney by an incision four inches long one inch below and parallel with the last rib on the right side. On dividing the lumbar fascia about a pint of offensive curdy pus escaped, and then the finger could be passed into a cavity roughly reniform in shape, occupying the position of the tumour, apparently about eight or nine inches from above downwards, but the lower end of which could not be reached. No calculus could be felt. The cavity was washed out with carbolic lotion, and a large drainage-tube inserted.

The pain ceased to be troublesome after the operation, the hectic symptoms gradually diminished, and the appetite, which had been very poor, soon returned. The drainage-tube was kept in until the 21st, the cavity being daily washed out with carbolic lotion until the 24th, when the urine became smoky-looking, and sanitas was substituted for carbolic acid in the lotion. On April 6th he was allowed to leave his bed, and on the 19th was removed home. On the 20th he passed a small phosphatic calculus by the urethra, and on May 9th had suddenly an attack of pain in the left calf and foot, with partial obstruction of the left femoral artery. This, however, had quite passed off by the 20th, and from that time his progress, though slow, was continuous, although the urine continued to contain pus, sometimes more and sometimes less. In July he returned to his work and was able to attend the regulation number of hours (eight daily) until March, 1886. Up to Christmas, 1885, he was free from pain, had a tolerable appetite, taking more milk than meat, and had gained flesh. There was still a discharge of pus from the opening in the loin, but the urine was free from any cloudiness. A sample examined on Nov. 11th proved, however, to be albuminous, sp. gr. 1014, alkaline, with a white deposit containing pus-cells and a few crystals of triple phosphate. He broke down under the severe weather of February and March, 1886, and died from uræmia on March 19th. No examination of the body was obtained.

ABSCESS OF KIDNEY TREATED BY FREQUENT TAPPINGS; RECOVERY.

BY THOMAS EDWARDS, M.R.C.S., L.R.C.P., L.M.

ON Dec. 4th, 1885, W. V——, aged twenty-three, of this village, working in London as a gravedigger, returned home complaining of constant pain of a dull aching character in the lumbar region, which he had had for the last eighteen months. He had been treated for lumbago and liver disease. The family history is good. He stated that he had never injured himself to his knowledge, and that he had "shivering fits" continually.

On examination the patient was greatly emaciated, appearing as one in the last stage of phthisis. There was pain on pressure over the right kidney, also pain on fully extending the right leg. There appeared to me deep fluctuation midway between the last rib and the crest of the ilium. Hectic fever and rigors were present; the urine was scanty and high-coloured, albuminous, but free from blood or pus; there was also profuse diarrhœa. I inserted obliquely upwards a trocar and cannula (one I usually carry in my dressing-case) to its full length, midway between the last rib and the crest of the ilium and two inches from the spine, and drew off a tumblerful of offensive pus resembling cream.

For the following two days the patient's condition improved, but soon afterwards all the bad symptoms returned. I again tapped and drew off another half-pint of pus. I repeated this operation five times, drawing off altogether three pints and a half of pus, the last drawn being terribly offensive. On each occasion the small wound made by the trocar healed in a day or two. The patient's condition after this greatly improved; the pain, fever, and rigors disappeared; he could walk, had a good appetite, and was rapidly gaining flesh. I gave quinine throughout, but now added tincture of iron and cod-liver oil. About three weeks after the last tapping the patient complained of an uncomfortable feeling in the old place, but no pain. I again tapped, and drew off three pints of clear amber-coloured fluid resembling urine; this operation I repeated several times, but on each occasion less came away, until it disappeared. The patient has quite regained his health and strength, taking long walks daily. Urine normal.

Harrold, Beds.

LIVERPOOL SOUTHERN HOSPITAL.—On the 11th inst. the Duke of Connaught, who accompanied Her Majesty in her recent visit to Liverpool, visited this hospital, which fourteen years ago he had formally opened. An address was presented to the distinguished visitor, in which it was stated that since its opening 107,000 persons had received at it medical or surgical aid. After inspecting the various wards, the Duke gave the name of the "Margaret Ward" to the apartment occupied by the children, and expressed his great satisfaction with the arrangement and management of the institution.

IN St. Pancras on Sunday last, the fourth annual United Friendly Societies' demonstration and church parade in aid of the funds of the West London and University College Hospitals took place, in the presence of a large number of persons. Collection boxes were exhibited along the route taken by the procession, and a substantial sum is said to have been collected.

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A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

ST. GEORGE'S HOSPITAL.

A CASE OF OVARIAN DERMOID TUMOUR IN A GIRL OF THIRTEEN; ROTATION AND COMMENCING GANGRENE OF THE CYST; OVARIOTOMY; RECOVERY; REMARKS.

(Under the care of Dr. CAVAFY and Mr. HAWARD.)

THE following case is one which presents several points of interest: the age of the patient, the character of the tumour, and the twisting of the pedicle, which had produced several attacks of localised peritonitis, from changes in the cyst wall, due to obstructed circulation, and had even caused commencing gangrene at the time of removal. We would refer our readers to the remarks appended to the case. The inflammation of the parotids, which developed six days after operation, does not appear to have been severe, or accompanied by much pain or constitutional disturbance. It may possibly be an example of the parotitis which occasionally develops after abdominal operations, though that is usually limited to one gland, rarely if ever affecting both simultaneously.

Alice A——, thirteen years and nine months of age, was admitted on June 6th, 1885, on account of constipation, vomiting, and abdominal pain. The mother stated that she had for some months past noticed the girl's abdomen to be swollen, and that the child had on three or four occasions during the last four months complained of stomach-ache and sickness; but these symptoms were not severe, and passed off without treatment, so that she attributed no importance to them. Menstruation had not commenced. During the last week in May a more severe attack of abdominal pain occurred, and though it ceased after a few hours the child had not seemed well since, but had been languid and lacked appetite. On June 3rd the abdominal pain recurred with severity, the child became worse, and lay in bed with her knees drawn up. On the following day vomiting occurred, and continued several times every day, chiefly after food. The matter vomited was said to have become offensive. There had been no action of the bowels since June 2nd. Some aperient had been given, but was vomited. Enemata had also been administered, but brought away only a few very small lumps of feculent material.

Her condition on admission, described chiefly from notes by Dr. Griffiths, the registrar, was as follows:—She was a pale girl of fair growth. Pulse 84, very small and weak; temperature 100°. Examination of the abdomen revealed an elastic tumour of rounded outline, extending downwards from about an inch above the umbilicus, and three or four inches towards each iliac fossa. It was more prominent on the left of the umbilicus, but extended rather further to the right of the middle line. The tumour was elastic, dull to percussion, and movable. Beyond the tumour the abdomen was mostly resonant, though there was slight comparative dulness in the right flank. She was given belladonna and opium, and small quantities of beef-tea and milk.

On June 7th, Dr. Cavafy, having diagnosed the case as one of ovarian tumour, requested Mr. Haward to see the child in consultation. She had not been sick, and was in rather less pain. Temperature 100°; pulse 120, weak. She lay sometimes on her back, sometimes on her side, with the knees drawn up; tongue slightly coated. There had been no action of the bowels. A catheter was passed into the bladder, and a small quantity of urine drawn off; it was high-coloured, had a specific gravity of 1028, and was free from albumen. Examination of the rectum showed the bowel to be empty as far as the finger reached. The uterus could be felt of natural size and position. The tumour was also easily felt through the bowel. There was some abdominal tenderness, chiefly over and in the neighbourhood of the tumour. There was very little resistance of the abdominal muscles. Mr. Haward agreed with Dr. Cavafy's diagnosis of ovarian tumour, which had probably recently risen out of the pelvis.

On June 8th there was more abdominal pain and tenderness. The tumour was now more prominent, especially towards the right side of the umbilicus. Pulse 120, weak. Rather more distension of abdomen; no action of bowels; she looked decidedly more ill. Dr. Champneys now saw the case in consultation, and agreed that the tumour was an ovarian cyst, and that peritonitis was commencing, probably in consequence of a twist of the pedicle. Ovariotomy was decided upon, and was performed next morning by Mr. Haward. Ether was administered and antiseptic precautions observed, but no spray was used. An incision was made in the middle line below the umbilicus, and on opening the peritoneal cavity a considerable quantity of clear light-yellow fluid escaped. The peritoneum was vividly injected. The tumour at once presented, and was seen to be of dark-purple colour, its vessels greatly congested, and some parts of the surface almost black. The cyst was thick-walled, about eight or ten inches in diameter, and very tense. It was tapped and emptied of its fluid, which contained a large quantity of blood. The pedicle was seen to be twisted twice round its vertical axis. The cyst having been drawn out of the wound, the pedicle was transfixed and tied with a double ligature of carbolised silk; the tumour was then cut away and the pedicle returned into the abdomen. The left ovary was ascertained to be healthy. The wound was closed with deep and superficial sutures of carbolised silk and covered with a dry pad of carbolised wool enclosed in eucalyptus gauze, over which strips of plaster and a flannel bandage were applied. The tumour sprang from the right ovary, and within the chief cyst was a smaller one containing caseous matter and hair.

No sickness followed the operation, but the bowels acted several times, the motions being very loose. She was given five drops of laudanum in a teaspoonful of water every four hours. No food was given till the following day, when she was allowed a pint of milk in the twenty-four hours. She went on well, with a natural temperature, till June 13th, when a sudden rise of temperature occurred (102·6°). The wound was therefore dressed, when it was found that she had passed some urine in bed, and that the bandage and pad under her back had thus become soiled. The wound was united soundly, excepting that a little pus had formed round the two lowest superficial sutures. All the stitches were removed. The temperature from this date declined, and on the 16th was normal, after which there was no further rise. On the 14th she had complained of tenderness at the angles of the jaw, and on the 15th both parotid glands were tender and swollen. The attack of mumps, however, soon passed, and from that time she made an uninterrupted recovery. At the end of a fortnight she was well, and after a few days was allowed to get up. On July 15th she was sent to the Convalescent Hospital at Wimbledon.

Remarks.—Mr. Haward, after pointing out the grounds of the diagnosis, said that the surgical treatment was obviously ovariotomy; for the history of the previous attacks of pain, the subsidence of these, and the sudden recurrence of pain and vomiting pointed almost certainly to a rotation of the tumour, with the attendant dangers—hæmorrhage, gangrene of the cyst, and peritonitis. It seemed more probable that the constipation depended upon peritonitis than upon obstruction of the bowel by the pedicle or the tumour, because of the subsidence of the vomiting and the slight amount of distension of the abdomen. The operation was performed with every antiseptic precaution, although the spray was not used, Mr. Haward stating that he had found his ovarian operations were no exception to the rule that obtained with regard to his other operation—namely, that, provided due care were observed in other respects, nothing was gained by the use of the spray. The dressings consisted of a dry antiseptic pad, which was recommended both for comfort and efficiency, not only for abdominal section, but for most recent wounds. Wet dressings are much more apt to irritate the skin and to excite suppuration; dry antiseptic wool, on the other hand, absorbs discharge, protects the wound from external influences, maintains the part at an equable temperature, and by its elasticity gives comfortable support and keeps the wound at rest. The after-treatment was of the simplest kind. No food was given for the first sixteen hours, thirst being allayed by washing out the mouth with warm water in which a little permanganate of potash was dissolved. Small doses of laudanum were

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given at first because of the looseness of the bowels, and later on, when the urine became loaded, lithia water was ordered. This was all that was needed in the way of medicine. The transient fever which occurred after the operation was probably due to the attack of mumps, which did not, however, materially delay recovery. The importance of examining both ovaries at the time of operation was pointed out and illustrated by the relation of two other cases of ovariotomy in quite young women, in whom Mr. Haward had found both ovaries diseased to an extent requiring removal. The first, a girl of eighteen, had, like the present case, a dermoid cyst of the right ovary; the diagnosis of its character being easy from the fact that hard masses (bone and teeth) could be felt in the cyst through the rectum. This cyst being removed, the other ovary was examined, and found to contain several cysts, one of which was of the size of the fist; it was therefore also excised. The second patient, aged twenty, had a large cyst of each ovary, forming tumours of about equal size. They were both removed. The patients in each instance made rapid and uninterrupted recoveries. The child whose case is related above has quite recently been to report herself at the hospital, and is in perfect health.

BURTON-ON-TRENT INFIRMARY.

A CASE OF "CRUSHED ABDOMEN"; DEATH ON THE THIRD DAY; NECROPSY; REMARKS.

(Under the care of Mr. MASON.)

DAVID T——, aged thirty-three, a porter, was admitted early on April 16th. He walked from the cab into the ward. He complained of great pain in the epigastrium, and said he had been squeezed between the buffers of two trucks, which were wide enough apart for him to get through sideways, but that steam was put on at the moment, and he had been caught and held some seconds. He had been seen and released at once. He had not been unconscious.

On admission the extremities were cold. There was no pulse at the wrist. The body was warm and without marks of violence. No ribs were broken. The heart-beat was regular—100, rather feeble. No abnormal dulness on percussion. The epigastrium was very tender on pressure. No hæmoptysis, hæmatemesis, or melæna. He had passed urine just previously to the accident. Vomits a good deal of greenish bile. He was ordered nutrient enemata every two hours, and nothing but ice by mouth. A soap-and-water enema brought away a healthy motion, but no blood.

April 17th.—Much the same. No pulse. Vomits a great deal of bile; is in great pain. Enemata continued and retained well.

18th.—Seems better to-day. Less pain and no vomiting. Called for food, and was allowed some beef-tea, which he retained some hours and afterwards vomited. Pulse at wrist for first time about 100, regular, small.

19th.—Pulse absent at wrist; hands cold. Sat up in bed twice to-day, once of his own accord, the second time at the request to have his back examined. Some dulness at left base behind. Dulness for two inches below right nipple; resonant below and over front of abdomen; rather dull in flanks; abdomen swollen. Died at 12 noon.

Necropsy.—On opening the abdomen a most fetid smell arose, and a large quantity of fluid blood poured out. The omentum was adherent all over to the intestines, which were likewise glued together by recent lymph. The coils of small intestine lying below the umbilicus were quite black, and had lost their gloss in places. The intestine was ruptured transversely in three places, to the extent of an inch, at a distance of a few inches from one another and about four feet from the cæcum. The liver, which was uninjured, was pushed upwards, and had its lower edge pointing forwards just at the level of the right nipple (hence the dulness), its ordinary position being occupied by distended gut. The stomach, kidneys, and spleen were healthy. The lungs were rather collapsed, especially the left, which was displaced upwards considerably by the blood in the abdomen, corresponding with the dulness observed at the left base behind.

Remarks by Mr. MASON.—The case is remarkable for the length of time the man lived with such extensive injuries, and with such an absence of symptoms, especially that there was no discharge of blood from either the mouth or bowel. I saw him about half an hour before his death, when he was complaining of the nurses because they would not bring him any solid food. After this he fell asleep, and died in his sleep.

WEST BROMWICH DISTRICT HOSPITAL.

A CASE OF RARE INJURY TO THE PELVIS; DEATH; NECROPSY.

(Under the care of Mr. LANGLEY BROWNE.)

THE following notes have been furnished by Mr. E. W. D. Kite, house-surgeon.

E. H.——, aged twenty-six, a powerfully built man, was admitted on Dec. 13th, 1885, in a state of extreme collapse. He had been raising a grindstone weighing nearly two tons, when the crane chain slipped and he was knocked down, the grindstone falling on his left hip and remaining there for some minutes before it could be removed. The left limb was colder than the right; there was pulsation in both tibials; no signs of fracture; swelling above Poupart's ligament extending along the iliac crest; very little bruising; a small wound in the perineum a little to the right of the raphé. When a catheter was passed into the bladder, bloody fluid rose and fell with the respirations, but no urine passed.

There being evidently ruptured bladder, it was resolved to open and clean the abdomen, to stitch up the bladder and drain; but before doing this the perineal wound was enlarged so as to admit an exploring finger. A tremendous gush of clots then took place, followed by very free hæmorrhage. An incision was then made above Poupart's ligament, and the swelling found to consist of blood-clot. The external iliac was then exposed by pushing up the peritoneum, and it was then seen that the epigastric artery was torn off from the external iliac, leaving a hole in the side of the latter, from which the hæmorrhage arose. A ligature was passed above and below the aperture, and all hæmorrhage ceased. The patient died in four hours from shock. After death it was found that both rami of the pubis were fractured obliquely, and that they had been greatly displaced under pressure, returning to their normal position when the pressure was taken off. The upper fractured ramus had torn off the epigastric and had lacerated the bladder; the lower one had torn across the urethra and inflicted the perineal wound. As all the injuries were extra-peritoneal, a long drainage-tube was passed from the iliac incision through the perineal wound, the course which the blood had taken after rising along the crest of the ilium. In this case abdominal section would have been of no use.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.

SURGICAL CASES.

(Under the care of Mr. W. VINCENT JACKSON.)

THE following is chiefly remarkable as being the record of surgical work done in a single day by one surgeon in a provincial hospital.

CASE 1. *Perineal Median Cystotomy for the removal of a small Vesical Calculus.*—E. H. J——, aged five years, was admitted with a small stone in the bladder. Chloroform being administered, a small-sized staff grooved on the convexity was passed into the bladder. A small incision half an inch long was made in the median line of the perineum, the urethra being incised at the same time. Along the groove of the staff a director was conducted into the bladder, and the former being withdrawn, a very narrow pair of lithotomy forceps was pushed within the groove of the latter into the bladder; the director being then removed, the stone was caught and brought away; it weighed 26 gr.

CASE 2. *Amputation of the Tongue.*—J. B——, aged eighty-two, was admitted with epithelial cancer of the right side of the tongue far back. Chloroform was administered, and the whole of the tongue was cut away.

CASE 3. *Amputation of a portion of the Tongue for Tubercular Ulceration of the Lip.*—Rachel L——, aged thirty-seven, was admitted by Dr. Malet on account of a very painful ulcer, the size of a sixpence, at the tip of the tongue, and with signs of advanced phthisis at the apices of both lungs. Chloroform was administered, and the front portion of the tongue, half an inch from the apex, was cut away with scissors. Afterwards the mucous membrane covering the two surfaces was brought together by ten points of interrupted suture of very fine silk.

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CASE 4. *Ligature of Brachial Artery.*—W. B——, aged thirty-three, was admitted on account of an aneurysm of the left radial artery high up, as well as extensive disease of the aortic valves. The left brachial artery was ligatured in the middle of its course.

CASE 5. *Amputation of the Right Leg.*—D. C——, aged forty-six, was admitted with a large epithelial ulcer of the outer side of the right foot. An ulcer had existed for thirty-four years. Ether was administered, and amputation of the upper third of the right leg was performed.

CASE 6. *Trephining the Upper End of the Left Tibia.*—Annie W——, aged thirteen, was admitted on account of constant pain at the upper end of the tibia, which was enlarged, and the periosteum covering it thickened. Chloroform was administered, and the painful spot was deeply trephined.

CASE 7. *Osteotomy of both Tibiæ.*—Sarah G——, aged three, was sent in by Dr. Dingley on account of right genu valgum and considerable anterior curvature of both tibiæ. Chloroform was administered, Esmarch's bandage applied, and each tibia having been sawn across and the fibulæ broken, the limbs were adjusted into a straight position upon proper splints.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Ligature of the Larger Arteries in their Continuity.—Congenital Absence of Hair with Atrophy of Skin and its Appendages.

AN ordinary meeting of this Society was held on Tuesday last, Mr. G. D. Pollock, F.R.C.S., President, in the chair.

Mr. BALLANCE and Mr. W. EDMUNDS communicated a paper on the Ligature of the Larger Arteries in their Continuity: an Experimental Inquiry. The experiments were made by the permission of Professor Birch-Hirschfeld at Leipzig. The object of the paper was to show that in the ligature of a large artery in its continuity (1) it was neither necessary nor advisable to tie the ligature so tightly as to rupture the coats of the vessel; (2) the lumen of the vessel must be completely or almost completely obliterated; (3) the round ligature, of small size and possessed of certain qualities, was the best. The authors commenced with a short historical sketch. They then stated the reasons which led them to perform the experiments which formed the basis of the paper. Nineteen carotid arteries of sheep and horses were ligatured, some with catgut and others with kangaroo tendon, and the result in each case was given. The animals were killed and the vessels removed from nine hours to seventy-three days after ligature. The general results of the operations were summarised, and the best material for ligature and the function of the clot discussed. Certain objections which might be raised were considered, and, in conclusion, the authors recommended for the operation of ligation in continuity—(1) aseptic precautions; (2) the small round absorbable ligature; (3) the maintenance of the integrity of the arterial wall. The paper was illustrated by macroscopic and microscopic preparations, and by drawings. It was seen in the preparations that the inner coats, even where included in the ligature, were alive and apparently of unimpaired vitality; that, although the tunics were unruptured, a plastic effusion had taken place, which in the arteries removed latest was developing into connective tissue, permanently occluding the vessel. With respect to the ligatures, leucocytes were thrown out round them, and gradually caused their absorption. In the case of kangaroo tendon, the absorption took place only from the surface; but with catgut the leucocytes insinuated themselves along the crevices formed by the twisting of the gut, and the ligature became absorbed more rapidly. The durability of catgut seemed to vary in different specimens; but it was thought that in wounds that healed by first intention good catgut held for about a month, and kangaroo tendon for two. In the three carotids of horses in which alone suppuration had occurred, it was proved that catgut was rapidly becoming absorbed in fourteen days, and had completely disappeared in fifty-one days, and that kangaroo tendon was but little altered in ten days.—Mr. BARWELL agreed largely with the conclusions of the authors, especially as to the undesirability of rupturing the internal coats. Whether it was preferable to use the round rather than the flat ligature for the purpose was a matter on which he joined issue with them. A small round ligature would more readily tear the inner coat. We ought not to lose sight of the different states in which the vessels are; some were tightly stretched, and others in a lax state. He had formed his own conclusions as the results of experiments on dead subjects and living animals. He considered that a flat ligature could lie smoothly, and the knot was not clumsy, though of large size, which he regarded as an advantage, for a small knot of catgut was more liable to set up ulceration and perforation, as in a case of innominate aneurysm in which Mr. Bennett May ligatured the carotid artery. A large knot obviated that difficulty of ulceration and perforation altogether. Again, a small knot was not sufficiently broad to resist the impulse of the blood current. A good-sized clot in the vessel was also advantageous as a check to the force of the blood current. There was further a general unreliability in carbolised catgut, which at least introduced an element of undesirable uncertainty, for it might be absorbed in a very short time.—Mr. SCOVELL SAVORY considered that the authors had collected an interesting series of facts, but he could hardly follow them in their conclusions that it was neither necessary nor advisable to rupture the inner coats. He failed to see how their experiments proved that it was not advisable; they had made no "check" experiments; their paper abounded in *ex parte* statements; the experiments had all been done in one way. If check experiments had been made they might have had facts which would justify their conclusions. Experimental investigations tended to show that the arterial system of animals differed very much from that of man; it was much more difficult to excite septic processes in animals, as Dr. Jones long ago proved. It was owing to the greater number of mishaps where animal ligatures were employed that made many surgeons hesitate still to employ them in preference to silk ligatures.—Mr. T. HOLMES also congratulated the authors on their industry and on the interest of the facts collated in the paper; but he hesitated to accept their main conclusions. He would not like to trust experiments on animals in guiding him as to what to do in the human subject. In one of Mr. Barwell's cases of ligature without rupture of the internal coats the vessel became pervious not long after the operation. He had been content with the practice at St. George's of division of the internal coats. In one instance Mr. Pick ligatured the femoral for popliteal aneurysm without rupturing the internal tunics, and pulsation recurred, though he felt bound to add that the vessel was afterwards tied lower down as tightly as possible, and then pulsation recurred. In truth, a long period of experience on human subjects would be necessary before we could accept the conclusions of the authors. In division of the internal tunics a greater amount of lymph was thrown out, which in itself would appear to be an advantage, and he asked whether there was a corresponding disadvantage in this excess of lymph. He could not but think that experiments on animals were not entirely satisfactory. It was at one time thought that a powerful barrier to the restoration of the circulation would be found in the employment of silver ligatures, which would produce no irritation. But in one instance in the practice of Brodhurst secondary hæmorrhage occurred. In a paper read before the Pathological Society Mr. Pick also showed how the artery could be occluded without dividing the internal coats by ligatures, which at the end of three weeks had not caused ulceration.—Mr. C. DENT had been engaged in a similar inquiry on the femoral arteries of sheep, using kangaroo tendon prepared in chromic acid, the internal tunics being completely ruptured. He considered that rupture of the tunics made the operation certain and was a better surgical practice. In one case pus formed around the ligature, which had not been rendered sufficiently aseptic. In none of the cases did secondary hæmorrhage occur.—Mr. BARWELL explained that he used the ox aorta ligature in the case referred to by Mr. Holmes, and the failure was purely an error of manipulation, and had nothing to do with the nature of the material employed.—Mr. W. EDMUNDS, in reply, pointed out that even in tying a flat ligature the knot was liable to present an angular projection, and so Mr. Barwell's argument that with a flat ligature the adhesion between the coats was

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favoured need not always hold good.—Mr. BALLANCE, in reply, admitted that more skill was necessary to apply a round ligature so as not to rupture the internal coats, but a very little practice in the post-mortem room would suffice to show how to occlude the lumen of the vessel, so that no water could be syringed through. On examination it would be found that no damage to the tunics had been done. A long piece of artery was occluded even with a small ligature, as the specimens on the table showed. Dr. Jones's classical work was referred to by Mr. Savory, but at that time it was thought that the question of rupture of the coats had been threshed out. His object and that of Mr. Edmunds was to present a series of observations showing what happened when the coats were not ruptured.

Mr. JONATHAN HUTCHINSON contributed a paper on a case of Congenital Absence of Hair, with Atrophic Condition of the Skin and its Appendages, in a boy whose mother had been almost wholly bald from alopecia areata from the age of six. This paper described the case of a boy three years and a half old, who presented a very withered "old-manish" appearance. His skin was remarkably thin, in some places being not thicker than brown paper. The genitals presented a marked contrast to the rest of the body, being in the state of a normally plump child. He had no nipples, their sites being occupied by little patches of scar. The history of the patient showed that it had been necessary to turn during delivery, but he had had no ailments since teething. He was liable to vary much in blueness from temperature or excitement. The question of heredity in this case was discussed.—Mr. W. SEDGWICK said that the subject of hereditary alopecia was illustrated by Dr. Thurnam many years ago in a paper read before the Society. The grandmother and two grandsons had well-marked alopecia, and the teeth numbered only four in the grandchildren; the microscope showed an atrophic condition of sweat ducts and glands. Sometimes this atrophy was associated with a great development of hair in other members of the family. Among birds, by breeding in-and-in alopecia could be developed. The "top-knotted" variety of canary could also be obtained, and if two such bred together their offspring were frequently bald on the top of the head, and in some cases a deficiency of the skin also occurred.—Mr. J. HUTCHINSON had not described the case as simply one of congenital alopecia. The skin was defective in development also, and the nipples were absent, whilst, strangely enough, there was a perfect development of the skin of the genitals. There was an *acquired* defect in the mother, and a congenital defect in the child; but it would be futile to discuss the possible relationship until further facts had been brought together.

OPHTHALMOLOGICAL SOCIETY.

Exophthalmic Goitre.

AT an ordinary meeting of this Society held on May 6th, Mr. Jonathan Hutchinson, F.R.S., President in the chair, several papers were read on Graves' disease.

Mr. JONATHAN HUTCHINSON opened the discussion and dealt chiefly with the prognosis and treatment. In one case of complete recovery that occurred in a medical man, and which was recorded by Dr. Warburton Begbie in his collected works as recently published by the New Sydenham Society, the disease was in full course ten years ago. The pulse was very frequent, as much as 140 per minute. There was albuminuria for one year. The individual, though very nervous, was now in excellent health. There was, however, an intermittent pulse, the carotids pulsated, and the thyroid was still slightly enlarged; palpitation, too, was easily brought on and the pulse easily accelerated. A variety of remedies had been used, and a sea voyage taken, but it was difficult to say which remedy had done most good. The man himself believed that the bromide of potassium in twenty-grain doses three times a day had most effect in controlling the disease. But aconite, digitalis, and iron were also employed. Mr. Hutchinson related another case in which the coincidence of albuminuria also obtained. (Dr. W. Begbie had first prominently brought forward the occurrence of albuminuria.) It was that of a clergyman, and almost exactly parallel to that of the medical man. Both patients had been also examined by Dr. George Johnson. There was albuminuria every day for a year at least, but it was present on some parts of the day only, after meals, and more after breakfast than at any other time: after 3 P.M. it was usually absent. The extreme uncertainty of the prognosis of the disease, which was sometimes so threatening and prolonged, was referred to. He then said that his own experience was necessarily fragmentary, most of the cases being brought to him for ocular symptoms. He had seen a considerable number improve under the use of such remedies as digitalis, aconite, iron, and bromide of potassium. In one case a medical man pushed the tincture of aconite till twenty minims three or four times a day were given, and the good result was ascribed to that. As to the treatment of the ocular symptom, Mr. Hutchinson spoke very favourably of the systematic application of cold to the temples and forehead by means of ice bladders, and also to the nape of the neck. He had never seen the eyes lost in any case under his own care, though he knew of cases that had become completely blind. With regard to the influence of disturbed sexual and menstrual function, it was to be noted that young women and young men were attacked in preference to those of more advanced age. It was said never to happen to those who were pregnant. He believed that the disturbance of sexual functions must be regarded as the result of a common cause. He could not agree with the statement of Niemeyer that if men were affected with the malady they were of advanced age; his experience was to the contrary. He narrated an interesting case in which there was loss of sight of both eyes due to ulceration of the cornea, with sequent opacity. The patient was a woman aged twenty-five, who had been twice married; the proptosis began in the fifth month of pregnancy and lasted sixteen months. She had the affection for twelve months whilst suckling and for four months whilst pregnant. She did not suffer much in general health, and the case was an exception to the rule that pregnant women never suffer. If males were affected, he did not agree with Niemeyer that the disease was more likely to be more severe and fatal. His youngest case was in a boy and the two oldest were women.

Dr. BRISTOWE explained that he had no statistics to give, but that he proposed merely to place before the Society a group of interesting cases, which were already (when the announcement of the discussion was made) written out for publication, together with two or three additional facts furnished by other cases. He first gave very brief details of a recent case, in which, in a woman aged forty, the symptoms of Graves' disease were distinctly referable to prolonged exposure to cold. He also mentioned one case in which recovery appeared to be complete; and another in which, all signs of proptosis and enlarged thyroid having subsided, the patient still suffered at times from severe palpitation. He referred also to a case of the disease in which exophthalmos was associated with syphilis; and to one in which the patient died from organic heart disease. The cases of chief interest were three in number. Of these, the first was that (which had already appeared in *Brain*) of a young woman, who, about the year 1877, first showed signs of proptosis, enlarged thyroid, and palpitation, which symptoms, after continuing for a few years, became complicated with those of ophthalmoplegia externa. In 1882 she came under Dr. Bristowe's care. She was then suffering from nearly complete paralysis of all the external ocular muscles, ptosis, and proptosis. Moreover, she had complete hemianæsthesia on the right side, with colour-blindness and loss of taste and smell on the same side. Later, fits, apparently epileptic, supervened, with rigid paralysis of the right arm and leg. Also, she suffered from hæmorrhage from the ears. She was under Dr. Bristowe's care for two years, who, not at the time knowing she had suffered from Graves' disease, attributed her proptosis to weakness of the paralysed eye muscles. The thyroid was not visibly enlarged. She had no palpitation, but her temperature from first to last varied daily between 100° and 103°, 104°, or 105°. Finally, she died of an acute attack of bronchitis. At the necropsy no disease was discovered in the nervous centres; the thyroid was a little larger than normal; there was much fat in the orbit, and the ocular muscles were pale. Excepting for the prominence of the eyeballs, the patient appeared, so far as the signs of Graves' disease are concerned, to have recovered. The second case was that of a young married woman who had suffered for three or four years from Graves' disease, and in which the thyroid had become so large as latterly to cause attacks of severe dyspnœa. It was on this account that she went into the hospital. Her breathing was stridulous; but no

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immediate danger being anticipated, no operative procedure was contemplated at the time. Unfortunately, a day or two after admission, she was attacked with a severe paroxysm of dyspnœa and, before anything could be done to relieve her, died. The third case was that of a young woman who had been suffering from the usual symptoms for some years, but who was also the subject of serious organic heart disease, there being evidence of aortic, mitral, and tricuspid affection. On admission, her breathing was stridulous; and, having regard to the result of the case last narrated, Dr. Bristowe consulted with his colleague, Mr. Sydney Jones, as to whether any operation was feasible. The goitre was unusually large, but fortunately the isthmus was narrow, and it was consequently determined to remove a portion of the isthmus and dissever the two lateral lobes—an operation which Mr. Jones had performed with admirable results in a case of ordinary goitre of Dr. Bristowe's, in which suffocation threatened. The operation was successfully completed in this case, and was followed by dwindling of the lateral lobes of the thyroid body and cessation of stridor. No other definite improvement followed. The prominence of the eyeballs continued, and the cardiac symptoms unfortunately progressed unfavourably, so that at the end of about four months the patient died of the heart disease.

A paper by Dr. Wilks was read by the Secretary (Dr. Sharkey). Dr. Wilks stated that, of the many cases which he had seen, some had recovered, others had died, and others had been lost sight of. He had also seen slight cases, which were probably modifications of the complaint. As to the question, What were the characteristic symptoms? he considered that there were increased frequency of the heart's action, enlarged thyroid, prominent eyeballs, a loud murmur heard in the veins with a thrill, and, in severe cases, great emaciation, with outbursts of sweating and diarrhœa. The increase in the cardiac rapidity he regarded as a primary and necessary symptom; quickened cardiac action, combined with exophthalmos and emaciation, or with enlarged thyroid and emaciation, he would regard as characteristic. The theory which attributed the symptoms to disease of the sympathetic in the neck was not good, and had not been found true in fact; though there was, probably, some disturbance of the sympathetic, giving rise to the extreme relaxation of the bloodvessels; the relaxation gave rise to murmurs which were much larger and harsher than any met with in simple anæmia; the diarrhœa and sweating might also be due to the sympathetic disturbance. Apart from the proptosis and enlarged thyroid, which could not come on suddenly, the symptoms resembled those seen in nervous women, especially at the climacteric. Violent palpitation, clammy sweat, diarrhœa, starting eyes, and choking were the symptoms produced by sudden fright. It was therefore reasonable to look to some relaxation of the sympathetic as a cause of the combination of symptoms seen in Graves' disease. The disease also seemed to have some relations with anæmia and chlorosis. Belladonna was the only drug in which he felt any confidence; he had observed the symptoms, even in severe progressive cases, so speedily reduced, that he could not doubt the value of the drug. After using it for some weeks, it was his custom, as the cases were tedious, to substitute iron, iodide of potassium, or digitalis, but he had observed no good effect attributable to these drugs. He gave the following categorical replies to the series of questions circulated by the Society (see THE LANCET, March 20th, p. 548.) 1. He had performed one necropsy; no lesion was found in the nerves or elsewhere. 2. No cause could be assigned in any case. 3. He had seen several cases in young women where the symptoms were modified. 4. He thought the disease removable (or curable). 5. He had had cases under treatment for two or three years, with great improvement; but relapses occurred. 6. He had never seen a case recover without treatment. 7. In none of his cases had the eye become diseased or vision imperfect. 8. He had never seen a case of simple exophthalmos. 12. He had never seen Graves' disease in conjunction with others (but he referred to Dr. Carrington's case mentioned below). 13. He had only seen two males affected with the disease; they were aged twenty-four and twenty-six respectively. He thought the disease was in some way associated with the reproductive organs; in women, he had seen it generally in those of middle age with families, or in young girls with anæmia and amenorrhœa.

Dr. HUGHLINGS JACKSON attached great importance to Graefe's sign, but had seen well marked cases of Graves' disease in which it was absent, mentioning, in illustration, the cases of two sisters. Again, he had found the sign present in a man who had no Graves' disease. These observations had been confirmed by Mr. Couper. Referring to the cases of the two sisters above mentioned, Dr. Hughlings Jackson remarked that a third sister was said to have the same morbid affection. Dr. Cheadle had seen four cases of Graves' disease in one family. Dr. Hughlings Jackson suggested a comparative study of such cases with some other "family diseases," such as pseudo-hypertrophic paralysis, Freidreich's disease, &c. In all the recent (eight) cases of Graves' disease he had seen, the right lobe of the thyroid was the larger, a fact bearing on the question as to central pathology, as Dr. W. A. Fitzgerald had suggested. The right vagus had, in some lower animals, more inhibitory influence on the heart than the left. Dr. Hughlings Jackson thought the hypothesis of a central pathology the most probable, and, in this connexion, referred to the experiments of Brown-Séquard and Filhene on production of exophthalmos by injuries of the restiform body. He believed that most would be learned as to the seat of changes in Graves' disease, from experiments on lower animals. In all cases of fatal Graves' disease, the medulla oblongata and pons Varolii should be carefully searched microscopically. He referred to so-called complicated cases, mentioning the remarkable case recorded by Dr. Warner and Dr. Bristowe, in which there was ophthalmoplegia externa; and a like case he had seen, a case complicated with asthmatic paroxysms, one with paroxysms of right-sided facial spasms, unlike cortical facial spasm, and a variety he supposed to depend on discharge of facial centres in the pons Varolii. Dr. Pavy had noted the association of Graves' disease with diabetes. In the so-called complicated cases the association might be accidental, but Dr. Hughlings Jackson thought they deserved very careful consideration. He did not remember seeing a case of Graves' disease in a man.

Dr. FITZGERALD (Dublin) said he had never yet seen the visible pulsation of the arteria centralis retina described by de Wecker. Visible pulsation of the veins was very frequently seen. Graefe's sign was not constantly present. In the cases in which a perfect cure occurred some of the ordinary symptoms were absent, or little marked. In some cases only one eye was affected by proptosis. He had seen one well-marked case in a man at the Meath Hospital, under the care of Mr. Foote, a man aged twenty-eight, in whom the affection had come on after an occasion on which he had danced excessively.

Mr. HILL GRIFFITH read a paper on thirty cases of Graves' disease. Twenty-seven were females and three males. The symptoms commenced twice under the age of twenty, sixteen times between twenty and thirty, seven times between thirty and forty, and five times between forty and fifty. Eighteen were single and twelve married. The ocular symptoms were bilateral twenty-three times, the right eye alone affected four times, the left three. Retraction of the upper lid (Stellwag's sign) was present twenty-two times, in four of which the lower lids were also retracted, it was absent three times, and not noted five times. Graefe's sign—a loss of consensual downward movement of the upper lid—was present four times, absent four times, and not noted twenty-two times. There was bilateral goitre fifteen times, and in three of these it was more marked on the right side, and there was increased pulsation of the carotid arteries. Spontaneous arterial pulsation was looked for in every case, and its absence was noted in twenty-six; there were no notes in this connexion of the remaining four. There were acute gastric symptoms at the commencement of the disease twelve times, loss of flesh twice, and minor complaints six times; no illness ten times. As to nervous symptoms, one patient felt as if she would choke sometimes, and then had a distinct hysterical attack; a third was easily frightened; and every morning a fourth was of "fussy" behaviour, and two others often flushed. Mr. Griffith thought the agitation of the patients was very characteristic. There were hæmic murmurs three times, an aortic systolic three times, mitral systolic the same number, and and in two a "thrill" was noted in the swelling; aortic regurgitation once. The right lobe was alone enlarged in two cases; goitre was absent in thirteen cases. Vision was normal seventeen times, subnormal twelve times, and once not noted. Of the twelve subnormal, ten were due to astigmatism; high degrees of myopia with staphyloma posticum. In two there was an amblyopia, and both improved. The refraction was normal twenty-two times, high degree of hypermetropia once, myopia four times, and

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astigmatism three times. The fundus was normal in twenty-six cases, and abnormal in four; two with monocular myopia and staphyloma posticum, the eye symptoms being symmetrical; "cork-screw" veins were noted once, and once a glistening striated patch at the upper and outer part of one disc. The remainder were probably normal. Glycosuria was observed twice. The menopause began three years before the symptoms in one instance; in another the patient had severe headaches at the periods; and in another the catamenia ceased for six months, dating from the ocular symptoms; twice the catamenia were noted as irregular. As to the order of occurrence of goitre and exophthalmia in the seventeen cases in which both symptoms were present, in three the goitre preceded by two years, one year, and six months respectively; in one the symptoms were synchronous; in another the patient noticed the exophthalmos first. Frequently the patients were not aware of the presence of the goitre.

Dr. SAMUEL WEST read a paper on thirty-eight cases of exophthalmic goitre. About one case in every 1000 out-patients represented, perhaps, the relative frequency of the disease. Two-thirds of the cases occurred before the age of thirty. There were three male cases in a total of fifty-one. The ocular, thyroid, and cardiac symptoms all appeared simultaneously in six cases; the thyroid enlargement occurred first in eight cases; palpitation appeared alone and first in nine cases; exophthalmos came first and alone in four cases. From these and other facts, it seemed that there was great irregularity in the relative time of appearance of the cardinal symptoms. The right lobe of the thyroid was larger than the left, where there was a difference between the two. In one case, a marked decrease in size of the thyroid occurred after an acute attack of pneumonia. Exophthalmos appeared generally to be a late symptom. Graefe's sign was noted only in seven cases. Graefe's statement that the pupils were never dilated was not absolutely true. In one case there was slight ptosis of both eyes; in another there was persistent crossed diplopia and an external squint of the left eye. Attacks of profuse sweating were noticed in four cases. Seven times uncontrollable and unaccountable diarrhœa was observed, and six times paroxysms of vomiting. Diabetes mellitus was present in one case. A bronzing of the skin, suggestive of Addison's disease, was remarked in one case. Inexplicable changes in bodily temperature were recorded seven times; twice there was remarkable pyrexia, recalling that met with in cerebro-spinal disease. Other nervous symptoms noted in some cases were change in manner and character, somnambulism, trembling, fits, megrim, neuralgia, insanity, chorea. In eight cases there was a definite history of rheumatic fever. Considering the rarity of exophthalmic goitre, it was remarkable that rheumatic fever should be so often associated with it; possibly, the severe organic valvular disease noted sometimes may be due to antecedent rheumatic fever. Overwork, severe parturition, blows, fits, and rheumatic fever were causes assigned in a few cases; in the majority no cause was given. No constant relation could be established between the disease and the catamenia. In some cases there was a family history of nervous diseases. The longest duration of the disease was nine years, the shortest two months. In three fatal cases the disease had lasted respectively four years, two years, and three months. The constant application of cold seemed to have undoubted influence for good in the treatment of some cases.

Mr. C. HIGGENS related the case of a woman, aged twenty-nine, in whom the exophthalmos was so extreme that it appeared desirable to attempt to partially unite the margins of the lids; the patient died under the influence of an anæsthetic. The case was fully recorded in the Transactions of the Pathological Society, vol. xxv., p. 240. The main points noted at the necropsy (by Dr. Goodhart) were enlargement of the thyroid gland and thyroid veins, and slight hypertrophy of the heart; thickening of the sympathetic capsule, and of the mediastinal and cervical connective tissue; growth of gland tissue in the region of the thymus, and tendency of the lymphatic glands elsewhere to enlarge.

Dr. CARRINGTON narrated a case of exophthalmic goitre associated with Addison's disease in a woman aged twenty-three. There was a family history of phthisis, and she had suffered from migraine. The symptoms were palpitation and prominent eyes for two years, with vomiting and a feeling of great weakness and exhaustion. For eight months the catamenia had not been regular; there was frequent epistaxis, but no emaciation. The bronzing of the skin was most marked about the eyelids, neck, abdomen, umbilicus, and flexor aspects of the forearms and hams. There was extreme exophthalmos; Graefe's sign was well marked; but she had no paralysis, and no affection of the optic disc or vision. The pupils were widely dilated, and scarcely acted to light or in accommodation. The right lobe of the thyroid was the larger. There were loud murmurs over the heart and in the jugular veins, but the heart was not enlarged, and the pulse was very small and feeble. He had seen three fatal cases; two had acute enteritis, and the third mitral regurgitation.

Mr. FREDERICK MASON spoke of the case of a woman aged thirty-five, in whom the eyeball was dislocated from between the eyelids by any disturbance of the eyelids; sometimes in the same case there was spontaneous dislocation.

Dr. SILCOCK described the necropsy of the case of a female, aged thirty, who died from uræmic poisoning. He found nothing abnormal in the nervous system. The muscles were in a state of fatty degeneration or rather infiltration, as the microscope showed. The cranial nerves and sympathetic ganglia were normal. The thyroid gland was enlarged, and the right lobe the larger. The interstitial connective tissue was increased, and there was overgrowth of the acinal epithelium. Dr. Cheadle had described in one case increased vascularity of the medulla and pons. Electrolysis appeared to have been of value in the treatment.

Mr. LANG read an epitome of six cases observed by Dr. J. J. Pringle and himself, in which unilateral lid phenomenon without proptosis was associated with no other evidence of Graves' disease, except slight thyroid enlargement in two of the cases. In four of these paresis of orbital muscles was present, and in three sensory phenomena (pain, scalding lacrymation, &c.) In none was there cardiac disease or disorder, nor had they ever noticed implication of the lower lid. They were inclined to consider their observations as lending support to the theory of the central origin of Graves' disease, and to regard a tonic contraction of the levator palpebræ superioris as the immediate cause of the lid phenomenon, in opposition to the well-known views of Graefe.

Mr. W. H. JESSOP said that when the eye was brought under the influence of cocaine, the palpebral aperture was widened, and distinct proptosis produced. By dropping cocaine into the eye, in a case of Graves' disease, he had intensified the exophthalmos, and made Graefe's symptom more marked.

OBSTETRICAL SOCIETY OF LONDON.

Elasticity, Retraction, and Polarity of the Uterus.—Serous Perimetritis.

A MEETING of this Society was held on May 5th, Dr. Potter, President, in the chair.

Dr. SAMUEL SLOAN (Glasgow) showed Graduated Uterine Dilators and also Graduated Dilators for the Female Urethra.

Dr. J. MATTHEWS DUNCAN read a paper on Elasticity, Retraction, and Polarity of the Uterus. Retractility has been defined as that property of the uterine tissue in virtue of which the womb emptied of a part, or of the whole, of its contents, acquires a greater thickness of wall at the same time that its volume and its capacity are diminished. It is a function of muscular tissue, and it gets only a little supplementary aid from elasticity. The elasticity of each of the three layers of the uterine wall was discussed, as it exists in healthy and in morbid conditions. Retraction is not merely a condition, it is a force. During pregnancy it is a mere tonic tightening. In labour its action is necessary. In labour there is inhibition of it in the circular fibres of the lower segment of the uterus, and in the whole cervix and vagina. Retraction implies expulsion of contents; but the retraction is not necessarily in proportion to the advance of contents. There is probably an essential difference between contraction and retraction. Each may go on without the other. The usual comparisons of the action of the uterus and of the heart were criticised, and a new comparison suggested between the whole of pregnancy and a diastole, and the whole of labour and a systole. The expulsion of a fibroid was cited in corroboration and illustration. Cases of morbid retraction and of morbid absence of retraction were mentioned. Ergot causes retraction and not contraction, and hence its failures, its injuries, and its benefits. John Williams describes the retraction of menstruation. Uterine polarity, described by Reil, and redescribed by Champneys, was referred to, and illustrations of its action given.—Dr.

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GALABIN agreed with almost the whole of the author's description of retraction of the uterus. He was surprised to see it stated, however, that ergot produced only retraction, and not contraction. If this were so, then the general opinion that in some cases ergot acts as an oxytocic and hastens delivery or completes it when nature cannot must be wrong. Rupture of the uterus occurs in some cases of obstructed labour after the use of ergot, intense rhythmical pains having preceded the rupture. In such cases he did not think rupture could be accounted for by continuous tension and pressure due to retraction having weakened the vitality of the tissue. Perhaps the explanation was that Dr. Duncan refused the title of contraction to that kind of contraction which was the initial stage of retraction. Such a use of the words could not be maintained. By contraction he understood shortening and thickening of the muscular fibres; by retraction, a similar shortening and thickening, not followed by relaxation and lengthening, but leaving a permanent shrinking after the tension of the contraction had passed off. Retraction was contraction and something more. The contraction itself was identical in the two cases. Thus in post-partum hæmorrhage the contraction was the same whether it was followed by relaxation and renewal of hæmorrhage or ended in retraction and arrest of hæmorrhage. He believed that ergot had the power of intensifying both effects in variable degrees in different cases—both the initial rhythmical contraction and the subsequently persisting tonic contraction which maintained the shrinking produced by it.—Dr. HORROCKS said elasticity of muscular fibre, though nearly perfect, is not sufficient in amount to diminish the size of the uterus after labour; with removal of the stretching force muscular fibre regains its normal size. Retraction means contraction not followed by relaxation. A contracted muscle feels hard, a retracted one does not. Retraction after parturition is probably due to the absence of sufficient force inside the cavity to stretch the fibres to their former length. Polarity of the uterus is merely a part of the great general question of relaxation of opponent muscles. He illustrated this by reference to various groups of muscles; relaxation of the fibres of the cervix during the contraction of those of the fundus is merely one example of the general law. He then discussed reflex tone of muscles, and pointed out that in defecation, micturition, and parturition there is a reflex tonic contraction kept up in the muscular fibres, especially in the sphincters. The contraction of the sphincters can be inhibited, and the nerve-centres for inhibition are closely associated with those for contraction. Defecation, micturition, and parturition can take place independently of volition, or even of consciousness. The will has, however, a modified power over them, and can help to start them. Finally, ergot will cause contraction of muscular fibre, because it has been given successfully many times to bring on premature labour.—Dr. CHAMPNEYS had difficulty in accepting the teaching that ergot produced retraction. He did not believe that it produced true contraction, neither did he believe that it produced true retraction. Ergot often produced a contraction of limited extent, and then tetanus, the organ contracting and then remaining of the same size, but hard and rigid. This was rather tonic contraction than retraction. With regard to polarity, the action of opponents referred to by Dr. Horrocks was exemplified in the uterus by conditions involving a disturbance of the normal condition, in which consentaneous, though opposite, action was observed in the upper and lower poles, such as incarceration of the placenta after pains and some forms of dysmenorrhœa, conditions analogous to colic in other hollow muscular viscera, the pain being due to violent opposition instead of normal yielding of one muscle to another.—Dr. SLOAN (Glasgow) thought it must be admitted that retraction differed from contraction, for after the uterus was quite emptied we found in the intervals of the pains free from tonic contraction the uterus smaller—i.e., retracted. He thought morphia was the exact opponent of ergot in its action on the lower segment of the uterus. It caused inhibition of this segment, and thus accelerated dilatation. He suggested that great mental distress, as in unmarried women, by preventing healthy retraction, favoured absorption and puerperal fever.—Dr. BROWN said that light might be thrown on the question as to whether ergot caused retraction or contraction by noting its action in small doses in threatened abortion, or in preventing habitual abortion. In the former its use stops the uterine contractions if not too far advanced, and in the latter the habitual tendency can be cured. On the principle of the double action of medicines, these facts may elucidate the point at issue.—Dr. ROPER remarked on the difficulty of separating contraction from retraction. Retraction could not occur without antecedent contraction. At the end of a contraction of a uterine muscular fibre there was no return to the original state or to relaxation, as in a voluntary muscular fibre. The first effect of ergot was to cause contraction; then followed traction, according to the potency of its stimulation. Ergot interrupted the rhythm and caused tonic spasm both in the body and cervix. It seemed questionable whether it directly stimulated the fibres of the cervix or whether it interrupted their inhibition.—Dr. PERIGAL remarked that ergot seemed to expend its action on the lower segment and affect the fundus but little.—Dr. DUNCAN, in reply, said he could not recognise in ergot the power to induce labour or abortion except in an indirect and uncertain way. It was common to hear of great pains induced by ergot, but he had not met with them. We much wanted a medicine which had that power; it was a want not yet supplied.

Dr. AMAND ROUTH related a case of Serous Perimetritis. The disease was brought on by a chill during menstruation, in a woman aged twenty-seven, suffering from subinvolution and its consequences. The uterus was fixed and there was bulging downwards of the pouch of Douglas with two fluctuating points. Each was aspirated, 3½ oz. and 1½ oz. of clear serum being drawn from them. The intestines were matted forming a large hypogastric tumour which varied with their distension. The patient speedily recovered after the aspiration, but had a slight relapse at her next menstruation, the temperature rising to 100° F. The researches of Dr. M. Duncan and J. Williams tended to the opinion that these cases were more common than is supposed and were often diagnosed as hæmatocele. The diagnosis between serous and purulent perimetritis was only certain after aspiration.—Mr. BURTON'S theory that these effusions were due to pelvic hæmatocele was opposed to the author's opinion that they were due to physiological congestion of the uterus during menstruation being changed into inflammation (metritis) by a chill, such inflammation spreading by continuity of tissue either along the Fallopian tubes, or through the uterine tissue to the peritoneum. Extreme cases of bulging of the pouch of Douglas were alluded to, caused, as Dr. John Williams has shown, by adhesive lymph fixing the intestines above and so preventing the serous fluid rising up into the pelvis.—Mr. DORAN said the case tended to prove the true signification of the term "serous perimetritis." Some irritant material from the tubes or elsewhere set up peritonitis, the uterine tubes and intestines happened to adhere in such a manner as to cut off a segment of the peritoneum. This was the first essential condition. The inflammatory process not being of a low type, serum instead of pus was poured out into the portion of peritoneum shut off from the general cavity. This was the remaining essential feature in that accidental variety of pelvic peritonitis, conveniently termed "serous perimetritis." He could not understand Dr. Routh's theory about the share which the posterior layer of the broad ligament might take in this disease. He described the actual anatomical relations of the parts, and pointed out that they explained the rapid matting of the ovary tube and broad ligament in such cases, but in some the intestine might displace the tube and come into contact with the broad ligament and adhere to it.—Mr. THORNTON wished to emphasise the remarks that had been made as to the inflammation forming serum instead of pus, and to point to the analogous conditions frequently seen in the pleura. If advantage of this knowledge were not taken and the serum evacuated, then tension would lead to suppuration and its attendant dangers. But in the earlier reports of these cases aspiration and tapping usually led to suppuration and death, just as removal of serum from the pleura used frequently to end in empyema and death. The great fact brought out by Dr. Routh's case was that, properly performed, aspiration of the serum in these cases ended in speedy cure, just as did the removal of serum from the pleura in the present day usually end in cure. The difference in the result was to be found in the careful antiseptic management of the operation. Dr. Routh cleansed the vagina with corrosive sublimate lotion and packed it with iodoform gauze; hence the speedy cure. Had he with his aspirator introduced putridity into the peritoneal sac, suppuration, instead of cure, would have resulted.—Dr. A. ROUTH said a few words in reply, and the meeting adjourned.

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EPIDEMIOLOGICAL SOCIETY.

Dissemination of Scarlet Fever by drinking the Milk of Diseased Cows.

A MEETING of this Society was held on Wednesday April 14th, Dr. Dickson, President, in the chair.

Dr. JAMES CAMERON read a paper entitled, "Observations on a certain Malady occurring among Cows at a time when the Milk produced by them disseminated Scarlet Fever," of which the following is an abstract. The author began by stating that he proposed to lay before the Society a short description of a cow disease which had been the subject of investigation by Mr. W. H. Power, Dr. Klein, and himself during a recent inquiry into an outbreak of scarlet fever which occurred in certain districts in London and in Hendon amongst consumers of milk derived from a dairy farm situated within his sanitary district. It was not his intention to discuss the circumstantial evidence which led to the discovery of this disease amongst the cows, or which proved its connexion with the milk. These were respectively in the hands of Mr. Power and Dr. Klein. The disease is certainly not a new one; it has been known to some farmers and cowkeepers, at any rate, as a catching malady under the designation of sore teats, blistered teats, and the like; but it has never hitherto been recognised or described as a specific contagious disease amongst cows, or considered to have any concern with the causation of scarlet fever in the human subject, and has commonly been regarded as a malady of little importance. After giving an account of the farm, and speaking favourably of its sanitary condition, the author stated that the disease first appeared in some newly purchased cows, which had arrived about a fortnight before the first cases of scarlet fever occurred among consumers of the milk. It was subsequently ascertained that one of these cows, which was the first sufferer, introduced the disease into the herd, the malady spreading from shed to shed until the whole herd of 100 cows, with very few exceptions, was attacked; while, coincidently with the spread of the disease among the cows and into the various sheds, scarlet fever made its appearance, and continued to prevail among the consumers of the milk procured from these sheds. Dr. Cameron described the disease generally as a specific contagious disease, occurring usually in the first instance amongst newly calved cows, and capable of being communicated to healthy cows by direct inoculation of the teats with virus conveyed by the hands of the cowman. The disease may continue from four to six weeks, and is characterised by general constitutional disturbance, a short initiatory fever, a dry hacking cough, sometimes quickened breathing, sore-throat in severe cases, discharges from the nostrils and eyes, an eruption on the skin round the eyes and hind quarters, vesicles on the teats and udder, alteration in the quality of the milk secretion, and well-marked visceral lesions. The author then proceeded to discuss the symptoms in detail, and, referring to the eruption on the teats and udder, stated that from five to seven days after the commencement of the illness one or more teats became much swollen, and vesicles or bullæ shortly make their appearance upon them. These vesicles are usually rubbed and broken in milking, leaving sores with raised ulcerated-looking edges; at this period the disease appears to be easily conveyed to other cows. Shortly after the vesicle has been broken a brown scab forms upon the sore, and this may remain from ten days or a fortnight to five or six weeks, a thin discharge escaping from beneath it until the sore is healed. There is a tendency for the milk to become ropy during the illness, but this is not always present, and as a rule this condition is not apparent until the milk has stood for five or six hours; hence the milk from this farm was distributed before this peculiarity had had time to show itself. After describing the differences between cow-pox and the disease in question, Dr. Cameron urged the necessity for the examination of cows and for the removal of all suspected animals from the milk business, and he expressed the hope that the Government would see fit before long to institute some means of more effectually protecting the general public against the recurrence of these disastrous outbreaks of disease which are due to milk.—In the discussion which followed, the President, Drs. Murray, Pringle, Hicks, and Saunders, and Messrs. Barham, Smee, and Shirley Murphy took part.

MEDICAL OFFICERS OF SCHOOLS ASSOCIATION.

THE second annual general meeting of the Medical Officers of Schools Association was held at the rooms of the Medical Society, Chandos-street, on Thursday, May 6th. The chair was taken by the President, Dr. Fuller; and, the minutes of the last meeting having been read and confirmed, the report of the Council was presented, and adopted on the motion of Dr. Alder Smith, seconded by Dr. Brett. The report alluded to the resignation of Dr. Diver, which had been accepted by the Council. Dr. Fletcher's paper on the Management of Athletics in Public Schools had been published by Mr. Lewis, and copies had been sent to each member of the Association and to the head masters of the public schools. Sir Andrew Clark, Bart., consulting physician to the East London Hospital for Children, and William Scovell Savory, Esq., F.R.S., surgeon to Christ's Hospital, had been elected members of the Association by the Council on Feb. 10th.

The following gentlemen were then elected members of the Association:—Dr. Batterbury, medical officer to the Berkhampstead Grammar School; Dr. Hetherington, medical officer to the Ipswich Grammar School; Surgeon-Major Pratt, medical officer to the Royal Military Asylum, Chelsea; Dr. Edward Penny, medical officer to Marlborough College; Howard Marsh, Esq., senior surgeon to the Children's Hospital, Great Ormond-street; and F. W. Salzmann, Esq., medical officer to St. Mary's Hall School for Daughters of Clergymen, Brighton. Dr. George Buchanan, medical officer of the Local Government Board, was elected as an honorary member.

The audited accounts, which exhibited a satisfactory balance in the hands of the Treasurer, were then presented and adopted.

The following gentlemen were elected as officers for the year 1886-7:—President: W. S. Savory, Esq., F.R.S. Vice-Presidents: Sir Andrew Clark, Bart.; Dr. Farquharson, M.P.; Dr. Fuller; Surgeon-Major Evatt. Treasurer: Noble Smith, Esq. Hon. Secretaries: Dr. Alder Smith; Dr. Chas. Shelly. New members of Council: Henry Armstrong, Esq. (Wellington); Brudenell Carter, Esq.; Shirley Murphy, Esq.; Dr. J. Ellison (Eton).

A vote of thanks to the retiring President, Dr. Fuller, was proposed by Mr. Carter, and carried with acclamation.

Dr. Fuller, in reply, briefly reviewed the history of the Association, which now numbered eighty-three members, and quoted instances in which the results of its labours had already proved useful to members of the profession as well as to the public; he was glad to welcome Mr. Savory as his successor in that chair, because he was a man whose position at the head of the Association could not but add prestige to its labours and authority to its conclusions.

Mr. Savory accepted the presidency as a special compliment from the members of the profession who knew him best, and the more gladly because he could thoroughly assent to the purposes for which the Association was founded. He knew that the Association had already done good work, that it was now doing good work, and he believed that it would do still better work in the future by the attention which it directed to the prevention of disease in its endeavours to discover the causes which provoke it.

Dr. Haigh Brown then read a paper on the "Causation of Follicular Tonsillitis." In the course of the discussion which followed the reading of the paper, Mr. H. Armstrong argued against the contagious nature of tonsillitis. Dr. Fyffe, Dr. Brett, and Mr. Statham were not prepared to admit the contagiousness of the disease, while believing that many cases had an insanitary origin. Dr. Alder Smith took a similar view, and considered that it would be a very serious thing if every case of follicular tonsillitis must be isolated on the ground of avoiding the spread of the disease. He agreed with Dr. Fyffe and other speakers in recognising at least three types of the malady, but they were certainly not always easy to differentiate: a persistent albuminuria he should regard as evidence of diphtheria, even in the absence of other specific symptoms of that affection. After Dr. Haigh Brown had replied in detail, the President proposed a hearty vote of thanks to him for a valuable contribution to an important subject, which was unanimously accorded. The members subsequently dined together at the Holborn Restaurant.

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ACADEMY OF MEDICINE IN IRELAND.

Villous Disease of Kidney and Rupture of Heart.—Cancer of Liver.—Spontaneous Rupture of Heart.

AT a meeting of the Pathological Section, held on Feb. 12th,

Dr. THORNLEY STOKER exhibited the Kidneys and Heart removed from the body of a gentleman who had recently died at about the age of seventy-two years. For ten years preceding his death he had suffered from occasional attacks of renal colic and hæmaturia. The loss of blood at times had been enormous, and the length of the hæmorrhages had varied from a day or two up to ten or twelve days. A post-mortem examination showed that the immediate cause of death was rupture of the left ventricle of the heart, due to fatty degeneration and hæmorrhagic infarction of its anterior wall, the result of embolism of the anterior coronary artery. This and other diseased conditions of the vascular system were evidently secondary to kidney disease. The left kidney was the seat of chronic nephritis, and its sinus contained two oxalate of lime calculi as large as hazel nuts. The right kidney weighed 1 lb. 7 oz.; its substance had almost disappeared, and was replaced by a number of spaces filled with blood-clots in different stages of formation—some being old and well-formed, while others were recent and scarcely solidified. The pelvis of the ureter was filled with thin stirabout-like matter, which proved to be disintegrated blood. The specimen had then been carefully reported on by Dr. Alex. M'Kee, who discovered in the sinus, infundibula, and calyces of the kidney extensive villous growths, presenting the usual dendritic character.—Dr. JAMES LITTLE said he had watched the patient for the last ten years, although he had not seen him for eighteen months before his death. He had been during ten years subject to the attacks of hæmorrhage. What usually happened was, that when going home in the afternoon from his office he would begin to feel pain, which usually came in the left loin, but sometimes in the right. He used to get into bed as quickly as possible, and the pain usually got worse and worse, and went down towards the groin and into the testicles, and had all the characters—as he was informed, for he never saw him while suffering from one of those attacks—of renal colic. Morphia never relieved him unless it was administered in such quantities as to stupefy him. The only thing that benefited him was a very hot application to the loins. The pain usually lasted twelve hours, and sometimes longer. Whenever he had pain he always had hæmaturia, but occasionally he had hæmaturia without pain.—Dr. J. W. MOORE said the present case proved that renal colic was produced by the passage of blood-clots. An instance of this recently came under his observation in the Meath Hospital. Another point of great interest was illustrated by a case which he saw a year and a half ago. It was that of a gentleman aged sixty-nine, who had for many years suffered from gout in his system, and who had been in the habit of passing quantities of oxalate of calcium in his urine. He was of active habits, and was suddenly laid up with an attack of pneumonia. His convalescence from this was protracted, and he had to give up all active exercise. He was a good horseman, and had been in the habit of taking daily exercise on horseback. When his convalescence was fully established he went out riding one day, and came home with a great desire to micturate. On doing so he was horrified to find that what he passed was almost pure blood. He sought advice, but in a very few hours his urine became perfectly limpid and pure. He (Dr. Moore) examined the bloody and also the pure urine, and found both to contain large quantities of calcium oxalate, the microscope showing them to be full of the calculi. He made a good recovery, and was not troubled with bloody urine afterwards. There was no pain in his case, because the calculi were not large.—Dr. DUFFEY thought they should look for something more than fatty degeneration in order to account for the rupture of the heart. He did not hear whether Dr. Stoker had said that there was fatty degeneration of the muscle of that organ; but if fatty degeneration *per se* had been the cause of this rupture, then they should meet with ruptures of the heart more frequently.—Dr. HENRY KENNEDY said that in cases of this kind hæmorrhages were commonly quite independent of both the kidneys and the heart. He had seen a number of cases of persons subject to fatty degeneration, in which fat existed in large quantities all over the body, and the individuals were subject to terrific fits of epistaxis, and yet afterwards made perfect recoveries for the time being. He looked on it as almost a necessary condition in those cases that hæmorrhages would occur independent of the state of the kidneys. He thought this gentleman must have had the gouty poison in him, and that it was relieved from express determination to the feet or elsewhere by these hæmorrhages.—Dr. STOKER, in reply, said he looked on these hæmorrhages as depending on a male change of life.

Dr. JAMES LITTLE exhibited and discussed a specimen of Cancer of the Liver. On Jan. 1st a lady's nurse-tender, aged forty-four years, was brought to the Adelaide Hospital suffering from profuse hæmoptysis. She had always been a delicate woman, and during the past year particularly so, the chief ailment from which she suffered having been pain in the epigastrium, brought on by eating solid food. The existence for twelve months of the epigastric and interscapular pains, and the circumstances of their having grown worse during the last three months, and of their having been particularly bad on the day preceding the hæmorrhage, seemed to him sufficient to justify the diagnosis of an ulcer in the stomach. Another circumstance tending to the same conclusion was that the blood was very bright in colour, and not of the dark colour that usually came from the stomach. She only lived twenty-four hours after her admission, and had several profuse hæmorrhages before her death. On post-mortem examination the stomach was found to be quite healthy, with the exception of a patch near the lesser curvature, about the size of half-a-crown. The liver weighed 4 lb.; almost the whole of the right lobe was occupied by one large mass, which presented in places a white and in places a yellowish-brown colour, and which was very firm and dense, cutting almost like cartilage. This mass was bounded by an abrupt line of demarcation from the rest of the liver. The remainder of the liver, consisting mainly of the left lobe, was very tough, and presented the characters of cirrhosis. The vena porta was filled with a soft dark thrombus. On microscopic examination the mass in the right lobe of the liver was found to be cancerous in nature, consisting of loculi of firm fibrous tissue, completely filled with polygonal-shaped cells.

Dr. FOOT communicated a case of Spontaneous Rupture of the Heart. The subject of the event was a car-driver, sixty-six years of age, admitted to hospital exactly a fortnight before his death, complaining simply of weakness and shortness of breath. He said he had been only ailing a week before admission. At the time he came under observation his feet and legs were œdematous, the action of the heart weak, slow, and unequal, his colour pale, and the skin of a satiny smoothness. His appetite was good, and urine free from albumen; and under the use of rest, meat, and wine, with tonic doses of digitalis and nux vomica, he frequently said he was daily gaining strength, but never showed any inclination to leave his bed. He slept a great deal, and often had to be aroused when the class came round. His sleep was never of a lethargic or comatose variety. On the morning of Feb. 9th, 1885, he was found dead in bed. There was no indication of any discharge from the stomach or bowels having taken place, nor was there any disturbance of the bedclothes. The distended pericardium, when slit open, gave exit to blood-stained serum, and contained twelve ounces of jet black coagulum, part of which was connected with a longitudinal rent in the anterior surface of the left ventricle, midway between the apex and base and close to the septum ventriculorum. The pale, soft, and greasy muscle of the heart had obviously been the seat of fatty degeneration, the condition which, above all others, predisposes to rupture.—The PRESIDENT (Dr. T. E. Little) remarked that a feature in this case was the very large size of the rupture; and its occurrence under the circumstances described, during sleep and without any muscular exertion, was rather unusual. Ruptures of the heart were generally longest at the inside, and passing obliquely outward towards the pericardial surface until they formed a pretty small rent at the outside: and this was an argument in favour of what Dr. Stoker had, in connexion with his case, indirectly put forward—namely, that rupture of the heart in many cases took place gradually.

Dr. WALTER SMITH exhibited the Viscera taken from a man who died of cardiac disease.

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Reviews and Notices of Books.

The Insane in the United States and Canada. By D. HACK TUKE, M.D., LL.D. London: H. K. Lewis. 1885.
Statutes of the United States, and of the several States and Territories, relating to the Custody of the Insane. By C. F. FOLSOM, M.D. Philadelphia. 1884.

DR. TUKE'S book is chiefly composed of the impressions received during a recent tour among the asylums of Canada and the States. He has added thereto much useful information in regard to the existing provisions for the insane, and in a chapter devoted to Dr. Rush, the father of American psychiatry (whose portrait serves as a frontispiece to the work), a history is given of the treatment of the insane in the United States. Of Dr. Rush, who died in 1813, aged sixty-seven, the author records that he used restraint-chairs, privation of food, shower-baths of fifteen minutes' duration, and in extreme cases the fear of death, or terror, &c. He recognised, however, the value of employment, sympathised with Pinel and Tuke, advocated separate establishments for dipsomaniacs, and recognised moral insanity. Rush held that the bloodvessels of the brain were the primary seat of insanity, and consequently used blood-letting extensively as a remedy—in a quoted case to the extent of 200 ounces in fifty-six days.

Pennsylvania appears to have been the first of the States to establish an insane hospital at Philadelphia in 1752; Virginia followed in 1773; yet it was not until 1832 that the provision of treatment for all insane persons was regarded as a State duty, and after this date asylums multiplied rapidly. Dr. Tuke gives a list of ninety-four now existing. The total number of insane in 1880 was 91,950, yielding the proportion of 1 in 369 of native whites, and 1 in 237 of foreign whites above the age of fourteen years. In asylums were 40,992, of whom 5·4 per cent. were reported under restraint by camisole, muff, strap to bench, handcuff, ball and chain, crib bed, &c. The crib bed is probably not regarded as restraint by many physicians, and not recorded as being so. In some asylums no restraint whatever is used, but in illustration of the possible abuse of the crib bed, the author points out that one asylum possessed fifty. Padded rooms are very rare. Suicides formed 1 per cent. of the deaths. Epileptics are not aggregated as a rule. Medical treatment presents little for special comment. Dr. Tuke concludes that English lunatics are more difficult to manage than American, and that general paralysis is less common among the latter. Out-of-door life and employment is less resorted to than in England. The American asylums have the advantage of being of moderate size, so that the possibility of individual interest in the patients and their treatment is ensured, and rendered more probable by the larger medical staff employed, this being 1 to 150 patients, as compared to 1 to 300 in England. Many of the assistant medical officers are married men, and it is asserted with probability that better men are thus attracted to and retained in the service; these assistants are also more liberally paid than with us. In several asylums lady physicians are on the staff. The dietaries strike Dr. Tuke as being more liberal and varied than those of British asylums. Segregation in the care of chronic lunatics is being carried out at Kankakee, and elsewhere, and appears to be satisfactory in regard to comfort and economy.

Dr. Tuke briefly summarises the lunacy legislation in regard to admission to asylums, which is the most important part of Dr. Folsom's dry and uninteresting work. At the same time Dr. Folsom must be credited with having discharged an unthankful office in condensing with perspicuity a heap of very unattractive procedures, only to be regarded as legal experiments on insanity, which is manifestly considered as a *corpus vile*. The simplest admission procedure obtains in Connecticut, where a request by a friend, with a medical certificate, suffices. In other States, as in Pennsylvania, two medical certificates, sworn before a magistrate, are required. In other instances, as in Massachusetts, a judge must *certify* that "*he* finds the person committed is insane and fit for treatment in an asylum." Admissions are, however, permitted on emergency certificates. Lastly, as in Illinois, admission is only possible after *trial by jury*. The sketch which Dr. Tuke gives of this last procedure justifies the illimitable use of expletives in regard to it which one of the alienist physicians of the State applies unsparingly. More revolting inhumanity can scarcely be conceived than the illustration quoted from Mr. Wines, the Secretary of the Illinois Board of Public Charity. Notwithstanding all these precautions, thirteen persons sent last year to the Utica Asylum were declared not insane, an emphatic warning of the imperfect protection afforded by magisterial intervention.

Dr. Tuke records that the managers of one of the State asylums of the highest repute complains of the want of confidence and of the suspicion of the public. The author might have added to this the recent endorsement by an American judge of the quotation from Harrison, that "every superintendent of a hospital desires the wards to be full, and where the inmates are pay patients there exists a temptation to detain them."

Dr. Tuke's book is interesting in spite of its innumerable facts and statistics, and is valuable alike as a book of reference and from its suggestiveness. It will probably be as warmly welcomed across the Atlantic as here, being remarkably free from any prejudice that could offend American critics.

The Mammalia in their relation to Primeval Times. By OSCAR SCHMIDT. (The International Scientific Series, Vol. LIV.) With 51 Woodcuts. Pp. 308. London: Kegan Paul, Trench, and Co. 1885.

THIS work may be regarded as an exposition of the theory of descent illustrated by examples drawn from each of the orders of mammals that possesses a palæontological history. The dominant feeling and idea of the author may be gathered from a single paragraph. He traces the history of the horse and its descent from the Palæotherium, or three-toed horse, through the Anchitherium and Hipparion in Europe on the one hand, and of the parallel, but more perfect, series in America of Orohippus, with four toes; Mesohippus, with three complete and one rudimentary toe; Miohippus, with three toes; Protohippus, with two rudimentary and one fully developed toe; to the horse, with one toe and traces only of the two others, and then remarks that, whilst Owen looks upon this as a providential transformation designed for the benefit of mankind, he looks upon it as an adaptation of the limbs of these animals to the formation of the ground and to the incoming of plains which originated during the Tertiary period. Schmidt assigns the credit to D'Alton of the doctrine of adaptibility generally ascribed to Goethe—the doctrine that "form conditions the life and acts of the creation, whilst each fashion of life with reflex forcible action works on the form." He dwells on the phenomena of convergence whereby animals placed under similar circumstances have a tendency to resemble each other in the modification of their organs; and we need hardly add that he considers in their main bearings the palæontology and embryology of the monotremes and marsupials, the edentata and whales. The work is well worthy of perusal by all those who wish to make themselves familiar with the present aspect of science in regard to the theory of evolution.

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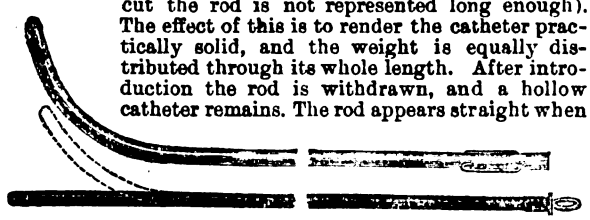
The Asclepiad. No. 10, Vol. III.

THE article on the Cardiac Pulmonic Balance is most originally thought out by Dr. Richardson, and well worthy of perusal. "The Poverty of Wealth" is an amusing narrative, showing that the motto of the *Journal of Public Health and Sanitary Review* ought to have been "National Wealth is National Health," and bearing generally on the value of hygiene and sanitation in promoting health. Antonio Scarpa is the subject of the biographical notice and portrait. "The life of Scarpa is eventful only through his labours. He is from the beginning to the end of his career the professor; his genius, observation; his force, industry; his fame, purity—purity in exactitude, patience, exposition, initiative, direction." In the *Opuscula Practica* there is a page or so on a "Proper Temperature for Mental Work." Here it is stated that if the temperature be unequal, study is unequal; and that the best degree of temperature for mental work is 64° F. or 18° C. If the temperature falls much below this, there is a relaxed state of body and mind, which soon leads to fatigue and exhaustion. No doubt Dr. Richardson is right, but we think allowance should be made for idiosyncrasies. We are not all gifted with the perennial energy of the author of *The Asclepiad*, and it is most likely that some of our dull brains are incapable of experiencing the variations in surrounding temperature in the manner above alluded to. Likewise we are disposed to join issue with the author in thinking, *with* the poet Cowper, that composition is rather exhausting in its nature.

New Inventions.

A SOLID CATHETER.

THE instrument shown in the woodcut is intended to combine the weight of a solid metal bougie with the advantages of a catheter. It consists of a silver catheter, into which, in place of the ordinary stylet, a soft metal rod fitting the tube is passed right up to the end (in the woodcut the rod is not represented long enough). The effect of this is to render the catheter practically solid, and the weight is equally distributed through its whole length. After introduction the rod is withdrawn, and a hollow catheter remains. The rod appears straight when



withdrawn; but in the catheter, owing to its softness, it follows the curve as dotted in the woodcut. As an instance of the difference of weight made by the rod, I have weighed a No. 9 catheter, selected at random from my set, which weighs without the rod 6½ dr., and with the rod 15 dr. The rods can easily be fitted to any metal catheter.

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A NEW DISINFECTOR.

WATERCLOSETS should require no disinfection; they should be so constructed that their contents are completely removed, and that they are thoroughly cleansed and filled with clean water. The use, therefore, of a disinfector presupposes a defective apparatus, which should be exchanged without delay for one more perfect; but if circumstances should render this impossible, and the best have to be made of faulty apparatus, the use of a disinfector is then necessary. Mr. H. E. Pollard, of Duke-street, Adelphi, has sent us the Sweet Home Patent Disinfector which is an ingeniously constructed receptacle made of earthenware, and containing permanganate of potash crystals; it is intended to be fixed within the pan as close to the flush as possible, and on each occasion of use of the closet water passes into the disinfector and washes round the pan of the watercloset solution of permanganate. It has the advantage of being very simple in its construction, and gives no opportunity for the retention of dirt, and will be found useful under the circumstances we have mentioned.

HEALTH OF CAVALRY HORSES.

THE very satisfactory condition of the horses, as shown in the Annual Statistical Report of the Army Veterinary Department for the year ending December 31st, 1885, reflects great credit upon the branch of the service so ably and efficiently conducted by Mr. Fleming. It appears that the average strength of the horses employed in the United Kingdom during the year was 11,778; the admissions into hospital from sickness and injury amounted to 589 per 1000; the deaths to 18·7; the number "cast" to 91·0; and the constantly non-effective from sickness or injury to 38 per 1000 of the strength. The admissions and casting were considerably lower, but the death-rate was 1·5 per 1000 higher than in the preceding year. The table showing the average number of days each horse was ineffective is a valuable addition to the return. The reduction in the number of cases was most marked in those from skin disease, sprains and accidental punctures, contusions, contused and punctured wounds, and collar-chain gall. There was a considerable increase in the cases of catarrhal fever, influenza, and strangles. The two classes—diseases and accidents of the locomotory apparatus, and surgical diseases and accidents—furnished upwards of three-fifths of all the admissions, and together amounted to 366 per 1000 of the strength. The increase in the mortality compared with that of 1884 was chiefly due to an outburst of glanders and farcy among the horses of the 5th Lancers after their return to England from Suakim, where the diseases are believed to have been contracted. The regiment arrived in England on June 13th, and on the 15th the first case of glanders was reported; between that date and July 11th 7 cases of farcy and 4 of glanders occurred; since then the regiment has been entirely free from the disease. Mr. Fleming observes that "to the prompt and energetic measures adopted (immediate destruction of the diseased, complete segregation of those presenting any suspicious symptoms, close inspection of every horse two or three times a day, picketing out in the open a horse's length between each horse, and the most scrupulous care with regard to watering, cleansing, disinfection, &c.) must be ascribed the wonderfully rapid 'stamping out' of what threatened to be a most serious invasion of glanders." Only one other case of glanders occurred during the year, in the Royal Artillery at Shorncliffe; it was "due to infection brought into the barracks by an officer's private horse kept in a stable attached to his house." Prompt measures were at once taken, and the disease did not spread. The most fatal class of diseases was that of the respiratory apparatus, which gave rise to 60 deaths, or upwards of a fourth of the whole mortality; and next to it stand diseases and accidents of the locomotory apparatus, by which 58 deaths were caused.

An interesting table is given of the admissions and deaths by ages, which shows that the highest percentage of sickness occurs among the five-year-old, and next to it among the four-year-old horses, while the highest death-rate under fifteen is among the four-year-olds. Among the causes of casting "old age" furnishes much the largest number, 457 out of a total of 997 being returned under that head, but no information is given as to the exact ages of the horses so "cast." We would suggest that the addition to Table G. of a column for the "casting" would add much to its value. The average price realised for "cast" horses was only £9 19*s.* 1*d.*, being £1 6*s.* 1½*d.* less per horse than in 1884, a result probably due to the depression in trade and agriculture. Mr. Fleming has given us a very interesting report, in which he has gone more into detail than previously, and we most sincerely congratulate him and his staff upon the successful result of their labours which he has been able to record.

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THE LANCET.

LONDON: SATURDAY, MAY 15, 1886.

WE were pleased to hear from Sir JAMES PAGET on Wednesday, the 12th inst., when addressing the students and their friends after the presentation for degrees, that there was a great hope of such modifications being introduced into the University as would fairly meet the views of those who pressed for the establishment of a Teaching University in London, and who were not content with a mere metropolitan examining board. He indicated, as we think quite rightly, that such alterations must be by way of addition to the present system, rather than by fundamental changes therein. The programme of the University has been steadily maintained as an institution for the chosen few from everywhere during an existence of fifty years; for next year will be its jubilee, and, as Sir JAMES PAGET pointed out in his able and interesting speech, it has justified its existence as an examining board and by its indirect effect on education so completely that it would be unwise, and indeed impossible, for it now to make a complete change of front and become a local university only. Local teaching institutions might be more closely affiliated to it, and local teachers more closely identified with it, without altering the world-wide influence it now exercises through its examinations. The fear of lowering its standard of merit is always put forward as the one argument against reform; but it is absurd to suppose that it ever can become, or is expected to become, an institution whence all who desire degrees, medical or otherwise, are to obtain them on easy terms. Average degrees for medical students in London must be granted by the corporations. But increased facilities for obtaining degrees, internal reforms giving a substantial recognition and power to teachers are still demanded from the University authorities, and are quite beside any question of lowering the standard. We may refer to one or two examples to show their necessity. The fixing of two preliminary scientific examinations in a year was only obtained after years of agitation, and was brought about by the influence of the teachers only, and in the teeth of a strong opposition led by the examiners in science, and encouraged by most of the then members of the Senate. Indeed, if the Vice-Chancellorship had not fallen to such a man as Sir J. PAGET, on the death of the late Master of the Rolls, we doubt if the additional examination would have been in existence now. Yet on its first institution in January last, 34 students presented themselves for the entire examination and 17 passed; 31 took two subjects and 22 passed; whilst 21 out of 33 candidates passed in one subject only; that is to say, 98 candidates altogether were examined, of whom 60 passed. A very large proportion of these 60 could not have spared the time and money to proceed to the degree if there had been only annual examinations. But the Senate must not stop at this; 155 candidates at the Intermediate M.B. Examination last year with a rejection of 59 call for a similar change in this examination. There is no reason whatever why these 59 should not be re-examined before the end of another year. Two Preliminary Scientific Examinations in the year must be followed by two Intermediate M.B. Examinations in the same period, and were teachers fully represented on the Senate this would quickly be arranged. Another imperative reform is a reconsideration of the regulations of attendance on lectures and hospital practice for the Final M.B. Examination, which in the present form are frequently quite prohibitory to the candidate. To pass from our own profession, we find teachers urging the institution of a degree in Engineering Science, and even hinting at a necessary modification of that almost sacred fetish, the Matriculation Examination, whilst others request complete revision of the regulations for the LL.B. degree. No such suggestions ever come from within; every change is initiated from without, and is only granted after long delays and wearisome agitation. This is simply because the authorities have lost touch with teachers and students, and we can only hope that the election of Sir EDWARD FRY and the new Senators will prove to be the first step towards the uprooting of this feeling, which has done so much to hinder the due development of the University in adapting itself to modern requirements. The position of infallibility assumed by many of its founders and older Senators cannot be too quickly abandoned.

IN a recent number we referred to an interesting paper by Dr. JAMES CAMERON, the Medical Officer of Health for Hendon, which had been read before the Epidemiological Society, and which gave account of a disease occurring amongst the cows on a farm in his district at a time when the milk which they produced disseminated scarlet fever amongst its drinkers. The Local Government Board have just published a Report by their inspector, Mr. W. H. POWER, showing the relation of this cow malady to the human disease. There has probably not been issued for many years a paper on a subject of greater importance, for upon the proof that a human disease which destroys every year thousands of lives in this and other countries has its origin in an affection of the cow must depend the means to be taken for its prevention. Until now, inquiries made into outbreaks of scarlet fever disseminated by milk had not afforded further evidence than that the disease was produced by milk which was infective from the time of leaving the farm; and although the absence of any knowledge of the means by which it acquired this property had, after careful investigation, raised a strong presumption that the cow might in some way or other be responsible, the final link has been wanting which is required to complete the chain of evidence. It is this link which Mr. POWER'S Report now supplies; but it goes even beyond this, for it shows by circumstantial evidence of the most conclusive nature that the cows upon the Hendon farm were only capable of producing milk which possessed this property at a time when they were themselves suffering from a disease which is characterised by the appearance of vesicles and sores on the udder.

It is impossible here to do justice to the admirable and exhaustive argument by which Mr. POWER supports his conclusions but we may briefly narrate the circumstances of the outbreak which his inquiry brought to light.

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The story is of a farm having three sheds, the milk from these sheds being received respectively by three retail vendors. Into the first of these sheds were admitted three cows newly arrived from Derbyshire, and which had been placed for a few days previously in a quarantine shed. These three cows were followed by four other newly arrived cows, which replaced the first in the quarantine shed, and were afterwards distributed, two in the first shed which had received the Derbyshire cows, and two in the second shed, where they remained for a short time and were then transferred to the first shed. Scarlet fever appeared among the customers of vendors receiving milk from the first two sheds, shortly after the admission of the newly arrived cows into the sheds with the other cows; among drinkers of milk from the first shed the disease occurred in large proportions and attacking them in increasing numbers; among the drinkers of milk from the second shed, first in small numbers, and then, after an interval, in larger proportions, the drinkers of milk from the third shed remaining free from disease until almost the end of the inquiry. Finally, a cow disease was found to have attacked the Derbyshire animals, and subsequently those which followed them, extending to other cows in the sheds in which they were placed. The appearance of the disease amongst the cows immediately preceded that of scarlet fever amongst the milk vendors' customers. The interruption in the prevalence of scarlet fever among the drinkers of milk from the second shed corresponded in point of time with the removal of the two newly arrived cows from the second to the first shed, while its recrudescence again corresponded with the appearance of disease among other cows in the second shed. The proof was already strong; but, as if to complete it, at the end of the inquiry the additional evidence was afforded of an invasion by scarlet fever of the drinkers of milk from the third shed immediately after the cows in this shed were attacked by the same disease as that which had affected the others.

In face of such evidence we are compelled to accept the conclusion that the disease of the cow was related to that of man as cause is to effect. It is true that this evidence is only circumstantial, but the correspondence in behaviour of the disease of the cows with that of the milk drinkers is too definite to have been a mere coincidence, and we have no hesitation in expressing our belief that we are at last brought face to face with the origin of scarlet fever. It is difficult not to anticipate a possible result of this addition to our knowledge of its etiology. The possibility of exterminating this disease will be at once apparent, and it is satisfactory to know that Dr. KLEIN'S services have been enlisted for the further prosecution of the inquiry on lines which the Report indicates. The consideration whether these expectations will be immediately realised must be left until Dr. KLEIN'S labours are ended and his report presented; but, under any circumstances, the facts which are already known will give fresh impetus to the study of animal in relation to human diseases.

We cannot close this article without bearing witness to the patience and perspicacity which have created these hopes. The excellence of the work of the Medical Department of the Local Government Board has long since placed this country foremost amongst those which have contributed to our knowledge of disease, and certainly no recent investigation in England better promises to maintain this high character, or to confer greater benefit on man, than that recorded in the Report of Mr. POWER here brought under review.

THE Croonian Lectures of the present year are mainly remarkable for the assiduity with which Dr. LATHAM has attempted to introduce into general medicine an intricate, though necessary, knowledge of some of the intimate chemical processes which are collectively classified under the physiologist's term of metabolism. Were we able to picture accurately the various stages of the chemical processes occurring in the normal integration and disintegration of protoplasm, we should be possessed of knowledge which it is no exaggeration to say would speedily place within our grasp the secrets of nature. As an attempt to propound some of the most important vital chemical changes, every member of the profession must fully appreciate Dr. LATHAM'S labours. But in the present state of physiological science his arguments can only be considered as more or less probably correct. Our information of the way in which a molecule of protoplasm or even albumen is built up is so vague and uncertain, that we have no solid groundwork whereon to build a superstructure. If, then, physiology is so unsettled, pathology must for all purposes be likewise indefinite. At the outset Dr. LATHAM appeals in large measure in support of his views to an ingenious analogy—first made, we believe, by PFLÜGER—between the properties of certain cyanogen compounds and those of living protoplasm. This analogy is very striking, and even if it does not actually represent the truth, it probably gives some idea of the difference between living and dead matter. It is a question of a difference in power, in potentiality. The chemical composition, the mere number of chemical atoms, is the same in urea and ammonium cyanate. Urea, however represents dead matter, more stable but less energetic than ammonium cyanate, which is the representative of living matter in that it possesses energy with instability. Dr. LATHAM suggests that albumens are structurally cyanalcohols combined with a benzene nucleus. The energy of albumens comes from their being cyanogen compounds. He shows how the various amide products of the animal economy may be built up in the laboratory by various chemical interchanges.

What is rheumatic fever? Clinically it consists in the development of various well-known symptoms. How may these symptoms be excited? We have for many years past been taught to believe that causes acting on the central or peripheral nervous system may give rise to joint changes having a close resemblance to those of subacute rheumatism. Is rheumatism a disease of the nervous system? The experiments of Dr. B. FOSTER have shown that the introduction of lactic acid into the animal economy may be followed by the production of a certain set of symptoms closely allied in appearance to those of rheumatic fever. Does the lactic acid act on the joint structures and vessels directly or through the intermediation of the nervous system? Dr. LATHAM adopts neither of these views. The Croonian lecturer believes that the *materies morbi* of rheumatism may induce the arthritic signs by its action on

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the trophic centres presiding over the nutrition of the joints. Lactic acid is formed in excess, but must be regarded as a companion symptom with the other phenomena of rheumatic fever. Not that the acid itself is harmless; possibly it also induces symptoms on its own account. Dr. LATHAM fixes on uric acid as the irritant to the central nervous system in rheumatic fever. Where and how is the excess of uric acid formed? In order to follow this problem it is necessary to know that there are such bodies as amido-acids. One of these of most importance in our present connexion is amido-acetic acid, glycocoll, or glycocine. This acid enters into the formation of many important substances. By heating it and urea together uric acid can be obtained. Glycocine may be formed in excessive quantities in muscular tissue; combined with cholic acid it forms a salt of bile. The liver, therefore, secretes it thus in combination. Now, there are several other ammonia compounds—leucine, tyrosine, and taurin,—all of which are probably dealt with by the liver, which most likely converts them into urea. The capacity of the liver in this respect may vary for different ammonia compounds. Imagine that the glycocine is not transformed, or only partially so, whilst the other bodies are acted upon, then we should have urea and glycocine together; a conjunction not difficult to imagine, and which possibly actually occurs with the formation of uric acid. But there is the difficulty; such processes are possible, but have not been proved to occur. On this view the liver is the great offender; on it the "sluggish" liver of our forefathers receives a new interpretation. There are many ways, however, in which the imperfect metabolism of glycocine may be brought about. Take an ordinary febrile catarrh, in which we may suppose that there is an excessive production of amido-acetic acid (glycocine) in the muscles. It goes to the various glands of the body—liver, spleen, kidneys. Some of it gets converted into urea, and we hear no more of it. Other portions combine with urea to form uric acid, with more or less disturbance of the nervous system, according as the eliminatory organs are in good working order or not.

The vaso-motor system figures largely in Dr. LATHAM'S attempts to explain feverish colds, rheumatism, &c. The vaso-motor system, as has been said of statistics, can be made to prove anything; any physiologist will grant such a proposition. The lecturer pointed out that muscles and glands have special secretory and vasal nerves; urari paralyses the former in muscle and atropine in gland. The vessels may be dilated without increasing the secretion or metabolism, but still, as a rule, vaso-dilatation means excessive disintegration or descending metabolism. Taking this as a guide, we can easily follow Dr. LATHAM through the varying effects of exhaustion, paralysis, and stimulation of the various parts, cutaneous, muscular, and glandular, of the vaso-motor system. In rheumatism the (what Dr. MOXON would call) "Secretary of State for the Vaso-motor Department" is in a condition of exhaustion—it has loosened its reins of government; the local departments therefore run riot; or, in other words, there is excessive disintegration and vascular dilatation—the consequences as regards glycocine and the like we have above considered; at the same time lactic acid is formed in excess. In rheumatism, therefore, we cannot blame the liver; it does its ordinary share of work, but too much is put upon it, hence the uric acid and morbid irritation of the nervous system. But in gout it is another matter; the liver is primarily at fault; its secretory cells are not acting up to normal, either from defective innervation or inherent weakness. It is possible that glycocine and urea may be conjugated by the renal tissue, and thus lead to the formation of the slightly soluble ammonium urate, some of which may pass away into the general circulation and be transformed into the soda salt which is deposited in the joints of gouty subjects.

The far-reaching nature of Dr. LATHAM'S subject is still further witnessed by its inclusion of the kidneys, as well as the liver, nervous system, spleen, and general physiological chemistry. A good deal depends on the kidneys: if they are sound the uric acid is readily eliminated; if not, if there be renal inadequacy, then more of the *materies morbi* circulates widely, and so induces the arthritic and other symptoms of gout and rheumatism. It is easy to picture the action of the poison in the blood on the *locus minoris resistentiæ* of various individuals, or the same individual at different times, with the production of gout at the heart, at the toe, at the stomach, and so forth. The arguments in support of Dr. LATHAM'S views afforded by appropriate treatment of rheumatism, gout, and diabetes by salicylic and benzoic acids and colchicum are not the least interesting part of the Croonian Lectures.

AT its last meeting the College of Physicians decided by a large majority of votes that the reformed constitution which had been drawn up by Dr. C. WEST was unnecessary for the due performance of its functions. The grounds upon which Dr. WEST based his proposals were plausible enough. Briefly stated, they were to the effect that the junior Fellows are not represented upon the Council, and that their interests have little chance to be considered in a body which contains so small a proportion of members having any direct connexion with a hospital or medical school. He proposed, therefore, that three standing committees should be appointed to deal with questions concerning (1) education, (2) professional interests, (3) public interests; such committees to consist each of two members of Council and three other Fellows of not more than ten years' standing, the members to be nominated by the Council and elected by the Fellows. The duties of these committees would consist in considering, reporting, and suggesting measures to the Council upon the various topics referred to them or initiated by them in their several departments. In that way he deemed it would be possible not only to interest the junior Fellows in the work of the College, but enable the College itself to take a more active part in many public and professional subjects than it now does. The reply of the Council to these suggestions was to the effect that the present system of appointing committees as occasion arises is preferable to any scheme of standing committees; that there already exists a Committee of Education and Examination, composed of delegates of the two Colleges; whilst the subjects alluded to by Dr. WEST as falling within the sphere of the College could be more speedily and efficiently dealt with under the present system. It was also pointed out in the debate upon the

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subject that on several occasions questions have been raised by junior Fellows, many of whom have also been placed on committees where their interests are concerned. That the claims of junior Fellows have, at least for some years past, been adequately considered was shown in the fact that they did not support Dr. WEST in his endeavour to remedy their supposed grievances. In point of fact, the constitution of the College of Physicians is at the present day far more democratic than is generally supposed. Two years ago the Council received a severe check in the reference to them of a nomination list which had been framed without due consideration to the claims of certain Members to the distinction of the Fellowship; and there is no question that in the same way there will always be found means for the expression of opinion by the body of Fellows when this runs counter to the views of the Council. Indeed, the powers of the Council are comparatively limited. Except in the matter of nominations to the Fellowship, the Council, and Examinership, that body can only deal with subjects which are brought under its notice at a Comitia of the College. The Council has no power to initiate; its function is merely executive. It is open to any Fellow of the College to bring forward resolutions, and to move the reference of matters either to the Council or to a special committee. We are far from saying that there is not room for some improvements in the machinery of the College, and especially in the somewhat effete methods of election without nomination, of which an instance was seen at the last Comitia. By the resignation of Sir H. PITMAN the College was called upon to elect a representative to the General Medical Council. Every Fellow present has the right of proposing whomsoever he thinks best fitted for such an office, and although doubtless the Council have already decided amongst themselves whom it would be best to support, that support is presumably bestowed in their individual capacity. The gentleman chosen on this occasion will undoubtedly represent the College with dignity and intelligence. He holds high office in the College, and that of itself may be an argument for his selection; but we can imagine that occasions might arise when the most suitable representative to sit upon a Council of Education like the General Medical Council should fail to be chosen by reason of the clumsy method of election at present in vogue. The same applies with even greater force to the election of a President of the College. These, however, are matters which concern the Fellows themselves, and we have no desire to meddle with them. Nor do they come under the head of Dr. WEST'S proposals, which, although rejected, will have at least served the useful purpose of informing the College of the duties devolving upon it, and of the manner in which it may, without any change in constitution, best seek to fulfil them.

A VALUABLE essay has just been contributed by Dr. W. H. GASKELL to the *Journal of Physiology* on the structure, distribution, and function of the nerves which innervate the visceral and vascular systems. The recognition of the functions of the true vaso-motor nerves is of quite recent date, commencing with the observations and experiments of CLAUDE BERNARD, BROWN-SÉQUARD, WALLER, and others, about the year 1848, as may be demonstrated by a reference to MÜLLER'S Physiology, who speaks only of their action on the heart; and to BROWN-SÉQUARD'S lectures, in which the development of the subject is traced. Modern research has shown that the sympathetic system of nerves consists of groups or centres of ganglion cells, connected by means of afferent and efferent nerves with the cerebro-spinal nervous system, and that through these a number of reflex actions may be excited, which powerfully influence the movements of the viscera and vessels, and with them the nutrition of each and every part of the body. Dr. GASKELL, in the essay referred to, limits himself to the efferent nerves, which he divides into three groups: the nerves of the vascular muscles, which may be either vaso-motor or vaso-inhibitory; the nerves of the visceral muscles, which may also be either viscero-motor or viscero-inhibitory; and, lastly, the glandular nerves. His researches have been made exclusively upon the dog; partly because of the close resemblance between the distribution of its nerves and that of the nerves of man, and partly because our knowledge of the functions of the majority of the visceral nerves is based upon experiments conducted upon this animal. The more important points that he has ascertained in regard to the structure of the visceral and vaso-motor efferent nerves, are that the visceral nerves constitute the white portion of the rami communicantes, and issue from the spinal cord in definite sacral, thoracic, and cervico-cranial regions. They then enter into the ganglia of the visceral nerves—that is, into the lateral chain of the sympathetic, and the ganglia on the main stems of the vagus and glosso-pharyngeal nerves. The vaso-motor nerves arise from a more limited portion of the central nervous system, and run, Dr. GASKELL believes, in the outflowing stream of visceral fibres which occurs between the second thoracic and second lumbar nerves, entering the lateral ganglia and there losing their medullary sheaths. This great chain might therefore most appropriately be termed the chain of vaso-motor ganglia, instead of its present title of main sympathetic nerve. There is no satisfactory evidence that vaso-motor—that is, vaso-constrictor—nerves join or are contained in the vagus or other cranial nerve.

Special examination of the central origin of the spinal accessory nerve, which governs the peristaltic contraction of the œsophagus, stomach, and intestines, shows that the fibres in part arise from the cells forming Clarke's column (which set forms a ganglionated root) and from a non-ganglionated root in connexion with the cells of the lateral nerves, and that they leave the central nervous system amongst the fine medullated fibres which issue from the upper part of the cervical region, and pass by way of the rami viscerales of the accessory and vagus nerves to the ganglion of the trunk of the vagus, where they become non-medullated. Proceeding by analogy, Dr. GASKELL considers that the nerves which arise from each spinal segment are formed by three roots—an anterior non-ganglionated root in connexion with the cells of the anterior horn, a posterior ganglionated root in connexion with the cells of the posterior horn, and a lateral root, which, like the fibres of the spinal accessory, are again divided into a ganglionated root in connexion with the cells of Clarke's columns, and a non-ganglionated root in connexion with the cells of the lateral horn. The motor nerves to the rectum, bladder, and uterus receive

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a double set of motor fibres—one from the cerebro-spinal, the other from the sympathetic system. The cerebro-spinal nerves pass to the hypogastric plexus, and thence to the organs in question by those visceral branches of the second and third sacral nerves which form part of the pelvic splanchnics, and are known as the nervi erigentes. The sympathetic fibres, on the other hand, pass to the inferior mesenteric ganglion along the rami efferentes of that ganglion, and thence to the hypogastric plexus. The former therefore issue by the sacral stream of visceral nerves, the latter by the thoracic stream. The functions of these two sets are opposed: the pelvic splanchnics innervate the longitudinal fibres of the bladder, rectum, and uterus; whilst the circular fibres which effect peristaltic action are under the control of the hypogastric nerves or lower abdominal splanchnics.

In regard to the vaso-dilator nerves, the existence of which is now generally admitted on the strength of the inhibitory nerves of the heart and the effects of stimulation of the chorda tympani, the small petrosal nerves, and the nervi erigentes, Dr. GASKELL'S researches show that they are medullated and of fine calibre, and that they leave the central nervous system by the cervico-cranial and sacral rami viscerales; thence they pass into the distal ganglia, where they lose their medullated sheath.

Dr. GASKELL'S memoir thus throws much light on the connexions of the sympathetic with the cerebro-spinal nervous system, and holds forth a hope that it will not be long before the objects and functions of the tangled plexuses we now call the visceral plexus are unravelled and made clear.

DR. OLIVER WENDELL HOLMES will be welcomed in this country by the reading classes of the community especially, and by the masses generally. The former will recognise him as an impressive and instructive writer; the latter partly as a humourist, partly as an American, and partly as a man of mark whom it is right to know. The medical profession, however, has a particular reason for hailing our guest with exceptional cordiality. He is for us in England the embodiment of an idea—unhappily an idea which has very few remaining embodiments, which is fast dying out, and by its death leaving a body of cultured men deprived of one of its most potent claims on the respect and confidence of the educated classes. It is useless to disguise from ourselves that, in developing the professional and scientific elements of Medicine as a vocation, we have not only neglected, but almost wilfully, if not willingly, abandoned its once scholarly and literary characteristics. It may seem a hard thing to say, but never in the history of our art were those by whom it is practised at a lower ebb as regards general scholarship, in spite of the acknowledged excellence of their attainments as technists. It has been by throwing aside the weight of scholarship that professional distinction has been won. The highest places in medicine are no longer held by men who, having achieved success in scholarship at the universities, "went out," as the phrase used to run, in physic. The long-cherished traditions of intellectual culture have been almost swept away, and now a young man is educated for the calling of a physician or surgeon as he would be for any other department of enterprise or industry; and with a view to the utilisation of every available force of which his brain may be capable in the particular business before him, he is not only encouraged, but required, to abstain from what is called the dissipation of mind-power in profitless—that is to say, not directly profitable—activities.

Dr. OLIVER WENDELL HOLMES, who, it must be remembered, is representative of the last generation rather than of the present, comes to us as a survivor of the intellectual and literary type, upon which our contemporary development is held to be such a marked improvement. He is a medical practitioner, but before that he was, and above it he is still, a "man of letters." We welcome him in our midst specially in that character, and it will redound to our advantage as a section of the community if we bestow more than a passing thought on the position he occupies. It will be well if the attention of our students is directed to this man of mark while he is among us, and if they are even for one moment reminded of a type which would seem to be becoming extinct (in the home country at least)—the literary scientist. We are, of course, all too busy with our daily work to bestow much time on the literature of medicine, but if only so old-fashioned and simple a book as AIKIN'S "Biographical Memoirs of Medicine in Great Britain from the Revival of Literature to the Time of Harvey" could be read by the practitioner of this last quarter of the nineteenth century, he would rise from the perusal with a feeling not far removed from humiliation provoked by the contrast displayed between the social positions occupied by physicians and surgeons in earlier and recent times. The difference is mainly, if not wholly, due to the specialising tendency of modern culture—a tendency which shows itself, perhaps, more disastrously in connexion with medicine than with any other branch of scientific pursuit. Is it inevitable and final, this choice of a narrowed intellectual path for the practitioner of medicine? Must he certainly be an expert in the art of healing, and nothing besides? Before we answer this question, and while we are doing so, let us mingle with our cordial and brotherly welcome to Dr. OLIVER WENDELL HOLMES a spirit of appreciative criticism, and try to learn how far we are the gainers or the losers by a policy of neglecting, if not of contemning, the gifts that were cultivated in the old times this visit of our revered guest invites us to recall, and in the possession and full fruition of which he has attained to an age crowned with honours and cheered by troops of friends.

IT remains to be seen whether the leave-all and please-all kind of legislation represented in the Medical Bill of the Government is to have the easy passage which its authors intended and hoped for. Clause 13 gives power to any two Lords of the Privy Council to order the registration of as many foreign graduates as they please, and not only so, but gives their two lordships power to order the Medical Council to register foreign diplomas and foreign graduates, which and whom they have distinctly refused to register. This is rather hard upon a profession which has been accustomed practically to govern itself and to be considered liberal and independent. But there is a tone of decisive frankness about the clause and its subsections which seems to imply that business is meant. Subsection 2, which says the Privy Council may make such order, adds emphatically "*and such order shall be duly obeyed.*" It really looks as if

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Sir LYON PLAYFAIR meant to provide the medical profession through the Medical Council with masters, notwithstanding the general air of innocence and non-interference which pervades the Bill. Is it in contemplation to increase freely the number of foreign graduates? We have never been illiberal in this matter. Our own graduates and those holding our diplomas turn up in every country, and we like to have their diplomas recognised, though we are often disappointed. But to give a *carte blanche* to two Lords of the Privy Council to override the deliberate judgment of the Medical Council on the merits of a foreign diploma or a foreign graduate is certainly rather a strong proceeding, and would have produced a protest from any Medical Council worthy to represent the medical profession. Sir LYON PLAYFAIR has not made any public admission of the error of his estimate of the waste of the profession, or of the fact that many hundreds are entering it every year in excess of the number required to fill the vacancies in its ranks caused by death or in other ways. But even Sir LYON PLAYFAIR will not maintain that we need, on the score of numbers, to have recourse to the admission of doubtful foreign degrees and graduates. Why, then, this imperious tone in the clauses providing for the recognition of foreign degrees against the judgment of the Medical Council?

But it must be admitted that though the new power of the Privy Council is more accentuated in the matter of compelling the Medical Council to do that which it does not approve in the matter of foreign degrees, this power is significantly expressed in other parts of the Bill; notably in Part III., Clause 18, under the head of Micellaneous Provisions. This clause gives power to the Privy Council (any two Lords of it, Clause 19), under certain conditions, to supersede the Medical Council at any time in any matter or question, in which the Medical Council has omitted to exercise its powers under the Medical Acts or in this Act. Now, the Medical Council being the powerless and the timid body it has hitherto been, the taking of such powers may seem not unreasonable. But the very taking them is, in our judgment, the gravest condemnation both of the Bill and of the Medical Council. The Medical Council ought to be a body so complete in its own powers, and so perfect in its own constitution, as that the claim of such powers by the Privy Council ought to be out of the question. But these clauses seem to say on the part of the Government: "We see the impossibility of that Council, with all its rival and competitive jealousies in full play, doing anything thoroughly, or settling the new questions which are likely to arise under Clause V. and other clauses, on broad and just principles. We feel our own want of courage to deal boldly and firmly with the reform of our examining bodies; so we shall insert in the tail end of the Bill clauses which give us the right to interfere, without the initiative of either the Council or the individual bodies, and compel them to do what they ought to do or what we think they ought to do." Even if the direct representation of the profession be increased to six, as is said to be likely, we cannot accept a Medical Council so condemned as this is to be by the threat of being constantly over-borne and superseded by the Privy Council. The Crown—that is, the Privy Council—has the nomination of six members of the Council to begin with. If that is not enough, let the Lord President himself, or the Vice-President of the Committee, have a seat in it, and let the number of rivalries and jealousies be reduced by collective representation. But do let us have a Council that has complete and independent powers within itself, without requiring the constant interference of the Privy Council.

The corporations feel aggrieved, it is understood, at the Universities having powers individually to give complete qualifications, while they (the corporations) must act in conjunction—saving those happy bodies, like the Apothecaries' Society, that are to co-operate with the Medical Council. It would be curious to see the resuscitation of the Apothecaries' Society, with new faculties and a diploma of moderate cost, superseding the more pretentious and costly parchments of the Royal Colleges. This is evidently one object of the Bill, or of Clause V., under which indeed we may have a great development and transformation of the rival system which now obtains and which is a scandal. In the absence of the Medical Council, which seems to have gone to sleep, this clause will probably receive the attention of the corporations.

Annotations.

"Ne quid nimis."

CONVOCATION OF THE UNIVERSITY OF LONDON.

ALTHOUGH the agenda paper of the annual meeting of Convocation on the 11th inst. was very full, the actual amount of business transacted was small. The most important subject—viz., the report of Mr. Magnus's committee upon a new scheme for the constitution of the University—was by leave withdrawn from presentation at this meeting, to be considered at a special meeting on the 25th inst. Certain resolutions affecting the constitution of the University, which were down in the names of Mr. Tyler and Mr. Spratling respectively, were also postponed, it being understood that they would be taken in the form of amendments to Mr. Magnus's scheme. Much time was occupied in the disposal of these matters, which came on after the House had been sitting about two hours. The proceedings commenced with the reappointment of Mr. Allen, LL.B., as clerk of Convocation, and the passage of a resolution approving of the action of the Annual Committee in forwarding a resolution to Mr. J. R. Storrar expressive of their deep regret at the death of Dr. Storrar, the late chairman of Convocation. The report of the Annual Committee was then received. It was resolved on the motion of Mr. Unwin, seconded by Mr. W. L. Carpenter, that a scientific degree suitable for engineering students should be instituted by the University, and a provisional scheme for this object, which had been drawn up by the Annual Committee, was approved and submitted to the Senate. On a motion by Dr. Benson, seconded by Mr. Kisch, that the regulations for degrees in Laws should be referred to the Annual Committee, an amendment, moved by Mr. Newson, to refer the subject to a special committee of seven, was carried. As, according to the standing orders, the members of the committee should have been nominated forthwith, a motion to suspend the standing order was put and carried, and the nomination deferred to the next meeting of Convocation. Dr. Baines moved that Convocation approve of the movement to celebrate the jubilee of this University, the first Charter of which was dated Nov. 28th, 1836. Mr. Bone seconded the motion, which was opposed by Mr. Hutton, who did not think the Uni-

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versity would add to its dignity, but that it would detract therefrom, by such a celebration. It had not had fifty years even of teaching, but fifty years of examination, which had ended in a great dispute as to whether they were occupying their proper place as a university or not. After a short discussion, the motion was agreed to; but while discussing the terms of the resolution appointing a committee on the subject, the House was counted out.

THE REGISTRAR-GENERAL'S QUARTERLY RETURN.

THE exceptionally severe and trying weather that prevailed during the first quarter of this year invests with more than usual interest the Registrar-General's report upon the health of England during that period. It appears that the annual death-rate during the quarter was 22·8 per 1000 of the estimated population, and exceeded by 0·6 the mean rate in the corresponding periods of the ten years 1876-85. These figures imply that between 5000 and 6000 persons died in England and Wales during the quarter who would have survived if the mean death-rate had not been exceeded. Only twice during the ten years referred to was the death-rate in the first quarter of the year higher than in the three months ending March last; it was 23·4 in 1876 and 24·9 in 1879. The lowest rate in the first quarter of any year on record was 19·5 in 1884. The excess in the death-rate last quarter mainly occurred in the rural districts. The death-rate in the 17,000,000 of persons living in the chief towns was 23·6 per 1000, whereas in the 11,000,000 living in the small towns and rural districts it did not exceed 21·6. Compared with the average rates in the first quarters of the preceding ten years, however, the excess of mortality in the rural rate last quarter was equal to 5·2 per cent., while it was but 0·4 per cent. in the chief towns. This may be partly due to the larger proportion of elderly persons in the rural population, upon whose mortality the effect of cold is most marked; it may, however, be in large measure attributed to the greater decline in recent years of urban compared with rural mortality, the result of improved sanitary condition. To this general improvement in the national health may, indeed, be attributed the apparently small excess in the general mortality in England last quarter, when compared with the mean mortality in the ten preceding corresponding quarters. During last quarter the temperature fell below the freezing-point of water on 51 of the 90 days: on 16 days in January, 17 in February, and 18 in March. The lowest reading of the thermometer on these 51 days showed a daily average of 5 degrees of frost. In the mild first quarter of 1884, when the death-rate did not exceed 19·4 per 1000, there were only 10 frosty days, with an average of 2·2 degrees of frost. The greatest amounts of cold in the first quarter of any of the 16 years 1870-85, measured in this manner, occurred in 1879 and 1881. In 1879 there were 49 frosty days, with an average of 3·8 degrees of frost; and in 1881 there were 40 frosty days, with an average of 7·0 degrees of frost. The English death-rate was 24·9 in the first quarter of 1879, and only 21·5 in the same period of 1881. It is evident, therefore, that the mere amount of cold does not afford a satisfactory explanation of the wide variations in winter mortality. It is worthy of note that during last quarter the death-rate in the twenty-eight large English towns showed comparatively little excess until nearly the end of February, notwithstanding the 16 frosty days in January and the 7 in the first half of February. The death-rate in these towns averaged only 23·5 per 1000 in the first eight weeks of the quarter, whereas the mean rate in the next four weeks was 27·6. It would appear that cold in March is much more fatal than in January, but far too little is yet known of the conditions which govern the widely varying effect of cold upon mortality.

LIGATURE OF ARTERIES IN CONTINUITY.

CERTAINLY the paper communicated by Messrs. Ballance and W. Edmunds to the Royal Medical and Chirurgical Society on the Ligature of the Larger Arteries in their Continuity was one of the most important of the present session. Perhaps its chief interest lay in the careful and extensive pathological investigation, but it has an evident direct bearing on surgical practice which could not fail to excite the interest and close attention of the surgeons present. The chief contention of the authors was that it is "neither necessary nor advisable" to ligature the vessel so tightly as to rupture the coats. It is necessary, however, to obliterate as nearly as possible the lumen of the artery. The object aimed at should be the excitement of just sufficient damage to cause a chronic or subacute arteritis, which leads to permanent occlusion of the vessel. The internal coats should not be ruptured for fear of opening up channels for septic absorption, and with a view to preventing such a degree of damage as would be followed by ulceration and subsequent danger from secondary hæmorrhage. If it were easily possible to excite just sufficient inflammation to secure the object in view by the means advocated, considerable progress would be made in arterial surgery. Mr. Savory, Mr. Holmes, and others appeared to doubt the possibility of obtaining the desired end by the method recommended when applied to the human subject. An examination of the specimens, both macroscopically and microscopically, which the authors brought forward, is amply sufficient to convince the most sceptical that the means employed in sheep and horses were adequate to the end in view. But here comes the rub. Can we argue from animal to man—from the arteries of sheep and horses to those of human beings? Theoretically we do not perceive why this should be impossible; but even the authors of the paper would probably admit that this is a question which must be submitted to the test of a prolonged experience in the operating-theatre and wards of hospitals for human beings. One point on which the authors commented was the undesirability of attempting to rupture the internal coats of diseased arteries when these have to be deligated in their continuity. Every surgeon must feel the immense importance of the question; for assuredly a benefit of no mean order would be conferred on individuals with diseased arteries if a ligature could be so applied as to be sufficient to incite an inflammatory process adequate to effect the occlusion of the lumen of a diseased artery, and without being so firmly tied as to rupture its internal coats.

MEDICAL STUDENTS AND INFECTIOUS DISEASES.

MEDICAL students in London have for some time been unfortunate in regard to their opportunities for studying acute infectious diseases. The hospitals of the Metropolitan Asylums Board, which are the chief institutions where these studies could be most successfully prosecuted, have been closed against them; but the Managers have at length learned that the public must eventually suffer from the inability of the profession to properly exercise duties which require an intimate acquaintance with infectious disease unless facility is given for their study, and they have therefore put themselves in communication with the Local Government Board with a view to the valuable material their hospitals contain being made available for educational purposes. The Local Government Board have, in reply, pointed out that the section of the Act of Parliament authorising the Managers' hospitals to be used for clinical instruction has been repealed. At a meeting of the Managers held on Saturday, it was resolved that the several infectious disease hospitals under their control should be made available for this purpose, and that the Local Government Board be

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urged to obtain from Parliament all the necessary powers. Medical knowledge would probably gain much if the boards of management of other Poor-law institutions would follow the example thus set them. Charcot has shown how much may be learnt from a study of the chronic diseases which especially find their way into institutions which are provided for the old and infirm; in London there is a vast wealth of material for study, but which is left untouched, mainly owing to the absence of the use for educational purposes of the institutions containing it. The decision of the Metropolitan Asylums Board may lead to this being better understood.

PATHOLOGY IN THE BIRMINGHAM SCHOOL.

AT the opening of the Summer Session the Rev. W. H. Poulton, the warden of Queen's College, announced that the Council had, at considerable expense, organised a special department for pathological research and tuition. The local institutions have always been rich in morbid specimens, and for some years a distinguished young pathologist has been a member of the resident staff at the General Hospital; but the systematisation of the study of morbid anatomy has been a recognised want in the local school. It has now been supplied by the appointment of Professor Gilbert Barling, who has organised the new pathological department in a very complete manner. The lectures will be given at stated hours in the laboratory, which, for purposes of study and original research, is fitted with stands for thirty students. Microscopes, reagents, and sections are provided for them, and the Professor will be assisted by the medical tutor, Dr. Hogben. The summer course will include anomalies in the distribution of the blood within the vessels; retrogressive disturbances of nutrition, hypertrophy, hyperplasia, inflammation, tumours, and the infective granulomata. A general description will be given of the schizomycetes, and practical classes arranged for pathological study of matters directly related to clinical work. Altogether, the new pathological department at Queen's College, Birmingham, marks a distinct and very important advance.

THE GORDON BOYS' HOME.

WE have much satisfaction in recording the successful establishment and progress, as a part of our national work, of the Boys' Home, which recalls the memory of the late General Gordon. The memorial could hardly have taken a form of greater public usefulness, or one more harmonious with the wishes, the character, and the whole life and actions of the unpretending hero of Khartoum. If there is anything in the history of General Gordon which more than another impresses the reader, it is his singular fitness in emergencies—his appropriateness, we may say, to some of the most critical needs of his time. We seem to notice the same quality in the lives of other great men, in all such more or less, but in none perhaps in so remarkable a degree. Wherever Gordon was needed, he was found; wherever found, his influence was felt and was fruitful of benefit. Whether in China, fortifying the only available form of law and order, and giving direction to the future of that empire which we cannot now estimate; in the Soudan, maintaining justice, promoting the love of liberty, protecting the helpless; or at home, employing his leisure obscurely and wisely for the most neglected of his own countrymen,—he was instinctively and essentially the man for the work. He has been spoken of as a fatalist, though he always repudiated the term. Some belief in destiny no doubt he had, but this did not imply the blind sense of a future which for him was aimless, but a perception of the design and working of a Higher Power with whom he sought to act. It is not therefore surprising that Gordon found his own place in that design. It is to our mind peculiarly characteristic of the man, and suitable in his memorial, that it should have accurately met one of the greatest social necessities of our time. The potential future of a nation is in its young men. Upon their type, their tendencies, and belief its course will chiefly depend. Upon them necessarily also the forces of any time, its perplexities, temptations, and responsibilities will chiefly act; and nothing could be more desirable than that the name and principles of this later Bayard should be perpetuated in an effort to secure the best interests of his young fellow-countrymen. We therefore commend most heartily to public consideration the memorial scheme, which is under the presidency of His Royal Highness the Prince of Wales.

EFFECT OF BITTERS ON DIGESTION.

DR. CHELTSOFF, chief of Professor Botkin's clinic, thinks that extracts of the so-called "pure bitters," which are usually prescribed with the view of stimulating the secretion of gastric juice and of aiding digestion, so far from having any beneficial effect of that kind, are absolutely injurious, inasmuch as they retard the digestive functions. He has made a series of experiments with extracts of aurantium, gentian, trifolium, absinthium, calumba, cascarilla, and quassia on (1) gastric digestion, and the secretion of gastric juice; (2) pancreatic digestion and the secretion of pancreatic juice; (3) the secretion of bile; (4) fermentation; and (5) nitrogenous metamorphosis. The conclusions at which he arrived were that bitter extracts, even in small doses, interfere with artificial gastric digestion, and also with the gastric digestion of animals, but not to so great an extent. Large doses of bitter extracts diminish the secretion of gastric juice, though small doses effect a slight and transitory increase of it, the digestive power of the fluid being, however, in all cases diminished. Bitter extracts have no effect on the secretion of pancreatic fluid, but they nevertheless retard hypogastric digestion. The action of bitter extracts on the secretion of bile is various; extract of absinthium, extract of trifolium, and large doses of extract of cetrarin, slightly increases it, usually at least, but not invariably; while extract of quassia, extract of calumba, and small doses of extract of cetrarin, have no effect at all. Bitter extracts have no anti-fermentative effect, and do not hinder suppuration. Lastly, assimilation of nitrogenous substances is diminished by the use of these extracts.

BULLETINS AND PARAGRAPHS.

IT is only natural that there should be public announcements of the illnesses which befall prominent members of society. Nor is there anything to complain of in the issue of such notifications. More than this, no possible objection can exist to the signing of bulletins by medical men, when it is a matter of moment that the opinion expressed should be promulgated on the authority of the practitioners in charge of the case. The objections we have from time to time urged against newspaper intimations as to the state and treatment of sick personages have been based on particular grounds. Either the announcements have been needlessly issued or they have been of the nature of advertisements, or they have been so drawn up as to be unintelligible or misleading. Speaking generally, we see many and grave reasons why "paragraphs" which are not bulletins should be issued at all. In any case we do not think they should contain the names of practitioners of medicine. If bulletins are needed, let them be written by the medical men in attendance and signed by them. Paragraphs which announce that a distinguished person has been treated by So-and-so, successfully or otherwise, are objectionable in the highest degree. It is enough for the information of the

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public that the fact of progress, or, in the case of an operation, of success, should be intimated. The introduction of the name of the attendant or operator cannot possibly have other than one purpose—namely, the glorification of the individual named. With reference to a recent announcement to the effect that a distinguished member of the judicial bench had been successfully operated upon by two surgeons simultaneously, the form of the notice would in itself be sufficient proof that the paragraph was not indited by a professional hand. We are, however, in a position to state that the notice in question was issued without the knowledge of the surgeons named.

THE LORD CHIEF JUSTICE AND UNQUALIFIED ASSISTANTS.

THE remarks of the Lord Chief Justice in the trial, at the Central Criminal Court recently, of Mr. A. W. Head, who was charged with the manslaughter of Henry Hibbert, are of a character to be pondered, if we may not question them. He declined to define culpable neglect. He said that the question of being a licentiate of a College or not, having a qualification or not, was a point of difference of which the law of England took no notice in respect of the question of competent skill. So much the worse, we say, for the law of England. The Lord Chief Justice further observed that the very fact that Dr. Money had employed his assistant was evidence of the assistant's competence—"otherwise Dr. Money would not have employed him." This is the most extraordinary deliverance on the subject of medical qualification which we remember to have heard. It seems to dispose of the necessity of all medical authorities and examining boards, and to frank all unqualified assistants acting under the ægis of medical men. After such remarks, we are prepared to find the Judge very tender in his judgment of Mr. Head. Fatty heart was difficult of diagnosis even to the skilled physician; and although the defendant did not verbally correct the erroneous instructions about the medicine, he wrote a label in the plainest hand. It was not necessary to maintain that the defendant had brought the highest skill to the case. All that was necessary was that he should have brought reasonable skill. After such deliverances the jury of course found a verdict of "Not guilty," and the defendant was discharged. The defendant is to be congratulated on having such a statement of the law of competence and skill, not only from the judgment-seat, but from the Lord Chief Justice of England. We will not pretend to be satisfied with it, or to think it satisfactory in the public interest; but the law generally, and that regulating medical practice, is so bad all round, that possibly the Lord Chief Justice's judgment may be justified.

CONNEXION BETWEEN SPLENIC TUMOUR AND THE UTERINE FUNCTIONS.

DR. SKORCZEWSKI describes in the *Przeglad Lekarski*, a Polish medical journal, a peculiar case of splenic tumour which had a distinct relation to the generative organs. A woman aged twenty-six, after a difficult labour four years ago, experienced pain in the left hypochondrium, and in the course of a few days noticed a tumour in the abdomen, which rapidly attained to the size it was when first seen by Dr. Skorczewski. It then occupied nearly the whole abdomen, being of an ovoid form, the long axis being transverse. It was hard, with smooth thick edges, and could be displaced upwards to the extent of a hand's-breadth above the symphysis pubis. The urine was normal; also the number of blood-corpuscles. Quinine and arsenic produced no effect. Electricity was then tried, and after a course of the interrupted followed by another of the constant current, occupying together some three weeks, the tumour had diminished so much that when pushed up under the left ribs it only extended about a hand's-breadth below them. The patient's general condition, too, had become decidedly better. Menstruation, lasting four days, then occurred, and simultaneously the tumour again increased to its original dimensions, and the woman's general condition became worse. Neither electricity nor other methods of treatment which were tried produced any fresh diminution in the tumour or any improvement in the general condition. The connexion between the splenic tumour and the functions of the generative organs was evident enough, but no explanation of this connexion seems to have suggested itself to the author.

HER MAJESTY'S INSPECTOR OF VIVISECTION.

THE announcement of the appointment by the Home Secretary of Mr. J. Eric Erichsen, F.R.S., to the post of Her Majesty's Inspector of Vivisection, under the provisions of the "Cruelty to Animals Act" of 1876, affords a fitting opportunity for an expression of regret that the country should lose through ill-health the services of one who for the past ten years has discharged the duties with a carefulness, highmindedness, and right feeling which those who know Mr. Busk best can most fully appreciate. Her Majesty's Inspector of Vivisection is one of those official personages on whom the public light shines sometimes fiercely, and his relations with the medical profession are both useful and important, requiring the exercise of some diplomacy. That vivisection is necessary for the progress of science we have always held; that it should be guided and directed by those best competent to judge of the value of proposed investigations we equally regard as just in the cause of humanity. In Mr. Busk the Government had, in combination with the Association for the Advancement of Scientific Medicine by Research, two advisers on whose judgment it could rely in carrying out the spirit of the law. It appears from Mr. Busk's report for the past year that of the 53 persons who held licences in England and Scotland during any part of the year 44 performed experiments. The total number of experiments performed was about 800. Of these 210 were done under the restrictions of the licence alone, and 82 lecture demonstrations under similar restrictions, but also under certificates permitting experiments in illustration to lectures, anæsthetics being necessary; 382 were performed under special certificates for experiments without anæsthetics, and 128 under certificates dispensing with the obligation to kill the animal before recovering from anæsthesia. Of the large number (382) performed without anæsthetics, no fewer than 328 consisted, so far as any operative proceeding was concerned, in simple inoculation or hypodermic injection, either with some morbific virus or for the purpose of therapeutic inquiry, and in which the administration of an anæsthetic, to which all animals have a great repugnance, would only entail needless annoyance and distress.

SHOP SEATS FOR COUNTER-SERVERS.

IT has been suggested by the *St. James's Gazette*, and we warmly support the proposal, that a clause should be introduced into Sir John Lubbock's Bill to compel shopkeepers to provide seats for their *employés*. Something more than this is needed—namely, that they should be further required to sanction the use of the seats when provided. As a matter of fact, we have reason to believe that the objection to provide seats pales into insignificance beside the objection to shop-assistants sitting. Both shopkeepers and customers look upon the fact of a young man or woman sitting as a proof of laziness. While this feeling exists it is in vain to contend about seats.

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ROYAL MEDICAL BENEVOLENT SOCIETY.

THE twenty-third festival of the Royal Medical Benevolent College took place on Tuesday evening in the Venetian Chamber of the Holborn Restaurant, Sir Andrew Clark, Bart., occupying the chair. The gathering was a large one, about a hundred medical men and laymen being present, and was fairly representative of the various branches of the profession. The Chairman proposed in graceful terms "The health of the Queen," dwelling on the importance of preserving a spirit of loyalty amongst all classes. Dr. E. Waters, of Chester, proposed "The Army, Navy, and Reserved Forces," to which General Sir L. Pelly, M.P., and Admiral Sir Anthony Hoskins replied. The latter mentioned that Dr. Walter Dickson (who was present) and himself started on their first voyage in the same ship many years ago. The toast of "The Reserved Forces" was acknowleged by Dr. Trend, of Southampton. The toast of the evening was proposed by the Chairman, who entered into the details of the working of the institution at some length. In connexion with it are fifty pensioners, twenty-four of whom reside in the College, and are between sixty and eighty years of age; the remaining twenty-six live at their own homes. The school contains fifty foundation scholars, the orphans of medical men, who are lodged, boarded, clothed, and educated. There are, besides, 150 resident scholars, mostly the sons of medical men, who pay nearly enough to cover their expenses; and, in addition, a few day scholars are received from the neighbourhood. Whenever vacancies occur there are a great number of applicants to fill them. The Chairman stated that he believed the work of the institution was exceptionally well done. The total cost per annum was £5000, to meet which they had an income, steadily diminishing, of £3800; a special effort was therefore necessary. Of the 16,000 members of the medical profession, he regretted to say not more than one-fifth interested themselves in the College. This was, he said emphatically, a disgrace both to the successful and the unsuccessful members of the medical profession; and he trusted that this stigma would be speedily obliterated. Subscriptions were subsequently announced amounting to about £4000. The toasts of "The Chairman," "The Head Master,' and "The Honorary Local Secretaries" were then honoured. The proceedings were much enlivened by a well-chosen selection of music interspersed between the toasts. This consisted of choruses and solos from "The Pinafore," and two part-songs, "Integer Vitæ" and "Beware." Mr. Trelawney Cobham, Dr. Lavies, Mr. J. W. Y. H. Lavies, and Mr. G. Anderson Critchett were most successful in their songs, and Mr. W. Ganz presided with his well-known skill at the piano. The arrangements for the dinner were in every way satisfactory. We may add that the annual voting papers for pensionerships and scholarships in the College have just been issued to the subscribers, from which it appears that there are three vacancies for pensioners and twenty-three candidates, only three of whom have been subscribers; there are two vacancies for scholarships and fifty-seven candidates, only two of whom have been subscribers. When will the great advantages of this excellent institution be better appreciated by the profession?

PIPE v. BRICK SEWERS.

FOR some time past we have heard complaints as to the construction of brick sewers in various portions of Paddington instead of the more economical and, under the special circumstances we are considering, the more efficient method of laying down glazed pipe sewers. Thus we are informed that for some four to nine houses in one street a brick sewer 3 ft. 9 in. by 2 ft. 6 in. has been constructed, and Mr. Mark Judge, in bringing the matter prominently before the inhabitants of the parish, points to this as involving a useless expenditure, and he reminds those whom he addresses of the well-known axiom of sanitary science that sewers should be as small as possible, having due regard to the work they have to do. This, we have generally understood, was universally accepted as a rule in connexion with sewer construction. If a sewer is larger than is necessary, the tendency is to reduce the rapidity of the flow of sewage, to favour the deposit of contents, and so to lead to decomposition and the resulting foul effluvia from the ventilators. On this ground alone it is to be hoped that those who ask the vestry to hold their hands in this matter will receive a favourable hearing, and that the practice heretofore in vogue, of building large brick culverts where small glazed-pipe sewers would apparently suffice, will not be continued without some formal explanation of the circumstances which are regarded as justifying it.

HOW DOES NITROUS OXIDE ACT?

THE dictum of Claude Bernard that nitrous oxide does not cause anæsthesia as the result of asphyxia, but by an altogether different mechanism, was accepted as the basis of an interesting and careful paper read by Dr. Dudley Buxton before the Odontological Society of Great Britain. It is suggested that nitrous oxide may be taken as in all probability entering the blood by forming a loose combination with either the oxyhæmoglobin or the globulins and other albuminous bodies. It then passes to the nervous centres and gives rise to subjective exhilaration, acting in fact as a stimulant. If an individual be watched whilst in the act of inhaling nitrous oxide, it will be found, urges Dr. Buxton that the respirations are simply an exaggeration of the normal—quite regular, but hurried in rhythm and increased in depth. There is nothing in the nature of the expiratory convulsions with which one is so familiar in the case of the lower animals dying from asphyxia. The author maintained that he narcotised his patients before the oxygen was exhausted—and, he submitted, a long while before.

"HYSTERICAL FEVER."

SINCE the application of the thermometer to the study of disease, the question of animal heat has assumed an importance that it did not possess before; but at the present time physiologists are not quite agreed as to the mechanism by which its production is governed, and several points require elucidation in considering the production and regulation of the normal heat of the body before we can take the work of the physiologist and utilise it for the study of medicine. The physiologist, however, often receives aid in his studies from the pathologist—the experiments of nature throw light on the experiments of the laboratory. Thus the work of the physiologist brought him to think that the production of animal heat is under the control of the central nervous system in much the same way as its regulation, but the exact proof of this position is wanting. Pathology, however, steps in and supplies the want. It says there is a disease consisting in a functional disturbance of the nervous system accompanied by an increase of temperature. Several cases of this sort have been recorded—viz., of hysteria with a high temperature, the latest of which was a case related by Dr. Debove to the Société Médicale des Hôpitaux, in which the patient, having been under observation for some time, had exhibited, besides her neurosis, occasional elevations of temperature. In the month of November of last year this elevation became continuous, and 39·5° C. was recorded in the axilla night and morning; during December 40° C. was the number, and during the latter part of the month 41° C.; during January, up till the 24th day of the month the thermometer was

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always above 41° C., and then it gradually sank to the normal by the 29th day. No lesions of the internal viscera could be discovered, but each evening about seven o'clock an hysterical attack came on, which lasted till one o'clock in the morning. But perhaps the most remarkable feature of the case was the slightness or general absence of difference between the morning and evening records. Anyone glancing at the numbers would perceive that this was no ordinary record of disease temperature, and perhaps it will be well to bear this in mind, because it is very easy to see what a dangerous weapon we are introducing into practice when we use the term "hysterical fever." Many are the elevations of temperature for which it is very hard to find an adequate cause, and to comfortably sink back on such a term for these cases would be most disastrous. After this three months' elevation of temperature the convalescence was as rapid as the fall, which tends to show, as Dr. Debove points out, that hyperthermia in itself is not such a source of danger as some think, and that increased heat will not by itself produce lesions in internal organs. A further lesson we may learn from the case, that the differential diagnosis between epilepsy and hystero-epilepsy by the temperature, as pointed out by Charcot, is not absolute.

SIR DYCE DUCKWORTH.

WE understand that Dr. Dyce Duckworth, Treasurer of the Royal College of Physicians of London, and Chairman of the Building Committee of the new Examination Hall of the Colleges of Physicians and Surgeons, the foundation-stone of which was recently laid by Her Majesty the Queen, has received the honour of knighthood. We offer our hearty congratulations to Sir Dyce Duckworth on the honour which has come to him. He is a distinguished medical graduate of the Edinburgh University; he has done much good work in pathology, medicine, and medical literature. His general character for sound judgment and good-heartedness, and his many-sided relations to the profession and to its leading corporations, make the honour conferred on him a matter of satisfaction to the profession. For the same reasons we feel glad that Sir Dyce Duckworth has been charged with the honourable duty of representing the College of Physicians of London in the Medical Council.

A PRECURSOR OF PASTEUR.

AN interesting volume might be compiled under the title of "Medicine's forgotten Worthies," in which few chapters would be more attractive than one devoted to Dr. Eusebio Valli, a Tuscan physician, who died seventy years ago. He was born in 1755 at Casciana, and his first professional laurels were won at Smyrna during a visitation of the plague. We next hear of him in France, where he held a post on the medical staff of the "Cablys" regiment, with which he sailed to Hindostan in 1783. Six years thereafter he returned to Italy, where he was associated intimately, as friend and coadjutor, with the great Alessandro Volta. Then he was appointed to the chair of Clinical Medicine in Mantua, whence he repaired in 1803 to Constantinople, again to study the plague, which was decimating the inhabitants. After its cessation he was once more in Italy and in Mantua, where he resumed his clinical prelections; and next we find him accompanying the French arms to Dalmatia. Thence he journeyed to Spain, and finally to America, where for the third time he encountered the plague, to which, however, he fell a victim on Sept. 24th, 1816. Among his writings is a most instructive account of the "Plague in Constantinople," in which he makes incidentally the following observations:—"When at Leghorn, in 1790, I communicated rabies to several animals by inoculating them with saliva taken from a hydrophobic dog. Inoculating other animals with the same saliva, corrected with the gastric juice of the frog, I found that none of them contracted rabies. Then I treated with this same gastric juice the son of the widow Rosselmini of Pisa and a maid-servant of the household, both of whom had been bitten by a foxhound which was suffering from hydrophobia. This inoculation neutralised the poison, and by the same means I cured a case of snake-bite, and also modified the variolous contagium, so as to generate a malady without cutaneous eruption, non-malignant and free from danger." This curious passage would have been lost to the historian of medicine but for the duteous care of the Cavaliere Giuseppe Valli of Ponsacco, a descendant of Dr. Eusebio Valli, who, after much research, compiled from documents unpublished or forgotten an interesting memoir of the Tuscan physician, which first saw the light in 1881. An appreciative review of this work appeared in our contemporary *Lo Sperimentale* of Florence, from the pen of its conductor, Dr. Angelini Filippi, and attention has again been drawn by the Tuscan school to Valli's treatment of hydrophobia by counteractive inoculation as a remarkable episode in the series of experiments which have culminated in the method of M. Pasteur.

PTOMAINE IN CHEESE.

IN the course of the year 1884 more than three hundred individuals inhabiting the State of Michigan experienced symptoms of poisoning after having partaken of a certain kind of cheese. In many of them the symptoms were of grave import, the medical attendants seriously discussing the possibility of poisoning by such irritants as arsenic, and indeed, prescribing the hydrated oxide of iron on that view. Vomiting, first of aqueous fluids, afterwards tinged with blood, was accompanied by severe diarrhœa. Constriction about the throat, epigastric pains, white fur on the tongue, soft irregular pulse, and cyanosed face were also observed. Fortunately none of the cases terminated fatally. The cheese examined by M. Vaughan had nothing peculiar in its taste or odour. On a fresh section numerous drops of a feebly opalescent liquid were to be seen, and micrococci existed in abundance in it. An alkaloid was extracted from the solid part of the cheese. Placed upon the tongue, it imparted an acid and burning sensation, soon followed by dryness of the throat and nausea. Absorbed in small quantity, it caused diarrhœa. M. Vaughan names it "tyrotoxicon," and obtained half a gramme of it from fifteen kilogrammes of cheese.

DUST AND REFUSE NUISANCES.

LONDON is threatened with another dust nuisance, for a wharf has been secured off Fermoy-road in the parish of Paddington, and the dust of Chelsea is to be removed there for the purposes of being sifted. The ratepayers in the neighbourhood very properly declare that if any dusting business is to be carried on in this populous district, it will soon become a nuisance and be dangerous to public health; and, in view of the importance of the subject, a special effort was made at the last meeting of the Paddington vestry to bring the matter forward. But the vestry adjourned for three weeks! A correspondent in the *Daily News* again asks the question why London householders should not follow the example set them in Paris, and place their house refuse every night in the street, whence it is easily removed in the early morning by the proper authorities. We presume the answer is to be found in the influence which dust contractors can bring to bear upon our local authorities; dust removal is now subject to a trades interest; at some times of the year it answers the contractor's purpose to remove house refuse, at others he has no immediate use for the dustbin's contents, and neglects to carry out the duty he is paid to perform. Doubtless.

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if the removal of refuse were regarded only from the public health point of view, it would be found a more economic method to fill the dust-cart as rapidly as possible, and for this purpose the regular and systematic call for the refuse of every house would enable this to be accomplished much more readily than if the dustman were to continue, as at present, to make his irregular perambulation through the streets and only assist those householders who may chance to hear his cry, and be willing and able to submit to the blackmail which he levies as if by right.

SANITARY WORK IN ST. LUKE'S.

A CASE recently heard by Mr. Barstow at the Clerkenwell Police-court gives evidence of the need for the active enforcement of the provisions of the Sanitary Acts in the parish of St. Luke's. A summons had been taken out against the owner of premises known as the City of London Baths, Golden-lane, which had been converted into dwellings for poor people. Dr. Yarrow, the medical officer of health, gave a pitiful account of the condition of these buildings. There were, he said, within them twenty-three closets in a dirty state, all without water-supply; twenty-five rooms which were dirty and required whitewashing; some of the drains were stopped, while others were open; in the basement were two or three hundred cartloads of the most offensive refuse; ashes, instead of being deposited in bins, of which there were none, were heaped in many cases on the stairs. Dr. Yarrow asked for the premises to be closed, a request with which Mr. Barstow complied; the new Chatham-garden-buildings had been erected near, and the people, occupying the "Baths" could easily obtain at a low price the necessary accommodation. While we may express our satisfaction at the termination of conditions so disgraceful, we are none the less led to wonder how any premises could have been so neglected. Two or three hundred cartloads of offensive material cannot have accumulated in a brief space of time. We are forced to the conclusion that either the inspectorial staff is insufficient or that the vestry have been unwilling to comply with the recommendations of their officers. We trust that Dr. Yarrow, who has not long been appointed, will be able to reorganise the sanitary administration of this thickly populated parish.

THE VALUE OF A POST-MORTEM EXAMINATION.

AN adjourned inquest was held at the Town Hall, Hull, on May 6th, touching the death of Ellen Jane Jackson, a married woman. It appears that deceased some five weeks after her confinement—from which she had recovered—was seized with pain in the lower part of the abdomen, and that Mr. Swarbrick, an unqualified medical man, was called in to attend her. In the opinion of the latter the case was one of obstruction of the bowels, and, acting upon his diagnosis, he administered croton oil as a purgative. Subsequently the symptoms became more alarming, so much so, in fact, that it seemed clear that peritonitis had supervened. To alleviate this Mr. Swarbrick ordered opium and calomel, but in spite of this Mrs. Jackson died. Prior to her death she expressed her belief that Mr. Swarbrick's treatment was at fault; in fact, she went so far as to say that that gentleman had murdered her. The allegation was repeated by the husband, and this, strengthened by statements made by Dr. W. Ballingall, who was called to see deceased shortly before her death, that "there are symptoms of irritant poisoning," and "the cause of death is dark and mysterious," caused the coroner to order an inquiry, although Mr. Swarbrick had issued a certificate of death. This certificate bore the signature "Charles Eyre Councillor," a qualified medical man with whom Mr. Swarbrick had up to May 1st acted as partner or assistant. During the hearing of the case it transpired that Mr. Swarbrick possessed blank certificates of death signed by Dr. Councillor; but the particular one in question, although it bore Dr. Councillor's name, seems to have been signed by Mr. Swarbrick. The post-mortem examination was conducted by independent medical men. It revealed acute inflammation of the right ovary, with consequent peritonitis. From the appearances observed the medical witnesses could not say that the treatment had accelerated death, nor that other modes of treatment would have succeeded in saving Mrs. Jackson's life. The jury upon this returned a verdict that death resulted from peritonitis. Assuming that the exact nature of the affection could have been diagnosed, it would certainly not have been appropriate to administer strong purgatives; but the difficulty in making out the exact primary lesion in the presence of peritonitis is always great. The peritonitis itself would cause constipation, and this might lead to the supposition that the case was one of obstruction of the bowels. Such mistakes are not infrequent. It was not shown that Mr. Swarbrick had been guilty of carelessness, much less of culpable negligence. We are therefore satisfied that the finding of the jury was an equitable one. Nevertheless, we must express our disapproval of the practice, which unfortunately is too common, of unqualified medical men attending patients and giving death certificates bearing the signature, or what appears to be the signature, of a qualified medical man who has never seen the case at all. In the present instance it appears that Mr. Swarbrick signed the certificate in Dr. Councillor's name; but in extenuation of the irregularity, it must be allowed that there was an inducement in the fact that he had previously been in possession of blank certificates—ready for filling-in,—which bore the real signature of Dr. Councillor.

THE CHOLERA IN ITALY.

DURING the week ending May 12th cholera has continued to prevail in Italy, and it has unfortunately enlarged its area of distribution. In the town and province of Brindisi 52 fresh cases and 18 more deaths have taken place, the disease showing some tendency to diminution during the past two days of the week. But the port town of Bari, situated some seventy miles higher up the Adriatic coast, has also become infected, the fresh attacks and deaths notified as having occurred during the two days May 9th and 10th reaching 61 and 21 respectively. No fresh news as to the prevalence of the disease at Vicenza has come to hand since May 5th, when two cases and three deaths were announced as having occurred on that and on the preceding day. But in the city of Venice fresh cases and fatal attacks are steadily maintained, the former varying daily from 9 to 13 and the latter from 3 to 8. In all, 62 cases and 25 deaths were reported as having occurred during the week.

HEALTH AND ATHLETICS.

IT would be superfluous to state that athletes are generally, as they ought to be, the healthiest of mankind. This is the rule, and it follows that deaths incurred by athletic exercise are usually the result of accidents which may with due care be avoided. There are exceptions, however, and among such must be numbered a young man who is reported to have died suddenly at Rockwell College, Cashel, from heart disease, after winning a race. Such a sad occurrence, though rare, is probably not unique. As we write we can recall a nearly similar instance of sudden death. The moral is obvious, yet it may very possibly pass unheeded by many who would do well to consider it. Athletic men are not prone to trouble themselves with valetudinarian fancies, and we certainly have no idea of intro-

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ducing them to this unprofitable line of thought. At the same time, it would be well if all such, before inaugurating a course of severe bodily effort, were to assure themselves that no vital flaw entailed a wise abstinence upon them. Boys at school are apt to be wholesomely free in the use of their muscular powers, and gain thereby in strength and resolution far more than they lose by fatigue. Yet it is most necessary that the exceptions among them also should be known and suitably restrained when necessary by their masters. With respect to heart disease, the question of strain is a most important one, especially since the latent weakness may not be apparent under ordinary exertion. It is surely no more than reasonable to make some allowance for an organ which, though unsound, is often capable, if protected from heedless risk, of passing successfully through the work and worry of an ordinarily active life.

POST-MORTEM EXAMINATIONS IN CRIMINAL CASES.

IT is not long since we took occasion to insist upon the desirability, nay, the necessity, of having a thorough post-mortem examination made in all cases where the death might entail a criminal charge. We are glad to find our views have received the judicial sanction and support of Mr. Justice Fitzjames Stephen, who at the present Stafford Assizes took occasion to say, in regard to a charge of wilful murder by shooting, that a post-mortem examination should have been made so that the exact cause of death might have been ascertained and recorded. It is only common fairness to the accused that the medical evidence which may be adduced at the trial should, as far as possible, relate to ascertained facts. Medicine is not an exact science, and many issues of life and death will ever remain enigmatical; but this is just the reason why every endeavour should be made to clearly distinguish between what is certain, what probable, and what possible.

PHOTOGRAPHING THE UTERINE CAVITY.

A SWISS physician describes a plan of introducing wadding tampons and laminaria tents into the uterus, by which he has succeeded in dilating the organ to such an extent as to be able, by means of reflectors, to get a complete view of the whole cavity in cases of carcinoma, fibrous polypi, fibromata, and endometritis. Not being content with ocular inspection, he has also contrived to obtain photographs of the cavity. New inventions for uterine exploration, medication, and instrumentation are often of a somewhat hazardous nature, but we tremble to think of the future of some female patients if photographing the interior of the uterus should ever become one of the medical fashions of the day.

SMALL-POX HOSPITAL PROVISION.

THE Metropolitan Asylums Board are evidently weary of waiting for the consent of the Local Government Board to erect at Gore Farm, Darenth, a new small-pox hospital for convalescent patients. Sir Edmund Currie naturally pointed out at their meeting on Saturday that it was necessary for the Managers to complete their plans before the next epidemic prevalence of this disease, but the difficulty with the Local Government Board is probably less the unwillingness to allow the expenditure of public money than to determine the best method in which this money can be laid out. The aggregation of cases of small-pox has been definitely shown to be attended by disastrous results, and the continued investment of large sums in the same manner as heretofore is not, in face of this evidence, in accordance with common sense. The Managers are without responsible advice in this matter, and will doubtless, if necessary, shelter themselves under this plea, but the Central Board are differently circumstanced in this respect, and will obviously have to adopt some other course than that which has been attended by so many misfortunes. Certainly the fact is very evident that the outside relations of these institutions can no longer be neglected. It is impossible that they should only be thought of as temporary homes for sick persons; their influence upon the public health of the metropolis must be considered in all its details, and for this purpose it is necessary that the question of dealing with small-pox in London should be made the subject of further study, and ample means provided for watching the effects of any action which results from the conclusions to which these Boards may come.

THE LATE DR. AUSTIN FLINT.

THE *New York Medical Record* of April 24th contains a memoir of Dr. Flint by A. Jacobi, M.D., President of the New York Academy of Medicine; also a paper entitled "Reminiscences of Professor Austin Flint." It is natural that the friends and countrymen of the deceased physician should not "let die" his virtues and his work, which leave such a model for future physicians in his and in all countries. Dr. Flint was English in his descent from Thomas Flint, a Puritan, who emigrated from Derbyshire to Concord, Mass., in 1638. His father, grandfather, and great-grandfather were physicians in Massachusetts. On our side, we shall remember Dr. Flint, not only for his English blood, but for his contributions to medicine, his fine form and face, and his genial and frequent visits to us, which we had come to regard as a sort of annual treat.

COMPLETE QUALIFICATIONS FOR COMPLETE EXAMINATIONS.

IF the unsatisfactory Medical Bill of the Government is to be proceeded with, a strong attempt is likely to be made to secure a recognition of the full qualification of those who have been examined in all branches of the profession by any one corporation or university. The idea that a man ought to go to two corporations to pass practically two similar examinations has its origin in consideration for, not the benefit of, the public, but of the corporations. And yet Sir Lyon Playfair proposes virtually to continue this injustice by requiring one corporation to join another, even if its examinations be complete—as, say, in the case of the Royal College of Physicians of London. This is to legalise injustice.

THE HOSPITAL SUNDAY.

IT is to be hoped that the reluctance of one or two hospitals to take an active part in organising local meetings in the week preceding Hospital Sunday will be overcome. Dr. Wakley's proposals have been heartily adopted by the Hospital Sunday Fund, and especially by its most active members. And it would be a pity to see anything like apathy on the part of leading hospitals.

ASEPTIC PREPARATIONS.

SMALL glass capsules, hermetically sealed, according to the *Pharmaceutical Journal*, are coming much into use for the storage and preservation of various fluids. M. Limousin proposes to employ them for keeping solutions for hypodermic use. The capsules, with long capillary tubes, are first sterilised by heating for some time at a temperature of about 200° C., and may then be filled in the ordinary manner, or by injecting with the hypodermic syringe and sealed in the flame of the spirit lamp or Bunsen burner. When required for use, the point is broken and the fluid transferred to the syringe by one slow stroke of the piston.

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PROPOSED CHALLENGE SHIELD FOR THE VOLUNTEER MEDICAL STAFF CORPS.

AN effort is being made to raise the sum of £40 for the purpose of obtaining a Challenge Shield for the Volunteer Medical Staff Corps, the trophy to be competed for by the members of the corps, and to be presented to the company that is considered to be most fit to receive it. The shield will be competed for annually, and, although considered as the general property of the corps, will be retained by the company who may have gained it for that year. Should a greater sum be subscribed than is asked for, either a second prize will be given or a more expensive shield than the one now contemplated will be ordered. Subscriptions (which are limited to one guinea each person) to the amount of £21 have already been received.

ITALIAN HOSPITAL AT CONSTANTINOPLE.

Il Morgagni (1st inst.) gives a description of the hospital which was erected in 1876 by the Italian Government in the Tophané quarter of Constantinople. The sum expended was £12,000, and the institution covers an area of 3800 metres facing the sea. The *personnel* consists of two paid medical officers, fourteen sisters of charity, and four male attendants. The chapel is an architectural gem. Public and private wards, lifts, bath-rooms, and a constant supply of fresh and salt water are provided. Paying patients are admitted, with reduced terms for those of Italian nationality. In 1884 the male patients numbered 309; the females, 41; and the deaths 28. An income of about £400 was derived from the paying patients, about one-third of the total expenditure, exclusive of medical attendance. The balance was defrayed by the Italian Ministry of Foreign Affairs. A lunatic asylum, adapted for twenty patients, and the consular prison, adjoin the hospital.

"NO EVIDENCE" OF INSANITY.

IT matters little practically that in a recent case of shooting the plea of insanity was not set up, although the behaviour of the prisoner was so strange that the Lord Chief Justice commented on the fact that no legal evidence had been offered. The accused, on conviction, was sentenced to imprisonment for eighteen months with hard labour, so that he will be under observation. Disastrous results might have occurred had he chanced to be acquitted. It is clearly necessary that something should be done to ensure the consideration of this question of sanity or insanity in every case before a prisoner is arraigned. We hold that the preliminary issue of responsibility ought logically to be already determined when the secondary issue of guilt is raised.

CENTENARIANS.

PROFESSOR HUMPHRY (Cambridge) is engaged in collating for publication the reports which friends have been good enough to send him respecting centenarians; and he will still be glad to forward a form for particulars to any member of the profession who will kindly take the trouble to fill it up from his knowledge of a person who has attained or passed the age of a hundred years.

FOREIGN PROFESSORIAL CHANGES.

PROFESSOR HERMANN EMINGHAUS of Dorpat has accepted the Professorship of Psychological Medicine in Erlangen. Professor Rühle of Bonn, who has just returned from six months' leave in Italy, resumes his lectures during the present summer semester. Dr. R. Hirzel, Extraordinary Professor of Pharmacy in Leipsic, has accepted an appointment at Jena. Professor Sohnke of Jena has been appointed Professor of Physics in Munich. Dr. Adolph Schenkl has been appointed Extraordinary Professor of Ophthalmology in the German Medical Faculty at Prague. This university has to lament the death of Dr. E. Linnemann, Professor of Chemistry. Dr. Ovsyannikoff, who has been for many years Professor of Physiology at the University of St. Petersburg, and was formerly Professor in Kazan, has retired.

HOW TO DETECT ACETONE IN URINE.

IT is stated by Mons. P. Chautard that the presence of acetone in urine or pathological liquids may be readily detected by adding a drop of an aqueous solution of magenta decolourised by sulphurous acid to the suspected liquid, when, if acetone is present, a violet colour is produced, the intensity of which is proportional to the amount present. In dilute solutions the colouration does not appear until after four or five minutes; if the amount of acetone is very minute, the urine or other liquid may be distilled, the first portion that comes over being examined. In this way a very minute proportion of acetone may be detected.

THE next half-yearly dinner of the Aberdeen University Club, London, takes place on Wednesday, the 19th inst., at the Holborn Restaurant. The Right Hon. Lord Watson, formerly M.P. for the University, will preside; and among the guests expected to be present are the Principal (Dr. Geddes), Sir Peter Lumsden, and Sir Donald Stewart.

THE spread of venereal disease amongst the native population and white settlers at the Cape is exciting great attention in the colony, the reports of the district surgeons which were recently laid before the local Parliament containing an appalling account of the ravages of the disease in its most malignant and loathsome forms.

THE ceremony of unveiling the statue by Mr. Brock, A.R.A., of the late Sir Erasmus Wilson, will take place at the Royal Sea-bathing Infirmary, Margate, on Tuesday, the 25th inst., at 1.30 P.M. Sir James Paget, Bart., will present it to the Infirmary on behalf of Lady Wilson.

THE Medical Society of London has awarded the Fothergillian Gold Medal to Dr. Strahan, of Belfast, whose essay is entitled "The Nature and Varieties of the Fevers prevalent in the United Kingdom."

THE deaths are announced of Dr. Nicolai Voronzovski, Professor of Operative Surgery in Moscow, and of Dr. Rud. Monnier, Emeritus Professor of Anatomy in Val-de-Grace.

THE use of calf lymph for vaccination has been made compulsory in the Grand Duchy of Baden, from March 1st.

CITY ORTHOPÆDIC HOSPITAL.—The thirty-fourth anniversary festival of this hospital was held on the 6th inst., the chair being occupied by H.R.H. the Duke of Cambridge. During the past year 2590 cripples have received treatment, and the total number of patients since the charity was established in 1851 is 48,900. The financial condition is highly satisfactory, the receipts having during 1885 exceeded the expenditure by £175. Donations and subscriptions to the amount of £1000 were announced by the secretary.

MR. LE PAGE, a surgeon in Salford, has recovered damages, amounting in the aggregate to £2100, as compensation for injuries and loss sustained by him owing to an accident on the Lancashire and Yorkshire Railway, the particulars of which we gave at the time of its occurrence.

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A REVIEW OF THE PRESENT SYSTEM OF MEDICAL EDUCATION IN LONDON.

By W. MOXON, M.D.

I SUPPOSE it will be allowed that education does not exist for the benefit of universities, but universities for the benefit of education. Graduation, the special endowment of universities, exerts a fascinating and powerful attraction in the encouragement of learning. A degree is the thorough student's proper reward. The hope of it is his worthiest ambition. A degree is due to him after he has passed through a sufficient course of methodised study. This truth is universal to universities. What is graduation? This is no idle question, because the true signification of a word may be buried with its derivation, and its proper meaning may be utterly forgotten so as to be denied to the very things which the word was intended to signify, and that at a time when the word is wanted as a just sanction. Surely, the idea involved in graduation is the fixing of steps or grades in a systematic course of learning which the graduate passes through in obedience to rules of method laid down by the degree-giving body or university.

This idea of graduation is no mere play on words, and the meaning of graduation should not be forgotten when a degree such as M.D. Brussels, &c., is given to those who have taken no methodical steps under the governance of the university that gives the degree. At present we witness a strange and most unfair and unjust anomaly. A degree, which properly means a token of graduate progress, is given—say at Brussels—where no steps of progress were prescribed or demanded; and this degree is given for learning which was obtained by a well-ordered system of steps of progress in London, steps prescribed by so-called "colleges" in London which are able to prescribe the steps and ensure the learning, but cannot grant the degree. It is not contended that the learning tested at Brussels is insufficient to justify the degree, and the degree of M.D. Brussels is held to be valid in this country.

In London we have graduation without degrees. The student of medicine in the metropolitan schools is conducted by the Royal Colleges of Physicians and Surgeons through a graduate's course of teaching and of examinations, and he is rewarded with the same title which the father obtained for a tithe of that training which the son has to undergo—a title which no longer suffices for the requirements of general practice. The result is to blight the spread and elevation of medical education in this vast city. Public attention should be concentrated on the causes of this anomaly, so that a flagrant injustice may be swept away. Systematic and graduated education in medicine has developed itself in the curricula of the Royal Colleges. It is now necessary that this should be duly recognised, and that the right of conferring degrees in due proportion to methodised attainments should in a fitting manner be attained by the colleges. Thirty years ago the system of medical instruction in London hospitals was as crude as the system of examination at the Royal Colleges was undeveloped. At that time the student spent, very much as he liked, a period of three years in preparing for an examination for the membership of the College of Surgeons and for the licence of the Apothecaries' Company, the diplomas usually taken. The examination consisted of questioning *vivâ voce* by four examiners, who severally inquired into the candidate's knowledge, each for a period of a quarter of an hour. These quarter-hours spent by the candidate without interval at four successive tables summed up into an hour of more or less equitably agreeable conversation, and the hour's talk thus put together served as the only test of the candidate's fitness for the diploma of the college. It is not fair that the graduated course of instruction and examination now in force should give no better reward than the diploma so obtained thirty years ago.

The old system may perhaps have had some occasionally valuable advantages. It left men of genius to the play of their own energies, so that the man of energetic genius had a freer field. And men of no great general power had three years of comparative quiet all to themselves, in which to gather information, if and when they pleased, in the manner best suited to their particular lines of mental progress, if any. For although lectures had to be signed up, yet attendance was less necessary than signature in the matter of these lectures. To those who approve of freedom in study it might appear that these were the happy days. A man had time to arrange his knowledge into ready accordance with the purposes he must keep in view in the duties of practice. There was leisure for the process of pondering and ascertaining the relative gravity of the considerations he had to undertake. But there is no time for pondering now; indeed, the word has gone almost out of use with the loss of what it signified in more static times. If things had remained as they were thirty years ago, there would be no call for medical degrees from the Royal colleges. But the time of freedom is over. Men are severely trained now at the London medical schools, and they claim their due reward. The whole system has advanced to university proportions. The student is compelled to take in large supplies of science, not for mere direct use and purpose in his vocation, but imparted as means of mental culture. The curriculum is one of utility duly adorned; it amounts to university graduation in all but the title conferred, and now a title is claimed.

Thirty years ago the systems of the Royal Colleges had none of the characters of university training. There was no division into stages, no tutorship, no plan of study pursued step by step under supervision, with examinations to ascertain the thoroughness of the several gradations. There was nothing to give the signification of the term "graduation," and to ensure the developmental soundness of the graduate's progress. But all this is changed, so that at the present day it would be difficult to say what is really the difference between the course of study pursued by the student of a London hospital and the course of study followed by a medical undergraduate at a Cambridge college. There are good and indifferent students at both. Learning is not always thorough at either, but an average man at one or the other has the same things to learn in the same way. It must be remembered, too, that thirty years ago physical science had not any of its present university recognition. It was looked upon as not liberal education. In the last thirty years a great revolution has occurred in the university value of the several branches of learning, so that at Cambridge and elsewhere degrees are obtained almost solely in such sciences as are taught equally well in a parallel systematic course at the London schools of medicine. Thus it is true that not only have the Royal Colleges, with the London medical schools, actually developed in the last thirty years a university system, but in the same period the Cambridge and other university systems have been adopting the same lines as those of the Royal Colleges and London schools. In fact, the so-called Royal Colleges are not colleges; a college is a teaching body; the Royal Colleges are examining bodies, which govern the medical teaching colleges and schools of the metropolis. They are out of kind amongst colleges, much in the same way as the ugly duckling was out of kind amongst proper ducklings.

Is it not simply true that the system of teaching and examination now in force in the medical schools and in the Royal Colleges of Physicians and Surgeons is in fact and in deed a graduated course such as everywhere else leads to the conferment of a degree? A "teaching university" for medicine already exists in London. The teachers of the London schools are practically all of them Fellows of the Royal Colleges. In these Colleges they or their chosen representatives compose to a large extent the deliberative body which acts as a board of studies in that faculty of medicine which the Colleges constitute in fact, though not in name. Either directly, or but little indirectly, the teachers prescribe the lines of study and of examination. The examiners are chosen from amongst their number. Besides those actually engaged in teaching, the deliberative body or board of studies comprises the most experienced and distinguished leaders in medicine and surgery in the metropolis—men whose character has secured, and may be trusted to further ensure, the maintenance of a proper standard of requirement in the examinations. We thus have in the Royal Colleges a university organisation, so far as regards the medical faculty, complete in itself; and the relation of this organisation to the London University is significant. In fact, the examiners in the medical faculty of the London University are practically the very same persons as those who examine at the Royal Colleges, and the same persons as those who teach at the London schools.

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The *personnel* is practically identical. They are the same persons, scattered in the schools, gathered in the Royal Colleges, and represented as a small minority by a few of their number at the London University. Already, in fact, the course of study and examination at the Royal Colleges represents the Pass degree in London Medical University education, and the London University degree represents the Honours degree. So that it might appear easy to arrange for the required extension of medical graduation in London by some form of union devised to incorporate the Royal Colleges in the existing London University, seeing that the *personnel* of the two institutions as regards the medical faculty is practically identical, and that all are moved by the same aims and interests for the benefit of the study of medicine in London. But those members of this *personnel* who are employed at the London University are subject to the power and tendencies of that University, and in fact their own views and the views of the body of metropolitan medical teachers have no more than a small and fractional influence there.

The London University is not free from the conditions of its origin, which conditions must be kept in mind in considering the services that it fulfils. The object of those who first moved in its formation was to found a teaching university. The original shares—some of them I now hold in hand, they are of no present or prospective pecuniary value—were subscribed in order to make provision of university education for such persons as, not being members of the Church of England, were at that time excluded from privileges at Oxford and Cambridge. The history of this attempt is very instructive. The forces under whose play the project came into action succeeded in completely dividing its issue into two distinct and separate institutions. One of these institutions represented the teaching part of the scheme, and now stands in Gower-street as University College, London; the other institution was the University of London, which represented the degree-giving part of the scheme, and now stands in Burlington-gardens. These two institutions, which are twin offspring of a divided germ, have been borne apart and made more and more separate. History represents tendency. The line of development which the University of London has pursued was determined by the pressure under which it entered into existence. This pressure was weighty. The Universities of Oxford and Cambridge and the College of Surgeons brought all the power they could to suppress it. From 1830 to 1835 the hopes of its parentage were deferred. When at last a body was formed with the requisite privilege and means of granting degrees, that body owed its constitution largely to the hitherto successful opposition of those who had feared easy rival degrees.

Under vast pressure a Senate of great weight had been brought together. One main principle on which this Senate was composed appears to have been of the nature of a guarantee that the Nonconformists did not get their degrees easily. This principle of guarantee led to the elevation and maintenance of a lofty standard of requirement. And though the Charters of 1850, 1858, and 1863 brought some modifications into the growing University, yet the University itself has not only remained under the influence of that Senate of guarantee, but it has achieved exalted distinction in very consequence of the elevation of standard which the high level of examination determined by that Senate has ensured to the degrees conferred by the London University. And now this elevation is the distinctive and unalterable character of the London University degrees. The function of the University has been developing before it in all the phases of its growth. Its progress has been upwards, always demanding more and more attainment in those who would belong to it. Its standard is the edge of the unattainable to ordinary class-men, the wholly unattainable to ordinary pass-men. At some point all ordinary candidates are sure to come to grief. The Senate cannot turn away from the history and lower the character which has brought the University into such repute. The Senate is bound by the requirement which it has itself created, and which it alone can fulfil. This demand is for such a degree as (1) shall be attainable by all English subjects, irrespective of the mode and place of tuition; (2) shall be attained only through a very high standard of acquirement. In the plastic stages of its first origin the embryo University refused local connexion and limitation. It declined to be turned to ordinary uses, such as the use which the Oxford, Cambridge, and other Universities fulfil in giving Pass degrees to men whose academic virtues do not include superior power of answering "stiff" questions. It refused to give degrees as the natural reward of a graduate course to men of ordinary ability, as other universities do. The full-grown London University cannot now localise its wide sphere of operation, nor stoop to common mould. If it lost its universal character and became a town affair, it would wholly forsake the means of its present elevation, and would fall. No friends of the University will take measures that could only issue in restricting its range to the metropolis and lowering its standard to ordinary levels.

Let it be sufficiently understood that the metropolis has within itself, independently of the London University, and already in separate operation and waiting to be combined in common action, all the machinery for a local university. The separate parts want only union, recognition, and a name. With the Royal Colleges of Physicians and Surgeons as a Medical Faculty, with University and King's Colleges as a Faculty of Arts, and with a Faculty of Science developed from the Kensington and Jermyn-street Schools—already there is a Faculty of Music with right of conferring degrees,—why should not an "Albert University" take its place on the Embankment?

THE GERMAN MEDICAL CONGRESS.

(*Continued from p. 896.*)

THE subject of the Pathology and Treatment of Diabetes Mellitus was opened in a paper by Dr. STOCKVIS (Amsterdam), who began by showing that the problems of its etiology had become more complex than was supposed when Claude Bernard discovered the glycogenic function of the liver. Diabetes depends on a deeper disturbance than glycosuria and glycæmia, and its final explanation will not be found until the whole of the nutritive processes of the organisms, its organs, and cells are known. It is due to changes in several organs—at least, in the intestine, liver, and muscles,—and must be regulated by a central organ as yet undetermined. Several points were touched upon. 1. *The relations of diabetes to albuminuria.* The latter is generally considered as due to the increased work thrown upon the kidneys, and is regarded as a late symptom; but Professor Stockvis finds it in all cases in amount proportionate to the severity of the case. Often albumen appears to alternate with sugar, the reason being that, owing to the polyuria, albumen is difficult to detect in the period of severe glycosuria; so that, when both glycosuria and polyuria subside, the albumen seems suddenly to appear. In other cases careful examination is needed to bring the diabetes to light, owing to the predominance of albuminuria. The symptom is not explained by mere variations in blood-pressure in the kidneys, such as are produced in experimental glycosuria. It may depend upon changes in the albumen of the blood, or more probably upon renal changes. Various conditions are described, from simple catarrhal nephritis to the contracted kidney, as well as hyaline degeneration of the secreting epithelium. The glomeruli are probably the regions the denutrition of which gives rise to albuminuria, and the foreign matter circulating in the blood acts as an irritant. Thus acetone, aceto-acetic acid, butyric acid, and grape-sugar, when introduced into the veins, excite albuminuria. Prognostically, albuminuria is by many regarded as a very fatal complication, but Bence Jones considered that it was better to have both diseases together than diabetes or nephritis separately. Two kinds of cases may be distinguished. In the one albuminuria occurs in small degree during glycosuria, and becomes more marked on the disappearance of the latter, and later entirely disappears. This variety is of no consequence. In the second variety the albuminuria, previously marked, persists, and is indicative of nephritis after the disappearance of the diabetes. This occurs in one-third of all cured cases of diabetes; but the renal disease can hardly be considered as the cause of the cure of the diabetes. Treatment is governed by general therapeutic principles, especial attention being directed to strengthen the cardiac power and to regulate digestion. 2. *Diabetic coma* has excited much attention since Kussmaul's writings twelve years ago. Excluding intercurrent

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diseases, as pneumonia &c. diabetics usually die in one of two ways—(1) with all the phenomena of collapse, slight somnolence, and toxic symptoms, without sweetish odour of the breath, without acetonæmia and diacetonæmia, or (2) with predominance of toxic symptoms. The first form is to be ascribed to cardiac failure, and ought not to be regarded as self-intoxication. In the second form there are always volatile products in the urine—acetone, diacetic acid, &c. This is the special coma diabeticum, with symptoms pointing to profound disturbance of the central nervous system by auto-intoxication. A sudden accumulation of noxious material in the body can only be brought about by its sudden increase, and especially by hindrance to its excretion. Such conditions would occur through nephritis, and therefore in diabetic coma there is invariably albuminuria with all kinds of casts. It is nothing but a special form of uræmia, the differences depending on the special conditions giving rise to them. When large quantities of grape sugar are injected into the blood of animals the breathing is affected as in diabetic coma. These rare cases of coma without albuminuria must be ascribed to a sudden enormous increase of tissue disintegration, which the healthy kidney cannot cope with. Death by coma is more frequent than by bacillary phthisis in diabetes. It favours no age or sex, and occurs equally in so-called severe and slight cases. But when there is marked pulmonary phthisis diabetic coma never occurs. In the first form fatigue plays a great part; the second variety is especially excited by excesses, which derange digestion and promote the formation of abundance of toxic substances. These materials do not depend upon an animal diet, but their precise source is yet undetermined. As to treatment, the first variety calls for cardiac tonics; in the second, or true diabetic coma, although there is no really rational method of dealing with it, the most important measures lie in prophylaxis—diet, purgation, and strengthening the heart-power. 3. *The dietetic treatment of diabetes*, of which the chief direction is a diet of albumen and fat, taking care not to overburden the stomach, and absolute withholding of carbohydrates. Milk, whether pure or skimmed, is forbidden; only curds allowed. Milk sugar has been held to be harmless, but this is at least doubtful. Worm Müller thought that in the diabetic it is converted into grape-sugar, whereas, in the healthy, copious milk-drinking is followed by slight excretion of lactose in urine. Recent researches prove that in health it appears in the urine partly as lactose and partly as glucose and galactose, in the slightly diabetic as large quantities of the latter, and but small amount of lactose, so that there is no essential difference. Abstinence from food for twenty-four hours with a view to diminish the excretion of sugar has no curative effect. Exercise is strongly recommended, especially in corpulent diabetics, with much uric acid in the urine; but excess is here also to be avoided. Mental rest is of chief importance. Dr. HOFFMANN (Dorpat) said that in the definition of the disease glycosuria cannot be separated from diabetes, in which there are no invariable anatomical changes. Hence various forms of diabetes are distinguished. Although "pancreatic diabetes" must be discarded, yet one may recognise a "neurogenic diabetes" as distinct from the "constitutional." He had collected eighty cases in which diabetes was ascribed to cerebral and spinal concussion and other traumatism, cases which agreed in the fact of injury, lack of heredity and prodromal nerve disorder, absence of tendency to furunculosis or arthritis; no polyphagia or polydipsia; no cataract; cases not of long duration, and often terminating in recovery. Every grade, from the mildest glycosuria to the severest diabetes, is represented in this series. Contrasted with such cases is the diabetes of the corpulent, with furunculosis, cataract, arthritis, very chronic course, and rare recovery. In treatment, too, the division into the accidental and constitutional groups is desirable, and is more valuable than that into mild and severe cases. The accidental forms —where curable—yield to animal diet; the constitutional, although showing an abatement of glycosuria upon such diet, exhibit other symptoms which are unfavourably affected by the restriction. Tonics—as iron, cod-liver oil, and quinine, and above all the Carlsbad cure—are suitable. Alkalies, of value in some cases, are useless or harmful in others. Opiates have latterly unfortunately been placed in the background, but their value is undeniable; only small doses should be given. Salicylic acid can be used with advantage in mild cases; in some cases it must be cautiously prescribed.—Dr. VON MERING (Strasburg) advocated muscular exercise, the muscles utilising the sugar and sparing the nitrogenous material; in one case five or six hours' heavy work produced a diminution in the urinary sugar from 50 to 5 grammes.—Dr. FINKLER (Bonn) had failed to induce glycosuria by ligature of the pancreatic duct or extirpation of the gland, by intravenous or intraperitoneal injection of pancreatic ferment. If diabetes is connected with the digestive function there must be other factors than lack of secretions. Some have attributed it to diseases of the cœliac plexus, and changes are often found therein. That the nervous system has to do with diabetes is shown in the reflex production of glycosuria by stimulation of the intercostal nerves, as well as other experiments proving that sensory nerves act reflexly upon the conversion of carbohydrates.—Dr. BINZ (Bonn) said he had found that injection into the blood of dogs and cats of neutral or faintly alkaline sodic butyrate caused coma and fatal paralysis. This was not due to concentration of the blood, for the same amount of sodic chloride or acetate gave rise to no such symptoms. The research confirmed the views of those who regarded oxybutyric acid as one of the causes of diabetic coma.—Dr. BAUMLER (Freiburg) pointed out that albuminuria of diabetes was of various pathogenesis and import; in some cases —fatal from carbuncle or pneumonia—the albuminuria was due to a bacterial nephritis. In the diabetes of the corpulent it may be due to chronic changes in the vessels, heart, &c. He asked for reports on the effect of von Duhring's treatment, consisting in the free administration of carbohydrates.—Dr. HERTZKA (Carlsbad) pointed out that diabetes was not a disease, but a symptom like icterus, and was evoked by manifold lesions, especially of the nervous systems. A man may therefore be a diabetic without excreting sugar. The dermatoses which precede glycosuria depend on the diabetic diathesis.—Dr. NAUNYN (Königsberg) had seen the best results from restricted animal diet, and had not observed any ill effects from it.—Dr. SCHNEE (Carlsbad, Nice) related a case of diabetes in a child whose father had suffered from syphilis. It was cured by mercurial treatment. Encouraged by this case he had prescribed mercury in seventy other cases, and in fifty-three the diabetes was cured.

A paper was then read by Dr. v. MERING upon Experimental Diabetes, in which, after alluding to previous work which indicated the part played by the glycogenic function of the liver, he described experiments with a glucoside—*phloridzin* ($C_{21}H_{21}O_{10}$), extracted from the root-cortex of fruit trees,—which, taken into the stomach, excites diabetes, in proportion to the dose administered. Whilst curare fails to produce glycosuria in starving animals, phloridzin succeeds; and to show its independence of the liver, he administered the substance to animals in whom the hepatic function had been destroyed by phosphorus. Sugar appeared in the urine in such animals, and also in geese after the liver had been extirpated. In starvation diabetes from phloridzin is accompanied by increased excretion of urea; in animals kept on flesh diet there is no such increase; and in this respect, as well as in the amount of sugar in the blood, this form of artificial diabetes differed from the actual disease. The author believed that renal changes formed an important factor in glycosuria.

Dr. FINKLER (Bonn) read a paper on the Treatment of Diabetes by Massage. In thirteen cases there was notable diminution in the amount of urinary sugar—e.g., from 400 to 120 grammes per diem,—the favourable result being attributed to increased metabolism. These results were obtained on a mixed diet, and the method was one suitable for patients incapable of active muscular exercise.

Professor STOCKVIS, in his reply, strenuously advocated restriction to animal diet, from which he had never seen any ill effects; but the diabetic should be careful not to over-eat himself, for derangements of digestion are dangerous.—Dr. HOFFMANN also replied, and pointed out in reference to v. Mering's experiments that phloridzin is a glucoside, and might therefore yield sugar directly.

Dr. RUMPF (Bonn) read a paper upon Syphilitic Diseases of the Vascular System. He pointed out that, whereas Heubner regarded disease of the intima as specific, Köster and Friedländer described arteritis obliterans as proceeding from an affection of the vasa vasorum, and therefore commencing in the media; whereas Baumgarten considered the adventitia to be the seat of such disease. A case was described which exhibited the rare condition of a gumma growing in the wall of the basilar artery causing thrombosis. Allusion was also made to forms of diffuse syphilitic infiltration. In

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some specimens bacilli were found, but were regarded as associated with the regressive changes, and not as pathogenic.—Dr. LITTEN remarked that syphilitic vascular disease has no special characters. The anatomical changes were the same as those observed in chronic nephritis, and produced experimentally. The chief change is an endarteritis, which leads to obliteration of the channel, and the pathological result depends on the functional importance of the affected artery. A special feature in disease of the cerebral vessels is the rapidity with which cure follows mercurial inunction.—Dr. RUMPF replied by pointing out that his case was not one of simple chronic endarteritis, but of a gumma due to the localised action of the virus.

Dr. KNOLL (Prague), read a paper on Respiratory Innervation. According to Langendorff and Nitschmann the automatic respiratory centre resides in the spinal cord, the medulla having only a regulating function; the arrest of breathing on separation of the medulla being attributed to stimulation of depressor fibres; but the more recent experiments of Rosenthal tend to confirm the older notion that the respiratory centre is situated at the end of the calamus scriptorius. The centre is stimulated mainly through the blood, but whether from excess of carbonic acid or lack of oxygen is an open question. The subject of so-called blood-apnœa by excess of oxygen was discussed, the excitability of the centre being lowered thereby. The notion of a special heat-dyspnœa was rejected, it being shown that clinically there may be very high temperatures without any influence upon respiration. The nerve-paths of respiratory stimuli were enumerated, and the reflex effects of irritation of the nasal and laryngeal mucous membranes especially mentioned. Traube's view that excess of carbonic acid in the lungs causes a centripetal irritation of the vagus is disproved by the fact that the presence of carbonic acid in the lungs does not excite inspiratory movements.

Dr. UNNA (Hamburg) read a paper on Leprosy. Mention was first made of the fact observed by Lutz that the bacillus leprœ is really composed of rows of cocci, and should therefore be termed streptococcus, and that by employing various combinations of reagents (iodine, iodide of potassium, hydrochloric acid, peroxide of hydrogen) in Gram's method of staining, it was found that only when there was free or nascent iodine the coccus structure become manifest. Reference was also made to the treatment of leprosy by an ointment made with reducing agents, especially pyrogallic acid (10 per cent.), followed by icthyol.—Dr. TOUTON (Wiesbaden) stated that he had been enabled to demonstrate lepra-bacilli within cells and even within the lumen of sweat glands. He also asked whether Dr. Unna had examined the blood for bacilli, and whether such observations were made during or in the intervals of the eruption of lepra-nodules. He did not agree with Dr. Unna's histological methods, which were also characterised by Dr. NEISSER (Breslau) as unsuitable, and their results as incorrect and artificial.

(To be concluded.)

DR. RICHARDSON'S LECTURES ON ANIMAL OR VITAL MECHANICS.

MATERIALS FOR CONSTRUCTION.

THE second lecture of the above course, delivered on Monday, the 10th inst., before the Society of Arts, was devoted to the subject of the materials used by Nature in her mechanical works. These, the lecturer said, were so distinctive that we might from them form a fair conception of the physical condition of the planet at the time when natural mechanics began to have an existence. The number of parts entering into the natural constructions—fewer than those used by man in his works—were considered by the lecturer, first from their elementary forms and afterwards from the compounds produced by the elemental combinations. The elements used by Nature were divided into four groups:—(*a*) The gases: oxygen, hydrogen, nitrogen. (*b*) The non-metallic solids: carbon and sulphur. (*c*) The metals: calcium and iron. (*d*) The metalloid: phosphorus. The respective uses of these elements were briefly defined, with the explanation of an experiment made by Dr. Richardson in 1869, in which all the elements, except the carbon, that formed the body of an animal, a smelt, were dispersed, by the immersion of the body of the dead animal under molten lead. The carbon remained intact, and floated to the surface of the molten lead in the precise form of the animal, as its mechanical elementary skeleton, the solid basis of its construction. The uses of the elements are fairly known, except in regard to the metal iron. Iron, the lecturer said, is essential to some physical vital purpose, but what that purpose is he could not venture to state. It had been thought that iron had some relation to the colour of the chief fluid of animal organisms, the blood; iron had been supposed to be a carrier of oxygen; he had himself supposed that it might be a conductor of an electrical current; but against each and all of these views there were objections which at present were unanswerable.

From the elements Dr. Richardson passed to the compound structures formed by elemental combinations and used by Nature in her mechanics. He classified such compounds for study into seven great groups: (1) The gelatinous; (2) the resistant or bony; (3) the contractile—muscular; (4) the transparent—lenses and humours; (5) the receptive—nervous centres, screens, and cords; (6) the elastic—elastic tissue, wherever distributed; and (7) the aqueous—blood, fluid secretions, fluid excretions. The organs and mechanisms made or formed from the compounds thus specified were now passed under review, and by the electric light there was shown on the screen a large number of illustrative designs, many of them direct photographs from the natural parts themselves. Under the first division of compound structures the membranous structures were surveyed as investments, as valves, as tubes, and as basements; they were followed by views of ligaments, cartilages, tendons, and fascia, and so on through the other groups, osseous, muscular, lenticular, nervous, and elastic. In the course of the verbal descriptions which accompanied the illustrations, the lecturer indicated how the character of a structure might be changed by the introduction into it of even one new element, such as sulphur or phosphorus. He dwelt also on what may be called the natural choice or selection of elements for particular objects, as the light, malleable, strong metal calcium for the composition of the solid resistant structure of bone. He exhibited a carefully prepared table in which the elements used by man in his mechanical inventions were shown to exceed in number those of Nature, while including all that she uses in her work; then, dwelling on the notion of the ancient philosophers, that natural mechanisms were made out of four elements—air, water, earth, and fire,—he explained that in a general sense the ancients were correct: for air yielded oxygen and nitrogen; water yielded oxygen and hydrogen; the earth yielded oxygen, calcium, sulphur, phosphorus, iron, and carbon—altogether the material elements most wanted; while fire, or the motion which puts these elements into work, completes the series, and yields that endowment of vital property which leads to structure, form, independent action, motion of dead matter, life itself as manifested in its varied and infinite phenomena.

A DAY WITH PASTEUR.

WE have been favoured by Dr. G. H. Brandt with the following description of a visit he recently paid to M. Pasteur at the École Normale:—

As rabies and Pasteur are the order of the day, it may be interesting to many of your readers to know how things are carried out at the École Normale. The patients, who have come from different parts of France and from abroad, reside in small hotels and lodging-houses in the neighbourhood, and have to come every morning at eleven o'clock to the laboratory to be inoculated. I am sorry to say that the waiting-room and inoculating-room are very small and very crowded, not only with patients, but with a number of medical men who come to witness the proceedings. Pasteur is at the door with his list in hand calling out for the patients of the different series who have to be inoculated. Series No. 1 is that which has to be inoculated for the first time, No. 2 for the second time, and so on. At one end of this small room is a table on which stand different glasses covered with a piece of gutta-percha sheeting, which contain the different

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solutions of virus in sterilised broth. The inoculator has two assistants—one fills and hands him the syringe, the other helps the patient. To avoid the trouble of undressing, the patients lift their shirt from over the left side, thus exposing the left flank; the inoculator seizes the skin, lifts it up, plunges the needle deeply into the areolar tissue, and presses the piston down to the end. One gramme of attenuated virus is thus lodged under the skin. One hundred and ten patients go through this operation every morning. The first inoculation is made with virus that has been kept in broth for fourteen days, the second inoculation with virus of thirteen days, and so on, until at the end of ten days a virus of five days' attenuation is used. This completes the ten inoculations, which are supposed to be sufficient to preserve the patient from hydrophobia. In the cases of the Russians who were so severely bitten by a wolf, M. Pasteur thought it right to repeat the series of ten inoculations three times over. I saw the photographs of the unfortunate inhabitants of Smolensk, who were completely disfigured by the fearful lacerations of the face; one of them, a priest, had his under lip torn away; another had still a fang of the wolf stuck in his malar bone; these are still alive, but, as you know, three have since died. It is well to mention that these unhappy men only reached Paris fifteen days after the bites. *Déjeuner* puts an end to the morning work, and at 2 P.M. M. Pasteur is in his laboratory, surrounded by medical men from all parts of the world—Americans, Russians, Germans, Swiss, Portuguese, &c. We first went to the basement, where the rabbits are kept in wire cages—some to be inoculated, others which have been operated on; of these there are three or four dying or dead. The mode of death in the rabbit is quite different from that of man—they die of paralysis, without a struggle; however, in some very rare instances you see a rabbit die of symptoms resembling those found in the human being. Two dead rabbits are taken up daily to the laboratory. The spinal marrow is taken out, and cut into pieces about four inches long; one end is attached to a piece of fine wire, the other end of the wire being fixed to an appropriate stopper, and placed in a prepared glass bottle. The preparation of the bottle consists in heating it to about 150° C., cotton-wool being placed in the mouth, and at another opening at the bottom of the bottle. A thick layer of caustic potash covers the bottom of the bottle. A few hours after the piece of medulla has been placed in the bottle it acquires a glazed appearance, as if it had been varnished. A piece of this spinal cord is placed in sterilised broth and kept for fourteen days; this serves for the first inoculation, as mentioned above. The operation of inoculating the rabbits is done in the following way: A healthy rabbit is placed on a board lying on his abdomen; his hind legs are fastened to two lateral pegs, and the same is done to the fore-paws. The hair is cut off his head to the extent of about half-a-crown. Chloroform is given until the animal is quite insensible. A clean incision is made lengthways with a sharp bistoury, previously dipped in a solution of carbolic acid. The lips of the wound are kept apart with an eye speculum or dilator, any blood is mopped up with fine blotting-paper dipped in carbolic acid solution, and a revolving trephine is placed perpendicularly on the bone; in a few turns a small disc of bone of about the size of a threepenny piece is cut through, and extracted with a curved needle, also disinfected. The dura mater is thus exposed. A fine Pravaz needle is then inserted under the membrane, and two or three drops of a strong virus-solution is injected. The speculum is removed, the skin sewn up, the ligatures undone, and the rabbit is allowed to come to, and is placed in his cage. On the seventh day the rabbit begins to feel the effects of the inoculation, and dies invariably on the tenth day. Two rabbits are thus inoculated every day, and two die every day, so that a supply of virus is kept up for inoculating rabbits and patients.

Nothing can exceed the politeness and kindness of M. Pasteur in explaining and answering our numerous questions. He is completely wrapped up in his subject, and, contrary to what has been hinted by some authors, keeps nothing hidden from anyone. He generally finishes by saying, "Gentlemen, I have told you everything I know, you have seen all I do, and now you know as much as I do." As we were questioning him, a paper was shown him in which there was a paragraph which said, "We can place no reliance on M. Pasteur's work, as so many cases of rabies appear many months—eighteen, twenty, and even twenty-four—after the bite of a mad dog." To this M. Pasteur answers: "This is not good reasoning, for statistics show that the great majority of cases have an incubation period of from twenty to sixty days. Cases of rabies happening before the twentieth day are very rare, and those after the sixtieth day are still more rare, so that our treatment includes the majority of cases. Six months have elapsed since young Meister was bitten by a mad dog and treated by my system; he is alive and well. So that it is not fair to condemn a treatment because time has not allowed the extremely rare cases of long incubation to show the result of our treatment. Statistics also show that there are about fifteen cases annually of hydrophobia admitted into the Paris hospitals, followed by fifteen deaths. Since we have begun our treatment there has been only one case admitted; this case was not inoculated, and death was the result." To the unbelievers M. Pasteur says: "Wait; time will reveal many facts connected with this question; and it is only by continued experiments and constant observations, carried on for a considerable time on hundreds of cases, that we shall be able to arrive at positive and definite results."

It is satisfactory to know that no evil results have followed the numerous inoculations already made. Several of M. Pasteur's students have inoculated themselves with attenuated virus, and, barring a slight red areola formed over the seat of puncture, no unpleasant symptom has ever shown itself.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Balsall Heath Urban District.—In so far as vital statistics are concerned this district has a satisfactory record for 1885. On a population of 22,495 the general death-rate was 14·3 per 1000, that for the principal zymotic diseases was 0·9, and infants under one year only died at a rate of 10 per 100 births registered. But Balsall Heath is not always so circumstanced. Thus during the previous year the zymotic rate reached 4·15 per 1000, and Dr. Leslie Phillips urges his authority not to be deterred from providing a proper hospital for infectious diseases by reason of a temporary cessation of the diseases for which such provision is intended. As a matter of fact, it is precisely at such times that hospitals can be best and most economically constructed; those erected under emergencies cannot be properly considered in their details, and the hurry leads to extravagance. Some few non-fatal attacks of the infectious fevers occurred, and opportunity was taken to secure the remedy of such faulty sanitary conditions as they were found to be associated with. Water is unfortunately still derived from surface wells, but eleven of them were closed during the year, their contents being considered unfit for human consumption.

Middlesex and Herts combined Districts.—For the twelfth time Dr. C. E. Saunders presents an annual report on this important district, and it is satisfactory to read an expression of opinion to the effect that it is doubtful whether any body of combined authorities can show a better record of work than has been performed in this district during the past ten years. Such work has secured a great general improvement of health, the mortality from the more preventable diseases has been diminished, and by the improvement of dwellings much additional comfort has been secured. During the past decennium the general death-rate has been reduced from 18·6 per 1000 to 16·4 on a population of some 90,000, which represents, during that period, a saving of some 1800 lives. In the *Barnet Rural District* the sanitary state of South Mimms remains very unsatisfactory, nothing of a permanent remedial nature having been effected, but in other parts of the district benefit has resulted from the laying on of the Colne Valley water. In the *Barnet Urban District* we are glad to learn that improvement has been effected in the matter of supplying the closets with water, for the defects in this respect have in the past led to much nuisance from stagnation of offensive contents in the sewers. No death occurred from diarrhœa during the past year—a result which may be, at least in part, attributed to the improvements effected in the matter of scavenging. The *East Barnet Valley Urban District* maintains its reputation

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for healthiness. There has been no fatal case of zymotic disease due to any local circumstances, and great improvements have been effected in the ventilation and the automatic flushing of the sewers; but the need for disconnexion of house drains in some parts of the district is still great. In the *Berkhampsted Rural District*, water is much needed at Long Marston, but hitherto the cost has been found to be prohibitive. The infectious hospital in this district has again been found to be useful for the purposes of the *Tring Urban District*, where the authority contract for its use. In this latter district some progress is being made with regard to the disposal of the sewage, but it is evident that Dr. Saunders thinks the interference of the inspector of the Local Government Board, who considered under-draining of the purification area to be an unnecessary expense, as a mistaken act of the central authority, and he points out in this connexion that the lower part of the area is already water-logged. Diphtheria occurred at Apsley End in the *Hemel Hempsted Rural District*, and the need for sewers in the town which gives its name to the district is becoming a more and more pressing matter. New buildings and their plans are well looked after by the authority. In the *Watford Rural District* the diphtheria prevalence which occurred in this portion of Hertfordshire caused ten deaths. The need for water was much felt in Abbotts-Langley, but a company are now about to meet that want. Certificates under the Public Health (Water) Act are always required in the case of new dwellings before they are allowed to be occupied. The *Welwyn Rural District* is one of the least populous of the rural districts in the kingdom, and it had a death-rate of only 6·8 per 1000 during the past year. Old houses are faulty by reason of dampness, and waterclosets not properly provided with water so affect the sewers that the latter stand in need of some means for their automatic flushing. Indeed, a public water service for Welwyn town is a prominent sanitary want. In the *Hendon Rural District*, Pinner suffered from imported small-pox, and the roadways about Harrow station render the neighbourhood scarcely habitable. Houses are found unfit for habitation in several villages and hamlets of the *St. Albans Rural District*, where accommodation for the working classes is much needed. But the authority have no bye-laws, and hence have no control over building operations. Action under the Labouring Classes Lodging-houses Acts is suggested in order to meet a pressing want. It will thus be seen that in the various districts we have referred to all the more pressing sanitary requirements are brought prominently before the authorities concerned, and that skilled advice is always available to secure the removal of such conditions as tend to the injury of public health in the combined area. Excellent work results from time to time, and further improvements are almost continuously being carried out.

Bollington Urban District.—We are glad to learn that the question of providing Bollington with a proper water-supply bids fair to be at last dealt with. It is a matter that has been allowed to drag itself over a somewhat long series of years, but an engineer has now advocated an entirely new gravitation scheme, which is regarded as more satisfactory than any of the schemes formerly submitted. Some cases of diarrhœa during the past year are regarded by Mr. Allen as having been associated, in point of causation, with impure water or defective drainage—conditions which, as far as is found practicable under existing circumstances, are removed on detection. Amongst the nuisances dealt with are some "badly-drained ashpits." Any drain to an ashpit is bad, and we trust the remedy applied has been to raise the floor of the ashpit well above the level of the surrounding soil, and then to cover it with a roof. In this way wetness of contents, and the resulting offensiveness, will be avoided, and no need will exist for any attempt at drainage.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 6177 births and 3585 deaths were registered during the week ending May 8th. The annual death-rate in these towns, which had been equal to 19·8 and 20·2 per 1000 in the preceding two weeks, further rose last week to 20·6. During the first five weeks of the current quarter the death-rate in these towns averaged 20·2 per 1000, and was 3·2 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 13·6 in Derby, 14·7 in Norwich, 15·7 in Wolverhampton, and 16·5 in Huddersfield. The rates in the other towns ranged upwards to 26·0 in Portsmouth, 28·3 in Preston, 28·8 in Bolton, and 29·1 in Manchester. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 382 and 364 in the previous two weeks, were 367 last week; they included 141 from whooping-cough, 114 from measles, 41 from diarrhœa, 32 from "fever" (principally enteric), 21 from diphtheria, 18 from scarlet fever, and not one from small-pox. No death from any of these zymotic diseases was recorded last week in Huddersfield; whereas they caused the highest death-rates in Portsmouth, Bolton, and Preston. The greatest mortality from whooping-cough occurred in Salford, Birkenhead, and Brighton; and from measles in Oldham, Portsmouth, Bolton, and Preston. The 21 deaths from diphtheria in the twenty-eight towns included 9 in London, 3 in Liverpool, and 2 in Halifax. No death from small-pox was registered either in London or in any of the twenty-eight large provincial towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had slowly increased in the previous six weeks from 7 to 19, had further risen to 27 at the end of last week; 11 cases were admitted to these hospitals during the week, against 6 and 3 in the preceding two weeks. The Highgate Small-pox Hospital contained 2 patients on Saturday last, no case having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 319 and 296 in the previous two weeks, rose again last week to 309, but were 44 below the corrected average. The causes of 83, or 2·3 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Brighton, Blackburn, Cardiff, and in five other smaller towns. The largest proportions of uncertified deaths were registered in Oldham, Bristol, Hull, Salford, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 20·5, 20·7, and 23·1 per 1000 in the preceding three weeks, declined again to 22·3 in the week ending May 8th, but exceeded by 1·7 the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 17·3 in Paisley and 17·8 in Edinburgh and Leith, to 26·1 in Glasgow and 27·9 in Perth. The 550 deaths in the eight towns showed a decline of 21 from the numbers returned in the preceding week, and included 20 which were referred to whooping-cough, 17 to measles, 12 to diarrhœa, 8 to scarlet fever, 2 to diphtheria, 2 to "fever" (typhus, enteric, or simple), and 1 to small-pox; in all, 62 deaths resulted from these principal zymotic diseases, against 34, 46, and 51 in the preceding three weeks. These 62 deaths were equal to an annual rate of 2·5 per 1000, which was 0·4 above the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 15 and 21 in the previous two weeks, were 20 last week, of which 15 occurred in Glasgow and 4 in Aberdeen. The 17 deaths from measles showed a further increase upon recent weekly numbers, and included 13 in Edinburgh and 3 in Leith. The 8 fatal cases of scarlet fever also showed an increase upon the numbers in recent weeks, 7 being returned in Glasgow. The deaths attributed to diarrhœa, which had been 9 and 6 in the previous two weeks, rose last week to 12, and were double the number in the corresponding week of last year; 4 occurred in Dundee, 2 in Aberdeen, and 2 in Perth. The deaths referred to "fever" and to diarrhœa were considerably below the average, and the fatal case of small-pox occurred in Edinburgh. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 100 and 123 in the previous two weeks, declined again last week to 108, and were 9 below the number returned in the corresponding week of last year. The causes of 73, or 13 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 27·3 and 24·4 per 1000 in the preceding two weeks, rose again to 27·8 in the week ending May 8th. During the

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first five weeks of the current quarter the death-rate in the city averaged 27·5 per 1000; the mean rate during the same period did not exceed 19·0 in London and 18·6 in Edinburgh. The 188 deaths in Dublin last week showed an increase of 23 upon the number in the previous week, and included 14 which were referred to the principal zymotic diseases, against 16, 8, and 13 in the preceding three weeks; 7 resulted from whooping-cough, 4 from diphtheria, 2 from diarrhœa, 1 from "fever" (typhus, enteric, or simple), and not one either from small-pox, measles, or scarlet fever. These 14 deaths were equal to an annual rate of 2·1 per 1000, the rates from the same diseases being 2·1 in London and 3·3 in Edinburgh. The fatal cases of whooping-cough, which had been 4 and 5 in the previous two weeks, rose last week to 7. The 4 deaths referred to diphtheria also exceeded the numbers in recent weeks, and raised the number of fatal cases of this disease recorded in the past five weeks to 8, whereas only one was registered in the first quarter of this year. Seven inquest cases and 7 deaths from violence were registered. The deaths both of infants and of elderly persons exceeded the numbers returned in recent weeks. More than a quarter of the deaths were registered in public institutions. The causes of 20, or nearly 11 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

THE Queen has been pleased to give and grant unto Arthur James Wharry, Esq., Surgeon-Major in the Egyptian Army, Her Majesty's Royal licence and permission that he may accept and wear the Insignia of the Fourth Class of the Order of the Medjidieh, which His Highness the Khedive of Egypt, authorised by His Imperial Majesty the Sultan, has been pleased to confer upon him in recognition of his services whilst actually and entirely employed beyond Her Majesty's dominions with the Egyptian Army.

WAR OFFICE.—Army Medical Staff: Deputy Surgeon-General William Henry Muschamp is granted retired pay, with the honorary rank of Surgeon-General; Surgeon-Major William Elgee, half-pay, is granted retired pay, with the honorary rank of Brigade Surgeon; Surgeon-Major and Honorary Brigade Surgeon Owen William George, M.D., has been permitted to commute his retired pay.

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of December 30th, 1884, Surgeon John Jennings has been placed on the retired list of his rank.

The following appointment has been made:—Surgeon Percy E. Maitland to the *Lion*.

INFANTRY MILITIA.—3rd Battalion, the Sherwood Foresters (Derbyshire Regiment): Surgeon W. A. Walker is granted the honorary rank of Surgeon-Major.

YEOMANRY CAVALRY (Dorset).—Surgeon G. W. Daniell is granted the honorary rank of Surgeon-Major.

ARTILLERY VOLUNTEERS.—1st Dorsetshire: The following officer is transferred from the 1st Hampshire Artillery Volunteer Corps, on its division into two corps—viz., Acting Surgeon P. W. G. Nunn, to be Acting Surgeon.—2nd Sussex: The following officers to be transferred from the 1st Sussex Artillery Volunteer Corps, on its division into two corps—viz., Surgeon R. V. Skinner, to be Surgeon; Acting Surgeon H. Colgate, M.D., and Acting Surgeon H. Habgood, M.D., to be Acting Surgeons.—3rd Lancashire: John Joseph Neville, Gent., to be Acting Surgeon.

RIFLE VOLUNTEERS.—4th Lancashire: John Alexander Mackenzie, Gent., M.B., to be Acting Surgeon; Surgeon William Hoyle resigns his commission.—24th Middlesex: Acting Surgeon H. M. Crookshank resigns his appointment.—2nd Perthshire (the Perthshire Highland): Acting Surgeon John Mackay, M.B., to be Surgeon; Acting Surgeon Peter McCallum resigns his appointment.—2nd Volunteer Battalion, the Princess of Wales's Own (Yorkshire Regiment): Surgeon J. W. Taylor, M.D., is granted the honorary rank of Surgeon-Major.—1st Volunteer Battalion, Princess Charlotte of Wales's (Royal Berkshire Regiment): Surgeon and Honorary Surgeon-Major W. R. H. Barker resigns his commission; also is permitted to retain his rank, and to continue to wear the uniform of the Battalion on his retirement.—1st Dumfries: Thomas Davidson, Gent., M.B., to be Acting Surgeon.—18th Lancashire (Liverpool Irish): Surgeon J. Finegan, M.D., is granted the honorary rank of Surgeon-Major.

Correspondence.

"Audi alteram partem."

THE SCHOOL BUILDINGS OF WILLIAM HUNTER.

To the Editor of THE LANCET.

SIR,—It is not long since you recorded the demolition of John Hunter's house at Earl's Court. In a few days the whole of the "school buildings" built by William Hunter in 1768 in Great Windmill-street—which you allowed me to describe in THE LANCET of Sept. 27th, 1884—will be removed to make way for the new thoroughfare from Piccadilly to Holborn. Yesterday I was in the Museum, which I first entered as a student some years ago. That room, the theatre, and dissecting-room will soon be only a matter of history. These buildings were used as a school until 1835. Here taught William Hunter, Hewson, Cruickshank, Baillie, Wilson, Brodie, Charles Bell, Herbert Mayo, and Cæsar Hawkins. For three years after the majority of the teachers migrated to St. George's Hospital in 1830, and Mayo to King's College in 1831. Mr. Gregory Smith, who died a few weeks ago, lectured for three years subsequently; he was the head of the school in Little Windmill-street. The dwelling-house, now a foreign café, still remains; it was built at the same time as the schools. Here William Hunter lived and died. He was succeeded by Dr. Baillie, who lived in it until 1799, when he resigned as physician to St. George's Hospital, and went to live in Lower Grosvenor-street, where he died in 1823. Mr. Wilson was the last connected with the school who lived in the house. This neighbourhood had long been a medical centre. Sir John Shadwell, physician to three sovereigns, lived in Great Windmill-street for many years, and died there in 1747. Dr. Willis, who attended the children of James II, when Duke of York, lived in St. Martin's-lane, and died there in 1675. Dr. Denman lived in Queen- (now Denman-) street, and delivered lectures on midwifery in his own house for many years. I should be glad to be informed where John Hunter lived after his return to England in 1763, until he succeeded his brother in Jermyn-street in 1768. I have heard that it was in Golden-square, but I can nowhere find any record of it.

I am, Sir, yours truly,

May, 1886. CHARLES HAWKINS.

"ROTHELN: A POINT OF DIAGNOSIS."

To the Editor of THE LANCET.

SIR,—Having just passed through an attack of the above complaint, perhaps it would be interesting to your readers to have an account of it, especially as it confirms the statement of Dr. Glover in your issue of the 24th ult. as to the implication of some of the cervical glands previously to the appearance of the rash.

On Tuesday, March 23rd, I visited a young patient who had the disease in a mild form, and having seen her only the once, can accurately give the incubation period in my own case—viz., seven days. On the following Thursday (March 25th) I felt a stiffness at the angle of the jaw on both sides, and, having a case of mumps at the time, I laughingly said to a friend that I hoped I was not going to have mumps, little thinking at the time that I was in for another infectious disorder. The stiffness continued, and on Friday, the 26th, I noticed that two or three of the glands on both sides were swollen and tender. This stiffness about the neck and tenderness of the glands continued until the rash made its appearance. On Tuesday evening, March 30th, I felt rather out of sorts, and had considerable aching of the eyes. I passed a fair night, and was able to do my work the next day, though feeling it an exertion. The aching of the eyes increased, so about midday I took a dose of quinine, thinking it was neuralgic, but without relief. At 7 P.M. I had a distinct rigor, and at 7.30 went to bed feeling very unwell, the pain in the eyes being very intense and shooting to the back of the head; I was also very hot and feverish. After passing a very restless night, I was astonished to find myself with a rash on the face, neck, and shoulders, which rapidly spread over the whole surface of the body except the hands and feet; the pain of the eyes was not relieved by the appearance of the rash. Next morning, Friday, April 2nd, the rash was

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at its height, the face swollen, conjunctivæ injected, and the throat, soft palate, and gums puffed and sore; the hard palate was also very rough to the tongue and tender, and I feel confident I had the same rash in my mouth and throat as I had externally. On Saturday the rash was fast fading, the aching of the eyes had diminished, and the stiffness of the neck had disappeared; and on the following Monday I got up for a short time, though feeling very shaky; it was on that day that I first noticed desquamation taking place on the face. Nothing remains to be said except that I made a rapid convalescence. I am Sir, yours faithfully,

Mill-hill, N.W., May 5th. W. STROVER.

AMENDMENT OF THE PENAL CLAUSES.

To the Editor of THE LANCET.

SIR,—The following clause in the Medical Amendment Act of 1884 has unfortunately been omitted in the present Act:—

"On and after the said appointed day, if any person who is *not* a registered medical practitioner, and who practises or professes to practise, or publishes his name as practising medicine or surgery for gain, or who receives any payment for practising medicine or surgery—*(a)* uses the designation of or represents himself to be a physician, surgeon, doctor, or apothecary; or *(b)* uses any designation or description denoting that he is qualified by law to practise medicine, surgery, or midwifery,—he shall, on summary conviction, be liable to a penalty not exceeding twenty pounds."

It is too much to expect at present the passing of a law to prevent unqualified persons practising either medicine or surgery; indeed it is doubtful whether such a law will ever be passed; but it is not too much to expect, or indeed to demand, that legally qualified members of the medical profession shall have their titles protected by law. At present a quack can assume any title that he may feel disposed to adopt, provided that he does not pretend to be *registered;* and the burden of disproof, often well-nigh impossible, lies upon those who take action thereon. By the insertion of the above clause this assumption is rendered impossible. It is intended to bring the subject before Sir Lyon Playfair (and other members of Parliament who have expressed themselves favourable to this clause) before the Bill reaches the committee stage, on Monday, the 17th inst., and if necessary petition the House of Lords in favour of the clause. All members of the profession who are in favour of its insertion will greatly assist if they will signify their acquiescence to me *without delay* either by post-card or letter.

I am Sir, yours &c.,

Liverpool, May 11th, 1886. ARTHUR WIGLESWORTH.

*** We entirely sympathise with the purpose of those who have drawn the above clause. Mr. Wiglesworth is chairman of the Liverpool Medical Defence Association, and speaks on the strength of much experience of the weak points in the clauses of the present Act. A Bill with a similar object is already before the House, introduced by Mr. John Morgan Howard, member for the Dulwich division of Camberwell. This Bill further contains a clause meant to suppress dispensaries which purport to be conducted by registered practitioners and are worked chiefly by unqualified assistants. This is a great evil, and needs more stringent legislation than we either have or are likely to get. The clause of Mr. Howard's Bill is perhaps a little too sweeping, but it is in the right direction. Practitioners who approve of the clause to which attention is drawn by Mr. Wiglesworth will do well to signify their approval by post-card to him.—ED. L.

ROYAL COLLEGE OF PHYSICIANS.

To the Editor of THE LANCET.

SIR,—The election this year of Fellows to the College of Physicians disappoints those who had hoped for an extension of it on a generous scale to the older Members. Your kindness allowed of attention being drawn to this proposition as early as last October, but possibly then too late to affect the recent election. If so, the sexennium of our present President might at its close be gracefully signalised by liberal selection to the fellowship of the older Members, the length of whose hospital experience, as well as entrance to the College, may measure within a decade of his own, and most of whom were Members before the youngest of the recently elected Fellows had been born. Be it understood, however, no fault is found with the early elections, but it is felt to be desirable as well as equitable, since the College has ceased to be merely metropolitan and become national, that its status of fellowship should be placed within the reach of industry and integrity after a reasonable term of membership. I am, Sir, yours truly,

May 10th, 1886. A MEMBER PRIOR TO 1859.

"AFTER-CARE" OF MENTAL CONVALESCENTS.

To the Editor of THE LANCET.

SIR,—Your previous kindness in calling attention in your columns to the need of "after-care" on behalf of many poor and friendless mental convalescents induces me to trouble you with another brief communication.

In succession to Lord Shaftesbury, who took much interest in the subject of "after-care," and attended several successive anniversaries of the Association, Lord Brabazon has accepted the office of President. Several well-known physicians, specially experienced in the treatment of mental maladies, have evinced personal interest in a project for fostering the convalescence of persons recovering from these disorders. It is intended, when the amount of funds permit the undertaking, to open a "home," both for the reception of a few convalescents and also as a centre of the Society's operations. Lord Shaftesbury expressed an opinion that such a home was necessary. No existing convalescent home (among more than 200) professes to receive persons recovering from general mental derangements. Many homes, by their rules, exclude this class of convalescents from the benefits which they provide for persons convalescing from ordinary maladies. It should be borne in mind that there are more than 60,000 patients (of whom the majority are women) in county asylums and kindred institutions. Many are physically as well as mentally invalided, requiring, on leaving asylums, "after-care" at least equally as much as convalescents from ordinary hospitals. Contributions would be received by Dr. Clay Shaw, hon. treasurer, Banstead, Sutton, Surrey; or by the Union Bank of London, Argyll-place, W. I would gladly reply to any communication.

I am, Sir, yours truly,

H. HAWKINS, Hon. Sec.

Chaplain's House, Colney Hatch, N., May 10th, 1886.

*** We heartily wish this very useful and humane enterprise success.—ED. L.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

SUNDERLAND INFIRMARY.

THE spring meeting of the North of England Branch of the British Medical Association having been held at Roker (a pleasant watering-place in the vicinity of Sunderland) on the 21st ult., the Honorary Medical Staff of the Sunderland Infirmary invited the members to the infirmary, and entertained them to luncheon. Between eighty and ninety members availed themselves of the invitation and inspected the infirmary, which contains accommodation for 150 beds, and was much admired. The new wing has now been opened nearly two years, and was built in accordance with the most advanced ideas of hospital construction, and cost £10,700. The admissions of patients is untrammelled by any subscriber's recommendation, and a small sub-committee sits to see that improper persons are not admitted. This change from ticket to free admission has now been tried for eight years, has worked admirably, and has had the special effect of bringing to the infirmary acute medical cases. There is another feature that might be mentioned in connexion with the Sunderland Infirmary—namely, that for the last fourteen years it has been nursed by the sisters from the Protestant Deaconesses' Training Hospital, Tottenham, and the unanimous feeling of the Committee of Management and of the medical officers is that the nursing and management of the

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sisters are highly satisfactory, and their self-denying labours above all praise. Another pleasing feature in connexion with the infirmary, which proves the success of its popular arrangements, is that the working classes contribute liberally.

NEW BATHS AND WASHHOUSES IN NEWCASTLE.

The corporation have erected, just lately, three sets of public baths and washhouses in different districts of the city, and two of these have been completed, and were opened by the mayor the other day. The arrangements are of the most modern and complete description, and the cost of the three establishments will be about £30,500. Each set of buildings contains one large swimming-bath, sixty feet in length and thirty feet in width. These baths are lined with white glazed tiles. Persons will not be permitted to enter the baths until their feet have been washed, and for this purpose a small foot-bath, with hot and cold water, is fitted up.

THE SANITARY CONDITION OF SCHOOL BUILDINGS.

The Corporation of Tynemouth have lately had a searching inspection of the whole of the schools of the borough carried out by the Corporation officials in conjunction with Mr. J. P. Spencer, C.E., of this city, and have published in a detailed report on the whole of the schools in the borough, both private and public, which goes to show that out of forty-five schools dealt with only two are stated to be in a satisfactory condition, the remaining forty-three, including the board schools, being all more or less defective in sanitary arrangements. The report contains in each case practical recommendations for remedying the defects, and the required alterations are in many instances being promptly carried out.

SANITARY DEFECTS IN HOUSES.

A builder in Newcastle having contracted to deliver a house in good sanitary condition to a merchant here, upon the occupation taking place one of the family suffered very severely from blood-poisoning, which led to an examination of the house drains; these were found to be very defective, and in the opinion of medical men clearly accounted for the illness. Legal proceedings were commenced for damages, which the builder found it prudent to arrest by the payment of £500. A few instances of this nature would do much to further a correct estimate of house sanitation in the "building mind."

NEWCASTLE SICK CHILDREN'S HOSPITAL.

The committee appointed by the Corporation have presented a report recommending a lease to be granted to Mr. John Fleming, of this city, of ground belonging to the Corporation in the suburbs, whereupon to erect a new children's hospital, Mr. Fleming having offered to erect the hospital and also to completely furnish it. It is to contain from sixty to eighty beds, and will probably cost not less than £16,000. There is at present a vacancy for a physician to the hospital, and in view of the expansion of the charity, there is likely to be more than usual competition for the post, as it will no doubt afford a good field for work and a certain introduction to practice. So far, the following are pursuing a very active canvass:—Dr. Coley, who is at present assistant physician, and has filled that post for four years; Dr. Limont, who is one of the physicians to the Newcastle Infirmary; and Dr. W. Robertson, of this city.

Newcastle-on-Tyne, May 11th.

EDINBURGH.

(From our own Correspondent.)

ROYAL HOSPITAL FOR SICK CHILDREN.

THE post of extra assistant-physician to this hospital, vacant through the resignation of Dr. Dyce Fraser, has been bestowed upon Dr. R. Mackenzie Johnston.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

At the last meeting of this Society, held on the 5th under the presidency of Dr. Batty Tuke, a large number of interesting specimens and cases were exhibited and some valuable papers read. A fifth was added to a series of cases recorded by Dr. Bruce of the deleterious effects of the inhaled fumes of bisulphide of carbon. In all the patients the same series of symptoms has been observed, the symptoms being chiefly those of alarming disturbances in the cerebrum, as evidenced by profound aberrations in the functional activity of the organs of special sense, with a general loss of trophic activity. The symptoms, though so serious in their aspect, disappear rapidly when the patient is removed from the vitiated atmosphere in which he has been working, and it seems that after his removal there is a steady process of elimination carried, on which relieves the system of the poison, leaving the patient perfectly restored to his lost or aberrant functions in from two to three weeks.—In an interesting paper Dr. Sloane communicated to the Society the results of a series of observations on the relationship which exists between the presence of goitre and the occurrence of pregnancy or menstruation. He drew attention to the frequency of a considerable enlargement of the thyroid tumour taking place in each of these conditions a corresponding diminution in bulk following their cessation; and he is inclined to think that these phenomena are in intimate connexion with some hæmopoiëtic function of the thyroid which becomes specially accentuated during the two conditions in which the enlargement of the gland is noticed. In the discussion which followed considerable doubt was thrown upon Dr. Sloan's view of the probable explanation of the phenomena, but his careful statistics received due credit as an important addition to the literature of the subject.—Dr. Byrom Bramwell read a paper describing a case of Meningeal Cerebral Hæmorrhage, occurring in a hæmophilic subject as the result of a fall. After a prolonged course, during which at first hemiplegia, and later optic neuritis were leading symptoms, the patient made a very good recovery, the paralyses having completely disappeared, and the sight being all but fully restored.

Edinburgh, May 11th.

GLASGOW.

(From our own Correspondent.)

UNIVERSITY REFORM.

DURING the last few years a great deal has been said and written about the reform of our system of university teaching, and the agitation with this end in view has been justified by reference to the many evils which are sure to grow up in the absence of a healthy competition in such teaching. Throughout the whole of the controversy it has been assumed, too hastily it seems, that the professors as a body were against any change in the existing system. It has come, therefore, with the shock of a pleasant surprise to find the General Council of Glasgow University adopting, by an overwhelming majority, a scheme of teaching reform which may be pronounced thoroughly radical or even revolutionary, and to find that this scheme is introduced and warmly supported by the professorial party. The plans so ably defended by Prof. Edward Caird at the last meeting of the General Council may be shortly described as having for their object intra-mural expansion as distinguished from unlimited extra-mural teaching. It is suggested that there should be a widening of the curriculum and a greater choice of subjects for the M.A. degree; that various new chairs should be instituted (modern languages, history, political economy, education, &c.); that in the Faculty of Medicine a chair of pathology and a lectureship on mental diseases should be at once founded; that, in addition to the present chairs, junior professorships and lectureships in the subjects already taught in the University should be instituted as required, the lectures of all these professors or lecturers qualifying *pro tanto* for degrees; that while due provision is made for present life interests, all class fees should go into a common fund, and that all the teachers should be paid by fixed salaries. The scheme here sketched is a tolerably close imitation of the German system, the extraordinary professors, professors, and *privat docenten* of Germany being represented by the professors, junior professors, and lecturers. How far it is capable of application to Scottish university life is not yet clear; but meanwhile it has given rise to much discussion and speculation. On the whole, it has been well and even warmly received, the principal malcontents being those engaged in extra-mural teaching with whose work it seems

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to some extent to interfere. On the other hand, the professors and assistant professors, and generally all those who have the welfare of the University at heart, have given the plan their warm support. Unfortunately the General Council has no executive power—it can only deliberate and advise; but it seems certain that in any alterations to be made in the government of our universities effect will be given to the expressed wishes and convictions of the members of the Senate and the majority of the University graduates. Further, the government of any one Scottish university is very much bound up with the government of the other three, and thus cannot be readily altered. Again, the monetary difficulty is one which will not be easily overcome; it does not seem very practicable to take the teacher's "fixed salaries" out of a fee fund, which from its very nature is itself anything but a fixed quantity. Visions of private munificence, and even of substantial Government aid, are now floating before the minds of the more enthusiastic advocates of the measure; it is to be hoped that they are not doomed to disappointment.

IRELAND.

(From our own Correspondent.)

ROYAL COLLEGE OF SURGEONS IN IRELAND.

THE annual elections for President, Vice-President, Secretary, and Council will shortly take place. There are at present two candidates in the field for the Vice-Presidency, which will then be vacated by Mr. Stokes—viz., Mr. Corley, Lecturer on Surgery in the Carmichael Medical College, and Dr. Frazer, late Examiner in the College of Surgeons; and it is believed that both gentlemen will go to the poll. Among the candidates for Council I may mention the name of Mr. Kendal Franks.

ADDRESS AND PRESENTATION TO DR. JAMES MOORE, LURGAN.

This gentleman was recently presented with a very handsome silver salver, having an appropriate inscription, by his friends from Dungiven, where he formerly practised, as a mark of esteem and affection. The salver was accompanied with an address illuminated on vellum. It must be very gratifying to Dr. Moore that these gifts were subscribed to by members of all classes, creeds, and parties.

DUBLIN ORTHOPÆDIC HOSPITAL.

A grand military and fancy dress ball will be held on the 24th inst. in aid of the funds of this institution. The ball will be under the patronage of the Lord-Lieutenant and the Countess of Aberdeen, the Prince and Princess Edward of Saxe-Weimar, and other distinguished persons. Last year an entertainment of a similar kind took place, and as a result a very considerable sum was obtained for the hospital.

COUNTY DONEGAL INFIRMARY.

Two sections of the new infirmary at Lifford have been completed within the past two years; and the third and last section has now been commenced. This latter is for females, and will contain three wards, with nurses' rooms, operating theatre, bath rooms, &c. The wards will be thoroughly ventilated, and it is intended to line the walls for five feet above the ground with white glazed brick, and the remainder and the ceilings in cement, so as to avoid all risk of infection by absorption, while all can be kept clean by washing with soap and water.

BARRINGTON'S HOSPITAL, LIMERICK.

The managing committee of this institution met last week and made the following appointments:—Visiting Physicians: Drs. Holmes and Graham. Visiting Surgeons: Messrs. Robert Barry, M. O'Connor, John Holmes, and M. J. Nolan. Consulting Physicians: Drs. M. J. Malone, Myles V. Bourke, and George Myles. Consulting Surgeons: Messrs. Thomas Kane, R. R. Gelston, T. J. Gelston, and F. W. Connor. Resident Physician: Dr. George Browning.

BELFAST WORKHOUSE.

The half-yearly report of the Local Government Board inspector of this workhouse is a very satisfactory one, and the management now in operation is giving general satisfaction. During the past half-year the inmates have been healthy, and the town has been free from any epidemic disease. The addition to the lunatic department is now nearly finished, and it is believed that it will answer the purpose for which it was erected. The report speaks highly of the general condition of the workhouse.

Dublin, May 11th.

PARIS.

(From our own Correspondent.)

DEATHS OF DR. HENRI LEGRAND DU SAULLE AND DR. LOUIS-ANTOINE GILLEBERT DHERCOURT.

ON Friday morning I received a notice of the death of Dr. Henri Legrand du Saulle, which occurred as his residence in Paris on Wednesday, the 5th inst., after only two days' illness, from cerebral congestion. He was only fifty-six years of age. The deceased physician was a distinguished member of the profession, and held a high position in Paris, as may be seen by his titles: Physician to the Salpétrière Asylum, Principal Medical Officer of the Prefecture of Police, Expert to the Tribunal Courts, Member and one of the Founders of the Society of Medical Jurisprudence, former President of the Medico-Psychological Society of Paris, and Officer of the Legion of Honour. After having edited the "Gazette des Hôpitaux" for seven years in conjunction with the late Professor Trousseau, he founded with Drs. Gallard and Devergie the Société de Médecine Légale. He was the highest authority in France on mental and nervous affections, on which subjects he published several works. Among them may be cited, "La Folie devant les Tribunaux," "Les Manuel Pratique de Médecine Légale," and "Le Délire des Persécutions." The last-named work was inspired by the events of the second siege of Paris in 1871. It contains an interesting description of the psychological aspect of the Commune, and the author explains in vivid terms how the Parisians, the women particularly, were terror-stricken. With minds thus unhinged, and being also under the influence of drink, the Communists were incited to commit the horrible crimes that are ascribed to them. The funeral of Dr. Legrand du Saulle took place on Saturday last, the service being performed at the Cathedral of Notre Dame, in the presence of a large assembly, where the learned societies to which the deceased belonged, the prefecture of police, and the magistrature were officially represented. After the service the body was conveyed to the Cemetery of Montparnasse, where it was temporarily deposited for further removal to his native town.

Another well-known physician, Dr. Louis-Antoine Gillebert Dhercourt, has just passed away. He died at Enghien, near Paris, where he had settled in practice during the whole of his professional career, and where he will be very much missed by the invalids who resort to that watering-station during the summer. The deceased was seventy-eight years of age; he was President of the Medical Society of Paris.

M. PASTEUR.

In completion of his report, submitted about a month ago to the Academy of Medicine, M. Pasteur read another at the meeting of last week, in which he expressed himself as follows: "On April 12th last the number of persons inoculated for hydrophobia was 726; at the present moment (April 4th) it is 950. Since the time that that report was presented I have had a confirmation of what I then stated—viz., that the mortality caused by the bite of rabid wolves was very considerable. Very frequently this mortality is 100 per cent., and the duration of the incubation is always very short, being sometimes only thirteen or fifteen days. Very frequently also this duration does not exceed eighteen to twenty days, the bite of the dog being rarely of such short duration. Six deaths have occurred among those who have been inoculated, without including the little girl Pelletier, who died at the commencement of these inoculations. The six cases were Russians, five of whom were men bitten by wolves, and the other a woman bitten by a mad dog, all of whom died of hydrophobia, and in whom also the wounds were of a very grave nature. These statistics present a great deception to hostile persons—such, for instance, as the anti-vaccinators. This is my profound conviction, and I believe that there can be no possible doubt regarding the method, as the persons adverse to it cannot contest the results which I have indicated, any more than the experiments which repose on the *ensemble* of these results."

Paris, May 11th.

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ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT an ordinary meeting of the Council held on Thursday last, Mr. Bruce Clarke attended and received the Jacksonian Prize.

The President, Vice-Presidents, and Mr. Marshall, representative of the College in the General Medical Council, were appointed to take any action which they may deem requisite in regard to the Medical Acts Amendment Bill.

The report of the Council of the Royal College of Physicians with reference to the title of Doctor, which has been laid before that College, was brought before the Council, and referred to the consideration of the Committee already appointed to report upon.

The resignation of Mr. Henry Moon, Examiner in Dental Surgery, was received with regret.

Mr. Marshall was reappointed representative of the College in the General Medical Council for five years from the 9th of June next.

Information was received from the Foreign Office of an International Congress on Hydrology and Climatology to be held in Biarritz in October next.

A letter was read from the Chancellor of the University of Adelaide, requesting recognition of the course of lectures of that University for the First and Second Examinations. This was referred to the Committee of Management.

Obituary.

TIMOTHY LEWIS, M.B., OF NETLEY.

IT is with much regret we announce the death of the above-named gentleman, which took place on the 7th inst., at his residence, Bywood, Woolston, after a brief illness, extending over a week only. The late Surgeon-Major Lewis was assistant professor of pathology in the Army Medical School, to which institution and to the medical staff of the army his death will be a great loss. Dr. Lewis's reputation as a scientist was European; as a microscopist he was *facile princeps*. Less than a fortnight ago the Council of the Royal Society included his name in the list of those recommended for election as Fellows in June next in recognition of his original investigations and contributions to science. When he passed through the Army Medical School as a probationer for the Medical Department of the Army, the professors recognised his aptitude for scientific investigation, and, along with Dr. David Cunningham, a probationer from H.M.'s Indian Medical Service, brought his name under the notice of the Secretary of State for War. The professors recommended that both the gentlemen named should be sent to Germany for a few months' training under some of the most accomplished pathological *savants* of that country. To this the Secretaries of State for War and India consented, and by the recommendation of the professors both gentlemen were sent to India, chiefly with a view to carry out investigations on the cause of cholera. This cause is yet one of Nature's secrets, which has evaded the researches of the ablest men who have sharply interrogated her; but while they failed to discover what was the main object of their search, like the brothers in the fable who dug in the garden for hidden treasure which was not there, their researches and labours were fruitful in other discoveries, with which the names of Lewis and Cunningham will, in the annals of science, be imperishably associated. The deceased gentleman was an occasional and highly valued contributor to our columns. It is needless to add that his death has caused profound grief in the great establishment to which he belonged, and of which he was so great an ornament. He had only just reached his forty-fifth year of age, and has left a widow and two children to mourn their loss.

DR. JOHN D. HAYWARD, of Liverpool, has, we understand, obtained a prize offered some two years ago by Dr. Prater for essays on the subject of Hydrophobia.

MEDICAL NOTES IN PARLIAMENT.

Medical Officers at Suakim.

IN the House of Commons on the 7th inst., Mr. Herbert Gladstone, in reply to a question by Mr. M. Henry, stated that three medical officers serving at Suakim had died, and that ten had been invalided. The medical officers of the British army were being removed from Suakim, as the British garrison was withdrawn.

The Rating of Charities.

On the 11th inst. Sir Julian Goldsmid brought in a Bill to exempt charities and hospitals from local rates.

Small-pox in Prisons.

In reply to Mr. Stanley Leighton, Mr. Childers stated that it was perfectly true that two prisoners suffering from small-pox had been removed from Shrewsbury Gaol to the Atcham Workhouse, a distance of five miles. He had no reason to doubt that the removal was, under the circumstances, expedient, and that all proper care was taken in the case. The prison is at present undergoing partial reconstruction, and there is no available space for the insulation of a case of this nature; moreover, the workhouse infirmary at Atcham is used for infectious cases, including small-pox cases. In reply to a further question, Mr. Childers said that it would partly depend on the condition of the prison whether, if a prisoner was affected with disease of this kind, he should be removed. In the present case it would clearly have been wrong to keep him in prison.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen, having passed the required examination, were admitted Members of the College on the 6th inst.:—

Birch, Edward Alfred, M.D. Brussels, Exmouth.
Dalton, Norman, M.D. Lond., Bentinck-street, Manchester-square.
Gerard, John, M.B. Aberd., Keppel-street, Russell-square.
Harris, Thomas, M.D. Lond., Mosley-street, Manchester.
Jones, Henry Lewis, M.B. Camb., Barnard's-inn, Holborn.
Lyon, Thomas Glover, M.D. Camb., King-street, Cheapside.
Neale, John Headley, M.B. Edin., Leicester.
Pearce, Walter, M.B. Lond., St. Mary's Hospital.
Pope, Frank Montague, M.B. Camb., Leicester.
Rutherfoord, Henry Trotter, M.B. Camb., Bedford-gardens, Kensington.

The following gentlemen were admitted Licentiates of the College on the 6th inst.:—

Baker, Walter Robert, Pine Villa, Quex-road, Kilburn.
Barrett, Robert Hasby, Elms-road, Dulwich.
Barrett, Sidney Edward, London House, Stepney.
Berrill, Alfred, Olton, Birmingham.
Bidwell, Lawrence, Lee-terrace, Blackheath.
Bonnefin, Fernand Henry, St. Paul's-road, Camden-square.
Buckell, Edward, Romsey.
Chisholm, Murdoch, Paris-street, Lambeth.
Clark, Francis William, Fairfield-road, East Croydon.
Clay, William Rudolph, Westwick-gardens, Hammersmith.
Coker, Owen Cole, Uxbridge-road.
Colquhoun, William Brooks, Evering-road, Upper Clapton.
Copeman, Sydney Arthur Monckton, York-road, Lambeth.
Daly, Stephen Joseph, Monastervin, Ireland.
Davidson, Harold, Claremont-road, Forest-gate.
Davis, George William, College of Medicine, Newcastle-on-Tyne.
Davis, Weston Peel, Gloster-terrace, Bayswater.
Dickinson, Charles, Sloane-street.
Dobson, Leonard Chas. Talbot, Holmesdale, Grange-park, Ealing.
Ellis, William McDonagh, High-road, Lee.
Evans, Charles Hotham, Percy Lodge, Winchmore-hill.
Gordon, Bryce, Sundorne-road, Charlton, Kent.
Gore, Alfred Joseph, Mildmay-road, Highbury.
Grenfell, Henry Osborne, Charing-cross, Hospital.
Harrison, Sidney Hope, Victoria-road, Tamworth.
Hare, Edward Christian, Lansdowne-place West, Bath.
Hebb, Frederick Theodore, George-street, Hanover-square.
Heffernan, William Hilton, Doddington-grove, Kennington-park.
Herbert, Herbert, Reginald-terrace, Leeds.
Holyoake, Hubert, Droitwich.
Ives, William Robert Yeates, Bevois-hill, Southampton.
Jackson, William Edward Gilson, Long-lane, Bermondsey.
James, David Philip, Osborne-terrace, Clapham.
Jollye, Francis William, Warminster.
Joly, Joseph Eugene Numa, University Hospital.
Jones, George Burdett Mander, Sydney, New South Wales.
Julian, Oliver Richard Arthur, Dispensary, Stoke Newington.
Keightley, Archibald, Chichester Villas, Notting-hill.
Kingsford, Edward Claude, Guy's Hospital.
Langton, Charles Baring Tyndal, Medora-road, Brixton.
Lawson, Bernard Sloane, Harley-street.
Llewellyn, James Davies, Gorphwysfa, Bargoed, Cardiff.
McDowell, Samuel Edgar Creighton, Frederick-street, Gray's-inn-road.

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Mander, Percy Robert, Bridge-road, Hammersmith.
Melhuish, John, Crossfield-road, Belsize-park.
Morgan, James Campbell, St. John's-park, Blackheath.
Morris, Colin Dwight, Philpot-street, Mile-end.
Noyes, Alexander Wellesley Finch, Beaufort-street, Chelsea.
Oliver, Francis George, Upper Mall, Hammersmith.
Pain, Francis, Thurlow-park-road, Dulwich.
Paine, William Henry, High-street, Lewisham.
Paul, George William Frederick, Ladbroke-grove-road.
Pearson, George Kenneth, Elgin-road, St. Peter's-park.
Pearson, Heslop Laird, Bedford-road, Rock Ferry, Birkenhead.
Pollard, Charles, Guy's Hospital.
Reddall, Osborne Henry, Belfenden-road.
Riddell, Andrew Wilson, Warwick-road, Redland, Bristol.
Ritson, Robert, Halsey-street, Chelsea.
Roome, Stanley Molesworth, Northesk, Dunkettle, Ireland.
Shopoff, Pano Ivan, Upper Brook-street, Grosvenor-square.
Simmons, Herbert Charles, Carleton-road, Tufnell-park.
Stubbs, Percy Bedford Travers, Ockenden-road.
Tabor, Charles James, Reading.
Tait, James Sinclair, Paris-street, Lambeth.
Tapson, Joseph Alfred, High-street, Clapham.
Travers, Ernest Aston Otho, Sutton, Surrey.
Tyndall, Francis, Ash-grove, Seaforth, Liverpool.
Vallance, Ernest, Deanery, Stratford.
Van Buren, Ernest Cecil Haward, Kensington Infirmary, Marloes-road.
Warde, Arthur Waldemar Brougham, St. Bartholomew's Hospital.
Ware, George Stephen, Middlesex Hospital.
Warner, Frederic Ashton, Eaton-terrace, Pimlico.
Webster, Percy Samuel, Fairbridge-road, Upper Holloway.
Williams, George Rowland, Ferme-park-road, Stroud-green.
Williams, James Edward, Richmond-crescent, Barnsbury.
Wood, Edward, Windmill-hill, Enfield.
Wright, Hiram Augustus, Guelph, Canada.

SOCIETY OF APOTHECARIES.—The following gentlemen passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on the 6th inst.:—

Bowden, Walter, Hilldrop-crescent.
Damian, Francis George Claxton, Trinidad, West Indies.
Edwards, Percy, Hawarden, Dartmouth.
Hardy, Albert Edward, Somerville House, Buttershaw, Bradford.
Nicholson, Edgar, Clarendon-road, Notting-hill.
Stone, John William, Richmond, Yorkshire.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—In the list published last week of gentlemen who passed for the membership of the Royal College of Surgeons of England, the letters "L.R.C.P.L." should have followed the name "William Henry Paine," not "L.S.A."

THE Hospital Sunday collection at Rochester was held on the 9th inst.

A CENTRE of the St. John Ambulance Association has been opened at Jerusalem.

ON the 5th inst. the new buildings of the Royal College of Veterinary Surgeons were formally opened by Mr. Roalfe Cox.

THE 9th of July next has been chosen as the opening day of the grand bazaar in aid of the funds of University College Hospital, which is to be held in the grounds of the College.

THE eighth annual report of the Southsea Infant Nursery has just been published, and contains a most satisfactory account of the work done by the institution during the past year.

THE President of the Royal College of Surgeons, Mr. W. S. Savory, has just issued cards of invitation to his conversazione, to be held in the College on Wednesday evening, June 9th.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL.—The Princess of Wales has consented to open the new wing of this hospital, which is now approaching completion. The ceremony will take place at a date to be fixed by her Royal Highness subsequent to June 1st next.

THE keeper of a registered lodging-house has recently been fined 20*s*., and 6*d*. each day for forty-nine days, at the Southwark Police-court, for not complying with the Public Health Act as to the amount of free cubic air space required for each of his lodgers.

PRESENTATION.—The post-graduate course of demonstrations in Ophthalmology, conducted by Dr. Hill Griffith at the Manchester Royal Eye Hospital, has just been concluded. The practitioners who attended the course have presented Dr. Griffith with a purse containing twenty-five sovereigns, as a token of their appreciation of the great ability and courtesy with which he has carried on the class.

THE Tottenham District Board of Health and the Metropolitan Board of Works having withdrawn their opposition, the Bill for the Purification of the River Lea has passed a Select Committee of the House of Commons practically unopposed.

THE magistrates at the Edmonton Petty Sessions have granted a summons, under the Public Health Act, against the Tottenham Local Board of Health, for allowing a large quantity of sewage to be placed upon the marshes at Park, in the Tottenham district, to the danger of the health of the public.

METROPOLITAN FREE HOSPITAL, KINGSLAND-ROAD.—At the anniversary festival of this institution on the 12th inst., it was reported that the total income for the past year amounted, in consequence of the commercial depression, to only £3600, whilst the ordinary expenditure exceeded £4000. The contributions announced during the evening by the secretary amounted to £2177.

THE Vienna Medical Widow and Orphan Society has issued a most satisfactory report concerning its present condition. The funds now in its possession amount to 2,500,000 gulden. The members number 354, and the widows and orphans 136, whose pensions amount in the aggregate to 89,000 gulden. The Society's funds being in so flourishing a condition, a resolution has been passed to augment the pensions now being paid.

THE SOUTHWARK AND VAUXHALL WATER BILL.—The clause in this Bill concerning the compulsory purchase of the dust-sifting yard near the company's filter-beds at Battersea has been struck out, and in its place an agreement with the London and Brighton Railway Company, the owners of the dust-yard, is scheduled to the Bill, in which an undertaking is given to discontinue its use as a dust-sifting yard upon certain terms contained in the agreement.

ABERDEEN ROYAL INFIRMARY.—At a meeting of the Committee of Management of this institution, held on the 4th inst., for the purpose of considering the question of hospital extension, it was resolved that the sketches illustrating the Lord Provost's plan be lithographed, and, with an explanatory memorandum, circulated among the committee and medical staff. A sub-committee was elected to give effect to this resolution.

ROYAL HOSPITAL FOR INCURABLES.—The annual dinner in aid of the funds of this institution was held on the 7th inst., under the presidency of the Duke of Portland, who, in proposing the toast of the evening, made an earnest appeal for liberal subscriptions, and pointed out how essential it was that the charity should receive undiminished support. During the evening the secretary announced a list of subscriptions amounting to £3725.

DEVONSHIRE HOSPITAL AND BUXTON BATH CHARITY. The annual meeting of the subscribers to this hospital was held on the 1st inst., when Dr. Robertson, who presided, delivered an address, in which he briefly reviewed the work done during the past year. The number of patients admitted was 2422, of whom 2144 were sent away as improved. It was unanimously resolved that a meeting of subscribers be called to take into consideration the advisability of establishing a Hospital Saturday during the summer in aid of the institution.

Medical Appointments.

Intimations for this column must be sent DIRECT to the Office of THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BARENDT, FRANK H., M.R.C.S., L.R.C.P.Lond., has been appointed House-Physician to the Royal Infirmary, Liverpool.

CHAPMAN, HERBERT F., L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer to the Workhouse of the Richmond Union.

COCK, M. F., L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer for the Tarvey District of the Bedford Union.

EVANS, WILLIAM, M.R.C.S., L.R.Q.C.P.I., has been appointed House-Surgeon to the Royal Infirmary, Liverpool.

FINDLATER, ALEXANDER, M.B.Dub., has been appointed Medical Officer for the Second District of the Aylsham Union, and for the Alborough District of the Erpingham Union.

FRASER, JAS. THOMSON, M.B., C.M., has been appointed Honorary Physician to the Hulme Dispensary, vice G. J. Haslam, M.D., M.R.C.S., resigned.

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GAILEY, JOHN A., M.D.Ed., L.R.C.P.Ed., has been appointed Medical Officer for the Leekfrith District of the Leek Union.

GEMMELL, JOHN E., M.B., C.M.Edin. (late House-Physician), has been appointed House-Surgeon to the Royal Infirmary, Liverpool.

JOHNSTON, R. M'KENZIE, M.D., F.R.C.S., has been appointed an Extra Physician to the Royal Edinburgh Hospital for Sick Children.

KNOTT, CHARLES, M.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer to the Workhouse of the Portsea Island Union.

LISTER, CHARLES E., L.K.Q.C.P.I., has been appointed House-Surgeon to the Royal Infirmary, Liverpool.

LOE, J. S., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer to the Second District of the Leeds Union.

LUCAS, S. A., L.R.C.S.Ed., L.R.C.P.Ed., has been appointed Honorary Medical Officer for the No. 1 District of the Liverpool Ladies' Charity and Lying-in Hospital.

OSWALD, ROBERT J. W., M.R.C.S., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Seventh District of the Lambeth Parish, vice Lionel Druitt, M.D., resigned.

PEDLEY, R. DENISON, L.D.S., M.R.C.S., has been appointed Dental Surgeon to the Evelina Hospital for Sick Children, Southwark bridge-road.

PIESSE, CHARLES HENRY, M.R.C.S., L.S.A.Lond., F.I.C., F.C.S., &c., Public Analyst for the Strand District, has been appointed Public Analyst for Fulham.

PIZEY, G. F. P., L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer for the Ninth District of the Bedminster Union.

SHEPHERD, ROBERT J., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Radnorshire District of the Hay Union.

THOMAS, W. THELWALL, M.R.C.S., L.R.C.P.Ed. has been appointed House-Physician to the Royal Infirmary, Liverpool.

Births, Marriages, and Deaths.

BIRTHS.

BRADSHAW.—On the 11th inst., at Sulgrave, Banbury, the wife of J. C. Bradshaw, L.R.C.P., &c., of a daughter.

HART.—On the 10th inst., at 4, Wemyss-place, Edinburgh, the wife of D. Berry Hart, M.D., of a daughter.

LANGFORD.—On the 7th inst., at Park House, East Finchley, the wife of Phinehas Pitts Langford, M.D., of a son.

MEARS.—On the 7th inst., at 11, Northumberland-square, North Shields, the wife of Frederick Charles Mears, M.B., of a daughter.

RICHARDSON.—On the 7th inst., at Lake House, Frampton-on-Severn, Gloucestershire, the wife of Richard T. Richardson, M.R.C.S., L.S.A.Lond., of a daughter.

ROOME.—On the 6th inst., at Fluelen House, Guildford, Surrey, the wife of Henry Abercrombie Roome, M.B., of a daughter.

SANDERS.—On the 5th inst., at Church-street, West Ham, the wife of Charles Sanders, M.B., M.R.C.S., of a daughter.

SANGSTER.—On the 7th inst., at 158, Lambeth-road, S.E., the wife of Charles Sangster, of a son.

VOGAN.—On the 5th inst., at St. Matthew's, Ipswich, the wife of Jas. Norman Vogan, F.R.C.S., of a son.

MARRIAGES.

MACKERN—GIBSON.—On the 5th inst., at St. John's Anglican Church, Buenos Ayres, George Mackern, M.D., to Maria Spence, elder daughter of Thomas Gibson, of Eglinton-crescent, Edinburgh.

STEWART—BAILEY.—On the 28th ult., at the Parish Church, Marylebone, by the Rev. Page Roberts, M.A., Incumbent of St. Peter's, Vere-street, William R. H. Stewart, of 41, Devonshire-street, W., elder son of William E. Stewart, of 16, Harley-street, W., to Bessie Elford, elder daughter of George H. Bailey, of 9, Cavendish-place, W.

DEATHS.

BOYCOTT.—On the 12th inst., at Montagu-square, Thos. Boycott, M.D., F.L.S. (formerly of the Mint, Calcutta), aged 70.

BREMNER.—At Strand-terrace, Walmer (after a few hours' illness), John Traill Urquhart Bremner, Inspector-General, R.N., aged 64.

LEWIS.—On the 7th inst., at Bywood, Woolston, T. R. Lewis, M.B. (F.R.S. elect.), Surgeon-Major, Army Medical Staff, aged 44 years.

LYONS.—On the 7th inst., Isidore I. Lyons, L.R.C.P., M.R.C.S., L.S.A.Lond., L.D.S., late Surgeon-Dentist, St. Bartholomew's Hospital, and of Queen Anne-street, Cavendish-square, W., aged 44 years.

OWEN.—On the 7th inst., at Belvedere-road, Upper Norwood, Harvey Kimpton Owen, M.D., F.R.C.S., L.S.A.Lond., in his 71st year.

PARRY.—On the 10th inst., at Lancaster-terrace, Regent's-park, Richard Parry, M.D., aged 79.

SEALY.—On March 9th, at Nelson, New Zealand, William Byers Sealy, M.D. (formerly of Swindon, Wilts), eldest son of the late Lieut.-General B. W. D. Sealy, of Cleve Dale, near Bristol, aged 63.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, May 17.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

SOCIETY OF ARTS.—8 P.M. Dr. B. W. Richardson: Animal Mechanics (Cantor Lecture).

Tuesday, May 18.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Arthur Gamgee: The Function of Circulation.

PATHOLOGICAL SOCIETY OF LONDON.—8 P.M. Mr. Eve: Adenoma and Adenosarcoma of Ovary.—Mr. Hutchinson: Adenoma of Palate.—Mr. Hutchinson, jun.: Neuroma of Parotid.—Dr. Acland and Mr. Ballance: (1) Noma; (2) Actinomycosis in Man.—Dr. Payne: Erythrasma.—Dr. Silcock: (1) Gangrene of Lung; (2) (for Dr. H. Jones): On the Vessels in Meningitis.—Dr. West: Mediastinal Tumours.—Dr. Turner: Miliary Tubercle in Pulmonary Artery.—Dr. Sharkey: Perforation of Vermiform Appendix.—Dr. Sainsbury: Tubercular Mass in Suprarenal.—Dr. Hale White: Case of Peripheral Neuritis, Myelitis, and Pachymeningitis.—Mr. Bilton Pollard: (1) Duct Papilloma of Breast; (2) (for Mr. C. Heath): Secondary Epithelioma of Lower Jaw.—Mr. Battle: (1) Osteochondrosarcoma of Breast; (2) Osteochondroma of Thigh.—Dr. Hadden (for Mr. Paul): Rupture of Aorta. Card Specimens will be shown by Drs. Kidd, Silcock, Sharkey, and Hadden, and Messrs. Battle, E. H. Fenwick, Churchill, and E. Crookshank.

SOCIETY OF ARTS.—8 P.M. Mr. Ernest Hart: Japanese Art Work.

Wednesday, May 19.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.

SOCIETY OF ARTS.—8 P.M. Prof. Leonard Waldo: Watchmaking by Machinery.

Thursday, May 20.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Dewar: The Alkaloids.

HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Dr. E. Downes: Treatment of Leprosy and Sciatica by Nerve-stretching.—Dr. R. Maguire: On the Albumens of the Urine.

Friday, May 21.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.—7.30 P.M. Mr. William Bassie: The Waters derived from the Bagshot Beds considered as Drinking Supplies.

SOCIETY OF ARTS.—8 P.M. Capt. Richard Carnac Temple: Everyday Life of Indian Women.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—8.30 P.M. Mr. Ballance will give a Demonstration in Bacteriology, to include the Cultivation of various Micro-organisms in Nutrient Media, together with Microscopical Preparations of the same.

ROYAL INSTITUTION OF GREAT BRITAIN.—9 P.M. Sir John Lubbock: The Forms of Seedlings, the causes to which they are due.

Saturday, May 22.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Ernst Pauer: How to Form a Judgment on Musical Works.

SOCIETY OF ARTS.—3 P.M. Prof. George Forbes: Electricity

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, May 13th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
May 7	30·21	W.	62	52	106	77	52	...	Hazy
,, 8	30·07	W.	61	57	85	70	57	...	Overcast
,, 9	29·93	E.	58	53	99	70	51	...	Cloudy
,, 10	29·85	E.	55	51	104	68	48	...	Cloudy
,, 11	29·85	S.E.	50	49	...	51	49	·03	Overcast
,, 12	29·69	S.E.	49	48	...	56	46	·19	Overcast
,, 13	29·10	N.E.	51	51	...	52	48	1·01	Raining

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

DAMP TOBACCO.

SOME startling statements with reference to the adulteration of tobacco by excessive moisture were made by Mr. Macfarlane in the House of Commons last week. Of some samples of bird's-eye tobacco which he had caused to be examined, No. 1 sample, at 5*s.* per lb., contained from 5 to 8 per cent. of water; No. 2, at 4*s.* 8*d.*, from 10 to 14 per cent.; No. 3, at 3*s.* 10*d.*, from 21 to 26 per cent.; No. 4, at 3*s.* 4*d.*, from 40 to 45 per cent.; No. 5, at 3*s.* 2*d.*, from 45 to 50 per cent.; and No. 6, at 3*s.* 1*d.* per lb., contained from 55 to 60 per cent. of water. These three lowest qualities represent three-fifths of the whole tobacco consumed in this country, and almost exclusively that which is smoked by the working classes.

Dr. Alex. Hill will find, on reference to our number of the 1st inst., p. 851, that the fact has already been announced in our columns.

"BONE-SETTERS AND THE PROFESSION."

To the Editor of THE LANCET.

SIR,—In your last issue, p. 908, appeared a short note bearing the above heading. Your opinion there expressed gratifies me, inasmuch as it upholds the course I found it necessary to take quite recently with a patient. The latter, a young girl, has suffered from strumous disease of the knee-joint for about eighteen months. As it was not improving so quickly as her parents would have liked, they, without my knowledge at the time, took her to a bone-setter in the neighbourhood, who told them the usual story, and said he could cure her. The mother, however, did not think her daughter could bear the pain of having the joint "put in," and asked me to go with them to the setter of bones in order to administer chloroform. This I at once firmly refused to do, and gained for myself the name of being very unkind, and at the same time lost a patient. I, however, felt convinced that I had acted rightly, and your opinion strengthens me in my belief. I am, Sir, yours faithfully,

May 8th, 1886. X.

THE MORPHIA HABIT.

To the Editor of THE LANCET.

SIR,—I should advise your correspondent, "Young Practitioner," to urge his lady patient addicted to morphia injecting to apply for admission into a suitable institution. From my experience I can affirm it is the best course and the most reliable. Many such cases have been successfully treated and cured.

I am, Sir, yours truly,

May 10th, 1886. J. ST. THOS. CLARKE, M.B.Lond.

THE COST OF THE SMALL-POX.

THE following extract from a recent speech of the President of the Grand Trunk of Canada Railway is interesting:—

"Of the £83,000 which we lost in the last half-year of 1885, £50,000 may be computed to be owing to the outbreak of small-pox at Montreal, and £3000 to the loss of emigrant traffic. The disease commenced in Montreal in February, 1885. The conductor of a Pullman car arrived at Montreal with the disease upon him, and as there was no special hospital to which he could be taken, he was conveyed to a regular general hospital, and very kindly treated. From that one case the disease spread with most alarming rapidity. The municipal authorities had not the necessary experience to enable them, in the first instance, to deal with such an outbreak of contagious disease; but afterwards it was vigorously attacked, and ultimately stamped out. But if the Grand Trunk Railway Company have lost £50,000 owing to the small-pox, the mercantile community of Montreal has been a far heavier loser. Goods sent from Montreal were actually returned as being infected goods, and at one time no one would buy anything from the city. The commerce of the whole district was paralysed, and Montreal was boycotted. Even the province of Quebec itself was isolated. The province of Ontario established a system of inspection, and there was a medical inspection also established at various points in the United States. No one travelled by our trains who could help it, the through traffic by way of Canada was driven into United States channels, the Grand Trunk trains were all shunned as being infected, and wherever passengers were discovered care was taken immediately and promptly to vaccinate them and to fumigate them thoroughly. As yet we have hardly recovered from that state of things. It followed us up to January, 1886, when the Montreal carnival could not be held in consequence, and from the carnival in past years we have always derived a good deal of traffic. It was useless to attempt to hold a carnival."

Dr. Ashby.—Probably next week.

"AN UNUSUAL CASE OF CONGENITAL MALFORMATION."

To the Editor of THE LANCET.

SIR,—In your issue of April 10th, p. 722, Mr. Salter describes a case of unusual congenital malformation, but where a post-mortem examination was not allowed. On Sunday, March 21st, I met with a case presenting somewhat similar symptoms, and the result of the post-mortem examination was rather interesting. The child (a female) was born about 2 A.M., and looked quite healthy, except that the abdomen was unusually distended, and on my visit in the evening the nurse drew my attention to the large size of the abdomen and stated that the child had been very sick. I requested her to give it a teaspoonful of castor oil, and when I called again on the Tuesday I found that the oil had not operated and that the sickness was getting much worse, the vomit becoming black and offensive. I tried an injection, but it succeeded in bringing away only a few very small lumps of fæces. The vomiting became more and more severe and the child died on Thursday morning, having lived a little over four days. At the post-mortem examination the stomach was found normal and the small intestine for about three feet was also normal, but here it ended in a blind extremity, which was greatly distended. Then, quite separate from all this, and not attached to it in any way, were coils of very small intestine several feet in length and not measuring more than a sixth or an eighth of an inch in diameter. This passed on into the right iliac fossa, and there forming the ileo-cæcal valve it continued in the course of the large intestine on to the rectum, its diameter in any part of its course not measuring more than a sixth of an inch. Doubtless the explanation of the non-development of this part of the intestine is simple, but the breach of continuity of the small intestine just about three feet from the stomach is not so easy of elucidation. Perhaps some of your readers may offer an explanation.

I am, Sir, yours faithfully,

Southwick-street, W., April 20th, 1886. OWEN PRITCHARD, M.D.

THE LEPER HOSPITAL AT BERGEN.

IN the *Sunday Magazine* for the present month is a description, by Mrs. Chas. Garnett, of the Asylum for Lepers at Bergen, the largest of the three institutions of the kind in Norway. Together they are capable of accommodating 800 patients, the number of inmates in 1880 being 617. The poor sufferers seem to be well cared for, and their lives made as pleasant by cheerful surroundings as their pitiable condition will admit of. Some of the rooms visited by the writer, however, were rendered intolerable by the want of ventilation, to which the lepers appear to have a deadly antipathy. In vain do the doctors in the morning throw open the windows; they are again closed as soon as opportunity offers. Most of the patients find a measure of relief from the monotony of their dreary existence by engaging in some kind of handicraft in the large workrooms set apart for the purpose. Segregation being recognised as the only effectual means of lessening the prevalence of leprosy, and of finally annihilating it, the Norwegian Government, we are told, is seeking to obtain powers to make the isolation of the sick compulsory, either in the national asylums or in their own homes.

Dr. Gilbertson will find the announcement on page 901 of our last issue.

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THE CONSUMPTION OF TEA.

ACCORDING to some statistics recently published by an Indian contemporary, it appears that the people of Great Britain are considerably behind other nations in the average consumption of tea per head of population. The Australians come first with 7·66 lb. per head; the New Zealanders next with 7·23 lb. per head; while the people of Great Britain, though appearing third in the list, consume only 4·90 lb. each. Newfoundland and Canada come next, while in the United States the consumption is only 1·30 lb. per head; and in Russia, which is always regarded as a great tea-drinking country, the consumption is only 0·6 lb. per head. Belgium, Sweden, Austria-Hungary, and Spain consume less than the other European nations; but there is not one nation on the Continent, with the exception of Holland, in which the annual consumption exceeds 1 lb. per head.

COCAINE AND SEA-SICKNESS.

To the Editor of THE LANCET.

SIR,—The subject of sea-sickness having been again opened by your correspondent, "Surgeon R.N.," I venture to send you the following two cases and accompanying observations without the usual apology.

My own observations have led me to distinguish two distinct forms of *mal de mer*, and a third intermediate or hybrid one. A certain proportion of the cases of sea-sickness will be noticed to occur almost immediately upon the vessel leaving port, and the number of these cases and the severity of their symptoms are always proportionate to the extent of the rocking. In these patients all purely "bilious" symptoms are conspicuous by their absence—that is to say, the skin and conjunctivæ are not jaundiced, there is no diarrhœa, the urine is not abnormally coloured, and the ejecta do not contain bile. If the retching is very severe, some bile may be regurgitated through the pylorus and appear in the vomit, but in small quantities only. I have always looked upon these cases as of purely nervous origin, possibly, as your correspondent suggests, due to jarring of the semicircular canals. I should, however, before definitely adopting this view, be glad to hear his explanation of the fact to which my attention was long ago called—namely, the great relief experienced in some cases by the application of firm support to the hypogastrium. I can recall a severe case which was much benefited by the tight application of the usual obstetric binder. Acting upon the theory that this form of vomiting is of the nature of a nerve reflex, I have been in the habit of prescribing anodynes. Chloral has been distinctly beneficial; but, on account of its taste, it is superseded, in my estimation, by cocaine. The following two cases are fairly illustrative of its usual action in my hands. They occurred on one of the Orient steamers in September last. Soon after leaving, the weather became very severe, the hatches were battened down, and only a few male passengers were allowed on deck by special permission.

CASE 1.—Miss B—— commenced to vomit two hours after leaving the Thames, and was very sick for an hour, when (at noon) she was given one-third of a grain of hydrochlorate of cocaine in a teaspoonful of water and orange syrup. She felt relieved almost immediately, and did not vomit again till 4 P.M., when a second dose was administered. She now became drowsy, and slept till 10 P.M., when she awoke, and was sick again. She then asked for another dose (the third). She fell asleep soon after taking it, and slept soundly all night. Next day she continued in a drowsy state. In the evening she sat down to dinner, eating a fair meal apparently. The weather was slightly less severe, but very rough, and though it continued so for the rest of the voyage she had no return of sickness.

CASE 2.—Mr. B—— had been sick all the first day, and at 6.30 next morning was given one-third of a grain of hydrochlorate of cocaine, which he immediately rejected. At 9 A.M. a second dose was given. He retained this, and slept till 1 P.M., and was very drowsy till 4 P.M., but not sick. He got up to dinner and partook of soup and fish and came off deck afterwards. The weather was still very rough, and continued so, but he had no return of sickness.

On future occasions I shall give a quarter of a grain, one-third seemingly being unnecessarily large. Another class of cases I have noticed occur usually at the expiration of twenty-four hours or more after leaving port, and they do not seem to be much affected by the rolling of the vessel. These patients have a typically "bilious" appearance. The skin and conjunctivæ are yellow, the tongue is furred, there is usually some bilious diarrhœa, the urine is high coloured, and the vomit always contains bile. One sees usually more of these patients, for they have not the tendency to lie down which the others have, but seem, on the contrary, restless. Their condition seems to be due to the stimulating effect of the sea air upon the secretion of bile, the effect no doubt being heightened by the sudden cessation of accustomed exercise, and, perhaps, a sharpened appetite and consequent over-eating. The same symptoms, in a less degree, are observable in persons newly arrived at the sea-side from some inland locality, and may more properly be designated "sea biliousness." Small frequent doses of an effervescing saline are usually sufficient to relieve them of their distress. The most difficult to treat are those whose symptoms give one the impression of partaking of the above-described two conditions combined. A man who feels a little qualmish has, of course, the finishing touch added when his gall-bladder and duodenum become distended with bile. I usually to these administer cocaine in an effervescing form.

I am, Sir, your obedient servant,

Regent's-park-road, May 10th, 1886. W. COOPER ADAMS, M.B. Lond.

THE SANITARY CONDITION OF TONQUIN.

IN a work on Tonquin by Dr. Challan de Belval, Chief Medical Officer of the French Expedition, which has just been published in Paris, a considerable space is occupied by a description of the hygienic—or unhygienic—conditions of the country, which is stated to be damp and unhealthy. The houses are also insanitary, the clothing of the people insufficient, and their food "detestable," so that their low and debilitated condition is easily accounted for. Malaria is very frequent, and is met with in very grave forms, more often in woody and mountainous districts than in the delta. The most common and most fatal disease after malaria seems to be dysentery. The author saw many cases of abscess and hydatid of the liver. As to cholera, it may be said to be endemic, with frequent and severe epidemic exacerbations. Typhoid fever proved fatal to many of the French soldiers. Small-pox is very prevalent, and is said to kill more than half the children. Tuberculosis, scrofula, rheumatism, and leprosy are all common. Syphilis, however, is rare among the natives, except in the vicinity of great European centres. Notwithstanding all the hygienic disadvantages, the author believes that Tonquin will develop into a fine colony, decidedly superior to Cochin China.

Mr. William Tebb.—We regret that we cannot find space in THE LANCET for anti-vaccination arguments. Life is too short, and small-pox too real and near a risk.

A. B. had better apply to the registrar for the desired information.

"KISSING THE BOOK."

To the Editor of THE LANCET.

SIR,—Dr. Mowat can hardly be aware that the suggestion he has made is wholly impracticable, since it is the duty of the court usher, who administers the oath, to see that witnesses place the Testament against their lips; otherwise they are not sworn at all. It is the practice with many medical witnesses here to kiss the open book; and though this is, strictly speaking, a privilege of Royalty, I have never seen or heard of its being objected to. The mode of administering the oath in Scotland is much more solemn, as well as being free from this objectionable practice of kissing a book which, however sacred, is too often the reverse of clean. I believe that in the Channel Islands the oath is administered in a mode similar to that practised in Scotland, and I hope that we may live to see this method made uniform throughout the United Kingdom. It is somewhat unfortunate that this subject, solemn though it ought to be, is just one of those in which there is only one step from the sublime to the ridiculous. But if any Member of Parliament were to take up the matter, he would I am sure meet with both support and gratitude. The general adoption of the Scotch method would relieve many witnesses from any fear of infection—a fear which, I believe, is by no means chimerical; would be more of a solemnity and less of a farce than the present mode, and might also, in the case of many witnesses of the lower orders, cause a decrease in the crime of perjury.

I am, Sir, yours faithfully,

Liverpool, May 8th, 1886. FRED. W. LOWNDES.

HOSPITAL ETIQUETTE.

To the Editor of THE LANCET.

SIR,—I should be glad to have an expression of your opinion on the following case. I am house-surgeon of a provincial infirmary, and, according to the rules, am the head of the house. The matron is untrained, and her chief duties are those of a steward in a large London hospital. One morning recently I began my visit, and entered one of the female wards, where I found the matron. After waiting some time in the expectation that she would withdraw, I requested her with the utmost civility to leave the ward until I had made my round. This she flatly refused to do, and she continued to go from bed to bed until she had spoken to every patient, I meanwhile standing idle until she left the ward with an air of injured dignity amidst the titters of the patients. I have previously been resident at two large metropolitan hospitals, where the *trained* lady matrons always, as a matter of routine, left the wards the moment the house-surgeon entered them; and I would ask, as a matter of hospital etiquette, whether I was not justified in considering myself aggrieved in the above circumstances.

I am, Sir, yours faithfully,

May 11th, 1886. M.B. EDIN.

*** It is no part of the duties of the matron of a hospital to attend the house-surgeon in his rounds.—ED. L.

RINGWORM IN A NEW-BORN INFANT.

To the Editor of THE LANCET.

SIR,—In your issue of April 10th I notice a letter from "Surgeon," citing a case of ringworm in a new-born infant. On March 18th I attended a lady in her confinement, and it was found by the nurse that the child had a small ringworm, about as large as a threepenny piece, on the abdomen, just above the left groin. When my attention was directed to it some days afterwards it was as large as a shilling, and gradually increased until it had attained an area half as large again. Under treatment it is improving.

I am, Sir, yours truly,

April 30th, 1886. PHYSICIAN.

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COPPER SALTS.

WRITING in a French Pharmaceutical journal, M. du Moulin states that sulphate of copper has been given by him to dogs in quantities of a drachm, and even more, without fatal results. Vomiting was produced; but after the lapse of some hours the animals appeared none the worse. The subacetate of copper also, which is commonly looked upon as a very poisonous substance, was given to dogs and rabbits daily in doses of from eight to fifteen grains for six weeks without causing any very serious results. The animals vomited for the first few days, but afterwards the tendency ceased and did not recur. The oxide and carbonate of copper have been administered to rabbits for a year without hindering growth. Compounds of copper with the fatty acids gave similar negative results. M. du Moulin has prescribed the sulphate of copper repeatedly in infantile sickness without producing any poisonous results.

A. W. L.—Tænia mediocanellata—the commonest form in this country—is derived from beef and (occasionally) mutton; tænia solium from pork. These two species are easily distinguishable.

HOODED GIG.

To the Editor of THE LANCET.

SIR,—In answer to a "Country Doctor," I may say I have used a hooded gig many years, and am now using a second. My experience is that the draught is much less than in a brougham. In meeting a strong wind the draught is felt at the back of the neck; and when it rains with a strong head wind, thorough protection from wet is not secured unless the head be brought well forward. I never have the hood up when driving against a strong head wind. I am, Sir, yours faithfully,

May 8th, 1886. M.D.

Surgeon.—We think—supposing that our correspondent's letter accurately represents the facts—that A and B have just cause to complain of the behaviour of C, who in courtesy ought to have made any complaints he had to make to A and B, the resident medical officers of the workhouse. We regret we have not space to insert the letter.

COTTAGE HOSPITALS.

To the Editor of THE LANCET.

SIR,—I am anxious to obtain the rules of cottage hospitals, and shall feel obliged by anyone sending them to me.

I am, Sir, yours faithfully,

Bocking, Braintree, Essex, May 10th, 1886. THOS. TAYLOR, M.R.C.S.

ERRATUM.—In the annotation headed "A Chemical Analysis Desirable," page 887, "Sutherland" has been printed in error for *Litherland*.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir William Mac Cormac, London; Mr. Charles Hawkins, London; Mr. Thos. Bryant, London; Mr. Gaunt, Alvechurch; Mr. Bowlby; Mr. Jessett, London; Mr. E. Ward, Leeds; Dr. A. M. Brown, London; Mr. Coode Adams, London; Dr. Cameron, Hendon; Dr. M. H. Tayler; Dr. R. Dawson; Dr. C. G. Monro, Penge; Mr. T. Ryan, London; Dr. Fenton Jones, London; Mr. C. S. Loch, London; Mr. Paulson, Loughborough; Mr. Ethelston; Dr. Edge, Manchester; Mr. Clarke; Mr. Bennett May, Birmingham; Mr. G. Fleming, London; Messrs. De Hoghton and Co.; Surg.-Major Hindley, Jeypore; Mrs. Dance; Dr. Fisher, Lytham; Mr. Berry, Wigan; Dr. Ashby, Manchester; Dr. Mabe White, London; Mr. Howard, Torquay; Mr. Taylor, London; Dr. C. Williams, London; Messrs. Bell and Sons, London; Messrs. Trehearne and Co., London; Mr. Van Praagh, London; Dr. Adams, West Malling; Mr. Morgan, Cleveland; Mr. Buck, Clapham; Messrs. Mann and Co., London; Dr. Prieger, Kreuznach; Messrs. Holbrook and Son, Portsmouth; Messrs. Slinger and Sons, York; Messrs. Hanton and Co., Stockton-on-Tees; Mr. Andrews, Stockport; Dr. Beissill, Acbeen; Mr. Northover, Finsbury; Mr. A. Tomes; Messrs. Isaacs and Co., London; Mr. A. B. Simpson, Birmingham; Messrs. Christy and Co., Fenchurch-street; Dr. Pasteur, London; Mr. Reginald Harrison, Liverpool; Dr. Sinclair, Dundee; Rev. H. Hawkins, Colney Hatch; Mr. Brembridge, London; Dr. Wyatt, London; Mr. Mayo Robson, Leeds; Mr. W. W. Jackman, Coggeshall; Messrs. Sumner and Co., Liverpool; Mr. T. Crewe; Mr. Shelly; Dr. Williams, Brynmeirig; Mr. Edwards, Harold; Mr. Smith, Kilburn; Messrs. Pegg and Co., London; Mr. Mellin, Peckham; Mrs. M'Lintock, Church Stretton; Dr. Wiglesworth, Liverpool; Messrs. Woolley and Sons, Manchester; Mr. Saunders, Manchester; Mr. Collins, Harrogate; Mr. P. Ness, London; Mr. T. Cooke, London; Messrs. Dixon and Sons, Sheffield; Dr. Suckling, Birmingham; Mr. Comyn, Exeter; Dr. Drury, Darlington; Mr. Rawlinson, Burnley; Messrs. Trübner and Co., London; Mr. Byrne, London; Dr. Henry, London; Mr. Backers, Chatham, U.S.A.; Mr. Leah, London; Dr. J. L. Andrew; Mr. H. Bramwell, Newcastle-on-Tyne; Mr. Macleod, London; Country; M.D.; Vigilans, Bath; Medicus; L.R.C.P.; Surgeon; A Member prior to 1860; M.B. Edin.; Matron, Ryegate; Hope; M.D., Upper Edmonton; W. G., Hemel Hempsted; A. S. W., Kensington; P. W., Yarmouth.

LETTERS, *each with enclosure*, are also acknowledged from—Sir Henry Thompson; Dr. Black, Cronford; Dr. Sanders, Exminster; Rev. W. Lane, Belton; Mr. Shirley, Stoke-on-Trent; Mr. Robinson, Sunderland; Mr. Stenhouse, Glasgow; Mr. Leckie, Pontypridd; Mr. Fox, Birmingham; Mr. Sergeant, London; Mr. Paterson; Messrs. Leader and Sons, Sheffield; Dr. Duckworth, London; Messrs. Maythorn and Sons, Biggleswade; Mr. Brown, Westgate-on-Sea; Messrs. Keith and Co., Edinburgh; Mr. Mainwaring, Kensington; Messrs. Phillips and Co., Chester; Mr. Rosburgh, Weston-super-Mare; Mr. Palmer, Dublin; Mr. Armstrong, Manchester; Mr. Barton, Weston-super-Mare; Mr. Fyte, Minchinhampton; Messrs. Maclachlan and Co., Edinburgh; Dr. Eberle, Thirsk; Mr. Fuge, Taunton; Mr. Ellis, Scarboro'; Mr. Watson, Yarmouth; Mrs. Ernst, London; Dr. Collier, Great Yarmouth; Mr. Smailes, Grosmont; Mr. De Luttichau, Ipswich; Dr. Hill, Bayswater; Mrs. Flyer, Gloucester; Mr. Beaman, Newton-le-Willows; Mrs. Thomson, Oldham; Messrs. Edmunds and Co., Walbrook; Mr. Rhodes, Manchester; Mr. Thomson, Luton; Mr. Kinder, Leicester; Mr. Davenport, London; Dr. Sinclair, Dundee; Dr. Mears, North Shields; Mr. Jeffrey, Eastbourne; Messrs. Cripps and Co., Hammersmith; Dr. Williams, Lincoln; Messrs. Porteous and Co., Glasgow; Dr. Howard, Orphen; Messrs. Parsons and Co., Addiscombe; Dr. Bradshaw, Banbury; Secretary, Highgate Hospital; Medical, Dronfield; Surgery, Ipswich; T. H. H., Derby; Medicus, Falmouth; G. W., Manchester; Surgeon; F.R.C.S., London; C. G., London; A. W., Whitby; Medicus, Nantwich; Lady Superintendent, Burton-on-Trent; E. D., Manchester; A. B., Walsall; N. P., Southport; A. N., Bournemouth; Veritas, Dublin; Fides, Dublin; Dee, Worcester; H. H., Southsea; J. M. R.; Gamma; M.R.C.S., Merthyr Tydvil; Omega, Brighton; M.D., Dulwich; Z. A., Clapton; P. N., Islington; Dispen.; W. W.; M. S.; P., Selby; C. A., Bristol; M.D., Kensington; R. A.; Tower.

Hull News, Hampshire County Times, Melbourne Argus, Hastings and St. Leonards Observer, Scottish News, Healthy Life, &c., have been received.

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ABSTRACT OF A

Clinical Lecture

ON THE

CONNEXION BETWEEN SCARLET FEVER AND HEART DISEASE.

By HENRY ASHBY, M.D. LOND., M.R.C.P.,

PHYSICIAN TO THE GENERAL HOSPITAL FOR SICK CHILDREN, MANCHESTER; LECTURER ON DISEASES OF CHILDREN, VICTORIA UNIVERSITY.

GENTLEMEN,—In taking the medical histories of our patients here, we often find that parents will insist that their children "have never been well since they had scarlet fever," and there is often much truth in this, inasmuch as this fever is apt to leave behind it not only enfeebled health, but various sequelæ which may be a source of annoyance or even risk for many years. On the other hand, an attack of scarlet fever, with its danger to the patient and inconvenience to the household, is likely to impress itself on the memory of parents, and is apt to get the discredit of after-coming troubles, with the production of which it may have had no share. Scarlet fever has been blamed in a casual and indefinite sort of way with giving rise to heart disease, and it may be worth while for us to review the subject by the light of the clinical and pathological records of nearly 900 cases which have passed through the scarlet fever wards of this hospital during the last five years.

The first question that naturally suggests itself when considering this connexion is—What relation does rheumatism bear to scarlet fever, or rather what part does the virus of the fever play in exciting or predisposing to an attack of rheumatism? Misconceptions here are very easy, for the commonest form of joint affection which complicates scarlet fever in children is a form of synovitis which is doubtfully rheumatic in character and is not often accompanied by endocarditis. In twenty cases of scarlatinal synovitis which have come under my care, in no one was there evidence of endocarditis, though in one there was a temporary pericarditis and in another pleuro-pericarditis. These attacks differ in several ways from acute or subacute rheumatism; they are more fugitive in character, rarely recurring or returning to a joint when once it has left, and exhibiting an especial tendency to attack the synovial membranes on the backs and palms of the hands, finger-joints, soles of the feet, and cervical vertebræ. The attacks mostly take place from the seventh to the ninth day of the fever. Nearly all these attacks of synovitis occur in cases in which the temperature is maintained longer than usual on account of severe inflammation of the cervical glands or ulceration of the tonsils or palate. These attacks of synovitis are certainly commoner in some epidemics than in others. But, apart from synovitis, attacks indistinguishable from true rheumatism are liable to occur at the end of the third or during the fourth week, much at the time that nephritis is liable to supervene. My own experience is that this post-scarlatinal rheumatism is commoner in young adults than in children, and indeed I believe it to be rare among the latter. Endocarditis is by no means uncommon in these attacks. It also happens that an attack of scarlet fever occurring in a patient convalescent from rheumatism has given rise to a relapse. I have seen this on several occasions among children who have been admitted to the general wards for subacute rheumatism, and who have contracted scarlet fever. In three of my cases pericarditis or joint pain occurred within a few days of the onset of the fever. In what way the poison of scarlet fever determines a relapse in these cases I am unable to say; I can only record the fact.

There is another complication of scarlet fever which is, I believe, a not infrequent cause of cardiac lesions, and that is nephritis. Probably a certain amount of dilatation of the left ventricle, with more or less compensatory hypertrophy, occurs in most cases of scarlatinal nephritis of any severity, and may certainly take place within a week, as can be demonstrated by examination of the apex beat. Both endocarditis and pericarditis may take place, and embolism occasionally occurs. Peri-endocarditis may also accompany the pyæmia which occasionally complicates scarlet fever; but as these cases are almost certainly fatal, it can hardly be said to produce heart disease. It will perhaps be worth while to refer separately to the different lesions which may occur.

Pericarditis.—The tendency to the production of pericarditis in uncomplicated cases of scarlet fever is not great. Litten has stated that dry pericarditis of short duration, without complaint of pain or any very obvious symptoms, is commoner than is supposed; and in this I am inclined to agree with him, as on several occasions I have noted a pericardial rub, lasting a few days and again disappearing without any signs of effusion. In two of my cases of scarlatinal synovitis there was a pericardial rub detected, and in one there was evidently some local pleurisy. In three cases of undoubted rheumatism already referred to, two of which were convalescent from an attack when scarlet fever supervened, suffered from pericarditis within a week of contracting the fever, and all three died in the course of a few weeks. All had suffered from chronic heart disease prior to the attack. Pericarditis also occasionally accompanies both pleurisy and mediastinitis in connexion with the septicæmic state so common in severe cases of scarlet fever. Thus it not infrequently happens that, in fatal cases attended with much suppuration of glands and cellulitis about the neck, pus burrows downwards from the deep cervical glands into the anterior mediastinum, and an effusion of lymph takes place in this situation, and possibly also a suppurative pericarditis or empyema. If recovery take place in such cases, this inflammatory process in the mediastinum may lead to matting and cicatrisation of the fibrous tissue and consequent pressure on the great vessels, especially the inferior vena cava and hepatic veins, giving rise to impeded hepatic circulation and perhaps hypertrophic cirrhosis. Pericarditis occasionally occurs in nephritis.

Endocarditis.—There is very little post-mortem evidence of endocarditis occurring in cases of scarlet fever dying during the course of the disease itself. I have examined the heart in upwards of 100 fatal cases of scarlet fever, and have never seen either endocarditis or pericarditis in any case uncomplicated with nephritis. The edges of the mitral valves are mostly irregular and nodular, and more or less thickened, probably in consequence of a swelling of the fibrous tissue elements between the layers of endocardium, but the surface of the latter is smooth and shiny, and has evidently not been the seat of endocarditis. The above condition is by no means uncommon in other febrile states, and is not peculiar to scarlet fever. This experience, I believe, agrees with others, though both Litten and Henoch have published cases in which ulcerative endocarditis was found post mortem associated with caries of the petrous portion of the temporal bone, purulent meningitis, thrombosis of veins, and pyæmic abscesses, complicating scarlet fever. If the post-mortem evidence is negative, what facts can be gathered from clinical observations? It must have occurred to all who have seen much of scarlet fever, or indeed of any febrile disease in children, to note murmurs, or at least abnormal cardiac sounds, during the height of the fever, which for the most part are systolic, are heard best in the mitral area, but also at the base, but not in the axilla. The first sound at the apex is frequently elongated, or not so clear and distinct as normal. Some authors have not hesitated to claim these bruits or murmurish first sounds as evidence of a scarlatinal endocarditis. Thus Picot, in the article on Scarlatina in the *Nouveau Dictionnaire de Médecine et Chirurgie*, says, in speaking of endocarditis, "the attacks are light, readily escape observation, and are easily healed." When some years ago I began to constantly examine the hearts of scarlet fever patients, I was struck with the frequency of abnormal heart sounds, and believed at first they were due to endocarditis. But the evidence afforded by the post-mortem room, and the careful following up of cases during convalescence, convinced me that the murmurs heard were only functional, and, whatever might be their cause, they were not due to an organic lesion. There are, however, a few cases on record in which the evidence is tolerably strong that endocarditis did occur during the course of, or during convalescence from, an attack of scarlet fever. Thus Litten[1] relates the case of a man aged twenty-one, who was admitted to hospital on the eleventh day of an attack of scarlet fever;

[1] Charité Annalen, vii., p. 136.

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he appears at this time to have been convalescent, and his principal complaint seems to have been perforation of the membrana tympani; fourteen days afterwards he complained of pain in the chest with feverishness, and the day following a pericardial friction sound was heard; three days later this had disappeared, and a systolic bruit was heard at the apex; this latter persisted, and two years later the patient was evidently suffering from chronic valvular disease. It must, however, be noted that the endocarditis in this case occurred during the fourth week, which is the usual time for post-scarlatinal rheumatism to supervene. Henoch mentions in his lectures the case of a boy, aged six years, who developed a systolic bruit at the end of the second week of an attack of scarlet fever, which remained for two months and then disappeared.

I have already referred to the fact that in cases of scarlatinal synovitis, although bruits were heard in several of them, these were only temporary, and afforded no sufficient evidence of endocarditis. Endocarditis does unquestionably occur in the post-scarlatinal rheumatism, which sometimes supervenes during the third or fourth week of the attack of the fever, and when the patient is fully convalescent. In two cases of malignant endocarditis under the care of my friend, Dr. Massiah, of Didsbury, in which the joint symptoms were slight but the cardiac severe, which followed during convalescence from scarlet fever, fatal results occurred in the course of four or five weeks. Ulcerative or malignant endocarditis, either with or without joint pain, seems occasionally to follow scarlet fever.

Endocarditis is undoubtedly a not infrequent complication of scarlatinal nephritis. I have noted this post mortem in three cases. In one of my cases an anæmic girl of nine years was admitted with albuminuria and œdema of face, with a history of a previous attack of scarlet fever. There was præcordial pain, dyspnœa, and a loud, almost musical, systolic bruit; there was also an enlarged spleen and intermittent fever. Shortly before her death she suffered from severe pain in the head, paresis of the right arm, optic neuritis, and retinal hæmorrhages. At the post-mortem the kidneys were enlarged, the cortex pale and fatty; there was extensive endocarditis, the mitral valves and posterior wall of the left auricle being covered with granulations, and a small aneurysm, evidently embolic, on the left middle cerebral artery. In a second case, which died three weeks after the onset of the nephritis, a deep ulcer was found involving one aortic valve; no bruit had been heard during life. In a third case, of a girl aged six years, who died three weeks after the onset of the nephritis, both pericarditis and endocarditis, the latter consisting of nodules of fibrin on the aortic valves, were found. A pericardial friction sound, but no distinct murmur, was heard during life. In addition to the post-mortem evidence of the existence of endocarditis in scarlatinal nephritis, there is the hardly less convincing evidence afforded by clinical observation, more especially that of the onset of hemiplegia due to embolism coming on during convalescence. Such cases have been recorded by Bristowe,[2] T. Barlow, Semple, and Finlayson. In Semple's case[3] the hemiplegia seems to have supervened some twelve weeks after the onset of the nephritis, and when the patient had been up and about. It is important to note that murmurs were not to be heard in several of these cases. In several of my cases of nephritis bruits have been detected during life and endocarditis diagnosed, but no endocarditis found at the post-mortem, only a dilated left ventricle. In other cases which recovered murmurs were also existent, and which were present when they left the hospital. It is not certain what is the cause of endocarditis in acute nephritis; the uræmic condition of blood seems to predispose to inflammation of serous membranes—as the pleura, pericardium, and peritoneum; and the high tension in the bloodvessels, by bringing about a "banging" action of the valves, would seem to give rise to a greater irritation of the endocardium than during their normal closure.

Degeneration of the muscular walls. — In most fatal cases of scarlet fever the muscular walls of the heart are pale and flabby, and the endocardium on the musculi papillares and interior of the ventricles is mottled in appearance, presenting typical "tabby cat" degeneration. The paleness of the walls is due to the presence of minute particles of fatty or granular matters in the muscular fibres, a change very similar to that occurring in all the organs. I have not seen any cases with the indurated or leathery condition of the heart muscle described by Litten.

Dilatation and hypertrophy of the heart without valvular lesions.—In long-continued pyrexias the muscular walls of the heart are apt to be damaged, and the cavities in consequence to become dilated. That this occurs to some extent in scarlet fever is probable, such hearts being found pale and flabby, and the cavities apparently having yielded more or less when contracting on their contents, though I have never seen any marked dilatation or hypertrophy. When, however, in addition to a disturbed nutrition of the muscular fibres, the blood-pressure rises as it does in acute nephritis, there is a frequent and very marked yielding of the walls of the heart, so that the cavities become dilated. As the high tension in the vessels affects all the cavities more or less, they are all found more or less dilated, though naturally the cavity to suffer most is the left ventricle. The amount of hypertrophy which follows depends upon the chronicity of the case and the nutritive powers of the patient. The full significance of this cardiac dilatation and its tendency to produce dyspnœa and sudden death has only been recognised by recent writers, such as Goodhart, Friedländer, and Silbermann. In the most severe cases of nephritis, dilatation may take place very quickly, so that it may be possible in the course of a few days or weeks to see a marked change in the position of the cardiac impulse, the impulse being first noted inside the nipple line, then actually on the line, and later still outside. This dilatation may occur without the presence of a murmur, though in other cases I have noted murmurs when the post-mortem showed there was no endocarditis. There can be little doubt that this dilatation occurring during an attack of nephritis may be perfectly recovered from, the cavities returning to their normal size after the nephritis has passed away and the health completely restored. This is illustrated by one of my cases, a boy of eleven years, who was admitted with acute scarlatinal nephritis, in whom the cardiac dulness was increased in breadth, the apex beat being diffused in the sixth and seventh spaces, partly external to the left nipple line, and who had attacks of orthopnœa, especially at night, with a cantering action of the heart. Later there was some basic pneumonia, much enlargement of the liver, and temporary amaurosis. There could be no doubt that both sides of the heart were dilated. He finally recovered under the use of digitaline and ether given subcutaneously. The albuminuria gradually disappeared, and when seen two years and a half afterwards he was doing heavy work in a shop, and an examination of his heart showed that the cardiac dulness and apex beat were normal. In another case, that of a boy aged eleven years, who was admitted with acute nephritis, after having walked a couple of miles to the dispensary, dyspnœa set in a few hours after admission, which quickly ended fatally. At the post-mortem all the cavities of the heart were dilated, and there was no endocarditis. In another case, that of a boy aged six years, admitted with acute nephritis, the cardiac dulness extended one inch to the left of the nipple line; the impulse was diffused, partly in the epigastrium and partly in the left nipple line, and there was a well-marked murmur heard at the apex and in the axilla. Two days after admission he was seized with urgent dyspnœa, vomiting, pallor of the face, and much distress, and died in a few hours. At the post-mortem both sides of the heart were dilated, the walls of the ventricles were very thin and pale, and there was no endocarditis or valvular lesion. Such cases are far from uncommon, cases being reported by Goodhart, Silbermann, and Baumgarten, and I have myself seen nine or ten, which ended fatally. Various authors have ascribed the symptoms and fatal issue to œdema of the lungs or thrombosis of the pulmonary artery. That general œdema is very often present is certain, but it is not always so, and œdema of the lungs is clearly not the primary cause of the fatal issue, but is the result of the gradually failing heart. The pathology of such cases is tolerably clear: the nutrition of the heart suffers in consequence of the uræmic and anæmic condition of the blood, while it has to carry on the circulation with an obstruction to the passage of blood through the arterioles of the kidney and elsewhere. The heart is like a badly fed and over-driven horse, who first staggers under the weight of its load, and then suddenly falls exhausted beneath it.

To sum up the connexion of scarlet fever with heart disease I may submit the following:—1. In uncomplicated cases of scarlet fever lesions of the heart are very rare.

[2] Theory and Practice of Medicine, 4th edition, p. 1042 (note).
[3] Medical Press and Circular, Dec. 3rd, 1884.

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2. Endocarditis is quite exceptional in scarlatinal synovitis; pericarditis occurs more frequently. 3. Acute or subacute rheumatism occasionally supervenes during convalescence from scarlet fever; an attack of scarlet fever may also be the exciting cause of a relapse; in such attacks peri-endocarditis is frequent. 4. Peri-endocarditis occasionally occurs in scarlatinal pyæmia. 5. Dilatation without valvular disease very frequently occurs in scarlatinal nephritis; peri-endocarditis and embolism are by no means uncommon.

TWO CASES OF AMPUTATION OF THE PENIS FOR EPITHELIOMA,

BY PEARCE GOULD'S MODIFICATION OF THIERSCH'S OPERATION.[1]

BY FRED. B. JESSETT, F.R.C.S. ENG.,
SURGEON TO THE CANCER HOSPITAL.

THE following two cases were admitted under my care at the Cancer Hospital. They were both men over seventy years of age, and in very enfeebled health. One man was operated upon on Dec. 8th, 1885, and the other as lately as Feb. 9th of this year.

CASE 1.—J. W——, aged seventy, a compositor, was admitted into the hospital on Dec. 5th, 1885, suffering from epithelioma of the penis. Five years ago he had ulcers on his legs; otherwise he has enjoyed fairly good health until two years since. No specific history. Has been a hard drinker. Father and mother died of old age; an uncle on the father's side died of cancer of the mouth. Seven months previously the patient first noticed a small red pimple on the lateral aspect of the middle of the penis, which has grown very rapidly until the present time. Experiences very great pain, but has no difficulty in micturition.

State on admission.—He has a large fungating and offensive growth on the penis, reaching quite to the root; the glands in the groins are slightly enlarged—none, however, larger than a small bean; and as these are so in both groins, probably they are only sympathetic, but not diseased. The patient is much debilitated in health, and has chronic bronchitis; he is most feeble and decrepid; notwithstanding this, however, as the disease is giving him so much pain, and there is considerable discharge of a most offensive character, it was decided to remove the diseased organ.

On Dec. 8th, the patient, being fully under the influence of ether, was placed in the lithotomy position, the legs being supported by Clover's crutch. The pubes being shaved, a circular incision was made round the root of the penis, and another incision extended from the lower part of this along the line of the raphé of the scrotum well into the perineum, and the two halves of the scrotum separated quite down to the root of the penis. A catheter was now passed into the bladder, and the corpus spongiosum divided about an inch and a half above the bulb by passing the blade of a knife between it and the corpora cavernosa. The catheter being removed, the urethra was divided from behind forwards. The corpus spongiosum with the urethra were now dissected carefully from the body of the penis as far back as the triangular ligament. This part of the operation being finished, I seized the penis and dragged it well forwards and downwards, and with a pair of scissors divided the suspensory ligament and tissues around, as far as the rami of the pubes. I then with a periosteal raspatory separated the crura from their attachments. The whole body of the organ now being removed, I caught up and ligatured the few bleeding vessels. The hæmorrhage, however, in both this and Case 2 was quite insignificant. The urethra was next slit up on its under side for about half an inch, and carefully stitched to the lower angle of the wound. Having washed the wounded surface out with a solution of carbolic acid, and dusted the raw surface over with iodoform, I inserted a drainage-tube in the lower angle, and united the margins of the wound with a few interrupted sutures and a continuous horsehair suture. The parts were then dusted over with iodoform and enveloped with salicylic wool, and the patient returned to bed.—Dec. 9th: Patient has passed a good night and micturated twice. No catheter was introduced into the bladder, and the man has complete control over his urine.—10th: He passed a bad night, due to excessive coughing, and also has great pain in passing urine, but no difficulty. Temperature last night 101°, but has fallen this morning to 100°. The scrotum is becoming discoloured (ecchymosed). He continued to improve from this time, and on the 15th the stitches in the upper part of the wound were removed. In the centre of the incision is a small slough, but the rest of the wound looks healthy, and at the upper part it has united by the first intention; there was some slight cellulitis, which has, however, all disappeared, and the whole part looks healthy, with the exception of the urethra and corpus spongiosum, which are sloughing.—28th: Wound has quite healed excepting where the slough came away at the lower angle; here there are healthy granulations; the corpus spongiosum has entirely sloughed away.—Jan. 10th: There is a hard painful swelling between the urethra and anus, evidently containing pus, probably due to urinary infiltration; this was freely opened, and a quantity of pus escaped; pus also flowed from the orifice of the urethral opening, and on injecting a solution of sulphurous acid into one opening it escaped by the other. The opening in the perineum gradually closed, and the urine now flows in the newly formed channel. The man is now quite well, but owing to the sloughing of the corpus spongiosum there is some contraction of the urethra; this, however, I do not at present intend to interfere with.

May 12th.—I saw this man a few days since. The wounds are almost imperceptible. He passes urine in a good stream. There is no sign of recurrence, and the glands in the groins have disappeared.

CASE 2.—J. W——, aged seventy-four, butler, was admitted into the Cancer Hospital on Feb. 8th, 1886, with epithelioma of the penis. He has been a healthy man. No specific history. Mother's relatives phthisical. Has had contraction of the prepuce all his life. No history of cancer in his family. On account of the contraction of the prepuce he had it slit up some twelve years ago. Six months since the patient noticed a small spot near the frænum, and consulted a medical man, who applied caustic to it, which appeared to reduce the growth, but it rapidly increased afterwards. Has had a good deal of pain and irritation from it.

State on admission.—There is an ulcerating mass extending over the glans penis and partly down the body of the organ; it does not interfere with micturition, but is very painful. The base of the mass is hard, and the surrounding parts deeply indurated. The inguinal glands are not affected. He has an old inguinal hernia on the right side, for which he wears a truss.

On Feb. 9th, the patient being placed under ether, the penis was removed by an operation similar to that described in the last case.—10th: There was a good deal of oozing during the night, and this morning there is a quantity of blood-clot between the lips of the wound. Temperature 101°. Patient can pass urine quite freely, but complains of frequent desire to micturate.—11th: Scrotum a good deal discoloured. There is no sign of any sloughing. The patient still complains of great pain and frequent desire to micturate.—12th: Temperature normal. Has slept well. Pain during micturition less, and desire not so frequent. Swelling of scrotum subsiding, and natural colour returning. The stitches at the lower part of wound have given way, and a small slough has formed.—18th: Some considerable sloughs have come away from the wound, and there is a good deal of discharge.—24th: The lower part of the wound now looks healthy and is granulating well. Micturition causes no pain, although the desire to pass urine is somewhat frequent; but probably this is not more so than is to be anticipated in a man of his age.—March 15th: Discharged. Wound healed, and the patient is able to pass urine without difficulty.

Remarks.—These two men are now convalescent. The patient in Case 1, when I first saw him, was a miserable-looking man, completely worn out by chronic bronchitis, pain, and the profuse stinking discharge from his penis. His cough, which was most troublesome, has now considerably improved, and, in fact, he hopes shortly to return to his employment. Mr. Pearce Gould's case, reported in THE LANCET of May 20th, 1882, and these two are the oldest patients on whom I have been able to find this form of operation performed, and although in the first case I hesitated before subjecting the man to such a severe operation, yet I felt that if left alone he would gradually succumb to the disease. The best plan of dealing with the urethra in all cases of amputation of the penis has been a vexed question from time immemorial,

[1] Paper read at the meeting of the Medical Society of London, March 22nd, 1886.

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and although many suggestions have been made so as to prevent its retracting when dealt with in conjunction with the stump of the amputated penis, it was not until Professor Thiersch, of Leipsig, adopted the plan of bringing the urethra through an opening in the perineum that any real advantage was obtained. The operation, as suggested and practised by this surgeon, was planned with a view of splitting the scrotum down the middle, sufficiently far to allow of his dissecting the urethra and corpus spongiosum away from the body of the penis, and then making a button-hole in the perineum about an inch and a half in front of the anus, bringing the divided urethra through the opening and fixing it there by a few sutures. He then contented himself with slicing the corpora cavernosa off close to the pubes and stitching up the wound. This operation has been performed by many English surgeons[2] with marked success, and undoubtedly the position of the urethra in the perineum has been the source of the greatest comfort to patients who have had the misfortune to be obliged to part with this important organ. Sir William Mac Cormac in February of last year showed a man at the Medical Society of London in whom he had amputated the penis in this fashion, and he has lately published five other cases, in all of which the most favourable results have been obtained. Mr. Wheelhouse, of Leeds, has also recently published two cases in which he had operated in a similar manner with equally happy results. We have, then, eleven cases here recorded of this method of amputation, all of which have been successful.

Mr. Pearce Gould, however, is the first surgeon who seems to have recognised the importance of removing the whole corpora cavernosa from their attachments to the rami of the pubes and ischium, and in order to accomplish this he suggested a slight but important modification of Thiersch's method, so as to enable him to have sufficient room to more readily detach the crura of the corpora cavernosa. He therefore adopted the plan of splitting the scrotum completely from the root of the penis to the perineum and as far back as the triangular ligament. By this means the body of the penis is brought into view for its whole length, and after about an inch and a half of the corpus spongiosum with the urethra are dissected from the cavernosa there is no difficulty in detaching the crura from their attachments by means of a raspatory. The urethra then is split along the lower border and fastened to the lower angle of the incision, as described above. I think this operation of Mr. Gould's is founded on more scientific grounds than that of Thiersch, because there is infinitely less likelihood of the disease recurring in the cicatrix or stump if the whole of the corpora cavernosa are removed than if the root of the penis is allowed to remain, and I consider this operation is a very decided advance in the surgery of these parts. In my first case the corpus spongiosum sloughed and caused great difficulty in keeping the opening for the passage of the urine patent. This may probably be accounted for by the age and debilitated condition of the man. It is a noticeable fact that both patients had complete control over their bladders from the time of the operation, and in neither case did I introduce a catheter at the time of the operation.

One important question, I think, arises in these operations of the removal of the penis in middle-aged or young men, and that is, What course should the surgeon adopt in regard to the testes? Mr. Wheelhouse has drawn attention to this point in the two cases he has recorded: in one the testes were involved in the disease, and were removed at the same time as the penis; in the other, the testes were free from disease and were left. These two men were inmates of the hospital at the same time, and occupied adjoining beds, and therefore had an opportunity of comparing notes. The one in whom the testes were removed made an uninterrupted recovery, and expressed himself as feeling completely relieved in every way; the other, however, although he made a good recovery, was a martyr to the physiological action of his testes, which were a constant source of annoyance to him, and he still remains a prey to desires which he can never gratify. I think everyone will admit that the condition of the former patient was certainly more satisfactory and perfect than the latter. This perhaps is one drawback to the special form of operation now being discussed, as by the old method, so long as any portion of the penis remained, the question of removing the testes need not arise. On the other hand, however, I am strongly of opinion that the immunity from recurrence in the stump is of far more importance than this minor inconvenience to the patient. Therefore, in performing amputation of the penis in men under fifty years of age, this point should be fully laid before them; and as the risk to life by loss of the testes is not materially increased, we should rather advise their removal. As to the advantages of bringing the urethra through the perineum, they are so manifest that they require little comment from me. There is no doubt that the comfort of the patient is considerably enhanced by having the opening of the urethra in such a position that he can sit down in comfort, and micturate without the urine passing over his scrotum and thighs. In one of Sir W. Mac Cormac's cases the patient even got over the difficulty of having to sit down to urinate, as he contrived a tin pipe like the spout of a teapot which fitted comfortably underneath between his legs, and there was not the slightest difficulty in passing urine in the ordinary manner. No doubt, therefore, surgical instrument makers can easily contrive something of a similar fashion.

I think the operation as suggested by Mr. Gould and practised by me in these two cases has this advantage over Thiersch's operation—that it enables the surgeon to make a complete dissection down to the triangular ligament, thus giving ample room for detaching the crura of the corpora cavernosa from their attachments, allowing the deep parts to be thoroughly drained, and preventing any fear of bagging of serum or pus. Moreover, undoubtedly the fear of retraction or contraction of the urethra is not nearly so great as in the old operation of amputating the penis by a sweep of the knife, or of the more modern fashion of forming flaps to cover the end of the stump, and leaving the urethra sufficiently long to pass through and be fastened to them.

[2] I am reminded by Mr. Davies-Colley that Professor Humphry, of Cambridge, practised a similar operation to that described by Thiersch as early as the year 1870.

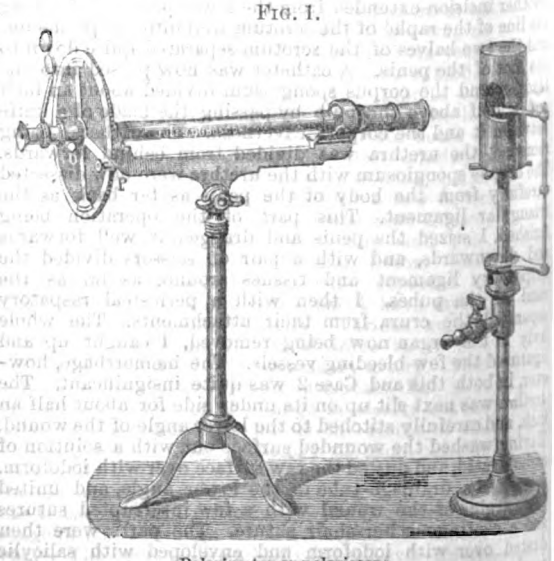
ON THE

COMMON ORIGIN OF DIABETES AND THE URIC ACID DIATHESIS.

BY DR. DEBOUT D'ESTREES,
OF CONTREXÉVILLE.

THAT diabetes and the uric acid diathesis have a common origin is not a new idea. The subject has been discussed by many writers, some upholding, others opposing, the theory. My own experience classes me with the first, because in all the cases of diabetes brought under my notice at Contrexéville since my appointment in 1868 I have seen the sugar during treatment give place to an excretion of uric acid.

FIG. 1.



Polarimeter or polariscope.

The examination of each sample of urine has on every occasion been carefully made by myself with both microscope and polarimeter (see Fig. 1), the latter instrument giving the proportion of contained sugar with the greatest

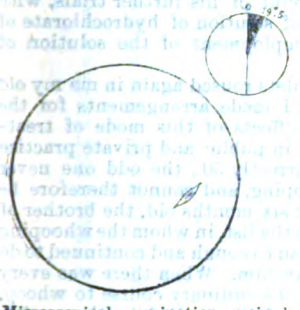
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accuracy. Some of my last observations were made with Dr. Cruise, President of the College of Physicians of Ireland; and it is, indeed, at his suggestion that this paper has been written.[1]

Dr. Marchal de Calvi, in a work entitled "Observations sur les Accidents diabétiques," published in 1864, writes: "The most obvious factor in the morbid *processus* of diabetes is the influence of the uric acid diathesis," and my experience at Contrexéville leads me more than ever to share his opinions as to the connexion of diabetes with gout and gravel. The following cases will, I think, corroborate these views. They are taken from my last season's note-book, and refer exclusively to patients sent me by British and Irish physicians.

Mr. V——, a gentleman fifty-six years of age, came to me on July 8th, 1885. He had been suffering for three years from polyuria and polydipsia. His sight was affected, there was a loss of power in the lower limbs, and an almost total insomnia existed. There was no gout or gravel in his family. For six months before his arrival at Contrexéville he had been under the care of Dr. Chepmell, and the treatment, mainly dietetic, had reduced the quantity of urine

FIG. 2.



Microscopical examination: a single epithelial cell. Polariscopical examination: 19·5° = 42·90 grm. of sugar per 1000.

FIG. 3.



Microscopical examination: some uric acid crystals. Polariscopical examination: 5° = 11·00 grm. of sugar per 1000.

FIG. 4.



Microscopical examination: abundant crystals of uric acid. Polariscopical examination: negative; no sugar.

passed in the twenty-four hours from four pints and a half to three pints, with at the same time a fall in the specific gravity from 1045 to 1038. The amount of sugar per litre was 42 grammes (4·2 per cent.). There was no albumen and no deposit. The treatment consisted in drinking from one to two litres of water from the Pavillon spring in the course of the day, with the addition after July 15th of cold douches of short duration. On the 17th an examination of the urine passed at bedtime and on getting up in the morning showed a specific gravity of 1024, and ten grammes per litre (1 per cent.) of sugar, while with the microscope *crystals of uric acid were discovered for the first time.* (See Figs. 2, 3, and 4.) The quantity of mineral water consumed daily was doubled, and on August 3rd the polarimeter showed that no sugar existed, but a red deposit visible to the naked eye afforded evidence of the excretion of a large quantity of uric acid. The patient was then entirely free from thirst and insomnia, and before leaving Contrexéville was able to walk eight miles a day. A better idea of these changes will be obtained by reference to the drawings taken from nature by means of the camera clara.

If space permitted I could quote a great many cases like the above, but this would involve a vain repetition. I wish, however, to insist particularly on this clinical fact, that in *all* the cases of diabetes which I have treated at Contrexéville the diminution or disappearance of the sugar has coincided with the appearance or with the increase of uric acid crystals in the urine. At the same time the glycosuria may coexist with the excretion of uric acid, and of this clinical truth the following two cases are illustrative:—

Mr. M——, aged forty-six, a man of robust health, and weighing ninety-nine kilogrammes, came to me on the 2nd of June in consequence of pains in the loins, which had recurred at irregular intervals during the six preceding years, the attacks lasting five or six days. For two years he had suffered from violent thirst. Micturition was frequent, five or six times during the night. The urine on June 4th was amber-coloured, slightly cloudy, of specific gravity 1040, contained 10 per cent. of sugar, and the microscope showed that the cloudy deposit, simulating mucus, consisted exclusively of minute crystals of uric acid. On June 11th the specific gravity was 1022; quantity of sugar 2·5 per cent. On the 18th the specific gravity was 1015; no sugar, but abundant red uric acid sediment. The nocturnal micturition had ceased.

Mr. X——, an Australian gentleman, was sent to me by Dr. Cruise with the following diagnosis: Irritable bladder; no stone; a little sugar in the urine. Dr. Cruise, who came to Contrexéville during this patient's stay, was able himself to verify the results of my analyses. In the first sample examined on Aug. 12th, globules of pus, a few epithelial cells, and crystals of uric acid were seen under the microscope. On the 28th of the same month crystals of uric acid alone remained, all traces of sugar having disappeared, the specific gravity being 1015.

That a low specific gravity does not always imply absence of sugar, nor a high specific gravity prove its presence, are clinical facts of which I have seen many illustrations. Without going further back than last summer, I may refer to a patient of Dr. Ramskill's who came to Contrexéville on July 11th with urine of a specific gravity of 1031, containing crystals of oxalate of lime, but no sugar. By the 29th of the same month the specific gravity had dropped to 1015, and crystals of uric acid alone were visible.

Another case came under my observation on July 12th—a patient of Dr. Hermann Weber. The specific gravity of the urine was 1030; crystals of oxalic acid were also present, but no sugar; and here by Aug. 3rd the specific gravity had fallen to 1012, and uric acid crystals alone were to be seen.

On July 17th, in a patient of Dr. Matthew Baines, who was non-diabetic, I found a specific gravity of 1029 and a number of oxalic crystals. A like specific gravity existed in the urine of a patient sent me by Mr. Buxton Shillitoe on August 14th, and in both cases the high density disappeared and uric acid took the place of the octohedral crystals. I also saw the same change under the influence of the waters last season in a lady sent me from Paris; here the specific gravity was 1034, with oxalate of lime, but no sugar.

The inference must not, however, be drawn that a high specific gravity always accompanies crystals of oxalate of lime, for in a patient sent me last year by Sir Andrew Clark, suffering from marked symptoms of oxalic gravel, the specific gravity was only 1020, though the microscope detected quantities of oxalate of lime. Nor must it be inferred that a low specific gravity is incompatible with the presence of sugar—e.g., the case of a lady in whom in 1879, during an obstinate attack of bronchitis, Dr. Wilson Fox had detected diabetes, and made the subjoined urinary analyses in 1880 at Contrexéville:—

		Sp. gr.	Albumen.	Sugar.
Aug. 20th	Morning	1022	0·40	22·0 grammes
	Evening	1026	1·30	35·20 "
" 26th	Morning	1015	0·30	15·40 "
	Evening	1017	0·50	17·60 "
Sept. 3rd	Morning*	1010	Traces	None
	Evening	1010	0·25	Traces

* Uric acid crystals appeared under the microscope.

This case tends to show that a comparatively low specific gravity does not always counter-indicate the presence of sugar, but as I purpose making a special clinical study of the subject of albumen in the urine, I will not here enter upon its discussion.

[1] I am aware that Dr. Cruise of Dublin is about to read a paper before the Academy of Medicine in Ireland on the Estimation of Sugar in Urine by the Polariscope, and I expect that his communication will shortly be published.

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ON THE NATURE OF WHOOPING-COUGH;

WITH A DESCRIPTION OF A NEW MODE OF TREATMENT INTRODUCED BY PROFESSOR MONCORVO, OF RIO DE JANEIRO, AND ITS PRACTICAL RESULTS.

BY WILLIAM H. BARLOW, M.D.,

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(*Concluded from page 917.*)

THE idea of a parasitic origin for whooping-cough has been for a long time floating in the minds of physicians; and so long ago as 1867 I had myself, led to that way of thought by the then new doctrines of Lister and the results of his treatment of deep abscesses &c., treated large numbers of out-patients at the Manchester Hospital for Sick Children with carbolic inhalations, both in the form of spray (using a solution of 2 or 3 per cent.) and as vapour. But though the success was marked, circumstances occurred which caused me to discontinue this mode of treatment: the inhalation of the spray could not be effectually carried out, except under the supervision of a medical attendant, and in the case of hospital out-patients this was of course impossible; while the vapour was frequently allowed to become so strong as to produce great irritation, not only to the patient, but also to the healthy inhabitants of the house. Even when carefully regulated it was oftentimes too irritating to be borne, and in cases where there was bronchitic complication it was necessary at once to intermit the treatment. Indeed, the fatal result in a case complicated with broncho-pneumonia in a little relative of my own, and which seemed to me to be in a great measure due to the irritation caused by the vapour, was the immediate reason of my ceasing to use this means; this death took place in 1868. The practice common among the people of towns, of taking their children to the gas-works to inhale the vapours from the purifying tanks, points also in the same direction, and it is a common practice to inhale the fumes of gas-tar for the same purpose. Parrot[1] has used phenate of soda for the same purpose, and considers the carbolic acid as heroic, *if not specific*, in whooping-cough. Many other writers have used the carbolic acid and carbolates all over the world, and the results have always been favourable as to the whooping. In Belgium, Tordeus[2] has used benzoate of soda with success. Keuster has employed inhalations of thymol. The salts of quinine have been used with more or less advantage by many, particularly in America. Huebner found benefit from salicylate of soda, and Hildebrandt[3] from inhalations of petroleum vapour. All these experiences point in one direction, that of the parasitic origin of this disease; and all are more or less subject to one drawback, that when they are strong enough to be effectual as parasiticides they become injurious as irritants. It was this fact which led me so long ago to renounce the use of the most effectual among them, and it was this which led Professor Moncorvo, more happily, to that research which induced him to employ the substance I have already named, and the discussion of which I am about to enter upon. It is a congener of carbolic acid, which, however, is free from the irritating qualities of that substance. This is Resorcine, a substance which fills a position in the class of aromatics very near to that of carbolic acid. Andeer[4] and Callias and Dujardin-Beaumetz[5] have borne witness to the remarkable effect which resorcine exercises upon the organic ferments, even in small doses; and indeed the latter assert its superiority to carbolic acid in that respect. There are also the advantages of the much greater solubility of resorcine, of its less caustic properties, of its very slight odour, and of its infinitely less toxic qualities—all which, together with the scarcely less important fact of its slightly sweet taste, combine to render it much more suitable as a topical application than carbolic acid. These properties had led Professor Moncorvo to employ it for internal administration in diarrhœa, dysentery, and other diseases of children, even infants at the breast, before he essayed its employment in whooping-cough. But he lays great stress upon the perfect chemical purity of the specimens of the drug to be employed, and he prefers to use it in an aqueous solution of 1 per cent., which is the strength that I have used. The first applications, which are made by means of a large camel-hair pencil or a swab to the supra-glottic portion of the pharyngeal lining, to the opening of the glottis and the pharynx, generally increase the violence of the chinks and their number; but that soon subsides, and in the course of one, two, or three days, the patients tolerate the application, and the chinks rapidly decrease in number. It should be applied at intervals of two hours, both night and day, unless the child sleeps, in which case it should not be disturbed. In his treatise Dr. Moncorvo gives thirty cases, and of eighteen of these he gives complete details; and in a further account in the *Archivio di Patologia Infantile* of Naples for the months of May, July, and September, 1885, he gives a further series of forty cases; many of these were complicated with bronchitis and broncho-pneumonia, and many also were in children with strumous or syphilitic cachexia. In no case was the complication a cause of any difficulty in the treatment, a statement in marked contrast with the use of carbolic acid, or other of the parasiticide reagents which have been previously mentioned. The last post from Brazil brought me a little additional treatise from the pen of the Professor, containing an account of his further trials, with the result of the application of solution of hydrochlorate of cocaine previously to the employment of the solution of resorcine.

The perusal of these pamphlets roused again in me my old interest in the question, and I made arrangements for the study of the disease and the effects of this mode of treatment. I collected altogether in public and private practice 51 cases, or perhaps more correctly 50; the odd one never arrived at the stage of whooping, and cannot therefore be counted, but it was a child of six months old, the brother of one of the children included in the list, in whom the whooping was fully established. He began to cough and continued to do so for several days before I saw him. When there was every appearance of proceeding in the ordinary course to whoop, the solution was well and carefully applied by the mother to both children; the elder, who was whooping every half-hour, was so far improved that the whoops fell to three or four in the twenty-four hours; and the younger, the child in question, lost his cough altogether, and never whooped at all. Thus, then, I only count 50 cases, of which I have given a list, and from which I gather the following facts. There were in these 50 cases 19 males and 31 females, clearly showing the predominance of the disease in the female sex. The ages showed under six months 5 cases, under twelve months 5, under eighteen months 4, under two years 6, under three years 10, under four years 5, under five years 3, under six years 4, and under seven years 3. The length of time under treatment is: under two weeks, 2; under three weeks, 5; under four weeks, 11; under five weeks, 5; under six weeks, 8; under seven weeks, 10; under eight weeks, 2; under nine weeks, 3—total, 46: leaving 4 cases of which no account can be heard, but of which Mr. Mills, the assistant medical officer, reports that the probabilities are that they were cured: "I think you may say they are all cured: if they had died, I should have known about it." The total duration of disease is: under two weeks, 1; under four weeks, 2; under five weeks, 8; under six weeks, 3; under seven weeks, 4; under eight weeks, 5; under nine weeks, 2; under ten weeks, 4; under eleven weeks, 3; under twelve weeks, 3; under seventeen weeks, 1; under twenty weeks, 1; under twenty-two weeks, 1; under twenty-three weeks, 1—total, 46. Thus the average length of treatment, of the 46 cases of which we have an accurate account, is five weeks and a half, within a fraction; while the total average duration of the disease is eight weeks and a half; but it is extremely likely that both these figures would be reduced by the inclusion of the four cases which we are unable to trace. Dr. Charles West[6] gives, from an observation of twenty-five cases, ten weeks as the average duration of the disease; but it is so extremely variable in its duration that this cannot be considered as otherwise than a very favourable calculation; and I am inclined to believe that the figures I have stated above show the effect of treatment, and that the true average is much higher than it is placed by Dr. West.

I have in the foregoing statistics given the bare facts,

[1] Lyon Médical, 1876. [2] Journal de Méd. de Bruxelles, 1880.
[3] De la Coqueluche. Thèse de Paris, 1860.
[4] Ein leitende Studien über das Resorcine. Würzburg, 1880.
[5] De la Résorcine et de son Emploi en Thérapeutique. Paris, 1881.

[6] Op. cit., p. 455.

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without any gloss or enthusiasm; I have placed no weight upon the individual cases, many of which have been very markedly affected by the treatment, but have trusted to averages, and where there has been any defect of observation or of knowledge have omitted them; but I think that we are justified in saying that there has been no fatality among these fifty cases, as had either of the four cases of which we have lost trace ended fatally we should have heard of it at the dispensary. Yet there were several severe cases among them, complicated with bronchitis, broncho-pneumonia, &c., such as Nos. 4, 5, 14, 16, 18, 19, 29, and 36; and of great debility, as Nos. 15, 26, and 39 (the last being a case in which paracentesis thoracis had been performed for empyema examination nothing special was to be seen; these specimens were from cases which had been for some days under the treatment, but in those which were taken from cases where the whoop was fully established, but which had not yet been submitted to treatment, the appearances are thus described by Mr. Broadbent: "Examined with one-twelfth immersion, with B eye-piece magnifying about 800 diameters, and the preparation stained with methyl aniline violet, it shows numerous nuclei of pus-corpuscles and some shreds of fibrinous material and a few epithelial scales. In some of the latter there are numerous small micrococci, arranged singly in chains and in groups (zoogloea); similar micrococci are also seen in other parts, but in much smaller numbers;

LIST OF FIFTY CASES OF WHOOPING-COUGH TREATED BY LOCAL APPLICATIONS OF SOLUTION OF RESORCINE.

No.	Sex.	Name.	Age.	Date of onset.	Date of commencement of treatment.	No. of whoops in 24 hours.	Complications.	Result and approximate date.
1	F.	Mary E. S.	2 years	July 20th	July 27th	48	—	Cured Sept. 3rd
2	F.	Charlotte B.	1 year and 9 months	,, 13th	,, 27th	20	—	,, Aug. 10th
3	F.	Elizabeth M.	4 months	,, 24th	,, 27th	12	Congenital syphilis	,, Sept. 7th
4	F.	Sarah J. G.	7 months	Aug. 3rd	Aug. 13th	60	Severe broncho-pneumonia	,, Oct. 3rd
5	F.	Ellen Ann C.	3 years and 6 months	,, 5th	,, 13th	20	Bronchitis	,, Oct. 19th
6	F.	Lydia S.	1 year and 9 months	,, 5th	,, 11th	12	—	,, Sept. 21st
7	M.	Thomas W.	3 months	June 15th	,, 12th	20	—	,, Aug. 20th
8	M.	Charles W.	2 years	,, 3rd	,, 12th	26	—	,, Aug. 20th
9	M.	Thomas D.	3 months	Aug. 6th	,, 13th	10	Vomits freely	,, Sept. 3rd
10	M.	Ed. L.	11¾ months	July 29th	,, 13th	12	—	,, Sept. 3rd
11	F.	Mary H.	2 years	Aug. 10th	,, 13th	14	—	,, Sept. 3rd
12	M.	Thomas S.	4 years and 9 months	,, 11th	,, 17th	—	—	,, Aug. 24th
13	F.	Mary M.	4 years	July 23rd	,, 17th	12	—	,, Sept. 7th
14	F.	Eliza H.	1 year and 11 months	Aug. 3rd	,, 20th	30	Bronchitis	,, Sept. 3rd
15	M.	John H. P.	1 year and 2 months	July 16th	,, 25th	10	Diarrhœa	,, Oct. 1st
16	F.	Anna P.	5 years	,, 23rd	,, 25th	12	Bloody vomiting	,, Oct. 14th
17	M.	Thomas H.	2 years and 6 months	Aug. 26th	,, 27th	30	—	,, Sept. 29th
18	M.	S. H.	6 years	,, 22nd	Aug. 25th	24	Bloody expectoration	,, Sept. 29th
19	M.	Alick J.	6 years and 10 months	,, 3rd	Sept. 3rd	40	Vomiting of blood	,, Sept. 25th
20	F.	Martha B. H.	2 years and 11 months	Sept. 7th	,, 8th	12	—	,, Oct. 4th
21	F.	A. W. R.	7 months	Aug. 8th	,, 2nd	25	Vomits freely	,, Oct. 4th
22	F.	Grace R.	3 years and 2 months	,, 8th	,, 2nd	25	—	,, Oct. 25th
23	F.	Mary McK.	4 years	March*	,, 8th	24	—	,, Sept. 29th
24	M.	Joe S.	5 years	,, *	,, 8th	30	Measles 12 months ago; coughed ever since, but not whooped till October	,, Oct. 5th
25	F.	Anne S.	5 months	June (mid.)	,, 8th	24	—	,, Oct. 19th
26	F.	Angelina P.	1 year and 1 month	,, (beg.)	,, 8th	12	Atrophy and diarrhœa	,, Oct. 15th
27	M.	Charles P.	3 years	Aug. 15th	,, 9th	10	—	,, Oct. 21st
28	F.	Mary Jane P.	1 year and 3 months	Sept. 1st	,, 17th	18	—	,, Oct. 15th
29	F.	Mary B.	3 years and 11 months	,, 14th	,, 21st	26	Bronchitis	Cannot be traced
30	M.	John McK.	1 year and 2 months	,, 14th	,, 21st	18	—	Cannot be traced
31	F.	Maria L.	4 years	Aug. 24th	,, 24th	12	Ophthalmia tarsi	Cured Oct. 30th
32	M.	Arthur L.	2 years	Sept. 20th	,, 24th	12	—	,, Nov. 25th
33	F.	Rebecca G.	9 months	,, 17th	,, 29th	6	Vomits freely	,, Oct. 8th
34	F.	Martha H.	4 years and 6 months	,, 23rd	,, 29th	30	Vomits blood	,, Oct. 30th
35	F.	Susan P.	1 year and 6 months	,, 24th	,, 29th	40	Bronchitis 6 months ago	Cannot be traced
36	F.	Margaret O.	4 years	,, 21st	,, 29th	50 or more	Vomits blood; bronchitis	Cannot be traced
37	F.	Nellie W.	2 years and 3 months	July 15th	July 20th	12	—	Cured Sept. 1st
38	F.	Annie W.	9 months	Aug. 3rd	Aug. 15th	15	—	Cured Sept. 1st
39	F.	Dottie S.	4 years	June 24th	July 9th	8	This child had empyema, and paracentesis thoracis was performed 18 months ago	,, Aug. 24th
40	F.	Elizabeth S.	6 years	July 1st	,, 9th	18	—	,, Aug. 24th
41	M.	Ernest M.	5 years and 3 months	,, 4th	,, 15th	14	These patients lived in a damp, poor cottage, in a bleak situation, on a wet clay soil, near a partially drained moss	,, Sept. 15th
42	F.	Rose M.	3 months	,, 12th	,, 15th	12		,, Sept. 1st
43	M.	William M.	2 years and 6 months	,, 12th	,, 15th	15		,, Sept. 12th
44	M.	Charles S. H.	2 years and 3 months	,, 17th	Aug. 5th	20	—	,, Sept. 1st
45	M.	Thomas W.	1 year and 6 months	Aug. 2nd	,, 17th	20	—	,, Sept. 21st
46	M.	William W.	5 years	July 14th	,, 17th	12	—	,, Sept. 21st
47	F.	Agnes P.	1 year and 9 months	Aug. 15th	Sept. 1st	10	—	,, Sept. 14th
48	F.	Ethel M.	4 years and 3 months	June 24th	July 23rd	10	Measles on June 9th, and a fortnight later whooped	,, Aug. 17th
49	F.	Mary P.	3½ years	Aug. 1st	Sept. 1st	8	—	,, Sept. 29th
50	M.	Alfred F.	2 years and 9 months	,, 25th	,, 9th	14	Measles on May 3rd, and coughed ever since	,, Sept. 29th

* Was better, and began again September 1st.

eighteen months before, and where the wound remained open and discharged pus for over six months); or cachectic, as in Nos. 3, 31, 41, and 42. It is in these cases that this treatment seems to evince a decided superiority over most other modes, as it does not cause any irritation, and need not be intermitted for the purpose of allowing other forms of treatment to be carried on, nor does it interfere in any way with such treatment. I think, therefore, that these results justify the recommendation of Professor Moncorvo; and I have also, by the aid of the well-known skill of Mr. J. Broadbent, been enabled to corroborate the statements of the Professor as to the microscopic appearances and the effects of this treatment upon them. Thus, in the earlier specimens of expectorated matters that were submitted to microscopic the epithelial scales seem to be the chief seat of the organisms." This, it will be seen, exactly confirms the description of Professor Moncorvo.

In the light of this experience and these observations we may, then, agree with the following conclusions:—"1. That whooping-cough is to be classed among the diseases which are caused by the irritation excited by the presence of parasites. 2. That it is due to the presence of micrococci, which proliferate in large numbers upon the lining membrane of the larynx and pharynx, and which infiltrate the epithelial cells, which seem to be the preferential seat of their growth and increase. 3. That resorcine in a solution of the strength of 1 or 2 per cent., applied directly to the mucous surfaces concerned, has been found, in all cases in

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which it has been employed and the results watched, to rapidly reduce the number of chinks, to reduce their intensity, and finally to lead to the cure of the disease." This last word "cure" is a bold one, but if the first and second propositions are held to be proven, then there can be little doubt that it is properly used. For if there are no other diseases *cured*, yet certainly those which are due to the irritation of a parasite are cured when that parasite is destroyed.

Lastly, the mode of application by means of a brush or swab is not the only mode in which it may be made; perhaps by some of the recently used instruments for applying medicated spray to the interior of the larynx and the adjacent parts of the throat (as that recently described by Dr. Miller of Windsor and by Dr. Hodgkinson) it may be applied yet more effectually than by the methods adopted by Professor Moncorvo and myself. And, again, it is not finally proven that resorcine is the best application that may be found. Perhaps in its near congener, orcine, we may have a still better agent for this purpose, for we find in a note by J. J. Andeer in the *Gazetta Medica Italiana-Lombardia* of July 4th, 1885, that "Orcine possesses almost all the physical properties of resorcine; but while the latter is caustic in large doses, orcine is never more than astringent and antiseptic." This seems to point the way to further experiments, but meanwhile I ask my readers to put to the proof the facts I have placed before them, and to make from them the deductions to which they lead. To guard against misunderstanding, I wish to add that, while sharing to a very large degree in the opinions so strongly asserted by Professor Moncorvo, I am not to be taken as denying that blood changes are an essential part of the pathology of this disease; nay, I am inclined to believe that some such changes are necessary to produce the peculiar pabulum for the parasitic germs, and that it is not improbable that some such change is a frequent result of attacks of measles and scarlatina, both of which evidently produce very marked effects upon the tracheal, bronchial, and pharyngeal lining.

ON A CASE OF URTICARIAL ASTHMA.

BY T. DAVIES PRYCE, M.R.C.S., &c.,
RESIDENT SURGEON TO THE NOTTINGHAM DISPENSARY.

JAMES R——, a lad aged sixteen, was admitted an out-patient of the Nottingham Dispensary on Oct. 19th, 1885, suffering from symptoms referable to a phimosed condition of the prepuce. He was at that time a fairly well nourished boy, and had been subject to no other diseases than those incident to childhood—i.e., measles, &c. On the 28th he was operated on for phimosis. When seen on the 30th, there being a swollen condition of the penis, a linseed poultice was ordered. Shortly after the application of this poultice the patient complained of great irritation, itching, and tingling of the skin, first over the part to which the linseed had been applied, and subsequently over the whole surface of the body. This was followed by an eruption of urticaria, which, starting on the abdomen, extended to the head and neck and other parts of the body. Simultaneously with this cutaneous eruption—and even with the irritation which preceded it—the patient experienced considerable difficulty in respiration, which increased in direct proportion to the amount of the urticarial rash, developing into actual dyspnœa when the eruption attained its height. This condition continued for nearly three hours, with fairly marked intermissions both as regards the rash and the difficulty of breathing. The cessation of the dyspnœa was followed by slight expectoration. The rash and the asthma coincidently subsided. Another attack occurred at 5 P.M. on the same day, lasting three hours. On the 31st similar attacks occurred at 11 A.M. and 5 P.M. He was seen when recovering from the morning illness. An inspection of the oral and nasal mucous membrane was omitted. On Nov. 1st the same condition was present. The patient had had three attacks during the course of the twenty-four hours. On the 2nd the dyspnœa and urticaria were as before. On the 3rd he was visited at 11 A.M., and found to be covered with an urticarial rash of characteristic appearance and suffering from a typical attack of asthma. The patient had to be supported in the sitting posture, and exhibited the usual signs and symptoms of an asthmatic attack. The pulse was small, quick, and feeble, beating 120 to the minute; the temperature 100°. The mucous membrane of the nasal and oral cavities was carefully inspected, and was found to be swollen and red in places. These swellings in some parts were diffuse, in others they possessed a more or less circumscribed border. They could be seen on the posterior wall of the pharynx, and also on the soft palate. Had it been possible to use the laryngoscope, I have little doubt that they would have been discovered in the larynx. The voice was subdued and husky, the patient only being able to speak in a hoarse whisper. The patient had a similar attack during the following night. He was ordered a saline with arsenic, after which there was no recurrence of the rash and dyspnœa.

The family history was good: no account of asthma, phthisis, or neurotic tendency. I believe from the foregoing details that most observers will agree with me in terming the disease now under consideration "urticarial asthma."

This case is of interest in more than one respect. In the first place, it brings clearly to the front the fact that sometimes asthma may be caused by the presence in the mucous membrane of the respiratory tract of swellings of an urticarial nature, they bearing a strong similarity to those which simultaneously appeared on the cutaneous surface. Secondly, the fact that urticaria and asthma may occur as one and the same disease, or as one and the same external expression of a certain condition of the blood or nervous system—as evidenced by the similarity of the eruption, and by the simultaneous appearance of both these phenomena—induces the consideration of the great resemblance which exists between these two diseases. Thus, with regard to causation, asthma (peptic variety) may result from taking certain articles of food, from indigestion, &c.; so may urticaria. Mental emotion, various irritations, and uterine affections may alike cause asthma and urticaria. The periodicity of attack in asthma and urticaria is sometimes marked. Both diseases are evidently of a neurotic nature. Thirdly, cases of urticarial asthma may be looked upon as occupying an intermediary position, in reference to the seat of the disease, between hay and so-called ordinary spasmodic asthma. Thus, in the case described the disease was located not more or less exclusively in the nasal cavities and pharynx, but evidently extended some considerable distance down the bronchi, as shown by the ordinary signs of spasmodic asthma. Fourthly, with regard to the cause of the attack, the operation for phimosed prepuce or the application of adulterated or impure linseed seem to me the most probable. Looking at the above considerations, one is led to inquire whether many of the cases of so-called spasmodic asthma are not due to swellings of a more or less circumscribed character of the bronchial mucous membrane, which bear a greater or lesser resemblance to the eruption of urticaria. This view (i.e., that asthma is a neuro-vascular disease) has been strongly insisted upon by Sir Andrew Clark[1], and also to some extent by Weber. Cases such as the one above described, and the consideration of the close alliance which in many respects exists between urticaria and asthma, seem to lend support to Sir Andrew Clark's theory.

THE CASE OF EDWIN BARTLETT.

MERCURIALISM; DEATH FROM LIQUID CHLOROFORM; NECROPSY.

BY ALFRED LEACH.

THE case "Regina *v.* Bartlett and Dyson,"[2] which under the name of the "Pimlico Mystery" attracted its full share of popular attention and sensational interest, presents problems of permanent interest to medical psychologists, jurists, and practitioners. I shall endeavour to set forth the medical history of the several features of the case as fully as possible and for purposes of study, and, to the best of my ability, will let my facts stand clear of the shadow of my inferences.

[1] Opening address on Asthma at the Cambridge meeting of the British Medical Association: "Theory of Bronchial Asthma." (International Journal of the Medical Sciences, Jan. 1886.)

[2] A full report of the trial appears in the Central Criminal Court Sessions Paper, vol. cliii., part 618, pp. 725-811, published by Messrs. Barnett and Buckler, of 89, Chancery-lane, to whose courtesy I am indebted for the use of an advance proof for the purposes of this article.

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About 10 A.M. on Dec. 10th, 1885, at 85, Claverton-street, S.W., I first saw Mr. E. Bartlett, aged forty. I found him reclining on a sofa. He was a rather short muscular man, in appearance not much over thirty, of fair complexion, with blue eyes and light brown beard. He was somewhat pale, and looked timid, anxious, and nervous. His limbs were a little shaky. It was difficult to "catch his eye," but it could be arrested momentarily by a direct reference to his bodily ailments. He was not much inclined to speak, and turned to his wife for answers. Was evidently suffering from a little pain; when he lay back he did so with cautious movements and an air of exhaustion, but could move sharply enough when his attention was taken off himself. Pulse small and frequent; pupils very contracted (this condition of pupil was persistent till death); skin cool; breathing and temperature normal. He complained of diarrhœa, with tenesmus, sickness, some pain in the abdomen, "bad mouth," and great sleeplessness. (*a*) Diarrhœa: The motions which his wife had preserved for my inspection were dark and loose, like chopped spinach mixed with a little tar, and were accompanied by some clots of red blood. He had no piles. The urine was very scanty, but normal. (*b*) The vomit was watery, containing bits of partly digested food and some bile. (*c*) The pain in the abdomen was not severe or localised, but the left iliac region was dull on percussion, and there was tenderness in the regions of the stomach and sigmoid flexure; the rest was tympanitic. (*d*) The breath was offensive, with the peculiar mercurial odour. The tongue was coated, especially posteriorly. He complained of a bad taste, but could not describe it. The gums were red, swollen, and spongy, with a deep bluish-red margin about an eighth of an inch in depth. In the upper jaw this edging was slight, though distinctly present; in the region of the lower bicuspids it was more developed; but in the edges of the gums of the lower canines and incisors it was very obvious. Some salivation and tenderness about the parotids existed. The teeth showed signs of neglect, but the patient did not complain of much recent increase of pain in them. The lower canines and incisors were fairly good, but had few opposing teeth in the upper jaw. There were over a dozen loose molar stumps in a horribly carious condition. (*e*) Complained of insomnia; as a rule little sleep sufficed. Asked for my diagnosis, I replied, "Mercurial poisoning." He could not account for the mercury, and said, in private, he had never had syphilis. A careful search failed to reveal any trace of the disease, and its absence was confirmed by the post-mortem and by a special search seven days after death. I suspected syphilophobia and his having resorted to quack specialists, but his assurances negatived both. Finally, he remembered taking a few days previously, and for no accountable reason, a pill of unknown quality, but no other medicine for weeks. He had been ill two or three days when I saw him, and the symptoms had steadily increased. The diarrhœa, melæna, and sickness were cured by bismuth and cinchona in a couple of days; the mouth somewhat improved under chlorate of potash lotion; and a little sleep was ultimately obtained by opiates.

But whence the mercurialism? Had the patient been practising suicidal experiments? Was he the victim of a poisoner; or were these symptoms accidental to an ordinary mercurial dose taken by a patient in bad health and highly sensitive to the drug? Tentative *felo de se* is somewhat negatived by his subsequent anxiety (apparently real) to have various things tested for mercury. He was a member of a firm of grocers, and did the wholesale buying part of the business—the tea tasting and mixing, the butter and cheese tasting, &c., as many as 300 samples in a day. It seems like straining hard for a theory if one suggest that he, a professional taster and a man who by all accounts carried tasting to the height of a fine art, was having administered to him a mercurial salt without discovering it; and advocates of this theory would have to fall back, I presume, on the tasteless but heavy subchloride for support. 1. I concluded the dose of mercury was not large because the case yielded so readily to such simple symptomatic treatment, and profuse salivation and tremors were absent. 2. But the melæna and blood suggest a large dose. The man's digestive organs were in a precarious state owing to his vocation, and he probably had an idiosyncrasy for mercury. Few drugs seemed to produce their normal results on this patient. 3. It was not chronic poisoning, because the symptoms were recent and urgent, and, again, profuse salivation was absent. 4. But the blue line is, when present, a sign of chronicity. Still, a man with a cleaner mouth—i.e., less hydrogen sulphide to seize upon the mercury circulating through the gingival margins—would probably have escaped this blue line under similar circumstances. Finally, what preparation of mercury did he take? He picked the pill to which *he* attributed these symptoms from a drawer of old samples in a grocer's shop. If this caused his symptoms, did it contain impure calomel (subchloride *plus* perchloride)? Was it corrosive sublimate pure and simple? Was it an ancient blue pill (grocer's quality) containing sulphate of mercury formed by the action of the H_2SO_4 occurring as an adulterant of the confection of roses? Was it mercury pill and nothing more? We shall never know. The symptoms were strangely suggestive of corrosive sublimate.

From Dec. 13th to the 31st, when the patient died, the case is chiefly one of psychological interest, and before approaching it in that light I will give a brief "previous history," and clear the ground of one or two physical complications. The patient is reported to have enjoyed robust health until the summer of 1885. Some years previously he suffered somewhat through overwork at amateur house-building. His teeth were always his chief trouble. About ten years ago he had the misfortune to be supplied with a gold plate without having the subjacent stumps extracted, and the plate soon became unbearable. A second set of teeth was made, and this too was discarded. Thenceforth he abjured the services of his dentist and toothbrush. Strange to say, his digestion appears to have remained perfect, though sorely taxed by irregular diet, tea-tasting, &c., until a few months before he died. He is said to have occasionally suffered, during the last year of his life, from a paroxysmal pain in the left side, a glass of wine being sufficient to provoke it There was no history of previous illness, and, medically speaking, his family history was good. Though always a shrewd man of business, he seemed to have been in private life somewhat peculiar. One fact elicited at the trial may be interesting to note: his handwriting could never be depended upon; it varied from day to day. He was not an illiterate man; he had a reverential regard for advanced learning; but his studies of late years seldom took him beyond veterinary works and books about dogs; and he had some taste for political economy. He was retiring, diffident, and in no sense unmannerly. He married when nearly thirty. His marital relations, it will be remembered, are stated to have been of a most unusual character. He was of generous instincts in pecuniary matters, sending unsolicited subscriptions to charities, and is said to have kept an earthen jar full of small silver coin for handful distribution among the poor. About December 13th he complained of increasing pain in the gums and tenderness in his teeth, and these were getting loose. By the 15th the blue line was giving way to a dirty grey one, with a red area of demarcation between it and the rest of the gum. The inner surface of the lip in contact with the stumps of the upper central incisors presented a superficial greyish and white sore as large as a sixpence. On the 16th Mr. T. A. Roberts, L.D.S.R.C.S.Eng., who coincided with the diagnosis of mercurialism, removed these two stumps; the mucous membrane of the lip healed, and the gum soon grew over the vacant sockets. The following day (17th) Mr. Roberts extracted ("picked out" would be the better word) about eleven very rotten loose stumps and teeth from the upper and lower molar regions. On the 18th all bid fair for recovery excepting the front of the lower gums. Here the whole margin of the gum had sloughed, and I removed a dead strip about an inch long and over an eighth of an inch broad, leaving exposed the edges of the alveoli and a ragged granulating gum. A long, greyish, and dark stain along that part of the mucous membrane of the lower lip hitherto in contact with this slough was observed. On the 19th Dr. Dudley described the gums as presenting a ragged edge. On the 20th the mucous membrane of the lower lip presented a longitudinal dirty slough, the four lower incisors were loose and painful, and the gum anteriorly and posteriorly exquisitely tender and receding from the bone. On the 21st the dental surgeon extracted the four lower incisors, and the inner surface of the lip improved, but the gums continued to recede from their alveoli. About the 28th the condition was as follows:—Breath offensive. Upper and lower gums healed, with the exception of the lower incisor region, where there lay a broad flat fungoid substance that seemed to spring from the empty sockets; it was supposed to consist of decomposed food, mucus, and coagulum; it extended from one to the other canine teeth, and its antero-posterior measure-

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ment was about three-quarters of an inch; it could be raised from the front and back gums which bordered it but its partial removal from the alveoli caused pain. The local treatment included the application at various times of chlorate of potash, Condy's fluid, and emulsified iodoform. On the 31st the alveoli beneath the fungoid growth were blackened and very painful, and, to make things worse, the edge of the gum round the lower left canine began to recede and slough, and the patient complained of great pain in that tooth. Between this canine and the next bicuspid a space existed in which a second fungoid mass was lodged, and it was decided to extract the tooth in the hope of alleviating the pain and clearing away the accumulation. On this occasion nitrous oxide gas was given, the patient taking a very large quantity, and recovering from its effects exceptionally rapidly. He expressed himself relieved, and was in very good spirits and quite talkative, and returned home to take his supper. (That night he died.)

Another ailment presenting itself for treatment was "subacute gastritis." By this expression I mean simply a more or less acute exacerbation of a more or less persistent dyspepsia. The history given me on Dec. 10th was one of mild dyspeptic troubles during the preceding months. These troubles had increased in severity during the last week; they were temporarily overshadowed by the mercurial symptoms, and soon improved under bismuth, &c. An explanation of their occurrence is written large in the account given of the patient's habits by witnesses. For instance, while living at Dover, he would, after three or four hours' sleep, rise at 3 A.M., travel to London, work hard all day at tea, cheese, and butter tasting, or engage in the worry of his wholesale and retail business, to which he was enthusiastically devoted, make a "snack" here and a hurried "snack" there stand in lieu of meals, and then return to Dover late at night. Add to this his inability to masticate. He was strictly temperate in the matter of alcoholic drinks. His digestive organs were practically sound by the middle of December. The next event was the appearance, without any previous symptom indicative of its existence, of a lumbricoid worm on the 23rd. Suspecting the presence of more, and misled by his assurance that he felt one wriggling in his stomach, his gullet, his throat, I administered santonine on the afternoon of the 26th, and followed this up by purgatives, which utterly failed in producing an evacuation. The list of those taken between 3 P.M. and 3 A.M. is as follows: Two drachms of sulphate of soda; two drachms of liquid extract of cascara sagrada; five drachms of sulphate of magnesia; two drachms of tincture of jalap; one minim and a half of croton oil. He said he was sure I was giving him stimulants to strengthen him; he especially affected the croton oil—it was "so comforting and made him feel so strong." The majority were swallowed in my presence, for I half suspected him of duplicity when the first ones did not furnish results, and I dreaded leaving santonine in him. He took hot tea and coffee, and finally I applied galvanism to the spine and abdomen. About 3.30 A.M. he said he was "feeling a bit tired and wanted some solid food"; so, with a humiliating sense of defeat, I left, telling him that the resources of civilisation were at an end. Six hours later his usual matitudinal evacuation occurred, but on this occasion it was unusually small in amount. The amazing part of this episode is that during the preceding fortnight his bowels had been fairly regular; from the 26th mild constipation set in, and was treated with belladonna and phosphate of strychnine. But no second worm was ever discovered.

(To be concluded.)

TESTIMONIAL TO PROFESSOR BERTRAM WINDLE, M.A. The students of Queen's College, Birmingham, met on the 18th inst., under the presidency of the Warden, the Rev. W. H. Poulton, to present a testimonial to Dr. Bertram Coghill Windle, M.A., their Professor of Anatomy, on the occasion of his marriage. Mr. H. S. Chavasse read an illuminated address expressing the students' deep gratitude and best wishes for their distinguished teacher; and Mr. J. F. Jordan formally presented the testimonial, which consisted of a handsome case of plate. Professor Windle, on rising to return thanks, was received with enthusiastic applause. The proceedings concluded with a vote of thanks to the Warden, moved by Professor Bassett, and seconded by Mr. Ernest J. Gamgee.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. BARTHOLOMEW'S HOSPITAL.

BULLET-WOUND OF FOREHEAD; OPTIC NEURITIS; PARTIAL RECOVERY.

(Under the care of Mr. THOMAS SMITH.)

THE notes of the following case, which we are enabled to publish through the kindness of the surgical registrars of the hospitals in which he was treated, will be read with considerable interest. The bullet, which was an ordinary slug, in common use in revolvers, was fired off close to the forehead, and, taking the course described in the report of the necropsy, lodged in the posterior clinoid process, dividing the left optic nerve in its track, and compressed but did not wound the carotid artery. The symptoms appear to have been chiefly due to inflammatory changes and suppuration in the track of the bullet, and loose sequestra required removal, but there was obviously no chance of removing the foreign body. The patient lived altogether 291 days after the receipt of the injury. We recollect to have seen a somewhat similar case at St. Thomas's Hospital about eight years ago, in which the bullet passed in a similar direction and for the same distance, entering through the right upper eyelid, the infliction of the injury being followed by blindness in the left eye and ultimately atrophy of the disc. This patient, however, recovered, and is still alive. For the following notes we are indebted to Mr. A. A. Bowlby, surgical registrar.

G. M——, aged nineteen, was admitted into Henry ward, under the care of Mr. Smith, on July 10th, 1885, suffering from a bullet-wound in the forehead. The wound was said to be suicidal. The patient was in a semi-conscious state; he could tell his name, but was quite unable to give any account of himself, and did not appear to understand the questions put to him. He was very restless and noisy, constantly shouting and uttering inarticulate sounds. In the middle of the forehead was a bullet-wound communicating with a fracture of the frontal bone, and bleeding profusely. A probe could be readily passed for a distance of three inches and a half in a direction downwards, backwards, and a little to the left. There was a good deal of swelling about the left eyelid and conjunctiva, with bleeding from the nose and vomiting of blood. The pulse was 64, and a little irregular; temperature 98·4°. For the next twenty-four hours the patient continued very restless and noisy. His temperature reached 100° in the evening following the accident; he did not sleep at all. The next night he became quieter, and slept for four hours after a dose of bromide of potassium and chloral.

July 13th.—The patient at times talked quite sensibly and coherently, at other times he wandered. He said that he was blind in the left eye. Pulse 64; temperature 100°; passes urine naturally.

14th.—As the discharge did not seem to escape very readily from the wound, a drainage-tube was inserted; he is now quite sensible, and only complains of pain in the left side of the head. Pulse 60; temperature 99·8°.

16th.—As the pain continued, four leeches were put on to the left temple, to the great relief of the patient. Pulse 76; temperature 101·8°.

17th.—Patient is extremely irritable, and refuses to be examined in any way; complains of pain and is very noisy; after eight leeches had been applied to the mastoid processes he became quieter and easier.

From this time the patient gradually improved. He was never again unconscious, though at times very irritable and noisy. His temperature sank to normal on Aug. 4th, never having been higher than on July 16th. Sometimes he slept well, at other times morphia injections were necessary. An examination of the left eye showed that the disc was in a

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very marked condition of white atrophy, but all the media were clear. There was absolute blindness. The discharge from the wound diminished, but did not entirely cease. No necrosed bone could be found after careful examination under chloroform towards the end of July. As his friends were anxious to take him out, they were allowed to do so on Aug. 17th.

GUY'S HOSPITAL.

BULLET-WOUND OF FOREHEAD; DIVISION OF LEFT OPTIC NERVE; OCCASIONAL EPILEPTIFORM SEIZURES; COMA; DEATH; NECROPSY.

(Under the care of Mr. BRYANT.)

For the following notes we are indebted to Mr. Targett, surgical registrar.

G. M——, aged nineteen, living at Camberwell, was admitted into No. 18, Job ward, on Aug. 17th, 1885, and died on April 17th, 1886. Five weeks ago the patient attempted to commit suicide by placing a pistol against his forehead in the middle line, about an inch above the eyebrows. On firing the pistol he felt a whirring sensation, but did not lose consciousness. He distinctly remembered being conveyed to the cab and taken to St. Bartholomew's Hospital, where he was under the care of Mr. Smith. (See *supra*.)

On admission, the patient was rather thin, and had a very heavy look about the eyes; his left pupil did not answer to the stimulation of light, and there was a slight blackening beneath the eyelashes; he was able to follow the finger when moved in different directions, both eyes working together; the left eye was not bloodshot; there was no paralysis or loss of sensation in either the limb or head, and none of the nerves to the muscles of the left eye were severed; there was tenderness between the eyes and around the wound; the bullet-wound was centrally placed between the eyes and a little above them; it was circular, and the edges presented granulations; there was some discharge from the sinus.

Aug. 21st.—Temperature 100·2°; pulse 90. The specific gravity of the urine was 1023; it contained mucus; no albumen, sugar, or blood. The patient was placed under chloroform. Mr. Bryant opened the wound between the eyes and a little above them, and took out two small fragments of bone by means of bone forceps. Retractors were placed on each side of the wound, a probe was passed, and some fragments of bone felt. The wound was dressed with iodoform gauze.

Sept. 1st.—The patient seems well, and does not complain of any pain; temperature 100·4°; he sleeps well; the left eye is still insensible to light.

2nd.—Patient has had a bad headache all night, and has had no sleep. The wound was dressed to-day, and there was a good deal of foul discharge. Temperature high and rising.

3rd.—The patient has had a bad night, and complained of severe pain in his head. Temperature 103·4°. He has been slightly delirious all day, and has taken no food; he still complains of headache, and is very restless. Pulse 150, soft and compressible; he has been sick several times, bringing up a greenish fluid. Chloroform was administered, and Mr. Clement Lucas prolonged the old incision, made another incision at right angles to the first, and reflected the four flaps; the supra-orbital artery of each side was twisted. Some granulating brain matter was then observed to be pushed up through the bullet-hole, and to be pulsating. It seemed to lie between the inner and the outer tables of the skull and in the frontal sinus. Mr. Lucas then cut with the trephine a small circular piece of bone about three-quarters of an inch in diameter, a little to the left of the median line. The granulations were then cut off, and a probe was passed; it went in easily, and evidently in the track of the bullet, for about three inches backwards and a little outwards, but the bullet was not felt, nor could any amount of pus be obtained by means of an aspirator. The probe seemed to pass under the left anterior frontal convolution.

4th.—Wound dressed. The temperature, which was 104° at midnight, this morning is 102·2°. He is restless, complains of pain in his temples, and wanders a good deal.

5th.—Temperature not so high, and he is quieter; he seems to have completely lost the sense of smell.

6th.—Wound dressed. Protruding through the trephine hole is seen a hernia cerebri, which pulsates very distinctly. The patient's condition is about the same, and his temperature varies between 101° and 103°.

7th.—The patient is lying in a semi-conscious state. He breathes rather heavily, but the pulse is moderately strong. An ice coil has been applied to his head.

During September there were frequent attacks of hæmorrhage from the trephine opening—on the 9th, 10th, 13th, 15th, 18th, and 20th. For a few days about the 9th of the month there was considerable discharge of cerebro-spinal fluid saturating the pillow, and the patient had pain at the back of the head and neck. During the earlier part of this month the temperature was usually high, and higher at night than in the morning; but towards the last week it became and continued normal, and there was corresponding improvement in the general condition.

Oct. 11th.—The patient was very drowsy, and would not take his food until late in the afternoon yesterday; he seems very sleepy again to-day, and will not speak when spoken to.

12th.—Patient has been shaking very much since last night, especially in his arms and legs. Two small pieces of necrosed bone came away from the wound yesterday, when the wound was being dressed. Wound granulating well.

14th.—The shaking which the patient had on the 12th has quite stopped; he is quiet, and takes his food well.

20th.—Patient about the same; he has a cradle over his legs, as the pressure of the clothes causes small sores to appear.

26th.—An abscess which had formed just beneath the chin on the right side was opened, and a good deal of thick greenish pus came away.

30th.—At 6.45 P.M. the patient was suddenly seized with convulsions, having been quite sensible up to the time of their occurrence; they began with contraction of the muscles of the face and clenching of the hands, and then extended to the whole of the body. The fits continued with short intervals from time to time, the length of each fit varying from one to five minutes, but the intervals rarely exceeded one minute. The convulsions consisted of muscular contractions, beginning (as a rule) in the left arm and leg, and then passing over to the right arm and leg; the pupils were widely dilated, and nystagmus was noticed in every direction; the teeth were firmly clenched, and a slightly blood-stained foam issued from beneath them. Pulse weak, varying from 130 to 140. Respiration rapid, shallow, and irregular, almost ceasing at times where the spasm was most intense. At 7.30 an injection of one-sixtieth of a grain of eserine was given, which seemed to shorten the length of the fits for a time; the dose was repeated a quarter of an hour later, but with small effect. At about 8 o'clock a quarter of a grain of morphia was given, which seemed to have very little effect. Chloroform was given for a quarter of an hour; the patient had only one slight fit during the administration, and when it was discontinued the patient fell into a sleep.

Nov. 2nd.—Patient had another fit last night, but it did not last more than a few minutes; he seems much better again this morning.

The man had convulsive seizures on Nov. 2nd, 3rd, and 6th, and the treatment was changed to twenty grains of bromide of potassium three times a day on the 7th. On the 11th he was very weak, almost collapsed, but rallied again, being able to read the newspaper on the 19th. On the 25th there was wandering and left external strabismus, with earache on the left side, which lasted three or four days. During December he improved, being able to sit up in front of the fire. The pain and deafness on the right side were complained of at the beginning of the month, and it was noted that there was much general muscular atrophy. The patient had another fit on January 6th, 1886, but during the remainder of the month he continued in fair health. The left eye was examined by Mr. Targett on the 15th; the pupil was dilated and fixed, the disc was atrophied, and there was evidence of old neuritis. During February the patient was up and about the ward every day.

March 9th.—About 7 P.M. yesterday the patient was noticed to turn very pale. At the same time he had spasmodic contraction of all the muscles of his face. His arms were also affected. This contraction of the muscles was more violent on the right side than on the left. He then became flushed, frothed at the mouth, and afterwards presented a livid appearance. In all he had some eight or nine fits. This morning on examination his tongue is found to be bitten, especially at the edge. The pupil of the

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left eye is more dilated than that of the right; neither of them reacts to light. During the fits one globule of nitrite of amyl was administered. Afterwards forty grains of bromide of potassium were administered per rectum. The patient recovered again from this condition, and was about the ward until April 9th.

April 12th.—The patient took to his bed again on the 10th. He has been sick at times.

13th.—During the afternoon the patient got worse; he lies in a barely conscious condition, speaks indistinctly when spoken to, and hardly takes any notice when addressed. Does not complain of pain. Pulse 58, very weak; respiration 20, shallow. The extremities feel cold to the touch; there is no rigidity of the joints or limbs. The right pupil is rather dilated; neither of the pupils reacts to light. No anæsthesia or hyperæsthesia.

14th.—1 A.M.: The left pupil reacts to strong light; the right pupil is dilated and does not react. Optic neuritis commencing in the right eye; the disc is red and ill defined; vessels obscured by exudation; the left disc is atrophied. Knee reflexes exaggerated on both sides; ankle-clonus present; triceps reflex exaggerated; some rigidity of the left arm; trembling movements of the fingers and hands at times. Pulse 55, respiration 19. The patient is unconscious.

15th.—The patient is still unconscious; takes but little nourishment; passes everything beneath him; occasionally there is a spasmodic action with one of the hands: the hand is generally lifted up to scratch the nose; otherwise there is no movement whatever.

17th.—Patient died about midnight; his respiration stopped some ten minutes before his pulse ceased beating; artificial respiration was resorted to for some time, but with no real effect; he was still perfectly unconscious when he died. Temperature 100·4° before death.

Post-mortem report by Dr. Goodhart. — Body well nourished. In the median line of the forehead, slightly inclining to the left, was a small circular aperture with a depressed cicatrix around it; a probe passed from this into the right frontal sinus would not, from some cause, go directly backwards or into the left sinus. When the calvaria was removed, however, the right frontal sinus was not exposed, but the left was completely ploughed up and opened. The bullet track was indicated by a gaping trough full of thick muco-pus, which ran along the floor, or rather in the floor, of the anterior fossa of the skull backwards to the posterior clinoid process on this side. The frontal sinus here was opened up completely, and formed the anterior part of the trough into the ethmoidal sinus; the roof of the ethmoid having all gone, the posterior part was formed of the sphenoidal sinuses, which were in like manner opened up and full of gelatinous soapy pus. The bullet was embedded in the left posterior clinoid process and adjacent bone, and in this situation had pinned in and surrounded the internal carotid artery; but there was no clot in the vessel. It had completely severed the left optic nerve just in front of the chiasma. On turning to the brain, both frontal lobes were adherent to the dura arachnoid about the region of the wound, and there was evidence of an old meningitis of the base in various white milky thickenings. The surface of the brain was dry-looking and the convolutions flattened all over the vertex. A large abscess existed in the right frontal lobe, occupying the greater part of it; it would hold perhaps two ounces. The pus was thick, green, and free from smell. In addition to this large abscess, there was a small cyst holding about a drachm just behind and below it. This was of quite a different appearance to the other; its contents were broken-down altered grumous blood, and its wall was yellow and atheromatous-like in appearance. I thought at once that it might be aneurysmal, but it was not tough enough for an arterial sac. It was not distinct from the brain, and I could find no dilatation of vessels leading to it or any vessel at all. It was therefore a bruised patch of brain, and inasmuch as it was close to the position of the wound made by the bullet I have no doubt it was produced by the original injury. The wall of the front cyst (the abscess) was fairly tough, and a millimetre or so in thickness. Its lining membrane was very vascular in appearance. This abscess had all but opened into the ventricle, but not quite. The wall of the right ventricle was distinctly thin and the brain soft beneath the outer edge of the nuclear caudatus (head). The ependyma of both lateral ventricles was markedly sandy. The other viscera were not examined.

GREAT NORTHERN CENTRAL HOSPITAL.

FRACTURE OF THE NASAL AND SUPERIOR MAXILLARY BONES, FOLLOWED BY NECROSIS AND ABSCESS WITH PROPTOSIS; REMOVAL OF THE SEQUESTRUM; REMARKS.

(Under the care of Mr. W. Spencer Watson.)

In the following case the occurrence of a considerable proptosis, with distortion of the nose, gave rise to some obscurity in the diagnosis. The patient was first seen at a late period of the case (fifteen months after the injury), and the protrusion of the eyeball, accompanied by a nodular swelling of the lower margin of the orbit, pointed at first to some chronic form of disease involving the orbit, and possibly extending upwards from the antrum. The subsequent history of the case, however, makes it clear that the irritation set up by the presence of the sequestrum in the nostril sufficed to explain all the symptoms.

Ada H——, aged seventeen, a healthy, well-grown girl, came under observation in February, 1886, with an unsightly protrusion of the right eyeball and a swelling of the right side of the nose. Fifteen months before, one of her fellow work-girls struck the patient by a sudden movement of the head against the bridge of the nose. This was followed by much pain and swelling of the parts, and ever since there had been a constant discharge of sero-pus from the right nostril, with the accumulation of mucous crusts, which were removed with great difficulty. The protrusion of the eyeball had come on quite recently.

On admission (March 12th, 1886) there was much swelling of the whole of the right side of the nose from the region of the lacrymal sac downwards, and extending somewhat over the bridge of the nose to the left side. There was mucous regurgitation on pressure over the sac. The nostril was partially obstructed by crusts of mucus, with occasional discharge of blood-stained matter; very little fetor. At the lower border of the orbit near the inner canthus a firm nodulated button-shaped swelling was felt by the finger, with slight mobility, and free from adhesion to the skin covering it, but attached deeply to the floor of the orbit. Some redness and swelling of the lower eyelid and regurgitation of mucus from the sac took place when pressure was made over it. On probing the nostril (a view of the interior of which was obstructed inside the vestibule by considerable swelling) no bare bone could be felt. The vision of the protruded eye was not affected, nor was there any diplopia. There was no visible swelling in the roof of the mouth nor in the pharynx. Under the angles of the jaw on both sides were several enlarged lymphatic glands.

March 15th.—Bare bone was felt by the probe on the outer wall of the nostril. The right canaliculus was slit up and probed, but no bare bone was felt in that direction. A large ragged ulcer, with everted edges, was seen just within the vestibule of the right nostril, occupying its outer side and extending upwards. Bare bone was felt in this situation.

31st.—The girl was put under the influence of ether, and after full exploration a piece of necrosed bone was found lying in an abscess cavity communicating with the nostril. The finger could be passed into this cavity, and the sides were felt to be formed by fragments adherent to the soft parts. The sequestrum removed was of the size of a split pea, and had ragged edges and surfaces. Deeper in the nostril, towards the middle meatus, another bare surface of bone was felt. It was not loose, but a portion was scraped away. The cavity from which the sequestrum was removed was freely scraped and cleaned by a small gouge. The girl recovered well from the operation, and the nostril has been syringed with a solution of permanganate of potash, and boric acid ointment applied frequently.

April 19th.—The swelling of the nose has completely disappeared, the loose fragments forming the wall of the abscess cavity having fallen into their respective places. There is still an indication felt by the finger through the skin of the side of the nose of the position originally occupied by the sequestrum, but there is no visible distortion, and the nose is perfectly symmetrical. The protrusion of the eyeball is becoming less every day, and the nodular swelling on the floor of the orbit is receding. The lymphatic glands under the lower jaw have almost disappeared.

Remarks.—The irritation set up by the presence of the necrosed piece of bone in a confined abscess cavity gave rise to so much disfigurement and swelling, that the case, when

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first seen, presented some of the features of a specific ulcer within the nostril. The enlarged lymphatic glands under the angles of the jaw also gave support to this view of the case. As, however, all the symptoms have subsided, it seems probable that the local irritation was due to septic poisoning from the abscess cavity, and the proptosis was probably due to a diffuse cellulitis of the orbit starting from the same focus of infection. Had the sequestrum remained, there would no doubt have been an extension of inflammation with abscess in the orbit, and possibly general septicæmia might have been set up.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Adenoma of Ovary.—Adenoma of Palate.—Neuroma of Parotid.—Actinomycosis in Man.—Erythrasma.—Vessels in Meningitis.—Gangrene of Lung.—Miliary Tubercle in Pulmonary Artery.—Mediastinal Tumour.—Peripheral Neuritis, Myelitis, Pachymeningitis.—Duct Papilloma of Breast.—Secondary Epithelioma of Jaw.—Osteochondro-sarcoma of Breast.—Osteochondroma of Thigh.

THE last meeting of the session of this Society was held on Tuesday last, Dr. Bristowe, President, in the chair.

Dr. COUPLAND (hon. secretary) read the report of the Morbid Growths Committee on Mr. Peek Richards' specimen of intracranial tumour. The tumour was a cyst with very vascular sarcomatous wall, into which hæmorrhages had occurred; it was developed from the infundibulum and third ventricle. The report was signed by Drs. Fred. Taylor and F. C. Turner.

Mr. F. S. EVE showed two Ovaries removed by Mr. Lawson Tait. In one ovary there was a circumscribed fibrous mass in one part and cysts in the other half, but they had no connexion with each other. The fibrous mass showed columns of germinating epithelium separated by a fibrous stroma. The specimens suggested one mode in which cystic disease might be produced by development from adenomatous tissue. The account of the development of the ovary given by Balfour, confirmed by Klein, showed that the germinating epithelium became thickened, and then the stroma grew into and divided it up into the trabeculæ. But in the development of the ovary an evolution of the Graafian follicles occurred, but this did not take place in the adenomata. Reference was made to a specimen of Mr. Alban Doran's, of a tumour weighing 14 lb., from a girl aged sixteen, in which similar appearances obtained, with a hyaline degeneration. Klein had described small masses of embryonic tissue in the fully developed ovary, which might form the starting-point of tumours. It was possible that cystic disease of the ovary might develop from such nests of cells. Mr. Eve thought that these observations brought ovarian tumours into the same line of formation as tumours in the breast, testicle, and skin—a generalisation of considerable importance.—Mr. ALBAN DORAN said that if Mr. Eve had confined his remarks to adenoma he should have entirely agreed with him. He was not prepared, however, to connect adenoma with cystic disease, and had examined 200 specimens without finding any evidence of such connexion. In Hart's paper on General Anatomy the extreme difference in the developing structure of the ovaries of such animals as cats, dogs, and human beings was pointed out. The embryonic tissue described by Klein had been shown to be relics of Wolffian bodies wandering in from the hilum of the ovary.

Mr. HUTCHINSON showed specimens of Adenoma of the Palate. The first was a slowly growing and slowly ulcerating tumour situated at the junction of the hard and soft palate; it occurred in a lady aged thirty, and had grown for one year, was ill defined at its edges, and ulcerated in its centre down to the bone, which could be struck; it was curious that no inflammation had occurred around it. Sir James Paget agreed that it was a most unusual form of growth. It was freely removed ten years ago, and had not recurred, neither had the glands been affected. The second case was also a quiet ulcerated tumour with bossy edges, and situate in the same place; it appeared in a gentleman aged forty-five, and also without any glandular implication. This was also freely excised six months ago. The structure of it was that of an adenoma, like the salivary glands in places and the tonsil at other parts. The ulcer had the appearance of a large open follicle of the tonsil, at the bottom of which a cheesy mass of very fetid substance existed; this ulcer did not expose the bone as in the first case, and there had been no recurrence. The literature did not throw much light on such cases, few authors mentioning the ulcerative quality of the tumours. The specimens also differed in not being encapsuled, most of the palatal adenomata being encapsulated.—Mr. BARKER referred to an adenoma of the palate that Mr. C. Heath had removed; it also presented the fetid caseous material in its base.

Mr. HUTCHINSON, jun., showed a Neuroma of the Parotid Gland, one inch in its longest diameter, taken from the left parotid by Mr. Waren Tay. It shelled out with the greatest ease, and the operation was followed by facial paralysis. The tumour was composed of minute round or oval bodies, from $\frac{1}{110}$th to $\frac{1}{210}$th of an inch in diameter, which broke up into concentric capsules, like the layers of an onion. Each had a concentric arrangement of cells and fibres, like end bulbs; there was no doubt of the existence of nerve fibres. The tumours probably developed on the branches of the facial nerve trunk. Reference was made to some observations of Rindfleisch and of Czerny on plexiform neuroma; but the specimen shown seemed to be unique.—Mr. BUTLIN said at first the specimen reminded him of a neuroma figured in Virchow's *Die Krankhaften Geschwülste*; but this was not the case. He had not been able to find either picture or description of a similar specimen, which must therefore be exceedingly rare.—Dr. HALE WHITE did not regard the concentric bodies as of so highly developed a nature as end bulbs; and end bulbs, on a motor nerve like the facial, would be very unlikely to occur.—Mr. HUTCHINSON, in reply, said that there were sensory nerves in intimate relation with the parotid gland.—The specimen was referred to the Morbid Growths Committee.

Dr. T. ACLAND read a paper on the Etiology and Pathology of Actinomycosis. Reference was made to a paper by Mr. Shattock in the Transactions of 1885. As to the clinical signs, they presented no specific characters. The actinomyces were found in the centre of each area of inflammation; in the cow they had the appearance of tufted rosettes with pyriform or clubbed-shaped rods. The first cases of human actinomycosis in this country had been recorded by Dr. Sharkey and himself; Mr. Shattock subsequently described some cases. In the human being the appearance was that of innumerable fine threads, single, branched, clubbed, or straight. He maintained and gave his reasons for believing that the structures were not due to the method of preparation, nor were they post-mortem growths, and certainly not crystallised fat due to retrograde changes in caseous products. Unsuccessful attempts had been made to cultivate the organism. Israel had attempted to inoculate a calf with the human mycotic material, but without success, though he had watched the animal for several months. One observer had cultivivated the actinomyces in gelatine and blood-serum, but he had not succeeded in reproducing the disease in animals. The structures did not become altered by acetic or nitric acids, nor by ether or alcohol, and were not blackened by osmic acid; they stained like an organism. Injection into a vein of the ear of a rabbit of cultivations of aspergillus fumigatus was followed by the death of the animal in a few days. Then spores could be found sprouting in a large vessel of the lung; this proved that mycelial growths could be causes of disease in animals. To show that the actinomyces was not an accidental contamination of a microscopic specimen, he exhibited a specimen of Dr. Percy Kidd's, which showed how unlike the two things were. Again, Mr. Solly had shown a preparation of crystallised fat from caseous material which did not stain; this to meet the other objection that the actinomyces was a crystalline product.—Dr. BRISTOWE believed that similar appearances were to be seen in the Madura foot, though the masses of growth were larger and coarser in structure.—Mr. CROOKSHANK showed many specimens of micro-organisms; actinomyces showed a likeness to the threads of mucor. In some kidneys a kind of mycosis produced by spores of fungi—aspergillus fumigatus—had some resemblances also. He agreed that it was difficult to demonstrate the club-shaped rods in some of the specimens. Jöhne had described a mycotic disease having clinical features like those of actinomycosis. In some of the preparations made by Mr.

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Crookshank it was easy to demonstrate the radiate structure in the fresh state, but not in stained specimens.—Dr. PERCY KIDD considered that one of the merits of Dr. Acland's work was that he had succeeded in proving that we had to deal with two sets of cases, that of actinomycosis bovis and the human variety. In the latter an appearance of a number of threads as of bacillus was bounded by small colonies of bacilli at their periphery.—Dr. ACLAND, in reply, thought the question of the organism in Madura foot would repay reopening, especially after the investigations of Lewis and Cunningham; he did not think the organism was the same in Madura foot as in actinomyces, but even in the latter he was not prepared to say what the growth was, whether aspergillus, mucor, or bacillus—nor, indeed, whether it was communicable from animals to man.

Dr. F. PAYNE showed a specimen of Erythrasma taken from a man aged forty, who for ten years had had a brown patch on the scrotum and corresponding part of the thigh; it was scaly and of a coffee-ground colour, not unlike pityriasis versicolor. After staining with methyl violet an organism of minute dimensions showing filaments one-third the size of the trichophyton was visible. Burchardt and Baerensprung had described a similar organism under the name of microsporon minutissimum, a minute fungus. Again, Bizzozero of Milan averred that these were bacteria, and occurred in the skin of man as a leptothrix development of bacillus. The point was whether they were the cause of the skin affection. The organism had been described as existing in the moist part of the groin and between the toes, and also in parts kept moist by inflammation. Dr. Payne had not seen the same form of organism before, and it was difficult to believe that it had not the same apparent causative relation to the disease as the organism found in chloasma.—Dr. T. C. FOX showed similar specimens from the thigh of a man suffering from diabetes; they existed in great abundance as long threads ramifying after the same plan as trichophyton; plain tubes and tubes with compartments and moniliform shapes were to be seen.

Dr. HANDFIELD JONES showed numerous drawings of Vessels from cases of Meningitis. He wished to demonstrate the origin of the corpuscles in the rete of the pia mater, and also certain changes occurring in the minute vessels. Dr. Bastian had described the migratory property of the cells eight years ago, and attributed it to amœboid contractions. These changes were not constantly met with. Some of the corpuscles were elongated and notched, and differed from the round or oval ones in a marked manner. The alteration in structure of the vessels and the corpuscular hyperplasia, which was an active process, were probably due much more to a disorder of the vessels than to damage of the tissues themselves. There was a degradation of a specialised tissue; in some of the specimens the piamatral capillaries ended in short tufts suggestive of renal glomeruli.

Dr. SILCOCK showed a specimen of Necrosis of the Lung due to Thrombosis of the Pulmonary Artery; it occupied the greater part of the middle lobe of the right lung, and came from a woman aged forty-four, who had Bright's disease with hypertrophied heart. As there was no sign of previous pneumonia, it was thought that embolism followed by thrombosis of the branch of the pulmonary artery was the cause of the necrosis, and not a consequence of it.

Dr. F. C. TURNER exhibited specimens of Tubercles in the Pulmonary Artery taken from a boy aged fourteen, who had tuberculosis of general distribution. In the main branches of the pulmonary artery clusters of miliary tubercles were to be seen in the endarterium. Weigert had described these miliary tubercles in the veins in nine cases out of ten of tuberculosis, but they had not been observed, so far as he knew, in the larger branches of the pulmonary artery.

Dr. S. WEST showed several Mediastinal Tumours. In one instance the man died suddenly, and the pneumogastric nerve was found to be greatly thickened; the nerve itself was not much altered, but a large mass of small cells grew between its fibres; it was a medullary carcinoma. In a second case hemiplegia of embolic origin coexisted; the mediastinal growth was not detected during life, but the vessels were invaded by the tumour, which had spread through their walls; possibly this was the source of embolism. In another specimen the innominate vein was occupied by a large growth. He had observed in this case many small venous thromboses in the legs, arms, and trunk, the cutaneous veins being affected. There was no proof of any direct connexion between the thromboses and the tumour. In the case of a butcher who was gouty a similar kind of thromboses was found in the skin. The tumours illustrated some of the more unusual causes of death.

Dr. HALE WHITE showed specimens of Peripheral Neuritis and Syphilitic Pachymeningitis, taken from a woman aged fifty-two, who had been a hard drinker and had had delirium tremens. For some months past she had had occasional right-sided attacks of convulsions. On admission she seemed partially demented, and would not answer when spoken to. The optic discs were healthy, and there was no facial paralysis. There were wasting, rigidity, and contracture of the right arm, and in a slight degree of the leg. The liver was enlarged and rough. After she had been in hospital a few days she was attacked, in the course of seven hours, with sixty-three right-sided epileptiform seizures, in which the face was affected, and which were accompanied by unconsciousness. The temperature ran up to 103°; the patient lapsed into a quiet unconscious condition, and died about eighteen hours after the last fit. At the post-mortem examination there was syphilitic ostitis of the back part of the frontal bone, causing the membrane underneath to be adherent, and under this ostitis, and over the whole of the outer surface of the left frontal lobe for an area bounded below by a horizontal line at the upper border of the first frontal convolution the membranes were quite thick and dense, being of a yellowish gummatous colour in parts and adherent to the brain, except where separated by thick yellow pus, of which there were several patches. The brain substance underneath was hardly affected. The same condition, but to a less degree, was present on the inner surface on that part of the marginal convolution immediately over the genu of the corpus callosum, causing the marginal convolutions to be adherent. With the exception of cirrhosis of the liver, the rest of the body appeared healthy. Microscopical examination showed that the pachymeningitis was characteristically syphilitic, being composed partly of fibrous tissue and partly of gumma, consisting of degenerate cells in a delicate meshwork; the nerve cells in the convolutions underneath were not at all affected. Examination of the skin from the finger showed that the fibrous sheath around the nerve formation was considerably thickened and sent in thick septa between the individual nerve fibres. These were much degenerated; in many of them no axis cylinder could be seen, and all that could be observed was the granular material into which the white substance of Schwann had become converted. Under very high powers sometimes the axis cylinder could be seen among all this granular material, itself so much distorted and degenerate that it could only be with difficulty distinguished from its surroundings. In the same section there were many affected and many healthy fibres; the change was always very chronic, there being no small-celled nor vascular increase. The median nerve appeared healthy to the microscope. The columns of Goll and central parts of the lateral columns in the spinal cord stained rather deeper than the rest of the cord, and there seemed to be a slight increase of neuroglia. This case presented many points of interest—(1) a syphilitic pachymeningitis following syphilitic ostitis was a rare though recognised sequence; (2) the right-sided Jacksonian epilepsy following the left-sided lesion was very interesting; (3) the peripheral neuritis, in view of the recent discoveries chiefly of the French workers, was important as showing that the usually received notions concerning it were correct. With respect to its etiology, it was probably due to the alcohol, but possibly to the syphilis; and, lastly, the slight change in the cord, also probably alcoholic, was to be noted.—Dr. HADDEN thought there was unquestionably neuritis, most probably due to alcohol.—Dr. WHITE said there were no symptoms referable to the part from which the nerve was removed.

Mr. BILTON POLLARD showed two specimens of Duct Papilloma of the Breast. The first specimen had been sent to him by Mr. Farnell of Eastbourne. The patient, from whom it was taken was fifty years of age. Twelve years before the removal of the breast, when six months advanced in pregnancy with her last child, the patient noticed a slight discharge of blood from her left nipple; three years later a warty growth projected from her nipple. This growth was repeatedly removed without permanent benefit, and two years and a half ago, when Mr. Farnell first saw the case, there was a growth in the breast beneath and around the nipple. The lymphatic glands were unaffected. In Oct. 1885 the breast was removed. On section the growth was invested with a distinct fibrous capsule, except at the

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place where it was sprouting on the surface. The growth was composed of two portions, of which one was very friable and the other was dense and firm. The structure of the friable portion was that of an arborescent papilloma; there was a very delicate stem of fibrous tissue with innumerable offshoots, all lined with columnar epithelium; in some places adjacent papillary processes were seen bending towards one another as though about to coalesce at their extremities; in others the appearances indicated that a junction had been effected; and in others, again, secondary villi were visible sprouting into the included spaces. The dense portion of the growth was encapsuled just like an adenoma of the breast; its microscopical structure was that of an adeno-fibroma, but in the general arrangement of its tissues it bore a striking resemblance to the friable portion of the growth. Mr. Pollard suggested that the adenomatous portion was but an advanced stage of development of the papillary portion resulting from the union of its adjacent villous processes and an increase in the fibrous groundwork of the growth. He also thought that such a method of development would explain the absence of excretory ducts in adenomata of the breast. He was indebted for the second specimen to Mr. Godlee. In it the tendencies of the growth were rather towards malignancy, although there were no evidences of malignant action in the patient. The growth, which closely resembled the first specimen in its structure, was in many places invading the surrounding fat. Mr. Godlee had shown to the Society a similar case in which the axillary glands had been secondarily affected, and Cornil and Ranvier described a similar growth under the title of villous carcinoma. Mr. Pollard thought the specimens of interest as suggesting that papillomatous growth within the mammary ducts might under certain conditions develop into simple tumours—adeno-fibromata,—and under other conditions develop into true duct cancers.—Mr. SHATTOCK said that he had seen two specimens of cysts of the breast with papillary growths identical in microscopical appearances with the specimens exhibited.

Mr. BILTON POLLARD showed for Mr. Christopher Heath a specimen of Secondary Epithelioma of the Lower Jaw, removed by Mr. Heath at University Hospital from a man aged fifty-five. The primary growth was first noticed in the lower lip two years and a half ago, and was excised two years ago. A year ago the secondary growth began to form, and on admission there was a swelling surrounding the body of the lower jaw and involving the tissues in the left submaxillary space. The tissues removed consisted of the left half of the body of the lower jaw, together with the angle and a small portion of the ramus, considerable portions of the masseter, internal pterygoid and mylo-hyoid muscle, and the left submaxillary gland. The jaw was only superficially diseased by extension of the growth to it. The patient's recovery was rapid and complete. The growth was a squamous epithelioma, and the only unusual feature of it was that, though it must have primarily formed in the lymphatic glands, it had so encroached upon the jaw as to simulate a primary growth in that bone.

Mr. W. H. BATTLE showed a specimen of Osteochondro-sarcoma of Breast. The patient, who was a widow aged seventy-three, and had had five children, was admitted into St. Thomas's Hospital, under the care of Mr. Mackellar, on Aug. 28th, 1885; amputation of the breast was performed three days after admission, and she left the hospital at the end of a month. The tumour began as a lump on the inner side of the nipple six years ago; it remained stationary, of the size of a pea, for two years, and the ensuing three years it increased to the size of a hazel-nut, and then grew more rapidly; it was painless, the size of an orange, of hard consistence, and composed of two portions—an inner, very hard and rounded, about the size of a walnut, which the patient had noticed for a long time; and an outer, more elastic, the size of a large egg, a more recent development. The nipple was much retracted. The skin over it was movable, except at the inner part, where it was adherent, red, and tense. A small freely movable gland was detected in the axilla. The softer part of the growth was friable and extremely vascular, with numerous hæmorrhages; the smaller portion was very hard and resembled bone. Microscopically, the softer parts were composed of round and spindle cells; the harder, of cartilage, which in places had ossified with the development of Haversian systems. The specimen was rare.

Mr. W. H. BATTLE also showed a specimen of Osteochondroma of the Thigh. The patient, aged twenty-five, stated that he had been kicked by a horse in the left groin. A fortnight later he noticed a lump the size of a walnut in this situation. When he came under treatment three months and a half after the accident, this tumour was of stony hardness and had a slightly irregular surface; it was situated in the diverging angle between the sartorius and the tensor vaginæ femoris, and apparently under the deep fascia; it was movable laterally, and measured three inches from side to side and four inches in its long axis. At the operation it was found lodged in a bed of areolar tissue without any definite connexions. Its structure was so hard as to require a saw to divide it. The hardness of the surface was unequal; this depended on the distribution of the cartilaginous, bony, and calcareous elements of which the growth was composed. The bony part occupied the centre chiefly, but was also scattered in other parts. In certain situations, generally where the cartilage and bone passed into one another, were patches of white calcareous deposit.—Mr. BUTLIN referred to a similar case occurring in the thigh which had been under the care of the late Mr. Callender; the growth recurred two or three times at intervals of about a year. It was a spindle-celled variety, and ossified in all parts except the centre.—Mr. BOWLBY spoke of his own specimen of tumour of the breast which had undergone partial calcification; also of that of Mr. Wood, and of that of Sir Astley Cooper, which was said to consist entirely of bone.

The following card specimens were shown:—Mr. L. Hudson for Mr. E. Crookshank: Photographs of Micro-organisms. Dr. Colcott Fox: Erythrasma. Dr. P. Kidd: Aspergillus Mycosis of Kidney. Dr. Silcock: Fibroid Thickening of Pleura (? Syphilitic). Dr. Sharkey: Perforation of Vermiform Appendix. Dr. Hadden: (1) Tubercular Mass in Supra-renal Capsule; (2) For Mr. Paul, Rupture of Aorta by Muscular Strain. Mr. Battle: Bones from a case of Congenital Syphilis. Mr. E. H. Fenwick: Calculus Extracted per anum. Mr. Churchill: Central Necrosis of Great Trochanter, with Rarefying Osteitis of Hip-joint. Dr. Hale White: A series of specimens of Leprosy for Dr. Rake of Trinidad. Mr. S. Paget: General Symmetrical Psoriasis (living specimen).

CLINICAL SOCIETY OF LONDON.

Aneurysm of Aorta and Galvano-puncture.—Rupture of Aortic Aneurysm into Posterior Mediastinum and Abdominal Cavity, with Remarkable Symptoms.—Impaction of Stone in one Ureter, with Atrophy of the other Kidney.

AN ordinary meeting of this Society was held on the 14th inst., Mr. Thomas Bryant, F.R.C.S., President, in the chair.

Dr. CHURTON (Leeds) read notes of the following case of Aneurysm of the Thoracic Aorta treated by Galvano-puncture. A strongly-built man, aged forty-five, had in 1880 an aneurysm which protruded through the left chest wall. He was then in the Leeds Infirmary, under the care of Dr. Clifford Allbutt, and was treated by iodide of potassium (afterwards continued for three years), and by galvano-puncture upon two occasions. After each puncture pulsation ceased for two or three days, but finally remained as before. The aneurysm, however, did not increase in size until last year. In June, 1885, he was admitted under the care of Dr. Churton, a second tumour having appeared in front of the lower part of the sternum. This grew rapidly. With the concurrence of Dr. Allbutt (now consulting physician to the hospital), Mr. Teale, who had operated upon the patient previously, applied the galvanic needles, fifteen cells of Leclanché's battery being used for twenty minutes. Blood-débris ran from the negative puncture. The pulsation ceased, but returned on the fourth day. The operation was repeated on October 2nd with like result. He began about this time to expectorate two or three drachms of blood-stained mucus daily. On October 27th galvano-puncture was used for the third time. The tumour was tympanitic for a few hours, but did not cease to pulsate. On Nov. 9th it was so much increased in size and its walls were so thin that a fourth puncture was made, Dr. Griffith, the resident medical officer, operating in the absence of Mr. Teale. The current was passed for twenty minutes. Pulsation entirely ceased, and the patient seemed to have gained a respite, but suddenly died twenty minutes after

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the operation from rupture into a bronchus of the first aneurysm, which had hitherto given no new sign except the very small quantity of bloody sputum. At the necropsy, an erosion, half an inch in diameter, almost blocked up by a clot to be described below, was found in the upper part of this sac. Except in the arch the aorta was only moderately atheromatous. One testis had undergone fibrosis. The orifice of the first aneurysm was about an inch in diameter; the wall of the sac was as firm as cartilage. The middle of the sac was occupied by a firm clot larger than a cricket-ball; the lower part of the sac was lined by laminated clot, thin around the orifice, gradually becoming thicker above, and quite smooth. The upper aspect of the central clot was rough. A fissure between the wall and the clot connected the two chambers into which the primary sac had been divided by the formation and subsequent partial separation of the clot. It seemed to the author that after the deposition of clot upon the entire sac, with closure of the upper part by formation of a very thick layer, this had been stripped from the roof of the sac by the blood, which found a way through the fissure, and then, enlarging this part of the sac, formed a projection on the exterior of the chest. A constriction in the sac, marking the position of the large mass of clot, suggested this view. The growth of this sac was arrested by the firmness of its wall except at two points both in the upper division or chamber. At one of these points the rupture into the bronchus had occurred. At the other, an orifice, one third of an inch in diameter, which existed at the lower part of the chamber, led to the second sac, which, as well as a third and very small sac, were altogether outside the chest wall. The third sac appeared to have originated by an orifice in the small piece of the wall of the primary sac, which had yielded and had become the upper limit of a short canal leading into the second sac. [The specimen and drawings were shown.] The walls of the second sac were soft, and its interior irregular, except where the sternum, quite uninjured, formed its limit. The front wall was composed merely of skin, and irregular bands or trabeculæ of connective tissue of varying thickness, disposed like the carneæ columnæ of a right ventricle. This was the cavity, as large as an orange, in which the galvanic needles had been inserted. It contained no laminated clot; the surface was smooth and uninflamed. A soft jelly of pinkish colour, too fragile to be preserved, and some blood débris were contained in the cavity. The cessation of pulsation had been due to entanglement of this clot in the short narrow canal leading from the orifice into the cavity. The temporary cessation of pulsation noted in the large aneurysm five years ago was probably due to a similar entanglement of soft clot in the narrow fissure above mentioned. The formation of such a clot and of blood débris in the cavity of a perfectly open aneurysm one would suppose to be not free from danger.—Dr. GIBBONS had the opportunity of seeing the post-mortem examination in two cases of aneurysm treated by galvano-puncture. The first was a woman suffering from aneurysm threatening to rupture externally, which was galvano-punctured successfully. Later, she died, and a firm clot was found at the point of previous puncture. The second case was that of a man suffering from thoracic aneurysm, which also threatened to rupture externally. This was punctured with needles attached to a battery of six Smee's, the operation lasting fifteen minutes. Nine days after, a second puncture was tried for one hour, and a firm clot was formed. After a time, all benefit of former operations having disappeared, puncture was a third time performed; solidification ensued, and the man resumed work. Six weeks later he returned to hospital; sloughing of skin appeared; puncture was again performed, but the edges of the wound becoming unhealthy, death occurred, apparently from pyæmia. The aneurysm was found post mortem to be of the thyroid axis. He believed there was a future in store for electrolysis, especially in gynæcology.—Dr. CHURTON, in replying, said that while disclaiming any right to speak positively, he thought that the clots which were found in the cases mentioned by Dr. Gibbons, being closely adherent to the wall of the sac, must have been deposited slowly upon the lining membrane, and could not have been formed around the needles introduced into the sac, which would, he supposed, be insulated, except at their points.

Dr. PERCY KIDD read a case of Aneurysm of the Aorta, with Extravasation of Blood into the Posterior Mediastinum compressing the Œsophagus and Vagus Nerves, and Rupture into the Abdominal Cavity, associated during life with frequent Vomiting. A labourer, aged thirty-one, was admitted into hospital on Dec. 4th, 1885, in a very exhausted state. He stated that he had been ailing for six weeks and had suffered from a slight cough, but was able to do his work until four days previously, when he took to bed on account of vomiting, shortness of breath on exertion, headache, and a feeling of malaise. He continued to vomit frequently, the headache and shortness of breath persisted, and his bowels were constipated. His previous health had been very good, with the exception that some years back he had contracted syphilis, and six years ago he had "pleurisy." On admission the patient was muscular and well-nourished, but extremely anæmic. On the lower part of one leg there was some partially healed ulceration and pigmentation. His pupils were slightly unequal, the right being larger than the left. Pulse small and weak, but equal in the two radials. Chest: Slight scattered rhonchus and slight dulness at both bases posteriorly; breath sounds rather weaker in the left than right interscapular region; over the manubrium sterni there was weak tubular breathing, but no dulness; heart sounds healthy. Abdomen soft and natural; no spots. Ophthalmoscopic appearances normal. Urine healthy. Temperature 99·0°. The next day there was no noteworthy change except that the pupils became equal; He continued to suffer from vomiting and retching, had a troublesome cough, and the temperature became subnormal. Early on the 7th he became very restless, the pallor increased, and he sank in two hours. At the necropsy the peritoneal cavity was filled with blood, but no source for the hæmorrhage was found in the abdomen. There was a small sacculated aneurysm springing from the third part of the arch of the aorta, which had ruptured into the posterior mediastinum and subpleural tissue on the left side. The effused blood was shut off from the pleural cavity by adhesions, and had burrowed down along the œsophagus, compressing it and the vagus nerves, and had entered the abdominal cavity behind the crura of the diaphragm. The aorta was atheromatous in the arch, but elsewhere was healthy. The heart was slightly hypertrophied, the lungs œdematous, and one testicle was fibroid. The other viscera were healthy. The vomiting was considered to have been due to irritation of the vagus fibres lying along the œsophagus by the pressure of the effused blood.—Mr. HARRISON CRIPPS related two cases of intra-peritoneal hæmorrhage in which uncontrollable vomiting was a marked symptom. A man jumped down from a high dogcart, and soon suffered from severe pain with vomiting every half-hour; he was somewhat collapsed, and there was slight distension of the abdomen. At a consultation internal strangulation was considered to be the lesion, and abdominal section was performed. Much fluid, dark-coloured blood was all that was discovered, but the source of hæmorrhage could not be found. At the necropsy a laceration of the posterior surface of the liver was the only lesion detected. A week or two after this case, a boy who had been run over was brought in, with severe vomiting and considerably collapsed. After death, which took place in two days, hæmorrhage into the peritoneum was found, with laceration of the spleen.—Dr. D. DREWITT remarked that in purulent peritonitis vomiting was very severe.—Dr. W. HADDEN asked if the gullet were much narrowed, and whether the vomiting was from the stomach.—Dr. KIDD, in reply, considered that there was genuine vomiting, which, he believed, was due to pressure on the vagus nerves, though some might have been due to intra-peritoneal hæmorrhage.

Mr. PICK read a case of Impaction of Stone in one Ureter, with Atrophy of the Kidney on the other side. The patient, aged forty-five, was first seen on Feb. 1st, 1884, when he was found to be suffering from almost complete suppression of urine. He had been the subject of dyspepsia, with high-coloured lithatic urine, all his life. Fifteen years ago he passed a small calculus. In August, 1883, he was attacked with severe pain in the hypogastric region, accompanied by inability to pass urine. A catheter was introduced, but no urine was drawn off. The pain, which was of a very intense character, and was accompanied by sickness and vomiting, suddenly ceased, and shortly afterwards he passed a small calculus by the urethra. Two days before he was seen by Mr. Pick he was again seized with intense pain in the region of the bladder, extending upwards in the course of the left ureter and downwards to the testicle on the same side. The pain was accompanied by a feeling of sickness, but no actual vomiting took place. It lasted for about four hours and then

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passed off. Since that time until he was seen (a period of over forty-eight hours) he had only passed five ounces of urine. Upon examination he was found to be in no pain, but nervous and anxious about himself. He was sweating profusely. There was no water in the bladder. The urine which he had passed was light-coloured, almost like water, of sp. gr. 1006, and contained no albumen or abnormal deposit. The diagnosis arrived at was that the case was one of impaction of a calculus in the ureter of a patient who had only one kidney, or who had already from some cause had the other kidney permanently destroyed. The patient was ordered to drink half a gallon of distilled water daily, in the hope that this would act as a non-stimulating diuretic and cause the secretion of a large quantity of urine, which would mechanically wash the stone into the bladder. Two days afterwards his condition was manifestly altered for the worse, though it appeared to be due more to nervous anxiety than to anything else. His principal complaint was inability to micturate; he, however, also complained of a considerable amount of pain in the left side of the abdomen, and here there was to be felt a firm, hard, and resisting circumscribed swelling, which was dull on percussion. He remained much in the same state, gradually, however, getting more restless and complaining, but without presenting any fresh symptoms, until the seventh day of his attack, when he was suddenly seized with an intense desire to micturate, and in the course of a very short time passed no less a quantity than seven pints and a half of urine, and with it the passage of three small calculi. From this time his symptoms were at once relieved. His urine, which he passed in natural quantities, contained a little blood, but this soon disappeared, and in a week or two he was, as he expressed it, "quite himself again." He continued well for about a year, until February, 1885, when he had a severe attack of lumbar pain followed by the appearance of blood in the urine, and some time afterwards passed a small calculus by the urethra. On August 3rd of the same year he had a third attack of renal colic, which lasted five or six hours and then ceased, but was followed by the appearance of blood in the urine. On the 11th he had an attack of retention from the impaction of a calculus in the urethra. This was relieved by the passage of a catheter, during which the stone was pushed back into the bladder. This was followed by vomiting, hiccough, and almost complete suppression of urine. He became comatose, and died on Aug. 17th. Permission could only be obtained to examine the urinary organs. The right kidney was found to be atrophied, very granular on its surface, and with only a trace of secreting structure remaining. The left kidney was twice its natural size, its cut surface of a deep-red colour, and much congested. It contained about six or seven small calculi studded throughout its substance, and one large calculus was contained in the pelvis and blocked up the ureter. The ureter itself was natural. The bladder contained a small stone. In reply to the President, Mr. Pick said that the lumbar swelling was difficult to map out accurately, but it seemed about four inches in length, and was considered to be a dilated ureter.—Mr. GODLEE raised the question whether urine might not be rapidly secreted after the removal of an obstruction due to a stone.—Mr. BRYANT inquired as to the state of the right kidney. The treatment by large quantities of fluid could only have been effective under the peculiar circumstances of the case. In his opinion the stone must have been impacted in the upper part of the ureter, which was probably not capable of much rapid dilatation. But it could become dilated as the result of a chronic process, after which he did not think the dilatation could pass away. He related a case of calculus in the bladder in which the child was sent away from the operating theatre because the stone could not then be detected. In the course of the night the child became pale and cold, in a collapsed condition, and died. At the necropsy it was found to have but one kidney, and hæmorrhage had taken place into the pelvis of the kidney. The anæsthetic was assigned as the cause of this hæmorrhage, but death would probably have been attributed to the operation if it had been done.—Mr. A. E. BARKER believed that where we had to do with a large accumulation of urine, a urinary fistula purposely made in the loin would frequently forestall very serious consequences. The risk of the operation would be very small, as also its consequences. In a case in which he had performed this operation the woman was now, and had been for a year past, wearing a urinal; she had no further pain, and was able to follow her avocations. He considered that there were occasions on which this plan might be resorted to with great advantage.—Mr. R. W. PARKER related the case of a boy aged twelve, who was first seen in February, with a history of having fallen over a bench, and having been thereby struck in the lumbar region. He was brought to him because of the passage of very dark blood-stained urine. Under rest the pain and hæmaturia disappeared in a week, and he was not seen till one week ago, when he was again passing blood. There was a large swelling in the lumbar region, which Mr. Parker punctured, and drew off much urine, but no blood. This appeared, therefore, to be a hydro-nephrotic sac, and a free incision was made into it two days later, eighty ounces escaping. The next day no urine escaped from the fistula, and the patient was passing very little urine at all. Complete suppression set in, and within a day or two uræmic convulsions and coma, ending fatally. The right kidney was found in a sacculated condition with calculi, and the ureter was blocked up; the left kidney was a mere sac, and contained many small calculi in its loculi.—Mr. PICK said the right kidney was an example of a congenital deficiency of development; it was but one inch long, like a specimen he had shown years ago at the Pathological Society, which had the size and shape of the supra-renal capsule, with a small renal artery. The treatment in this case was only applicable to very rare cases where but one kidney was functional. The stone, he believed, had lodged at the opening of the ureter into the bladder. As to the ureter, he did not perceive why it should not contract during a period of eighteen months. If a fistula had been made in the loin, it might have done considerable harm. In regard to Mr. Godlee's remarks, he believed that the large quantity of urine was passed before, and not after, the stone had come from the bladder.

The following living specimens were exhibited:—Mr. Pearce Gould: Raynaud's Disease, affecting chiefly the left hand and foot. Dr. Henry White: Cervical Rib.

MIDLAND MEDICAL SOCIETY.

A MEETING of this Society took place on April 7th, Dr. J. Holmes Joy, President, in the chair.

Loss of Conjugate Movements of the Eyeballs downwards, and of Convergence and Accommodation.—Dr. SUCKLING showed a woman aged thirty-eight, who presented these symptoms. She had suffered from vertigo for twelve months. There was no history of syphilis. The pupils responded normally, and the fundus was normal. There was a slight general increase of the deep reflexes, most marked on the left side. In walking the body was held stiffly, and she frequently fell, falling to the left. There was no psychical change. Dr. Suckling thought that the paralysis was due to degenerative changes in the cerebellum.

Paraplegia and Anæsthesia of Legs.—Dr. SUCKLING showed a woman who had been sent to him suffering from paraplegia anæsthesia of the legs, following a fall five months previously. She was of the neurotic type; cheerful, intelligent, energetic, industrious, and eager to get well. After being informed that the application of electricity would cure her, faradisation was employed, resulting in recovery.

Dr. SUCKLING also read a paper upon Paralysis depending upon Idea and Faith-healing.

Glioma of Retina.—Mr. EALES showed an eyeball excised for glioma of the retina in a child aged two years and a half. The vitreous and retina were replaced by the growth, which, however, had not perforated the ocular tunics anywhere; the lens was transparent, and the iris not apparently involved. Microscopical sections of the tumour were typical of glioma; but sections of the optic nerve showed it to be free from infiltration by the growth, and apparently quite normal in condition.

Senile Cataract.—Mr. EALES also read a paper on some points connected with the Extraction of Senile Cataract, in which he insisted on the importance of ophthalmoscopic examination in the early stages of cataract, when only the state of the fundus can be ascertained. Bright's disease and diabetes were perhaps the most unfavourable of all the various conditions of ill-health which tended to bad results of operation. Cocaine locally applied had rendered general anæsthesia unnecessary for extraction of cataract, thus removing one source of danger both to the patient and the integrity of the eye. When all the conditions were favourable, he thought the cornual section of Liebreich with a

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small iridectomy just involving the pupillary margin of the iris was a good operation and gave excellent results. The section was most favourable for removing cortical matter without the use of force, and was well placed for early subsequent inspection, while the cicatrix was hardly noticeable afterwards and the iridectomy too small to be attended with any bad results as regards vision or appearances; nor was it extensive enough to cause pain during its performance, no dragging of the iris taking place, comparing favourably in this respect with the pain caused in excising the iris down to its root necessary in all the modifications of Graefe's linear section, in which, consequently, the final stages of the operation were often attended with much embarrassment to the operator by the patients having lost their composure. When the conditions were not favourable he preferred the three-millimetre flap modification of of Graefe's operation, in which case he often performed the iridectomy previously, as in cases where glaucoma was present or its tendency suspected, or the iris non-dilatable or vascular, or Bright's disease present. He had found Forster's method of maturing the lens a most valuable method of dealing with cases of very slowly maturing nuclear cataract, affecting both eyes equally, and a means of saving months of waiting and forced idleness to the patient.

Notices of Books.

Kystes: Tumeurs Perlées et Tumeurs Dermoïdes de l'Iris. Par E. MASSE. Paris. 1885.—The explanation of the formation of cysts in or on the iris has always been felt to be a difficult chapter in ophthalmology. The first case recorded appears to have been by Mackenzie in 1832. Dr. Guépin, Mr. Hulke, Rothmund, Wecker, Monoyer, and others followed with detailed reports of cases. The great frequency with which the formation of cysts of the iris was preceded by injuries to the eye was clearly established from these memoirs; and the last-named two authors drew a distinction between liquid and solid and pearly tumours of the iris. Bowman, with Mackenzie, thought that these tumours formed in consequence of the secretion of a fluid between the iris and the posterior layer of epithelium, so that the epithelial cells of the uvea formed their posterior wall. Rokitansky believed that they proceeded from the proliferation of the connective tissue in the fibrous stroma of the iris. Wecker thought that the mode of formation of these tumours was that in the cysts a fold of the iris was made by the injury, and that an anterior or posterior synechia resulted, forming a cavity enclosing a little fluid; whilst in many instances of the pearly tumour a cilium became implanted on the iris. M. Masse admits three varieties of tumours, cysts, pearly tumours, and dermoid tumours, and has collected a large number of cases of each. He has made many experiments to determine the mode of origin of cysts of the iris. He transplanted portions of skin into the anterior chambers of the eye in rabbits, and found that they readily became attached to the iris; and whilst part underwent resorption, another part grew and formed the commencement of a pearly tumour, which, however, remained always of small size. Portions of cornea thus transplanted also grew, and formed translucent tumours. The experiments of M. Masse seem to establish in the most satisfactory manner that a large proportion of cysts of the iris, if not all, are the result of the transplantation of normal tissue by some accidental traumatism. In regard to treatment, he recommends waiting till the patient experiences some trouble in the affected eye. It should then be completely extirpated by incision through the cornea and iridectomy. M. Masse has added to the value of his paper by an excellent bibliography, and he gives two plates showing well-marked varieties of the disease.

A Text-book of Inorganic Chemistry. By Professor VICTOR VON RICHTER, University of Breslau. Authorised Translation by EDGAR F. SMITH, Professor of Chemistry in Wittenberg College, Springfield, Ohio. Second American from the Fourth German Edition. London: Kimpton. 1886.—There are many merits in Professor von Richter's little text-book, and it is not wonderful that the English version has so soon reached a second edition. The author has brought the scientific record well up to date, and has rewritten many parts. Thus, we have a sufficient account of the liquid forms of the gases formerly called permanent, such as hydrogen and oxygen, and a clear statement of the periodic law, in which, however, we are sorry to notice that the name of Newlands, the real discoverer, is omitted. The section on Crystallography is one of the best in the book.

Hospital Sisters and their Duties. By EVA C. E. LÜCKES, Matron to the London Hospital. London: J. & A. Churchill. 1886.—Miss Lückes is already well known as the author of some excellent "Lectures to Nurses," and we were prepared to find her present work, which is addressed to hospital sisters, full of sound practical information and advice. Those who are most familiar with the working of hospitals under the modern system of nursing will best appreciate the great importance of a due knowledge of their special duties and relations to other officers of ward sisters. Miss Lückes deals with these matters in a clear and commonsense style, and her book cannot fail to be useful to those for whom it is specially intended. On every page we find evidence of Miss Lückes' thorough acquaintance with all the details of the nursing department of hospital management. From the chapter on the "Relationship of Sisters to their Patients" we extract the following: "One of the most satisfactory conclusions that long experience of all sorts of patients brings to the majority of sisters is that human nature is worthy of greater respect and admiration than they had previously believed." Further on, in urging sisters to welcome with a kindly word all new patients, Miss Lückes writes: "It must be remembered that they (the patients) are not only strange but ill, and often in actual pain, so that they are not in a normal condition for going through the ordeal of being consigned into strange hands, and unless they are too ill to take any notice, which of course frequently happens, the way they are spoken to on their first arrival will make a wonderful difference to them." In reference to the vexed question of patients' friends we read as follows: "The familiar sight of what appears to us a very unattractive, not to say repulsive figure, the harsh sound of a very gruff voice uttering words that to our ear are not very tender or even kindly, the heavy footfall of most ungainly boots, may be eagerly looked for and welcomed by the patient, and may do more to diminish the terrible sense of loneliness that is creeping over him than our gentlest and most sweetly expressed sympathy could do."

The Liverpool Medico-Chirurgical Journal. No. 10. London: H. K. Lewis.—This number contains an instructive article on a case of Congenital Macrostoma and Deformity of the Ear, by Mr. Rushton Parker. The Significance of the Corpus Callosum, by Dr. J. Hamilton, has already been referred to. Sir Dyce Duckworth has written a clinical lecture on Paralysis Agitans, to which Dr. James Barr has appended a case of the same disease. Mr. Robert Jones has contributed an article on the Abuse of Rest; Dr. Emrys Jones, some notes on Iodoform in the Treatment of Eye Disease; Mr. Lowndes, some notes of post-mortem examinations. A special new feature of the journal is the introduction of reports on recent practical advances in medicine and surgery: Antipyretics by Dr. Barr, and Antiseptics by Dr. W. Alexander. The journal is the organ for the Transactions of the Liverpool Medical Institution. Mr. Rushton Parker contributes a paper on Hernia, based upon seventy-four operations. In a paper by Dr. Richard Caton on the Pathology and Treatment of Chorea, we are sorry to find canine chorea and human chorea are not sufficiently differentiated in all varieties. The Pathology of Syphilis is discussed by Mr. A. Barron, and its treatment is the subject of a paper by Dr. James Wilson. Dr. Francis Imlach contributes a paper on Ovarian Abscess and Pyo-salpinx.

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THE LANCET.

LONDON: SATURDAY, MAY 22, 1886.

THE wholesale projection of the Privy Council into the affairs of the medical profession is one of the blots of the Government Bill which we have been careful to expose. We are glad to admit that our representations have not been disregarded. The amendments proposed by Sir LYON PLAYFAIR greatly reduce the frequency of the necessity for the sanction of the Privy Council; and undoubtedly, if the Medical Council was one likely to work well, there need be, and there would be, little occasion or excuse for interference. But this is the very point. There neither exists a good Council, nor is one to be created by the Bill. One more direct representative of the profession has been conceded to England, which brings the whole number of direct representatives up to five. Sir LYON PLAYFAIR seems to have felt the force of the objection that the proportion of direct representatives, especially those of England, to the representatives of corporations, was very small, and he has diminished the Crown representatives by one and given it to the registered practitioners. We must be thankful for crumbs when we cannot get half a loaf, but we think that the Crown representatives might well have been reduced to four, and the number of direct representatives raised to six. It is not denied that the original design of Crown members was to secure through the Government the representation of practitioners unconnected officially with the medical corporations, whose excessive and individual representation has been the weakness of the Council, and which unfortunately is not dealt with in this Bill as it was in that of the previous Liberal Government. A further reduction of the Crown representatives would be the more reasonable, as the interference of the Crown, through the Privy Council, is still provided for in the Bill.

Is there any chance of an honest attempt to make the thorough changes in our examining system which have been desired by medical reformers for a generation, and which have been recommended by the Medical Council and by a Royal Commission? We fear there is not. In the amendments printed we see no sign of this. One set of amendments indicates that the corporations are dissatisfied with the favour shown to universities in recognising their right *singly* to grant a complete qualification, whereas the corporations must combine, two or more, to be able to give a full qualification. Sir HENRY HOLLAND represents these amendments, as he does also another to secure and empower the registration of diplomas in Public Health, whether from a university or a medical corporation, Sir LYON PLAYFAIR strangely proposing in an amendment only to register those sanitary diplomas which are granted by universities. We can see no reason for this invidious distinction But all this is a mere fight for pre-eminence between universities and corporations. Any adequate Bill would have recognised the clear distinction between universities and corporations. It would have recognised the view that corporations exist mainly to grant the ordinary licences to practise, while universities exist to grant something more—viz., a Degree—after an examination of a higher character than that minimum examination which has to be passed for an ordinary diploma. It is no less desirable for the reputation of the profession that the universities should be kept up to a standard above that of mere competence than it is that the minimum examination of the corporations should be a sound test of competence. The Bill does not attempt to recognise any such difference in the functions of universities and corporations. It does not, however, treat universities and corporations impartially. It assumes that each single university can grant a full qualification, and that each single corporation is under a disability of granting a *complete* qualification, whatever the completeness of its examinations. We cannot wonder that there should be grave dissatisfaction on the part of the corporations with such an assumption. The London College of Physicians, for example, gives a thorough examination in all branches. Is it to be tolerated that it shall recognise the *necessity* of going into combination with another body before granting a full qualification? It is true that it has chosen for a time, under certain conditions, to act conjointly with the sister College; but to have its disability expressed and stereotyped in an Act of Parliament, and to have the universities placed in the favoured position of granting full qualifications, with no test applied as to the *higher* standard of their examinations, is too much for flesh and blood as it exists in corporations. Let us leave out of view the Corporation and its interests to consider the claims of a man who in this College or any other *single* college has passed an ample and fair examination in medicine, surgery, and midwifery. How can it be right to demand that such a man shall go through the mill of a second college, in the same subjects, and pay a second set of fees? It cannot be right. It is of no use for Sir LYON PLAYFAIR to boast that he is securing complete examination. That is secured in the one College. What he insists on is that two corporations must combine in order to give one qualification. The uninitiated member of Parliament may think this is in the interest of the public. It is not so at all. It is an attempt to maintain two corporations where only one is wanted, and to do so at the expense of the medical profession in perpetuity. The corporations are selfish in the matter, and if they rebel now it is because they are offended at the superior position of the universities in the Bill, which deserves to fail for want of thoroughness. There is also the risk of all the corporations that have hitherto been condemned to give only single diplomas taking advantage of Clause 5, and with assistant examiners from the Medical Council giving a qualifying examination—a risk, of course, that involves a great number of different and competing bodies, which it will be difficult and very

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costly to supervise. Finally, there is the great defect in the Bill of any serious attempt to strengthen the penal clauses for using false titles and for various forms of sham and deceptive practice. At coroners' inquests and in the law courts we are constantly and painfully reminded of the necessity for such a change in the penal clauses, and yet the subject is neglected by the Government and left to be dealt with in the Bill of a private member.

THE lives of WILLIAM CHESELDEN and ANTONIO SCARPA are the themes of interesting studies by the eloquent and sympathetic pen of Dr. B. W. RICHARDSON, in the last two numbers of his *Asclepiad*. While doing justice to rare powers and enduring work, he has not entered into many biographical details, of which some are worth recalling. Best known as an anatomist, and for his method of lateral lithotomy, CHESELDEN was so good an artist that Putney Bridge and the Surgeons' Hall at the Old Bailey were erected after his designs. The operation for artificial pupil which he originated was first performed in 1728, the very year of JOHN HUNTER'S birth. Twenty-one years later, as recorded by their contemporary, BENJAMIN HUTCHINSON, in his "Biographia Medica," CHESELDEN, at the request of Dr. WILLIAM HUNTER, allowed his brother JOHN to attend him at Chelsea Hospital for his first lessons in the rudiments of surgery. CHESELDEN had been himself fortunate in his early training, as he was a resident pupil of the distinguished anatomist and surgeon, WILLIAM COWPER, best remembered for the glands which bear his name. It is no disparagement of JOHN HUNTER'S merits to dwell on the rare advantage which attended his entrance into the profession under three such masters as his brother, WILLIAM CHESELDEN, and PERCIVAL POTT. ANTONIO SCARPA'S fortune was in kind similar, for he was the favoured pupil of G. B. MORGAGNI, who in his classical work "De Sedibus et Causis Morborum," laid the foundation of pathological anatomy and clinical medicine, as pillars of the modern medical edifice. When stricken with blindness, MORGAGNI chose SCARPA for his assistant and secretary; and they found common intellectual solace from their severer studies, in the Latin classics for which MORGAGNI had had a life-long predilection and SCARPA had shown very early aptitude. All the great men to whom we have incidentally referred were scholars, with the solitary exception of JOHN HUNTER whose youthful days appear to have been wasted in the Grammar School of Long Calderwood, his birthplace; he never seems to have acquired or cultivated a taste for literary pursuits; while SCARPA, who most closely rivals him for depth and variety of anatomical, physiological, and surgical research, was a writer no less elegant than prolific. His letters to HENRY WEBER, of Leipsic, "De Gangliis Nervorum, deque origine et essentia Nervi Intercostalis," are models of pure Latinity; and he appears a worthy countryman of METASTASIO in his biography of GIAMBATISTA CARCANO LEONE, the favourite pupil and devoted assistant of GABRIEL FALLOPIUS.

Latin and Italian were equally familiar to SCARPA with pen and speech; and he mastered English, French, and German in the wide scope of his reading, and by not only visiting, but working in, the European capitals. In Paris FRÈRE CÔME, VICQ-D'AZYR, and WENZELL; at Gottingen, BLUMENBACH, RICHTER, and WRISBERG, were his masters; in London he studied under the HUNTERS and PERCIVAL POTT; and, curiously enough, first learned from CRUIKSHANK how to display the lymph by injection with mercury, although the existence and function of these vessels form one of the many discoveries justly due to the Italians. Early association and animated rivalry with GALVANI at Bologna must have acted as a very potent stimulus to SCARPA'S taste for physical research, in cultivating which he had the incalculable advantage of long colleagueship with VOLTA when their powers were ripest.

Hypogastric lithotomy was the object of special studies, both by CHESELDEN and SCARPA. The former takes precedence not merely in date but for the importance of the treatise which he published in 1723 on the High Operation for the Stone. This volume deserves special notice at a time when the procedure which it describes is enjoying the favour common to revivals. The book having no index or table of contents, a superficial observer is apt to look upon the 180 pages of which it consists as devoted to CHESELDEN'S practice; but this, with a careful anatomical description, cases, and ten plates, only comprises thirty-three pages besides the preface, from which one passage may be quoted in evidence of CHESELDEN'S candour and modesty: "In my own account of this operation I have fairly set down everything that I judged most material to be known, without the least disguise or partiality to myself, and that the reader might see what had been before done, and that I might not be suspected of arrogating to myself any part of this operation." In one of the quoted cases two stones were removed above the pubes from a gentleman aged about seventy. The stones weighed a little over four ounces each, and the patient recovered without any bad symptoms. The remainder of CHESELDEN'S treatise under notice is devoted to translations of memoirs on the same operation by PIERRE FRANCO, DIONIS, HILDANUS, and other masters, concluding with a short original appendix from CHESELDEN'S pen entitled "Two Cases to show that Wounds into the Abdomen are not exceeding Dangerous, though the Guts should appear or Thrust out at the Wound." In one of the cases (a female aged seventy-three), with gangrenous umbilical rupture, CHESELDEN found her "with about six-and-twenty inches and an half of the gut hanging out mortified. He took away what was mortified, and left the end of the sound gut hanging out at the navel, to which it afterwards adhered, and she recovered."

Although CHESELDEN'S life-work must ever remain an integral part of the history of surgery, his name is unaccountably omitted from the last edition of the "Encyclopædia Britannica." Like SCARPA his rise was rapid. At twenty-three our countryman was F.R.S., and at twenty-two the Italian was appointed to the chair of Anatomy in the University of Modena. Academic honours and wealth fell to the lot of both. The French Academy of Sciences paid CHESELDEN the rare compliment of deputing SAUVEUR MORAND to visit London to study and report upon his method of lithotomy, and at the foundation of the Royal Academy of Surgery in Paris CHESELDEN was elected by acclamation its first foreign associate. On SCARPA NAPOLEON conferred the order of the Iron Crown; and then, as a special token of regard for his talents and his independence, released him from the obligation of taking the

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oath of allegiance, to be free from which he had absented himself from Pavia. Not so equal was the fortune of the two great surgeons in survivorship. CHESELDEN, like the two HUNTERS, died within a few months of sixty-five. SCARPA reached eighty-five, close upon the age of his first master, who touched eighty-nine. It has been said that eminence is often a question of survivorship, a proposition capable of wide illustration, but with many notable exceptions in science as in the arts. DUPUYTREN died at fifty-seven, VESALIUS at fifty, BICHAT at thirty-one; yet, looking down the life records, in their published works, of such men as MORGAGNI and SCARPA, it is inconceivable that they could have accomplished what they did, had they not been endowed with most vigorous constitutions and spared to patriarchal age.

Twelve pages of Dr. RICHARDSON'S *Asclepiad* article, already referred to, are devoted to SCARPA'S labours, and the erudite record is certainly a prodigious one. For fertility amongst anatomical, physiological, and surgical writers, ANTONIO SCARPA has scarcely a rival besides CHARLES BELL; but, contrary to what might be predicated from their nationality, the Italian excelled in calm observation and rigid induction. Both were marvels of versatility; but BELL was too imaginative and impressionable to reach the philosophic standard, towards which SCARPA toiled with fixed gaze and unfaltering step.

ON Tuesday next, the 25th inst., an extraordinary meeting of Convocation will be held at Burlington-gardens at 5 P.M., for the reception and consideration of the report of the Special Committee which was appointed in December last, on Mr. MAGNUS'S initiative, after Lord Justice FRY'S scheme had been rejected. The report of this committee of twenty-five follows so faithfully on the lines laid down in Mr. MAGNUS'S circular of Dec. 1st, 1885, and is so evidently a mere amplification of that circular, that we might have been spared the suspense and waste of time. In reviewing his proposals on their appearance, we pointed out that with the exception of the last two—viz., the question of professorships &c. of higher education, and a fixed State endowment,—they might practically run on all fours with those whose details were worked out by Lord Justice FRY; and this opinion has been fully borne out by the present draft scheme. We find in it no such differences from that presented by the former committee as to justify or even to excuse the action of those members who are responsible for its production, who in November last voted against Lord Justice FRY'S amended motion, "That the House now consider what amendments, if any, be made in the said scheme, and that such amendments, if any, be made in the form of instructions to a committee of revision." A Council of Education, with some members elected by the separate faculties in Convocation, as a weak and clumsy substitute for proper faculties and boards of studies; an indefinite for a precise indication of what are to be constituent colleges; the omission of the words "in or near London" in reference to the colleges; and a direct addition of two members by Convocation to the Senate, are the main alterations suggested by the new committees. Six months have been allowed to pass by, so that these details might be worked into the scheme, and permit it to go forth to the world under its present auspices, whereas they might properly have been discussed as amendments when Lord Justice FRY'S plan was under consideration. The outcome is a little less power and influence for the teachers, and a fractional increase of them for Convocation. We hope that the jealousy of the graduates may be allayed by these concessions, and that this scheme may pass, although we much prefer the former one. Any scheme which will secure a more intimate association between university examination and university teaching, and which will confer a substantive voice in the government of the University upon the teachers and examiners, is so far preferable to the present chaotic condition of higher education in London, that we shall not cavil at its details, or at the safeguards by which it has to be surrounded out of deference to the distrustful attitude of some graduates and senators. It can only be adopted by Convocation as a basis of conference with the Senate, and is sure to undergo considerable modification before that body consents to apply for the new charter into which it can be embodied. The proposals for promoting higher education and for obtaining a fixed endowment from the State are good and easy of adoption, and we only hope that the money may be forthcoming; but it is at least doubtful whether the conferring of honorary degrees will not be a great mistake.

Annotations.

"Ne quid nimis."

HOMES OF THE WINDSOR POOR.

AN article in the *Morning Post*, calling attention to the need for the sanitary improvement of certain parts of Windsor, has been the subject of warm discussion by the Town Council of that borough. We gather from a report of recent proceedings of that body that the misfortunes which accrue to the inhabitants of unhealthy areas are shared, though doubtless to a less extent, by those of their fellow-townsmen who are better circumstanced. The reputation of a town must have its influence upon trade and general prosperity; and it is indeed fortunate that this should be so. Where a local authority is negligent in enforcing all the powers that it possesses, it deserves to be thought of as one that is careless of the health interests of the community; and the injury which results from this opinion is often an incentive to work which should be undertaken from a higher motive. If Windsor is suffering from loss of trade, the remedy is in her own hands. The Council cannot be surprised if holiday-makers, in choosing a locality which they intend to visit for the purposes of health and recreation, have some regard to its sanitary condition. A town may have many natural advantages, but if it have within its districts that which may serve to foster disease, there is an element of risk to visitors as well as residents which cannot be overlooked. Windsor, therefore, for every reason, should proceed without delay to put itself in order; and this, we understand, the Royal town is going to do; but time is passing, and in the meanwhile the reputation of the town suffers. It has been proposed that the reconstruction of the old and defective portions of the town should be undertaken in honour of the Queen, during her year of jubilee. The thought is worthy of a Royal borough which has within it an ancient Castle of which England is proud, and which is a residence of the Sovereign. But it is high time that a substantial beginning of this project should be made; unless this is done, we fear that Windsor will not regain the confidence she has lost.

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THE NORTH-WESTERN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

ON Thursday, May 13th, this Association were hospitably entertained by the Mayor and Corporation of Salford. Dr. Tatham, the medical officer of health for the borough, introduced the members and associates to the Mayor and Chairman of the Health Committee, at 2 P.M., at the Town Hall; and after a champagne lunch had been disposed of, the party proceeded in conveyances to inspect the Winton Fever Hospital, the disinfecting station, and the extensive sewage-works at Mode Wheel. Mr. Jacob, the borough engineer, courteously acted as guide over the works, explaining the details of the process adopted (mixing the sewage with lime and turning it into tanks to settle), and then invited those present to adjourn to the board-room, where coffee was served. Here Dr. Tatham delivered an address on the Notification of Cases of Infectious Disease and their Isolation in Hospital as practised in Salford, and passed in review the steps taken by the Sanitary Authority for the improvement of the sanitary condition of the town. In the course of his remarks he stated that in 1867, when the Local Health Committee first came into existence, the average annual death-rate of the borough was not less than 31 per 1000 of the population; whereas in the five years ending 1885 the average annual death-rate was less than 23 per 1000. At the close of Dr. Tatham's address, Dr. Kenyon, of Chester, congratulated the Sanitary Authority on being so ably advised, and on the public spirit displayed in attempting and achieving so much for the health of the community. In the name of the North-Western Association of Medical Officers of Health, he heartily thanked his Worship and the Corporation for their hospitality and courtesy. Mr. Vacher, of Birkenhead, endorsed all that Dr. Kenyon had said. The result of the efforts made at Salford should encourage other urban authorities to be as active and persevering; and it might be that one effect of the Mayor's invitation would be to introduce sanitary reforms into districts where hitherto little had been done, and where neither hospital accommodation nor disinfecting apparatus were provided.

PHYSIOLOGICAL EFFECTS OF MASSAGE.

DR. F. GOPADZE has published a series of observations undertaken with a view to determine the effect of massage on the transformation of the nitrogenous principles of food. He has investigated the history of the subject, and finds traces of it in a Chinese work 3000 B.C. Dr. Gopadze finds that though there has been a general tendency amongst authors to assume that massage increases the assimilative power, no exact observations on the subject have hitherto been published. He therefore obtained the co-operation of four medical students, who for three consecutive weeks became inmates of Professor Manassein's clinic, and lived on certain articles of food—bread, milk, soup, veal, and roast beef, the quantities ingested being accurately noted. The nitrogen in all the samples of food, and in the fæces and urine excreted, was determined by the Kjeldahl-Borodin process. Massage was practised for from twenty to twenty-five minutes once a day two or three hours after food. The operations were commenced by *effleurage*, beginning from the extremities and working towards the centre. This was followed by *massage à friction, pétrissage, tapotement*, a second *effleurage* of each part concluding the whole. The temperature was subsequently taken, and in some cases sphygmographic tracings. In all four cases the appetite was decidedly increased, not only during the week in which massage had been practised, but after it had been stopped; thus, one of the subjects took an average daily quantity of 24·95 grammes of nitrogen during the first week, 30·97 during the second or week of massage, and 29·57 during the third week. Similarly the amount of nitrogenous transformation was augmented during the continuance of massage in all four cases. The augmentation persisted in two of the cases, but in the other two the transformation was less during the third than during the first week. In Case 1, the nitrogenous transformation was increased 3 per cent. during the second week and 1 per cent. during the third. In Case 2 it was increased 1 per cent. during the second week, but diminished 11 per cent. during the third. In Case 3 it was increased 3 per cent. during the second week, but diminished 10 per cent. during the third. In Case 4 it was increased 4 per cent. in the second week and 3 per cent. in the third. The quantity of nitrogen assimilated increased in all four cases, independently of the amount of food ingested. During massage two of the subjects gained slightly in weight, the other two losing weight; but during the week following the one in which massage was practised all four gained. The axillary temperature decreased for about half an hour after the operation to an extent varying from 0·1° to 0·5° C., after which it began to rise, attaining its original figure, or from 0·1° to 0·3° below it, about an hour after the end of the *séance*. The respirations became more frequent, and were of a deeper character. The effect on the pulse varied with the character of the massage. When this was carried on lightly, the pulse became more frequent; but when the manipulation was more forcible, the pulse became slower. The effects in both cases persisted for an hour or more after the termination of the operation. In conclusion, the author suggests that massage should prove useful in chronic gastro-intestinal catarrh, in chronic constipation due to an atonic condition of the intestines, also in various cases where there is a lack of tone in the abdominal muscles. He also thinks that the practice of massage should be a subject of instruction not only in the Military Medical Academy of St. Petersburg, but in all the medical faculties of the empire and in the institutions for training "feldshers"—a semi-educated class of men who act as hospital sergeants, and after retiring from the army are put in charge of village communities where there is no medical man.

HOUSES LET IN LODGINGS.

THE vestry of the parish of Bermondsey last week obtained a conviction of the owner of a house in Long-lane for a breach of one of the vestry's regulations as to houses let in lodgings. The house had been registered, and the requirement to prevent overcrowding was that no room should be occupied that did not provide 300 cubic feet of air space for each adult or two children if used as a sleeping room only, and 400 cubic feet if used for day purposes as well. The inspector appointed to enforce the Act found that in four rooms the number of inhabitants was such that this amount of cubic space for each individual was less by fully one-third than it should be. The magistrate inflicted a fine of 20*s.*, and 6*d.* a day for forty-nine days during which the regulation was disobeyed, and stated that this mitigated penalty was due to the defendant's plea that "she was no scholar, and had erred in ignorance." It was stated that this was the first conviction under the Act which empowers the regulation of lodging-houses, and if this be the case, an Act which offers the only effectual remedy for preventing overcrowding in this great city, has been allowed to be inoperative for twenty years. Doubtless overcrowding can be dealt with apart from regulations, but the tedious process of serving notices, of obtaining a magistrate's order, and only procuring a penalty when this order is disobeyed, would have rendered the employment of a much larger staff necessary than the vestries have been willing to provide. The result has been that overcrowding has remained to a great extent unchecked, but the ease with

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which this difficulty is overcome by the adoption of regulations under the 35th section of the Sanitary Act of 1866, in enabling the vestries to obtain a penalty within a few days of the discovery of the offence, should commend these powers to every authority that desires to do its work efficiently.

THE MICROZYMES.

THE battle of the microbes, which has been raging for three months in the French Academy of Medicine, is now brought to a close, and for some time we may expect peace from leucomaines and microbes. To estimate which side has the advantage is not a difficult task. Microbes have too sure a footing to be easily displaced from our etiological catalogue, though from time to time their exact place may be subject to variation, as our knowledge of their life history becomes more complete or our acquisitions of new factors increase. Among the many discourses that the discussion elicited from members of the Academy, the longest was that of M. Béchamp, who, without being exactly a microbist or antimicrobist, reconciled the external and internal (if we may be allowed the expression) origin of disease by the theory of microzymes. According to this idea, every animal cell, its nucleus and nucleolus, and every description of cell, whether white blood-corpuscle, or gland, or epidermic cell, is composed of elementary particles visible to us under the microscope as granules, to which he applies the term microzymes. These have a life and being of their own, and by this fact the life of the cell is maintained; but when the cell itself comes to an end and is disintegrated the microzymes live on, and when free are known to us as bacteria. They may change their form and aggregate, giving rise in this way to the many kinds of micro-organisms that have been described in the order Schizomycetes, such as vibriones, spirilla, &c. The physiological action of these microzymes varies according to the media in which they are developed, and in this way the noxious forms may be rendered innocuous, as seen in Pasteur's cultivation of rabietic virus, or *vice versâ*: the innocent microzymes may under certain bad conditions become virulent, of which such diseases as typhus, small-pox, &c., afford an example. The theory is no doubt attractive, and serves to supply some vacant places which the microbian idea leaves, but will it bear the test of experiment—that is, does such a thing as a microzyme exist? The matter has been placed in the hands of a commission, and we await the verdict.

DWELLINGS OF THE POOR.

A DEPLORABLE account has recently been published of two houses in Warren-street, St. Pancras. In one of these the drains were apparently entirely stopped, and the sewage, running all over a back yard, percolated through the kitchen wall and accumulated underneath the floor. In the front area, it was stated, the objectionable matter likewise declined to run through the drains owing to the traps being defective, and consequently added to the accumulation under the flooring. On the application of the vestry's officers, Mr. Mansfield made an order for closing the houses until the necessary repairs had been executed, and imposed a fine of 25*s*. It is worthy of notice that this large parish has nearly 25,000 houses, that a very large number of these are let out in lodgings, many of them occupied by the poorest and most destitute people, yet for the purposes of carrying out the various Acts of Parliament, the Food and Drugs Act, Canal Boats Act, the Factory and Workshops Act, all the Acts dealing with infectious diseases, and the inspection of houses of all kinds, four inspectors only are employed. In proportion to population there is not more than one inspector to 60,000 persons, and yet it is pleaded that London vestries are not negligent of the duties which devolve upon them. When it is recollected that for each case that goes before the magistrate the inspector must pay several visits to the house before the nuisance is finally abated, some idea can be formed of the insufficiency of the staff to maintain the parish in a proper sanitary condition. But St. Pancras is not exceptional; there are other parishes where the staff is not more numerous, and recent events have certainly not shown any desire on the part of the local authorities for more effective sanitary administration. Londoners can only be grateful for what is done in the absence of something better.

THE DANGER OF TUBERCULAR AFFECTION FROM COWS' MILK.

PARIS cows are said to have been found to be producing milk which contains the bacillus of tubercle, and the Council of Health have advised the closing of all cowsheds in the city. It is believed that the conditions under which these animals are kept have contributed to the production of this disease, and it is hoped that the milk of animals living in country farms is less open to objection in this respect. Of late years much has been done to improve London cowsheds, but the question certainly deserves consideration whether the inhabitants of this metropolis are not exposed to the same risk as are those of Paris. At the present time there are in London more than 800 cowsheds, and the amount of milk distributed therefrom is very large. If it could be definitely shown that London milk is more prone to contain tubercle bacillus than that coming from the provinces, there would be much reason for the Metropolitan Board of Works to follow the same course as that pursued by the Paris authority. It may be found that of the evil effects of milk, of which we have heard much lately, that of the production of phthisis is the greatest; but the power which every householder possesses of protecting his family by boiling all milk which comes upon his premises is so easily within his reach that it is matter for regret that the practice of milk-boiling is not more general.

THE TREATMENT OF YELLOW FEVER.

SENOR ADOLFO MARTINEZ CERECEDO, of Puerto Rico, in an article in *El Siglo Medico* on Yellow Fever, argues that, as Dr. Freire of Rio de Janeiro has demonstrated the existence of cryptococci in the blood, vomit, &c., and as the micro-organisms producing most infectious diseases appear to obtain entrance by the gastro-intestinal tract, the abortive treatment by emetics and cathartics would seem to be the most rational, though much objected to by many South American practitioners. In addition to the emetics and cathartics, Señor Cerecedo advises that hot infusions of mallows or of oranges and lemons should be administered, the heat and the acidity being prejudicial to cryptococci and mycelia. He remarks here that Pacini and Koch have shown that the cholera bacillus dies rapidly in a medium only slightly acidulated, and that Bucholtz and Falk have observed that certain acids prevent the development of the different micro-organisms which set up abnormal fermentation processes in the stomach. Added to which, he has himself noticed from his experience in Puerto Rico that those persons who habitually drink lemon-water enjoy more immunity from yellow fever and malaria than those who abstain from acid liquids. He quite agrees with Dr. Freire as to the effect of salicylic acid on the yellow fever poison, and he advises that the soda salt should be given from the second day, and diaphoresis encouraged by hot drinks and external stimulating liniments. As an ordinary drink at this time lemon-water may be given, which, if nausea exists, may be iced. If the third day brings the remission with diaphoresis, the cold drinks should be replaced by hot. If

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the abortive treatment does not prove effectual and the serious symptoms of the second period supervene, he advises recourse to the ordinary methods of treatment.

COMPULSORY SWIMMING IN SCHOOLS.

A FEELING has for some time been steadily growing that all healthy persons should be able to swim, and a good number, at all events, of our schools which are favourably situated include this most useful art in their curriculum of education. Compulsory instruction in swimming has found favour with some continental communities, and indeed there is much to be said for such a course. All children, as is well known, do not take readily to bathing, while of those who do some never take the trouble to learn to swim. Thus it comes about that persons who have spent their lives at the coast—many fishermen, for example—are helpless when immersed in deep water. There is reason therefore in the argument that swimming should form a regular part of school training, and should be compulsory on boys and girls alike, who are not disqualified by bodily infirmity. Even children of poor physique, if not vitally damaged by disease, will often benefit by such a course. Not only is the vigour of every organ and tissue stimulated by the bracing chill of cold bathing, but the skin surface which is cleansed from the products of its excretion must also subserve, much more effectually than one which is not, the nutrition, purity, and working power of the more active organs. Health, without doubt, is largely indebted to a clean skin. In swimming we have these various physiological advantages with that of muscular effort added, and when we think again of its great utility in case of such accidents as every summer invariably brings us, we cannot but plead that the kind compulsion exercised abroad may also be applied at home. Many of our largest towns have the sea or an estuary close at hand, while inland populations which have not this advantage are seldom without one or more swimming-baths.

THE ETHICS OF HANGING.

A PARLIAMENTARY enthusiast on the subject of abolishing the death-penalty some years ago described the issue raised as "a poor man's question." It is impossible not to feel that, setting aside all considerations of class distinction and privilege, this is an inadequate account of the matter. Even granting that the gallows is a terror to the poor rather than to the rich—by no means an accurate proposition—the well-to-do and law-abiding sections of the population have fully as much interest in the questions whether it is expedient to punish capital offences by death, and if so, how the extreme sentence of justice should be executed, as the probable or actual victims of the penalty. It is not perhaps strictly within our province to determine whether the fear of death does operate as a deterrent from crime, although we have the deep interest common to all citizens in this issue, and it will be conceded that, as members of a profession brought into close relation with all classes of the community, and compelled to study human nature in its secret workings, and as an hereditary estate and organisation, medical men have exceptional opportunities of forming a judgment on that point. We incline to the belief that the death penalty *is* deterrent in its effects, although not so much on men or women who are on the verge of committing deeds of violence as on those who, were there nothing to fear, would drift into homicide; and on this ground we are not prepared to urge strongly that the time has arrived at which the State may safely decide to put no more malefactors to death. Whatever may happen in the future, the old Levitical law cannot at present, we fear, be safely superseded. The comparative immunity which this country enjoys from habitual or prevalent crime of the homicidal class is, doubtless, in large measure due to the fact that murder is punished by the ignominious death of its perpetrators. This rule, even though there may be many exceptions, has certainly a wholesome influence on the manners of the population generally. It is shameful to kill, and therefore it is accounted shameful to do acts which may lead to killing. Our more immediate concern, however, is with the manner of executing the law as it stands; and, looking at the whole facts of the case from a physiological as well as a moral point of view, we doubt whether there is any more suitable mode of taking life for judicial purposes than that of hanging by the neck, provided always that the process is carried out with the skill due to humanity. Many alternative means have been proposed, such as destroying life by passing a current of electricity through the body, or by the deprivation of oxygen, or the use of some lethal chamber. Meanwhile we decidedly incline to the opinion that, instead of depending on a public executioner for the carrying out of the death sentence, it would be better, as suggested by the author of a recent magazine article on this subject, to adopt a well-considered general rule of procedure, and to have the penalty inflicted by the warders of our prisons. It is humiliating to society to employ a particular individual to hang the condemned. Better far let the infliction of this penalty, as of others, be a strictly official act performed by the authorities of the prison as other penalties are inflicted. A committee might be appointed to draw up a set of rules which should be carried out strictly. The last act of justice would gain in dignity, and the interests of humanity would be secured by this reform more effectually than by any other which public opinion has yet been asked to consider and approve.

TREATMENT OF ACUTE RHEUMATISM.

THE last number of the *Russkaya Meditsina* contains a communication from Dr. L. Grinevitski, of Rostoff-on-the-Don, who writes that for more than twenty years he has treated acute articular rheumatism with nitrate of potash, two drachms being given daily in raspberry syrup, and a dose administered every two hours. Together with this internal medication he prescribes an ointment for use morning and evening of the following composition: Olei hyosc., 1 oz.; ung. hydrarg. cinerei, 2 dr.; ext. acon., 1 dr. He has tried all ordinary remedies, and finds that on the whole this plan of treatment is more satisfactory than any other, being especially valuable in those cases where salicylates fail to give relief. Generally the disease is brought to an end in from one to two weeks, according to its severity and the time the treatment was commenced. When commenced at the onset of the attack, and before more than one joint was affected, the others were usually spared altogether.

A NEW PLAYGROUND FOR LONDON CHILDREN.

LONDON is not yet so well supplied with public gardens or other open spaces but that another is at any time both acceptable and useful. Attention has lately been directed to the waste ground which lies to the west of the Law Courts, and which is not at present required for the extension of these buildings, on account of its fitness for a temporary recreation-ground. Several reasons combined render it very desirable, in our opinion, that the opportunity thus presented should not be overlooked by those who are interested in the well-being of the poorer town children. The space in question lies in the heart of a populous district, where dirt and overcrowding are almost unavoidable; it is required for no other purpose, and it might at a very moderate cost, in seats, gymnastic bars, and the like, be made to contribute to the healthy growth of many who rarely if ever see the country. We heartily commend this project to the attention of the Public Gardens Association.

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GLASGOW ROYAL INFIRMARY AND THE UNIVERSITIES (SCOTLAND) BILL.

OUR Glasgow correspondent writes:—There is a movement on foot to obtain the recognition of the Royal Infirmary Medical School as a College of the University. A proposal that such a recognition ought to be extended to this school comes up for consideration at the next meeting of the Glasgow University General Council. In the meantime the managers of the infirmary have sent a memorial to the Lord Advocate and to the Secretary of State for Scotland, suggesting that in the forthcoming Universities (Scotland) Bill a clause should be introduced embodying the change above indicated. Reference is made to the breaking up of the connexion between the University and the Royal Infirmary in 1875, when the former institution was removed from its old site in the High-street, near to the infirmary, to the extreme west of the city, where it has the Western Infirmary on which to depend for clinical teaching. The Royal Infirmary has a complete staff of able teachers, most suitable accommodation and equipment (provided in 1882, in the form of an extensive range of new building, costing over £6000), and large clinical resources (550 beds) but very few students; and it is thought that there is little likelihood of any increase in the number of students, to whom this magnificent store of clinical material might be made available, so long as the infirmary school continues to bear to Glasgow University the relation simply of an extra-mural teaching establishment. The memorialists, therefore, urge that Glasgow University should follow the example of Oxford and Cambridge in recognising as colleges schools outside its own walls. There would then be in Glasgow a strong eastern and a strong western school, and the present overcrowded condition of the Western Infirmary wards would be relieved, to the advantage of clinical teaching all round.

QUARANTINE IN ITALY.

La Società Italiana d'Igiene (the Italian Society of Hygiene), whose seat is in Piedmont—that is, in the most enlightened province of the peninsula—held on the 5th inst. an important and prolonged discussion on the efficacy of quarantine, and embodied its conclusions under the following three heads: 1. Experience of quarantine as enforced during the last two years demonstrates that cholera cases afloat and in quarantine stations are extraordinarily rare when it has been possible to preclude the infection from being introduced with soiled articles worn by the passengers or by the crew, or from its being borne with the ship's cargo. 2. Assiduous surveillance of persons practised by the medical officer on board, and the rigorous disinfection of soiled articles in the ship, also practised by him under his own responsibility, are sufficient safeguards against cholera germs being in this way transmitted from place to place. 3. The conditions nowadays of passing to and fro, and the manifold means of communication by land between one Italian seaboard and another, have this effect: that quarantine afloat, even if its utility could be shown, can be eluded by anyone whose commercial engagements make it worth his while to pass from one port to another by sea-route. Hence the fact that quarantine resolves itself simply into a grave impediment to our commercial activity afloat, with that most disastrous of consequences in times of epidemics—to wit, the misery of the seaboard population. These positions, which have long been truisms in England and her dependencies, have finally been accepted by scientific Italy, but politics interpose to set them aside. Seven days' quarantine must, it seems, be fulfilled by all who—from whatever part of the peninsula, to go no further—have occasion to visit such Italian islands as Sardinia and Sicily, and this because in the forthcoming elections it would go hard with Government candidates if the Minister of the Interior failed to humour the prejudices of these backward populations. The indignation of *Il Diritto*, a high-class Roman journal, finds vent in a special article, the tenor of which may be inferred from the following:—"The condemnation passed by science on quarantine, and the inefficacy of the precaution as demonstrated last year, are not enough to spare us these vexatious provisions. In spite of science, in spite of experience, the Minister of the Interior, through his chief secretary, Signor Morana, has political reasons in readiness to justify the opportuneness of 'precautions' rejected by common sense." Our readers may remember that this same Signor Morana issued at the close of the year a report on the last two visitations of cholera in Italy, which was noticed in THE LANCET of January 9th. Nothing could be clearer than his exposure of quarantine as worse than useless.

PARALYSIS OF LARYNGEAL MUSCLES.

THE generalisation so strongly upheld by Dr. Felix Semon, that the abductor muscles of the larynx are more prone to paralysis than the adductors does not carry us a great way but it is very useful as a step to further knowledge. A general cause acting on the recurrent laryngeal nerves appears always to paralyse or weaken the abductor muscles before or more than the adductor. M. Charazac records a case in the *Revue Mensuelle de Laryngologie* of cystic goitre associated with unilateral paralysis of the adductor muscles of the larynx consecutive to compression of the right recurrent laryngeal nerve. During expiration the larynx appeared to be perfectly healthy; the vocal cords left the middle line in a natural manner, so that the glottis presented its normal triangular outline. But during phonation the left vocal cord closed up to the mesial line in good form, but the right did not approach its fellow. We think M. Charazac lays too much stress on his single observation, supposing that to have been a true one, and not to be explained by other causes than the one to which it is attributed. So far the generalisation to which we above referred seems to have been confirmed and strengthened by numerous and carefully observed cases.

CHEAP FOOD FOR HARD TIMES.

WE have satisfaction in observing that the cheap dinner movement has extended beyond the limits of the Board School. It is high time that some attempts were made to effect such a reduction in the price of food as will enable many who have been thrown out of employment through the widespread depression in trade to obtain at least the bare necessaries of life. There are not wanting, indeed, indications that the provision trade in its various branches, between the pressure of competition and a general shrinkage of income, has had to forego a part of its former liberal turnover in deference to the requirements of the time. This is in some ways rather a matter for congratulation. It is a change which comes directly in the interest of the poor. It cannot, however, meet the needs of the most urgent cases, and a special interest therefore attaches to a system which is said to reach even to these, and has been found to work well under the now familiar management of the Vicar of Gateshead. Mr. Ede finds that he can supply a substantial lunch or small dinner of soup, pudding, or pie at the cost of 1*d.* to 2*d.* A really good dinner of two courses, including meat, can be given for 6*d.* The heating and cooking expenses incurred amount to 1*s.* 6*d.* per day. The management of this useful departure in social economy is carried out on ordinary commercial principles, and is in the hands of £1 shareholders, who already, we are told, receive a dividend of 5 per cent. on their investment. An experi-

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ment such as this deserves to be repeated on a much larger scale. Should it succeed, it will justify a hope that under no circumstances of depression can it be impossible to guard the poor of this country as a class against absolute starvation.

THE MARTYROLOGY OF MEDICINE.

A HOLIDAY contributor writes on the 13th inst. from Florence:—"Passing through this loveliest of cities, I find it in all its ranks, professional and lay, affected with a sadness that refuses to be comforted, even amid the exhilaration of a Tuscan spring. Marino Rossetti, the right hand of Professor Federici in his clinic, attached for more than a year to the Military Hospital, the *facile princeps* of his fellow-students, already crowned with the first prizes of the career on which rare ability and indomitable working power had launched him, succumbed yesterday to the most honourable of wounds. A patient, it appears, on his way to the hospital, had died on the stretcher on which he was carried. For two days, by some unaccountable remissness, the body had been allowed to lie untouched in the dead-house, and on the third day, when it was already far gone in putrefaction, an order came from headquarters for an immediate necropsy. Those whose business it was hesitated to carry through the examination, but Rossetti, when appealed to, undertook it at once. He had barely concluded the work when he saw he had, in his haste, inflicted a slight abrasion on one of his fingers, which had come in contact with the cadaveric ichor. He cauterised the part forthwith, remarking jocularly 'Se saranno rose, floriranno' ('If there are to be roses, they will bloom'), little dreaming of the cypress, still less of the laurel. In a few days pyæmia in a very aggravated form declared itself. Professor Federici, his master, and Professor Corradi and Dr. Pedrazzani, his friends, bestowed all their skill and care on him. His colleagues relieved each other day and night by his pillow, and his young wife was unwearied in such tendance as she could give. But in vain. At six o'clock yesterday morning his prolonged struggle, borne with the manliest endurance, was at an end, and with it a career as bright as it was brief."

THE PARIS SANITARY EXHIBITION.

THE sanitary exhibitions held at Berlin, Geneva, and London have inspired the French Society of Public Medicine and Professional Hygiene with the desire to impart similar practical lessons to the Paris population. With the assistance of the State and the Municipality this most active and able sanitary association of France has succeeded in organising a very creditable Exhibition. It is located in the Caserne Lobau, immediately behind the Hôtel de Ville, a building which up to the present time has been known as the place where hundreds of unfortunate prisoners were shot without trial when the Versailles troops entered Paris. Now this structure is devoted to illustrating the means by which life can be saved or prolonged. The exhibition is notable for its purely technical or scientific character, and the total absence of all trading element. In this it compares favourably with the recent Health Exhibition held at South Kensington. But, on the other hand, it is much to be feared that the knowledge it is desired to convey will not spread very far. There is nothing to attract the general public, to whom the meaning of the various exhibits must remain totally incomprehensible. Ninety-five, if not ninety-nine, of every hundred Parisians do not know what constitutes a syphon, they fail to realise the necessity of such a trap, nor do they understand that gas can travel up a soil-pipe and be a danger to health. These elementary facts are taken for granted by the exhibitors; but being ignored by the visitors, the latter cannot feel any interest in the various combinations of traps, ventilators, flush-tanks, and plumbing work. The structure at South Kensington representing a sanitary and insanitary house was a far more effective exhibit for the purpose of illustrating elementary principles of house-drainage. There is time still, however, to considerably improve the exhibition in this respect. Written explanations should be suspended here and there, and the catalogue could easily be converted into a brief treatise on sanitation. One of the most effective lessons given is that relating to the Paris water-supply. Three glass tanks stand side by side, each containing a cubic metre of water. In the centre there is the absolutely transparent drinking-water of the Vanne, on one side the opaque greenish-yellow water of the Ourcq canal, and on the other the grey, turbid water of the Seine. In a small glass the difference would be scarcely perceptible; but when thus shown in the bulk, the Parisians will see how essential it is to abandon the Seine and the Ourcq as supplies of potable water. This necessary reform is not yet fully accomplished. With respect to the individual merit of the various exhibits, we must reserve our opinion for a future issue, as the exhibition, though open, is not quite completed. For the moment it suffices to say that the French manufacturers of sanitary appliances have not been slow to profit by the ideas they were able to obtain at the London Health Exhibition; but, in some respects, they have taken the initiative, and English specialists will find several important improvements at the Sanitary Exhibition of the Caserne Lobau.

THE EMPLOYMENT OF EPILEPTICS.

WE have recently alluded to the need of providing for epileptics in institutions other than asylums organised for the insane. Another great and urgent need is to provide for the employment of epileptics, under conditions of safety, in such way that they may be able to support themselves, or, at least, to contribute towards their maintenance. This is a matter of very great interest and importance. A meeting of the Council of the Charity Organisation Society, at which this project was discussed, has just taken place, and among the speakers were members of our profession well qualified to speak with knowledge on the subject and to offer suggestions to the Council. We trust that the outcome of this and similar deliberations will soon be manifest in the shape of a formulated scheme, which the charitable may be able to help. The class of epileptics has been too commonly confounded with the lunatic population, and measures of special assistance consequently neglected or overlooked.

THE DALRYMPLE HOME FOR INEBRIATES.

THE Home at Rickmansworth seems an institution in which much good is being done, and much experience gathered that will be of use when a capable Legislature comes to deal adequately with the treatment of habitual drunkards. Of patients discharged since the opening of the Home, it is estimated that half have done well, and over 30 per cent. more have improved, so that between 75 and 80 per cent. have received decided benefit. The present Act is not only a poor instrument, requiring the consent of the patient, but it is actually deterrent by requiring that the patient shall appear before two justices. Accordingly more than half the admissions are not under the Act, but voluntary. The most flagrant cases and the great majority of habitual drunkards, of course, are never reached by the Act and are allowed by our absurd notions of freedom to ruin themselves, and too often all belonging to them. Of patients entering under the Act, 4 entered for twelve, 5 for six, and 3 for three months. Of private patients, 6 entered for twelve, 1 for nine, 6 for six, and 4 for three months. Patients show an increasing disposition to stay for

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long periods. The element of heredity is made out with more clearness as the history of the disease is more closely studied. Of the 29 cases admitted, 12 had a family history of inebriety. Of the remaining 16, in which a history of inebriety could not be traced, in 2 there was a history of insanity, and in others of hysteria, neuralgia, and other neurotic affections; 3 were traceable to severe physical injury. Dr. R. Welsh Branthwaite publishes several tables of much interest. In one he gives us what he has been able to make out as to the exciting causes in 78 cases: Sociability, 28; nerve-shock, as from domestic, financial, or business trouble, 26; want of employment, 7; influence of occupation, 6; following injury, 3; not assigned, 8.

SURGICAL AFFECTIONS IN THE INSANE.

DR. GINÉ Y PARTAGAS, physician to the Barcelona Asylum, Nueva-Belén, in a clinical lecture published in *La Independencia Médica*, gives a *résumé* of the more important surgical maladies he has met with among lunatics. Erysipelas, he says, and especially erysipelas of the face, is very common, and should be watched for by the physician, as lunatics frequently do not trouble themselves about cutaneous affections. Eczema also is very common. As to furunculosis, he remarks that he has never seen it followed by cure or alleviation of the mental condition. The chief self-destructive propensity of melancholics seems to be to mutilate the genital organs. One man showed the doctor, as an evidence of his operative skill, a testicle which he had contrived to excise with the help of a piece of broken glass. Another patient managed with a similar implement to perform a true œsophagotomy. Dr. Giné remarks that it is wonderful how insensible they seem to the pain they thus inflict upon themselves. With regard to the difficulty of retaining splints on fractures, he says that for many years poroplastic appliances have been employed in Nueva-Belén with the most satisfactory results. In conclusion, he calls the attention of his hearers to the importance of careful examinations of the inguinal and crural regions of lunatics, who may have new herniæ or inflammations in old ones for some time without complaining.

THE MEDICAL COUNCIL AND THE BILL.

THE Medical Council shows signs of waking up. It is summoned to meet on Tuesday, June 1st, but it is possible that before its hibernation is quite over it may be superseded as a judge of foreign diplomas by the Privy Council, and that a Medical Bill may be passed which, under a show of leaving everything and everybody—including unqualified practitioners—very much as it finds them, may produce changes not contemplated by the authors and supporters of the Bill, and which will perpetuate the evils and inequalities justly complained of by the profession.

DIALYSING DIAPHRAGMS.

A PRACTICAL subject of much importance in the chemical laboratory is that of the relative permeability of various diaphragms; and the paper by Herr Zott in the *Annalen der Phys. und Chem.* will be therefore appreciated. Goldbeater's skin carries off the most useful, homogeneous, and water-tight material as a dialyser, and is twice as effectual under the same conditions as parchment-paper, which, on the authority of Graham, has hitherto been regarded as the best substance. When the solutions to be dialysed are of such a nature as to attack organic membranes, ordinary clay cells must be still employed, though they are sixty times less effectual than goldbeater's skin. It appears also that the rapidity of diffusion is increased by the complete exhaustion of the air contained within the pores of the dialyser; the rapidity is also dependent more on the increase of volume of the solution than on augmentation of the mass dissolved. After a preliminary exhaustion endosmosis takes place, even in the case of slowly diffusible substances such as colloids. The terms "colloid" and "crystalloid" are purely relative; two or more substances present in a solution are more rapidly and completely separated the greater the difference of their diffusion velocity. Separation by dialysis is more rapid the more often the liquid in the outer vessel is removed.

THE CHURCH OF ST. BARTHOLOMEW THE GREAT.

THOSE who have received their education at the great School of St. Bartholomew will probably be familiar with this ancient and interesting edifice, founded by Rahere (who was also founder of the hospital) in the year 1123, and which has endured nobly until now. The *Builder* of May 8th contains an excellent description of the church and of the proposed restoration of this magnificent relic of the architecture of the period; and a letter which appeared in the same journal of May 15th shows very cogently that the project has a singular claim upon the sympathy of the medical profession. The lawyers of the Temple possess their fine memorial church of the past; Lincoln's-inn is also similarly endowed. Why should not medicine be represented in its specially appropriate church of St. Bartholomew the Great? Its restoration would probably be costly, and funds would be needed, but the medical world of to-day will have reason to be proud if they render aid in this work of respect to their pious friend and benefactor of times gone by, Rahere. In this connexion we may refer to a little work by Normanus, beautifully illustrated by Mr. G. J. Evans, and which contains a minute description of the fine old Priory Church and its precincts. It is published by Mr. Barnes, Fore-street, City.

HOSPITAL FOR DISEASES OF THE THROAT, GOLDEN SQUARE.

WE have received from the medical council of this hospital a statement made by them to the committee of management on certain differences that have lately arisen between these two bodies. In consequence of the action taken with regard to this statement by the lay committee, the medical staff, with the exception of one member, have sent in their resignations. From this *ex parte* statement it certainly appears that the lay committee have proceeded in an arbitrary manner in depriving the medical council of the voice they should have in the domestic medical affairs of the hospital. We shall probably have to recur to the matter.

COMPULSORY VACCINATION IN THE WORKHOUSE.

ON Saturday a woman made complaint to the magistrate at Hammersmith that her child had been vaccinated without her consent while an inmate of the Kensington Workhouse, and asked his opinion as to the legality of the action of the medical officer who had performed the operation. Mr. Bennett, in reply, stated that the mother's consent was unnecessary, as the vaccination had been done in compliance with an order of the Local Government Board. In an official circular of the year 1840, the Poor-law Commissioners expressed the opinion that the guardians have the right, without the permission of the parents, to vaccinate any child in their custody during any danger of contagion from small-pox; and the Poor-law Board again in 1848 pointed out that if the guardians and the workhouse medical officer think that any child in the workhouse requires vaccination, the medical officer should vaccinate such child, notwithstanding any objection on the part of the parents. The guardians are responsible for the safe custody and welfare of the child,

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and are bound to take every precaution to prevent it from becoming the subject of infectious disease. This is only proper, and we should hope there are few persons who would raise any objection to the performance of an operation done so obviously in the interest of the child as well as in that of the general community.

DR. FOSTER'S AMENDMENTS TO THE BILL.

DR. FOSTER has put down on the paper several amendments intended to diminish the number of Crown representatives from six to four, and to give the difference to the profession—viz., to raise its representatives to four from two, an entirely inadequate number. We have advocated this change elsewhere, and before seeing Dr. Foster's amendments. Further, in any process of revision of the composition of the Council, Dr. Foster would provide that where any body ceases to be represented, in lieu of its representative one additional should be given to the practitioners in that division of the kingdom. The profession will be grateful to Dr. Foster for these amendments. We trust Sir Lyon Playfair will adopt them. Only in such ways can he justify to the profession a Bill leaving such numerous rival bodies, such an enlarged and costly Medical Council, and examining arrangements which will involve increased cost and complications to generations of medical men. Dr. Foster also wishes to pass an amendment to secure the registration of foreign degrees by those who, previously qualified, procured them after examination, and prior to the passing of the Bill. Subject to the approval of the Medical Council of the particular degree, we see no objection to this.

THE PHARMACEUTICAL SOCIETY OF GREAT BRITAIN.

THE festival of the Pharmaceutical Society is always one of the events of the season, and that of this week was no exception. The dinner, presided over by the President of the Society, M. Carteighe, Esq., was a great success, the company including representatives of all the scientific societies, from Professor G. G. Stokes, President of the Royal Society, downwards. Our own profession was strongly represented, and the mutually respectful feeling which has lately grown so much between medicine and pharmacy found happy expression in the speeches.

CIRCULATION OF BLOOD IN NERVOUS TISSUES.

THE large nervous ganglion cells are not extra-vascular; they do not lie in the meshes of a capillary network of bloodvessels. Each ganglion cell contains within its outer boundary a complete arterial and venous system; there is an intra-cellular vascular apparatus of most perfect description and arrangement. These are the conclusions of Adamkiewicz, already well known for his researches on the bloodvessels of the human spinal cord, and they may be studied in a thin volume under the title of "Der Blutkreislauf der Ganglionzelle" (Berlin, 1886, August Hirschwald). The nucleus we have for some time known is not a solid, but may be regarded as a cavernous organ; its caverns form a venous sinus which surrounds the nucleolus—so reports Adamkiewicz. From this central sinus a central vein leads the blood away and empties it into the vein of the neuroglia in its immediate vicinity. These assertions naturally strike one as extraordinary. The author in his preface cautions us not to be sceptical merely, but to search for ourselves or examine his own specimens. It is suggested that the nervous cells may have a direct influence on the circulation, aiding it or increasing its resistance, and that it may do this by the exercise of protoplasmic contractility or, we may presume, by more subtle processes. A description is given of the methods adopted in the ascertainment of the facts, the intra-cellular network of capillary vessels being demonstrated by injection of carmine and other fluids. Beautiful illustrations illuminate the text.

THE PASTEUR COMMISSION.

THE work of the Royal Commission appointed to inquire into Pasteur's method of inoculation for the prevention of hydrophobia consisted in the examination of groups of individuals who have been bitten by dogs, each group comprising all the cases that had been attacked by one dog. An endeavour was made to ascertain the nature and site of the wound inflicted, together with all attendant circumstances; also inquiry was directed as to the nature of the illness from which the suspected dog was suffering, or whether it were really ill at all. One day Dr. Sanderson and Mr. Horsley investigated a group of cases that occurred at St. Ouen. On another day Sir Henry Roscoe, Dr. L. Brunton, and the above named went to Brie, near Paris, and made a thorough inquiry into another series of cases. On the third day all the above-named members of the Commission, together with M. Chauveau, spent the morning with M. Pasteur, witnessing his inoculations on patients, and the afternoon was devoted to an inspection of the method of inoculation of the rabbits, which M. Pasteur demonstrated. On the fourth day Drs. Sanderson and Lauder Brunton worked out another group of cases in Paris, and Mr. V. Horsley spent the day at Pasteur's laboratory. The secretary to the Commission, Mr. Horsley, remained nearly another fortnight in Paris, and was engaged in collecting evidence concerning many cases of bites by alleged mad dogs in and around Paris, at Lyons, and St. Etienne. Altogether eighty-five cases were investigated in this indefatigable manner.

THE BIRMINGHAM SCHOOL.

AT a meeting of the Clinical Board of the General and Queen's Hospitals, Birmingham, held on the 14th inst., Sir James Sawyer resigned the presidency, after three years of office, and Mr. Oliver Pemberton, F.R.C.S., senior surgeon to the General Hospital, was elected to the presidential chair. The Birmingham School has steadily increased and prospered of late years, and the results have been highly creditable to professors and students. Sir James Sawyer's tenure of office has proved advantageous to the school in many ways. The arrangements for clinical teaching have been largely developed, and since the amalgamation of the two hospitals for clinical purposes the students have necessarily possessed facilities for study unsurpassed by those of any provincial school. The following resolution, proposed by Mr. Pemberton and seconded by Dr. A. H. Carter, was carried unanimously:—"That the cordial thanks of the members of the Birmingham Clinical Board be given to Sir James Sawyer M.D., for the unvarying courtesy, ability, and punctuality evinced by him as President during the past three years."

LARYNGEAL CORTICAL CENTRE.

CLOSELY associated with the interpretation of internal speech, the laryngeal muscles are most probably represented in close proximity to the posterior part of the third frontal convolution, especially of the left side of the brain. Krause has experimentally deprived dogs of the capacity to bark by destroying a certain point of the antero-external part of the gyrus præfrontalis of that animal. M. Garel adds his quota to existing knowledge in the *Revue Mensuelle de Laryngologie*, No. 5. He believes that the cortical laryngeal centre ought to be placed in the third frontal gyrus at the level of the foot of this convolution, and near the furrow that separates it from the ascending frontal.

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THE INFLUENCE OF WATER ON NUTRITION.

THE necessity of a certain quantity of water for the assimilation of food and the chemical changes of the body which result in nutrition is admitted by everyone, but whether the ingestion of water in large quantities has an influence for increasing or decreasing metabolism has been called in question. In France the question has been studied. In that country the subject of obesity has a significance which it does not possess on this side the Channel, and it had been thought that the ingestion of large quantities of water had an important effect in reducing this abnormal bulk by rendering the oxidations more active, thus favouring the burning away of the fat which had been deposited by reason of the sluggishness of the nutritive changes. That this idea is not true has been shown by Dr. Debove. He has proved that the ingestion of large quantities of water has no influence on nutrition or body weight if care be taken that the solid diet is in no way altered at the same time. The determination of the urea showed the same fact. The observations were made on a friend who submitted to a strict diet of known weight, so that after a time his body weight remained stationary; the amount of water was then increased to more than double, and the daily amounts of urea, with the body weight, were tabulated, which showed at a glance the fact that water has no influence on nutrition, and that persons taking it in unusual quantities have no tendency to become thinner or fatter unless the solid constituents of the diet are lessened.

THE COUNTESS OF DUFFERIN'S FUND.

THE fund established by the Countess of Dufferin for the purpose of supplying female medical aid to the women of India continues to receive vigorous support from representatives of all classes and creeds in all parts of the Indian Empire. At a meeting recently held in connexion with the Burmah branch at Rangoon, amongst the speakers were the bishop of the city, two Burmans, a Chinaman, a Bengalee, and a Parsee. The social condition of a race of people can only improve when its women's domestic life and education are good; and as a movement in this direction the work of the National Association, under whose auspices the fund is administered, is one of very great value. Of all the philanthropic movements started by Europeans in India, none has so thoroughly enlisted the sympathies of the native population. The scheme deserves the support of all charitable persons, and should not be allowed to languish.

STERILITY DUE TO UTERINE DISPLACEMENTS.

IN a recent lecture M. Pajot says: "Another cause of sterility in women has often been, and still is, turned to profitable account by the quacks, and, unfortunately, also by doctors who prefer their own interests to those of science. This cause is uterine displacement..... Two years before the war I received a visit from an Austrian lady, who had an extreme retroflexion, for which she had consulted nearly all the doctors in the world, and they all, except Scanzoni, had told her that under the circumstances pregnancy was impossible. She menstruated regularly and painlessly. I told her that if the menses could pass out other things could pass in, and that her displacement was not a hopeless obstacle to conception. A week after I saw her she became pregnant, and was subsequently confined naturally, after which I kept her in bed till her menses reappeared (three months), and succeeded in producing a perfectly straight uterus, of which I was very proud. A year later the displacement was as bad as ever, but that did not prevent her from having two or three more children. This fact puts those who, with much ado, try to replace the uterus by special instruments, quite in the wrong. This is all useless; the best replacer of the uterus is pregnancy. A displacement cannot be considered as a disease; it is an infirmity, and moreover an infirmity easy to be borne. It is said that it causes grave inconveniences to women. For my part, I declare that if women had not been told by the doctor or midwife of their condition they would never suspect it, so little does it annoy them! It is only in cases of considerable descent, which weighs heavily and drags, that a displacement is a real inconvenience."

THE CHOLERA IN ITALY.

The news from Italy shows that cholera maintains itself steadily in the city of Venice and at Bari. In the seven days ending May 18th there had been 28 deaths from cholera in Venice, but the number of attacks was set down at only 37, which must necessarily be below the mark. At Bari 79 cases and 32 deaths are reported to have taken place during the same period. In the province of Brindisi the attacks, which never exceeded some 5 a day, gradually fell to a single one on the 14th inst., and since then no fresh attacks have occurred. There has thus been no increase of cholera in Venice and Bari, and elsewhere the disease has abated. This is, so far, satisfactory. But in view of the early season of the year it would be very premature to attach too much importance to any apparent diminution in the extent of the epidemic. Last year cholera prevailed off and on for several months in the Spanish province of Valencia before the sudden outburst early in June, which formed the commencement of a widespread epidemic throughout the peninsula. The failure of the disease to make rapid headway in Italy, whether it is owing to meteorological or other conditions, is, however, favourable to the carrying out of such sanitary measures as are known to hinder the spread of cholera; and in such action the best hopes for Italy now lie.

M. LOUIS MELSENS.

La Presse Médicale Belge says that Belgium has to deplore the loss of one of her most illustrious sons. M. Louis Melsens, who has just died at the age of seventy-two, was a distinguished chemist, his name being known not only in Belgium, but in all countries where there are scientific workers. He had a rare independence of character, and was a lover of science, to the advancement of which he contributed numerous researches. His paper on the Employment of Iodide of Potassium in Mercurial and Lead Poisoning has been of great service to public health, and was awarded prizes by the Institute of France and the Belgian Government.

OVERWORK AMONG FIREMEN.

IT is scandalous, because wholly irrational and the direct result of a pitiful policy of "economy"—falsely so called,—that our firemen are practically on duty without any complete remission twenty-four hours daily. To expect men, however courageous and devoted, to do their duty honourably and efficiently under such conditions of life is to expect more than human nature will continuously yield. With some personal knowledge of the working of the Brigade, we are bound to express the deep conviction that no body of public servants renders more uniformly good service; but it is surprising this should be so! The remedy is simple enough. Raise the rate for fire-protection purposes from a halfpenny to a penny in the pound *by all means*, but at the same time emancipate the Brigade from the government of the Metropolitan Board of Works. If the Metropolitan Fire Brigade were an independent organisation directly responsible to the Secretary of State, as the metropolitan police force is constituted, Captain Shaw would be able to provide London with a far more

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efficient organisation. Let some member of the House of Commons ask for an exact return of the percentage which the Metropolitan Board of Works practically charges for managing the Fire Brigade business, and, unless we are greatly mistaken, there will be a revelation which must tend to place matters in an entirely new light.

MORTALITY AMONGST MEDICAL MEN DURING THE TYPHUS EPIDEMIC IN MOSCOW.

THE typhus epidemic in Moscow, which is now, it seems, on the wane, has played great havoc in the ranks of the profession, no less than five junior police surgeons having already died. Most of them were without private means, and have left their families entirely without provision. Five more surgeons have been attacked by the disease, and it is hoped that they may recover. The authorities have publicly thanked the police surgeons for their devotion to their trying and dangerous duties during the epidemic. It is to be desired, however, that the widows and orphans will be remembered in some better and more substantial manner than this.

THE MEDICAL BILL AND FOREIGN GRADUATES.

A PETITION in favour of admitting to the Register foreign degrees obtained by practitioners already registered after *bonâ fide* examinations has, we understand, been forwarded by the Foreign Graduates' Association to Dr. Balthazar Foster, M.P. for Chester, for presentation to the House of Commons. Communications have also passed between the Association and Sir Lyon Playfair upon the same subject.

HUGE DOSES OF BISMUTH IN CHOLERA.

AT the Madrid Academy of Medicine Señor Sanchez, of the Military Sanitary Service, described his method of treating cholera, which consists in the main in giving huge doses of subnitrate of bismuth—150 grains every half-hour or hour—until the diarrhœa is arrested. The oil of mustard is also employed externally, and a very rigorous diet enforced, even bouillon being excluded.

THOSE of the profession who make their autumnal holiday in Switzerland may be interested in knowing that on Aug. 11th the Société Médicale de la Suisse holds its congress at Geneva. In the same month other associations—the Société Helvétique des Sciences Naturelles, the Association Géographique, and the Société Géologique Suisse—will also meet in that city within a few days of each other.

El Siglo Medico is publishing a translation of Mr. Godlee's clinical lectures on the Surgical Treatment of Empyema; and a series of articles on the same subject, embodying the results observed in the Odessa Military Hospital, is at the present time appearing in the *Vrach* from the pen of Dr. A. T. Kazanli.

THE Aberdeen University Club met and dined in great force on Wednesday evening. About 120 members and guests were present. The guests included General Sir Donald Stewart, G.C.B., Sir Peter Lumsden, K.C.B., Colonel Duncan, M.P., and others. The chair was occupied by the Right Hon. Lord Watson.

ON the 11th inst., the death occurred, very suddenly, of Dr. M. Willett of Bristol. The deceased, who was seventy-two years of age, was well known to, and highly popular amongst, the inhabitants of the city, in which he had practised for many years.

THE death is announced of Dr. Karl Friederich Küttner, who was formerly Prosector to the Obuchow Hospital in St. Petersburg, but who for the last thirteen years had lived in Heidelberg, where he died from heart disease. He was a diligent and painstaking observer, making good use of the enormous amount of pathological material which passed through his hands at the Obuchow Hospital. His published works are mostly to be found in Virchow's *Archiv*. Amongst the more recent of these may be mentioned his papers on Epithelium of the Lungs and on the Circulation in the Lungs of Frogs and Mammalia.

AT the Royston Board of Guardians on the 12th inst., an outbreak of a severe epidemic of measles in several parishes was reported, and it was stated that four deaths had already occurred in one village.

PROFESSOR GAIRDNER has been chosen by the Glasgow Committee as President elect of the meeting of the British Medical Association to be held in Glasgow in 1888.

WE regret to hear that Professor von Arlt, the renowned Vienna ophthalmologist, has met with an accident. He fell in the street and fractured his left humerus.

Pharmacology and Therapeutics.

A SOLUTION OF COD-LIVER OIL IN MALT.

THE value as a therapeutic agent of an emulsion of cod-liver oil and extract of malt has long been recognised, but there are undoubtedly many cases in which patients are quite unable to assimilate such a preparation. Pharmacologists and practical physicians have long desired to obtain a true solution of cod-liver oil in malt, but the difficulties in the way of its accomplishment were found to be so great that all attempts to manufacture such a product were temporarily abandoned. The question has, however, at last been solved, and we have had submitted to us specimens which are undoubtedly true solutions of oil in malt. On examining an ordinary emulsion of cod-liver oil with even a low power of the microscope, it is seen to be made up of myriads of oil-globules, some small, but the majority of considerable size. On subjecting the solution of cod-liver oil in malt to examination, no globules of any kind can be detected with even the highest powers available. This new preparation, which is known as the Kepler Solution of Cod-liver Oil in Malt, differs but little in appearance from the old-fashioned emulsion of cod-liver oil in malt, but its superiority as a therapeutic agent, especially in cases of wasting disease, is obvious. Thanks to the spread of a knowledge of pharmacognosy, the time is fast coming when every medical man will systematically examine the drugs he prescribes, and will not be satisfied with mere random assertions as to their purity and value.

HYDRASTIN.

Dr. A. T. Slavatinski, who has published as a graduation dissertation an account of his researches on the pharmacological action of hydrastin, which he gave to a number of pregnant bitches and rabbits, as well as to other animals, finds that when introduced into the blood in doses of not less than a hundred-thousandth of the body weight, or one centigramme per kilogramme of the body weight, it acts as a stimulant to the spinal cord and medulla oblongata. In medium doses it paralyses the vaso-motor centres, thus decreasing the blood-pressure. It acts on the heart first as a stimulant, and afterwards as a depressant of the motor ganglia. No effect seems to be produced on the peripheral branches of the pneumogastric. The augmentation of the cardiac contractions begins from the spinal cord. At first

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the secretory and convulsive centres are stimulated and afterwards paralysed. Hydrastin, in doses of from 0·01 to 0·03 grm. per kilogramme of body weight, was found to act as an ecbolic in pregnancy, and to produce contraction in the fibres of the non-pregnant uterus. At a certain period of pregnancy, which for the human subject is about seven months, the drug, in the same small doses (0·01 to 0·03 per kilogramme), if repeated a few times, appears to cause a miscarriage. The author had an opportunity of trying the ecbolic effect of hydrastin on a woman who had a contracted pelvis, and in whom it was desirable to bring on the labour somewhat before its proper time. On March 3rd, which was the commencement of the ninth month of pregnancy, a gramme dose of hydrochlorate of hydrastin was administered hypodermically morning and evening. These injections were repeated the following day. In the evening the patient noticed that the movements of the fœtus were particularly strong. On the forenoon of March 5th a gramme and a half was injected, and subsequently two strong movements were felt. The same evening two grammes were injected. On the forenoon of the 6th two grammes were given, and there followed during the day three strong movements. At night three grammes were injected. On the forenoon of the 7th three grammes were given, and one very violent and prolonged movement was experienced. Two grammes were given in the evening. No further injections were required, as signs of approaching labour manifested themselves. The child was born without complications, but it died the next day. Dr. Slavatinski suggests that if further experiments show that hydrastin may be used without danger to the mother, it may well replace the use of instruments in cases where premature induction of labour is required. He considers that hydrastin and its salts are more reliable than other preparations of the root. With regard to the dose for therapeutic purposes, he puts the maximum daily quantity at 0·3 grm. when given hypodermically, but would give doses of 0·5 grm. internally.

GRINDELIA ROBUSTA.

Grindelia robusta, which has been for some time in use in the form of the fluid extract, has recently been made the subject of a series of further elaborate investigations, both in the physiological laboratory and the hospital, by Dr. Dobroklonski, chief of Professor Botkin's clinic in St. Petersburg. (See THE LANCET of July 11th, 1885.) He made experiments on frogs, rabbits, and dogs to the number of sixty-eight, and gave the drug to patients suffering from various diseases. He found that the main effect, when moderate quantities were used, was to diminish the number of the heart beats, increasing at the same time the arterial tension. The effect on the heart appears to be due in warm-blooded animals to a stimulating action exercised on the inhibitory nervous apparatus of the heart, more particularly on that which is situated in the medulla oblongata. The increase of tension arises partly from a direct action of the drug, causing the vessels to contract, and partly from its stimulating action on the vaso-motor centres situated in the brain, the medulla, and the cord. Grindelia robusta also diminishes the irritability of the vaso-motor nerves of the heart and vessels, as well as that of the motor nerves and voluntary muscles, the nerves being more easily affected than the muscles, and the central more easily than the peripheral nerves. The therapeutic action of the drug, of which the author is in the habit of administering thirty drops three or four times daily, is, he believes, due to its power of decreasing and rendering more regular the cardiac contractions—having, he says, a greater regulating effect than digitalis, adonis vernalis, convallaria majalis, or chloral hydrate. It has, too, a diuretic action, but this is of less importance, being weaker than that of digitalis or adonis vernalis. He finds that grindelia robusta may advantageously be combined with adonis vernalis in cardiac diseases, which other more ordinarily used remedies have failed to relieve.

FLUORIDES OF AMMONIA AND IRON.

Dr. John Lucas of Bombay has employed the fluoride of ammonia in the treatment of hypertrophy of the spleen. The drug appears to have antipyretic and antiperiodic properties, as proved in cases of ague. Nausea was produced at first, but afterwards large doses could be borne. The appetite, after a time, improves under its use. By giving the drug after meals its nauseant and purgative actions are greatly lessened. "It certainly appears to possess the merit of excelling any other method of treatment of hypertrophied spleen with which we are acquainted." Dr. Lucas began with five-minim doses, but in future would be disposed to give twenty, or even thirty, minims well diluted. The fluoride of iron would, perhaps, be preferable to the ammonia salt, on account of its hæmatinic properties.

SUBCUTANEOUS INJECTIONS OF COCAINE IN ASTHMA.

Subcutaneous injections of a 5 per cent. solution of salicylate of cocaine are said by Mosler to arrest the paroxysms of asthma, and he believes that this remedy will prove useful in the general treatment of the affection. He gives 0·04 gramme (three-fifths of a grain) for a dose. In one case he remarked a certain amount of faintness, which, however, soon passed off. A Dresden physician, Dr. Beschorner, has also recorded favourable results from the use of cocaine in asthma.

LUNATIC ASYLUMS, 1885.

No. I.

EACH return of spring brings for us, with the primrose and the Lenten lily, its crop of annual blossoms in the form of reports, clad in every conceivable hue, from the various lunatic asylums of the country. These reports, not unlike the modest flower, tell us how much of homeliness and peace may be found in out-of-the-way places, and in places, too, sometimes so wild and darksome that they might seem almost to bid defiance to us in our most sanguine hopes. In themselves, however, these reports deal not with the poetry, but with the saddest and sternest realities, of our social and domestic life; they sum up, in general language and with an almost wearisome monotony of statistics, the annual events and transactions of our little worlds of unreason.

Taking the reports for the year 1885 now before us, it is our purpose, in the first place, to glance briefly at them one after the other, and to note what matters of special interest each one presents; and, in the second place, to give a general summary of the year's work in relation to the reports as a whole. With this view, we shall take it as a favour if the medical superintendents who have not sent to us a copy of their reports will kindly do so at their early convenience.

At the Cumberland and Westmoreland Asylum, the Superintendent (Dr. Campbell) says that the diminished admission-rate for the past year "fully bears out his formerly expressed views, that in this district extreme prosperity and high wages among the lower strata are a more powerful factor in causing insanity than the opposite extreme." Further, he bemoans and deprecates, on behalf of the private patients, the "mistaken kindness" of their relatives in pursuing the home treatment too long and delaying their admission into the asylum, so that "they do not at all have the same chance of recovery as their poorer fellow-sufferers." On the other hand, and on behalf of the ratepayers, Dr. Campbell calls attention to a matter of some importance—viz., the frequent readmission of persons suffering from insanity due to alcoholic excess. We take it that these persons are to be found at all stages of a scarcely varying chronological cycle, involving (1) drunken idleness ending in insanity; (2) admission to asylum; (3) speedy recovery; (4) early discharge from asylum; (5) rapid relapse. They would stand a much better chance (he says) of exemption from this self-brought-on insanity if after recovery in the asylum they were by law detained for an increasing period after each attack in some industrial institution, whose profits assisted to reduce the rates. We think the Prison Commissioners would have little difficulty in providing a few cells in their local habitations (on a modified penal scale, of course) for such "drowthy" and expensive misdemeanants.

There is a pleasing homeliness about the report of the Superintendent of the Dorset Asylum; and we regret that this experienced official should have to refer to himself as being in indifferent health. The Commissioners in Lunacy, however, in their report upon the asylum, call attention to the staff of attendants as being too weak; and this is not to be wondered at when we find 89 patients (of whom 11 are epileptics and 11 are in bed) under the care of four nurses and a supernumerary. We scarcely know whether the

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nurses or the patients are most to be commiserated. Again, no wonder that Mr. Symes tells the Commissioners that he experiences great difficulty in getting nurses when the initial wages are £13, without uniform. The tone of a large asylum must always suffer when the authority and the element of self-respect which a quietly attractive uniform carries with it are lacking.

The report of the Devon Asylum, which, by the way, is to be commended for its excellent type and paper, is illustrated with most useful charts, which show at a glance the fluctuations in the annual population, death-rate, recoveries, and weekly cost *per caput*. Dr. Saunders still has his wards so overcrowded as to prevent him classifying his patients according to their mental requirements. Nevertheless, he has to report favourably as to the health of the community, and he says that the low rate of mortality (the percentage on the average number resident being 4·32; 3·21 on the males and 5·07 on the females) is remarkable, and without parallel in the history of the asylum. Dr. Saunders, also, has occasion to refer to a class of cases which merit the attention of the Prison Commissioners. "It is interesting to note how one or two patients of the 'rogue and vagabond' class were sent here and not found insane. They have sufficient craft and cunning, as they avow, to prefer the asylum to the gaol, and are usually persons who have no claims on the county, but are only casuals. From a review of past years it would appear that this class of patient is oftener met with than formerly. Malingering among our own insane poor is almost unknown." This statement is interesting not only with regard to the overcrowding of our asylums, but also with regard to the diminished numbers of our prison population.

The Superintendent of the Newcastle-upon-Tyne Asylum (Mr. Wickham) gives the following opinion on the relation between intemperance and insanity:—"It will probably be always a vexed question whether the intemperate habits are the cause of the insanity, or the insanity is the cause of the intemperate habits. As the result of many years' careful study of the causes of insanity, I can only remark that in the great majority of those particular cases which have come under my notice, the evidence is in favour of the conclusion that the insanity causes the intemperate habits. The reverse only happens when there is already some disease which is due to impaired nutrition. Perhaps it is for that reason that the descendants of a drunkard are more liable to insanity than the drunkard himself."

A good practical report of the working of a large institution is sent in by Mr. Barton, the Superintendent of the Surrey County Asylum at Brookwood. He is able to report a large percentage of recoveries on the number of admissions; and although the death-rate was somewhat higher than for the previous six years, it appears to have been due to the great number of feeble and broken-down cases admitted during the last two years. A commendable pathological zeal is observable at this asylum, for, with two exceptions, post-mortem examinations were made in all the 103 deaths that took place during the year. A criminal lunatic in an advanced stage of general paralysis was admitted. He had been sentenced to a month's hard labour for unlawful possession of a quantity of wood; and Mr. Barton says there is no doubt this man was not responsible for the act for which he was convicted, and which was simply the result of his disease. There is every reason to fear that this consignment of the insane to prison cells is of too frequent occurrence.

There is nothing special in the reports of the Superintendents of the Birmingham Borough Asylums, but the Lunacy Commissioners, in their report on the Winson-green Asylum, make the following remark:—"We saw in the hall at dinner 311 men and 221 women, who were seated, not, as is general in asylums, on different sides of the hall, but only on different sides of the tables. This arrangement seems here to be attended with very happy results, and the patients behaved with the greatest propriety."

The Superintendent of the East Riding Asylum at Beverley refers to the fact that the insanity of three only out of sixty-two admissions during the year was due to intemperance. He fears that this small proportion of cases due to intemperance is "but a sign of hard times." "One patient, an idiot, died of premature decay at the age of twenty-two. His development had been arrested in early life. He could neither see, hear, nor speak; he could not even stand; his existence was a mere fact, and not equal to that of a healthy plant."

BURGH POLICE AND HEALTH (SCOTLAND) BILL.

THE Burgh Police and Health Bill for Scotland, one of the measures introduced last year into Parliament, but abandoned at the end of the session, has passed the House of Lords and now awaits the consideration of the Commons. In addition to the regulations necessary for the constitution of police burghs and the formation and maintenance of a police force, there is much in the Bill bearing upon the sanitary condition of the towns and of the houses, and also an important section on the mitigation and prevention of disease. To some of the proposed clauses we think it necessary to draw the attention of the profession. The 66th clause enacts that the commissioners appointed for the purposes of the Act, elected by ballot by the householders of the burgh, and one-third of whom retire annually, "shall appoint annually a legally qualified medical practitioner, who shall be styled the 'medical officer of health,' and whose duty it shall be to ascertain the existence of disease within the limits appointed to him, especially of all infectious diseases, and to point out any local causes likely to occasion or continue such diseases or otherwise injure the health of the inhabitants," &c. The tenure of office of the medical officer of health for one year only, or the necessity of his reappointment annually by a fluctuating body of commissioners, appears to be very objectionable, as likely to interfere with his independent action—in such cases, for instance, as those in which some of the more influential commissioners may be the owners of property which, from its insanitary condition, should be reported as injurious to the health of the occupants. The interests alike of the public and of the profession seem to us to require that the appointment should be permanent, subject only to being cancelled for inefficiency or neglect on the part of the holder, such dismissal to require the approval of the Board of Supervision. Under Clause 325, with a view to secure the notification of cases of infectious disease, it is provided that "every medical practitioner resident or practising within the burgh shall, within twenty-four hours of the same coming to his knowledge, report to the medical officer of health every case of infectious disease and whooping-cough occurring in his practice, and stating the building or ship where the patient is being treated, under a penalty of forty shillings; and if it be found that the diagnosis of such practitioner was correct such practitioner shall be paid the sum of two shillings and sixpence for each case reported and verified as aforesaid." It is not said by whom this verification is to be made, but we presume it is by the medical officer of health. To this we see very serious objection, especially in those instances in which he is also a practitioner in the borough. It cannot fail to give rise on some occasions to very unpleasant feelings, and it seems quite unnecessary. The certificate of a duly qualified practitioner ought to be accepted as sufficient evidence of the nature of the case. When no medical practitioner has been called in, the occupier or person in charge of the building is to give notice to the medical officer of health of any case of infectious disease of the existence of which he shall become aware; but no remuneration is provided for so doing, nor is there any penalty for neglecting to report it. The commissioners are bound to intimate any outbreak of infectious disease within the burgh to the Board of Supervision, who must notify it to contiguous local authorities under the Public Health Acts. Under the term "infectious disease" are comprehended "cholera, smallpox, typhus, typhoid, scarlet, relapsing, continued, and puerperal fever, measles, scarlatina, and diphtheria, and such other disease as the commissioners, with the approval of the Board of Supervision, or Her Majesty by Order in Council, may, from time to time declare, for the purposes of this Act, to be infectious." Why scarlet fever and scarlatina should be classed separately, and why whooping-cough should be excluded from the list of infectious diseases, are mysteries known only to the Parliamentary draughtsman.

The commissioners are to provide in or near the burgh a hospital for the treatment of infectious diseases, which must be licensed by the magistrates before being occupied, on the certificate of the medical officer of health or some other duly qualified medical practitioner that it is suitable for such purpose, the licence to be renewed annually; also a reception-house for persons removed from an infected house, but who are not suffering from disease themselves,

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and a disinfecting-house with necessary apparatus; and they may provide nurses for attendance upon infectious cases. The medical officer of health is to have power, in cases where from insufficient accommodation he has reason to fear the spread of infectious disease, to remove the patient to hospital, the expense incurred to be defrayed out of the burgh general assessment. The commissioners are to be empowered to remove to the reception-house for a period not exceeding fourteen days all the residents of an infected house, on the production of a certificate signed by the medical officer that such removal is necessary to avoid the spread of disease, and to prevent the return of any of the residents until the house and all the bed and body clothing have been cleansed and disinfected to the satisfaction of the medical officer. If the commissioners are of opinion "on the certificate of their medical officer of health, or of any other legally qualified practitioner," that this cleansing and disinfection would be more effectually carried out by their own staff than by the owner or occupier of the house, they may cause it to be done, but at their own cost, and making compensation for any property or articles destroyed or injured. A penalty not exceeding forty shillings is to be inflicted on any person getting rid of the excreta of patients suffering from infectious disease, or of any article likely to communicate it or to retain infection, without previously disinfecting them. Mortuaries and proper carriages for the removal of the bodies to them are to be provided, and a heavy penalty is to be inflicted on anyone retaining unburied for longer than forty-eight hours, except in a mortuary, or with the sanction in writing of the medical officer of health or of a registered medical practitioner, the body of any person who has died of infectious disease. Wakes are likewise forbidden in such cases. The Bill also provides for the prevention of children who have suffered from infectious disease, or are resident in a house where such exists, attending school until free from disease and infection and the house and its contents have been disinfected to the satisfaction of the medical officer of health. Occupiers of milk-shops and dairies are to give notice of any persons employed in them being attacked with infectious diseases. When there is reason to believe that the spread of such disease is attributable to milk, the commissioners are to have power to require the cowkeeper, purveyor, or occupier of a dairy or milk-shop to furnish lists of the customers supplied by them, which will afford most important means of tracing its influence, and verifying or removing the suspicion. On the certificate of the medical officer of health that, in his opinion, an infectious disease is being spread by the sale or delivery of milk from any dairy or farm, the Procurator Fiscal or sanitary inspector "shall apply to the magistrate for an order to prohibit the sale of the milk so brought, from and after due intimation of such order, until the person affected has been removed or has recovered from such illness, the premises been disinfected, and the bedding and clothing have been destroyed or thoroughly disinfected, and until it is certified by the medical officer of health that the said premises are free from infection and in a proper sanitary condition, and that the sale of milk from such place may be resumed."

THE LATE SURGEON-MAJOR T. R. LEWIS, M.B.,

ASSISTANT PROFESSOR OF PATHOLOGY, NETLEY.

THE premature death of Surgeon-Major Timothy R. Lewis, M.B., is a loss not circumscribed within the limits of the department to which he belonged, for it is a severe loss to the profession and the cause of science generally. There is something peculiarly pathetic in his death at a time when he had been elected for the blue ribbon of science, but did not live to have the honour of the F.R.S. actually conferred upon him. There is very little doubt, too, that his death was attributable to his scientific ardour, for his attack of fatal pneumonia seems to have developed out of some septic poisoning following a dissection wound.

The deceased possessed a rare combination of qualities: keen love of work, patient industry, penetration, a strong and impartial judgment, a well-trained eye and hand, linguistic knowledge, and a very modest and amiable character. His ability and aptitude for scientific inquiries early attracted attention at Netley, and, in connexion with Dr. D. D. Cunningham, he was selected, at the suggestion of the late Professor Parkes, to conduct a special scientific investigation into the theory of the fungoid origin of cholera advanced more particularly by Professor Hallier of Jena, and that of the connexion existing between this disease and certain conditions of soil promulgated by Professor M. von. Pettenkofer of Munich. After a special course of study in Europe, Cunningham and Lewis went to India, and published, in connexion with the sanitary department of that country, a series of very exhaustive observations on these subjects—microscopical, chemical, experimental, and otherwise. Lewis did a great deal of work with the Sanitary Commissioner of the Government of India (Surgeon-General Cuningham), largely aiding that official in the preparation of his reports, and contributing also from time to time special papers to those reports, either by himself or in connexion with his colleague, Dr. D. D. Cunningham.

To complete what we have to say of Lewis's labours in relation to cholera brings us down to the present time, and to investigations still incomplete. As is well known, a German Commission, under the distinguished *savant*, Dr. Robt. Koch, was sent to Egypt to study the subject of cholera during the late epidemic in that country; and subsequently the Commission proceeded to India to complete the series of observations necessary for establishing the identity of the disease in Egypt with Indian cholera. It is not necessary to discuss in detail the results of those investigations; the outcome of them was, in the opinion of the Commission and others, to establish that the so-called comma-shaped bacillus was invariably present in, and the cause of, cholera. Lewis, who by this time had left India, and was Assistant Professor of Pathology, Army Medical School, Netley, with the zeal that characterised him, started off to Marseilles and Toulon, to corroborate for himself this alleged discovery. In September, 1884, he published a memorandum on the subject, in which he demonstrated that a comma bacillus microscopically identical with Koch's was present in the saliva, and he criticised with great penetration the views advanced by the German micro-pathologist. The Indian Government subsequently sent out a Commission to India (that of Drs. E. Klein and Heneage Gibbes), and their report was submitted for the decision of a committee convened in 1885 by the Secretary of State for India under the presidency of Sir Wm. Jenner, of which committee Lewis was appointed honorary secretary. Lewis contributed to their report the results of some very valuable and original observations in further pursuit of a subject, the investigation of which he was probably better qualified to undertake than anyone living. The latest report—21st Annual Report of the Sanitary Commissioner of the Government of India, published in 1886—corroborates the correctness of Lewis's views; and, as matters at present stand, Koch's alleged discovery is at present not proven.

At the late Sanitary Conference at Rome Lewis was one of the delegates, and did excellent service to the cause of science and scientific sanitary legislation. But it was in his parasitological researches in endemic hæmaturia and chyluria in the discovery of the filaria sanguinis hominis that Lewis performed his more brilliant and original work. The subject is one of great importance, and in its latest advances in relation to the life history of filaria, the mosquito its intermediate host, and the periodicity of the phenomena, it forms a study of extreme interest in micro-pathology and natural history. Lewis made the discovery of the filaria in the urine of patients in the General Hospital, Calcutta, in 1869. In 1871 the same filaria was discovered by him in the blood, and several specimens were forwarded to the late Professor Parkes in this country. The blood is infested with a living worm about $\frac{1}{3}$th of an inch in length and $\frac{1}{5\,0\,0}$th of an inch in diameter. Upon the subsequent researches of Dr. Manson in China and Dr. Bancroft in Australia there is no need to dwell. The whole question is discussed in the new volume (vol. ii.) of Hirsch's Handbook of Geographical and Historical Pathology, published by the New Sydenham Society. It is not, we think, very creditable to the Government of this country or that of India that Lewis received no State recognition of his important services. Science counts for very little compared with the glamour of the profession of arms.

ON the 16th inst. the Hospital Sunday collections were made at Birkenhead.

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THE UNIVERSITY OF LONDON.

Scheme embodying the Resolutions of the Special Committee for the consideration of the Scheme for the Constitution of the University.

SECTION 1. *University.*—The University to consist of: (*a*) Senate; (*b*) Convocation; (*c*) Constituent Colleges; (*d*) Council of Education [in place of Faculties and Boards of Studies].

SECTION 2. *Senate.*—The Senate to consist of: (*a*) Chancellor to be appointed by the Crown. (*b*) Vice-Chancellor to be elected by the Senate annually from amongst its members. (*c*) The following members *ex-officio:* chairman of Convocation, chairman of Council of Education,* and chairman of each of the four Boards of Studies.* (*d*) Ordinary members to be appointed as follows: Six by the Crown, eight by Convocation [instead of six], four by the Council of Education,* and one by each of the seven following institutions—University College, King's College, Royal Society [additional], Royal College of Physicians of London, Royal College of Surgeons of England, Council of Legal Education, and Council of Incorporated Law Society. The ordinary members to hold office for a period of four years, and to be re-eligible. The Senators elected by Convocation to be elected by members of Convocation voting in their respective Faculties. Two members to be elected by the members of each of the four Faculties. The Senate to have the control and management of the University.

SECTION 3. *Convocation.*—Convocation to remain constituted as at present, with such increased powers as are herein referred to.

SECTION 4. *Constituent Colleges.*—The constituent colleges to consist of educational bodies in or near London, together with other institutions or colleges not affiliated as constituent colleges to any other University, and having one or more Faculties of university rank; and to be (*a*) such bodies as may be named in a schedule to be settled by a joint committee of the Senate and Convocation; (*b*) such other bodies as may be hereafter admitted by the Senate with the concurrence of a joint committee of Convocation and the Council of Education. On the admission of each constituent college, it shall be determined to what Faculty or Faculties it shall belong, and in what mode it shall be represented on the Council of Education, and such terms may be subsequently revised by the Senate, with the concurrence of a joint committee of Convocation and the Council of Education. The Senate to have power, with the like concurrence, for good cause to remove any college from being a constituent college. The institutions from which the University receives certificates for degrees in Medicine to retain their right of giving such certificates, whether they be constituent colleges or not; the list of such institutions to be subject to the existing power of revision; but the Senate not to report thereon without the like concurrence.

SECTION 5. *Council of Education.*—The Council of Education to consist of: (*a*) representatives of Convocation; (*b*) representatives of the constituent colleges; (*c*) the examiners of the University. The representatives of Convocation to be members of Convocation, and to be elected by the members of Convocation voting in their respective Faculties. Convocation to elect one-fourth of the total number of the members of Council. The representatives of constituent colleges to be professors or persons engaged in giving instruction of university rank. The representatives of Convocation on the Council of Education to hold office for a period of four years, and to be re-eligible. The Council of Education to advise the Senate on all matters connected with the subjects of examination and the teaching thereof. The Council of Education to appoint a chairman annually. The Council of Education to appoint from among its members standing committees or Boards of Studies, one in each of the four Faculties, and also to have power to appoint special committees as it sees fit. Each board to appoint a chairman annually. Each Board of Studies to consider matters connected with its own Faculty and to report theron to the Council of Education.

SECTION 6. *Provisions for Promotion of Higher Education.*—The University to have power to hold real property and to accept gifts, devises, and legacies for the purposes of the University. The Senate to take steps to secure to the University a fixed endowment from the State in lieu of the present annual grant, with power of exclusive control over its application and expenditure. The Senate to have power to appoint professors, lecturers, and examiners in any branch of knowledge; to subsidise or endow laboratories, libraries, and museums; to make grants out of the funds of the University for the purpose of research; and to assist by any other means in promoting higher education. The Senate to have power to confer honorary degrees.

SECTION 7. *Supplementary Provisions.*—The existing members of the Senate to continue. The Crown not to appoint any new members until the number of the present Crown nominees is reduced to five, and then to nominate from time to time to vacancies occurring in any of its six places. Convocation at once to elect one moiety of its complement of members to the Senate and to the Council of Education respectively, and at the end of two years to elect the other moiety, and each Faculty to fill up from time to time vacancies occurring in the number of its representatives. The Council of Education, when constituted, to elect its complement of members to the Senate, two of whom, to be determined by ballot, shall retire at the end of two years; and the Council of Education to fill up from time to time vacancies occurring in the number of its representatives. All elections by Convocation under this scheme to be by voting papers.

* Instead of three by each of the four Faculties.

EXTRAORDINARY CÆSAREAN OPERATION.

OUR recent annotation under this heading (THE LANCET, May 8th, p. 890) was based on such an exceptional series of facts, that with the fullest confidence in the authority from which we quoted—*La Gazzetta degli Ospitali*,—we sought fuller information from the patient's medical attendants, Drs. Raniero Baliva and Adolfo Serpieri. Those gentlemen have our warm thanks for their courteously prompt and full reply, which we translate:—

"Viterbo, 15th May, 1886.

"We append a summary history of the Cæsarean section which N—— de A—— of Viterbo practised upon herself on the morning of the 28th March last.

"A peasant woman of Viterbo, aged twenty-three, of lymphatic temperature short stature (one metre and forty cent.), and of delicate constitution, was in the last month of pregnancy. As her condition was talked about amongst her neighbours, and provoked the anger of members of her family and of her masters, she came to the following unheard-of determination. At 3 A.M. on the 28th of March, as she relates, with a not very sharp kitchen knife she opened her abdomen. The wound was linear, but somewhat jagged (*efrangiata*), twelve centimetres in length, situated in the middle of the right iliac region, from a little above the level of the umbilicus downwards, and from without inwards. She penetrated with a somewhat less extensive incision into the uterus, and extracted from it a male fœtus at the ninth month, weighing 1 kilogramme and 900 grammes. This fœtus, before being extracted from the uterus, had received several important wounds in the thorax and abdomen, whereof it died before breathing, as was undoubtedly proved by the results of the necroscopic analysis. The head had been divided from the trunk by a circular incision at the base of the neck and precisely between the penultimate and the last cervical vertebra. The cord was detached from the placenta and the fœtus. The placenta was perfectly healthy. This operation completed, the patient states that she tightly bound a bandage round her body, so as to bring the edges of the wound together and prevent the protrusion of the intestinal coils; then, having dressed herself at 5 A.M., two hours after the operation, she went into Viterbo on foot, a distance of one kilometre, and visited a married sister, to whom she said nothing of what had happened, but breakfasted with her on bread and coffee and a cup of broth. She then left the house and walked about the town for some time, in order, as she states, to show herself and to put an end to the current talk about her pregnancy. At 10 o'clock, still on

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foot, she returned to her home in the country; on reaching it she was seized with unbearable abdominal pains, followed by violent vomiting and fainting. She quickly rallied, and, the bandage having slipped upwards, almost the whole of the small intestines protruded. It was only then (about 11 o'clock) that the father, mother, and brother became aware of the serious occurrence, and went to Viterbo for medical assistance.

"We were the first to arrive on the spot at 4 P.M., the same day, thirteen hours after the incision, and six hours after the escape of the intestines. We found the patient in pain, but not so much so as might have been anticipated from the gravity of the case; she was conscious and tolerably calm. She was lying dressed on a small bed in a well-ventilated room. Without loss of time, with all possible precautions, and with the limited means at our disposal in the country, we proceeded to cleanse the intestines and to replace them in the abdominal cavity, after having emptied it of copious sero-sanguineous effusion. We were scrupulously careful to secure the utmost possible cleanliness; the wound was closed with twisted sutures, and a drainage-tube placed in its most dependent part. Strict injunctions for necessary care were given to the patient and her attendant. During the first five days no serious change occurred. The thermometer never rose beyond 39·5° C. There was no sign of uterine disturbance; the peritonitis was only partial; thirst slight; vomiting at night. During the first three days micturition was difficult and the bowels inactive. The catheter was only passed once, on the third day, from which period the bowels acted copiously and regularly. The patient slept for several hours on the previous night; her sufferings were not great, and on the eighth day her recovery seemed assured. At the commencement abundant bloody serum and badly-smelling clots escaped from the turgid and painful abdomen. A considerable quantity of omentum protruded. Pus followed, thin at first, but became thick on the tenth day, and then gradually decreased in quantity. The discharge all took place through the lower angle of the wound, the deep parts of which healed by first intention for about two-thirds of its extent. On the twenty-fifth day the wound was purely superficial, and limited to six centimetres in length. Cicatrisation was complete on the fortieth day. The patient is now (forty-eighth day) perfectly well and walks about. She is under the surveillance of the judicial authority and is receiving much sympathy from the public.

"The occurrence, though seemingly incredible, is perfectly true. We have related the actual facts, accepting the patient's statement that she operated upon herself. What is even more extraordinary than the operation is recovery in the proved circumstances of the actual case. We shall be happy to supply any further information desired.

"RANIERO BALIVA, M.D.
ADOLFO SERPIERI, M.D.

"P.S. Externally we made use of a solution of carbolic acid 4 per cent., and of 1 per cent. for injection through the drainage-tube, which was removed the tenth day as it appeared to irritate. The sutures were removed the fourteenth day. During the first fifteen days the dressings were changed four times daily. At first abstinence from food was strict; after a few days good wine was allowed. Throughout the treatment preparations of quinine were administered. Only two oil purgatives were given in the early days. Ice was freely used during the first five days to counteract hiccough and vomiting. Until recovery was complete the woman was covered with carbolised cotton wool."

UNIVERSITY COLLEGE HOSPITAL.—The Executive Committee have arranged for a fancy dress ball to be held at Willis's Rooms, King-street, St. James's, on Tuesday, June 1st, 1886, in aid of the funds of the above hospital. The bazaar, to be held in the grounds of University College, will be opened by the Princess Louise on July 2nd—not the 9th, as stated in our last.

THE NEW MEDICAL BILL: SUGGESTIONS.

"M.D." suggests: 1. After —— no one shall be allowed to practise medicine or surgery in the United Kingdom without first obtaining a Government permit and a title from one of the present recognised licensing bodies under a penalty of - — &c. 2. The Government permit to be granted (*a*) after a conjoint examination in medicine and surgery under conditions as approved of by the Medical Council, at a fee of ——; (*b*) on application, free of charge, to all whose names appear on the Medical Register, or who possessed registerable qualifications at the date of the Bill becoming law. The Government permit would ensure that all candidates passed the same standard of examination, and, a title being required as a licence to practise, the present licensing bodies would not be interfered with—a rock on which all proposed Medical Bills have come to grief.

With reference to health diplomas, the Association of Medical Practitioners qualified in Sanitary Science suggest the following clause: "All registered medical practitioners who have obtained from any university or medical corporation of the United Kingdom a qualification in Public Health after examination shall be permitted, and are hereby empowered, to register the same as a qualification under the Medical Act on payment of such fee as the Council may appoint." We understand that Sir H. Holland has consented to move the above clause as an amendment in committee.

With regard to foreign degrees, "A Medical Man with British Diplomas" thinks it is a great mistake, in face of the increased number of medical men who are yearly admitted on the Register, to propose that foreign diplomas shall be registered, especially considering how easily these foreign diplomas are obtained. He thinks that in the background there must be some motive for legalising these diplomas, as it cannot be for the good of the profession.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

On Diphtheria at the Royal Female Orphan Asylum, by Dr. GRESSWELL.—The fact of a prevalence of diphtheria in this institution having occurred in November last, with its reappearance in January, and the circumstance that the cause had "baffled all inquiries," led to the investigation which Dr. Gresswell made on behalf of the Local Government Board. The institution contains, with its resident staff and the orphan girls, 151 persons; and it is located on a piece of low-lying ground completely encircled by the river Wandle, or by a conduit, partly covered and partly open, which connected together a semicircular sweep of the river. The site itself is thus unpromising. Then, again, for many years past cesspool drainage had been resorted to, and when this was abandoned, after an epidemic of enteric fever, an ill-devised sewer, which can only now be described as constituting an elongated cesspool, took its place; some of the old house drains and soil-pipes being so left or disposed of that little else is known of them than that foul odours tend to prevail, and that in connexion with some of these nuisances one old soil-pipe was discovered and removed. Such conditions, superadded to the character of the site, become most unfavourable when associated with diphtheria. Then, again, the building forming the asylum is so constructed that the infirmary, wards, bedrooms, &c., all have one common air, and hence no proper isolation, in the sense of aerial severance of sick from healthy, can be expected. Under these circumstances, Dr. Gresswell looked into the previous sanitary history of the inmates, and he records a long list of ailments since 1867, which include sore-throats, diphtheria, diarrhœa, ophthalmia, erysipelas, gastric fever and irritations, enteric fever, &c., which go to show that for a very long period diphtheria in its more or less marked forms, and many other diseases which are known to be associated with conditions leading to the pollution of the air, have prevailed in the institution.

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So also Dr. Gresswell, dealing essentially with the throat mischief, which he especially inquired into, finds in the meagre sickness returns of the establishment a large number of entries of sore-throat, putrid throat, strumous throat, and the like, together with ailments suggestive of diphtheritic sequelæ; and on examining the throats of the orphan girls, he says that "hardly more than one-third can be spoken of as possessed of healthy tonsils." The remainder "have tonsils which are enlarged, many hugely so ....., and now and again they present evidence of follicular inflammation." How, under these circumstances, the cause of diphtheria can have baffled even the most superficial inquiry is astounding. In almost all the details of its sanitary history, this institution presents some of the most essential characteristics of places to which diphtheria is known to cling with exceptional tenacity, and the disease has, more or less masked or self-evident in type, been long prevalent there. Locally, we learn, there has been a suggestion that the proximity of the Croydon sewage farm, which lies almost immediately to the north and east on the opposite side of the Wandle, has been the cause of this chronic state of illness amongst the inmates; but, as Dr. Gresswell very properly says, until the sanitary condition of the institution itself has been put upon a proper footing, any attempt at differentiation of possible causes of the chronic illnesses in persons living therein would certainly be futile. We have no wish to exonerate the sewage farm. On the contrary, the influence of sewage farms on public health is one of the subjects concerning which accurate and trustworthy information is much needed. But there are other populations near to the Croydon farm, and, so far as we know, they have not suffered in the same way as this institution has; whereas on their own premises the governing body of the asylum will find in abundance the very conditions which, if they do not continually cause initial cases of diphtheria, ensure its persistent prevalence when once the disease has been introduced.

Diphtheria in the Rural District of Walsingham, by Dr. GRESSWELL.—Walsingham registration district was one of the districts which suffered from diphtheria during the great epidemic which commenced in 1858. During that year the fatal cases were only 3 in number, but they steadily rose year by year to 27 in 1862, and then ensued a diminution, marked, however, by a temporary increase again in 1873. But it is to be noted that ever since 1858 deaths have, with the exception of one single year, been every twelve months ascribed to diphtheria, and even in that year, as in nearly all the others, fatal attacks of throat diseases, which we have now come to regard as at least allied with diphtheria, occurred. The investigation carried out did not lead to any new information as to the etiology of this obscure disease, and this was necessarily the case because so many general insanitary conditions prevail there that, until these are eliminated one by one, in so far as cause is concerned, it is impossible to ascribe the disease to any definite condition. Mr. Power inspected two of the parishes in this district in 1875, and he then found diphtheria to prevail in connexion with a want of proper sewerage and drainage, a scarcity of drinking-water in dry seasons, and insufficiently ventilated dwellings. It is difficult to see that there has been even a semblance of improvement since that date, for even at Fakenham, which is the market town and has a considerable population, the cottages were found to be damp and ill-ventilated. Foul cesspools exist which ventilate into the houses through untrapped sink-pipes and ill-ventilated soil-pipes; and privy vaults, ash-pits, and filth accumulations lie in the immediate neighbourhood of houses and wells. A district thus circumstanced can hardly be expected to get rid of a disease like diphtheria, and the various details given in Dr. Gresswell's report go far to show how seriously they must necessarily affect public health in the district. To one point especial prominence is given—namely, the damp condition of the dwellings—a condition with which diphtheria has again and again been found to be associated. Thus, at Stiffkey a large number of houses are built into the hillside without protection from the wet of the higher land above, the back walls being, in consequence, damp and covered with various moulds. The floors of the lower rooms are generally below the level of the ground outside, which is both unpaved and undrained; and this condition of dampness is aggravated by the absence of eaves-spouting, which, together with a dilapidated state of the roofs, ensure dampness of the upper as well as of the lower rooms. Under such circumstances, the Walsingham registration district again in 1884 suffered from a diphtheria epidemic, which caused 21 deaths, in addition to 8 more from other throat affections, and the disease extended well into 1885. Indeed, according to the Registrar-General's quarterly returns, no less than 12 diphtheria deaths are recorded during the four quarters of 1885 for the registration district. With the exception of the parish of Wells-next-the-Sea, the district is under the administration of the rural sanitary authority, and their attention may well be called to the state of the area under their jurisdiction with regard to the removable causes of disease which have so long prevailed in it.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5273 births and 3321 deaths were registered during the week ending May 15th. The annual death-rate in these towns, which had been equal to 19·8, 20·2, and 20·6 per 1000 in the preceding three weeks, declined last week to 19·1, and was lower than that recorded in any week since October, 1885. During the first six weeks of the current quarter the death-rate in these towns averaged 20·0 per 1000, and was 3·2 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 8·8 in Huddersfield, 10·4 in Birkenhead, 14·2 in Derby, and 16·0 in Sunderland. The rates in the other towns ranged upwards to 24·1 in Blackburn, 24·3 in Hull, 27·8 in Preston, and 28·2 in Manchester. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 382, 364, and 367 in the preceding three weeks, further declined last week to 324, a considerably lower number than in any recent week; they included 120 from whooping-cough, 90 from measles, 39 from diarrhœa, 30 from diphtheria, 23 from scarlet fever, 21 from "fever" (principally enteric), and 1 from small-pox. No death from any of these zymotic diseases was recorded last week in Huddersfield, whereas they caused the highest death-rates in Blackburn, Portsmouth, and Bolton. The greatest mortality from whooping-cough occurred in Salford and Bolton; from measles in Preston, Portsmouth, and Bolton. The 30 deaths from diphtheria in the twenty-eight towns included 19 in London, 3 in Liverpool, and 2 in Portsmouth. Small-pox caused 3 deaths among the residents of London and its outer ring, 1 in Blackburn, and not one in any of the twenty-six other large provincial towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had slowly increased in the previous seven weeks from 7 to 27, had further risen to 30 on Saturday last; 9 cases were admitted to these hospitals during the week, against 3 and 11 in the preceding two weeks. The Highgate Small-pox Hospital contained 4 patients on Saturday last, 2 cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 296 and 309 in the previous two weeks, declined last week to 293, and were 49 below the corrected average. The causes of 83, or 2·5 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Brighton, Norwich, Derby, and Wolverhampton. The largest proportions of uncertified deaths were registered in Halifax, Bristol, Bolton, and Plymouth.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 23·1 and 22·3 per 1000 in the preceding two weeks, was 22·2 in the week ending May 15th, and exceeded by 3·1 the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 8·2 and 12·5 in Perth and Greenock, to 23·7 and 27·6 in Leith and Glasgow. The 548 deaths in the eight towns almost corresponded with the number in the preceding week, and included 17 which were referred to measles, 14 to whooping-cough, 13 to diarrhœa, 5 to "fever" (typhus, enteric, or simple), 3 to diphtheria, 3 to scarlet fever, and not one to small-pox; in all, 55 deaths resulted from these principal zymotic diseases, against 51 and 62 in the preceding two weeks. These 55 deaths were equal to an annual rate of 2·2 per 1000, which exceeded the mean rate from the same diseases in the twenty-eight

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English towns. The fatal cases of measles, which had been 15 and 17 in the previous two weeks, were last week again 17, of which 12 occurred in Edinburgh and 4 in Leith. The 14 deaths from whooping-cough showed a further decline from the numbers returned in the preceding two weeks and included 12 in Glasgow. The 13 fatal cases of diarrhœa showed a further increase upon recent weekly numbers; 6 occurred in Glasgow and 4 in Paisley. The deaths referred to different forms of fever, which had been 2 in each of the preceding two weeks, rose to 5, and included 2 in Edinburgh and 2 in Leith. Of the 3 fatal cases of diphtheria 2 occurred in Glasgow. The deaths from scarlet fever, which had increased from 3 to 8 in the previous three weeks, declined again to 3, all of which were returned in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 128 and 111 in the preceding two weeks, further declined last week to 108, which, however, exceeded by 10 the number in the corresponding week of last year. The causes of 67, or 12 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 24·4 and 27·8 per 1000 in the preceding two weeks, declined again to 23·3 in the week ending May 15th. During the first six weeks of the current quarter the death-rate in the city averaged 26·8 per 1000; the mean rate during the same period did not exceed 18·8 in London and 19·0 in Edinburgh. The 158 deaths in Dublin last week showed a decline of 30 from the high number in the previous week, and included 8 which were referred to the principal zymotic diseases, against 13 and 14 in the previous two weeks; 3 resulted from "fever" (typhus, enteric, or simple), 2 from scarlet fever, 2 from whooping-cough, 1 from diarrhœa, and not one either from small-pox, measles, or diphtheria. These 8 deaths were equal to an annual rate of 1·2 per 1000, the rates from the same diseases being 2·2 in London and 3·1 in Edinburgh. The fatal cases of whooping-cough, which had been 5 and 7 in the previous two weeks, declined last week to 2. The 3 deaths from "fever," however, showed an increase upon the low numbers in the previous two weeks. Four inquest cases and 1 death from violence were registered; and 45, or more than a quarter, of the deaths were recorded in public institutions. The deaths of infants corresponded with the number in the previous week, while those of elderly persons showed a considerable decline. The causes of 22, or nearly 14 per cent., of the deaths registered during the week were not certified.

Correspondence.

"Audi alteram partem."

"THE PRESENT SYSTEM OF MEDICAL EDUCATION IN LONDON."

To the Editor of THE LANCET.

SIR,—Dr. Moxon attempts to solve the vexed question of the propriety of granting degrees in medicine to pass men of the Royal Colleges of Physicians and Surgeons, by suggesting that they should receive a degree bearing the stamp of an Albert University. If we read Dr. Moxon's interesting paper, we shall find that he speaks of the degree of the London University as being wholly unattainable by ordinary pass men, and as the edge of the unattainable to ordinary class men. He therefore proposes to brand these—I am afraid we must say third-class—men with the Albert degree, a degree which henceforth must bear the impress of inferiority. Whether a man's success in life as a practitioner depends upon his holding a degree in medicine or not, I cannot say. I only do know that hundreds of our best practitioners never have had a degree. I therefore question the propriety of issuing wholesale a batch of degrees, the very possession of which will at once mark the recipient as being below the average class man of our schools. Dr. Moxon enforces his argument by stating that the medical schools have so far improved in their teaching that they should now take rank as universities, and, as such, should therefore be able to guarantee to their respective students—as a reward for diligence—a degree in medicine. But I would ask, Have our universities been standing still while the medical schools have been making these grand strides? Have they not, too, improved as regards their teaching beyond all precedent?—improved also in certain definite lines—namely, that the best form of instruction is professorial, in other words should be centralised? With our medical schools it is the reverse, they are doing everything in their power to promote decentralisation. They are, in fact, vying, the one with the other, in providing scientific teaching, whereas their legitimate function is to utilise to the best of their ability the splendid mass of material they stand possessed of to promote clinical teaching in its widest sense. I believe I am right in asserting that true advanced university teaching of the day is becoming more and more opposed to "steps;" men are left more and more to themselves. The best teachers—professors—are obtained as instructors, but the men are less and less harassed by other lectures than those they prefer to attend. Is this the case with our medical schools in London? Are not our students surfeited with lectures, prescribed by the curriculum of the Royal Colleges, which, moreover, as they cannot themselves but doubtfully guarantee the quality, are careful to insist on quantity in its place?

Let the medical schools of London hand over their scientific teaching to universities and science schools. Let them confine themselves to purely professional matters, electing the various members of their staff rather with the view to professional knowledge than as teachers suitable to their science classes. Let the affiliated Colleges revise their curriculum, removing at least some of their "steps," and we shall soon find the Albert degree will be the one unasked for.

I am, Sir, yours faithfully,

DONALD W. CHARLES HOOD, M.D. Cantab.

Green-street, Park-lane, May, 1886.

THE IMPORTANCE OF WORK IN THE WARDS.

To the Editor of THE LANCET.

SIR,—In THE LANCET of May 1st there was a letter quoting the opinion of Sir Benjamin Brodie on the effect of the "prize-giving" system on the education of medical students. In the succeeding number Mr. Buckston Browne sends an extract from Sir B. Brodie's autobiography, giving his opinion on the effects of the over-attendance on lectures. In the issue of May 15th a correspondent writes—Thirty years ago the system of medical instruction was as crude as the system of examinations was undeveloped." In the autobiography above mentioned Sir B. Brodie tells how he was appointed assistant-surgeon to St. George's Hospital in 1808, not being then twenty-five. Soon after his appointment Mr. Home left him the almost entire charge of his in-patients, and he shared with Mr. Robert Keate, the senior assistant-surgeon, the charge also of the patients of Mr. Gunning, who was doing duty with the army in the Peninsula. He says: "I had the opportunity at an unusually early age of acquiring a large experience in hospital practice; and to this circumstance my early professional success may very much be attributed. Six months in the year I passed several hours daily in the wards of the hospital, taking notes of the cases and communicating freely with the students. During the other six months the whole of the time I could spare from my employment as a teacher of anatomy was devoted to the hospital. The custom at St. George's, and indeed at all the other metropolitan hospitals, had hitherto been for the surgeons to go round the wards only on two days in the week, not attending otherwise except there were operations to perform or severe accidents which made their assistance necessary. Mr. Keate and myself were the first persons who adopted another mode of proceeding. We were at our posts in the hospital daily and superintended everything, and there never was an urgent case which we did not visit in the evening, and not infrequently at an early hour in the morning. This was of as much importance to the students as it was to the patients and ourselves, and the effect of it was soon perceptible in the increase of zeal and diligence on their parts and in their increasing numbers. After some time I appointed clinical clerks. I also began to deliver clinical lectures, and I believe that they were the first lectures of the kind which were ever delivered in a London hospital."

I am, Sir, yours truly,

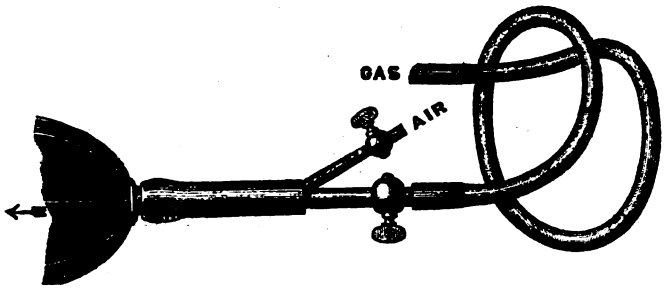
May, 1886. F.R.C.S.

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AN IMPROVEMENT IN PAQUELIN'S CAUTERY.

To the Editor of THE LANCET.

SIR,—Everyone who has used this instrument must know the extreme value it possesses when it will work properly; but I think there can be few who have not experienced an aggravation not equalled by anything that I know, by the instrument refusing to work exactly at the time when it is most wanted. I have tried many expedients to remove the difficulty, and have made many experiments to discover the causes of the failures. I have found that they lie chiefly in two directions—the most common being that by some accident the bottle of benzine has been tilted, so that a little of the fluid has run into the inside of the instrument. This renders it for a time perfectly useless, and sometimes permanently so. The second, and most frequent cause of failure is that the passage of the air over the surface of certain kinds of benzine does not enable it to become charged with a sufficient percentage of the inflammatory gas. I have therefore devised two methods of overcoming the difficulties. The first is to use ordinary domestic gas for the purpose of the cautery by the addition of a tube and double nozzle pipe, which is made perfectly clear by the accompanying woodcut. The pipe for the gas is slipped over



the burner of the gas jet, air is admitted by the second pipe, and the mixture takes place in the ball hand-pump, part of which is seen in the woodcut. The second method is, instead of having a bottle such as is usually provided with the cautery, to have one which is identical with the reservoir of Junker's apparatus for methylene, only of a considerably larger size. In this way the air is saturated with the benzine, and there is less risk from the shape of the bottle that the fluid benzine will run along the tube of the cautery. The improvements are neither complex nor expensive, and I find that they obviate many disappointments. I may say that for *heavy* work, such as the searing of pedicles of either uterine or ovarian tumours, or the searing of large surfaces of adhesion, I have devised a special form of gas cautery, which is for these purposes superior to Paquelin's. It is quite simple and never gets out of order, and can be had from Mappin and Co., 121, New-street, Birmingham.

I am, Sir, yours &c.,

Birmingham, May 17th, 1886. LAWSON TAIT.

"ROTHELN: A POINT IN DIAGNOSIS."

To the Editor of THE LANCET.

SIR,—The importance of the enlarged cervical glands, and the early stiffness of the neck resulting therefrom, as a "point in the diagnosis" of rotheln or rubeola being now raised in your columns, I may be pardoned for quoting two short sentences from an article "Rubeola, &c.," which you did me the honour of inserting in THE LANCET (vol. i., 1883, p. 995).

Describing the early symptoms of the disease, I then wrote: "Except the enlarged glands, *usually first to appear and last to go*, cough persists longest." And again, dealing with the glands: "Tender to the touch, *they give rise to the early stiffness of the neck*, and sometimes occasion actual pain." It is most satisfactory to me to find three members of the profession independently confirming these observations. My attention was first strongly directed to this "point" about 1879-80, when a patient was sent into hospital suffering from a feeling of malaise, stiffness of the neck and enlarged cervical glands, a temperature of 100° F., and naught else. As I had at the time several patients from the same house of business suffering from rubeola, I put the man aside as a possible case of that disease. Next day the supposition of the night before became established as a fact. I have since, especially in private practice, on a few occasions been able to confirm this observation. However, without the knowledge that a person so suffering had very recently resided in a house or district in which rubeola was rife, I should be disinclined to attach to this symptom any greater value than that of raising a *suspicion* of the disease. Another point to which I attached, and still do, importance—viz., symmetry in the glandular enlargement—has, I see, also been observed.

I am, Sir, yours faithfully,

Ladbroke-grove, W., May, 1886. W. TONGE-SMITH.

MANCHESTER.

(From our own Correspondent.)

THE VICTORIA UNIVERSITY.

AT the recent meeting of the Court of the Victoria University several important matters were considered. Dr. Greenwood resigned the Vice-Chancellorship, which office he has held since the establishment of the university, and regret is felt in many quarters that a change has had to be made. Professor Ward was unanimously elected to succeed him for a term of two years; no one took a more active and important part in the founding of the university, and the selection has given universal satisfaction. Dr. Greenwood and Professor Rendall, of University College, Liverpool, were elected pro-Vice-Chancellors. At the same meeting it was resolved to apply to Government for an annual grant from the national exchequer in aid of the expenses of the University, as it is without funds, except such as it derives from the two colleges at present affiliated to it. Another subject discussed was the extension of the work of the University in connexion with teaching bodies and educational institutions where instruction of various kinds is given. It was also resolved to make application to the Government for a separate representative on the Medical Council, in lieu of the proposed joint representation with Durham University, as provided in the Medical Act Amendment Bill now before Parliament. Our new Professor of Physiology has now got thoroughly to work in his new quarters, and at the inaugural address delivered by him on the 11th inst., he produced a very favourable impression upon his hearers: he concluded an interesting "introductory" by expressing a hope that the Victoria University might to some extent follow upon the lines of the Scottish universities, and make its degrees accessible to every student who worked in a fair and steady manner, and that they should not be beyond the reach of the average man to obtain.

THE ASSIZES.

The assizes now being held have had an unusual number of cases of homicide for trial, amongst them being that of a case of poisoning by a surgeon's assistant, already alluded to in these columns. Two patients, one a baby and the other a woman, both died with all the symptoms of opium poisoning after taking medicine supplied by the accused. In the first case, the magistrate acquitted the prisoner, but in the second, the case was sent to the assizes. Analysis showed morphia to be present to a very large extent, though no satisfactory explanation of how it came to be in the mixture was forthcoming at the trial. The jury returned a verdict of manslaughter, and a sentence of six months imprisonment was passed.

HEALTH AND RECREATION.

The open spaces committee of the Manchester and Salford Sanitary Association lately offered the corporation to take charge of the open space in Mount-street, Ardwick, and fit it with gymnastic appliances; and if the experiment of thus converting it into a recreation-ground should prove successful, to transfer all the appliances, &c., free of charge to the management of the Parks Committee. Steps have been taken to continue during the present summer the much-appreciated children's holiday movement, whereby children from our courts and alleys are sent out into the country for a period of three weeks. It is to be hoped that 1000

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children may thus be sent within the next few months. It is stated that the cost per child is twenty shillings; all the work in connexion with the management of this beneficial scheme is voluntary and unpaid.

MEDICAL OFFICERS OF HEALTH.

The Sanitary Association has followed up its petition on the status and qualifications of medical officers of health by a deputation to the President of the Local Government Board on Friday, the 14th inst. Sir H. Roscoe introduced the deputation to Mr. Stansfeld, and Dr. Ransome explained to the President what it was the Association desired to bring before his notice, and the suggestions were favourably received by him.

The Local Board of Withington have decided to grant a fee of 2*s.* 6*d.* to every medical man supplying information of the existence of a case of infectious disease.

Manchester, May 17th.

LIVERPOOL.

(*From our own Correspondent.*)

THE ROYAL VISIT.

THE visit of Her Majesty to this city, extending from 8 A.M. on the 11th till 10 A.M. on the 13th, was a most successful one in all aspects except the weather. Instead of the proverbial Queen's weather, which might reasonably be anticipated in this "merry month of May," there were piercing winds and drenching rain combined—the weather was, indeed, as wretched as it could have been. In spite of this, however, the Queen, with a courage which was duly appreciated, went through the whole of the heavy duties which she had undertaken. On the first day of the visit, after travelling all night, she opened the International Exhibition with full State ceremonial. On the next day she was out in an open carriage for fully three hours, in addition to going for a trip on the Mersey. This, seeing that her sixty-seventh birthday rapidly approaches, is very satisfactory proof of her capacity of physical endurance, as well as her desire to comply with the wishes of her subjects, and to appear openly among them. In consequence of the precautions taken by the authorities to prevent accidents, noticed in a previous letter, not one occurred during Her Majesty's visit, though unfortunately one has occurred since. On Saturday last a triumphal arch, erected in a leading thoroughfare, fell down suddenly during a heavy north-west gale, causing severe injuries to several persons. The worst case is that of a lad aged eleven years, who sustained a concussion of the brain, but who is progressing fairly well. At the request of the Queen, conveyed through General Sir H. F. Ponsonby, the Mayor, Sir David Radcliffe, telegraphed the condition of the injured.

SIR DYCE DUCKWORTH.

The honour conferred upon this gentleman is an event of local interest, Sir Dyce being a Liverpool man. He is the youngest son of the late Robinson Duckworth, and was born in Liverpool in 1840. He was educated at the Royal Institution here, under the late Dr. Dawson Turner, after which he commenced a mercantile career in the office of Messrs. Holderness and Chilton, probably there acquiring business habits, which have been very useful to him ever since. He received his medical education at the Edinburgh University and St. Bartholomew's Hospital, graduating M.D.Edin. in 1863. Sir Dyce obtained high honours, the gold medal, and the prize for his thesis, "Observations on the Anatomy of the Suprarenal Capsules." He is a brother of Canon Duckworth.

REMOVAL OF A CITY CHURCHYARD.

For the purposes of city improvements the churchyard of St. Thomas, Park-lane, is in course of removal, the remains of those interred being removed for interment elsewhere, either by their surviving friends or by the authorities. In the latter case, the remains are conveyed to the new cemetery at Kirkdale, situated a few miles off. The church was built 136 years ago, on land outside Liverpool, in a lane leading to Toxteth Park. Now it is the centre of a thickly populated district, and hemmed in on all sides by houses and shops. The graveyard was never a public one, being laid out in vaults and graves, mostly bricked ones, for the use of private families of the better class. The soil was unsuitable, being a very stiff clay, and the tendency of vaults and bricked graves is to retain water. The contrast between this old burial-ground and our local cemeteries, where the soil is suitable, well-drained, and in accordance with the most recent sanitary requirements, is very striking. The churchyard was closed by Order in Council in 1854, but a few burials have been permitted in family tombs by the Home Secretary.

A SUICIDAL EPIDEMIC.

On the 15th inst. there were no fewer than five cases of attempted suicide brought before one of the borough justices. One was that of a married woman thirty-seven years of age, who had taken poison, and whose excuse was that she and her husband had been drinking together. The remaining cases were those in which suicide had been attempted either by the knife or poison, and in all drink had been the exciting cause of the rash act. This is confirmatory of an old tradition that May is a month for suicides.

Liverpool, May 18th.

NORTHERN COUNTIES NOTES.

(*From our own Correspondent.*)

SALT AND CHEMICALS.

A FEW years ago I gave you some particulars of the discovery by accident of a bed of salt of about 120 ft. in thickness in the valley of the Tees. Messrs. Bolckows and Vaughan, the great iron manufacturers near Middlesborough, were boring for water, when, to their great surprise, they came upon the bed of salt. This discovery has had the effect of giving considerable impetus to the chemical manufactures of the north, the decomposition of the chloride of sodium by sulphuric acid being, as it were, the first step in the manufacture of various chemicals of commercial importance. The chemical trade in the north has been for a considerable period in a languishing condition. A company who own the largest chemical works in the country were rather unfortunate last year in their explorations on the Tees for salt, but it is said that they also have now succeeded in reaching the salt bed, and are raising a considerable quantity, which is sent to their works here. The yearly consumption of salt at these great works is 27,000 tons, and the company expect to raise this quantity for their own supply. This acquisition must prove of immense importance in the economics of the chemical trade in its present state.

INTERNAL BURNS.

An inquest was lately held at Cleator Moor on the body of a labourer employed at one of the large ironworks situated near that place. The deceased, it appears, was breaking some red-hot metal, when he fell forward. He did not appear to be sufficiently injured to account for his death, but it was shown by Dr. Matthers that the deceased died from internal burns through inhaling hot air and sand from the iron bed.

DEATH UNDER CHLOROFORM AT NEWCASTLE INFIRMARY.

A death under chloroform took place last week at the Newcastle Infirmary. It was shown at the inquest by Dr. Maynard, house-surgeon, that the deceased, a quarryman, sustained an injury to his knee by falling on the pavement. Mortification set in, and symptoms of absorption of putrid matter. It was decided to amputate the thigh. Chloroform was given with due care, but just before the operation the patient died. It was further shown that on admission he was under the influence of drink, and the post-mortem disclosed old-standing disease of the heart, also fatty degeneration of the liver and kidneys; altogether he was a bad subject for the administration of chloroform, and for any operation without its aid.

TYPHOID ON BOARD THE "WELLESLEY."

One of the boys on board the *Wellesley* training ship in Shields harbour having been attacked by typhoid fever, he was, under the direction of the medical officer of the vessel, in order to prevent the possibility of the disease spreading, removed this week to the Tyne port sanitary authority's floating hospital at Jarrow. I believe there are at present between 300 and 400 boys on board the *Wellesley*. This

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vessel is always considered one of the sights of the Tyne and the little sailors have so far been kept up to a high standard of health and general good behaviour.

UNIVERSITY OF DURHAM MEDICAL SOCIETY.

This young and sprightly Society gave a general entertainment last Friday in the Assembly Rooms in this city, which was highly successful in point of attendance and otherwise. Drs. Drummond, Mears, and others did the graceful honours of receiving the guests. Very few buildings in the north are so well adapted for an entertainment of this nature as the Assembly Rooms, and on this occasion they looked at their best. The attendance of practitioners and their friends from a distance was very numerous, special trains being provided for the visitors from Sunderland, South Shields, &c. Every thought was considerately shown for the comfort of the guests, and the University of Durham Medical Society deserves to be congratulated upon the success of this brilliant affair.

Newcastle-on-Tyne, May 16th.

EDINBURGH.

(From our own Correspondent.)

EDINBURGH UNIVERSITY COURT.

AT its meeting on the 17th inst. the Court formally sanctioned the arrangements by which a schoolmaster's diploma is to be conferred by the University of Edinburgh. A final assent was also given to the regulations for the new lectureship on the Philosophy of Natural History, to which Mr. Romanes has been appointed for a term of five years. This course is to consist of six lectures annually, to be delivered in the University, and to be free to all matriculated students; the necessary funds to endow the lectureship having been provided by the Earl of Rosebery, acting upon the advice of Professor Cossar Ewart.

THE ROYAL SOCIETY OF EDINBURGH.

An important paper by Dr. Griffiths has been communicated to the Society by Professor Crum-Brown, dealing with the effects of ferrous sulphate in destroying the spores of certain parasitic fungi which attack farm crops. Dr. Griffiths, amongst other species, has made a special study of the *Penospora infestans*, the cause of the potato disease. The spores of this organism may be kept as a dry dust for many months without losing their vitality. Following the lines of Duclaux's classical researches, Dr. Griffiths has tested the vital relation of these spores to a variety of chemical agents. Potash salts prove highly favourable to their development, whilst ferrous sulphate, although in general a very valuable plant food, is found to exert a selective devitalising influence upon the *Penospora*. A weak solution of the salt applied to a diseased plant was found to destroy the parasite, whilst it left the structure of the higher organism uninjured. Dr. Griffiths recommends as a practical outcome of these researches that in warm, damp seasons, when the disease is specially liable to be developed, manures should be employed, in the composition of which potash salts should have their place taken by small quantities of ferrous sulphate. A paper by Mr. Kidston was read at the same meeting, showing that what have been considered as fossil parasitic fungi in certain ferns from the carboniferous formations are in reality a form of fructification. Lord Rayleigh, M. Milne-Edwards, the Abbé Renard, and Professors Newton and Thalen have been elected honorary Fellows of the Society.

A SUBURBAN HOSPITAL FOR INFECTIOUS DISEASES.

In consequence of the change of arrangements which has placed the City Fever Hospital under the direct control of the Corporation of Edinburgh, it has become necessary to meet the requirements of the outlying districts, which can be no longer provided for at the expense of the City ratepayers. The Board of Supervision for Scotland has accordingly issued notices to the various rural authorities calling upon them to provide hospital accommodation for such cases of infectious disease as occur within their jurisdiction. A plan has been submitted by which these authorities can join in supporting a single institution which will supply the needs of all, upon a system of proportional maintenance based on the census reports from each district. It is expected that this will be generally acquiesced in, and already plans for the proposed hospital are in course of preparation.

ROYAL PHYSICAL SOCIETY.

The annual dinner of this Society was held on the 14th inst., the chair being occupied by Professor Sir W. Turner, F.R.S., the President of the Society. In proposing the toast of the Royal Physical Society, the chairman gave an interesting *résumé* of its history, which has extended over more than a century, and referred to the existence of such bodies as an index of, as well as a stimulus to, the intellectual and scientific life of a community. In replying to the toast of the Universities of Scotland, Professor Chiene reviewed the present flourishing condition of the Universities of Edinburgh, Glasgow, and Aberdeen, and said it was the duty of all loyal Scotsmen to do everything in their power to support the smallest and the oldest of the Scottish Universities, St. Andrews. He advocated the affiliation of the rapidly prospering University College of Dundee to the old University, as a measure calculated to prove of the very highest value to both institutions.

Mr. F. Grant Ogilvie, M.A., B.Sc., F.R.G.S., of Gordon's College, Aberdeen, has been appointed Principal of the Heriot-Watt College, a most important institution in Edinburgh for providing secondary education in technical subjects and in natural science for the classes whose primary education is provided for by the School Board.

Dr. D. Noël Paton, of Edinburgh, has been appointed Examiner in the Institutes of Medicine and in Zoology in the University of Aberdeen.

Edinburgh, May 18th.

PARIS.

(From our own Correspondent.)

PRESENTATION TO M. CHEVREUL.

AFTER an illness of two or three months, M. Chevreul, the illustrious centenarian, paid his first visit yesterday to the Academy of Sciences. On his entry the whole assembly rose to welcome his return amongst them, and the president, Jurien de la Gravière, took the opportunity of tendering him the congratulations of the Academy on his recovery. It had been decided that some token should be presented to M. Chevreul to commemorate his 100th birthday, which, although it does not take place until Aug. 31st next his colleagues, most of whom would be away for their holiday, were anxious to anticipate by offering him their congratulations, accompanied by a magnificent statue in bronze representing History, which was designed by M. Paul Dubois, the well-known sculptor. The president then, in very neat and touching terms, traced the life and works of this hero of the day, in doing which he said that the members of the Academy congratulated their venerable colleague, not only for the green old age that he had attained, but for the good use he had made of his life. M. Chevreul then rose, and, although under the influence of great emotion, thanked the Assembly, in a distinct and audible voice, for this mark of their affection and esteem, and added that it was mainly to temperate living that he attributed his longevity.

DISTURBANCE AT THE SCHOOL OF PHARMACY.

A disturbance took place at the Paris School of Pharmacy — a rather unusual circumstance — on the occasion of the opening lecture of the summer session by M. Chatin, Professor of Botany. When the professor began to speak he was interrupted by groans and shouting, whilst raw eggs, potatoes, and pebbles were hurled, but fortunately fell short of the rostrum. The students, on an inquiry being made, could formulate no grievance against their professor, but it oozed out that he was too much of a botanist for them, as he preferred the study of plants to that of chemistry. The fact is, M. Chatin is rather severe at the examinations, and it is only those students who are backward in botany who complain of the inordinate zeal of the professor in that particular branch, especially as he required them to accompany him every Sunday to the country for the purpose of

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herborisation, which was distasteful to the students, as it spoiled their Sunday holiday. Notwithstanding the interruptions, M. Chatin continued his lecture to the given time (one hour), and on his retiring a most disgraceful scene took place, projectiles being thrown in all directions. In the mêlée Dr. Flahaut, Professor of the Faculty of Montpellier, a former pupil of M. Chatin, and who came to attend the lecture, attempted to remonstrate with the students, when he was struck on the head with his own umbrella, causing a wound, which, however, is not of a serious nature. In his report to the Minister of Public Instruction of the disturbance M. Chatin sent in his resignation as director of the school, but not as professor of botany, as he considered the study of that branch, as well as chemistry, indispensable to pharmacology. As there seemed to be no signs of reconciliation on the part of the students, the Minister of Public Instruction has thought proper to close the school for the present.

DEATH OF DR. HENRI FAUVEL.

Dr. Henri Fauvel, a distinguished chemist, son of the late physician of the Hôtel Dieu, and the well-known hygienist, was accidentally drowned a few days ago while making some experiments with the Seine water near the bridge of Epinay, just outside Paris. He was a young man of great promise, and was a former pupil of the late Professor Wurtz. He was attached to the Municipal Laboratory of Paris, where he greatly distinguished himself as an analyst and hygienist.

Paris, May 15th.

ROYAL COLLEGE OF PHYSICIANS.

A COMITIA of the Fellows of the Royal College of Physicians was held on the 20th inst., Sir W. Jenner, Bart., President, in the chair. The intimation by the President that Her Majesty had been pleased to confer the honour of knighthood upon Dr. Dyce Duckworth, treasurer of the College, in recognition of his services in connexion with the Examination Hall, was received with applause.

A Report from the Medical Bill Committee was read. It advised the introduction into Clause 3 (*a*), enumerating the bodies competent to hold qualifying examinations, of the words "or medical corporation" after the word "university"; in Clause 4 the omission of the words "assigning power to the Privy Council, to reinstate medical authorities which have been previously deprived of their rights to hold qualifying examinations"; and the total omission of Clause 5, which provides for qualifying examinations by single corporations, with the assistance of examiners appointed by the Medical Council. The Committee also expressed their high opinion of the existing examinations for certificates in Sanitary Science, and deemed the suggestion that such certificates should be capable of registration worthy of being entertained. It was pointed out by Sir H. Pitman that both Sir Lyon Playfair and Sir H. Holland had given notice of amendments in the Bill to introduce the official recognition of such certificates. The report was adopted, an amendment declining to press the subject of registration of Sanitary Science qualifications being rejected.

A Report from the Building Committee was read. After alluding to the ceremonial of March 24th, it stated that the Examination Hall will probably be completed and ready for occupation next year, on the anniversary of the day on which foundation stone was laid. The Committee also drew attention to the unoccupied plot of ground adjoining the Hall, which was also in the possession of the two Colleges. In adopting the Report the College referred the question as to how that site may best be utilised to a special committee, to confer with a committee of the College of Surgeons upon the subject.

The Report of the Croonian Trust Committee was again brought under notice, and several alternative schemes and proposals were discussed. No decision was arrived at, the consideration of the matter being again adjourned.

MEDICAL NOTES IN PARLIAMENT.

The Medical Acts Amendment Bill.

IN the House of Commons on the 17th inst., in reply to Dr. Farquharson, Sir L. Playfair said he did not propose to do more that night than to get the Bill into committee and immediately report progress.—Mr. F. Powell suggested that as the right hon. gentleman had several important amendments to propose, it might be well to commit the Bill *pro formâ*, in order that it might be reprinted with the amendments. Sir L. Playfair said he did not think the character of the amendments rendered that course necessary; they referred mostly to matters of detail. The House afterwards went into committee on the Bill, and, in accordance with the above statement of Sir Lyon Playfair, progress was immediately reported.

Small-pox at Wooburn

On the 18th inst., Mr. Borlase, in reply to Mr. Lawson, said he very much regretted the outbreak of small-pox at Wooburn Mills. The Local Government Board had no authority under which they could secure the disinfection of rags used in paper-making so as to prevent contagion. The Board had enforced the vaccination and revaccination of those engaged in paper-making as the most valuable means of protecting them from small-pox.

THE SERVICES.

INDIA OFFICE.—The Queen has approved of the following amongst other promotions among the officers of the Staff Corps and Indian Military Forces made by the Governments in India:—Surgeon Percy Hugh Benson, Surgeon John Lancaster, and Surgeon Walter Gawen King, all of the Madras Medical Establishment, to be Surgeons-Major.

ADMIRALTY.—The following appointment has been made:—Surgeon Eli T. Eds, to the *Triton*.

Obituary.

DR. ROBERT SCOTT ORR.

WE regret to announce the death of Dr. Robert Scott Orr of Glasgow, which took place very suddenly on May 15th. Dr. Orr was a native of Edinburgh, his father being a member of a well-known firm of chemists. He was apprenticed to Sir George Newbegging, a surgeon in that city, and studied at the University, graduating in medicine there in 1840. Subsequently he went to Glasgow as assistant to Dr. Hutcheson of the Royal Asylum for Lunatics, Gartnavel, and, after some valuable experience there, he was appointed in 1843 Superintendent of the Glasgow Royal Infirmary. He signalised his period of office by publishing annually a very valuable series of statistical tables of the cases in the hospital. On leaving the infirmary he practised for several years in Dunoon, one of the Clyde watering-places, and formed a connexion with visitors from Glasgow, which stood him in good stead in after-life. For more than thirty years he has been a well-known Glasgow physician and consultant, and has occupied a prominent place in the Faculty of Physicians and Surgeons. He was president of that corporation from 1880 to 1883; and for the last eight years he has been the member of the General Medical Council elected by the Faculty, and has gained the esteem of his fellow-councillors by his sound judgment, courtesy of manner, and unswerving rectitude and devotion to his trust. For several years he acted as Extra-professorial Examiner in the University of Glasgow, and also an examiner in medicine to the Faculty of Physicians and Surgeons. He was long a physician to the Royal Infirmary, and as such he was an accurate and painstaking observer of disease, and was loved as few men are loved by the patients under his care. The *Glasgow Medical Journal* was frequently enriched by the records of the results of his hospital experience.

Glasgow can ill spare a man like Dr. Scott Orr, for he was the friend of aspiring talent, and helped by kind word and

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generous deed many a young practitioner during their early struggles. In all the years of his professional life we firmly believe he made no enemies. His remains were followed to the grave by a large number of his professional brethren. Dr. Orr was sixty-seven years of age, and leaves three sons and four daughters. One of his sons is a medical practitioner in Kensington.

MALACHY J. KILGARRIFF, F.R.C.S.I.

THIS gentleman died at his residence, in Harcourt-street, Dublin, on the 18th inst., after a tedious illness, aged forty-six years. The deceased was formerly a demonstrator and lecturer on anatomy in the Ledwich School of Medicine, and afterwards became one of the visiting surgeons to Jervis-street Hospital; he was finally elected a member of the surgical staff of the Mater Misericordiæ Hospital, which appointment he held at the time of his death. He had been in very bad health for a considerable time past, and those who knew him intimately were aware of the inevitably fatal nature of his malady. His contributions to surgery included a case of Genu Valgum, operated on by Ogston's method successfully. Mr. Kilgarriff leaves a widow and family to mourn his untimely decease.

PROF. HANS GIERKE.

THE University of Breslau has lost one of the most popular of its medical staff in Dr. Gierke, who died on the 8th inst. in the Maison de Santé at Schöneberg, near Berlin. Hans Paul Bernhard Gierke, brother of the well-known Professor of Law in the University of Heidelberg, was born on the 19th of August, 1847, at Stettin. After completing his academic studies he came before the public with his first scientific work, "Ueber das Athmungscentrum" ("On the Respiratory Centre"). At the instance of Dr. Kölliker, he went in 1876 to Tokio to fill the Chair of Anatomy in the Imperial University of the Japanese capital. By that time, however, the seeds of a lingering malady had declared themselves, and in 1881 he returned home to assist Professor Heidenhain in the Physiological Institute at Breslau, where he was appointed in the following year Extraordinary Professor. Advancing illness compelled him to seek a more southern climate, but the change brought him no benefit. Before his death his valuable collection of Japanese objects was exhibited in the Industrial Art Museum of Berlin, while his rich assortment of Japanese pictures was purchased by the State for the Ethnographic Museum of the same city.

BRIGADE SURGEON TYLER OUGHTON.

MR. TYLER OUGHTON, whose death occurred from heart disease on the 13th inst., was born in Jamaica in 1836, and received his professional education at St. Thomas's Hospital. Having become a Member of the Royal College of Surgeons of England in 1858 and a Licentiate of the Society of Apothecaries in 1859, he entered the army in 1861, and served for several years in Western Africa and in India. He was engaged in the last Ashantee and Afghanistan wars, and marched with General Roberts from Cabul to Candahar, taking part in the subsequent victory. In 1881 he retired from the service and devoted his remaining years to scientific study, the result of which is contained in a series of articles on Vision contributed to the columns of this journal.

ACCIDENT TO MR. WILLIAM ADAMS.—We regret to learn that Mr. William Adams met with a rather serious accident at the Colonial and Indian Exhibition on Thursday last. In walking through one of the courts he stumbled over a chair, and fell against a glass case, wounding his hand and wrist somewhat severely.

PRESENTATION.—The patients and other friends of Dr. Douglas Reid, of Helensburgh, recently presented that gentleman with a very handsome horse and brougham, as an indication of the high esteem in which he is held throughout the district in which he practises.

Medical News.

UNIVERSITY OF CAMBRIDGE.—The following gentlemen have passed the examination for the degree of B.S.:—

G. Bulstrode, Emmanuel; R. Coombe, Caius; B. Evans, King's; G. C. Fitzgerald, Caius; A. S. Percival, Trinity; T. Rushbrooke, Christ's; S. S. Sprigge, Caius; H. M. Sympson, Caius; H. J. Tatham, Clare; G. Winfield-Roll, Christ's.

At a congregation held on the 13th inst., the Vice-Chancellor, Sir George Paget, Professor Humphry, Professor Latham, Professor Macalister, Dr. Donald Macalister, Professor Liveing, Professor Foster, and Mr. Trotter, Trinity, were appointed a syndicate to take into consideration the Medical Acts Amendment Bill, and to take such steps with reference thereto as they may think fit. Dr. F. B. de Chaumont (Edinburgh), Dr. Alfred Carpenter (London), Dr. Hubert Airy (Trinity), and Sir Charles A. Cameron, President of the Royal College of Surgeons in Ireland, were appointed examiners in State Medicine.

SOCIETY OF APOTHECARIES.—The following gentlemen passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on the 13th inst.:—

Alexandrian, Nazareth, Scutari, Constantinople.
Atkinson, John Lancelot, St. George's-square.
Barnes, Robert Newton, Ash House, Bishop's Waltham, Hants.
Bell, John Charles, Merlin, Ontario, Canada.
Englebach, Frederick George, Richmond, Surrey.
Jones, Josiah Herbert, Hoe-street, Walthamstow.

THE thirty-fourth annual meeting of the governors of the Hospital for Sick Children was held on the 19th inst.

AT a public dinner held on the 19th inst., on behalf of the funds of the Public Dispensary, Stanhope-street, Clare-market, subscriptions to the amount of £320 were announced.

ON the 19th inst., the fortieth annual meeting of the supporters of the House of Charity, the oldest convalescent home, was held, when a satisfactory report was presented and adopted. The income last year amounted to £1853.

A BAZAAR in aid of the People's Palace for East London (the Beaumont Trust) will be held in the Duke of Wellington's Riding School at Knightsbridge on Wednesday, June 2nd, and two following days.

A SUB-COMMITTEE of the Rivers Committee of the Manchester City Council has been appointed to take into consideration a scheme for dealing with the whole of the sewage of the city.

COTTAGE HOSPITAL FOR FAVERSHAM.—Mrs. W. T. Townend Hall, lately of Syndale Park, Faversham, has generously offered to provide funds for the building of a cottage hospital for the town, in memory of her late husband, who died some twelve months since.

ON the 19th inst., at the twentieth annual meeting of the Governors of the Victoria Hospital for Children, Queen's-road, Chelsea, it was reported that the number of in-patients admitted last year was 550, and total attendances of out-patients 30,898, and at the convalescent branch at Margate 146.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The Library of the College will be closed on Thursday, the 27th inst., for the Clinical Examination; and on Friday, the 28th inst., at 4 o'clock, for the *viva-voce* part of the examination for the Final Fellowship, for which twenty-eight candidates have entered their names.

METROPOLITAN FREE HOSPITAL. — The fiftieth anniversary of this institution was commemorated by a banquet on the 12th inst., when the chairman, Mr. Cyril Flower, M.P., stated that the new building in Kingsland-road was constructed to contain 160 beds, one-fourth of which would specially be set apart for the accommodation of patients of the Jewish persuasion. The out-patient department is already in full operation. The amount required for carrying on the work of the hospital is from £8000 to £9000 per annum. During the evening subscriptions amounting to nearly £2200 were announced.

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MORLEY HOSPITAL.—On the 17th inst., a bazaar was opened in aid of the funds of this seaside convalescent home for the working men of London, which was established in 1883, at St. Margaret's Bay, near Dover. The object of the bazaar is to remove a debt of £2000 incurred in the purchase and furnishing of premises suitable for the purpose of the home, and this incubus being removed, it is estimated that the institution will be self-supporting.

ST. JOHN AMBULANCE ASSOCIATION.—An ambulance class composed of officers and non-commissioned officers of the 45th Regimental District Headquarters was examined at Derby on the 6th inst. by Dr. J. W. Martin, who reports very favourably of the manner in which all the pupils passed the examination. The examiner lays great stress on the importance of this subject to all branches of this service, and strongly urges the formation of similar classes elsewhere.

THE HOSPITALS ASSOCIATION.—On the 19th inst. the sixth general meeting of the members of this association was held, when a paper on the Ambulance Arrangements of an English Army was read by Surgeon-Major Evatt. The formation of a Volunteer Medical Staff Corps to supplement the existing regimental surgeons and ambulance men and to provide bearer companies and field hospitals for the Volunteer forces was strongly advocated. A discussion followed.

NORTH-EASTERN HOSPITAL FOR CHILDREN, HACKNEY-ROAD, E.—At the eighteenth annual meeting of the supporters of this hospital on the 17th inst., it was reported that the institution was in a much better position than last year, the income showing a slight increase over the amount received in the preceding year. The number of in-patients relieved was 653, as against 620 in 1884, and the out-patients numbered nearly 1000 per week. Funds are still required to pay off a debt of £1600 to the bankers, and for this the committee earnestly appeal.

M. PASTEUR.—It is reported that M. Pasteur has been so favourably impressed by the scientific intelligence of an American physician, Dr. Valentine Mott, of New York, that he has, for the first time, broken through his rule not to allow his virus go out of his own hands. The Czar has just conferred on M. Pasteur the Order of St. Anne of the First Class, with diamond insignia; and other decorations on the physicians and surgeons who co-operated with the eminent *savant* in the treatment of the wolf and dog-bitten Russians.

PROVIDENT SURGICAL APPLIANCE SOCIETY.—The annual dinner in aid of the funds of this institution was held on the 19th inst., when it was stated by the Duke of Portland, who occupied the chair, that not less than 4300 instruments, some of them of a most expensive character, were given to poor people last year, and the total number of instruments which had been distributed since the formation of the Society was more than 40,000. A list of subscriptions amounting to £1072, as against £950 at the last dinner, was announced by the secretary.

COLONIAL AND INDIAN EXHIBITION.—The Reception Committee, recently formed by direction of H.R.H. the Prince of Wales, Executive President of the Royal Commission, is desirous of offering a fitting and cordial reception to Colonial and Indian visitors of distinction during their visit to England, by facilitating, so far as may be possible, their arrangements for visiting places of special interest in the United Kingdom. To enable the Committee to do this funds are required; and those who may be desirous of co-operating are invited to subscribe to the object in view. Subscriptions can be sent to the London and Westminster Bank, West-end Branch, St. James's-square, S.W., or to Mr. Arthur Hodgson, C.M.G., General Secretary, at the office of the Reception Committee, "Old London," Exhibition Buildings, South Kensington, or to Mr. H. Trueman Wood, the Treasurer, Society of Arts, John-street, Adelphi. Cheques should be crossed London and Westminster Bank, West-end Branch.

THE POLLUTION OF THE LEA.—At the meeting of the Select Committee appointed to report on the purification of the River Lea on the 14th inst., Mr. Grantham, engineer to the Enfield Board of Health, described the drainage works and sewage farm at Enfield. He stated that the farm consisted of ninety-five acres, and the tanks were capable of containing 480,000 gallons of sewage, which was carried to all parts of the farm by means of pumps. In dry weather the sewage matter pumped upon the farm was 480,000 gallons, but in wet weather the quantity increased to as much as 2,200,000 gallons. As far as Enfield was concerned, if the existing intervening cut was widened and deepened it would be satisfactory; but it would be a more desirable scheme, if the cost was not wholly disproportioned to the advantage, to have the sewage kept out of the river. Mr. Bailey Denton having given evidence as to a scheme which he prepared some years ago for the drainage of the valley of the Lea, the committee adjourned.

BANQUET AT THE ACADEMY OF MEDICINE, IRELAND.—Dr. Robert McDonnell, President of the Academy of Medicine, Dublin, had the honour of entertaining on Wednesday, the 12th inst., at dinner, at his residence, Merrion-square, his Excellency the Lord-Lieutenant and his Serene Highness Prince Edward of Saxe-Weimar, Commander of the Forces in Ireland. The following representatives of the different sections of the Academy of Medicine and other gentlemen were invited to meet his Excellency:—Dr. Cruise, Medical Section; Sir Charles Cameron, Surgical Section; Dr. More Madden, Obstetrical Section; Dr. Little, Pathological Section; Dr. Duffy, Treasurer; Dr. Thompson, Secretary; Col. Turner, Private Secretary to the Lord-Lieutenant; the Provost of Trinity College; Sir Robert Hamilton, Assistant Secretary; Sir Patrick Keenan, Commissioner of National Education; Mr. Robinson, Vice-President of the Local Government Board; Mr. McCausland; and the Aides-de-Camp of the Lord-Lieutenant and the Commander of the Forces. Twenty in all sat down to dinner.

BRITISH ASSOCIATION.—The programme of arrangements for the Birmingham meeting of this Association has just been issued. It will meet on Wednesday, Sept. 1st, when Sir Lyon Playfair resigns the presidency, which will be assumed by Sir William Dawson, C.M.G., F.R.S., the eminent Canadian geologist, Principal of M'Gill College, Montreal. The local secretaries are Mr. J. Barham Carslake, the Rev. D. H. W. Crosskey, and Mr. C. J. Hart; and the local treasurer is Mr. J. D. Goodman. The following are the presidents of the various sections:—*(a)* Mathematical and Physical Science, Professor G. H. Darwin, F.R.S.; *(b)* Chemical Science, William Crookes, F.R.S.; *(c)* Geology, Professor S. G. Bonney, F.R.S.; *(d)* Biology, William Carruthers, F.R.S.; *(e)* Geography, General Sir F. J. Goldsmid, K.C.S.I., C.B.; *(f)* Economic Science and Statistics, John Biddulph Martin, F.S.S.; *(g)* Mechanical Science, Sir James N. Douglass, M.I.C.E.; *(h)* Anthropology, Sir George Campbell, K.C.S.I., M.P. On Thursday evening, Sept. 2nd, there will be a *soirée*; on Friday, the 3rd, at 8.30 P.M., a discourse on the "Sense of Hearing," by Professor W. Rutherford, M.D., F.R.S.; on Monday evening, the 6th, at 8.30, a discourse on "Soap Bubbles," by A. W. Rücker, M.A., F.R.S.; and on Tuesday evening, the 7th, at 8 P.M., a *soirée*.

UNIVERSITY COLLEGE.—On the 19th inst., the prizes in connexion with the Faculty of Medicine were distributed by the Earl of Kimberley. In the class of Surgery the gold medal was won by Mr. H. H. Brown, and the silver medals were presented to Mr. E. R. St. C. Corbin and Mr. S. C. Holder. In the senior class of Physiology, gold medals were awarded to Mr. H. M. Fernando and Mr. J. L. Firth; in the junior class, a silver medal was awarded to Mr. C. A. Kent. In the senior class of Anatomy, the gold medal was gained by Mr. J. B. M. White, the first silver medal by Mr. H. M. Evans, and the second silver medal by Mr. W. H. Tate; in the junior class, the silver medal was awarded to Mr. L. E. Hill. In Medicine, the gold medal was awarded to Mr. J. E. Rennie, and silver medals to Mr. K. N. Bahadhurji and Mr. W. P. May. In Practical Chemistry, the gold medal was awarded to Mr. H. A. Eccles, the first silver medal to Mr. H. Tilley, and the second to Mr. A. Vaughan. In Pathological Anatomy, the Tuke medal was gained by Mr. S. E. Holder. In the senior class of Clinical Medicine the following Fellowes medals were awarded:—Gold to Mr. Sydney E. Holder, silver to Mr. J. J. Lister and Mr. F. S. Toogood; in the junior class, the silver Fellowes medal was awarded to Mr. C. W. Jecks. In Clinical Dental Surgery, the prize was gained by Mr. E. R. St. C. Corbin. A large number of certificates were also awarded.

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Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BAILEY, J. RIDLEY, M.B.Edin., has been reappointed Medical Officer of Health for Bilston.

BLACKWOOD, ARTHUR, M.D., M.Ch., has been appointed Assistant Medical Officer to the Liverpool Parish Hospital, vice W. Piercy Fox, resigned.

CHEESMAN, G. E. A., L.R.C.P.Ed., L.S.A.Lond., has been appointed Medical Officer for the First District of the Lymington Union.

DAVIES, D. S., M.B.Lond., M.R.C.S., L.R.C.P.Lond., has been appointed Medical Officer of Health to the City and Port Sanitary Authority of Bristol, vice Davies, resigned.

DAVIES, ELEAZER, L.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Pontlottyn District of the Merthyr Tydfil Union.

FRASER, ALEXANDER G., M.A.Aber., M.B., C.M.Edin., has been appointed Honorary Physician to the Hulme Dispensary, vice G. J. Haslam, M.D., M.R.C.S., resigned.

HINDS, FRANK, M.B., B.S.Lond., M.R.C.S., has been appointed Junior Resident Medical Officer to the Hospital for Sick Children, Great Ormond-street, W.C.

MAUNSELL, FRANCIS J., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer for the Tir Phil District of the Merthyr Tydfil Union.

MOIR, JOHN, L.R.C.P.Ed., Medical Officer to the West Ham Union Infectious Diseases Hospital, has been reappointed Medical Officer to the West Ham Local Board Cottage Hospital, Plaistow, E.

MORSE, SYDNEY, L.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Cannock District of the Cannock Union.

PARRY-JONES, M., M.D., B.S.Lond., M.R.C.S., L.S.A.Lond., has been appointed Resident Surgeon to the Pinxton Collieries, Alfreton.

PARTINGTON, WILLIAM, M.B., C.M.Glas., has been appointed Medical Officer for the Workhouse and the Tunstall District of the Wolstanton and Burslem Union.

RAKE, HERBERT VAUGHAN, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer of Health for the Fordingbridge Union.

THOMAS, J. L., M.D.Aber., has been appointed Physician to the Royal South Hants Infirmary, vice Dr. Broster, deceased.

Births, Marriages, and Deaths.

BIRTHS.

BLACKBURN.—On the 12th inst., at Margravine-gardens, West Kensington, the wife of H. B. Blackburn, M.R.C.S., of a daughter.

GRAHAM.—On the 6th ult., at Bindjey, Sumatra, the wife of J. Campbell Graham, M.D., of a daughter.

MORRISSON.—On the 17th inst., at Strathallan, St. Saviour's-road, Brixton-hill, the wife of Stammers Morrisson, L.R.C.P.Lond., M.R.C.S., of a daughter.

MARRIAGES.

BARTON—GASSIOT.—On the 15th inst., at St. Mary Abbott's Church, Kensington, A. B. Barton, M.D., of Lexham-gardens, Kensington, to Harriet, second daughter of the late J. P. Gassiot, J.P., F.R.S.

HICKS—POTTER.—On the 13th inst., at Madeira, at the British Consulate, and afterwards at the English Church, Frederick John Hicks, M.A., M.B.Oxon., to Sarah Emma (Dollie), eldest daughter of the late Philip Potter, of Larklands, Ilkeston.

OLIVER—BURFORD.—On the 13th inst., at the Wesleyan Church, Hampstead, Francis George Oliver, L.R.C.P.Lond., M.R.C.S., eldest son of Frank Oliver, Esq., of Negapatam, India, to Kate, youngest daughter of Mr. James Burford, of Norway House, Hampstead, N.W.

REED—HIGHAM.—On the 13th inst., at Charles Church, Plymouth, William Cash Reed, M.D., to Eleanor Winifred Maude, youngest daughter of the late James Higham.

RUTHERFORD—TWEDDELL.—On the 18th inst., at the Parish Church, Gosforth, Newcastle-on-Tyne, Robert Leonard Rutherford, M.D., of Jesmond, Newcastle-on-Tyne, to Mary Alice, third daughter of the late George Tweddell, of West Hartlepool.

SHEPERD—BEALE.—On the 13th inst., at Christ Church, Hoxton, by the Rev. Robert J. Sheperd, L.R.C.S.I., L.K.Q.C.P.I., of Pemberton House, Hay, Breconshire, to Mary Kathleen, daughter of the late George Beale, Esq., of Dublin.

DEATHS.

HANDS.—On the 17th inst., at Shepherd's-bush-road, Joseph Hands, M.R.C.S., late of The Grove, Hammersmith.

LIVESEY.—On Feb. 1st (of exhaustion, following rheumatic fever), Ernest Livesey, M.R.C.S., L.S.A.Lond.

MEDLEY.—On March 27th, on board s.s. *Glengarry*, off Hongkong, Harold Thomas Dupuis Medley, M.R.C.S., L.R.C.P., in his 26th year.

ORR.—On the 15th inst. (very suddenly), at Albany-place, Glasgow, Robert Scott Orr, M.D., aged 67.

OUGHTON.—On the 13th inst., at 20, Buckingham-road, Brighton (after a short illness), Brigade-Surgeon Tyler Oughton, aged 49 years.

STUDDERT.—On the 14th inst., at Liverpool, Reginald Waller Studdert, M.B., B.C.L., aged 24.

TREACHER.—On the 14th inst., at New, John Gawaron Treacher, M.R.C.S., late of Laban, aged 72.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

Medical Diary for the ensuing Week.

Monday, May 24.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

SOCIETY OF ARTS.—8 P.M. Dr. B. W. Richardson: Animal Mechanics (Cantor Lecture).

Tuesday, May 25.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Arthur Gamgee: The Function of Circulation.

SOCIETY OF ARTS.—8 P.M. Mr. G. Gordon Hake: Cyprus since the British Occupation.

ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8.30 P.M. Mr. Reginald Stuart Poole: The Ancient Egyptian Classification of the Races of Man.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Mr. Lockwood: The Morbid Anatomy and Pathology of Encysted and Infantile Hernia.—Dr. Fletcher Beach: A case of Imbecility with Choroid Movements.—Dr. Steavenson and Mr. Bruce Clarke: The Treatment of Stricture of the Urethra by Electrolysis.

Wednesday, May 26.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.

BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens will be shown by Mr. Lawson Tait and others.—Dr. Fancourt Barnes: On a case of Pyometra.—Dr. Grigg on Pyosalpinx in the Puerpera. Council Meeting at 8 P.M.

Thursday, May 27.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Professor Alexander Macalister: Habit as a Factor in Human Morphology.

Friday, May 28.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

CLINICAL SOCIETY OF LONDON.—8.30 P.M. Report of Urinary Tests Committee. Dr. Caton (Liverpool): Aneurysm of Hepatic Artery.—Mr. R. W. Parker: On the Treatment of Nævus by Excision, to which is appended a Clinical Analysis of 564 cases of Nævus, together with the Microscopic Nature of this Condition.—Mr. Victor Horsley: A case of Suppuration of the Mastoid Cells complicated by Thrombosis of the Right Lateral Sinus and Septic Embolism of the Heart and Left Lung, in which Recovery followed Trephining of the Mastoid Process, with remarks on the Prevention of Septic Embolism in such cases.—Dr. Hale White: On Simultaneous Inflammation of several Serous Membranes.

ROYAL INSTITUTION OF GREAT BRITAIN.—9 P.M. Prof. Oliver Lodge: Electrical Deposition of Dust and Smoke.

Saturday, May 29.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. G. G. Stokes: Light, with special reference to Effects resulting from its Action on Various Substances.

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, May 20th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia. in Vacuo.	Maxi Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
May 14	29·32	W.	48	45	77	52	45	·12	Cloudy
,, 15	29·75	N.W.	48	42	99	56	41	·03	Cloudy
,, 16	29·86	W.	52	50	...	55	45	·09	Raining
,, 17	29·81	W.	54	53	...	60	51	·23	Raining
,, 18	29·77	W.	59	55	112	70	53	...	Cloudy
,, 19	30·00	S.W.	55	51	72	57	49	...	Overcast
,, 20	29·88	S.E.	58	55	...	...	51	...	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

ALCOHOL IN WORKHOUSES.

THE return required by the Local Government Board, showing the quantities of wines, spirits, and malt liquors consumed in the workhouses for the year 1885, was laid before the guardians of the St. Saviour's (Southwark) Union on the 13th inst. The particulars were as follows:—Christchurch workhouse—spirits, 456 pints; wines, 55 pints; malt liquors, 2218 gallons. The average number of inmates was 506. St. George's Workhouse—spirits, 58 pints; wines, *nil*; malt liquors, 2553 gallons. The average number of inmates was 424. Newington Infirmary—spirits, 506 pints; wines, 222 pints; malt liquors, 5356 gallons. The average number of inmates was 1020.

H. S. (Birmingham).—"Crematorium," meaning the place in which cremation is practised, is a correct, though quite unnecessary coinage. It occurs in no Latin author, and ought to be replaced by the shorter, equally expressive, and quite classical word, "ustrinum."

Mr. Armstrong (Newcastle-on-Tyne) will find his letter inserted in our issue of April 10th, p. 715.

Mr. Lawson Tait's paper will appear very shortly.

A CASE OF AMNESIC APHASIA.

To the Editor of THE LANCET.

SIR,—The following case of amnesic aphasia (uncomplicated) may be of interest.

B. D——, aged fifty-nine, in February last suddenly lost the power of expressing his thoughts in words. On seeing him the following morning, he referred an acute pain to the left temporal region; there was no paralysis of any muscles, and the eyes were both normal in all respects. On examination, a mitral systolic murmur was detected; he also suffered from chronic dyspepsia; the other organs were all healthy. His vocabulary consisted of a few monosyllabic words; he was also unable to read, write, or use figures. He could, however, make himself understood by signs, though the few words he used had no reference to those signs. He was kept quiet and treated with bromide of potassium. Since that time he has greatly improved; he can now talk fairly well when not excited or exhausted; he reads the newspaper, but cannot articulate long or use common words; he can write and add up figures in the course of his business, but is utterly powerless to remember the names of people or places, and still complains of headache. The pain in the left temporal region is doubtless referable to lesion of the convolution of Broca; while from the researches of Dr. Hughlings Jackson it seems highly probable that the injury was caused by plugging of the middle cerebral artery of the left side by an embolus derived from valvular disease of the heart.—I am, Sir, yours truly,

Kendal, May 4th, 1886. R. W. LEEMING, B.A., M.B. Cantab., &c.

PERIODICAL VARIATIONS IN ATMOSPHERIC BACTERIA.

M. MIQUEL stated at the last session of the Paris Society of Public Medicine that in a series of observations he had made on the periodical variations of atmospheric bacteria he found the maximum number occurred between six and nine o'clock in the morning, and the minimum about two o'clock in the afternoon. A second maximum occurred about seven o'clock in the evening, and a second minimum at two o'clock in the morning. The maximum was greater in the town than in the country. The practical advice to which his experiments point is to ventilate one's rooms, more particularly early in the afternoon and in the middle of the night.

Poison.—Vide THE LANCET, vol. ii., 1885, pp. 863, 996, 1070, 1119, and 1167. See also Martindale's little book on Coca and Cocaine.

TEREBENE RASH.

To the Editor of THE LANCET.

SIR,—The following case, which recently came under my observation, ought, I think, to be placed on record.

John K——, aged sixty, was ordered to take five-minim doses of terebene four times a day for chronic bronchitis, from which he has suffered for many years. After taking six doses of the medicine (thirty drops in all), he had to desist, on account of a profuse bright-red, papular rash, intensely itchy, making its appearance, first on the left hand, and then on both ankles, extending up the legs to the knees. The hand was likewise very much swollen. That this condition was due to the terebene was proved by the retrogression of the eruption coinciding with the discontinuance of the medicine. This idiosyncrasy, the patient informed me, was observed about thirty years ago, when, having sprained his wrist, he was recommended to apply turpentine as a liniment. The result of this was the appearance of an eruption of similar character to the foregoing, his arm becoming at the same time so swollen as to incapacitate him for work for a whole fortnight. With the exception of the skin trouble, no other inconvenience has ever arisen from the use of the drug.

I am, Sir, yours truly,

ORMOND H. GARLAND, M.B., M.R.C.P. Ed.,
May 15th, 1886. Hon. Physician to Leith Hospital, &c.

Dr. Unna (Hamburg).—A short article on the subject would be accepted.

Mr. Maddock should apply to the Secretary to the Board.

Mr. Clemow (Lynton).—Yes.

"THE USE OF COCAINE IN OPERATIONS FOR PILES."

To the Editor of THE LANCET.

SIR,—With reference to Dr. Pritchard's claim for priority in the use of cocaine for operations on piles (THE LANCET, March 13th, p. 527), allow me to state that on Dec. 26th, 1885, I used a 4 per cent. solution in the removal of an external pile from a negro, with good result. Earlier in the same day I had occasion to have an abscess in the back of my own neck opened, so asked a medical friend to paint the skin with some of the same solution before making the incision. Beyond a slight scratching, I experienced no sensation as the knife divided the skin.

I am, Sir, yours truly,

BEAVEN RAKE, M.D. Lond.,
April 27th, 1886. Government Medical Officer, Trinidad.

Dr. B. W. Jones (Vulcan, Mich.).—The name and address of the patentees are given in the notice of the apparatus.

Subscriber.—Will our correspondent kindly repeat his questions.

"HOSPITAL ETIQUETTE."

To the Editor of THE LANCET.

SIR,—In fairness to the matron, your correspondent, "M.B. Edin.," ought to quote the rules for house-surgeon and matron of his infirmary. Trained or not, the committee appointed this lady upon certain conditions, and before accepting office the house-surgeon ought to have thoroughly understood these rules. Instead of sheltering himself under your pages, and thus holding the matron up to public ridicule, he should have laid the matter before his committee. The rules of metropolitan hospitals and provincial infirmaries are two very different matters.

I am, Sir, yours truly,

May 15th, 1886. INTERESTED.

A Young Practitioner has not enclosed his card.

Mr. F. Treves.—In an early number.

RINGWORM IN A NEW-BORN INFANT.

To the Editor of THE LANCET.

SIR,—In reference to the two instances cited in THE LANCET of ringworm in new-born infants, I may also add my quota to the cases of your correspondents. On April 13th I attended a young woman in her confinement, and a few days afterwards the nurse drew my attention to a small ringworm, about the size of a sixpenny-piece, on the scalp. One application of tincture of muriate of iron cured it. I may say that tincture of muriate of iron is almost a specific in ringworm.

I am, Sir, yours faithfully,

York, May 19th, 1886. T. CAMPBELL MACCORMAC (Student).

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NEWSPAPERS AND PERIODICALS OF JAPAN.

FROM some recently-published statistics of the Japanese press it appears that thirty-seven publications are devoted to matters connected with education, and that these have a total circulation of 42,649 per month. There are seven medical papers, with a monthly circulation of 13,514; nine relating to sanitary matters, with a circulation of 8195, and two on pharmacy. There are seven devoted to various branches of science, with a circulation of 2428; but to these must be added twenty-two engaged in popularising science, with a total circulation of 70,660.

Dr. Murphy (Sunderland).—Yes, soon.

"INFANT FEEDING: COD-LIVER OIL."

To the Editor of THE LANCET.

SIR,—In reference to Mr. S. Yeldham's letter in your issue of May 1st, recommending the administration of cod-liver oil in small quantities to infants to whom no kind of artificial food is of benefit, I wish to say that I have for some time been in the habit of ordering cod-liver oil in such cases by merely floating it on the milk. But since having seen Mr. Yeldham's letter, I have adopted his method, which is certainly most useful and entirely successful.—I am, Sir, yours truly,

St. Mary Cray, May 15th, 1886. EDGAR D. CANE.

THE MALLING UNION.

OUR attention has been called to the way in which the vacancy in the No. 1 district of the Malling Union, caused by the resignation of the medical officer who formerly held the post, has recently been filled up. If the facts are as stated by our correspondent, we have no hesitation in saying that he has just cause of complaint, and we are not surprised that the Central Board has thus far declined to confirm the appointment.

Mr. W. O. Allison (New York).—We cannot exchange.

"SANITARY WOOLLEN CLOTHING AND BEDDING."

To the Editor of THE LANCET.

SIR,—In your issue of May 1st you inserted a letter from me under the above heading, since which I have had almost daily inquiries asking me where the book, "Health Culture," and the articles referred to are to be obtained. Possibly you may allow me to say that the book (price 1s.) and all pertaining thereto may be had of the Dr. Jaeger Sanitary Woollen Clothing Co., Fore-street, London, E.C.

I am, Sir, yours faithfully,

St. Leonards-on-Sea, May 13th, 1886. JOHN PENHALL.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Gowers, London; Dr. A. K. Chalmers, Mossend; Mr. H. D. Cane, St. Mary Cray; Dr. Chepmell, London; Dr. Caddy, London; Mr. W. H. Day, London; Dr. Newell; Mr. Porpa, London; Mr. F. C. Maccormac, York; Mr. H. T. Wood, London; Mr. Cousland, Swatow; Mr. Fry; Mr. B. Oughton, Brighton; Dr. B. Fenwick, London; Mr. Wharton Jones, Ventnor; Dr. Broadfoot, Greenock; Mr. Butler-Smythe, London; Dr. Mackey, Brighton; Mr. Nixon, London; Mr. Lawson Tait, Birmingham; Dr. G. Harley, London; Dr. H. Harvey, Wavertree; Mr. Wigmore, London; Mr. Milner, Godalming; Mr. Batty Tuke, Edinburgh; Mr. Magnus, London; Mrs. Theobald; Mr. J. B. Pike, Loughborough; Dr. Penhall, St. Leonards; Messrs. Burgoyne and Co., London; Mr. Clemor, Lyndon; Mr. Field, Bradford; Dr. Steele, Florence; Mr. Oliver; Mr. Harrison, Liverpool; Mr. Healy, Tamworth; Mr. Stanford, London; Dr. Geddie, Accrington; Mr. Gravatt, London; Mr. C. Bedford, London; Dr. Callanan, Dublin; Dr. Percy Kidd, London; Mr. Browne-Webber, Chapelizod; Mr. W. A. Holmes, Kingston; Dr. Whistler, London; Mr. B. Sheppard; Mr. Lawson Tait, Birmingham; Dr. Illingworth, Clayton-le-Moors; Dr. Albert Wilson, Leytonstone; Mr. A. Baines, London; Dr. Ashby, Manchester; Major-General Keating, London; Dr. Churton, Leeds; Dr. B. Rake, Trinidad; Dr. Woakes, London; Dr. Tily, Brentford; Mr. B. Heelis, Nottingham: Mr. Hogg, Wellington, N.Z.; Messrs. Arnold and Sons, London; Dr. Pedley, Rangoon; Mr. Woodland; Dr. B. W. Jones, Vulcan, U.S.A.; Mr. Jackman, Coggeshall; Dr. Bell Taylor, Nottingham; Dr. W. Curran, London; Mr. Garland, Leith; Dr. F. L. Benham, London; Dr. D. C. Hood, London; Messrs. Robertson and Scott, Edinburgh; Mr. Armstrong, Harperhey; Messrs. Woolley and Co.; Mr. Rushworth, Halifax; Mr. Keith, Edinburgh; Mr. Freeman, London; Mr. May, Sheffield; Mrs. Piggott, Preston; Messrs. Hogg and Son, London; Mr. Simon, Leamington; Messrs. Benjamin and Sons, London; Mr. Beissell, Aachen; Mr. Pitman, Paris; Mr. Baker, Newport; Mr. Arnott, Beverley; Dr. Cameron, Hendon; Mr. Ostell, Carlisle; Mr. Simpson, Reading; Dr. Davies, Sherborne; Dr. Tenant, Bathgate; Professor McKendrick, Glasgow; Messrs. Barter and Co., London; Mr. Thompson, London; Mr. Hunt, Hull; Dr. Ridge, Enfield; Mr. Harrison, Derby; Mrs. Rawlins, Clapham; Messrs. Lee and Martin, Birmingham; Mr. Saunders, Manchester; Messrs. Condy and Co., London; Mr. Inglish, Canterbury; Mr. Manning, Combe Martin; Mrs. Carless, Liverpool; Messrs. Maclachlan and Co., Edinburgh; Mr. Woodland, London; Mr. Morrison, Snaith; Mr. Gillander, Fort Rose; Messrs. Bennett Bros., Salisbury; Dr. Debout d'Estrées, Contrexéville; A. W.; Interested; Justitia; One who has served his time as a Pupil; A Graduate of Paris; Matron, Portsmouth Hospital; Boreas.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Drury, Darlington; Mr. Thwaites, Bristol; Mr. Ward, London; Mr. Levan, West Bromwich; Mr. Buckley, Stonehouse; Mr. Robinson, Sunderland; Mr. Nisbett, Helmsley; Mr. Davies, Newport; Messrs. Hunton and Co., Stockton-on-Tees; Mr. Paul, Liverpool; Messrs. Sumner and Co., Liverpool; Dr. Gillon, Wellington, N.Z.; Messrs. Treharne and Son, London; Mr. Cole, Holywell; Dr. Bailey, Marple; Mr. Terry, Winchester; Mr. Christmas, Hemel Hempsted; Messrs. Symes and Co., Liverpool; Mr. Arrowsmith, Bristol; Messrs. Loefund and Co., London; Mr. Brockelbank, Islington; Dr. Eberle, Thirsk; Rev. A. J. D'Orsey; Dr. Habershon, London; Mr. Laskey; Messrs. Davis and Co., Newcastle-on-Tyne; Mr. Rutherford, Newcastle; Mr. Fletcher, Northwich; Dr. Wright, Finedon; Mr. Oliver, Sutton; Mr. Howard, Littleport; Mr. Davies, Bridgend; Mr. Gray, Exeter; Mr. Rideal, London; Mr. Dawe, Huddersfield; Mr. Beales, Mold; Messrs. Christy and Co., London; Mr. Denham, Wareham; Messrs. Kilner and Co., London; Mr. Darke, London; Mr. White, London; Mr. Crofts, Church Gresley; Mr. Beckton, London; Mr. Vincent, Hulme; Mr. Thomas, Birmingham; Mr. Baxter, London; Mr. Northover, Tisbury; Dr. Ems, Eastbourne; Mr. Crasweller, Highbury; Vesta; X. Y. Z., Kingsland; Walden; D., Newcastle-on-Tyne; Secretary, Hull Infirmary; Delta, Liverpool; Member, London; M. A. B.; Medicus; B.A.; H. A., Ben Rhydding; Matron, Weston-super-Mare; Beta, Manchester; X. Y., Pontypridd; Omicron; M. C. J., Notting-hill; A. H.; M. N.; N. P., Southport; Matron, Grimsby; Physician, Bow; Chiswick; Surgeon, Salford; Fossil; Statim, Clapham; D. H., Deal; Shirley; Medicus, Bradford; W. A.; Surgeon; Medicus, Belfast; Medicus, York; R. H., Wigan; Omega, Brighton.

Bournemouth Observer, Windsor and Eton Gazette, St. Leonards Observer, Bristol Mercury, Christchurch Press, Lyttleton Times, Rangoon Gazette, Manchester Guardian, Brechin Advertiser, Kentish Gazette, Liverpool Evening Express, Holloway Press, Photographic News, Philanthropist, The State, Journal of the Society of Chemical Industry, &c., have been received.

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Clinical Lectures
ON
CASES OF DIFFICULT DIAGNOSIS.

By SAMUEL FENWICK, M.D., F.R.C.P.,
PHYSICIAN TO THE LONDON HOSPITAL.

LECTURE VI.

ON FÆCAL ABSCESSES CONNECTED WITH THE SMALL INTESTINES.

GENTLEMEN,—In a former lecture we discussed the subject of fæcal abscesses arising from ulceration of the colon, and we found it was necessary to consider them separately from those connected with the small intestines, on account of the great difference in the structure, functions, and anatomical relations of these sections of the digestive tube. I now wish to direct your attention to abscesses connected with the other portions of the intestinal canal, but it will be necessary to examine those of the duodenum separately, as this part differs in many important particulars from the rest of the small intestines.

When it is considered how often we meet with perforation of the ileum in post-mortem examinations, we should expect frequently to find an abscess connected with this part; but such is by no means the case. It not unfrequently happens, indeed, that in tubercular peritonitis two or more loops of intestine are united by adhesions, which wall in a collection of pus communicating with the interior of the gut; but as in such instances there is rarely any external tumour, and there are no symptoms differing from those of an ordinary case of tubercular peritonitis, we shall at present reject these and direct our attention only to those cases in which there are symptoms or physical signs that would enable us to suspect the existence of an abscess. On examining the post-mortem records of this hospital, I have met with five such cases of fæcal abscess connected with the small intestines, and I have been able to collect from various authors twenty-five others in which the presence of an abdominal tumour produced by this affection had been remarked during life, and in which a detailed account is given of the appearances discovered after death. It is not, however, difficult to explain the rarity of fæcal abscess connected with the small intestines, for their mobility, the rapidity with which ulceration proceeds in them, and the liquid nature of their contents are sufficient to point out why a general rather than a local inflammation should usually follow perforation of their coats.

When we analyse the cases I have collected, we find that the numbers resulting from the various conditions capable of producing fæcal abscesses are very different from those we before met with when we examined the same affection as connected with the large intestine. Thus three commenced in inflammation around the pelvic organs, which had ended in suppuration, bursting into the lower part of the small intestines, and in all of them there was general peritonitis, in addition to the adhesions surrounding the abscess. In one, which occurred in this hospital, the small intestines had been perforated by an abscess which seemed to have originated in an ulceration of the colon produced by dysentery. In another in our records there was a tumour the size of a child's head connected with the lower part of the ileum; the walls were one inch thick and composed of a cancerous growth, the coats of the intestine being completely destroyed and the two ends of the healthy portions of the gut being continuous with the fæcal cavity thus formed. In a third in our records a very rare condition was discovered: the coils of the jejunum were united by adhesions; their contents had escaped from an opening between them; but the cause of the perforation was found to be the distension produced by a narrowing of the ileum resulting from a small tumour that projected into the cavity of the intestine.

In eight out of twenty-five cases the fæcal abscess had followed an injury to the abdomen. There can be little doubt that this proportion is in excess of what it would be if every case of fæcal abscess had been recorded, but cases produced by accident are especially apt to be noted, as the symptoms are from the first usually well marked, and immediately follow the injury. As this part of our subject is of great practical importance, and has scarcely received the amount of attention it deserves, it will be advisable for us to consider for a few minutes the various ways in which an injury is capable of producing ulceration of the small intestine.

In the first place, then, a blow on the abdomen often sets up either general or local peritonitis, which may terminate by adhesions of some of the loops of the intestine to each other and to the abdominal parietes, these loops being apt to be bent at angles more or less acute. It is at these sharp bends that ulceration often commences, and if it should proceed slowly a fæcal abscess may result. General adhesions were mentioned in six out of eight cases in which the abscess had resulted from injuries; and in five out of the twenty-five cases of fæcal abscess it is recorded that the perforation took place at an angle of a portion of gut fixed by adhesion; this occurred not only when inflammation had followed the receipt of injuries, but also in tubercular peritonitis, and in two instances where there had been only a local non-tubercular inflammation of the peritoneum. It is not difficult to explain why a portion of gut sharply bent by adhesions should be more liable to ulceration than when it is in its normal condition, for the flexure must tend to congest its bloodvessels as well as impede the transmission of its contents.

Secondly, a slight blow may set up suppuration in the abdominal walls or in the connective tissue behind the peritoneum, which may open into any part of the canal. A case is mentioned in our records in 1839 where a boy in delicate health received a blow on the abdomen from a schoolfellow, which occasioned inflammation that terminated his life in five days. On post-mortem examination, three abscesses were found behind the peritoneum, which had been the cause of his death. No opening, however, had taken place into the intestine, although we can imagine how easily such an occurrence might have taken place if the patient's life had been prolonged.

Thirdly, in three of the cases a very small opening in the intestine was discovered after death, and it was believed by those who recorded them that the perforations were the result of previous injury. It seems difficult to understand how an opening the size of a shilling, as is mentioned in one instance, could fail to allow of an immediate escape of the intestinal contents, and thus give rise to rapidly fatal peritonitis, unless we assume that the canal was quite empty at the time of the accident. As this would be rarely the case, I think it is more probable that only one of the coats was in the first instance ruptured, and that the perforation of the canal took place at a subsequent period by an extension of the ulcerative process.

Of the twenty-five collected cases, only seven are noted as resulting from a tubercular affection of the peritoneum. Such a proportion is, however, much below what it would have been if all that came under observation had been recorded, for the occurrence of an abscess of this kind in phthisical cases may take place without producing any very marked variation in the symptoms or deterioration in the condition of the patient, and is consequently apt to be looked upon only as an accident of the general disease. Fæcal abscess connected with this portion of the intestinal canal is, however, so generally the result of this cause, that whenever we are able to exclude the effects of accidents and previous peritonitis, we shall be justified in assuming any case that may present itself as probably due to tuberculosis. Tubercular peritonitis, as you are often told, and as you see so frequently exemplified in the wards, presents itself clinically under three forms: in one the onset of the complaint is sudden, its course rapid, and often closely simulates typhoid fever; in the second there are at first the same acute symptoms, but these soon subside, and an affection of the lungs or some other organ becomes the more prominent manifestation of the disease; whilst in the third the symptoms are from the first subacute, and the malady runs a more chronic course. Now it is in this latter form that, according to my experience, fæcal abscess is most apt to take place, for the intestines become generally adherent, and any escape from the canal is liable to be walled in by the neighbouring viscera; and in support of this opinion it may be remarked that in six out of seven of the cases it is stated that there were general adhesions of all parts of the peritoneal cavity. The ulceration may commence either

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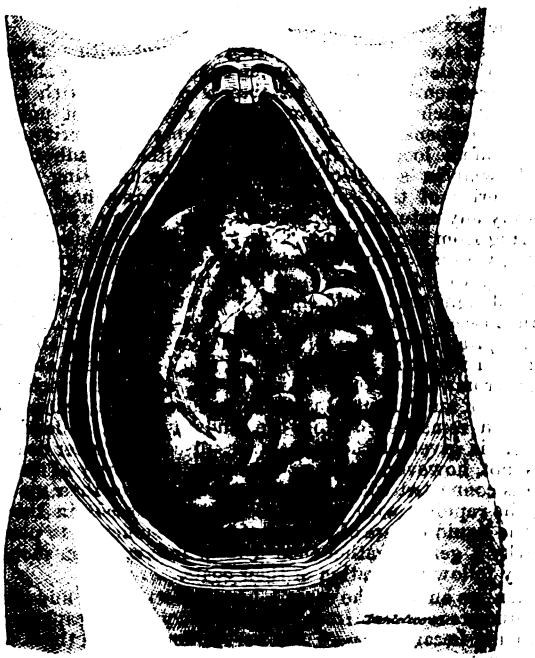
on the mucous membrane or externally. In two of the seven cases ulcerations of the mucous membrane are noted as having been unusually extensive, and in three there were also ulcerations of the colon. Perforation, as has been before mentioned, was found to be most apt to occur at any sharp bend of an adherent loop of the intestine; on the other hand, three are described as having commenced as "encysted peritonitis," the pus having subsequently made its way into the canal. In all cases the walls of the abscess were formed by the adherent viscera or by thickened membranes. In one instance discharge of feculent matter took place at the umbilicus, in another through the obturator foramen; but generally the abscess was only discovered after death.

The earliest symptoms of the cases of fæcal abscess that I have collected varied according to the disease that gave rise to the ulceration of the intestine. For example, a boy was treated in this hospital for typhoid fever, which ran its usual course, and on his recovery he was sent into the country for change of air. Five weeks afterwards he was suddenly attacked with pain in the abdomen, loss of appetite, and constant vomiting, and was readmitted into the hospital, where he died. On post-mortem examination, numerous ulcerations were found in both the small and large intestines, there were also extensive adhesions between the coils, and an abscess containing fæcal matter communicated with one of the adherent loops of the gut. When the abscess resulted from an accident, the first symptoms were pain of the abdomen and vomiting, and in some instances collapse. In tubercular cases pain of the abdomen and vomiting were also the earliest indications of the disease; in one these were attended with rigors.

As in every instance there was general or local peritonitis, the symptoms during the progress of the malady were only indicative of that condition; indeed, a fæcal abscess was rarely suspected during the life of the patient. Vomiting, pain of the abdomen, and tenderness on pressure constituted the most prominent subjects of complaint. In two instances blood was remarked in the stools, and diarrhœa is recorded as having been present in one quarter of the cases. In seven a more or less defined swelling was observed during life; in one a circumscribed tumour is mentioned as being present near the umbilicus, and in another a tumour was noted at the hypogastrium; all of these being cases of tubercular peritonitis. In a case where the ulceration arose from a sharp bend in a loop of intestines produced by adhesions, an abscess presented itself in the thigh and was opened; in another, arising from a similar cause, the pus was discharged at the groin.

I now propose, gentlemen, that we should direct our attention to abscesses connected with the duodenum, and I must first remind you of the differences in the position and relations of this part, as compared with those of the other sections of the small intestine. Instead of having a complete investment of peritoneum, its second and third divisions are only covered by this membrane in front, and are therefore in immediate relation with the connective tissue behind; and, as a result of this arrangement, perforating ulcers may produce abscesses that may burrow in different directions, and may present themselves at a considerable distance from their point of origin. Then again, the duodenum is fixed and surrounded by numerous important organs, such as the liver, gall-bladder, kidney and colon, all of which are liable to acute inflammations, the product of which may discharge itself into this portion of the intestinal canal. I cannot better show the difference between an abscess of this part and those we have been lately considering than by reading to you the notes of a case for which I am indebted to the kindness of my friend and colleague, Mr. Rivington.

CASE I.—William C——, aged nineteen, plasterer, was admitted under the care of Mr. Rivington on Nov. 1st, 1881. In the afternoon he had fallen upon his abdomen from a height of 12 ft.; he was picked up by his fellow-workmen and carried home. He vomited everything he took, and was brought to the hospital the same evening. Very little history of his previous state of health could be obtained, but it was stated by his friends that he had been drinking heavily for some time, and that the vomiting had commenced two days before the accident. He had, on admission, a pinched and anxious face, pulse very feeble, skin hot and bathed with perspiration, and he complained of slight pain in the hypogastric region; temperature 100·4°. He made no complaint of any severe pain. On Nov. 3rd the pain was localised to the right inguinal region; bowels confined. On the 7th he was very restless, and had fixed pain in the right inguinal region; diarrhœa for two days. On the 15th he seemed to be in a typhoid condition; fulness was noticed in the right inguinal region, and there was some dulness there on percussion. On the 18th there was a distinct fulness close to the pubes in the right inguinal region, which was hot and tender; the stools were formed, but offensive. He gradually improved after this date, and left the hospital on Dec. 24th. His temperature varied between 100° and 103° until Nov. 21st, after which it rose every evening to 102°, falling in the morning to the normal point. He was readmitted on Feb. 1st, 1882. He was then somewhat emaciated, his cheeks thin and flushed, and his expression anxious. There was a hard swelling in the right groin above and to the right of Poupart's ligament, which fluctuated with an emphysematous crackling, as if air and fluid were intermixed; bowels opened daily. He had little pain or tenderness over the abdomen. On the 10th an incision was made into the tumour, and a large quantity of yellowish feculent pus was evacuated. On the 27th the discharge was feculent and profuse, and pressure on any part of the abdomen caused a large quantity to be evacuated. On June 14th the sinus was more freely opened, and a large amount of fæcal matter removed. On the 28th diarrhœa came on, and he became much weaker. He lingered until July 31st, when he sank from exhaustion, nine months after the receipt



Sketch of Mr. Rivington's case of Peri-duodenal Abscess.

of the accident. The temperature always rose in the evening to 101° or 102°, and generally fell to the normal point in the morning.

Post-mortem Examination.—The body was so much wasted that it looked as if the patient had died of starvation. On opening the abdomen, a channel was discovered extending from the under surface of the liver to Poupart's ligament on the right side; it was situated behind the ascending colon, and was about two and a half inches wide. The roof and inner wall were formed of thickened peritoneum and the adhering gut, the floor by the thickened fascia covering the quadratus lumborum and the ileo-psoas, the outer wall by the thickened transversalis fascia, and there was a free opening at Poupart's ligament where was a fæcal-stained cavity, supposed, at first sight, to be formed of the gut adhering to the abdominal wall. The lower horizontal limb of the channel ran behind the pubes and formed a slightly sacculated end in the left groin. The channel contained no solid fæces, but its walls were coated with a brownish-yellow fæcal deposit. As it was supposed there might be some connexion with the intestines, water was injected into the colon and into the small intestines, but none escaped until it reached the duodenum, from which part it flowed out in a large stream into the upper extremity of the channel and swept downwards to Poupart's ligament. At the point of

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escape the duodenum presented an ulceration the size of a sixpence, with thickened edges, about five inches and a half from the pylorus, which had perforated all the coats and communicated with the channel. All the other organs of the body were healthy. (See Figure.)

In this very interesting case it is impossible to determine, from the want of a proper history of the condition of the patient before the injury, if there had been previously an ulcer of the duodenum; but whether such was the case or not, it is evident that the intestine was ruptured by the fall. The accident occurred at three in the afternoon, two or three hours after the usual dinner-hour of the labouring class, when the duodenum would be probably distended by the products of the gastric digestion, and therefore most liable to suffer from a severe blow. The vomiting and partial collapse in which he was found on his admission into the hospital pointed to some grave injury of the abdominal organs, whilst the complaint of pain in the right groin at that time seems to prove that the intestinal contents had already found their way into and down the connective tissue behind the peritoneum. This conclusion is supported by a very similar case described by Mr. George Pollock.

CASE 2.—"A young man was admitted into St. George's Hospital with symptoms of ruptured intestine, but somewhat less prominently marked than is usually observed when such an injury has occurred, so much so that we hesitated to give a positive opinion as to the exact amount or situation of the mischief. Under treatment for a few days he seemed to improve. Then worse symptoms set in, and he died twelve days after the accident. The duodenum was found lacerated behind the peritoneum. Its contents had escaped and had set up suppuration, which had travelled down in front of the right kidney behind the peritoneum, as low as the right iliac fossa."[1]

These cases are most valuable, not only in proving that injuries of the small intestines may, under certain circumstances, perhaps end in recovery, but also in showing that the part to which the pain is referred may be at a great distance from the actual site of the lesion. In both suppuration was established in the connective tissue behind the peritoneum; and in Mr. Rivington's case an abscess presented itself in the neighbourhood of the bladder, and was opened in the groin.

I have, gentlemen, in previous lectures, prefaced the consideration of each subject with one or two cases which might serve as illustrations of the usual course of the disease we were discussing, but on the present occasion I have departed from this plan. The two examples I have just quoted are intended to show the differences that may exist between abscess connected with the duodenum and those of other parts of the small intestine, but cases of this sort are so extremely rare that you are not likely yourselves to encounter them. In the course of my reading I have not met with any others precisely similar as regards the length of time the patient lived after the accident, or where the symptoms of suppuration of the connective tissue so rapidly followed the injury.

When examining the abscesses that are connected with the other portions of the small intestines, we found they were most frequently due to tubercular disease, but this does not seem to be the case with respect to those of the duodenum. In our post-mortem records I have only been able to discover five instances of peri-duodenal abscess; in three the mischief had been caused by the perforation of duodenal ulcers, in one by suppuration set up by an impacted gall-stone, and in one by tubercular disease of the kidney, which had produced a perinephritic abscess that burst into the duodenum. I have collected twenty-nine cases (including the above) from various authors, and of these eighteen originated in ulcers of the duodenum, three in chronic ulcers of the stomach, five in suppuration in the neighbourhood of the gall-bladder, and one in what was believed to have been an old hydatid cyst of the liver.

Let us, in the first place, examine the cases that have arisen from ulceration in the duodenum itself. You are aware that the stomach differs from the other parts of the digestive tube in its greater liability to the "round," or, as it is often termed, the "perforating" ulcer; and the mucous membrane of the duodenum also presents instances of the same kind of lesion. It is, however, much more rare, for only five post-mortem examinations of duodenal ulcer are recorded in our books during a period in which there are noted sixty-nine fatal cases of gastric ulcer. The usual site in the cases I have collected of the ulcers producing abscess was in the superior portion of the duodenum, where it is covered, like the stomach, by peritoneum; for of ten, eight are stated to have been situated in this locality, one was in the descending and one in the transverse portion; in the remainder the site is not stated. This greater liability of the superior portion you must not refer to a greater tendency there to the production of abscess, for it is the part that is most subject to ulcerations; thus, Kraus states that of sixteen cases of perforating duodenal ulcer he had collected, twelve were situated in this part of the gut. It would appear that acute ulcers are but little apt to set up abscess, as they generally destroy life either by hæmorrhage or by perforation into the cavity of the peritoneum, for in only one instance of those I have collected are the edges stated to have been sharp; in all the others they are described as "round" or "thickened." The materials forming the walls of the abscess varied greatly; thus, in ten out of eighteen they were formed by the adhesion of some of the neighbouring viscera, in two the pus was contained in a cavity in the substance of the pancreas, and in five suppuration had taken place in the connective tissue behind the intestine, and had spread from that part in different directions. In most instances it is worthy of notice that the abscess might have been safely reached by a surgical operation.

It is a common remark that no important part of the animal frame can become the seat of disease without other organs being also affected, and abscesses arising from ulcerations of the duodenum present no exception to this rule. In one out of eighteen the duodenum is said to have been dilated, in two its calibre was contracted, in five the stomach was found to be greatly dilated, and in two the spleen was much enlarged. The dilatation of the stomach is, I suspect, a much more frequent accompaniment of chronic duodenal ulcer than might be supposed from these figures, and may be a useful sign in the diagnosis of such cases. In only two a tubercular condition of the lungs is mentioned. In five instances the abscess originated in the neighbourhood of the gall-bladder, and afterwards burst into the duodenum. In each case it seems to have been the result of irritation set up by gall-stones, but in one concretions could not be discovered, although the ducts were greatly dilated, pointing to the previous existence of some obstruction to the free exit of the bile. The exact place at which the pus had been discharged into the intestine is only mentioned in two cases; in one it was into the superior and in the other into the descending portion. In all the sac was formed by adhesions, and no case is recorded in which suppuration was set up in the connective tissue. This is of course what might have been expected, as the abscess in most cases originates in suppuration of the gall-bladder itself. In two instances the abscess was situated at a little distance from the duodenum, and opened into it by means of a sinus. In one the abscess was produced by the irritation of a malignant tumour that involved the gall-bladder and ducts, but no mention is made of the presence of a calculus.

The cases I have collected throw but little light upon the causation of duodenal abscess. Of course when they originated from gall-stones, hydatid cysts, or perinephritic abscesses, it is easy to account for them, but what we are chiefly concerned with is to ascertain what circumstances tend to produce the chronic ulcers of the gut that by perforation of the intestinal walls usually give rise to them. Statistical inquiries have proved that duodenal ulcers are most common in the male sex, and chiefly occur between thirty and fifty years of age. Now, of eleven cases of duodenal abscess, nine were males and only two females; and only one occurred below twenty years of age, four between thirty and fifty, and three above fifty years of age. In all probability, ulcers in this, as in other parts of the gastro-intestinal tract, are most apt to perforate rapidly in the young, and it is only as age advances that there is a tendency to a slow process of ulceration, and consequently to the formation of adhesions and abscess around the gut. As duodenal abscesses may arise from so many different causes, it is evident that the symptoms and course of the disease must vary accordingly. Let us, then, first consider the cases that have been recorded as having resulted from simple ulcers in this portion of the intestinal canal. I have been able to collect only fourteen of this class in which a

[1] Holmes's System of Surgery, vol. i., p. 878.

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history of the symptoms is given, and in some of them the details are unfortunately very scanty. They were all of long duration; thus, in one the symptoms of ulcer had existed for eight, in another for seven, in a third for three years, and in one for twelve months, whilst in three they are mentioned as having been present for "a long time." You will remember that we before found the ulcerations after death were always stated to have had thick or round edges, so that there is no doubt the quickly spreading ulcers destroy death rapidly, and it is only in such that have been long in a quiescent state that external adhesions occur and the formation of an abscess becomes possible. In all of the cases the patients had previously enjoyed good health, with the exception of one who had suffered from cough and slight hæmoptysis, and in whom, after death, emphysema of the lungs was found. Pain was the prominent symptom in the majority of the cases; in some it came on one hour or at a later period after food, in others it occurred occasionally, the patient being free from suffering in the intervals. In one instance it was looked upon as neuralgia of the cœliac plexus; in another the pain is described as radiating from the epigastrium to the right hip. In two cases there was no complaint of pain, but only a sensation of fulness after eating, until at last more severe symptoms suddenly made their appearance. Vomiting was present in most of the cases, but was by no means so general a symptom as pain. Usually the food last taken was alone rejected, with immediate relief of the pain, but in one case the fluid was intensely sour and the stomach was found after death to be much dilated. In the majority there was either hæmatemesis or blood was passed from the bowels. In some this occurred frequently, in others only once, but it was usually profuse, and in one the blood is mentioned as having been passed in dark clots. Loss of flesh was a prominent symptom in all the cases, and ulceration in this locality seems to produce a more marked effect on the general health than when the stomach only is affected. Want of appetite is not especially noted, but in one patient it is stated that the appetite continued good until near the termination of the illness, when it quite disappeared. Paleness of the skin is generally recorded as having been present; some are described as "anæmic," others as "earthy-coloured," and some were "like persons suffering from cancer." No doubt this anæmia arose partially from the hæmorrhages to which the patients were liable, but it must also be attributed to the disturbance of nutrition resulting from the ulceration. The cases as a rule, after continuing for a length of time, terminated suddenly. In only one the duration of the final attack was three weeks, when the patient died of pleurisy. Most of them were carried off by hæmatemesis or by perforation of the peritoneum, three sank from exhaustion, and one died of suppuration of the lungs and of the parotid gland. You would of course expect to find considerable differences in the symptoms and course of a duodenal abscess when this originated from irritation of the biliary passages, and when it was the result of a duodenal ulcer. I cannot show the distinction more clearly than by quoting the following case from our post-mortem records.

CASE 3.—A man, thirty-five years of age, had been affected with jaundice four years before his admission into the hospital. He stated that it had come on very gradually, and had lasted without intermission for nearly three years. At the end of this time he was attacked with a severe pain of the left side and across the abdomen, and on the subsidence of this the jaundice gradually disappeared. Five weeks before his admission he had a severe rigor, followed by delirium. When admitted he was suffering from jaundice, and a mass could be felt occupying the right side of the epigastrium, which seemed more clearly defined than would have been the case if it had consisted of an enlargement of the liver. The left lobe could be felt projecting below the ribs; the mass moved with the respiration, but the gall-bladder could not be distinguished. Four days after his admission he is stated to have had no pain, the stools were natural in colour, but he had been sick and had vomited. On the sixth day he had severe rigors followed by sweatings, the temperature reaching 103·4°; and severe rigors occurred again on the eighth day. On the tenth day jaundice was remarked as still remaining, and there were repeated rigors on the twelfth day. On the fifteenth day he complained of a peculiar sensation at the epigastrium, and brought up a quantity of dark-coloured blood. On the following day he suffered severe pain in the epigastrium, and rapidly sank. At the post-mortem examination, a gall-stone, the size of a filbert, was found to be impacted in the common duct; the gall-bladder was destroyed by suppuration, and a large sinus extended between the gall-bladder and the duodenum, which were united together along with the liver, in the substance of which were numerous abscesses; there was also an abscess deeply placed in front of the left kidney.

Now the first point that will strike you is that up to five weeks before the patient's illness he was in good health, for this is a marked difference from the long-standing pain, vomiting, and emaciation we before found in persons who were affected with an abscess produced by ulceration of the mucous membrane of the duodenum. There was also a history of chronic jaundice, from which he had recovered; and attacks of colic or of jaundice are also recorded as having been present in other cases of a similar nature I have been able to collect. A sudden onset had also been observed in them as in the foregoing case, and was no doubt dependent on the mischief set up by the irritation of biliary calculi. Repeated rigors did not constitute a prominent symptom in the former class of cases, but in that just related it was probably dependent on the formation of the hepatic abscesses discovered on post-mortem examination. In duodenal abscess arising from internal ulceration, hæmatemesis or the passage of blood by stool was one of the symptoms most commonly remarked, and I have also found one or other of these in almost all the cases I have been able to collect where the abscess had resulted from irritation of the biliary passages.

As regards physical signs, I have only been able to collect nine cases in which these are given with sufficient detail to allow of definite conclusions being drawn from them, and it should be borne in mind that a swelling is not likely to be detected when the abscess is situated very deeply, and that a tumour may, as we have before seen, present itself at a considerable distance from the duodenum when suppuration has extended into the connective tissue. A tumour was discovered in the epigastrium, or region of the liver, in seven out of the nine cases; in one it was situated in the right iliac region, and in one at the back of the right shoulder. It was mentioned as being visible in only three cases, but in all probability this point may have been omitted in the records of many others. It was "hard" in three, and "soft" or "elastic" in two. The note on percussion was "tympanitic" in four cases, and in one a metallic sound was produced by the shaking of the patient. In one the liver and heart are stated to have been displaced upwards by the large size of the tumour. Alterations in the percussion note are noticed in only one case, and in this it is said that the tumour remained fixed on full inspiration, but that the line of dulness varied according to the position of the patient. In one only is it mentioned that the contents of the tumour were influenced by the action of the intestines, the note on percussion being much clearer when diarrhœa was present. In some of the abscesses in which there is a communication with the duodenum, physical signs present themselves closely simulating those of pneumothorax, but we must defer their consideration until we examine the subject of abscesses connected with the stomach.

I need scarcely say that the diagnosis of an abscess connected with the duodenum must be a matter of great difficulty on account of the various conditions which may give rise to it, the different directions the pus may follow, and the great depth at which this portion of the intestinal canal is situated. But, in addition to this, it is very difficult to make out the exact limits or even the existence of a painful tumour situated in this locality, for the patient usually contracts his muscles directly pressure is made over it, so that they become as hard and unyielding as a board. When, however, you have been able to satisfy yourself of the presence of a tumour, you have to consider whether it is an abscess, carcinoma of the liver, stomach, or peritoneum, or perhaps only a fæcal accumulation.

In the first place, then, you must bear in mind that an abscess connected with the duodenum is, as we have before found, almost always the result of a very chronic ulceration of the gut, or of the irritation set up by gall-stones. In the former case, the patient will have suffered for many months or years from pain after food or from severe attacks of pain attended by vomiting, or from profuse hæmatemesis or the passage of blood by stool. In cancer the progress of the case is much more rapid, the patient seldom living more than nine or twelve months after its commencement; the pain is more constant; the anæmia and emaciation more

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marked; the hæmatemesis, if present, more frequent and smaller in amount. In abscess near the gall-bladder the onset of the symptoms is sudden, the progress rapid, and there is usually a history of colic or of jaundice. In abscess from either cause the temperature is high, whilst in cancer it is often below the normal point. The tumour in duodenal abscess is less defined and more tender than in cancer, and percussion often affords a tympanitic note or a splash, as if the contents were composed of liquid and of gas, or, in other cases, the line of dulness varies with the position of the patient. In the case of fæcal accumulation the temperature is not elevated; there is a history of constipation; the tumour is dull on percussion, and when firmly pressed upon it seems to give way before the fingers, as though an indentation were thereby produced in its substance. When an abscess has commenced in the peritoneum, and afterwards burst into the gut, you will find, in addition to the signs of a tumour filled with gas or fluid, a history of diarrhœa and localised pain accompanied by fever, the temperature remains high, and the auscultation and percussion usually afford evidences of a tubercular condition of the lungs. We will defer our consideration of the treatment of these cases until we discuss the subject of abscesses connected with the stomach.

ON THE

REMOVAL OF DEEP-SEATED TUMOURS OF THE NECK.

By ARTHUR E. BARKER, F.R.C.S.,

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IN THE LANCET for Jan. 30th of this year I ventured, under the above heading, to put forward some conclusions which appeared to me justified by a considerable recent experience, and which seemed to me not unworthy of note as bearing upon a question constantly cropping up in the experience of every practitioner—namely, what can be done for deep-seated tumours of the neck? Since the cases then recorded were operated on, others have come under my care which have strengthened the opinion there expressed, but none so much as the last. This involved the deepest and widest dissection I have ever made in the neck, and was, nevertheless, as complete an enucleation of a distinctly encapsuled growth as one could wish. It was accompanied by very little bleeding, and no important structures were divided. Again, the very extensive wound healed from bottom to surface everywhere by first intention, except in the track of the drainage-tube, and here only a drachm or two of thick serum was found every three or four days until it had closed, the patient suffering nothing from the wound, either locally or constitutionally, all the time. The following brief record of the case speaks for itself, and emphasises the conclusions in my first paper perhaps more strongly than the cases there narrated.

T. H——, aged sixty-four, a labourer from Cornwall, was admitted into University College Hospital on Feb. 22nd, 1886. His personal and family history were excellent, showing nothing but some rheumatism. He has had a family of six children, all of whom are healthy. Five years ago he felt a little pain in the nape of the neck, and a little later noticed a small lump between the left mastoid process and middle line of the neck behind. This lump appeared to be deep-seated and fixed, and grew very slowly until six months ago, when it began to increase rapidly, attaining double its former size since then. There has been from the first occasional pain in the tumour of a gnawing character and radiating to the back of the head. There is no history of a blow in the region of the swelling, and but an indistinct one of strain. The tumour is described in the hospital notes as reaching from the anterior border of the left sterno-mastoid muscle to the posterior middle line, and from the inferior occipital curved line above for about 4 in. downwards. It is thus 5 in. across and 4 in. vertically. Its upper limit corresponds to the insertion of the splenius capitis and trapezius muscles into the superior curved line. The anterior border of the latter muscle is very prominent below the growth, and can be traced over it for a little distance above. The tumour is very elastic, but does not fluctuate. There is very slight lateral mobility, but none from above downwards. The heart and breath sounds are normal.

Taking the above facts into consideration, together with the sensation of the tumour to the finger and its appearance, I had little doubt that we were dealing with a sarcoma. But the point of its origin, the degree of its limitation, and its exact depth in the neck were matters about which it was impossible to come to any definite conclusion. That it lay very deeply was quite clear, but whether it sprang from the base of the occipital bone, from the spinal column, or lay between the muscles, it was quite impossible to form an opinion. I thought it quite possible, however, that it might be found, on examination of its surface, to be quite separable from surrounding parts in spite of its depth, having been agreeably surprised in this respect in analogous cases more than once. I therefore explained the gravity of the matter to the patient, and that it was quite possible that it would be found to be beyond the reach of excision, but that this could only be determined by making an exploratory incision through the coverings of the tumour. It was pointed out to him that if this exploratory incision revealed the fact that the tumour could not be removed, it could be closed and would heal without any mischief being done. To this alternative the patient readily agreed, and the operation was performed a couple of days later. The preliminary treatment consisted in shaving and washing the whole of the occiput several times with warm water and soap, then with a solution of perchloride of mercury (1 in 500), and finally soaking it with carbolic acid solution (1 in 20).

Operation.—On Feb. 24th, with every antiseptic precaution except the spray, an incision was made, commencing about an inch above the superior curved line of the occipital bone and an inch from the middle line, and running downwards and outwards for about two inches, and then directly downwards for three inches. This was designed to expose the origin of the trapezius and its anterior border. When this muscle and the splenius capitis had been exposed, it was found that the latter was more directly in the way than the trapezius. It was therefore slit upwards in the direction of its fibres nearly to its insertion, and the inner portion thus separated was divided transversely above. On everting this portion, the tumour was well seen, still covered by a very thin layer of muscle fibres derived from the complexus. These were now torn across at their superior attachment to the bone, and the finger was insinuated between the latter and the growth. As the bone appeared quite unimplicated, the finger was carried deeper and deeper until the insertions of the rectus capitis posticus, major and minor, and obliquus superior were reached. Just here I was for a little time uncertain whether the dissection should be proceeded with, but, finding the other aspects of the tumour were quite well defined in a capsule, I continued its separation from the small rotators until the spinous processes and ligamentum nuchæ were reached. The tumour lay directly upon these, and here the attachment was firmest. Some steady clearing with the finger, however, loosened it cleanly, and then it was separated from the transverse process of the "axis," which was commencing to be absorbed by pressure. Lower down it was not at all difficult to isolate it from the complexus and inferior oblique muscles, and it was soon cleared and lifted out. Just at the last, in lifting out the tumour, two small fragments were broken off, each about the size of a flattened pea; these corresponded to a spinous and transverse process. Except at the points where they came away, the capsule was unbroken and well defined, so that every particle of the growth shelled out. It may be said to have lain upon the occipital bone between the superior and inferior curved lines, lower down, directly upon the four short rotators of the skull on the left side from their origins to their insertions; the ligamentum nuchæ and interspinous ligaments were pushed over to the right by it, and the splenius capitis and trachelo-mastoid to the left, while the body of the growth corresponded to the bulky part of the complexus at its upper end. Part of this muscle was expanded over the growth posteriorly, and over this again was stretched the trapezius. Apparently, then, the mass grew from or beneath the under surface of the complexus. The only vessels distinctly troublesome were found in the upper angle of the scalp wound, where the branches of the occipital were divided and required ligature. Besides these, some few muscular twigs were closed by forcipressure, and one or two venous twigs in the deeper part of the wound. The total loss of blood probably did not exceed four ounces, most of it being

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derived from muscular oozing. The field of operation, having been dried out, was dusted lightly within and without with iodoform, and was closed with five silk sutures, a drainage-tube being left in the lower angle, reaching about four inches down to the small rotators. Strips of salicylic wool were then laid on either side of the incision, and others across these, until a thick even covering enveloped the whole occiput. Then a large quantity of ordinary wool was carried over this and under the chin, and was firmly bandaged so as to support the head on all sides and prevent movement, as well as to exercise elastic pressure on the large wound and bring all its surfaces into contact. Over this a kind of cuirass reaching from the waist to the occiput, consisting of poroplastin moulded beforehand to the body, was applied, and the shoulders and head were further immobilised by bandaging to it.

The patient bore the operation well, and after a rather restless night became quiet. He was inclined to become restless again, but this was probably due to his disposition, otherwise his state was very satisfactory, and he slept well, as a rule, after a little morphia. The temperature rose on the third night to 101·4°, the night following to 101·6°, but on the next night only rose to 100°, and remained below this figure for the rest of convalescence. The wound was dressed for the first time on the fifth day, and was found quite quiet, without a trace of discharge. The drainage-tube was withdrawn, cleared of blood-clot, shortened to about two inches, and replaced. The same form of dressing as before was applied. Two days later it was examined for the second time, and the tube was removed for good, as only a little thick serum was found. It was dressed as before. Four days later the wound was dressed for the third time. It was found united everywhere by first intention, except where the drainage-tube had been inserted. Here about a drachm and a half of thick odourless serum had exuded. The stitches were all removed and the same dressing was reapplied. After the next dressing, which was two days later, there is nothing to note, only one small spot remaining unhealed at the time. The patient was out of bed on the twelfth day, and each day until he left hospital on the seventeenth day. For about a week before leaving he had complained of severe rheumatic pain in the right arm, probably due to the cold March weather, when he began to sit up after lying wrapped in wool. This was improving when he left for Cornwall. At this time he seemed almost to have forgotten his old trouble in the neck, but made a good deal of his rheumatism. The microscopical examination of the tumour showed it to be a myxo-sarcoma. From a letter received lately from the patient's medical man in Cornwall, I learn that the result of the operation is most satisfactory.

A CASE OF

RHEUMATIC HYPERPYREXIA, WITH NERVOUS SEQUELÆ, SIMULATING MULTIPLE SCLEROSIS.

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ON the evening of Sept. 27th, 1884, I admitted W. J. S——, aged thirty-three, married, sadler, into the General Hospital, under the care of Dr. Russell. He was one of a family of fourteen, twelve of whom were alive and well. His father was sixty-four years of age, and healthy; his mother died of "consumption of the bowels" at the age of fifty-six. He had lived in Birmingham sixteen years, and had been more subject to colds during this period than formerly, though he was always considered a delicate child. Twice he was attacked with inflammation of the lungs, fifteen and twelve years since respectively. Seven years ago he was unable to do any work for a fortnight on account of "dizziness and dyspepsia." Otherwise his previous history was good. His present illness commenced fourteen days before as a chill with severe pains in all his joints which had obliged him to keep to his bed. On the 25th his wife noticed pimples (sudamina) all over his body. At 6 P.M. on this day he became very hot and half unconscious; he was deaf, but could see; his breathing was noisy and rapid. He remained thus till 3 A.M. on the 26th. At 6 P.M. on this day a similar attack occurred, but only lasted an hour and a half.

My note on admission was as follows: "Well-formed man; body covered with sudamina, and there is a free acid sweat; complains of pain in his joints; the ankles, knees, and wrists have effusion; slight dyspnœa. Heart: area normal; apex a confused repetition of impulses; to the stethoscope sounds are cantering and feeble, with probably a systolic mitral. Lungs, liver, and spleen apparently normal."

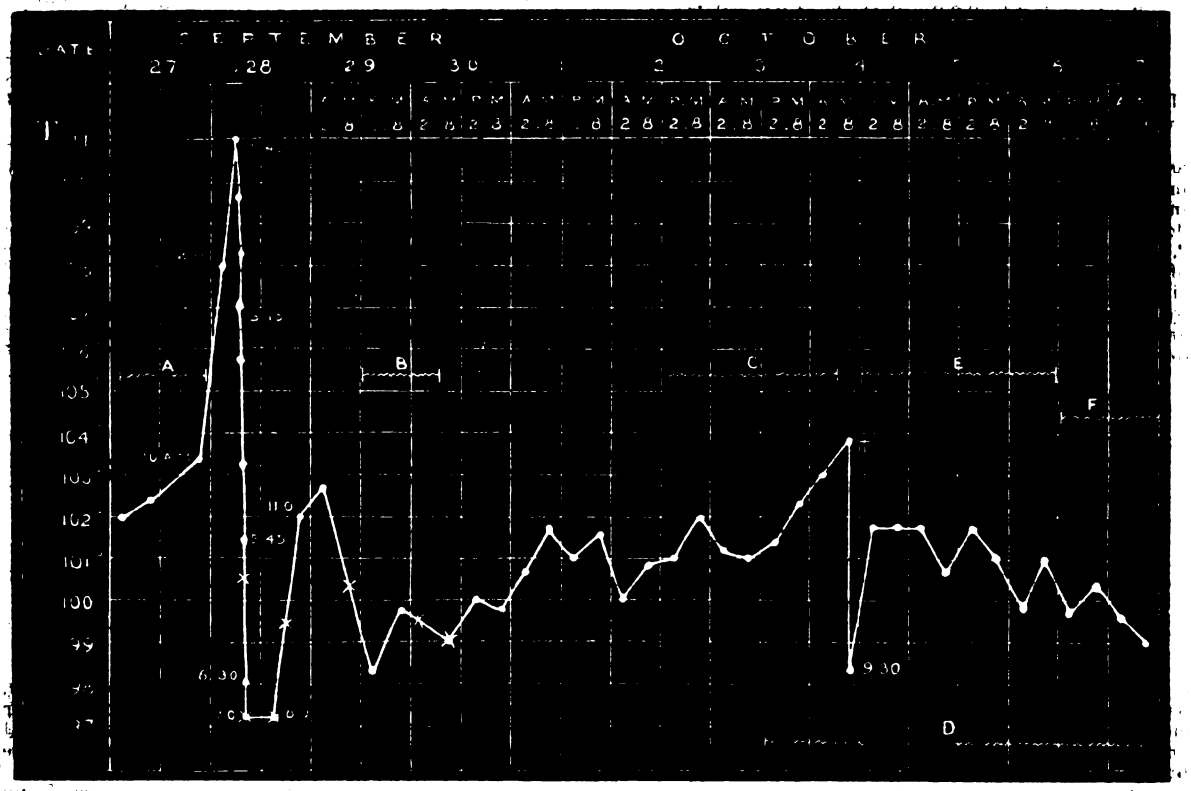
Sept. 28th.—10 A.M.: In much less pain, but complains bitterly of thirst. Sordes about the mouth. Temperature higher, 103·2°; pulse 96; respiration 26. I saw him at this time in the course of my morning round, and must confess to having noted nothing beyond a more than usually severe attack of fever, though the lessening of pain should have aroused my suspicions.—Noon: Salicylate of soda (which he had been taking since admission) stopped, because he was slightly deaf and appeared rather light-headed. He had had 140 grains in all. From 2 to 4 P.M. his friends were with him, as it was visiting day. His wife says he answered her questions, but he states that he remembers nothing after the giving out of the dinners at 1 P.M. — 4.15 P.M.: I was sent for, and found him quite unconscious. Pupils contracted and insensitive; skin burning; respiration 90, and noisily stertorous; pulse 200, full and bounding, but beats quite distinct, though tumultuous; temperature in axilla 108°; a loose stool in the bed. — 4.45 P.M.: Immersed in bath at 90°, which was cooled to 70° in fifteen minutes, and then maintained at 70° to 75°; lumps of ice kept floating around his head, which was also completely immersed except nose and mouth.—5.45 P.M.: Removed from bath. During his stay in it the pulse kept good and distinct, though its tension and size much diminished, especially towards the latter part. Towards the end, too, his vocal cords began to act, and he moved as if conscious of pain, although his pupils still remained insensitive; stertor also vanished, and he breathed quietly.

All the temperatures above 105° were taken with two thermometers, whilst the highest (111°) was taken with three. Those from 4.45 P.M. on the 28th to 2 P.M. on the 29th, inclusive, were rectal, the rest axillary. (See accompanying chart.)

Oct. 3rd: Has been in a mental state of very little change—one of dull puzzledom. Sordes and sudamina are gone. Joint effusion has almost entirely vanished, though he still complains of pain. Heart has feeble first sound at apex.—9th: Still in a fog as to time past, though quite clear-headed about the present. Great difficulty in enunciating consonants; intonation is nasal, though the soft palate moves well; speaks slowly and very laboriously. No paresis of any kind noted in limbs. Knees stiff and painful.—13th: Speech better, but still nasal; each word is hung upon; reflex movement of soft palate very deficient, but voluntary movement and localisation good. Pupils large, but react well to light. Knee-jerks normal.—20th: Talks sensibly, but with convalescent childishness. Grasp of hands equal, but feeble; well-marked rhythmic tremors on attempting to bring an index finger to the tip of the nose, these increasing as the hand nears the face. Knee-jerks exaggerated, especially on the right side; ankle-clonus is well marked on the right, slightly so on the left; plantar reflexes normal. Walks too feebly to make out any tremors; there are probably none; he brings his feet down with a helpless flop. Sensation to touch is quite good everywhere. No nystagmus; no contraction of field of vision; no ocular paralysis. Smell and taste good. A primary interrupted current strong enough to produce a moderate contraction on a healthy neighbour acts rather less well on the patient, but all his muscles react equally well.—21st: He measures his words, though not rhythmically. Says "stretsh" for stretch, "clooh" (German *ch*) for clock. Has much difficulty in pronouncing *l*, and the *m* in "many." His lips do not respond actively to the will, the upper being comparatively immobile.—22nd: Less tremor in arms. Articulation is perceptibly scanning to-day.—26th: No rheumatic pains left, but general stiffness in all his joints. Can walk alone, but feebly and with a somewhat ataxic gait. Right leg is the more affected. He has no woolly sensation beneath his feet. Pupils are large and indolent, with some deficiency of accommodation. There is slight nystagmus on extreme rotation out or in. Articulation is tardy and indistinct still;

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the tongue seems most at fault. - Nov. 5th: Right arm much better; can pick up a pin, but doing so produces tremor. Left arm much the same. Walks very feebly, but lifts his feet well, though he puts them down too abruptly. Walking at once causes giddiness. Speech of same character, but much clearer and less laboured; he stutters occasionally before an *s*. — 25th: Speech still nasal and palate reflex deficient. All his joints are stiff, and he cannot fully extend his knees. His right foot is especially painful. Complains of the tremors in his arms; they prevent him writing his name even when he attempts to do so unobserved. Can walk with his eyes shut.—Dec. 30th: Words are still slurred, and the difficulty with the gutturals and labials continues. Palate reflex is now not deficient; uvula is drawn to right in saying "Ah"; tongue is protruded to left, but withdrawn in either direction; left side of the mouth is rather indolent.



The patient was in a bath one hour: from 4.45 till 5.45. On removal, he was wrapped in a cold pack and an ice-cap applied. At 6.30 the pack was removed, and twenty grains of sulphate of quinine were given. At 7.0 the ice-cap was removed. At 9.0 the ice-cap was reapplied. At 11.0 twenty grains of sulphate of quinine were given. At the times indicated by the crosses (x) he vomited. From admission till noon on the 29th he had seven loose stools; thereafter his bowels were confined, and his average daily excretion of urine from September 29th to October 3rd, inclusive, was thirty-six ounces. At † a cold pack was applied, and continued for an hour and a half.

Line A represents the period during which twenty grains of salicylate of soda were given twice.
Line B " " ten grains of sulphate of quinine were given four times.
Line C " " one grain of sulphate of quinine and ten grains of bromide of potassium were given four times.
Line D " " three ounces of brandy were given daily.
Line E " " six grains of kairin were given every hour.
Line F " " ten grains of salicylate of soda, four grains of carbonate of ammonia, and four minims of tincture of digitalis were given twice.

Can walk fairly well, but is still very weak, and trembles all over on exertion; knee-jerk remains much exaggerated; the plantar reflexes are also increased. On attempting to produce ankle-clonus, a regular rhythmical tremor is set up. There is deficient sensation at a spot in front of the right ankle. His grasp is tremulous and feeble.

On Jan. 1st, 1885, he was sent to a convalescent home. As to treatment, he had phosphate of iron, cod-liver oil, and strychnia. His urine on Sept. 28th was as follows: sp. gr. 1020; acid; much urates and uric acid; cloud of albumen; no sugar; granular casts, a few epithelial casts, and some loose epithelium. On the 30th it was: sp. gr. 1030; very acid; urates; very faint cloud of albumen; no sugar or casts. The cloud of albumen remained till the end of October, and then the urine became normal. His heart was unaffected throughout, the murmurous first sound heard during the first week being due no doubt to the pyrexial state.

Dec. 30th.—Has been able to do his work ever since he left the convalescent home in February, though not so well as before his illness. His temperature sense is peculiarly modified. The body generally is less sensitive to changes in the surrounding atmosphere than it used to be; he has no need to be so careful about wrapping himself up, and is less liable to catch cold; has no transitory shiver—e.g., on coming out of his hot shop; is better able, though to a correspondingly less degree, to bear the heat of summer, and he flushes more readily, though the tendency to perspire is unaltered. On the other hand, his perception of hot and cold substances locally is keener; a hot plate feels considerably hotter than before, this being especially the case with the left hand. This left hand is also more sensitive to cold (e.g., snow) than it used to be, whereas in the right he detects no change in this sensation. [Thus the right hand and left leg are, in all the variations noted, less affected than the left hand and right leg.] He does not seem to perceive the sensation more *speedily* than usual, but when it is perceived the sensation is stronger. Pen-points less than one-eighth of an inch apart on the finger-pulps are felt as one, the pulps being no more sensitive than the rest of the fingers [the skin of the finger-pulps is very horny]; on the dorsum of the feet points less than one inch apart are felt as one. The front of the right ankle still feels numb. Localisation of one point is quite correct. Can walk very nearly as well and as fast as ever he could, but can no more run than a baby, his feet refusing to "go into the right shape." His legs do not give, but he occasionally staggers, though the merest touch of any support at once

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steadies him; the staggering is no worse in the dark; the knee-jerks are now only slightly exaggerated; the left leg is under better control than the right; there is little fault, however, to find with either. Any delicate work makes his hands shake—e.g., picking up tacks or cutting leather; to write is hardest of all. This tremor is worse when he is watched, and sometimes is entirely absent. He has less control of the left hand than of the right. His speech is hesitating occasionally; no stuttering nor scanning. His voice is a little thick, and the words slightly slurred; these come to his mind readily enough, "but something in my mouth seems to stop me from speaking." There is distinct paresis of the left side of the mouth. Has noticed no difference in his sexual powers, and has lately become a father. Has had no difficulty with the bowels or bladder. Electrical reactions fairly normal. The following were the results with the constant current of a Stöhrer's battery:—

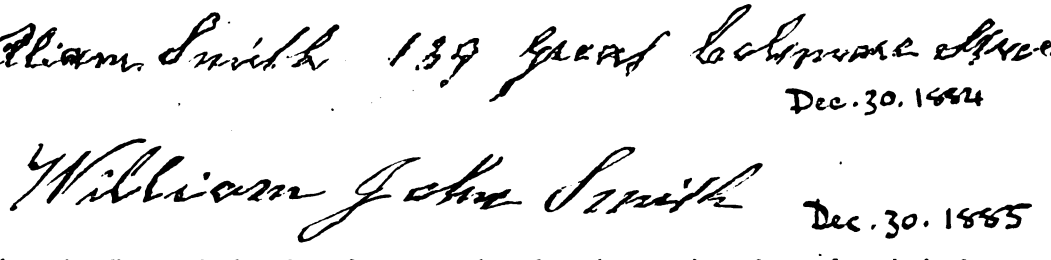
R. extensor indicis—C.C.C. with 10 cells; A.C.C. with 12 cells.
L. extensor indicis—C.C.C. with 18 cells; A.C.C. with 22 cells.
R. tibialis anticus—C.C.C. with 22 cells. A.C.C. with 26 cells.
L. tibialis anticus—C.C.C. with 18 cells; A.C.C. with 24 cells.

He has not been subjected to treatment of any kind since he left the hospital.

Remarks.—Recovery after a rectal temperature of 111° is, as far as I can learn, of extremely rare occurrence in rheumatic fever. The noteworthy points about the pyrexia in this case are, I think: 1. Its steady rise under fairly full doses of salicylate of sodium (140 grains in fourteen hours). 2. Its apparently much more rapid rise on the administration of this drug being stopped. 3. Kairin (144 grains in forty-eight hours), given during a subsequent rise, is noted both by Dr. Russell and myself as having had no appreciable antipyretic action. 4. Large doses of the sulphate of quinine (100 grains in thirty-six hours) acted splendidly as a stimulant, the effect of the first dose of twenty grains being especially marked, whilst none of the ill effects of cinchonism were noted. I believe it was also a very active antipyretic. 5. The employment of cold water, as instanced by the pack on Oct. 4th as well as by the bath, was by far the most potent agent in reducing the temperature. 6. Was the running up of the temperature on Oct. 4th in any way due to the brandy? Did it affect injuriously the thermic centre by dilating its arterioles? It was the first alcohol he had taken since admission. 7. The pyrexia had great persistency. The two attacks of semi-consciousness previous to admission were no doubt attended with high temperature, and it was not until after ten days of antipyretic treatment that the normal was reattained. 8. The pyrexia did not return during his stay in hospital—three months. Morning and evening temperatures were taken.

If I may venture to suggest anything as to the method of employing cold water as an antipyretic, I would say its action is often not sustained for a long enough period. In the present case I was strongly advised to remove the patient from the bath twenty minutes before I did so; I believe I should have acted more wisely if I had detained him in it thirty minutes longer, raising the temperature of the water gradually to blood heat. But the nervous affections form by far the most interesting feature of the case. They were too permanent to be explained as mere functional derangements due to the action of the hyperpyrexia. They must have been the result of some organic lesion, probably an inflammation set up by the rheumatic poison. We know this can widely distribute its influence and attack various regions of the body—e.g., lungs, heart, muscles, joints, skin, &c. It seems remarkable, then, not that the nervous tissue should sometimes be affected, but that this affection should occur so rarely. Briefly these nervous affections may be summarised as follows:—1. Paresis of some of the muscles supplied by the twelfth, ninth, and seventh cranial nerves on both sides of the body. 2. Some loss of the motor and coördinating power in all the limbs, but chiefly in the left arm and right leg (cross paralysis). 3. An alteration of the temperature sense. 4. A lessening of the liability to catch cold. A diffused inflammation of moderate intensity occupying the substance of the medulla and lower half of the pons would account for these conditions, and seems to me to offer the most probable explanation of their cause. The changes in the temperature sense, while both that of locality and common sensation remain practically unchanged, are of extreme interest. I cannot help accepting the patient's statements with regard to them as facts, for he is a man of great intelligence and volunteered them to me unasked. I can offer no simple explanation of their somewhat contradictory nature, and have no space in which to discuss vague probabilities. My own inclination is to suppose a thermic centre (as advocated by Maclagan) with special centripetal nerves, that this centre is functionally and anatomically closely related to the vaso-motor centre, and that it has been morbidly altered by the same inflammation which I believed produced the other nervous affections. Disturbance of a thermic centre will also account for the hyperpyrexia. In favour of this view that hyperpyrexia is due to an organic lesion, it must be remembered that this symptom, when it occurs, is by no means a transitory one. In the present case the tendency existed for ten days, notwithstanding energetic antipyretic measures, and in the case reported by Mr. Teale[1] a temperature never below 108° lasted for seven weeks. In fact, in cases which recover it has nearly always been a symptom of considerable duration. It is true that in the majority of the reported cases it has only existed for one or two days, but this is because the death of the patient gave it no chance of continuing longer. Again, in all the cases of which I can find complete records, other definite signs of bulbar mischief exist. This lends additional likelihood to the suggestion that hyperpyrexia itself may be due to lesion of the medulla.

Specimens of the Patient's Handwriting at dates stated.



Not much weight can be attached to the absence of any observable nervous lesion post mortem in Dr. Ringer's cases;[2] in fact, such could hardly be expected, since in the longest instance hyperpyrexia only lasted some forty-eight hours. Besides, no one at present could receive the most carefully proved post-mortem negation as an absolute one. The post-mortem examination on Dr. Bristowe's piquante and redoubtable "Marion"[3] (who had ophthalmoplegia externa, right hemiplegia and anæsthesia, epileptiform attacks, &c.) made all those who had watched the aberrant manifestations of her life ask with increasing scepticism the question of jesting Pilate, for the most painstaking investigations of Dr. Hadden enabled him to discover nothing worthy of the very least of them all.

My lovingly esteemed master, Dr. Russell, was about to publish this case himself when death took him from us; many of the most valuable notes are in his handwriting, and for these I am indebted to his son, my friend, Mr. James Russell.

[1] Trans. Clin. Soc., vol. viii., p. 98.
[2] Medical Times and Gazette, Oct. 5th, 1867. [3] Brain, Oct. 1885.

THE ACCIDENT TO MR. WILLIAM ADAMS.—We are glad to learn that the accident which happened to Mr. William Adams at the Colonial and Indian Exhibition last week is of a less serious nature than was thought probable. The wound in the hand is healing rapidly, and is not likely to result in any permanent injury.

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ON A CASE OF LITTRE'S HERNIA.

BY JOHN H. MORGAN, F.R.C.S.ENG.,
ASSISTANT-SURGEON TO CHARING-CROSS HOSPITAL.

IN a paper on a New Form of Hernia published in the "Mémoires de l'Académie Royale des Sciences" in 1700, M. Littre described a condition of incarceration of intestine which had not been previously recorded, except by Hildanus in 1598. Littre's attention was first attracted by the case of a stout man, aged forty-eight, who died suddenly with a hernia in the left groin. He found a part towards the end of the ileum arrested in the sac of a hernia, which could not be easily withdrawn, although not adherent. The whole circumference of the intestine did not form this hernia, but only the portion opposite to that which is immediately attached to the mesentery. Thus the continuity of the canal was not interrupted. There arose also a lengthening of that part of the intestine engaged in the ring, so as to cause the formation of a sort of appendix of conical shape with a large base below, and communicating at its upper part with the cavity of the ileum. Its thin walls and fine vessels showed it to differ in structure from a naturally formed appendix. In a second observation, he found in a man who died of fever, aged thirty-four, a hernia, not strangulated, formed by an appendix of the ileum, which alone was engaged in the ring, whilst the rest of the circumference of the body of the intestine remained free. A third instance is related of a man with a tumour in the left groin, of which he died in five days. This it was difficult to recognise as a hernia, since the man had no distension and was hardly inclined to vomit. Owing to decomposition, the parts did not reveal the exact state, but probably the same condition existed as in the other two cases. Among other causes for strangulation of these herniated appendices are the thickness and weight of the material which accumulates in them, which are unable to regain the continuity of the gut through the narrow opening, and are unaided by the intrinsic muscles of the appendix, which have lost power from distension, or by the extrinsic forces of the abdominal walls, which can no longer act upon them. The condition, then, which Littre described, but which has since acquired a rather loose signification, is one in which a section of the gut is forced into a hernial opening and, becoming distended and enlarged, forms a distinct appendage. The condition has been frequently described, and is not one of very uncommon occurrence. The strangulation of this part is very frequently followed by gangrene, owing perhaps to the delay which may ensue from the difficulty of recognising the condition and the anomalous nature of some of the symptoms. That gangrene is not necessarily the cause of a fatal issue, and that this may ensue from other causes, are shown by the following case, which is one of considerable interest and instruction.

I was asked by Mr. Humphry, of St. George's Dispensary, to see with him an elderly woman, who stated that her age was sixty-four, although she looked even more advanced in years. She stated that she had been a domestic servant, and had generally enjoyed good health. For some two or three years she had been losing flesh, during which time she had been of constipated habit, for which she had resorted to aperient medicines. At various times she had passed blood per rectum when at stool, but never to any great amount. There was no family history of phthisis or of malignant disease. Seven days prior to my seeing her, finding herself constipated, she took her usual remedy, which was followed by an action of the bowels, and this was again succeeded by a more obstinate constipation. She was treated at first with purgatives, and subsequently by enemata. Nothing, however, had passed with the exception of some blood in streaks and mucus, which was accompanied with tenesmus. She had vomited a little dark material, which was not stercoraceous. There was some pain, constant but by no means urgent, referred to the umbilicus. There was no hiccough. We found the patient lying on a rough bed in an underground ill-lighted room, and in a very feeble condition. Her emaciation was extreme, so that, in the words of the registrar's report, the body appeared free of all fat. She was sent by my advice to Charing-cross Hospital, where she was seen by myself and colleagues the same day. Her condition was one of extreme feebleness and exhaustion, but the more thorough examination which was available under these circumstances revealed the fact that there was no local tenderness at any part. The abdomen was moderately distended and tympanitic; no peristaltic action of the intestines could be observed. Nothing could be detected at any of the usual sites of hernia, but a large flaccid protrusion of the vagina evidently containing intestine, and at the apex of which could be seen the minute os of a very atrophied uterus, passed from out beyond the labia. This was reducible with the simplest pressure, and it seemed evident that nothing in the condition of its contents was giving rise to the symptoms. The walls of this protrusion as well as the labia were covered with dry crusts of secretion, which had in some places come away, exposing small weeping excoriations. No tumour could be detected in the abdomen, and palpation gave rise to no pain, nor was there any indication as to the seat of mischief. Her eyes glistened brightly, but there was a marked facies Hippocratica. Such was the state of collapse that no operative measures could be undertaken. She was ordered a pill containing opium and belladonna, and if she improved an injection was ordered to be administered. Her temperature was 97° and pulse 92. No flatus was passed per rectum. On the following morning the temperature was 98° and the pulse 100. She was somewhat less feeble and complained of no pain. She had twice vomited, and though the material thrown up was only suspiciously stercoraceous on the first occasion, it was undoubtedly so on the second. I again carefully examined the abdomen, but with a negative result. I observed, however, a very slightly enlarged gland about the middle of Poupart's ligament, which had not been noticed the previous day. This might be due to an excoriation of the corresponding labium, but in view of the symptoms I carefully examined the femoral region for any sign of hernia, which, owing to her great emaciation, might be expected to be manifest, however small the protrusion. No sign either of tenderness or of difference from the corresponding region could be detected. Nevertheless, I felt strongly tempted to cut down and explore the femoral region; but after consultation with my colleagues, and after giving due weight to all the previous history and the present symptoms, I determined to cut down upon the colon in the right lumbar region, and, should this be found empty, to perform laparotomy and seek the cause of obstruction. This was accordingly done; the colon was immediately found, but its collapsed condition showed plainly that the obstruction was situated above the commencement of the larger bowel. No time was lost in closing the wound after the bowel had been examined, and no blood was lost; but it was evident that the patient would not bear any further operation, and I was obliged to relinquish the hope of relieving her. She was sent back to bed, and died the following morning.

Necropsy.—Lungs œdematous at bases and emphysematous throughout. The left ventricle of the heart was hypertrophied, the muscular tissue soft and flabby. Abdomen: The upper part of the small intestine down to within ten inches of the cæcum was distended with flatus. At this portion a very small portion of the circumference of the gut had passed into the femoral canal on the left side, where it was impacted and fixed. There were no adhesions; the herniated portion was very slightly discoloured, and showed no sign of becoming gangrenous. The lumen of the gut was continuous, but the part beyond was collapsed and smaller than that above. There was also a number of coils of small intestine in a pouch behind the uterus, which was prolapsed beyond the labia. There was no peritonitis. The uterus was exceedingly atrophied, and the os would hardly admit the point of a hairpin. There was advanced rheumatoid arthritis in both hip-joints.

The diagnostic symptoms which Littre gives as distinguishing this form of hernia are—(1) that the patient regularly discharges his motions, since there is no interruption to the continuity of the canal; (2) that there is seldom hiccough, and vomiting is less frequent than in ordinary herniæ, and never stercoraceous; (3) that the abdomen is neither large nor distended; (4) that the tumour increases more slowly and never attains a large size; and (5) that the inflammation, pain, fever, &c., take longer to show themselves, and are less violent. With regard to the first of these symptoms, it could be gathered from the woman's account that, as far as previous history went, there was good reason to suspect malignant disease. To this explanation her age,

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the extreme emaciation, the habitual constipation becoming more and more pronounced, and the passage of blood and mucus all seemed to point. Hiccough was never present, and the vomiting did not occur till late in the period of illness, and was only stercoraceous on the day preceding death. At no time was the abdomen distended or painful, and, though not stated by the patient or those around her, it is to be presumed that flatus made its escape through the continuity of the gut. There was no tumour to be found at any period; and the only indication of anything like inflammation was the slight enlargement of an inguinal gland on the second day of her being in the hospital, which might readily be attributed to the excoriation of the labium. Strong as were the probabilities of hernia, this was the single indication as to its possible situation.

The intense collapse of the patient was a restricting influence as regarded operations, but under the circumstances there were three proceedings which might be undertaken: (1) herniotomy in the left femoral region; (2) laparotomy and exploration of the abdomen and its contents; and (3) colotomy, on the presumption that a malignant stricture existed in some portion of the large intestine. The first of these measures I rejected, though with some reluctance, since the indications, not so much of hernia as of its site, if existent, rested upon very slight foundation. Had it been adopted, the condition of the parts makes it probable that the herniated segment of gut, even if detected, could hardly have been satisfactorily dealt with. The second proceeding would, I think, have been the proper course to adopt in a patient less exhausted, or in a younger person suffering from similar symptoms. By following up the collapsed intestine, and thus ascertaining the cause of obstruction, a very slight force would have sufficed to draw the small herniated portion of gut out of the femoral canal. There must, however, even with the greatest care, be a certain amount of shock attending any such operation; and there is little reason to suppose that the patient could have borne such a proceeding, as shown by the result of the milder measures which were adopted. I was driven, therefore, to resort to the proceeding which had at least the merit that it offered less shock to the patient, and if successful would afford a chance of present relief and possibly of prolonged comfort.

NOTES OF CASES OF

PUERPERAL CONVULSIONS TREATED WITH PILOCARPINE.

BY JAMES MURPHY, B.A., M.D., &c.,
LECTURER AT THE UNIVERSITY OF DURHAM COLLEGE OF MEDICINE, AND SURGEON TO THE SUNDERLAND INFIRMARY.

IN connexion with the case of successful treatment of puerperal eclampsia by pilocarpine recorded in THE LANCET of April 3rd by Dr. Horrocks, the notes of the following cases may prove of interest.

CASE 1.—On Nov. 27th, 1885, Dr. Prowde asked me to see Mrs. C——, aged thirty, at the Sunderland Workhouse. She was admitted on Aug. 20th, and was eight months pregnant with her first child. A month before I saw her she showed signs of œdema, and this continued till Nov. 27th, when she was seized with violent convulsions, which recurred every twenty minutes, and then she at once lost all consciousness and could not be roused in the intervals between the fits. Her breathing was markedly stertorous; her pulse 120, hard and wiry; her face, trunk, and extremities very much swollen; and the small quantity of urine removed from the bladder became almost solid on the addition of heat and nitric acid. The cervix was hard and had not been taken up; the os would admit a No. 12 catheter; the vagina was dry; and, in fact, there was no sign of labour. A third of a grain of pilocarpine was at once injected beneath the skin of her arm; within two minutes saliva commenced to pour out of her mouth, necessitating the use of a tin vessel to catch it in; and within five minutes she was in a profuse perspiration all over her body, the drops standing out on her forehead and chest like large beads. She had a slight convulsion shortly afterwards, which was the last she had, and obviously the question at once presented itself, Should labour be induced or an expectant treatment followed? After anxious consideration, Dr. Prowde and I decided that it would be hopeless to permit pregnancy to continue in a completely water-logged woman, quite comatose, who had already had some twenty convulsions, and with her breathing and pulse as mentioned. The cervix was accordingly gently dilated with the finger, a Barnes's bag introduced, then another, and so on till the os was fully dilated, which occupied a little over two hours, when Tarnier's new forceps was applied, and a living male child delivered, chloroform having been freely administered the whole time to prevent muscular movements and to assist the pilocarpine to lessen arterial tension. She continued insensible and almost maniacal for two days, on each of which she had a third of a grain of pilocarpine, which roused her and made her more sensible for some hours, and she then rapidly improved, the urine gradually becoming freer from albumen, till at the end of a fortnight it was normal, and at the end of a month, thanks to Dr. Prowde's skill and attention, she and her child left the workhouse, both quite well. She had suffered for many years from right facial paralysis and slight deafness on the same side, which were in no way affected by the attack or the treatment.

CASE 2.—On March 6th, 1886, Dr. Coatsworth Watson sent me an urgent message to come to assist him with a lady, aged twenty-eight, who had gone a fortnight beyond her calculated time with her first child. She had spent an excellent pregnancy, and on this day had been out for a walk, but complained very much of headache, and latterly had some swelling of the legs. An hour before I saw her she was suddenly seized with a convulsion, and lost all consciousness. On Dr. Watson's arrival he at once administered chloroform, without producing any effect on the convulsions, as (though I was summoned by telephone and arrived very shortly after him) she had had four fits during its administration, and as I entered the room was in one of the most violent convulsions I have ever witnessed, and appeared to be on the point of death. A third of a grain of pilocarpine was quickly injected, which acted rapidly, and she had no more convulsions during her labour, but it was deemed safer to continue the chloroform; her pulse was almost imperceptible, ranging from 140 to 150, and her breathing stertorous. On examination, the head was found well down in the pelvis, and the os thin and of the size of a shilling; an ounce of urine was drawn off highly charged with albumen. Having rapidly but carefully discussed all the circumstances of the case, Dr. Watson and I decided to at once rupture the membranes, and to introduce the largest sized Barnes's bag, which, as the pains were very strong, was expelled in about twenty minutes, when Tarnier's new forceps were applied and a dead male child delivered. Two hours later a second third of a grain of pilocarpine was administered as a prophylactic, and all went on well for twenty hours, when she had a slight convulsion, necessitating the administration of a third dose of pilocarpine, after which Dr. Watson placed her on a mixture of jaborandi, which in a few days was changed for tincture of the perchloride of iron and spirit of nitrous ether, and under his skilful and judicious care she made a speedy and excellent recovery, the albumen disappearing on the fifth day.

CASE 3.—On April 14th, 1886, Dr. H. Shapter Robinson kindly asked me to see a primipara, aged twenty-one, whom he had attended ten hours previously in her first confinement, all going on well. Shortly after he left the house convulsions set in, and occurred every half-hour up to the time of our visit, when we found the patient in a dazed condition, with widely dilated pupils; but she could be roused to answer questions fairly well. A third of a grain of pilocarpine was at once injected into her arm, and in a few minutes the characteristic salivation and diaphoresis occurred; and with the exception of one slight convulsion afterwards all went on well under the able and efficient treatment of Dr. Robinson, who, on the occurrence of the last-mentioned convulsion, injected a second dose of pilocarpine. Mother and child continue in excellent health.

This case makes the sixth that I have treated with pilocarpine, the first five being very severe cases; and I am thankful to say all the mothers made excellent recoveries, and four of the children were saved and are now alive.

My first case occurred in my own practice on March 30th, 1883: a multipara aged thirty-nine, in her tenth pregnancy. She had nine convulsions before being seen, and was comatose and œdematous. The urine contained a large quantity of albumen. One-third of a grain of

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pilocarpine was administered every six hours. Labour came on twenty-four hours after the first visit; child dead. The mother became conscious next day, and rapidly recovered. My next case occurred on June 6th, 1883, in a patient of Mr. Morgan's, a multipara, aged twenty-eight, seven months pregnant. She had thirty-three convulsions. The urine contained a large quantity of albumen. Chloroform and other remedies failed. One convulsion only occurred after the administration of pilocarpine. Pregnancy went on to normal length; living child. These two cases are recorded fully in the *American Journal of Obstetrics* of December, 1883, and an analysis of the urine in the second case is given, showing how the urea was diminished.

The third case occurred on March 27th, 1884, and is recorded by Dr. Ridley Dale in the *Medical Press and Circular* of April, 1884. The urine was very much reduced in quantity, but at the onset there was no albumen, which, however, appeared in a few hours. Pilocarpine having been administered, the convulsions ceased; but they returned next day, when the drug was again administered, with cessation of the convulsions. Both the mother and child did well.

These six are the only cases of eclampsia I have seen during the past three years, and in their treatment pilocarpine has acted so satisfactorily as to leave little to be desired.

THE CASE OF EDWIN BARTLETT.

MERCURIALISM; DEATH FROM LIQUID CHLOROFORM; NECROPSY.

By ALFRED LEACH.

(*Concluded from p. 970.*)

THE remaining peculiarities of the patient are grouped in the following account of my twenty-two days' observation. The general condition on Dec. 10th is given at the beginning of this article. In my notes of Dec. 12th to the 16th the following passage occurs: His physical symptoms rapidly improved; but his spirits did not. He said his gums pained him, and that he could not obtain any sleep whatever. Bromide, opium, and injections of morphia (seven minims thrice a day) were almost without effect; bromide of ammonium in one-scruple doses or more he repeatedly declared irritated him and made him restless. The bowels were acting regularly, and he was taking food. The dulness to percussion over the region of the abdomen suddenly shifted from the left iliac to the right lumbar region, and a swelling as large as a hand accompanied it, but disappeared in a day or two (phantom tumour?). On the 17th *et seq.* he suffered from "wind," and a mixture of carb. veg. c. confec. rosae found favour with him. When advised to go for a drive he declared it would kill him; he liked "to lie still and feel happy." His spirits were better, and he engaged in conversation. He began to talk about his return to business, his movements and plans for the future, but always a remote future; for the present he could not be persuaded to leave his bed. He had his stumps drawn with a view to having a set of false teeth made later on. He thought about his health unduly, exaggerated his alleged weakness, but did not expatiate on any special trouble or fix his mind on any individual organ or symptom. He could not be said to be anxious about his condition; he was contented to think it bad. He blandly inquired: "Can one be as bad as I and yet survive"? He adopted the inference with prophetic apathy. He emerged occasionally from his usual reserve, but still shyly, to bestow praise on absent persons, or, more timidly, on persons present. He expressed to his wife unbounded confidence in his doctor, and occasionally said he "knew the doctor would cure him." He was depressed by trifles, but never angered by anything. He was passive under treatment, and did what he was told, provided it involved no great effort. He would smile, but seldom laugh. When alone with his wife he was said to weep bitterly for more than an hour at a time, and said he did so "because he felt so happy." He said the world was very good to him. He gave one the impression of suffering from partial paralysis of the will and emotional ataxy. His wife remarked in his presence, "You would not think, seeing him now, that he rules a staff of *employés* kindly and considerately, but with unequalled firmness." By all accounts this was perfectly true. He was a sound man of business, "talented" one might say, very straightforward, and strictly honourable. Drawn into conversation on his hobby, he would brighten up amazingly, and afford interesting information on the laws of demand and supply, of imports and exports, down to the minutiæ of the grocery business. With him trade was a profession. On Dec. 18th he acknowledged that he was getting better, but he and his wife requested me to bring in a physician to witness the fact, giving as reasons that family disturbances and dislikes existed. The only reproachful word I ever heard him utter was on this occasion, when describing the part played by certain of his relatives. Asking for the consultation, he rose in his bed excitedly, saying, "I do this for the protection of my wife." On the 19th Dr. John Gardner Dudley visited him with me, and has kindly permitted me to transcribe and abridge portions of the notes he made on the occasion. "*Condition:* I found the patient lying in bed in an easy position and apparently free from discomfort. He had a depressed mental appearance, and looked at me through his eyelashes, his eyelids being half closed. He said he was quite free from pain, excepting that his gums were very uncomfortable from having had teeth extracted. He said he kept his bed because he preferred it to sitting up, and that he had been much overworked, mentally and bodily, and required rest and sleep. He also said he had not slept well for a considerable time, and scarcely at all the last few nights. I found his gums much inflamed and spongy; the edges were ragged. His tongue was large and flabby, and indented by the few teeth he had left, and was very slightly coated. His bowels were acting regularly; his urine was normal; his temperature normal; his pulse 80, and of moderate volume; chest and abdomen normal. I told him he was a sound man, and that he ought to sit up and go out daily for a walk or drive. We prescribed fifteen grains of hydrate of chloral, fifteen grains of bromide of ammonium, and twenty minims of solution of hydrochlorate of morphia, to be taken at bedtime, and repeated in four hours if necessary. Also a tonic mixture containing acid, nux vomica, and taraxacum, to be taken at 11 A.M. and 4 P.M. daily."

Dr. Dudley's notes also mention, among facts that struck him, the wife's solicitude and attention—a remark that has my fullest concurrence; a kinder, more tender, more patient, or more self-sacrificing nurse could not have been wished for. Beyond making a mental note of this fact when I began my attendance, I very naturally took little further notice of the Bartletts' bearing towards each other; but I distinctly remember at first receiving an impression that there was something unusual, something unfamiliar to one's everyday experience, in their behaviour one to the other—a freshness in their affections, if I may so express it, together with a reserve in their approaches. I jumped at the very inappropriate conclusion that they were newly-married people, and thought no more about it until I was informed of the non-existence of sexual relations between the parties. I was unprepared when in the witness-box to detail the several cogent reasons I have for accepting in the main this statement, and I am not at liberty to give them here; their suppression was and is of no moment, and many medical men have already, by drawing independent conclusions, accepted the statement as possibly true. I have grounds, too, for believing that the patient was not devoid of moderate sexual appetite, though its gratification was not permitted to conflict with his marriage compact. Specially examined after death, his genital organs were found normal. I protest strongly against the supposition, unwarranted by any evidence whatsoever, that the deceased was a victim to a degrading secret vice.

On Dec. 21st, when his teeth were extracted, a peculiar and suggestive circumstance occurred, which tends to throw some light on the man's character. He had a firm belief that he could not be brought under the influence of "laughing gas," because in former years medical men and dentists had failed to produce anæsthesia in him by its aid, and had told him he "could never be brought under." I resolved to avail myself of the peculiarly impressionable nature of the patient and his unreasoning belief in my powers; so, after preparing his mind by a discourse upon the voluntary abolition of painful sensations and a mystical manipulation of a camel's hair brush saturated with cocaine, I informed him that he could no longer experience any sense of pain in his lower jaw. I placed him in position, signalled to the dental

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surgeon to commence operations, and treated the patient to a clinic somewhat in this style: "Now, what you feel is merely a sense of chill from contact with a metal and absolutely painless. Lie still and keep the mouth open. Now you feel the teeth painlessly dropping out from the insensible sockets, and it does not hurt you in the least. The sensation is almost pleasurable." The four lower incisors had flown out, and the patient had kept his eyes inquiringly fixed and never winced. He was puzzled to say whether he had suffered or not. Ordinarily he could not bear to have his gums or teeth touched by his own or other person's finger. I have never practised this pious fraud before, and am doubtful whether I shall ever meet with another case in which it will bear repetition. Ten days later, when his left lower canine required removal, I was lacking in faith enough to resort to it. I could not cajole him into a resolution to go out of doors, but he managed to get out of bed and totter about the room. His wife on several occasions told me before him, "He still talks about dying and not recovering." He would not explain his reasons. She also said that he slept a good deal better than he thought he did. He consented to go to Torquay, but postponed his departure *sine die*. He and his wife both protested against a diminution of professional visits, declaring that he "derived strength" from them and felt weak in the intervals. I was desirous of removing him from both his wife and myself, but he persisted that strangers would not understand his complaint. He would not have a nurse. His wife still sat up all night, or took short sleeps on the sofa or in the arm-chair by his bed, and, when remonstrated with, she declared in his presence that he would not compose himself or rest unless she sat by holding his foot, and when she was absent from her post he would leave his bed and wander. By day he showed no such inclination. He was now obtaining some sleep, had lost no flesh, his muscles were firm, and his countenance more cheerful. One morning he told me that, being unable to sleep and feeling exhausted, he had risen from his bed and stood for two hours with his arms outstretched over his sleeping wife, and "felt her vital energy entering his finger tips," after which he slept. His urine at this time was slightly acid, sp. gr. 1010, otherwise normal. On the 23rd he was much perturbed from having passed the lumbricoid worm. On the 26th he confided to us his belief that he was mesmerised, and that he and his wife were alike victims to the mesmeric influence of a friend whose acquaintance they made some months previously. The only explanation he would afford as to the symptoms was that he was doing such strange things—things contrary to wont, usage, and common sense—things he would not do unless he were under mesmeric influence. I have not the slightest doubt he meant the peculiarly Platonic arrangements he had made as to his wife's future. Was this about mesmerism a delusion? I think not; I regard it as a hysterical attempt to render some extenuating account to himself for the absurd folly of his own proceedings. I was able a day or two later to successfully argue him out of his mesmeric theory. I believe no argument reaches an insane delusion. On the 28th I took him by surprise and insisted upon his going a drive with me while I went my rounds. It was genuine alarm and misgiving he showed as, muffled up from head to foot, he was assisted downstairs by two people. On his return he ran upstairs quite lightly, and the next day went a drive with his wife. On the 30th I did not visit him. On the 31st he had a tooth out under gas. On his return home he ate a good supper, ordered an extra allowance of breakfast for the next morning, and soon after midnight died from swallowing chloroform. His wife fell asleep about midnight in her usual place, holding his foot, and on awaking was struck, but not alarmed, by the peculiarity of his breathing. She awoke again about 3 A.M. or later with a cramp in the arm holding his foot; and, seeing his face buried in the pillow, she proceeded to place him more comfortably, but found him apparently dead. She tried to revive him, applying brandy, &c. On arrival at 4.30 A.M., Jan. 1st, 1886, I found the corpse lying on its back, forearms and hands on the abdomen, legs semi-flexed and everted, the parts of the thorax lying uppermost quite cold, the hottest parts of the back being below 95° F; eyelids partly closed, pupils half dilated; tongue very white; no smell whatever in the mouth, and no froth; rigor mortis absent. Dead about three hours (?). There was no trace of any struggle, and no poison in the vicinity of the corpse (a very careful search for [illegible] was made). Cause of death unknown. I have subsequently discovered by experiments that liquid chloroform whitens the epithelium of a furred tongue, especially a "smoker's tongue," while its rubifacient effects are alone discernible in a glazed or clean tongue. In the corpse and in the living body the white appearance is lost in five or six hours.

The necropsy was performed on Jan. 2nd at 2.30 P.M., about thirty-eight hours after death, by Dr. T. H. Green (from whose notes I am kindly permitted to quote), assisted by Dr. H. M. Murray. Present: Dr. J. G. Dudley, Mr. W. W. Cheyne, F.R.C.S., and myself. Body well nourished; on the abdomen much cutaneous fat of deep-yellow colour. Rigor mortis present. Heart: On opening the pericardium nothing abnormal; heart, on removal, normal in size; muscular tissue a little flabby, probably from post-mortem causes; valves healthy; tiny patch of atheroma at root of aorta; the post-mortem staining of the lining membranes of the cavities and large vessels abnormally deep; blood in cavities dark and quite fluid. Lungs and pleuræ normal. Liver, spleen, kidneys, mouth, pharynx, trachea, and upper part of œsophagus normal. Œsophagus at its lower part abnormally vascular and irregularly denuded of its epithelium. Stomach: Nearly an ounce of contents, consisting of a brownish grumous liquid, varying in consistence; the more solid portions are paler in colour, and look something like thick mucus; smell strong, pungent, ethereal odour, resembling a combination of chloroform and garlic. At the cardiac end of the stomach the mucous membrane is of a dusky pink colour, which, to the naked eye, looks uniform, but under a lens there is a distinct punctiform and capillary hyperæmia; the surface is covered with an abnormal amount of thick tenacious mucus or lymph; at what appears the most dependent part there is a patch about the size of a five-shilling piece, where the mucous membrane presents a rough irregular appearance, as though it were partly destroyed; here the membrane is more easily removed by the finger-nail than elsewhere. In other parts of the cardiac end the mucous membrane is not easily removable. The pyloric end of the stomach is of a pale-greenish colour, covered with a tenacious mucus, but otherwise normal. Intestines: The contents present the same peculiar odour in a less marked degree and less pungent. Some small pieces of what appears to be mango chutney were found in the whole length of the intestines, and one or two pieces were observed in the stomach. The mucous membrane is normal. The large intestine contains much fæcal matter. Head: On removing the calvaria, the dura mater was found abnormally adherent. With exception of rather more post-mortem staining than usual, the surface of the brain presents nothing abnormal. A careful examination of the brain throughout failed to reveal anything abnormal.

On Jan. 6th I excised the lower jaw, the tongue, and surrounding parts (subcutaneously), and made a section of the incisor region. The edges of the vacant sockets were blackened to the depth of one-sixth of an inch; the rest was healthy. The alveoli contained decomposing matter. Dr. T. Stevenson, the Government analyst, found 11½ grs. of pure chloroform and a trace of alcohol in the contents of the stomach. A considerable evaporation had taken place before these reached him. He found unimportant minute traces of lead and copper in the substance of the lower jaw. The stomach, jaw, and tongue were the only parts sent for analysis.

The general opinion seemed to be that the patient had met with his death by about an ounce, or probably less, of chloroform finding its way into the stomach. The unsolved problem is, Did he take it as a soporific, an anodyne, or as an instrument of suicide? Did he, acting upon impulse, take it with no well-defined purpose whatever, or did he (and I have a leaning to this view) take it in sheer mischief with the intention of alarming by his symptoms the wife who an hour or two previously had talked about using it in an emergency? The problem in diagnosis is: What was he suffering from: melancholia, hypochrondriasis, or hysteria—one or more of them? The loss of flesh, the aversion to food, the urine loaded with urates, the inactive skin and liver, the obstinately inactive bowels, the overwhelming and persistent gloom of melancholia, were absent in this patient, who "liked to lie still and feel happy." On the other hand, we miss the eagerness of the patient to describe his ills, the anxiety to interpret special symptoms, the desire for recovery, the greed for medical literature, and the inevitable bundle of former prescriptions that stamp the hypochondriac. But what symptom of hysteria is absent?

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A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

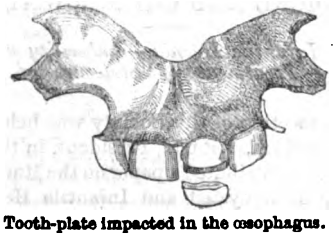
ST. THOMAS'S HOSPITAL.

TOOTH-PLATE IMPACTED IN THE ŒSOPHAGUS; SUCCESSFUL REMOVAL BY ŒSOPHAGOTOMY; REMARKS.

(Under the care of Sir WILLIAM MAC CORMAC.)

IT is now generally conceded that the treatment of foreign bodies impacted in the œsophagus, where unsuccessful attempts have been made by the use of forceps &c. to extract them, should be by an operation—œsophagotomy,—as in the following case. Here, as will be seen from the diagram illustrating the case, the plate with very irregular and pointed projections had become fixed, and resisted all attempts to remove it. The operation has been a very successful one when undertaken before the advent of inflammation or suppuration about the œsophagus; the chief danger appears to be in delay. The point in the treatment to which Sir William draws attention in his remarks (the closure of the œsophageal wound by suture) is one which will probably be generally adopted in similar cases, as it presents considerable advantages. The notes of the case have been taken by Mr. Cameron Kidd, house-surgeon.

The subject of this accident was a woman, aged thirty-one, of healthy appearance, but subject to epileptic fits since childhood. During one of these fits, which took place on Sunday morning, March 14th, the patient swallowed a set of artificial teeth, consisting of a silver plate to which five teeth (four incisors and one premolar) had originally been attached, but one of these (the premolar) had been



Tooth-plate impacted in the œsophagus.

broken off some time before the accident occurred. (See engraving.) When the patient regained consciousness she had some difficulty in breathing and swallowing, and then discovered what had happened. She immediately consulted a doctor, who gave her an emetic, which caused her to vomit without moving the plate, and an attempt to extract them with forceps was made without success. She was then advised to apply at St. Thomas's.

On her arrival at the hospital two hours after the fit, there was no difficulty in breathing, but there was considerable pain on drinking. An œsophageal bougie, carefully passed to ascertain the position of the foreign body, became arrested at a point six inches and a half from the edge of the teeth. The patient said she could feel the tooth-plate from the pain it caused, which she referred to a spot an inch below the cricoid cartilage. Mr. Battle made repeated and prolonged efforts to extract the foreign body by means of œsophageal forceps of various kinds. The plate was repeatedly grasped by the forceps, and as much force used as was thought justifiable, but all attempts to disengage it failed. Some slight hæmorrhage followed. During one attempt half a tooth was broken off and was extracted. The plate was evidently flattened against the posterior wall, as the forceps went past it, and it could only be grasped when they were withdrawn a short distance and passed again with the blades open. The patient, who was admitted on March 14th, was seen by Sir William Mac Cormac at 7 P.M., but as there was no dyspnœa or other urgent symptom, it was decided to postpone any further action until the following day.

March 15th.—The respiration is quite easy, but the patient cannot swallow anything, even a small quantity of liquid, and she expectorates the saliva. She complains of severe pain just below the cricoid cartilage, and at the back of her neck. There is some cough.

Operation.—As every possible effort had been made to extract the body by the mouth without success, further attempts in this direction seemed unadvisable. The plate was of very irregular form, with sharp angular projections at each side. It was evidently very firmly lodged in the tube, and was not likely to be extracted without danger of tearing the œsophagus, entailing very serious risk. Sir William therefore decided to perform œsophagotomy, the position of the foreign body being distinctly made out by the bougie and forceps, although nothing could be felt in the neck externally. At 2 P.M., the patient being under the influence of chloroform, the œsophageal forceps was passed and the foreign body again plainly felt at the same point as before. An incision about four inches long was therefore made along the anterior border of the left sterno-mastoid muscle, extending downwards to within half an inch of the sternal notch. The superficial tissues were divided until the edge of the sterno-mastoid muscle was reached, and the edges of the wound retracted. The anterior jugular vein, which was somewhat larger than usual, gave some trouble at this point, but was finally drawn inwards with the thyroid body. Several veins required division after the application of a double ligature. The carotid sheath was exposed, the omo-hyoid muscle cut through, and the artery and vein drawn outwards by the finger of an assistant. After dividing about half of the sterno-hyoid muscle and drawing the thyroid body well over towards the middle line, the œsophagus was exposed, but even then the foreign body could not be felt through its walls. It was feared it might have passed into the stomach. The forceps were again passed through the mouth, but even with them the foreign body was not distinctly felt. As, however, the probabilities were strongly in favour of it not having shifted from the position it occupied before the operation, a longitudinal incision about three-quarters of an inch long was made upon the end of the forceps, and when the lips of the incision were held apart the plate was at once seen closely impacted against the posterior wall of the œsophagus. It was readily seized with a pair of forceps and extracted without difficulty. It was now decided to close the œsophageal wound. An ivory-balled probang was passed to cause the tube to project somewhat, and the edges of the incision were united with three catgut sutures. The external wound was disinfected with a 1 in 1000 perchloride of mercury solution. Two drainage-tubes were inserted, and the margins of the skin united with silk sutures. There was very little bleeding throughout the operation. The wound was dressed with iodoform, salicylic wool, and gauze bandages. The patient was ordered to be fed by the rectum, and not to have anything by the mouth.

March 16th.—On the wound being dressed this morning, it looked well and there was no puffiness. Patient had a nutrient enema at 12 A.M., and a similar one has been ordered every four hours. She has taken nothing by the mouth, and expectorates her saliva. Slept well; no pain. The temperature rose after the operation to 101°, and is now (9 A.M.) 100·4°; at 9 P.M. it was 98·4°.

18th.—The stitches were taken out and the drainage-tube removed. The wound was looking very well. The patient could now swallow her saliva and she was allowed a little milk, which she swallowed easily and without any pain. Nutrient enemata discontinued. Temperature A.M. 99·4°; P.M. 100°. There has been no regurgitation through the wound.

20th.—Last evening some milk came through the wound after drinking. The patient did not mention the fact till this morning, as she was afraid her supply of milk would be stopped. She is a restless, irritable woman, and dislikes the feeling of thirst. On taking off the dressings and giving the patient milk to drink, some came out of the lower end of the wound, which was perfectly free from inflammation and had healed, except at the spot above and below where the drainage-tubes had been placed. The nutrient enemata were ordered as before and the supply by the mouth stopped. Antiseptic dressings left off. Temperature normal.

22nd.—Wound again dressed; it was looking quite well. On drinking hastily, a little milk came out from the lower

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end of the wound; a small drainage-tube was inserted there. The patient was still allowed to drink milk. The nutrient enemata were discontinued. Temperature, morning, 99°; evening, 99°. General condition excellent.

25th.—The wound is now soundly healed, with the exception of a small place at the lower extremity. No milk has passed through it for the past twelve hours, not even when the patient swallows quickly. Drainage-tube removed.

27th.—Wound completely healed. The patient had an epileptic fit at 4 o'clock this morning.

30th.—The patient was up on the 28th, and went home to-day. There is a linear cicatrix in the neck, scarcely noticeable. She can swallow as well as before, and without pain or inconvenience, even when taking solid food.

The patient was seen about a month later, and was in excellent health. She had been supplied with a new and securely fitting plate.

Remarks by Sir WILLIAM MAC CORMAC.—This patient was only sixteen days in hospital, having made a rapid recovery. The point of chief interest is the closure of the œsophageal incision directly after the removal of the plate. The introduction of the sutures was a little troublesome owing to the depth of the wound, and I consider the partial failure was due to imperfect closure of the incision, from an insufficient number having been passed. Had four or five sutures been introduced in place of three, this accident might probably have been avoided. The milk, however, only found its way into the wound on the sixth day, when the chance of extravasation into the cellular tissues of the neck would be past, and it soon ceased to escape. This practice appears preferable to introducing a tube into the stomach from the neck or mouth and allowing the wound to heal by granulation—at all events in cases such as this one, where there were no inflammatory changes in the parts, and the margins of the œsophageal wound were clean cut, and not bruised.

EUROPEAN GENERAL HOSPITAL, ADEN.

A CASE OF MULTIPLE ABSCESS OF THE LIVER; DEATH; NECROPSY; REMARKS.

(Under the care of Surgeon-Major COLSON.)

THE notes of the following case are by Assistant Apothecary Gardiner.

The patient, J. B——, a seaman, was admitted on March 2nd, complaining of severe pains in the right side. He stated that he was quite well before leaving Bombay (about Feb. 22nd), and was taken ill two days after sailing. He was quite emaciated and exhausted, skin and conjunctivæ yellow, tongue rough and dry. The temperature on admission was 102·8°. There was a good deal of bulging over the hepatic region, with pain and tenderness on pressure. On careful examination the liver was found very much enlarged, with a sense of fluctuation below the ribs. An abscess was diagnosed pointing anteriorly about half an inch below the ribs.

March 3rd.—The patient was placed under chloroform, and an exploring-needle introduced, pus being found. A puncture was made with a trocar, and about eight ounces of pus removed through the cannula. The cannula was retained in the abscess as a means of drainage. Antiseptic dressing was then applied. He was ordered milk, mutton broth, and stimulants.—Evening: Temperature 102·8°. Felt much easier. One drachm of solution of hydrochlorate of morphia to be given at bedtime.

4th.—Temperature 99·4°. Bowels moved twice yesterday. Says he feel comfortable and slept fairly last night. Three grains of quinine given twice. To continue stimulants, &c. Evening: Temperature 101°. Cannula removed and drainage-tube substituted. Morphia draught to be repeated.

5th.—Temperature 99·6°. He slept well last night and feels less pain in the side. Bowels moved three times; light-coloured and semi-solid. Respiration before and since operation has been very slow, numbering between 8 and 12 per minute. Five grains of quinine were given twice during the day.—Evening: Temperature 101·4°. The morphia draught repeated.

6th.—Temperature 97·8°. The bowels were not moved during the night. Slept [illegible] the whole night, and is in[illegible] 68; respiration 14. [illegible] 102; respiration 30. Appears [illegible] during the day, and is [illegible] grains of quinine to be given at [illegible] bedtime. Had passed urine [illegible]

7th.—Bowels moved twice last night, the second motion containing blood and pus. Temperature 99·6°; pulse 104; respiration 22. Five grains of quinine given twice.—Evening: Had three motions during the day, each one containing pus. Temperature 103°; pulse 110; respiration 26. Is very low. To continue support by stimulants, &c.

8th.—Temperature 100·4°; pulse 124; respiration 38. Had two motions last night of the same character as the previous ones. Complains of great weakness.—Evening: Had about ten motions during the day, containing large quantities of pus; some passed involuntarily in bed. Temperature 102°; pulse intermittent and thready; respiration short and hurried. Is in a very low state. He gradually got worse, and died from exhaustion at 1 A.M. on the 9th.

Necropsy.—Liver enormously enlarged, extending upwards on the right side to the level of the fourth rib downwards three inches below the ribs. The left lobe occupied the whole of the left side, extending upwards to the fifth rib and downwards to about two inches below the level of the ribs. Heart and lungs displaced upwards. The cavity of the abscess which had been punctured by the trocar was found well contracted, but posteriorly in the right lobe there were two large abscesses not communicating with one another or the first, and filled with pus; one of these opened into the ascending colon. The liver was not adherent to the abdominal parietes, but no pus had escaped between. The liver weighed 6 lb. 12 oz.

Remarks by Surgeon-Major COLSON.—The non-subsidence of the symptoms after the abscess had been freely opened pointed to another collection of pus. I had fully determined, after an interval of a day or two, to explore for this. The appearance of pus in the stools showed it had opened into the bowel, and I had hopes that the unfavourable symptoms would subside. The result of the post-mortem examination showed that any treatment in this case was hopeless. The previous history of the case is very unsatisfactory. The patient was a German, and talked and understood English imperfectly.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Encysted and Infantile Hernia.—Imbecility with Choreoid Movements.—Treatment of Stricture of Urethra by Electrolysis.

AN ordinary meeting of this Society was held on Tuesday last, Mr. G. D. Pollock, F.R.C.S., President, in the chair.

Mr. LOCKWOOD contributed a paper on the Morbid Anatomy and Pathology of Encysted and Infantile Hernia. After commenting upon the practical importance of the subject and briefly referring to its history, the writings of Hey and Cooper and other authorities were quoted. It was shown that the origin of encysted hernia was usually attributed to the stretching of a cicatricial membrane which was supposed to obstruct the upper end of the patent processus vaginalis. This view was rejected because—1. Such a septum had never been seen and its existence was doubtful. 2. The specimens in the museums afforded no indication that cicatricial tissue had entered into their composition. 3. Because the sac of these hernia was always composed of two layers of peritoneum. 4. Because an examination of the tunica vaginalis showed that it either communicated, in cases of encysted hernia, with the peritoneal cavity, or was simply closed by apposition and adhesion of the walls. Upon these and other grounds it was concluded that the various hernia called encysted belong, [illegible] to the infantile variety. Infantile hernia were observed to be originated by some event connected with the [illegible] tion of the testicle, which was described. It was suggested that the processus vaginalis preceded the [illegible] and that it was drawn along by fibres of the [illegible] which were inserted into it. The usual [illegible] that muscle was mentioned, but additional bands [illegible] described attached to the external [illegible] and tubes [illegible], and others were mentioned [illegible] of the processus vaginalis, with the [illegible] the peritoneum. These bands were described [illegible] cord as the "internal cremaster," and [illegible] the

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looseness of the peritoneum of the back of the abdomen, the way in which it accompanied the transition of the testicle was explained. A band of muscular fibres which passed from the epididymis to the inner sac wall of the infantile herniæ was next described and identified as the upward prolongation of the gubernaculum. These fibres were considered to have much to do with the origin of the hernial sac. The results of the inquiry were: (*a*) That the London museums contain no specimens of encysted hernia such as was usually described. (*b*) That the various specimens designated by that name belong to the infantile variety. (*c*) That the latter owe their origin to the tractive power of the gubernaculum testis.—Drawings of specimens from the museums of St. Bartholomew's, Guy's, St. Mary's, and St. Thomas's Hospitals, as well as various diagrams, were exhibited.—Mr. HOWARD MARSH was not prepared to endorse in their entirety the views put forward by Mr. Lockwood, but so far as he could gather from the paper the arguments seemed sound. He confessed that he had always had some difficulty in understanding how encysted herniæ originated, notwithstanding Mr. Hey's original account of the nature of the hernia.—Mr. LOCKWOOD, in reply, thanked the curators of the various museums who had allowed him to make such free use of the specimens under their charge.

Dr. FLETCHER BEACH read a case of Imbecility with Choreoid Movements. The author recorded the case of an imbecile patient, of fairly high type, aged seventeen years, who, as the result of epileptic fits, lost some power on the left side, and after which continuous spasm of the left hand and arm was noticed. A description of the movements, which ceased shortly before death, was given. At the necropsy the parietal regions of the brain were more resistant than normal, and the occipital convolutions were firm and hard; the white matter of the first temporo-sphenoidal convolution, of the inferior parietal lobule on both sides, and of the occipital convolutions, on a level with the middle part of the lateral ventricles, appeared fibrous. The chief changes noticed microscopically were: (1) great increase in the number of the vessels; (2) distension of many of these vessels; (3) extensive infiltration of the tissue with leucocytes, especially in the perivascular sheaths of the vessels. The case was regarded as one of post-hemiplegic disorder of movement allied to those described by Dr. Gowers (Medical and Chirurgical Transactions, 1876). The difference between the symptoms noticed in athetosis and in the disease under consideration were contrasted; the essential difference being that, according to Dr. Gowers, in the mobile spasm seen in partially paralysed limbs there was a fixed spasm superadded to the mobile spasm. The pathology of the affection was then discussed. Dr. Gowers says: "The symptoms point clearly to damage to the grey matter of the brain, to local perverted nutrition of nerve cells, in consequence of which they over-act, either spontaneously or on the stimulus of a volitional impulse, which is by their over-action perverted or irregularly distributed." In the case under notice great congestion of the grey matter of the brain was present, and it was held by the author that the microscopical appearances were pathological. The theory that the nerve cells in this case have over-acted from perverted nutrition, due to excessive supply of blood, and hence the spasms, was brought forward. Mention was made of the fact that similar appearances have been noticed in the medulla from a case of hydrophobia, and to a less degree in the spinal cord from a case of tetanus.

Dr. STEAVENSON and Mr. BRUCE CLARKE contributed a paper on the Treatment of Stricture of the Urethra by Electrolysis. The more extensive use made of electrolysis in surgery and gynæcology abroad, and especially its successful employment in the treatment of stricture of the urethra, induced the authors to undertake a series of observations to test the accuracy of the reports which had reached this country. Their results bore out in every particular the successful results received from America. Electricity, on account of its power of splitting up compounds into their chemical elements, can be used as a substitute for ordinary caustics to the human body. It can be applied with especial advantage to parts difficult of access, such as the male urethra and the uterine cervical canal, and it can also be applied to these and other regions where the application of other caustics is attended with a certain amount of danger. Its effects could be limited to the points touched by the electrode. The caustic effect could be arrested or not commenced until the applicator, in the form of the electrode, was *in situ*, and the duration and extent of the caustic action was entirely under the control of the will of the operator. The treatment of stricture of the urethra by this method was the most simple and perhaps the most striking in its results, and had therefore been selected as the first on which to collect and report observations. In this paper the details were given of six cases of stricture of the urethra treated by electrolysis, the *modus operandi* was explained, the steps of the operation were given, and the advantages of this method of procedure were thus summed up: There was usually no bleeding. If hæmorrhage did occur, it was accidental, and usually showed that too strong a current had been used. No anæsthetic was required. If pain or discomfort was produced, it was trifling. The patient could, in the case of slight strictures, pursue his ordinary occupation during the period of treatment. No antiseptics were required, as the process itself was aseptic. In the majority of cases there was no contraction or return of the stricture. Eschars produced by caustic alkalies were said to heal with less contraction than wounds produced in any other way, and electrolysis with the negative pole of a battery was a means of applying the same destructive action as was caused by the caustic alkalies to parts difficult of access in a way which was impossible by any other method. Probably other chemical decompositions and combinations take place at the negative pole besides those characteristic of the caustic alkalies, but they have not up to the present time been thoroughly made out.—Mr. BERKELEY HILL said that, whilst congratulating the authors on their interesting paper, he could not accept their conclusions as quite satisfactory. Like the American cases, the cases were given in too little detail as to the existence, size, and nature of the stricture; moreover, the final results had not been yet observed. In the first case, in which the stricture had lasted twenty years, he must say that the facts related did not carry much conviction to him; there was no conclusive proof that the tissue of the stricture had been absorbed. There were many urethral impediments that were not strictures. He related a case in which there was a stricture two inches and a half from the meatus urinarius. This consisted of a nodule of cicatricial tissue on one side of the urethral wall. By means of the endoscope (which the authors did not appear to have used), it was possible to watch the action of the electricity. In his own case the point of the needle entered into the nodule and bubbles of gas made their appearance; there was no pain, except on making or breaking the current of electricity. The application was made for fifteen minutes, with the result that an increase of one millimetre in the diameter of the urethra was gained, but even this was not maintained; and after subsequent applications the stricture became more and more narrow, and had to be treated by other methods. Altogether, he felt sceptical as to the real result of this method of electrolysis.—Mr. SWINFORD EDWARDS detailed the particulars of a case of stricture which had been first under his care two years and a half ago. There were two strictures in the penile portion of the urethra, and one in the subpubic region. The deepest stricture allowed a No. 12 French to pass, and by the gradual interrupted method a No. 25 was reached when the patient left off treatment. He returned six months ago with three strictures, situated respectively half an inch, four inches, and five inches and a half from the meatus. This time he was only able to get a filiform—No. 4 of the French scale — through the deepest stricture. A No. 3 electrode was held against the deep stricture, and a current of from five to eight milliampères was employed, but there seemed to be no effect. At another sitting a No. 5 electrode was tried, and this time with apparently excellent results, so that a No. 22 steel and 24 pewter catheter could be passed after a month or so. He opined that electrolysis might prove of great value, especially for those strictures which could not be treated by Otis's dilating urethrotome, or indeed by any other reliable method.—Mr. BUCKSTON BROWNE spoke of the necessity for careful examination of urethræ and for bearing in mind the sources of fallacy. He felt quite certain that several of the cases related would not have needed internal urethrotomy, and could have been successfully treated by gradual interrupted dilatation. He remarked on the circumstance that the succeeding electrodes were larger and larger, and said that mere pressure against the face of the stricture led to temporary relaxation and a flow of urine, even though the instrument had not engaged the stricture. It was a very remarkable fact about Dr. Newman's cases

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that they were all successful.—Dr. STEAVENSON, in reply, said that the electrodes used by him were entirely different from that shown by Mr. Berkeley Hill; he would expect some swelling and increased narrowing of the urethral passage after the use of such a needle. It was necessary that the electrodes should be held tightly by the stricture, and hence the use of larger and larger sized instruments.—Mr. BRUCE CLARKE in, reply, said that he was well aware of the objections that could be raised: that the urethræ were not really strictured and the cases not really cured. Some of the cases narrated certainly demanded something more than the ordinary kind of treatment, though others did not. In one of the cases eight months had elapsed since the operation, and a bullet-headed instrument passed with ease. The result was as good as that obtained by any cutting operation, but he would be loth to assert that the case had been cured until some years had elapsed. He hoped to have an opportunity of reporting the ultimate result to the Society.

HARVEIAN SOCIETY.

AT the meeting held on May 6th (Mr. Malcolm Morris, Vice-President, in the chair) the following papers were read:—

Sudden Death in Pregnancy, Parturition, and the Puerperal State.—Dr. M. HANDFIELD JONES briefly traced the history of the evidence on which hypertrophy of the left ventricle in preguancy rests, and raised the question whether this hypertrophy was ever wanting, and if so what were the results. Cases were detailed in which clinical investigation showed apparently absence of all hypertrophy, and in such patients signs of cardiac failure and insufficiency were observable; the possibility of repeated miscarriage being also referred to this cause was shortly touched upon. Attention was drawn to the close tie existing between the heart and the uterus, and the extreme probability that the return of the heart to its normal size after delivery was, as in the case of the womb, due to a gradual process of fatty metamorphosis. While under healthy conditions this process was devoid of danger, arguments were adduced to show that in some patients this process of fatty change might overstep the normal boundary, and by weakening the cardiac muscle leave the heart liable to be overwhelmed by secondary conditions insufficient in themselves to bring about a fatal issue. Cases were read in support of this view. In conclusion, some of the cases quoted in the literature of sudden death in and after pregnancy were brought forward, and the explanation given of death in the various cases criticised, with the purpose of showing that in most of these the fatal result could be more scientifically accounted for under the view already enunciated than by referring them to such obscure conditions as idiopathic asphyxia, &c.—Dr. JOHN PHILLIPS mentioned a case in which albuminuria and œdema had been present, but no hypertrophy of heart or evidence of actual renal inflammation. Premature labour had therefore not been induced. Was it always advisable to induce it where there was reason to suspect fatty degeneration during the later months of pregnancy?—Dr. CHAMPNEYS thought that the changes in the vascular conditions before and after pregnancy were not yet fully understood. Cases of true cardiac insufficiency from rheumatism were often unsuspected until pregnancy occurred. In 75 per cent. of the cases recorded by Dr. Angel Money there were murmurs of some kind, but mostly transient. Fainting and sudden death were liable to occur even without hæmorrhage, and for this reason especial care was necessary for many hours after delivery when there had been much loss of blood.—Mr. GEORGE EASTES referred to clotting of blood in the pelvic veins and pulmonary embolism, and to ruptured uterus and post-partum syncope, as other causes of sudden death.—Dr. MORTON believed that the alteration in the character of the blood had much to do with the formation of the clots referred to by Mr. Eastes.—Dr. M. HANDFIELD JONES, in reply, advocated induction of premature labour in the cases referred to by Dr. Phillips. He was not aware of the average duration of the physiological hypertrophy after delivery.

Some Practical Points in Percussion and Auscultation of the Chest.—Dr. WILLIAM EWART read a paper on this subject, prefaced by a brief description of the instruments used in percussion and in auscultation. Manual percussion, in the author's opinion, was to be preferred to the use of the hammer and pleximeter. The relative advantages of monaural and of binaural auscultation were discussed from a practical stand[illegible] Differential stethoscopy was thought to be of little value, but Dr. Ewart advocated the use of the "comparing stethoscope," an instrument differing from the ordinary binaural in possessing two chest-pieces connected with the ear-tubes by means of a four-way tube shaped like the letter X. By this instrument special facilities were afforded for the rapid examination of the chest, and for the accurate comparison of sounds heard at widely distant spots. The comparing stethoscope had been constructed by the author before he had become acquainted with Dr. Spencer's stethoscope. The priority of the latter was freely acknowledged, and a tribute was paid to its ingenious and elegant construction. The paper concluded with practical suggestions as to the methods of auscultation and of percussion, and as to the management of patients under examination.—Dr. SANSOM advocated the use of the pleximeter in percussion. He regarded the finger as the medium least of all adapted for the purpose, believing that it was nearly impossible to obtain precise outlines by its means. For his own use he had devised a pleximeter consisting of a small pillar of vulcanite furnished with flat plates at each end of different size, adaptable to broader or narrower intercostal spaces or other surfaces. By percussion with the finger the sense of tactile vibration was fully preserved, and outlines could be so clearly defined as to admit of being marked out in pencil on the chest itself.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

Bacteriology.

A MOST successful meeting of the above Society was held on Friday last at the West London Hospital, at which Mr. Ballance gave a demonstration in Bacteriology. The whole of the out-patient department was utilised for the occasion, and was tastefully decorated with flowers and ferns. Upwards of sixty microscopes were arranged upon the tables for the purpose of showing the many varieties of micro-organisms which have been during recent years isolated and described. Some beautiful specimens of the bacillus anthracis were shown by Dr. Acland. In addition to the specimens, the various apparatus employed in bacteriological research were exhibited respectively by Messrs. J. Allen and Son, of Marylebone-lane, and Messrs. F. E. Becker and Co. But the chief interest was centred in the large series of cultivation specimens which Mr. Ballance had specially prepared for the meeting. Before the members dispersed, a cordial vote of thanks to this gentleman, proposed by the President, Mr. Hemming, and seconded by Dr. Thudichum, was carried unanimously; and, in reply, Mr. Ballance said that the marvellous advance which had recently been made in the subject of bacteriology had raised it unquestionably to the position of a science, which it was only true to say was almost daily increasing in importance, so much so that we were probably within a measurable distance of the time when each medical school would possess a bacteriological laboratory, in which instruction would be given to meet the requirements of an extension of the curriculum in this direction.

Reviews and Notices of Books.

The Science and Practice of Surgery. By FREDERICK JAMES GANT, F.R.C.S., Senior Surgeon to the Royal Free Hospital, late President of the Medical Society of London, &c. Third Edition, revised and much enlarged throughout, with 1090 Illustrations on Wood, mostly new and original. London: Baillière, Tindall, and Cox. 1886.

IT is now some years since Mr. Gant first presented to the profession his "Science and Practice of Surgery." Its distinguishing features, its method and style, are well known, and the reviewer of a third edition need not attempt to indicate them. Indeed, when a text-book has reached a third edition, and especially when it has had to compete with no mean rivals, the task of a reviewer is reduced to small proportions. The entire work has been revised for this edition, and a not unsuccessful attempt has been made to present to the reader the modern aspect of surgery. The mere fact of novelty has not been held sufficient to justify notice, and Mr. Gant has endeavoured to sift the wheat from the chaff, and to

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incorporate in his work only what he believes to be real and substantial advances in surgical knowledge. In doing so he has of course laid himself open to criticism, for there is by no means a general agreement as to what is and what is not true progress. A new feature in this edition is a chapter on Bacteria in Surgery, contributed by Mr. Watson Cheyne. No one better could have been selected to write this chapter, and it forms a very valuable feature of the work. Indeed, we believe that nowhere else is such a practical, compendious, and useful account of this branch of pathology to be met with in the English language. The article on Diseases of the Skin is from the pen of Mr. Malcolm Morris; it bears all the evidences of careful preparation, and a thorough knowledge, not only of the subject, but of the requirements of the student. Other articles on special subjects are supplied by the same writers as contributed to the previous edition.

In turning over the pages of this work we have noted a few points in which we think it might bear improvement. Thus, for instance, on page 148, vol. i., an elaborate classification of tumours is given, in which we find melanotic tumours classed under cancers, and *not* under sarcomata; this is a mistake which would not be lightly passed over in any surgical examination conducted with any pretensions to efficiency; it is therefore a pity that it has not been corrected. There is some confusion also about the relations of sarcomata with recurrent fibroid tumours; in the classification just mentioned they are kept quite apart, but within twenty pages we find them all massed together as sarcomata. This is just one of those points on which a student needs precise and emphatic information, and he looks to his text-book to clear up ambiguous statements carelessly made, or those he meets with in older books. A similar confusion is introduced into the chapter on Diseases of Bone, in which we find a description of several varieties of cancer of bone. A brief mention is made of the fact that cancer "generally occurs in bone as a secondary formation," but the reader of the whole section would be likely to derive the impression that cancer of bone as a primary growth is well known, by no means rare, and is a disease demanding active surgical treatment. Nothing is written which even suggests that primary cancer of bone is either infinitely rare or entirely unknown. In another place we read that syphilitic sarcocele "cannot be distinguished from scrofulous." We are quite willing to admit that in some cases the distinctions between the different sarcoceles are not well marked, but the above is much too sweeping a statement.

There are passages in the chapter on Fractures which call for some remark. Here is one: "Fractures differ essentially in regard to the mode of their reparation, according as they are" simple or compound. By the way, why does Mr. Gant always speak of "reparation" and not of repair? But apart from this, we have here a statement which is seriously at variance with fact, and which is rendered more puzzling by subsequent statements. Thus, under the heading "Course and Termination" of Compound Fractures we read: "*Inflammation* supervenes, followed by suppuration, perhaps profuse, and partial sloughing; or by gangrene on a larger scale. Either degree of mortification, arising from inflammation, is limited to the seat of injury. By this process, however, a fracture, which originally was simple, may become compound in some cases." What idea this could convey to a student seeking here his first instruction on this subject we cannot conjecture. Such ambiguity not only renders the task of reading far less pleasant than it otherwise would be, but it produces a condition of bewilderment in the reader which is far removed from instruction.

Charcot's Joint Disease is not adequately described; its sudden onset with great swelling and its painless character are not mentioned. With regard to the mode of origin of loose cartilages in joints, we find in one paragraph these two statements, which scarcely harmonise:—"They seem to *arise* from the vascular processes of the synovial membrane, as outgrowths of that membrane, projecting into the joint." "Rarely, they form in the synovial tufts." In the description of Congenital Sebaceous Cysts of the Head, there is no mention made of the differences in structure, contents, or position of these cysts and common wens, which they are said to resemble. The old operation of plugging the posterior nares, fast becoming only a "relic of barbarism," is fully described as the treatment for severe epistaxis, and no mention is made of the far superior rubber air tampon, or of the fact that many cases of epistaxis can be efficiently dealt with by proper plugging of the nose from the front.

We cannot part from this book without expressing our sense of the magnitude of the task Mr. Gant set himself, and of the energy and perseverance he has brought to its fulfilment. We hope this edition will be as successful as its predecessors, and that we may soon hear that Mr. Gant is again busily engaged in revising it for a fourth issue.

Archives Slaves de Biologie. Dirigées par MM. MAURICE MENDELSOHN et CHARLES RICHET. Tom. I., Fasc. I. Paris: 111, Boulevard St. Germain. London: David Nutt.

THIS is the first part of a new journal which is intended to be the vehicle for the work of Slav biologists, who already are very numerous, and whose labours are at present only represented by memoirs scattered through French and German periodicals. The *raison d'être* of the Archives is clear. There are probably not half a dozen scientific men in England and but few in France or in Germany who can read Slav. Hence researches which have cost much labour and pains are either wholly unknown or are read only in the form of an abstract or highly condensed note, in which many important points are passed over without notice. The editors hope to be able hereafter to publish a fasciculus every month, but at present do not feel able to promise more than six parts per annum. Their intention is to translate and publish in the French language all important papers within a month after their publication, whilst in the case of less important articles a full but complete analysis will be given. Sections will be devoted to bibliography, critiques, and notes of recent discoveries in other countries. The bill of fare will include memoirs on biology, embryogeny, anatomy, physiology, histology, anthropology, zoology, and palæontology, together with physiological chemistry and physiological psychology. The present number contains many (fifteen) original memoirs and many critiques and analyses. Amongst these are a note by Fritsch on a human cranium found in the clay of Podbaba near Prague; a contribution by Godlewski to the theory of the circulation of the sap in plants; papers by Pocta and Werzejewski on the development of fossil and recent sponges; Lesshaft on compound joints; Kowalewsky on the nervous mechanism effecting dilatation of the pupil; Navalichin on the growth, development, and death of muscular fibres; Botkine on pernicious anæmia; Kourloff on the alimentation of phthisical patients; and Oberzut on the morphology of the bacilli of tubercle: altogether a very satisfactory list for the first number of a new journal, to which we wish all success. The papers are all in French.

Notes on Analytical Chemistry, for Students in Medicine. By ALBERT J. BERNAYS, Ph.D., F.C.S., F.I.C., Professor of Chemistry, Practical Chemistry, and Toxicology at St. Thomas's Hospital Medical and Surgical School, &c. Second Edition. London: J. & A. Churchill.

THE modest title of Dr. Bernays' little book scarcely does justice to it. Although exceedingly condensed, it is sufficiently detailed to guide the student through his practical work with little assistance from the teacher, and clear expositions of the nature and cause of the

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reactions concerned are uniformly given. Although it is intended to help students in preparing for the London University and other examinations, it is no mere cram text-book. The time that can be devoted to chemistry by even the most diligent student is very limited, and it is important that it should be judiciously expended. The book with which he works should contain little more than his real requirements, but should provide completely for them. This is exactly what Dr. Bernays has done, and medical students may be grateful to him for his work. In a space of about 130 pages he has given a progressive series of practical studies, commencing with very simple analysis, but including the examination of a certain number of organic compounds, the elements of volumetric analysis, some physiological chemistry (including milk, bile, urine, and blood), the rudiments of toxicology, the examination of water, and many other matters of which some practical knowledge is now required for the higher examinations. Altogether, the book, though so small, is good and useful.

New Inventions.

A MODIFIED MIDWIFERY FORCEPS.

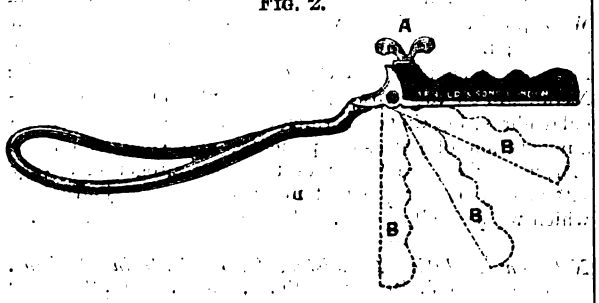
I WISH to bring under the notice of the profession a midwifery forceps which I think will fulfil (1) an indication for which much more elaborate, and, to say the least, terror-exciting instruments are from time to time brought out; (2) to meet a difficulty which is recognised, but for which no mechanical contrivance that I am aware of has been proposed; (3) to fulfil still another defect which is rarely considered by operators. It may be thought presumptuous to suggest anything further in the way of a midwifery

FIG. 1.



forceps, whose name is legion. I, however, propose a modification only, which I have found useful in practice without being elaborate or complicated. If unskilful surgeons require skilful instruments, then the sooner some medical men get them the better! All cannot be Simpsons in midwifery or Thompsons in lithotrity, and whoever strives to perfect diagnosis and treatment by the perfection of instruments with a conscientious and not ambitious object tends towards the general good as much as the skilful surgeon who works skilfully with unskilful instruments. Fig. 1 shows the handles bent back to meet the line of axis run-

FIG. 2.



ning through the fenestral, and by so doing dispenses with the aid of a traction force applied to the blades. Such a bend makes the instrument also easy of introduction, and keeps the handles in proper place when introduced. The non-recognition of this simple fact in the ordinary forceps has long kept in use a most unscientific instrument, whose axis is altogether erroneous. Contrivances have of course latterly been used to meet this difficulty, but in my opinion are not simple enough, or are too elaborate or bulky. Fig. 2 shows the chief advantage I claim for the instrument—viz., the presence of a screw hinge on the upper blade, which will make it easy of application, and fulfil an indication for which there is no provision at present made—i.e., the adaptation of the space between the blades to the varying size of the child's head; I think it very strange to squeeze the head of every child delivered by forceps to the same extent, and the evils ensuing therefrom, though not apparent, are nevertheless real. I wish to add my testimony to that of others in favour of the forceps being a more safe and desirable aid to delivery than is generally thought, not only in inertia, but where force and the obstacle of an unassisted process cause prolonged suffering, and weary both uterus and patient. With rather thin and well-shaped blades little or no bulk is added to the presentations, whilst the broad body formed by the head is changed into, as it were, a moving inclined plane, which, even without traction, slips out more easily than if left to the process of nature, and in my experience does more than almost anything, combined with the injection of oil, to save the perineum. We shall always, of course, have Radicals and Conservatives in medicine, but he who nowadays watches the wearisome process of prolonged labour in women whose tissues are weakened by the acquired and transmitted debilities of modern town life, with perhaps an increase rather than otherwise in the size of heads, will be more often conscientiously urged to supply a wanting balance in the shape of instrumental aid, but gently, slowly, and scientifically applied and used. The forceps have been contrived by myself and Mr. Arnold of Smithfield, to whom I am indebted for this and for other aid.

JAMES MACMUNN.

Finsbury Park, N.

THE PRESENT SYSTEM OF MEDICAL EDUCATION IN LONDON.

To the Editor of THE LANCET.

SIR,—Dr. Moxon's letter and the reply to it by Dr. Hood have a deep interest for the great majority of practitioners of medicine who have received their professional education in London, and also for metropolitan students in the present and future. As a general practitioner, I tender Dr. Moxon my warmest thanks for using his powerful pen and still stronger influence in endeavouring to obtain a degree for physicians and surgeons of the London Colleges. Why the hundreds of our best practitioners who have never had a degree should, as Dr. Hood asserts, degenerate to third-class men on receiving it I cannot see. Does Dr. Hood apply his dictum to the possession of any degree? Success in life does not, happily, depend upon having a degree, as the writer can testify; but it is not pleasant to be surrounded by Scotch and Irish graduates who pose before the public as holders of a superior, because a higher-sounding, qualification. Medical practitioners are not unfrequently consulted by parents on the question of professional education of their sons, especially with reference to the selection of a medical school. After explaining the disabilities under which metropolitan students suffer, I am compelled to advise the sending of them anywhere rather than to a London Hospital, unless they are prepared to put their sons through the long and weary work requisite for the obtaining of the London degree along with the many chances of failure before them. There should certainly be no longer any delay in putting London educated practitioners and students on a titular par with those of the north of England, of Scotland, and of Ireland. If this is not speedily done, not only will the London schools be more and more avoided by students, but the degree-granting institutions will be so crowded that the comparatively small clinical advantages belonging to the latter will become less available.

I quite agree with Dr. Hood that science should be taught at science schools; and I believe I am right in saying that advances have been made from St. George's Hospital to South Kensington for the carrying out of this object. For many reasons I think "Westminster" would be far preferable to "Albert" as a name for the new degree. The two following may be mentioned. "Albert" gives no idea of locality, and would necessitate a further affix of "Lond.," which would be an injustice to the holders of the veritable London degree; whereas "Westminster" at once localises and gives the prestige of antiquity to the degree.

I am, Sir, yours obediently,

May, 1886. PHYSICIAN AND SURGEON.

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THE LANCET.

LONDON: SATURDAY, MAY 29, 1886.

THE Contagious Diseases (Animals) Bill has again been introduced, and will, it is hoped, pass into law before the close of the present session. Whether this success will be attained, or whether, as in the case of its predecessor of last year, it will be included in the long list of legislative measures which are sacrificed by an abrupt termination of the session, the next few days will probably show; but it deserves greater consideration than before, if for no other reason than the hope which Mr. W. H. POWER'S recent investigations have raised that some really practical steps may be taken to prevent the disasters which now result from the distribution of infected milk.

With the greater part of the Bill we need not now concern ourselves; it relates to the amendment of the provisions of the Act of 1878, which have as their object the limitation of foot-and-mouth disease; but it also evidently intends that the whole subject of milk infection shall be considered in relation to the health of human beings, and therefore proposes that the powers vested in the Privy Council by Section 34 of the former Act shall be transferred to the Local Government Board. Under this section the Board will be empowered to make special or general orders for ensuring what is usually understood as the sanitary condition of dairies and cowsheds, and the cleanliness of milk stores, milk shops, and vessels used for containing milk for sale; and also for the inspection of cattle in dairies, and for prescribing precautions to be taken for protecting milk against infection or contamination.

The Privy Council have interpreted these precautions against infection to extend to the circumstances of the milk after it has left the cow, and have assumed that any infection from which it may become contaminated must necessarily be infection derived from some human being the subject of disease. Hence the precautions thus prescribed are those which would prevent infectious persons coming in contact with milk or taking part in the business of dairyman. Recent experience has shown the insufficiency of these precautions. That they may have a value we are prepared to admit; as against dissemination of enteric fever they are calculated to eliminate one very probable source of contamination, and even the infection of milk by scarlatinal virus communicated in this manner cannot but be regarded as within the bounds of possibility. But medical knowledge has, thanks to Mr. POWER, gone beyond this, and we are already led to see that the contamination of the milk against which precautions have to be taken may occur either before or at the moment the milk leaves the cow. The exact nature of these precautions cannot at once be seen; it may be hoped that they will, however generally, be apprehended before the lessons to be learnt from the Hendon farm are forgotten; and it may be assumed that they are essentially those which relate to the cow herself. We trust this is sufficiently appreciated by those responsible for drafting the Bill which is now before Parliament, and that all the necessary powers are being conferred upon the Local Government Board which can now be perceived to be necessary, and which may be more fully required as additional knowledge of milk infection is gained.

In view of the need for medical supervision of every detail connected with milk production and supply, it is somewhat surprising to find that, while the various sanitary authorities throughout England and Wales are to be entrusted with the administration of the Act, the metropolis is to be treated exceptionally. There can certainly be no desire to overlook the medical aspects of the subject, and we can but attribute the decision to continue the Metropolitan Board of Works as the local authority for all parts of London, except the city, either to the fact that the vestries and district boards have lost public confidence, or to the distinct advantage which results from entrusting these duties to one board having jurisdiction over the whole metropolis, rather than to thirty-nine district authorities. If the Bill is not to be amended in this particular, the metropolitan local authority must be provided with the organisation necessary to enable them to perform these difficult duties, and it would be certainly well if the Bill required them to take the steps required for this purpose. But the metropolis is in an unfortunate position with regard to its ability to guard itself against the dissemination of disease through infected milk introduced from without. It is dependent in a very large degree upon the efficiency of provincial local authorities, and over these it can exercise no supervision. Everything will therefore depend upon the thoroughness with which the Local Government Board watches over the action of these bodies. The making of proper regulations is a matter very different from their enforcement, and this duty of the Central Board should be undertaken with energy for the reason that the effects of any negligence will often not be appreciable in the district whose representatives will be responsible for the administration of the law.

THIS year the lectures at the College of Physicians illustrate the tendency in the mode of advance of scientific medicine. The Croonian and the Lumleian Lectures both dealt with scientific matters in a manner which none but scientific men could hope to understand in its entirety. In this regard we may perceive good grounds for the training in chemistry and physics, which should form part of the education of every physiologist and true pathologist.

The key-note of Dr. STONE'S most able and successful lectures is very soon struck: physics, and without them nothing. There is a radicality in this method of dealing with the electrical conditions of the human body which to the logical mind commends itself as of the most philosophical and rigidly exact kind. Like all genuine advances, the Lumleian lecturer's position tends to displace much that was fascinating but incorrect. He insisted upon the great importance of absolute measurements of electrical currents. Professor HUGHES having shown that the telephone can be used for the estimation of electrical currents, Dr. STONE immediately takes up the idea and uses it instead of the unmeasurable and entirely empirical indications of the galvanoscopic frog. Perhaps the chief fact that the lecturer gave his audience was that concerning

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the estimation of the resistance that the human living tissues offer to the passage of electricity. For the first time in medical electricity we think it may be definitely admitted that the resistance has been accurately ascertained to be about 1000 ohms. This estimate is of the tissues without the skin. The latter is a most perfect insulator of enormous resistance, hence the previous overestimation of the resistance. But it was shown that by employing very large areas of contact and freely wetting the skin, its resistance could be eliminated. As having a direct bearing on medicine, the alterations of the resistance that take place in disease are especially interesting. In dropsy, it was found that the resistance was diminished; in one instance, as Dr. STONE ascertained, even to one-half. In six cases of hemiplegia with contracture the resistance was much less on the paralysed side of the body. Again, in impregnations of the tissues by various metals the electrical resistance was much altered; mercury had a decided influence in diminishing it, as also had copper, whilst the influence of lead was but slight.

The human body, like any fluid or body holding fluid, acts as an electrolytic agent. Certain chemical decompositions take place, and this is the equivalent of a development of electricity; electricity therefore begets electricity. By employing electricity as a curative agent Dr. STONE was able to make observations in certain cases of disease. In a case of old-standing sciatica with wasting of the leg, and in two of diabetes, it was found that by charging the body with a moderate strength of constant current for half an hour a considerable discharge took place from the body, which might last for several hours. The first and largest discharge that occurs after the body has been charged is probably to be accounted for as a phenomenon of self-induction; but the less marked though longer discharge is most probably due to electrolysis.

Most elaborate explanations have been offered concerning the phenomena of electrotonus, and one of the most revolutionising parts of Dr. STONE'S lectures was concerned with it. Science is measurement, and the latter is what Dr. STONE pleads for. He says in effect: "Let us have our groundwork sure; let us be quite certain what strength of current is being used; let us ascertain the resistance and polarisation of every wire and every part of the circuit, whether composed of dead or living matter, before we venture to think we understand the phenomena over which physiologists have laboriously pondered and too often ingeniously misinterpreted." Even if Dr. STONE'S arguments did not appeal to one's instinct for science and truth, which they undoubtedly do, he has at command *a posteriori* evidence of the importance and absolute necessity of his scepticism. In the experiment shown with telephones it was demonstrated that on making and breaking the current the telephone clicked; it, a purely physical instrument of research, gave a loud click with the break, and a softer sound with make. On withdrawing the coil along the slide, just as was done when experiments in physiology were made, both clicks grew fainter, until the softer disappeared. Just as in experiments on nerve-muscle preparations, the telephone reproduces the peculiar difference between make and break,—a difference which in neuro-muscular physiology is ascribed to vital conditions. In the third lecture it was shown that induced currents could be measured, and that the resistance of the human tissues to them was much less than to the constant current. It would seem as though the induced current penetrated with the facility of a conical bullet as compared with the constant current, which rather resembled the slower penetration of the spent round ball. The human body, like all imperfect conductors, is probably more permeable to high-tension than to low-tension currents. As the lecturer urged, there is a great field open for research in physiological electricity, which, though a stately building, rested still on an unsafe foundation or *physical basis*.

THE questions recently asked in the House of Commons as to the prevalence of small-pox at Wooburn in connexion with the paper-mills in that place again give prominence to a subject which has from time to time received more than passing attention. The influence of the rags which are used in the manufacture of paper as vehicles of disease is distinctly recognised by all authorities on public health; and as regards one infection, that of cholera, the State steps in to secure the community from risk by the issue of Orders prohibiting the importation into England of rags from countries where that disease prevails. It is true that little is known which could prove the existence of actual danger in the case of cholera, whereas one of our current infections—namely, that of small-pox—has again and again been communicated through the agency of rags, and the rag-sorters in paper-mills being first affected, the disease has spread to those with whom they associate. This is what occurred when a sudden outbreak of small-pox took place amongst women employed in the St. Mary Cray paper-mills, and the same has occurred again at Wooburn; and the public somewhat naturally ask, both in and out of our Houses of Legislature, whether something cannot be done to protect the public from the danger that ensues.

A distinction has always been drawn between the importation of diseases foreign to our climate, such as cholera, plague, and yellow fever, and those which we have always with us, in so far as legislative interference is concerned; and we are bound to admit that, so long as small-pox is one of our current infections, it would hardly be possible to prohibit the importation into one district of rags from another district where small-pox happened to prevail, except in so far as it might be practicable to offer proof as to the actual infectiveness of any given bales. But, assuming that there must be free trade in rags in so far as the manufacturers are concerned, it becomes a question whether the rags ought not in all cases to be subjected to some process of disinfection before they are used for the purposes of any manufacture, whether of paper or otherwise. And the question is the more pressing because there is reason to believe that some rags from abroad come from such institutions as hospitals. But considerable difficulties stand in the way. There is, under the Public Health Act of 18[illegible], a legal remedy against any person who gives, lends, sells, transmits, or exposes without previous disinfection any bedding, clothing, rags, or other things which have been exposed to infection from any dangerous infectious disease. But, apart from a detailed knowledge of the history of the bale or parcel of rags, it is impossible to say that [illegible]

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or more samples have been so exposed; and hence, as a matter of fact, no remedy lies against the manufacturer. Indeed, it might be unfair to hold him solely responsible when, as a matter of fact, no practicable check can be, or is, placed on the proceedings of the original owner of the rags, or upon the marine store dealers who collect them in the first instance.

There are, however, two definite remedies. One lies in the disinfection of all rags before they are unpacked for sorting purposes. This action must, however, in the present state of the law, be purely voluntary on the part of the paper manufacturers; but it may be hoped that, with the machinery and steam power which are available in every paper-mill, the time may come when the cost of applying steam under pressure to all cargoes of rags may be effected so rapidly and economically that it will generally be resorted to. The other lies in efficient vaccination and revaccination both of the workers in the mills and of the surrounding communities. This latter remedy can easily be applied by all who have sufficient common sense to appreciate its protecting value, and manufacturers can use their influence to secure its practice amongst their *employés*. Small-pox is the only infectious disease against which there is an easily available and trustworthy means of protection, and its prevalence, whether in a paper-mill or elsewhere, points to the neglect of a simple and efficient remedy.

AT the time of our going to press the Medical Bill is precariously situated. The lukewarm character of the Bill, and the belief in every medical body that it and all its interests will survive under the measure, disarm opposition. However, we again cheerfully and gratefully admit that Sir LYON PLAYFAIR has shown a very courteous disposition to consider objections, and especially our own objections, to the obtrusion of the Privy Council at every stage of the work of the General Medical Council; to the inadequate proportion of direct representatives (especially for England) to the other constituents of the Council; and to the monstrous proposition that the Privy Council should have the power of ordering the Medical Council to register foreign graduates of whom and of whose degrees the Medical Council may disapprove. Sir LYON PLAYFAIR is understood to be ready to modify the clauses bearing on these points. He is prepared to give five direct representatives, and in certain eventualities a sixth. He will erase in many places the words requiring the sanction of the Privy Council, and in the serious matter of recognising foreign degrees he is willing to show more respect to the Medical Council. So far, so good. But all interested parties should use due vigilance. No one can visit the House of Commons in these excited days without feeling what a game of chance legislation is, and how slight and superficial is the remedy that even a Government can apply to the greatest evils. The forms of Parliament have been the death of many a Medical Bill. They prevented progress in committee on Monday night, when Sir LYON PLAYFAIR was hopeful of getting it practically through its committee stage; and he would be a sanguine man who in such a time of crisis and political tension as this would confidently expect a Bill to pass of which members of Parliament know but little and care even less. The intervention of the Medical Council to preserve the independent government of the profession would be of course most desirable; but by the time that body, which meets next week, shall have decided to intervene, the deluge may have come and swept the authors of the Bill away or it may have slipped through its remaining stages into existence. Meantime we must trust to the reasonableness of Sir LYON PLAYFAIR; and we must be grateful, as we are sure the profession will be, to Dr. FOSTER, who has most actively studied the Bill and all proposals of modification, and to whom, indeed, we owe many valuable amendments, especially that for the increase of the number of direct representatives.

There are still three great evils that are not touched by the Bill as it stands, and the non-removal of which will make any Bill a poor contribution to the solution of the problem of medical reform. We can only indicate them for the consideration of Sir LYON PLAYFAIR, or Dr. FOSTER, or any other member who will rise to the height of this great reform. The three evils which will remain are:—

First. The multiplicity of licensing medical authorities which will continue to compete with one another and to disparage each other's examinations.

Secondly. The undignified competition of degree-granting bodies with diploma-granting bodies.

Thirdly. The comparative impunity of medical practice by unqualified persons acting either alone or under cover of registered practitioners.

To say that such evils will remain unremedied under the Bill is to pronounce the most severe condemnation of it. But we must say what we feel, and we shall be glad if the author of the Bill or any of its critics can contrive, even at the eleventh hour, to make it really worthy of the profession whose efficiency it is to regulate, and of the public whose highest interests it is meant to serve.

Annotations.

"Ne quid nimis."

HER MAJESTY THE QUEEN.

IT is a subject for congratulation among all classes that Her Majesty has reached her sixty-seventh birthday in good health and with more than average constitutional vigour. The many years of retirement which followed the great grief which befell her in middle life seemed to thrust upon her a life of seclusion and sadness. It has happily been broken somewhat of late, much to the satisfaction and pleasure of Her Majesty's subjects, and we trust and feel assured with no injury to Her Majesty's health. It, however, must have been a considerable effort to reappear in public, and nothing but a deep sense of duty could thus have aroused anyone. Something is due to the judicious care with which Her Majesty has been tended, and we may take it as an expression of gratitude to our own profession that the first act performed by Her Majesty in public was to lay the foundation stone of the new medical buildings now being erected conjointly by the Royal College of Physicians and the Royal College of Surgeons. The kindly expressions on that occasion towards Her Majesty's physician were very grateful to the whole profession as an honour done to their highest representative in his capacity of President of the Royal College of Physicians; and the title offered to the President of the College of Surgeons on that occasion, though declined by

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him, was not less grateful to the profession; for Mr. Savory is the premier of the great body of practitioners of the country who claim allegiance to the Royal College of Surgeons, and any honour done to him is in reality done to them through him.

THE FELLOWSHIP OF THE ROYAL COLLEGE OF PHYSICIANS, LONDON.

AT an extraordinary meeting of the College on the 20th inst., the gentlemen elected at the last Comitia were admitted Fellows. The list, which has already appeared in our columns, this year was below the average in point of numbers, but was certainly strong as regards individual quality. Taking the whole list, especially with respect to the metropolitan members, the election this year has been most satisfactory. There has been less evidence of favouritism and a more liberal recognition of individual work. If the same care continues to be exercised, the Fellowship will once again take the high position with the profession and the public which it occupied in the palmy days of the College, when it was the mark of sterling achievement, and not the reward of mere success in practice. In making these remarks, we are aware that there is a very considerable number of Members of the College of old standing who feel aggrieved at being passed over, and who urge that they ought no longer to be ignored. No doubt cases of individual hardship in this respect do occur, but we believe them to be very rare, and hold it to be quite exceptional for good, sound, honest work to be permanently overlooked; and in London, where the line between consultants and practitioners is so rigidly drawn, we feel convinced that the Fellowship ought not to be granted except to those engaged in teaching in the schools or in original research. Even in the provinces the same rule should hold, and the Fellowship should be the reward of work, and not bestowed on account of wealth or of political or county influence. The list this year has been so good and so much in accordance with what we have for many years insisted on that we hesitate to add anything like criticism. But if there is a shortcoming, it is in the somewhat illiberal treatment of the provincial Members. Two or three names of physicians belonging to provincial schools have occurred to us who ought to have been among those recently elected, since their work is well known, and stands as high as that of any in the list. Our provincial schools are year by year increasing in size and influence, and we sincerely hope the present oversight is not occasioned by any feeling of jealousy. Such ought not to be the case; the College should view with pride the work of its provincial Members, and admit them to a full share of collegiate honours.

THE VACANCY IN THE SENATE OF THE LONDON UNIVERSITY.

THE election of a member of the Senate of the London University will take place on the 29th prox. Dr. Wilks and Mr. Magnus have been nominated as candidates for the vacancy, and the name of Mr. Thiselton Dyer has also been mentioned as a probable candidate. On Dr. Wilks' qualifications for this post it is unnecessary to dwell. His services to the cause of medical education and literature, his hearty aid to all projects for the improvement of the profession of which he is an honoured member, are too well known to need recapitulation. We are informed that the names of 200 graduates, including the most eminent members of the Medical Faculty, have already been received in his support. Mr. Magnus will be also known to our readers. He contested the last vacancy with Professor Carey Foster on the strength of his B.A. degree, and has of late made himself conspicuous by his action in regard to the reform of the University of which he now seeks to become a governing member. Coming forward to contest the present vacancy on his B.Sc. degree, and thus breaking the spirit, if not the letter, of the understanding that the seats of Convocation on the Senate alternately belong to the Arts and Laws Faculties on the one hand, and those of Science and Medicine on the other, it is to be hoped that Dr. Wilks will have a majority of votes sufficiently large to convince even Mr. Magnus that it is not well to attempt to run with the hare and hunt with the hounds. Moreover, the recent losses of Drs. Storrar and Carpenter have seriously diminished the strength of the medical representatives. The election, as already stated, will take place on June 29th, and voting papers are to be delivered personally to the Clerk of Convocation or sent by post at least one week before that date.

TRANSMISSION OF TUBERCULOSIS TO CHILDREN.

AT a recent meeting of the Boston Society for Medical Improvement, Dr. Gannett read a paper with the title "Should Nurses who are Tuberculous be allowed the care of Children?" (*Boston Med. and Surg. Journal*, April 29th.) Premising that he was not speaking of wet-nurses, and giving a slight sketch of the doctrine of the transmissibility of tuberculosis as raised in the bacillary hypothesis, he proceeded to relate two cases of fatal tuberculosis in children of previously good health and without hereditary predisposition, both of whom had been under the care of nurses who were tubercular. One was a child four years and eleven months old, who died from tubercular meningitis after a three weeks' illness. In addition to the appearances of general acute miliary tuberculosis, there were foci of chronic tubercular broncho-pneumonia and also chronic tuberculosis of the bronchial glands. There was no family history of tubercle; the child was born healthy, and was nursed by the mother until nine months old. At the age of fourteen months the child came under the care of a nurse about twenty-six years old, who had lost one sister of consumption, and was herself pale, but of healthy appearance. The nurse remained in charge for a period of three years and five months, and when the child was four years and two and a half months old it slept with her at night as well as being in her care during the day. About this time symptoms of phthisis developed in the nurse, and she had eventually to give up her situation from increasing weakness, four months before the child fell ill. It is possible that the child was infected through the lungs, which showed evidence of more chronic disease than other organs. The second case was that of an infant eighteen months old, who also died of meningitis, and in whom caseous nodules occurred in the lungs and bronchial glands, which contained tubercle bacilli. The only case of tuberculosis on the father's side was that of a great-aunt, who died of this disease after nursing her husband for the same affection; and on the mother's side a cousin had died of phthisis. The child in question was the youngest of three; its nurse, a Scotchwoman, twenty-two years old, was subject to colds and coughs, and developed signs of phthisis. She was in charge of the child for eleven months, from the age of six weeks. Dr. Gannett did not desire it to be thought that these cases proved that the children were infected by their nurses, but that there was "sufficient probability of such infection as to render it important for physicians to caution the laity about allowing children of a tender age to come into too close or frequent contact with nurses and others who are tubercular." In the debate that followed Dr. Minot thought there could be no doubt that the children were infected as stated; but he could only recall one case of such a form of infection—viz., in the wife of a gentleman in the third stage of phthisis. She developed the disease, having no hereditary ante-

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cedents. Dr. Rotch, who had seen one of the cases related by Dr. Gannett, said there was certainly a remarkable coincidence in the tuberculosis of the nurse and child, but did not think it justifiable to say that there could be no doubt of infection. He pointed out how frequently tuberculous mothers lived in close contact with their children, who never showed any signs of infection. He thought it prudent, however, to exclude children from the care of tuberculous nurses. Dr. Fitz agreed on this point, owing to the probability of such a medium of infection, remote as that probability may be. Dr. White spoke in the same sense, and Dr. Bowditch declared that he had held phthisis to be contagious under favourable circumstances long before the bacillus was discovered.

THE THROAT HOSPITAL, GOLDEN-SQUARE.

THE dispute at the Golden-square Hospital, which has ended in the resignation of all but one of the members of the staff, appears to have had its origin in the interference by the managing committee in a question which, though small in itself, strikes at the root of the proper relations of the medical staff to the hospital. A resignation having created a vacancy in the days of seeing patients, the managing committee filled up that vacancy without previous consultation with the medical council. Then followed protests, recriminations, and finally a general resignation, with one exception, on the part of the staff, who considered justly that their rights had been infringed. The history of the whole matter, which extends over several months, is embodied in a lengthy document issued to members of the committee by the medical council, after their failure to get their grievance redressed. Although the domestic concerns of the Golden-square Hospital cannot be deemed of much general interest, yet whenever there is a conflict between a hospital staff and its managing committee it is important to investigate it for the sake of other institutions in which such a constitution is found. In 1877, owing to irregularities in management of such a character as to lead to the withdrawal of patronage in high quarters, the medical affairs of the hospital were placed in the hands of a council consisting of the acting and consulting medical officers. In 1883 the dean of the medical council was given a seat *ex officio* upon the managing committee, and the only other medical officer who has a seat on that committee is Dr. Morell Mackenzie, who also, by virtue of his position on the consulting staff, is a member of the council. In the present dispute Dr. Mackenzie appears to have taken part with the committee as against the views of his colleagues, who represented the medical council. The *casus belli* was the following: On January 26th last, within an hour of the meeting of the committee, the chairman persuaded Dr. Semple to resign his appointment on the staff, by reason of age and length of service. Had Dr. Semple declined to accede to this request, until, at least, he could have consulted his colleagues, the friction which arose might have been avoided. However, his resignation was received, and Mr. Hovell was nominated by the committee to fill the vacancy thus created. A protest from the dean against this undue haste led to the appointment of Mr. Hovell being held over until, according to custom, the day vacated by Dr. Semple had been offered to members of the staff in order of seniority. Unquestionably the committee acted in violation of precedent in not notifying the fact of Dr. Semple's resignation to the medical council, and asking that body to take steps to fill the vacancy. Nor in yielding so far as to offer to the senior physician the choice of the day so vacated did the committee wait to receive the advice of the council, for when Dr. Prosser James declined to accept the offer because the council had not been consulted, and when the next in seniority, Dr. Whistler, withheld his answer until the council had met, the managing committee without further delay proceeded to the appointment of Mr. Hovell. It is needless to pursue the steps of the controversy further. The council endeavoured, without success, to get a reasonable hearing or discussion of their grievances; their protest that the appointment of Mr. Hovell by the committee, without previous consultation with the medical council, was illegal was disregarded, and they acted very properly in sending in their resignations. The members of the staff have done right to protest against an unwarrantable attempt to ignore their advice in questions relating to their offices, and we are glad for the sake of the profession that they have had the courage to pursue their protest to its legitimate conclusion. Had they taken the same course nine years ago, the history of the hospital would have been different; but they then allowed their scruples to be satisfied with the formation of a medical council, which, it appears, is only a council in name and not in fact. The plea that it is the duty of the managing committee to arrange the days and hours of the attendance of the medical officers, and to see that this attendance is punctually made, cannot apply to the present circumstances, which involve—first, the occurrence of a vacancy; and, secondly, the selection of an officer to fill that vacancy: matters which, if there be a medical council at all, are precisely the questions with which they should be expected to deal, and upon which their advice undoubtedly should be sought.

FEAR AS A PATHOLOGICAL FACTOR.

IN the summer of 1884 Professor Mosso of Turin published his brilliant monograph "Sulla Paura" ("On Fear"), just in time to admonish the profession in Italy of how seriously that depressing emotion can intensify the ravages of such an epidemic as cholera; and now we have the same treatise, admirably translated into French by Felix Hément, justifying its reappearance by the renewed outbreak of that disease. There is much, however, not only of opportune but of permanent interest in the volume. The infusion of terror into the young growing mind—so frequent a resource in the nursery, and even, in different forms, in the schoolroom—is gravely censured by Professor Mosso in a special chapter on fear as a force in education. "Everything gruesome, terrifying, panic-striking, that is said or represented to the child is a thorn left in its moral tissue to wound it throughout life. Alarm, dismay, fright, cleave for ever to the memory, like a fatal creeping plant inwoven around the reason." And he infers the damage done by this means to the tender brain of the young from the paralysing effects of such moral reagents on the adult. Examples of the fatal effects of fear in these latter cases are vividly presented in his pages, and he even coincides with the late Sir James Simpson in deducing from the depressing moral atmosphere of a hospital the argument in favour of rendering surgical assistance at the domicile rather than in the ward. Fear, he maintains, not only aggravates but engenders disease; while Bosquillon goes so far as to say that it, and not the bite of the mad dog, is the only cause of rabies. Guy de Maupassant has quite lately defended the same thesis; and Professor Mosso himself records the case of a physician who, when called in to a hydrophobic patient in one of his convulsive seizures, examined the sufferer with special care, pressed his lips to the froth-sprinkled mouth, and assured him that his malady was not rabies; no other paroxysm supervened, and the patient recovered. Twelve years ago, in Paris, a poor woman, by trade a vendor of small wares, was bitten by a dog, undoubtedly rabid, near Notre Dame, and taken to the Hôtel Dieu, where the wound was at once cauterised. Several months after she was recognised in the street by a student who had seen her under the operation:

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"Tiens," he exclaimed, "vous n'êtes pas morte? Le chien qui vous a mordue était pourtant enragé." The poor woman, dismayed, was soon afterwards seized with pharyngeal spasms of the most violent kind. Admitted, *d'urgence*, to the clinique of Dr. Bucquoy, she was put under treatment, but without avail, and died soon afterwards. The case, as it occurred, was recorded and commented on at the time in the *Gazette des Hôpitaux*. The dramatic interest of Professor Mosso's work, which loses nothing in the French translation, might be illustrated by many an excerpt; but its value has another and sounder basis. The physiological study of the effects of fear on the viscera, and secondarily on the nutrition of tissue, is a meritorious specimen of scientific induction, and prepares the mind for a prompter acceptance of conclusions which would otherwise have seemed accessible only by the "high priori road."

GARIBALDI'S BODY-PHYSICIAN.

DR. BERTANI, the organiser of Garibaldi's field hospitals, has within a fortnight been followed to the grave by a scarcely less interesting figure, Dr. Giovan Battista Prandina, the General's body-physician. This accomplished practitioner and intrepid patriot was born in Milan in 1816, and was already in great request by a wide *clientèle*, when the upheaval of 1848 drew him, like so many other generous natures, into the struggle for Italian unity. He first served under King Charles Albert, and shared with him and young Victor Emmanuel the dangers and disasters of the campaign that closed in 1849 at Novara. He again resumed active professional work, this time at Chiavari, labouring assiduously among the poor of the district, and so distinguishing himself by his devotion during the cholera epidemic of 1857 that his services were recognised by two gold medals for "valour as a civilian." Two years thereafter he accompanied the Piedmontese troops on their triumphal entry into Milan, having served on the army medical staff as Garibaldi's physician, in which capacity he so won the confidence of the General that he was his constant attendant on all his Italian campaigns. In 1862 at Aspromonte, and, later, in the prison at Varignano, at Spezia, and in the islet of Caprera, he never left the side of his illustrious chief so long as the physician's art could cure or could comfort. Again he was drawn from general practice by the campaign of 1866, and again he was of great assistance to Bertani in organising the field hospitals; and a year later we find him, in the desperate invasion of the States of the Church, rendering active service under fire at Monte Rotondo, and even reinforcing the combatants in their Parthian retreat at Mentana. After this campaign he once more resumed professional work, chiefly among the poor, helping forward by his medical skill or his pecuniary means every institution for their well-being, moral and physical, while always keeping himself informed as to every phase of the declining health of his beloved General. Thirty-six is the number of the institutions, benevolent and patriotic, of which he was a steady promoter, and at whose anniversary meetings he was always an idolised assessor. On the death of Garibaldi at Caprera, in the June of 1882, he produced the General's will, which had been secretly confided to him in 1877, according to which the mortal part of the illustrious deceased was to have been consumed by cremation. But the document was not respected, Dr. Prandina's protests were overborne, and he retired from the island in just indignation at the authors of the counter-plan. This pro- [illegible] devotion was still as strong as ever—though [illegible] and a much-tried [illegible] warned him [illegible] there I shall either be quite cured or get buried in the lake"). At first the change seemed to answer; but the slight return of strength seduced him into going out of doors: the day was treacherous; and, a relapse supervening, he died serenely on the 15th inst.—the day on which, seventy years ago, he was born. His funeral was one of the most impressive witnessed of late years; and over his grave, to an audience composed of thousands of humble witnesses to his benevolence and skill, the poet and publicist, Felice Cavallotti, delivered a splendid discourse on this physician, now laid so honourably to rest.

SANITARY REORGANISATION IN MARYLEBONE.

AN important step is being taken in Marylebone with a view to the reorganisation of the sanitary department, which has not, according to public opinion as recently expressed, been maintained at a proper standard. A committee was appointed to report on the subject, and, with one exception, all their recommendations are to be carried out. The first relates to the registration and supervision of sub-let houses. As an experiment, 150 of these houses were registered shortly after the outcry against the method in which the working-classes were housed in the metropolis, and the result is stated to have been so satisfactory that the number is now to be gradually increased up to 1500. It is also at last admitted that the method of dust removal in force is a failure. The "Lump Contract" system is an unwise one, for the contractor's main object, when he arranges for the work for a specific period, must be to make as much as he can out of the transaction. Until March, 1887, the present system must be retained; but it is expected that before that time arrives the Sanitary Committee, with the aid of the medical officer of health, will have a better scheme to submit; and it is suggested that the contracts about to come into force shall be placed under the supervision of the sanitary department, and that an experiment should be made with the movable pail system for some portion of the district containing about 500 houses. Re-arrangement of the inspectors of nuisances is to be made, so that each shall be responsible, amongst other things, for dust removal and inspection of registered houses in a definite area; and five additional officers are to be appointed. And, with a view of relieving the medical officer of health and the inspectors of nuisances from the more formal and clerical work of the office, a sanitary clerk is to be appointed to the health department, and is to keep and register complaints, have charge of the records of sub-let houses, attend to summonses under the Sanitary Acts, &c. The only point which remained to be dealt with was a structural alteration with a view of giving better access to the sanitary department, and this is postponed. The changes inaugurated are important, and we trust that they will be carried into effect with determination and energy.

ACROMEGALY.

UNDER the name of Acromegalie M. Marie described a curious affection characterised by an acquired hypertrophy of the upper and lower extremities, and of the head, the hands, feet, and head especially become enormously enlarged; the skeletons of the hand and foot are of gigantic proportions, and without appreciable deformity. In contrast the forearms, arms, and legs preserve their normal size, or only increase in size to a slight extent, as [illegible] described by Friedreich. The bones of the face [illegible] when the head is affected, and the general [illegible] countenance assumes that of an ellipse with [illegible] vertical diameter considerably elongated. [illegible] characteristic deformities, there exist other [illegible] ance curving of the spine forwards [illegible] volume of certain bones (clavicles, ribs, [illegible]

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but not of the long bones, tendency to hypertrophy of the fibro-cartilages of the ear and larynx, slight deformity of joints, wasting of muscles, deafness and blindness, hypertrophy of the tongue, preservation of general sensibility, spontaneous pain, a tendency to varicose veins and hæmorrhoids, considerable thirst, abundant flow of urine, and absolute integrity of the skin with a certain condition of cachexia. The disease effects males and females between the ages of fifteen and thirty-five; but apart from the disappearance of the menses nothing is known of its etiology. M. Marie speculates on the nature of the affection, and inclines to regard it as due to a vice in the development of the osseous system analogous to the disease known as primary progressive myopathy. Clinically, the disease recalls myxœdema, osteitis deformans of Paget, and leontiasis ossea of Virchow.

THE WINTER OF 1885-86.

MR. CHARLES HARDING read a paper at a recent meeting of the Royal Meteorological Society which well deserves the attention of members of our profession, as supplying suggestive data for the study of weather in relation to disease. As a matter of fact, the winter of 1885-86, now happily drawing to a close though not quite ended, has not been productive of a high mortality or of prevalent disease, although it has occasioned very great suffering as well as distress. The large class of people who are afflicted with "nerves"—to use a popular expression—have been exceptionally strained and demoralised by the long persistence of "depressing" influences. There have also been many cases of rapid, and to some extent unexpected, death, occurring among persons who, while apparently in average or even more than average health, failed in force and tone with especial readiness when subjected to exhausting or inhibitory agencies. Thus, the number of deaths from pneumonia has been significant, if not really high. We are beginning to recognise that this malady is not a sthenic inflammation. It has a close relation to those states of the organism, however induced, in which the quantity of oxygen available for metabolic purposes is small; and probably to other states which are either the immediate results of blood-poisoning or render the organism peculiarly susceptible to what may perhaps be loosely called mephitic influences. In short, the pneumonia of recent days differs essentially from that for which our fathers and grandfathers were freely bled and purged, and is more closely connected with sewer gas and other forms of poisoning than with those reactionary inflammatory processes which are commonly regarded, or more accurately speaking used to be regarded, as the effects of chill. The congestion set up is what was once called "passive" rather than "active," and, instead of consolidation with effused lymph, there is loading of the organic structures with an exudation in which cells preponderate and fibrination does not speedily occur. All forms of disease have, during the recent winter, tended to what may be characterised as a low and rapidly exhausting type, with depressed nerve forces and vaso-motor disturbances of extreme degrees and wide variations. Mr. Harding's paper throws light on some of the atmospheric causes which have been at work, playing an important part in the production of the phenomena which practitioners in medicine, at least in populous districts, can scarcely fail to have observed. It seems that the *earth* has been colder than usual as compared with the air, being only some two degrees above the temperature of the atmosphere. This is a most important matter from a health point of view, particularly as regards the classes of persons who are susceptible to slight changes of temperature. The earth's temperature would seem to play the part of a stable point or centre around which fluctuations may take place harmlessly. Speaking generally, the winter has been excessively long, and the durations of spells of cold have been remarkable. Our readers will do well to study the paper in detail; but the relation of the earth's temperature to the atmospheric temperature is the point to which we desire to direct particular attention. From March 1st to the 17th, as Mr. Harding tells us, the earth was colder than usual by amounts varying from 6·3° to 8·5°; and, which is the important fact, it approximated more closely than usual to the temperature of the air around. Electric and magnetic conditions, undoubtedly affecting the nerve state in a marked degree, must have been greatly modified by this bringing together of what may be compared to the centre of gravity and the meta-centre in relation to meteorological equilibrium.

THE COLONIAL EXHIBITION HOSPITAL FUND.

THE first of the "Mechanical Beggars," invented by Dr. James H. Aveling, has been placed, as suggested by him, in the Colonial Exhibition, and is now busily begging for the London hospitals. It has been inspected by Her Majesty the Queen, their Royal Highnesses the Prince and Princess of Wales, the Duke and Duchess of Connaught, the Duchess of Albany, and the Princess Beatrice, who expressed themselves much pleased with its mechanism, and tested its working by depositing coins in the donation-box. It is to be hoped all visitors will follow the good example thus set; for if everyone who enters the Exhibition were to give but a penny, the amount realised would be about £10,000. The Exhibition "Mechanical Beggar" has two windows, through one of which may be seen a card in constant motion with "Pray give" on it; and through the other, but only when a coin is deposited, a card with "Thank you" on it, which jumps up and remains in sight a few seconds. The donations are collected by the cashier of the Royal Commission, and it has been proposed to hand over the sum realised to the Committee of the Hospital Sunday Fund for distribution.

SMALL-POX HOSPITAL ACCOMMODATION.

LAST week Mr. Stansfeld received, at the offices of the Local Government Board, a deputation which urged that there was no necessity for the proposed hospital at Darenth. Mr. Sly, the chairman of a conference of metropolitan boards of guardians which had been held upon this subject, acted as principal spokesman, and pointed out that the past experience of similar institutions had not been sufficiently satisfactory to warrant the expenditure of a further sum of £118,000 upon that at Darenth, while another guardian thought that a better site could be obtained on the waste land near the small-pox ships. The action of the Metropolitan Asylums Board in denying any responsibility for the effects of these institutions has raised a hostile feeling in the minds of many metropolitan local authorities, and has taught London to think of these institutions in any sense but that of preventers of disease in a community, and to this feeling is no doubt to be attributed the opposition of the present time. The Asylums Board have attempted to meet the difficulty of dissemination of small-pox from the aggregation of persons suffering from this disease only by removing the sick to a distance from London, and although this must minimise the evils which result from hospital treatment of small-pox, the managers are practically only postponing the evil day, which must come sooner or later as London grows. The means they have provided for the removal of the sick are so admirably designed that this is accomplished with much less fatigue and inconvenience than formerly, when the distance was less. The fact, however, remains that during epidemic times some aggregation of very severe cases must take place within

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the Metropolitan area, and Mr. W. H. Power has clearly shown that the housing of only nine such persons is sufficient to give rise to an outbreak of disease in the neighbourhood of the institution in which they are placed. The difficult problem of hospital provision for small-pox is not yet solved, nor is it being solved; while therefore we may admire the public spirit of the managers in endeavouring to make provision for small-pox patients before the appearance of the next epidemic, we would gladly see some portion of the funds at their disposal devoted to the construction of an institution which should not be liable to the same accusations as were made with so much reason against the hospitals at Fulham, Hampstead, and Homerton. London is accustomed to regard the isolation of cases of small-pox as an important means of safety to individual households, and it should surely be possible for this to be effected without recurrence of the misfortunes which have attended all former efforts.

STATUE OF THE LATE ERASMUS WILSON.

THE simple but impressive ceremony of Tuesday last in the grounds of the Royal Sea-bathing Infirmary, Margate, went off to the evident satisfaction of all concerned. As soon as the occupants of the special train from London had arrived on the scene, Sir James Paget stepped, uncovered, on to the platform and opened the proceedings in the simplest possible manner. In a few admirably chosen sentences, every one of which told with his audience, Sir James depicted the remarkable career of Sir Erasmus Wilson, pointing out the growth of his riches, the success of his practice in dermatology, and his great love for medical science especially. The benevolence which Sir Erasmus loved to exercise was not bestowed in a general manner, but was guided by discretion and applied to objects in which the benefactor took a personal interest. Late in life Sir Erasmus became what was rare—an ardent and successful student of Egyptology; and the obelisk on the Thames Embankment would remain a permanent monument of this study. Mr. Russell Lowell, in the capacity of Vice-President of the Egyptian Exploration Fund, also testified to the love that Sir Erasmus Wilson bore to the study of Egyptology, and for two years he had defrayed the expenses of this fund. The bronze statue was unveiled by Sir James Paget, and revealed a most artistic piece of work, executed by Mr. Brock, A.R.A. After the unveiling of the statue, the visitors were invited to inspect the buildings of the infirmary, where they had an opportunity of witnessing the valuable additions made to the ancient building by the munificence of Sir Erasmus Wilson.

PHOTOGRAPHING THE RETINA OF THE LIVING HUMAN EYE.

A PAPER with this heading appears in the *Photographic News* of May 7th, by Mr. W. T. Jackman, of Coggleshall, Essex, and Mr. J. D. Webster, and the authors of that paper have been kind enough to forward to us specimens of the photographs they have obtained. The difficulties of making a good photograph of the fundus are extreme, and we can only congratulate these gentlemen on the results of their labours, though it must be admitted that, as yet, it only appears to be possible to obtain a picture of the optic disc and of the retinal vessels as they cross the disc. The first experiments of Messrs. Jackman and Webster were made by placing a small camera fitted with a 2 in. lens in the place of the observer's eye behind an ordinary ophthalmoscopic mirror, but subsequently various modifications were introduced which are fully detailed in the paper referred to. The best light was found to be an albo-carbon gaslight, having a reflector behind it and a bull's-eye lens in front. It was well borne by the eye. The reflection from the surface of the cornea was long found to be very embarrassing, but it was overcome with the exercise of a little ingenuity. In the photograph we have received, the physiological cup in the centre of the disc is very perceptible with the marginal portion of the disc, and the main blood-vessels and their primary divisions are distinctly marked. The result is sufficiently encouraging to lead us to recommend the authors of the paper to persevere in their efforts, and not to be discouraged by failure. Much greater difficulties than those which are here presented have been overcome by patience and the intelligent application of existing knowledge, and we expect soon to receive a still more satisfactory representation of the fundus of the eye.

HOSPITAL SATURDAY IN BIRMINGHAM.

SATURDAY, the 22nd inst., was the day appointed for paying in this year's contributions from the workpeople of Birmingham towards the support of its medical charities. The movement has been a brilliant financial success from the date of its initiation in the midland metropolis in 1873; and it is specially worthy of note that, trade depression notwithstanding, the annual total steadily grows. The Birmingham Joint Stock Bank, where the collection is always paid in, opened its doors for the special purpose at three o'clock last Saturday afternoon, and the staff remained cheerfully at work until nine o'clock. The *Birmingham Daily Post* reports that "at four o'clock 262 contributors were credited with £2944; at five, 360 with £3566; at six, 442 with £3980; at seven, 543 with £4386; at eight, 647 with £4818; at nine, 774 with £5332 19*s.* 6*d.* Last year the amount received at nine o'clock was £5094, and the number of contributors 809, so that the average contribution was £6 17*s.* 9½*d.* this year, against £6 5*s.* 11*d.* in 1885. These averages, however, are necessarily reduced by subsequent payments, inasmuch as all the larger contributions have been received. If, however, the subsequent payments raise the total at the same rate as they did last year, the workshop collection will reach £6712, as against £6446." The firms whose *employés* are at the head of this year's list with amounts over £100 are: G. Kynoch & Co. (Lim.), £371 16*s.* 8*d.*; Nettlefolds (Lim.), £139 8*s.* 9*d.*; Tangyes (Lim.), £102 8*s.* 1*d.*

BURIAL REFORM.

BURIAL, it seems to us, holds indisputably the first place among the various methods which have been adopted for the disposal of the dead. Not only does it present the various advantages which have been claimed for other systems, including that of cremation, but it meets the objections which have been urged against these on religious, social, and judicial grounds. In speaking thus, however, we must not be taken to deny the need of reform in our present customs of interment. On the contrary, we acknowledge traditional errors in this respect, and speak rather of what burial should and must become than of what it commonly is. That process which is exemplified throughout the generations of nature must be our model in this purely physical matter. We are made out of the earth, and we but follow the law of all created forms when our bodies are finally restored to the earth. But if we maintain this rule, we must uphold it in its simplicity. The stout case in which we are wont to enclose the dead, and fruitlessly to forbid decay, must be abandoned. To retain its use is a blot upon our civilisation. We corrupt Nature while we profess to copy her, and we store up for ourselves under our very feet the accumulated and postponed decay of many years. The more perishable the covering, the better for our purpose and the better for the health of the community. It may

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be thought that further argument on this subject is hardly necessary, but we cannot forbear from expressing thus shortly our own opinion in support of the work which is being carried out on the same lines by the Church of England Funeral Reform Association. At a meeting of this Society at Grosvenor House on the 22nd, the Bishop of London spoke in favour of the adoption of measures for promoting "a fuller appreciation of the idea of Christian burial." Mr. Seymour Haden followed with a speech in which he showed that simple interment, such as we have above described, was not only by far the most suitable on economic and sanitary grounds, but was the form most strictly in accord with the familiar words which are daily heard committing "earth to earth." The resolutions proposed by both speakers in these terms were unanimously carried, as was also that in which both they and the Duke of Westminster agreed in recommending to all classes, especially to the wealthy, the duty of asserting by example the need of this salutary reform in our mode of burial. It is by organisation of this kind that public opinion can best be influenced on this important subject, and we may therefore expect that in time the present cumbrous practice will be replaced by others newer and better.

STRENGTH OF WILL.

To the logician and the practical thinker no subject is of deeper interest than the power of the will, as exemplified in the control of the passions by the higher mental faculties. Theoretically, everyone admits that the will is a great power; but not all are agreed as to the degree of its supremacy, and its capacity for development by careful culture and persevering exercise. Memorable historical incidents attest the difference which men and women exhibit in their power of controlling the emotions when called upon to witness or to endure suffering. When Moreau, seated on his charger at the battle of Dresden (Aug. 27th, 1813), beside the Emperor Alexander, had both his lower limbs shattered by a cannon-ball from the French lines, he was carried to the rear without uttering a groan, and placed upon a table in a cottage to undergo amputation of the right leg. He asked for a cigar and smoked it leisurely while the surgeon did his work. In a short time the latter expressed fears that the left limb was also so much damaged that it was very questionable if it could be saved. "Then cut that off too," exclaimed the heroic General, and he remained immovable throughout. How different the temperament of the great Sir Robert Peel. When carried home after a fall from his horse on June 29th, 1850, he was so exquisitely sensitive that he could not bear Sir Benjamin Brodie and the other attendants to touch him. It was found impossible to reduce his fractured clavicle. After death another fracture was discovered of the fifth rib, pressing on the lung; but the case was really one of a man of grand intellect utterly unable to subdue his emotions when suffering from pain. It is a popular idea that, in spite of their more sensitive nature, women can exercise more self-control and bear pain better than men do, and some extraordinary cases may be adduced in support of that belief. Dr. Paul F. Eve, in his "Collection of Remarkable Cases in Surgery," reports this instance of Cæsarean section successfully performed by a negress upon herself in the year 1769: "Being in labour, she seized a butcher's broken knife, about two inches and a half long, and cut through her abdominal wall on the left side near the middle line. The right thigh of the child presented, and it came into the world by the action of its own struggling. A negro midwife was sent for, who cut the umbilical cord and returned the part adhering to the placenta, and a considerable portion of the intestine also, into the abdomen, as it had come out of the wound with the child. The surgeon who attended the plantation was sent for a few hours after the accident; and judging, from the situation in which he found the patient, that some dirt had been put into the wound by the old midwife with the intestines, he cut open the stitches that had been made and carefully washed the parts clean, extracted the placenta at the wound, and then stitched it up again. The child lived five days. The woman recovered perfectly, menstruated regularly, and became pregnant again." Terrible as that occurrence was, how much more extraordinary was the fortitude of the Roman woman whose case was fully related in our columns last week. The facts would be incredible but for the signed attestation of Drs. Baliva and Serpieri, who were called to the patient thirteen hours after the first incision, and six hours after the small intestines had projected through the wound. Let the reader picture to himself the fact of the poor woman, oppressed with shame, three hours after midnight, long before the sun had risen—for it was March 28th,—alone in a peasant home on the slope of the Apennines, just thirty-nine miles from Rome, determining that she would give the lie to scandal, seizing the kitchen knife, thrusting it into her womb, wounding the child as she tore it out, binding herself up, walking into Viterbo to breakfast with her sister, and again homeward, only then fainting as the intestines gushed through the wound. The tragic picture has its ennobling side as a practical lesson of strength of will.

THE PROTECTION OF WEIRS.

WHEN an accident is evidently due to neglect of ordinary care on the part of those who suffer by it, we may refrain from censure where the debt of hardihood has been so dearly paid; but we cannot recall such events, nor can we by any mere contrivance prevent their occurrence. The accident at Bray, by which a boat was swamped in the weir and several lives lost, does not, however, seem to have been of this kind. An eye-witness writes that it was blowing hard at the time, and that steering was very difficult, while the disaster was clearly in no way due to want of skilful management on the part of the occupants of the boat. The mishap, moreover, is not a solitary one; similar fatalities have happened before in the same circumstances. It is to be hoped, therefore, that the lesson thus rudely taught will not be allowed to pass without finding its practical application, and that the Thames Conservators will recognise the duty and advantage of protecting weirs in some such manner as has been suggested, so as to limit the risks of boating on the river to those dangers which can with care be avoided.

CHOLERA IN ITALY.

IT is by no means easy to explain the state of affairs as regards cholera in Italy. Up to the 19th inst. there was a daily record of cases and deaths from the province of Brindisi, and up to the 20th inst. official information was regularly given as to the daily fatality of the disease both in Bari and in Venice. But from that date all news has ceased. It is hardly possible that the prevalence of cholera, which had been for some time maintained, and which had caused a substantial number of deaths every day for some time past, should have suddenly ceased, and this simultaneously, at both extremes of the Italian peninsula; and we feel bound to assume that, for purposes which we do not pretend to explain, the information as to the real state of affairs is being suppressed. It is, of course, possible that there has been a diminution in the extent of the outbreaks, and that it is thought best not to provoke the imposition of further quarantine measures now that these have become unnecessary. But, on the other hand, it must be remembered that, in view of the advance of the season when certain

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parts of Italy are largely invaded by visitors, there would also be a strong inducement to hush up any extension of the epidemic. In the absence of all official returns, time alone can make clear the reasons for a suppression of information which must almost certainly have taken place.

SUICIDE OF A LUNATIC WHILE UNDER LEGAL CONTROL.

WE are not inclined to criticise the dealings of relieving officers with actual or alleged lunatics too severely, because we thoroughly appreciate their difficulties; but it ought to be a rule of practice, from which no departure should be allowed, that whenever and wherever a person is brought under the notice of a relieving officer as "a person of unsound mind not under proper control," or under any similar definition, such officer should take measures for his protection, as though he were both suicidal and homicidal, until he is finally discharged from his custody. A recent case, at Eastbourne, of suicide under conditions such as these is peculiarly distressing. There is only a minimum of blame to be attached to the officials concerned, because in this instance so much doubt existed as to the insanity of the person who ultimately committed suicide that two medical practitioners had actually certified that the alleged lunatic was of sound mind. Nevertheless, the fact remains that, due protection not being afforded, the poor man cut his throat while under legal control. The occurrence is a deeply regrettable one, and the rule of which we have spoken ought most certainly to be made; but we do not think there is any need of grave censure in this case as matters now stand, or as the duty of relieving officers is at present understood.

A LIBEL ON A SURGEON IN NEW ZEALAND.

THE *Lyttelton Times* of New Zealand contains a very full report of the trial of an action for libel brought by one of the surgeons of the Christchurch Hospital against the proprietors of the Wellington *Evening Press*. The libel complained of was contained in a highly coloured article, headed "Extraordinary Hospital Scandal; Revolting Disclosures; Manslaughter or Worse, ..." in which it was stated that at the Christchurch Hospital a man had recently been submitted to an operation for the radical cure of hernia, and had died owing to the "incompetence and criminal negligence" of the surgeon; and it went on to make many other painful statements. The whole story is a long and, we may add, exceedingly painful one, for it exhibits the profession in this colony in a very unpleasant light. It seems that a patient was admitted to the hospital for the express purpose of having this operation performed, that the operation was a difficult one, and that the man died in a few days with symptoms, in our opinion, of peritonitis. A most imperfect necropsy was made, and an inaccurate certificate of death was given. A colleague of the surgeon in charge of the case thereupon lodged a complaint with the hospital board and an inquiry was held, the result of which was that the surgeon was exonerated. Thereupon his colleague wrote to the Colonial Secretary, who very wisely refused to authorise a Government inquiry into the case. This same gentleman then had an interview with the writer of the article in question, who, as a result of the interview, wrote the alleged libel. We cannot refer to many minor points and side issues that were brought into the case. They do not materially affect it. We greatly regret such an occurrence, which can only tend to degrade the profession, and therefore injure the public. The operation appears to have been fully warranted and to have been properly carried out, although the result was fatal. As it was the first time such an operation had been performed at the hospital, or even in the colony, it would have been better to have had a consultation of the surgeons on the staff previously, and to have obtained their sanction and co-operation before proceeding further. Afterwards, a complete necropsy should have been made, and the cause of death carefully verified. But we fail to see how these errors justify the course that was taken by the colleague. A hospital can only be worked successfully when the staff are colleagues in more than name, and are ready to help each other in every way, and to share the responsibility of the position, which must at times press heavily. It was an extreme measure to bring this case before the hospital board; it was a grave mistake to make it the burden of a complaint to the Colonial Secretary; and when these authorities failed to interfere, it was altogether wrong to allow such charges as those we have quoted to get into the public press. Had we the space and the inclination to go into the case in all its details, we could easily point out flaws in the conduct of all the prominent actors in it. The verdict of a majority of the jury was in favour of the plaintiff, with one shilling damages, and with this finding we are inclined to agree.

THE BRECHIN ALMSHOUSE AND MEDICAL ATTENDANCE.

WE regret to see that Sheriff Currie Thomson has reversed the decision of Sheriff Robertson, which recognised the claim of Dr. Lawrence to be paid for his medical services to Miss Jamieson whom he attended in the Brechin Almshouse as a pauper, but who was afterwards found to be a lady of some property, and to be quite unfit to receive parochial medical attendance. The Sheriff Principal considers there was no contract between the deceased and Dr. Lawrence, only between the deceased and the parochial board, which included medical attendance on pauper terms, and expresses an opinion that a claim might lie against the board, who were paid by the deceased for, *inter alia*, the services of Dr. Lawrence, but who clearly had no right to be asked to attend a lady of property as if she were a pauper. We hope Dr. Lawrence will get a verdict against the board that will make them more careful in protecting the services of their medical men from abuse.

INFECTION AND REGISTRATION.

THERE is a good deal of force in the suggestion that means should be taken to prevent the transference of contagion in registration offices from those who have lately waited on deceased persons. It is among the poor, for obvious reasons, that infectious disease is most virulent and most fatal, whilst measures of cleanliness and isolation are alike difficult to apply. For the purpose of registering death, moreover, it is the rule that a relative present at the death, or someone who has been in attendance during the last illness, should be the bearer of the medical certificate. Under these circumstances, in addition to the fact that the registrar's office is not usually a spacious one, while the time of attendance is very limited, there can be no doubt that persons who have come thither from uninfected homes, notably those who attend to register births and may themselves be in poor health, may readily contract a dangerous or fatal illness. In considering how best to meet a difficulty of this kind, it is often more easy to propose a remedy than to apply it. Arrangements have to be made with regard to other business, and premises which are shown to be unsuitable may not admit of instant alteration. Fresh air and disinfecting substances are fortunately always at hand, and it would be well if registrars would frequently avail themselves of these useful agents. On the same principle, we may recommend to the notice of this department the manifest advantage of [illegible]

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offices, wherever available, rooms of good size and capable of easy ventilation; nor does it seem a difficult matter to arrange that the time fixed for birth registration should precede or be separated by some interval from that allotted to recording death certificates.

PORRO'S OPERATION AND SIMPLE CÆSAREAN SECTION.

UNDER this title, in the *Journal de Médecine et de Chirurgie* for the current month, Dr. Just Lucas Championnière has summarised a report which he recently addressed to the Paris Society of Surgery. It is a noteworthy fact that for more than one hundred years no recovery has followed the performance of the ordinary Cæsarean operation in Paris, whereas M. Championnière has saved two out of four mothers on whom he performed Porro's operation, all the children surviving. These results and Dr. Godson's statistics notwithstanding, it is difficult to form an exact estimate of the value of the two operations. In country practices the simple Cæsarean procedure is not unfrequently successful, even when performed with comparatively little care; and it becomes a question whether those successes might not be made to exceed the results of Porro's operation, by utilising the advances of surgical therapeutics. M. Championnière had felt inclined to prefer the simple Cæsarean operation; but later and fuller experience has in his judgment weighed in favour of Porro's procedure, especially so in the hands of surgeons experienced in abdominal operations, and who have all surgical resources at command. He advises the simple Cæsarean operation in cases of fibrous tumours of the uterus, because they frequently render removal of the organ an impossibility.

PHARMACOLOGY AND THERAPEUTICS.

A CORRESPONDENT writes:—"The present position of pharmacology and therapeutics is undoubtedly unsatisfactory. It is difficult to over-estimate the importance to the community of investigations into the physiological action of remedies, and yet so much opposition is displayed towards workers in this particular branch of science that few care to engage in it. As a matter of fact, English pharmacologists constitute a very small body, and their number is becoming daily more and more limited. In Germany, and on the Continent generally, the subject attracts the greatest attention and its importance is fully recognised. The expense of a research is no light matter, and if the publication of a paper, however able, subjects its author to contumely and reproach, it is hardly to be wondered at if the younger members of our profession turn their attention to more lucrative fields of investigation. What is wanted is some kind of official recognition, and until this is forthcoming we must be content to obtain our information on the action of remedies second-hand from other nations, who are not so backward in recognising originality and talent and in adequately rewarding it."

TYPHOID MORTALITY IN MUNICH.

IN a lecture recently delivered by Dr. von Ziemssen on the mortality from typhus abdominalis in Munich, he exhibited diagrams showing the immense improvement that has taken place since the city has been supplied with a good system of drainage and sewerage, and since the establishment of various other important hygienic reforms. The average annual mortality in the hospital from typhoid from 1865 to 1880 was seventy-one, while that of the last five years was only ten. From these hospital statistics a calculation was made that during the last five years the number of persons in the city annually attacked by typhoid has been 1830 less than it was in former years, the number of deaths from the same cause being annually 213 less. The learned lecturer proceeded then to estimate the saving effected to the public, reckoning the average loss caused by an attack of typhoid as fifty days' labour at half a crown a day. He thus obtained the considerable sum of £11,437 as saved in the five years; and was therefore able to point out that citizens who had made great sacrifices for the improvements had already received great benefits thereby, not only in the way he had mentioned, but in many others besides, and he went on to insist on the necessity for the adoption of still further and more perfect sanitary measures.

THE INFANT KING OF SPAIN.

ACCORDING to *La Lanceta*, Dr. Sanchez Ocana, the physician to whom is entrusted the honourable and responsible duty of attending the infant King of Spain, has interviewed no less than twenty-seven women for the purpose of choosing a wet-nurse for his youthful Majesty. It seems to have been decided before the birth took place that the Royal mother was not to be allowed the natural privilege which is properly so prized by most mothers of lower degree—would that we could say so of all! But where Royalty sets the fashion, what wonder is it that others, with no public or extra domestic duties whatever to attend to, and so entirely without excuse, hasten to depute the mother's duty to a stranger.

PSYCHIATRY IN SPANISH UNIVERSITIES.

IN *La Independencia Médica* an earnest appeal is made to the Government by Dr. Valentí y Vivó, Professor of Forensic Medicine in Barcelona, to found chairs of Psychiatry or Mental Pathology in the Spanish universities. At present, he says, the only instruction the students receive on the subject of mental diseases is that which is contained in the lectures on therapeutics, pathology, hygiene, and forensic medicine; but a great deal more than this is required, and he hopes that a ministry which has already shown itself disposed to further matters connected with public health will not refuse to consider the importance to the State of having a body of physicians well trained in the science of mental pathology.

"BAUNSHEIDISM"

"BAUNSHEIDISM" is common enough in Eastern Europe, though fortunately but little known here. This consists in making a number of punctures with needle-points by means of a perforated plate and a corresponding instrument set with points, a strongly irritant oleaginous liniment of secret composition being subsequently rubbed into the skin over the punctures. This mode of treatment is sometimes beneficial in cases of chronic muscular pain of rheumatic origin; but when ignorantly used for any and every kind of pain, as it sometimes is, a good deal of harm frequently results. Thus, a Warsaw surgeon has lately reported two cases in which gangrene of a serious nature resulted from this kind of treatment. In one case amputation had to be performed.

SCALDING OF LUNATICS.

CRUELTY to lunatics by the carelessness of attendants is a very common cause of complaint, for which far too frequently for justice, though perhaps not often enough for expediency, the superintendents of asylums are held responsible. It has been said by experienced administrators that it is easier to govern a colony of madmen than to keep attendants up to their work or "be even with them" in the matter of duplicity and the needless and cruel coercion of the poor mind-sick folk entrusted to their care. One of the common "accidents," as they are mischievously called, which

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befall the inmates of asylums is to be scalded, so that they die, in the baths to which they are forcibly subjected. The neglect shown in this particular is altogether inexcusable, and it is most desirable that this should be recognised. Such injuries as the fracture of ribs and the breaking of arms and legs are usually the outcome of bad temper, but the scalding of patients is a fruit of idleness or inattention, for which not a particle of apology can fairly be offered. An irritable or ill-tempered attendant is an anomaly; a lazy or a thoughtless one is a monstrosity, which ought not to be allowed to exist.

THE JOHNSON TESTIMONIAL.

AT a meeting recently held at King's College it was decided that a testimonial of a personal nature should be presented to Dr. George Johnson in recognition of his services to the hospital, on the occasion of his resignation of the Professorship of Clinical Medicine at the College and of the office of Physician to the hospital. An influential committee was appointed, and a lengthy list of subscribers has already been received. Dr. Johnson has given instruction to many generations of students, and, without doubt, many of those who have profited by his counsel and teaching will be glad of an opportunity of showing their appreciation of him. The treasurer of the fund, to whom subscriptions should be sent, is Professor Robert Bentley, 38, Penywern-road, Earl's-court, S.W.

THE LEICESTER ANTI-VACCINATIONISTS.

THE opponents of vaccination at Leicester grow more hardy in their defiance of law. "Home rule," like small-pox, is contagious. It is, by the action of the Government, in the air. If good for Ireland, why not for Leicester? Why should Leicester pupil teachers be revaccinated when the public opinion in Leicester is against vaccination? The Education Department has displeased some of the wise people of Leicester by applying the law of the land against two such pupil teachers. It is refreshing to see that the Government still recognises its responsibility as a central authority for enforcing, not the law of Leicester, but the law of England. We have no doubt there are many sensible pupil teachers in Leicester to be found who will comply with the law.

THE NEW SYDENHAM SOCIETY.

THE members of the New Sydenham Society will receive in the first volume for the current year a valuable contribution to the literature of one of the most important subjects of the day. The volume in question, of which we have had an early copy, has been edited by Mr. Watson Cheyne, and consists of selected essays on various topics connected with micro-parasites. It includes typhoid fever, erysipelas, tuberculosis, leprosy, rabies, actinomycosis, and many others, bringing each subject up to the present level of our knowledge. It is illustrated by a series of lithographic plates. The volume forms a fitting sequel to Koch's Memoirs on the Infective Process, which were published by the Society some years ago. It will be welcomed by many readers.

KLEPTOMANIA.

A WELL-MARKED case of kleptomania turned up at one of the Glasgow police-courts a few weeks ago. It was shown that the accused person, (a lady of independent means) had stolen two silk handkerchiefs from a warehouse in the town. The defence offered was a plea of kleptomania, in support of which a specialist testified that he had attended the accused for puerperal fever—a disease which, it was now known, was occasionally followed by this particular form of mania as one of its sequelæ. The same patient two months ago had purloined an instrument belonging to him, had hidden it under a pillow, and then assisted him actively in the search for it. He had had two similar cases. The plea of mental aberration and non-responsibility was sustained, and the accused was found not guilty, as it was impossible to say that she had "wickedly and feloniously" stolen the articles mentioned.

UNVEILING OF THE STATUE OF JOHN HUNTER.

ON Saturday (this day) the statue of John Hunter, presented by the Queen, will be unveiled in the Oxford University Museum. A short address on the Character and Work of John Hunter, with special relation to the effect of his labours on surgery and medicine, will be delivered by Sir James Paget, Bart., D.C.L., in the lecture-room of the museum. The statue will then be unveiled in its place in the court, and presented to the University on behalf of Her Majesty by Her Royal Highness the Princess Christian. All members of the University in their academical dress, and persons introduced by them, will be admitted. Any graduate may be accompanied by one friend. The address will commence at 2.30 precisely, when the doors will be closed.

PATHOLOGY OF SCURVY.

SCURVY being unfortunately a somewhat common affection amongst certain classes in Russia, papers on the subject frequently appear in the medical press of that country. In a recent account by Dr. T. Stazevich in a Moscow journal of eighty-six cases he had the opportunity of studying last summer, some attempt is made at elucidating the pathology of the disease. The writer made a careful microscopical examination of the tissues, and found in all cases he had the opportunity of observing an extensive degeneration of all the organs, and especially of the voluntary muscular tissue, which scarcely contained any really normal fasciculi; the bloodvessels were not greatly altered. He does not consider the petechial rash as due to capillary extravasation, but looks upon the spots as local hæmorrhagic inflammations. In the blood a large number of stellate corpuscles were found. The conclusion come to is that the disease is a "form of septic poisoning."

STREET COLLECTION FOR HOSPITALS.

MR. GEORGE R. SIMS writes to the *Daily Telegraph* complaining that his coachman, driving a hansom cab in which he himself was, nearly came to grief on a recent Sunday in Oxford-street through the noise of a brass band heading a procession which was making a collection for neighbouring hospitals. The fright of the horse was completed by a lad approaching the horse with a long pole with a money box at the end of it and shaking the coppers. The horse bolted and soon fell on the greasy wooden pavement, fortunately without killing anyone. Apart from this accident, we cannot admire this mode of raising money for hospitals. The intention is kind. The method is noisy and disturbing altogether out of proportion to the results. The friendly societies should leave the streets to the Hospital Saturday Fund, and find some other way to raise money for institutions by which their members so largely benefit.

VACCINATION BY UNQUALIFIED ASSISTANTS.

A PRACTITIONER at Liverpool, has been summoned before Mr. Raffles at the instance of the Vaccination authorities in London for having given improper certificates of vaccination. The gentleman in question has two dispensaries, which are attended by an unqualified assistant. This assistant was ascertained to have vaccinated children, and represented himself as the practitioner who signed the certificates. He

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(the latter) justified this by saying that the public vaccinator used to act similarly in regard to children that he, the practitioner (when unqualified), vaccinated, and that he believed every professional man in Liverpool did the same. We agree with Mr. Raffles in condemning this practice, both on moral grounds and on the ground that vaccination ought to be performed only by responsible and qualified medical men.

ALLEGED CURE OF HYDROPHOBIA BY SWEATING.

THE report from Odessa of a case of cure after the onset of what are said to have been unmistakable symptoms of hydrophobia in a boy lends some encouragement to Buisson's mode of treatment to which we have alluded (THE LANCET p. 655). The symptoms of the malady began seventeen days after the receipt of the bite from a dog authoritatively stated to be rabid. The boy, at once removed to the hospital, was placed in a warm bath, the temperature of which was rapidly raised to 42° Reaumur (125° F.). At this stage the boy became unconscious and continued so for one hour. He was taken from the bath, swathed in cloths, and placed in a room at a temperature of 68°. The same process was repeated in the evening and twice a day for the following three days, when the patient's appetite was fully restored. So far the boy has remained well.

FROM the report of the examination made by Colonel Sir Francis Bolton of the water supplied by the several metropolitan water companies during the month of April, it appears that the Thames water sent out by the Chelsea, West Middlesex, Southwark, Grand Junction, and Lambeth Companies contained in every case, excepting that of the Chelsea Company, more organic matter than in the previous month's samples, although the proportion is not in excess of what is usual at this season of the year. The water drawn from the Lea and supplied by the New River and East London Companies contained less organic matter than any of the Thames waters. All the samples were clear and bright. The number of micro-organisms discovered in the filtered water was in every case considerably less than in the March samples.

SEVERAL inmates of some workmen's dwellings in Högmarsö, a village near Stockholm, having been attacked with rigors and convulsions followed by cough and severe gastric pain, causing extreme prostration, and the nature and cause of this outbreak being very obscure, the "provincial medical officer" has received instructions to institute an examination into the circumstances, and to furnish a report for the guidance of the authorities.

TELEGRAMS from New York announce the death of Dr, Dio Lewis, the well-known physician. He was born at Auburn in 1823, and was educated at Harvard Medical School. Dr. Lewis deprecated the use of drugs, and advocated the introduction of physical exercise as a part of public education. He was the author of several works on hygienic subjects.

A LEGACY of some £15,000 has been left to the Jena University to be applied in zoological research on the basis of Darwin's evolution theory. The testator is Herr Paul von Ritter, of Basle, who believes the teaching of Darwin to be the greatest sign of progress which the century has yet given.

AT a meeting of the American Surgical Association held in Washington on April 30th, 1886, Sir William Mac Cormac was elected an Honorary Fellow of the Society.

ODONTOLOGICAL institutes are to be added to all the Prussian University establishments. At present Berlin is the only one that has such an institute. The next to be arranged will be in Breslau.

CHOLERA is reported to be increasing in the South of Japan.

UNIVERSITY OF LONDON.

AN extraordinary meeting of Convocation was held on the 25th inst., Dr. F. J. Wood, Chairman of Convocation, presiding.

Mr. MAGNUS moved that the report of the special committee appointed on Dec. 8th, 1885, be received. He said that the report was not the expression of the views of any one member, but of the whole committee; and contended that it was based upon resolutions passed by Convocation long before the idea of a Teaching University was started. The scheme involved the affiliation of provincial colleges, which was a distinct gain, there being no reason why the university should be restricted to London.

Mr. MAGNUS then moved the following resolution:—"That Convocation approves of the admission of certain educational institutions having one, or more than one, faculty of university rank as constituent colleges of the University, and agrees with the proposals relating thereto contained in Section 4 of the subjoined scheme." (See THE LANCET, May 22nd, p. 994.) He cited the Vice-Chancellor's remark that in any change in the University it should seek to add to its useful functions, and not to take away from them. It had long been felt that the teaching institutions of London should be more closely united, and this would be effected by bringing them into connexion with the University. He warned those who desired to set up another university in London and who might oppose the present scheme, and believed that the majority of members of Convocation would affirm the value of the reform.

Mr. ANSTIE, Q.C., seconded the resolution.

Mr. T. TYLER objected that the scheme introduced a new department of the University, which hitherto consisted of fellows and graduates, and would now contain "constituent colleges" also. He also asked what was meant by colleges of "university rank."

Dr. MOXON was astonished not to see any of the supporters of Lord Justice Fry's scheme opposing the present one. But he did not think this reform would meet the views of those who advocated a Teaching University—i.e., an institution where the aptitude and training of a man could be estimated as well as his knowledge tested. He had however, no objection to the scheme so far as it went.

A MEMBER pointed out that the University of London was founded on broader ideas than that of a local teaching university. It was meant to be open to all comers; and he thought it should retain its universal character; but at the same time there was room in London for a great teaching local university.

Mr. HANHART objected that the sections of the scheme were not being discussed in due order, and moved as an amendment that the words "affiliation to the University" be substituted for "admission."

Mr. BROWN seconded the amendment.

Dr. CURNOW supported the resolution, but did not think it went so far as the Teaching University proposals or as Convocation had itself desired. It might be accepted as an instalment; but the next resolution was one which should be amended.

Messrs. LYNN and ELLIOTT supported the amendment.

Dr. SYLVANUS THOMPSON explained the reasons for taking the scheme in the order of the resolutions, and said that the word "admission" was used in a general sense.

Dr. SANSOM thought the tendency of admitting colleges would be to lower the value of degrees. There was room for another university in London, which should grant degrees equal to those of other existing universities, if not so high as

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the University of London. He urged that nothing should be done to depreciate the degrees of the University.

Several other members spoke, one of them averring that it would not meet the views of the Teaching University, nor satisfy the requirements of University and King's Colleges.

Mr. MAGNUS, in reply, said that the proposal of the Colleges of Physicians and Surgeons to grant degrees was quite apart from this question.

The amendment was lost.

Another amendment, moved by Mr. TYLER and seconded by Mr. LYNN—viz., "That Convocation approves of the revision of the list of institutions in connexion with this University, with a view to such institutions being brought into closer relation with the University"—was negatived, and the original resolution put and carried by a very large majority.

Mr. MAGNUS then moved, "That Convocation approves of the establishment of a Council of Education as a part of the University, and of the proposals for giving effect thereto contained in Section 5 of the subjoined scheme."

This was seconded by Mr. ANSTIE, and after a brief discussion, interrupted by a motion to adjourn the House, was carried.

The House was proceeding with the next resolution—viz., "That Convocation approves of the proposals for the constitution of the Senate of the University contained in Section 2 of the proposed scheme,"—an amendment to introduce the Institute of Civil Engineers having been rejected, when the adjournment took place until June 29th, the day fixed for nominations to the Senatorial list.

THE GERMAN MEDICAL CONGRESS.

(*Concluded from page 948.*)

A DEBATE upon the "Treatment of Syphilis" was opened by Professor KAPOSI (Vienna), who said that it had not made equal advance with our knowledge of the pathology of the disease. Mercurial inunction—now, as four centuries ago—remained the most reliable treatment; and the only notable gain to treatment since the first half of the sixteenth century was the introduction of iodine in the middle of the present century, and, as regards the administration of mercury, the rational use of inunction and the subcutaneous injection of the drug. The *laisser aller* principles of the treatment of syphilis held by the Broussais school, and the erroneous doctrine which attributed late manifestations to mercurialism, were briefly combated. Syphilis must be regarded as a curable disease, one of the most curable of all the infective constitutional maladies, for we possess remedies and methods which act directly and powerfully upon the local lesions, as well as on the general blood disorder. It is much to be desired that the experience of practitioners should be periodically collated so as to establish a common understanding on the value of any special line of treatment. The first question raised was, *Does treatment of the initial forms prevent general infection?* This question may be discussed alike by those who hold the unitarian doctrine that every kind of primary lesion may be the starting-point of general infection, and by the dualists, who assign this part solely to the typical sclerosis. If, with von Bärensprung, the sclerosis (hard chancre) is regarded as a symptom of actual constitutional infection, then the question of abortive treatment falls to the ground; but if the probably truer view be held—viz., that the specific virus is limited for a time to the primary lesion, and is thence conveyed to the tissues by the lymphatics and blood-vessels,—then, theoretically, this absorption might be prevented and constitutional infection guarded against. The methods theoretically and practically possible to effect this object are threefold. In the first place, the virus may be destroyed at the seat of inoculation, as by cauterisation or excision of the primary sore. The non-development of syphilis following such treatment cannot be taken as positive evidence of its effectiveness, because every sclerosis is not necessarily followed by syphilis, and because the truly syphilitic nature of the primary lesion rests on the testimony of the surgeon who excises it. Nor is there any means of determining a period when the excision of the local lesion may be successful. Again, the presence or absence of glandular swelling does not suffice to determine the syphilitic nature of the lesion. If Lustgarten's bacilli could be trusted as a test for syphilis the nature of a primary sore might be determined. Practically, excision is easy enough when the sore is preputial; but it can be less thoroughly practised when this is seated on the glans or sulcus coronarius. In the second place, systemic infection may be prevented by interrupting or closing the path of absorption, which it has been professed to effect by division of the dorsal lymphatics, and, if desired, by excision of glands. This is a very naïve proposition, for injected preparations show that the whole penis lies embedded in a dense meshwork of lymphatics. In like manner the value of mercurial and iodic injections into the primary lesion to destroy the virus during absorption may be discarded. In the third place, there is the abortive treatment. Is it not reasonable to employ systemic treatment early in every case when the specific characters of the primary lesion are manifest? Although this may be rational and humane—for it is, theoretically, imprudent to suffer a disease to attain its full intensity before commencing to treat it,—yet, practically, it is not of much use. Experience teaches that the outbreak of general symptoms is not prevented by such early treatment, but only postponed; that the symptoms then follow a disorderly and atypical course; and that generally there appear, not merely mild exanthematic affections, but very early severe symptoms—e.g., periosteal. Therefore, in his experience, it is unnecessary and injurious, as well as perplexing, to the practitioner to attempt systemic treatment before the clear manifestation of constitutional symptoms. It is wiser to allow the disorder to develop, and to defer treatment until the first appearance of roseola. The second question raised was *the relative advantages of anti-syphilitic remedies with reference to the pathological phenomena.* The answer to this depends upon establishing a principle upon which to estimate the activity of a remedy or method of treatment, and to critically survey such methods. The activity of a drug is estimated by the promptitude with which its employment results in the disappearance of visible and palpable phenomena, and in the freedom from relapse. On the latter point, in which the cure of syphilis solely consists, judgment is difficult. Hospital patients are discharged as soon as external visible symptoms have disappeared and only a small proportion come again under treatment, and are available for statistics, which are therefore worthless. It is only in private practice that information as to the cure of syphilis can be gained, and here no statistics are available; Prof. Kaposi summed up his experience by saying that there are many patients who remain cured after a single course of a few weeks' or months' duration; but there are many who undergo one or several relapses before being cured; and, finally, that in a small number who have been free from symptoms for years, and have procreated healthy children, relapses of syphilis—cutaneous, cerebral, and other—may arise. It is quite impossible to fix a limit to the time over which a drug may be administered. The occurrence of relapses tells nothing either for or against the value of a drug; for relapses may occur under the most favourable conditions. It is desirable that after a sufficient treatment several months should be passed without any symptoms; and the disappearance of polyadenitis must be borne in mind. The remedies known to be most active are—(1) mercury, (2) iodine, and (3) vegetable decoctions[1] (*holz-tränke*); to which may be added the so-called after-cures, as sulphur and sea baths; and, lastly, Fournier's protracted plan. Mercury can be introduced into the body in many ways, the most important being inunction with grey mercurial ointment. As the absorption of the drug depends on the fat with which it is mixed, lanolin alone is useless as the basis of an unguent. Empl. hydrargyri is less efficacious except for the local treatment of gummatous infiltrations. Sublimate baths are of use in infantile syphilis, and in adults in cases of extensive ulcerating gummata. The introduction of the hypodermatic treatment by Lewin has been of great service; it is more exact and direct than any other mode of administration, and a large number of mercurial preparations may be administered by its means. These preparations vary in their efficacy as well as in their liability to produce local

[1] Sarsaparilla mainly.

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lesions, and Prof. Kaposi concurred in the following scheme drawn by up Bockhart to classify the various preparations:—

1. Mercurial preparations of markedly durable action—
   (*a*) Inunction (Neapolitan ung. hydrag.).
   (*b*) Calomel injections. } Subcutaneous.
   (*c*) Lewin's sublimate solution. }
2. Mercurial preparations of moderately durable action—
   (*a*) Sublimate; chlornatrium. }
   (*b*) Albuminate and peptonate of mercury. } Subcutaneous.
   (*c*) Blood-serum—mercury. }
3. Mercurial preparations of slightly durable action—
   (*a*) Mercury bicyanate. }
   (*b*) „ glycocoll. } Subcutaneous.
   (*c*) „ formamide. }

The least painful of these is the formamide. Internally, sublimate, calomel, and tannate of mercury are useful, the last especially producing but little effect on the stomach; also protiodide and biniodide, which are more frequently prescribed in France. Professor Kaposi thinks that mercury should be given in all forms of cutaneous affection in the early period, and in the late period for diseases of bones, of parenchymatous organs, and of the cerebro-spinal system in acute stages; whilst iodine is preferable for joint affections and syphilitic cephalalgia of the later stages. The more resolute and prolonged the treatment of acute affections, the more certainly may relapses and a protracted course be avoided. He therefore advocates inunctions where possible, and failing them injections of the more durable agents, less active medication being reserved for those late forms which are not of urgent nature. The more serious affections—as iritis, ulcerations of the naso-laryngeal tract, and affections of the brain and spinal cord—must be treated actively by inunction. Mercurial treatment never gives rise to sequelæ so long as it is carefully given. Iodine is useful in bone and joint affections, especially for nocturnal pains, and also for the symptoms of the gummatous period. In the early stages iodine should never be prescribed alone for fear of protracting the disease, and it is a mistake to suppose that iodine corrects the abuse of mercury. The "decoctum Zittmani" is useful in late forms, especially of ulcerations of the throat and skin, and may be combined with inunctions. It is preferable to the "decoctum Pollini," which injures the appetite. The after-treatment by sulphur baths, hydropathy, &c., has no specific action. The third question dealt with by Professor Kaposi was *how long and how often should anti-syphilitic treatment continue?* In general, the first treatment should be carefully pursued for a long time, and then only repeated as often as the symptoms of syphilis recur; when there are no signs, treatment is superfluous. But a rational course of treatment can do no harm, and there is nothing to urge against its occasional repetition within the first year; but in deciding upon the need of this the practitioner must deal with the individual case. Besides the constitutional treatment, local measures are in many cases needful, such as ulcerations of the nose, pharynx, and larynx.—Dr. NEISSER, who followed, spoke of the numerous differences which still obtain among practitioners in the treatment of syphilis; but he would not abandon the hope that in the future, by means of careful and critical analysis, more certain principles would be established. The experience of single individuals needs to be corrected by the sum of the experience of many, and in this direction much might be done by collective investigation. With this object he directed attention to the following points: Is it possible to prevent the outbreak of syphilis by removing its primary effects? Ought the constitutional disease to be attacked with remedies, or should it be left alone? What plan can be established for a treatment which may be generally accepted? Each of these questions he discussed in turn. 1. That syphilis is a bacterial disease may be now generally accepted, the Lustgarten-Doutrelepont discovery being a distinct advance; but the important question of the time and manner of the dissemination of the microbe from the seat of infection cannot be determined by experiment, since syphilis is incommunicable to animals; it must be decided clinically. We are unable to base our treatment on pathological knowledge, but the results of treatment may help to solve the pathological problem. In most of the published cases excision of the primary lesion has had no result; some have remained healthy. Negative results are open to the objection that the operations were not radical enough or were deferred too late, and positive results may be ascribed to the fact that they were not cases of actual specific lesions. Further investigation is needed, for it may be taken that in a great number of cases the virus remains for a long time at the seat of infection, and therefore may be removed, especially if attacked early enough. Results may be uncertain, but no harm can come of excision, which is the best local treatment. If excision be not practised, then cauterisation by strong carbolic acid is to be recommended. 2. He agreed with Kaposi that, once constitutional syphilis is declared, the best remedies are mercury and iodine, without forgetting attention to hygiene, diet, &c. Mercury should be given as soon as the diagnosis of syphilis is established, for although the course of syphilis is not cut short its intensity will be diminished. Syphilis, if untreated, may pass on to recovery; but far more often it leads to destructive processes, as the history of endemics teach. There is no sure ground for prognosis or the estimation of the later course of the disease from its early stages. In every case left untreated the possibility of tertiary manifestations must be borne in mind. But the action of mercury being directly antidotal, it is obligatory to give it, although under slight necessity, on the chance of mitigating severe symptoms and to effect a cure. He agreed with Fournier's plan of commencing treatment as early as possible, often before the appearance of a rash. He did not think such early treatment harmful; but its value or inutility as a prophylactic must be regarded as an open question. 3. He also agrees with Fournier in prolonging treatment for three or four years, a chronic disease requiring to be treated chronically; and for this purpose the continuous administration of small doses may be intermitted with larger and more active ones. The choice of a drug is less important than the amount of mercury administered, and it is wrong to adhere to one remedy or one method. As a rule treatment should be active at first, and at any recurrence, the intervals being available for iodide of potassium or milder mercurials. The various methods of mercurial inunction may be successively combined, so as to bring as many lymphatic gland regions under its action as possible. Baths, "drink cures," "sweating cures," pilocarpine, and wood decoctions are only to be regarded as aids to specific treatment. Iodine holds an intermediate position, having in the later stage a specific action. It is indispensable, but is generally given in too small doses. Even children will bear very large doses. There is no essential difference between the iodides of potassium, sodium, and ammonium. It is questionable if iodoform given internally or subcutaneously is of any service.—Dr. WEBER (New York) spoke of the prevalent methods in America. A notable feature is the early administration of iodide of potassium, even at the beginning of the secondary stage; and of much larger doses in all stages than in Europe. Duhring and Keyes have shown that large doses are borne very well, taken in soda-water or milk. Mercury is generally given on the French plan—the protoiodide internally, and yields good results. The use of Zittman's decoction is little in favour; indeed, of late years a large number of vegetable fluid extracts (mostly derived from the Indians' armamentarium) have been introduced, but Dr. Weber was unable to report any favourable results.—Professor v. ZIEMSSEN (Munich) said they required observation and statistics of cases treated on one plan for comparison, and the deduction of the relative value of various methods. He was satisfied to prescribe the subcutaneous administration of bicyanate of mercury, and had seen good results follow the combined use of that preparation and of iodide of potassium in visceral and cerebro-spinal syphilis.—Dr. SCHUSTER (Aix) remarked on the excretion of mercury.—Dr. ZIEMSSEN (Wiesbaden) advocated the separation of patients from their families, and their treatment at health-resorts.—Drs. EDLEFSEN (Kiel) and LEUBE (Wurzburg) commence treatment as soon as the syphilitic nature of the chancre is established. Inunctions are more lasting, injections more rapid; and care should be taken in the administration of large doses of iodide of potassium.—Dr. BAUMLER (Frieburg) spoke on preventive treatment, and recommended early resort to mercury. Mercury is also indicated in the secondary stage, and iodide of potassium in the tertiary. It was important to look after the nutrition of the patient.—Dr. DOUTRELEPONT (Bonn) strongly advocated calomel injections.—Dr. SCHUMACHER protested against a prolonged intermittent treatment as unnecessarily weakening the patient.—Professor KAPOSI, in reply, said that no unanimity had been expressed, nor could it have been expected, on the therapeutic value of the various methods of administering mercury; and as to preventive treatment, he looked

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forward to more information being gained by collective inquiry. He also humorously critised the prevalent plan of treating syphilis by subcutaneous injections as likely to eventuate in rendering it so curable that syphilis wards would no longer be required in hospitals.

Dr. KAHLER (Prague) read a paper on the Experimental Production of Permanent Polyuria. Cases of polyuria following injuries to the skull do not solve the question as to the precise locality of which lesions produce polyuria. Of twenty-two recorded cases, in six the middle parts of the brain were damaged, in four the pons, in two the medulla. Claude Bernard never succeeded in producing permanent polyuria; and his experiments were carefully repeated on rabbits with modifications, the animals being kept on dry food, and the urine strictly measured. By making a deeper puncture than Bernard, and injecting minute quantities of nitrate of silver, a marked and lasting polyuria was excited, although its degree varied spontaneously from time to time. Examination showed that the lesion in such cases involved the posterior part of the pons, and the medulla near the restiform body.

Dr. DEMME (Berne) described a case of Acute Pemphigus in a well-nourished country lad, thirteen years of age, who whilst under observation had seventeen acute attacks, generally accompanied by fever, vomiting, mild delirium, and depression. A characteristic diplococcus was found in the blood, urine, and fluid of the vesicles, in amount proportionate to the severity of the eruption. The vesicular fluid also contained some isolated larger cocci and occasionally bacilli containing spores. Inoculations of pure cultures of the diplococcus were made, with negative result, in pigeons, dogs, cats, and rabbits; but in the guinea-pig intra-pulmonary injections produced fatal pneumonia with great development of diplococci. It seemed probable that acute pemphigus was due to this micro-organism, which he could not detect in pemphigus foliaceus or in syphilitic pemphigus. The case was treated with antipyrin internally and the application of a hydrochinone (1 in 30) ointment, and it eventuated in recovery.

Dr. REHN (Frankfort) exhibited a well-developed girl, twelve years old, who during the first months of life had been twice tapped for simple chronic hydrocephalus.

Dr. RAHL (Vienna) related his experience of Syphilis Hereditaria Tarda, of which he had seen 112 cases. In no case had symptoms appeared before the second year. The most frequent were—bone disease in sixty-two, ozæna in forty-two, and eye disease in thirty-six. Three cases were of special interest, for, having been under medical observation since birth, it was proved that there were no syphilitic manifestations until the seventh, fifteenth, and sixteenth years respectively.

Dr. HEUBNER (Leipsic) read a paper on Scarlatinal Diphtheria, and its treatment by means of parenchymatous injections of a 3 per cent. solution of carbolic acid into the tonsils and arches of the palate with a specially devised instrument. He said that on this plan mortality had fallen from 35·6 per cent. to 13·8 per cent.

Dr. FRIEDLANDER (Leipsic) read a paper on the Typical Course of Articular Rheumatism. He distinguishes two types—one having a maximum duration of seven days, the other of thirteen days. Cases of longer duration were combinations of both types. The maximum temperature is attained on the third or fourth day; and in the course of one attack no joint is affected more than once.

Professor QUINCKE (Kiel) exhibited three distinct forms of Fungus from a single case of Favus, but had not been able to determine whether each variety was equally competent to excite the disease.

Dr. SCHUMACHER (Aix) spoke of Localised Hydrargyrosis and its Laryngoscopic Diagnosis. He averred that mercurialism produced changes in the buccal mucous membrane, resembling those due to syphilis; but, on examining the root of the tongue with the mirror, broad, sharply defined, and characteristic patches may mostly be detected.

Dr. LITTEN (Berlin) related a case of Pyopneumothorax, with Cercomonades in the Pulmonary Tissue. A patient was tapped for pleurisy, after which succussion, but no other sign of pneumothorax, appeared. On a second puncture, there appeared suddenly another sign, elicited on movement—viz., a bubbling râle; and the conclusion was that there was a pleural fistula with valved outlet. Microscopic examination of the exudation revealed cercomonades (monas lens), which were also found in the sputum. The presence of these animalcules has been thought to indicate pulmonary gangrene, but no symptom of gangrene occurred in this case. Tubercle bacilli were, however, once found, pointing to the cause of the pleural fistula.

Dr. FRANZ (Liebenstein) gave an account of cases of Chlorosis cured by the Oertel Method, where iron had been of no service.—Professor LEYDEN, however, warned against overstrain of the heart in chlorosis.—Dr. BREHMER had seen better results in cardiac cases from Schott's gymnastics than from the Oertel cure.

Dr. BLOEBAUM (Coblenz) advocated Galvano-cauterisation in the treatment of Diphtheria. He said it was painless, and was not only destructive of bacterial life but prevented absorption of ptomaines.

Dr. SCHULZE (Heidelberg) read a paper upon Syringomyelia, which was easy to diagnose, producing partial sensory paralysis, with spastic paralysis of the lower limbs. The sensory paralysis may consist of partial analgesia, as in a case where no pain was felt from a broken arm. In a case of cellulitis of the hand, which led to amputation and to fatal pyæmia, the supervention of spastic paralysis of the lower extremities led to a diagnosis of syringo-myelia, which was confirmed post mortem. The etiology of the condition is unknown.

Dr. E. PFEIFFER (Wiesbaden) reported upon the Etiology and Treatment of Uric Acid Calculi. He finds that chloride of sodium waters (as the Kochbrunnen in Wiesbaden) have very little solvent effect on urinary calculi, but that alkaline waters (as Carlsbad) have much more marked action. But in each case, on leaving off drinking the mineral waters calculi form again very rapidly. Lithia water—the artificial being twenty times stronger than the strongest natural—has very slight solvent properties. More powerful is the purely alkaline water of Fachingen, which he recommends should be taken continuously for a long period in cases of renal and vesical uric acid calculi.

At the conclusion of the four days' session, the President, Professor Leyden, thanked the members for their participation in the Congress, especially those who had come from distant countries, as America, Russia, Austria, Switzerland, Holland, and Belgium, and invited all to meet again at Wiesbaden next year.

BURGH POLICE AND HEALTH (SCOTLAND) BILL.

IN addition to the provisions, which we have already noticed, for the appointment of medical officers of health and for the adoption of measures to prevent the spread of infectious diseases, the Bill proposes to confer important powers upon the Commissioners in connexion with the erection of new buildings, the occupation of dwelling-houses, the construction of public sewers, the control of house drainage, and the supply of water. We shall notice a few of the more important of these.

Clause 168 forbids the erection "of any building upon any ground which shall have been filled up with any material impregnated with fæcal matter, or with any animal or vegetable or other offensive matter, which, in the opinion of the medical officer or sanitary inspector, may tend, by decomposition or otherwise, to the prejudice of the health of any future resident or occupier of such building, or of any resident in the neighbourhood, except upon a certificate of such medical officer or sanitary inspector that proper precautions have, in his opinion, been taken to obviate any such result." No new or altered building will in future be permitted to be occupied until it has been certified by the surveyor of the burgh to be fit for occupation and in accordance with the provisions of the Act. The Commissioners are to have power, "after cause shown," to order means of ventilation, approved by them, to be provided in every building, whether erected before or after the application of the Act; and where not already existing, to order, or if necessary to construct at the expense of the owner, such means of drainage as they may consider requisite. The surveyor of the Commissioners is to be authorised, when requested by the medical officer of health or the sanitary inspector, to open for the purpose of inspection any drain or cesspool; if it be found in good order, all the expenses incurred in the inspection to be defrayed by the Commissioners. Provision is made for the

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compulsory introduction of water, at the expense of the owner, into every house or part of a house occupied by a separate family, and for fitting up a sink, duly trapped, and, wherever practicable, a sufficient watercloset; the sinks, soil-pipes, and waterclosets to be trapped and ventilated. Every watercloset, earthcloset, or privy must be placed so that one of its sides shall be an external wall, with a window in it of at least six superficial feet and one-half made to open; and the soil-pipes from waterclosets must be kept wholly disconnected from all other pipes except ventilating pipes. The Commissioners are to be empowered to take the necessary measures for obtaining or providing and maintaining, for the use of the borough, an adequate supply of pure and wholesome water, and to make bye-laws, *inter alia*, "for inspecting and periodical cleansing of cisterns erected in buildings for the use of two or more families."

In the building of new dwelling-houses it is proposed to enact that every habitable room on the ground floor shall have a height of at least 9 ft. 6 in. from floor to ceiling; on all other floors except the attics, of at least 9 ft.; and in every habitable attic the height shall be at least 8 ft. through not less than one-third of the area, and in no part less than 3 ft. Every habitable room must have at least one window, the area of the glass of which shall be at least one-tenth of the area of the room, the top of it not less than 7 ft. 6 in. above the floor, and one-half at least made to open. It is proposed also to regulate the occupation of houses by making it unlawful for any owner to let or any person to take on lease any building which, if consisting of one apartment, does not contain at least 700 cubic feet of space if it was used as a separate house before the passing of the Act, or 900 if not so used; if consisting of two apartments, it must contain 1200 or 1500 cubic feet; and if of three apartments, 1800 or 2000 cubic feet. Each apartment must have a window, and the cubic space is to be calculated free of all obstructions. We confess we are unable to see the reason for this distinction between a house "used as a separate house" before the passing of the Act and after it. If the larger space is requisite for the health or comfort of the inmates, it should be imperative in all cases; if not necessary, it is unjust to require it. We presume it is a concession to some supposed vested right, but no such right ought to be permitted if inconsistent with the public health. Rules are laid down for the regulation of common lodging houses with a view to promote health, cleanliness, and ventilation, and to prevent overcrowding. Every keeper of such house is bound under a penalty to report if any lodger has been confined to bed or affected for twenty-four hours with any infectious illness.

Such are some of the more important points bearing upon public health. The Bill will confer great powers upon the Commissioners, and necessarily also great responsibility. If these powers are exercised firmly and judiciously we cannot doubt that the Bill will have an important bearing upon the lives, the health, and the comfort of the inhabitants of the burghs to which it is applied. We trust that in committee it will be amended as regards the annual appointment of the medical officer of health, the verification of the diagnosis of qualified medical practitioners who report cases of infectious disease, and the distinction drawn between houses occupied as separate houses before and after the passing of the Act.

THE MALARIA PROBLEM IN ITS LATEST PHASE.

IN THE LANCET of the 10th ult., p. 708, we announced that Dr. Schiavuzzi had presented to the Roman Accademia dei Lincei some microscopic preparations made with cultures of a bacillus found by him in the malarious atmosphere of the regions around Pola in the Istrian Triangle. Now, according to Professor Tommasi-Crudeli, although the bacillus in question in Dr. Schiavuzzi's preparations assumes forms identical with those of the bacillus malariæ, it is by no means certain that the two bacilli are one and the same micro-organism. The configuration alone is not sufficient to characterise the bacilli of the various infections, it being well known that the comma bacillus of Koch, believed at first to be the unvarying principle of cholera, is found identical in patients and localities where no shadow of cholera exists. Micro-organisms, quite undistinguishable as to form, may be malignant or innocuous, so that recourse must be had to experimental proof from cultures made *ad hoc* to determine whether the bacilli can cause specific infections or not.

Another question yet awaiting solution is that of the nature of the alterations wrought by the malaric infection on the blood-globules. Our readers are familiar with the results of Laveran's researches, as well as of those of Drs. Marchiafava and Celli on this subject. By the malaric infection the colouring matter of these globules turns from red to black, being converted into a substance called melanine, while the interior of the globules is at the same time invaded by a substance called hyaline. Laveran attributed these alterations to a living organism which penetrates the globules; while Marchiafava and Celli, to whom belongs the merit of having first thrown light on the alterations in question, observed that the hyaline substance possesses a certain motility, and inferred that it was a parasite to which the destruction of the blood-globules is due; and as after the globule is destroyed the hyaline substance divides into a granular débris, they ascribed to these granules the reproduction of the parasite. Similar conclusions were reached by Golgi, who supported the parasite theory by the observation that in the globules, before their transformation into granular débris, there is visible a fragmentation (*fragmentazione*) which divides the globule itself into fine segments. Now, Professor Tommasi-Crudeli holds that the phenomena described by Marchiafava, Celli, and Golgi have not been justly interpreted by these observers. Already, in 1884, at the Copenhagen Congress, he explained the alteration of the red globules as a degeneration of their protoplasm determined by a morbigenous agent, and not a development of an animal parasite. Indeed, the movements encountered in the hyaline substance which invades the globules, and advanced as proof of the presence of the parasite, have little value, if only for the reason that in many blood diseases, and as the result of a heightened temperature, the protoplasm undergoes alteration and acquires a more or less marked motility. So also the degenerations described by Golgi as a fragmentation, by which the parasites are reproduced, are encountered in analogous degenerations caused by violent agencies, as by an electric discharge, or by treating the globules with certain saline solutions. On the other hand, no one has ever seen the granulations in process of conversion, step by step, into the parasite, nor can any trace of this last be found in the air or in the soil of the malarious localities.

But there are yet other considerations. What we in these days know of the progressive infection of organisms excludes the notion that it depends on an animal parasite. On the other hand, we have numerous examples of infections produced by vegetable parasites. The malaric infection presents such a variety of forms, from the slightest to the most acute, and there are such intervals of time between its attacks, as no animal organism hitherto known could be capable of producing. Moreover, the improbability of the animal nature of the parasite is proved by the property inherent in the malaric ferment of remaining buried for centuries without losing any of its pernicious qualities, so that (and Rome supplies examples every day) one excavation or disturbance of inert soil to a certain depth suffices to liberate the ferment and to make a locality, till then innocuous, the scene of a febrile explosion. We know that the seeds of plants can preserve intact their peculiar germinative power, even after being buried for centuries, like the grain found in the coffins of Egyptian mummies. So, also, the cutting of a tract of soil in a deserted neighbourhood, through the exhumation of seeds hidden in the earth, can all at once develop an unwonted flora. But nothing of this sort, insists Professor Tommasi-Crudeli, has ever been observed in the case of animal organisms; and therefore he reasserts his opinion that the malaric ferment is constituted by a vegetable, or, in his own language, a schizomycete (*σχίζω*, divide; *μύκης*, a fungus). "The tendency to precipitate conclusions," he adds, "from limited research leads to erroneous interpretations, and can only postpone the solution of a problem so complex as that of the malaric ferment—a problem which must be approached not by an isolated observation, but by the concurrence of a multitude of facts and their verification by experiment."

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DR. RICHARDSON'S LECTURES ON ANIMAL OR VITAL MECHANICS.

METHODS OF NATURAL CONSTRUCTION.

THE third lecture of the above course, delivered on Monday, the 17th inst., opened with illustrations of natural constructions in comparison with certain others produced by man. The jointing of bone by the suture was compared with the dovetailing of mechanical art; the fabrics woven by Nature with those woven by man; the vibrating drum of natural formation in the tympanum with the drum and vibrating screen of human design; the natural osseous column with the column erected by the architect; the tubular system of the arteries with the tubular arrangements of human invention for the conveyance of water and other fluids; the sacs or pouches in some animals for water carriage, as in the camel, with the water-holders of human make; the eye as a camera, and the common camera now in such ordinary use. These were all, practically, the same as means for particular ends; and these having been illustrated, the subject was varied in order to introduce details of methods of construction, with comparisons and distinctions between the works of Nature and man. 1. Nature and man go to the same markets for their primary materials. Neither of them works without proper materials, although Nature is able to work with fewer than man, and man often takes structures, such as cotton, which Nature has prepared for him, and applies them to his mechanical purposes. Man also possesses an advantage in that he can bring together his materials from a distance, while Nature only produces at points where the required materials are at hand and ready for application. 2. Nature as well as man requires for her work certain preliminary conditions for construction besides material—that is to say, constructive forces: proper attractions and repulsions, correct degrees of moisture, of temperature, of pressure, of light. These imperfect or unsuitable, the work in both cases is imperfect or wanting in adaptability. Even Nature's crowning work, the highest order of animal construction, the human body, is rendered imperfect if the required conditions are not duly represented. 3. The mechanical works of Nature, like those of man, wear out, but not precisely in the same way. Some parts, those which are elastic, wear out in a manner extremely similar, but Nature seems to have a more systematic destiny for her work than man has for his contrivances. Nature has five successive stages: one of development, a second of maturity, a third of maintenance, a fourth of decline, and a fifth of dissolution. These stages were traced out, and the theory of Flourens, indicating the period of maturity in animals and the multiplication of that period by five for the period of dissolution, was described—man, who had assigned to him twenty-one years as his period of maturity, having 105 years as his period of dissolution, or completed anatomical age for death, and the death taking place, under such fulfilled ordination, from failure at the breathing surface and from a process of anæsthetic sleep. The works of Nature thus grow out of existence, while those of man shake or vibrate out. 4. Natural works as well as human are subject to wear and physical accidents, and both are made to undergo repair, in which work of repair Nature is often most skilful, though she may require directing, as in the case of a broken bone, where she brings together the broken ends, and for a time supports them by an extra deposit, called by the surgeon the callus, which, when it has served its purpose, becomes reduced or passes away altogether. In treating of the wearing out of natural parts, Dr. Richardson was not in favour of the common idea that every part of the body is renovated and replaced by absolutely new material in a limited number of periods—say of seven years—during life. He showed a scar on his own hand from an accidental wound, and which had been there nearly fifty years, as indicating permanency of structure. He referred to memory as proof of the same truth, and he observed that if short periodical structural changes and renovations did really occur, then various diseased organisations, such as disease of the valvular tissues of the heart, ought to pass away and be replaced by new structure, unless diseased structure also reproduced itself. On the whole, he maintained that change was very slow, as slow as life itself, with identity thereby of the *ego*. 5. In her mechanism Nature never traverses laws which man may not. She is not kinder to herself, not less exacting to herself, than to man. She acts in regard to her own mechanism as if she, like man, were obeying a primary power which had provided materials and laid out the conditions. Hence Aristotle had speculated as if in the natural mechanism two powers had been at work, one to give and command, the other to use and carry out by mechanical skill the details of mechanical art. 6. In all the above particulars the works of Nature and of man present much that is in common. When, however, we come to method of work, the difference is as wide as it can be. Nature works from a centre, man works towards a centre; Nature distributes, man concentrates; Nature strikes out or evolves, man brings in and founds or builds. How Nature evolves, and so evolves as to produce perfect organs by coincident growth of parts, formed a striking part of the discourse. Once on this matter all was obscure; now there are some faint lights on it. John Hunter broke ground when, by his experiments on growth of bone, he showed that growth was by deposit from without, attended by absorption from within. Graham broke ground when he divided natural formative structures into colloids and crystalloids, and showed the separation and filtration of crystalline matter through colloidal, with the laying down of the colloidal parts in mechanical order and design. The chemists had broken ground by their proofs that out of inorganic materials they, like Nature, could make organic substances, such as the specimen of artificial urea on the table. The microscopists had broken ground in their industrious labours and discoveries on the subject of natural primary development of structures from cell formation, and on the formation of tissues by the natural arrangement of cells so as to evolve natural constructions. If we could out of the primary elements used by Nature construct a cell that would accrete to itself and give out another cell, the first step of natural construction by evolution would be attained. Without assuming this to be attainable or not, the lecturer passed to a brief description of some recent experiments of his own in micro-electroscopy, from which he explained that by electric decompositions of organic fluids, like blood, he had produced constructions which in many particulars resembled various organic tissues; and concluded with illustrations relating to what he designated "the growth of form" in natural and human combinations.

THE MEDICAL DEFENCE ASSOCIATION AND MEDICAL REFORM.

A MEETING of the Council of the Medical Defence Association was held on the 21st inst., to consider the Medical Bills now before Parliament. Dr. B. W. Richardson, F.R.S., presided. It was resolved: "That, in the opinion of the Council, the Universities of Aberdeen and St. Andrews should each be entitled to send a representative to the General Medical Council, instead of sending one jointly, as provided by the Government Bill." It was also resolved: "That the hon. secretary be requested to convey to Sir Lyon Playfair the above resolution, and to ask if he will receive a deputation from the Association (*a*) in relation to the above; (*b*) on the subject of introducing a clause in the proposed new Act for preventing so-called 'provident dispensaries' being conducted by unqualified persons; (*c*) on introducing a clause relating to the assumption of medical titles." The above resolutions having been forwarded to the Vice-President of the Council, the hon. secretary (Mr. George Brown) has received the following reply:—

"Privy Council Office, May 24th, 1886.

"Sir,—I am directed by Sir Lyon Playfair to acknowledge the receipt of your letter of the 22nd, and to say that the last two subjects referred to therein (the conduct of so-called provident dispensaries and the assumption of medical titles by unqualified persons) are not dealt with by the Bill, of which the scope is definite and could not be enlarged. With regard to the representation of the Universities of Aberdeen and St. Andrews, Sir Lyon Playfair hopes that the question may be decided to-night in committee, in which case it will be unnecessary to trouble your Association to send a deputation on the subject.

"I am, Sir, your obedient servant,

"J. W. MACKAIL."

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WILLS OF MEDICAL MEN.

THE will of Mr. John Cooper Forster, formerly President of the Royal College of Surgeons, late of 29, Upper Grosvenor-street, who died on March 2nd last, was proved on the 13th ult. by Mr. Stuart Forster, the son, and Mr. Arthur Edgell Eastwood, the executors, the value of the personal estate exceeding £25,000. The testator bequeaths to his wife, Mrs. Adela Forster, his furniture, books, pictures, plate, jewellery, and effects; and there are some legacies and annuities to servants charged on his real estate. All his freehold and copyhold property he leaves to his wife for life, and then to his said son. The residue of the personalty is to be held upon trust for his wife for life, and at her death as to one-fifth for his granddaughters, Undine and Elsa Emily Dixon, one-fifth for his danghter, Mrs. Jessie Tamplin, and three-fifths for his daughters, Rose and Anna Forster.

The will and codicil of Mr. George Ord, retired surgeon, of Brixton-hill, Surrey, were proved on April 20th by Mr. William Miller Ord, physician, and Mr. George Rice Ord, surgeon, the sons, the executors, the value of the personal estate amounting to over £24,000. The testator leaves three-fifths of his real and personal estate to his son, William Miller, and two-fifths to his son, George Rice.

The will and four codicils of Mr. Francis Burdet Courtenay, surgeon, of 2, Chandos-street, Cavendish-square, who died on March 15th last, were proved on the 3rd inst. by Mrs. Frances Maria Lambert, Mr. Francis Hoare, and Mr. Edward Horseman Bailey, the executors, the value of the personal estate amounting to over £16,000. The testator bequeaths legacies to his daughter, grandchildren, a servant, and others. The residue of his property he leaves upon trust for his daughter, Mrs. Lambert, for life, and then for her children or more remote issue as she shall appoint.

The will of John Fremlyn Streatfeild, F.R.C.S., late of 15, Upper Brook-street, who died on March 18th last, was proved on the 3rd inst. by Mrs. Georgiana Maria Streatfeild, the widow, the Rev. Arthur Benjamin Cotton, and Colonel Robert Champion Streatfeild, the executors, the value of the personal estate amounting to over £14,000. The testator makes some bequests in favour of his wife, his mother, and his executors; his freehold estate at Chigwell, Essex, at Canterbury and Westerham, Kent, and the residue of his real estate, he leaves to his wife for life or so long as she shall remain unmarried, and then he settles the same on his son Thomas. The residue of his personal estate he leaves upon trust for his wife so long as she shall remain unmarried, and then for all his children (except the child who shall succeed to his real estate) in equal shares.

The will and four codicils of Mr. Richard Stocker, late of 29, Upper Montagu-street, Montagu-square, surgeon, who died on Feb. 25th last, have been proved by Mr. John Sherwood Stocker, the son, and Mr. Thomas Dence, the executors, the value of the personal estate amounting to upwards of £7000. With the exception of a complimentary legacy to his executor, Mr. Dence, the only legatees under the will are the testator's sons, Richard Charles Southby Stocker and John Sherwood Stocker.

The will of Thomas Spencer Cobbold, M.D., of 74, Portsdown-road, Paddington, who died on March 20th last, was proved on April 19th by Charles Spencer Waller Cobbold, M.D., the son, and Mr. John Henry Hortin, the executors, the value of the personal estate amounting to over £12,000. The testator gives his leasehold residence with the furniture and effects and £100 to his wife, Mrs. Frances Philippa Cobbold; his microscopic cabinet of entozoa to his said son; all his books on helminthology to the Linnæan Society of London, Burlington House, for the library; and pecuniary and specific legacies to children and others. The residue of his property he leaves to his wife.

The will of John Storrar, M.D., formerly of 113, Ladbroke-grove, but late of Stratheden House, Blackheath, who died on March 10th last, was proved on April 13th by Mrs. Helen Storrar, and Mr. Robert Storrar, the brother, the executors, the value of the personal estate amounting to over £4000. There are bequests to his brother, James Russell Storrar, and his wife, and to his late wife's niece; and the residue of his property he gives to his said brother Robert.

The following legacies have recently been left to hospitals and other charitable institutions:—Mrs. Frances Acton, of 106, Elgin-crescent, Notting-hill, £500 to the Royal Hospital for Incurables, West-hill, Putney.—Mr. Edward Cohen, of 111, Harley-street, Cavendish-square, and of Windermere, Westmoreland, £200 to the Middlesex Hospital, Charles-street, and £100 each to St. Mary's Hospital, Paddington, and University Hospital, Gower-street.—Mr. Richard Henry Vade Walpole, formerly of Upper Brook-street, Grosvenor-square, but late of Suffolk Hall, Cheltenham, whose personal estate amounts to over £185,000, £200 to the Royal Hospital for Incurables, West-hill, Putney; £100 each to the Cancer Hospital, Brompton, St. Mark's Hospital, City-road, the Fever Hospital, Pelley, Leckhampton, Cheltenham, and the Metropolitan Free Hospital, Spitalfields; and the whole of the large residue of his personal estate in equal shares to the Westminster Hospital, Broad Sanctuary, Charing-cross Hospital, King's College Hospital, Portugal-street, St. Mary's Hospital, Paddington, the London Hospital, Whitechapel, the Royal Free Hospital, Gray's-inn-road, the London Fever Hospital, Liverpool-road, the City of London Hospital for Diseases of the Chest, Victoria-park, the Norfolk and Norwich Hospital, the Cheltenham Hospital and General Dispensary, the Great Yarmouth Hospital, and the British and Foreign Sailors' Home, Great Yarmouth.—Dame Anna Maria Hare-Clarges, of the Crystal Palace Hotel, Norwood, £500 each to the Royal Hospital for Incurables, Putney, and the Taunton Hospital or Infirmary, Somersetshire.—Mr. Arthur Blewert Bryer, of 7, Kennington-park-road, £200 to the Royal South London Dispensary for the Relief of the Sick Poor.—Mr. Foster Connor, of Lea Court, Bangor, co. Down, and of the Linen Hall, Belfast, £500 to the Belfast Royal Hospital.—Mr. Samuel Ellis, of 28, Gracechurch-street, tea merchant and grocer, £100 to the Yeatman Hospital, Sherborne.—Mr. Charles George Johnson Da Silva, of Bride-lane, Fleet-street, merchant and medicine dealer, and of Burntwood, Wandsworth-common, such part of the residue of his personal property as may by law be applied for charitable purposes, to the Royal Medical Benevolent College, to found three exhibitions of £50 per annum each, tenable for three years, for boys educated at the College and proceeding to the universities, and to pay £20 per annum each to twenty-six poor pensioners of the said college.—Mr. Alfred Burges, late of Worthing, £3500 to such charitable institutions or societies, and in such shares, as his trustees in their absolute discretion shall think fit.—Miss Elizabeth Lancaster, of Stanmer House, Suffolk Lawn, Cheltenham, £250 each to the Cheltenham General Hospital and Dispensary, the Cheltenham Samaritan Fund and Dispensary, a branch of the said Hospital, the Scarlet Fever Ward or branch of the Delancy Hospital, and the Small-pox Ward or branch of the said Hospital.—Mr. Thomas James Stallard-Penoyre, late of 54, Wilbury-road, Hove, £50 to the Cancer Hospital, Brompton.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Milton Rural District.—Dr. Sutton explains the value of the infectious hospital which was jointly erected by this authority and the Sittingbourne Local Board of Health, a sudden outbreak of small-pox having been checked by it, in addition to its having been found useful in other diseases. Rainham has stood in need of much amelioration, the report on this place taking note of polluted drinking-water, offensive closets, defective drainage, overflowing cesspools, and insanitary slaughter-houses. All these conditions are, according to the report, remedied. We trust the remedies are permanent, and not merely of a temporary sort. The death-rate for 1885 was low—namely, 13·1 per 1000.

Jarrow Urban District.—The great depression of trade which has been so peculiarly felt in Jarrow has not, according to Dr. Munro, produced any appreciable effect on the death-rate for last year, that rate standing at 22·1 per 1000 as opposed to 23·4 during the previous two years. The zymotic rate was high, reaching 44 per 10,000 of the popula-

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tion; measles, scarlet fever, and whooping-cough being the three diseases which caused most deaths. Scarlet fever was largely maintained by attendance at one of the elementary schools, and since obscure cases baffled Dr. Munro's efforts to limit the spread of the disease by the exclusion of scholars from infected houses, it was at last found necessary to close the school under the provisions of the Education Code. The school was well cleansed whilst closed, and the result was that after its reopening there was no recrudescence of the disease in connexion with the re-assembling of the children. This result was favoured by the system of compulsory notification of infectious diseases in force within the borough. During the year 714 cases were notified to the authority, no less than 264 being cases of scarlet fever, and in this connexion it is satisfactory to note that an infectious hospital is in course of construction. This matter has been a tedious one in Jarrow. Economical reasons prevented a joint hospital being erected for Jarrow and the neighbouring towns of South Shields and Hebburn, and the result is that at last Jarrow has to act alone, at a greater cost than the joint scheme would have involved, and with the prospect of larger permanent expenses of maintenance than would otherwise have been involved. Apart from these considerations, however, there are certain advantages in each sanitary authority having its separate hospital.

South Shields Urban District.—Dr. Munro gives the death-rate of this district during 1885 as 22·3, much the same as in the previous year, the zymotic rate being 32 per 10,000, which was in excess of that for the previous four years. Small-pox has now been introduced in thirty-three instances during three and a half years, and as regards each first case Dr. Munro is able to add that it was removed to hospital. The result of this action has been that in no single instance has there been any extension of the disease after it became reported to the Health Office. Scarlet fever caused no less than 76 deaths during the year, and the failure to cope with it satisfactorily is in part ascribed to the absence of compulsory notification. Again and again efforts in the direction of prevention were ultimately found to have been futile, owing to some unknown case a few doors off, or just on the other side of the street. The infectious hospital received 126 cases, including Dr. Munro himself, who, having contracted scarlet fever in the performance of his official duties, showed an example by placing himself under isolation in the manner provided by the authority. In connexion with the general sanitary work carried out, proceedings under the Food and Drugs Act are specially adverted to, Dr. Munro finding himself hampered by a decision of the Town Clerk to the effect that since milk for analysis must, according to the Act, be procured "at the place of delivery" and "in course of delivery," the taking of samples from carts entering the town would not justify legal proceedings under the Act. The report proceeds to say that the sooner the section is cleared of this ambiguity, and it is provided that samples of milk may be taken on the highway, the better for the consumer and the worse for the adulterator.

Northampton Urban District.—The birth-rate of Northampton has steadily fallen from 41·3 per 1000 in 1878 to 32·6 in 1885; the death-rate for the latter year was 15·5 per 1000. Measles, whooping-cough, and diarrhœa were the three preventable diseases which caused the largest mortality, and they led to a largely increased zymotic rate. Some use was made of the make-shift isolation hospital, but for the diseases just specified isolation is rarely resorted to, and it is doubtful how far it would be useful to urge it on sanitary authorities. From Mr. Cogan's account of the current sanitary work, inspection of the district would appear to be systematically carried out, with the result of an abatement of many injurious nuisances. Disinfection is largely resorted to where needed, and there is now a prospect that in the very important matter of water-supply the town will before long be freed from the serious danger to which it has been put by previous failure in the matter of deep well sinking.

Toxteth Park Urban District.—This favoured suburb of Liverpool had a death-rate of only 13·4 per 1000, and even this is decidedly in excess of the mean for the previous four years. Of the diseases usually grouped together as zymotic 9 were from whooping-cough and 4 from diarrhœa; but there was also some small-pox and scarlet fever, of which details are given by Dr. Steeves, and special action as to school attendances, disinfection, &c., had to be taken in consequence. It is, however, satisfactory to know that the sanitary authority are in earnest in their endeavour to secure a hospital for the isolation of first attacks of infectious diseases, and that they have already taken preliminary steps to secure a site. Attention has been given to the sanitary state of bakehouses and dairies, and systematic inspection of the district has been carried out.

Sittingbourne Urban District is also under Dr. Sutton's jurisdiction, and both scarlet fever and small-pox were stayed by the aid of the hospital already referred to. An excellent water-supply is mentioned as having done much to diminish outbreaks of enteric fever, 1400 out of 1543 houses being now supplied from the public works. Constant scavenging is also maintained throughout the town. The annual death-rate reached 17·3 per 1000, and the birth-rate was 43·6.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 6106 births and 3254 deaths were registered during the week ending May 22nd. The annual death-rate in these towns, which had been equal to 20·6 and 19·1 per 1000 in the preceding two weeks, further declined last week to 18·7. During the first seven weeks of the current quarter the death-rate in these towns averaged 19·8 per 1000, and was 3·1 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 12·5 in Derby, 13·0 in Brighton, 13·9 in Bristol, and 16·1 in Hull. The rates in the other towns ranged upwards to 22·7 in Halifax, 24·1 in Portsmouth, 25·2 in Manchester, and 34·0 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 367 and 324 in the preceding two weeks, further fell last week to 286; they included 108 from measles, 87 from whooping-cough, 27 from "fever" (principally enteric), 27 from diarrhœa, 21 from scarlet fever, 15 from diphtheria, and 1 from small-pox. No death from any of these zymotic diseases was recorded last week either in Birkenhead or Huddersfield, whereas they caused the highest death-rates in Blackburn, Portsmouth, and Preston. The greatest mortality from measles occurred in Blackburn, Bolton, and Preston; whooping-cough showed the highest proportional fatality in Salford, Manchester, and Cardiff; and "fever" in Portsmouth. The 15 deaths from diphtheria in the twenty-eight towns included 9 in London, 2 in Liverpool, and 2 in Leeds. Small-pox caused 1 death in Liverpool, but not one in London or in any of the twenty-six large provincial towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had increased in the previous eight weeks from 7 to 31, had further increased to 35 on Saturday last; 10 new cases were admitted to these hospitals during the week, against 11 and 9 in the preceding two weeks. The deaths referred to diseases of the respiratory organs in London, which had been 309 and 293 in the preceding two weeks, further declined last week to 282, and were 33 below the corrected weekly average. The causes of 66, or 2·0 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Norwich, Sunderland, and in four smaller towns. The largest proportions of uncertified deaths were registered in Halifax, Newcastle-upon-Tyne, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 23·1, 22·3, and 22·2 per 1000 in the preceding three weeks, further declined to 21·8 in the week ending May 22nd, and exceeded by 3·8 per 1000 the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 13·7 and 18·1 in Dundee and Aberdeen, to 22·9 in Perth and 25·4 in Glasgow. The 538 deaths in the eight towns showed a decline of 10 from the number returned in the preceding week, and included 11 which were referred to whooping-cough, 10 to measles, 7 to diarrhœa, 6 to "fever" (typhus, enteric, or simple), 5 to diphtheria, 5 to scarlet fever, and not one to small-pox; in all, 44 deaths resulted from these principal zymotic diseases, against 62 and 55 in the preceding two weeks. These 44 deaths were equal to an annual rate of 1·8 per 1000, which slightly exceeded the mean rate from the same diseases in the twenty-eight

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English towns. The fatal cases of whooping-cough, which had declined from 21 to 14 in the preceding three weeks, further fell last week to 11, of which 7 occurred in Glasgow and 3 in Edinburgh. The 10 deaths referred to measles showed a decline of 7 from the numbers in the previous week, and included 8 in Edinburgh. The 7 fatal cases of diarrhœa were fewer than those returned in any recent week, and less than half the number in the corresponding week of last year. The deaths from "fever," which had been 2 and 5 in the preceding two weeks, further rose last week to 6, of which 2 occurred in Glasgow and 2 Aberdeen. The 5 fatal cases of diphtheria exceeded by 2 the number in the previous week, and included 3 in Edinburgh and 2 in Glasgow. The 5 deaths from scarlet fever were all recorded in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 108 and 103 in the preceding two weeks, rose again last week to 119, and exceeded by 12 the number in the corresponding week of last year. The causes of 66, or 12 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 27·8 and 23·8 per 1000 in the preceding two weeks, rose again to 28·7 in the week ending May 22nd. During the first seven weeks of the current quarter the death-rate in the city averaged 27·1 per 1000; the mean rate during the same period did not exceed 18·6 in London and 19·3 in Edinburgh. The 194 deaths in Dublin last week showed an increase of 36 upon the low number in the previous week, and included 6 which were referred to the principal zymotic diseases, against 14 and 8 in the previous two weeks; 2 resulted from "fever" (typhus, enteric, or simple), 2 from whooping-cough, 1 from diphtheria, 1 from diarrhœa, and not one either from small-pox, measles, or scarlet fever. These 6 deaths were equal to an annual rate of 0·9 per 1000, the rate from the same diseases being 1·6 in London and 3·1 in Edinburgh. The fatal cases of whooping-cough, which had been 7 and 2 in the preceding two weeks, were again 2 last week. The deaths referred to whooping-cough, which in the previous two weeks had been 1 and 3, declined last week to 2. Two inquest cases and 1 death from violence were registered; and 53, or more than 27 per cent., of the deaths were recorded in public institutions. The deaths both of infants and of elderly persons showed a considerable increase upon those returned in the previous week. The causes of 30, or more than 15 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

WAR OFFICE.—Army Medical Staff: Brigade Surgeon George Scott Davie, M.D., is granted retired pay, with the honorary rank of Deputy Surgeon-General; Surgeon-Major Christopher John Weir, M.B., is granted retired pay, with the honorary rank of Brigade Surgeon.

ADMIRALTY.—Royal Naval Artillery Volunteers (Bristol Brigade): Francis William Slow Wicksteed, M.B., M.R.C.S., to be Surgeon.

The following appointments have been made:—Staff Surgeon Alex. R. Joyce, to the *Cleopatra*; and Staff Surgeon J. W. H. Howton, to the *Daring*.

ARTILLERY VOLUNTEERS.—1st London (City of London): James William Thornton Gilbert, Gent., to be Acting Surgeon.

ENGINEER VOLUNTEERS.—1st Gloucestershire (the Western Counties): Surgeon T. S. Ellis is granted the honorary rank of Surgeon-Major.

RIFLE VOLUNTEERS.—3rd Durham (the Sunderland): Mitchell Hunter, Gent., M.D., to be Acting Surgeon.—2nd Volunteer Battalion, the Hampshire Regiment; Henry Wm. Russell Bencraft, Gent., to be Acting Surgeon.

THE VOLUNTEER MEDICAL STAFF CORPS.—Woolwich Company: James Francis Henry Bottrell and Charles Henry Hartt, to be Surgeons.—Edinburgh Company: Charles W. Cathcart, M.B., and David Hepburn, M.B., to be Surgeons.

THE annual meeting in connexion with Dr. Barnardo's Homes for Orphans and Destitute Children was held on the 22nd inst.

Correspondence.

"Audi alteram partem."

THE MEETING OF THE AMERICAN PUBLIC HEALTH ASSOCIATION.

To the Editor of THE LANCET.

SIR,—The fourteenth annual meeting of the American Public Health Association is to be held at Toronto during the first week in October, and I have been requested by Dr. C. W. Covernton, the first vice-president, to bring the meeting to the notice of English sanitarians, in the hope that they may be willing to visit Canada on that occasion. In addition to the reading and discussion of papers on various matters relating to hygiene set out in the circular I beg to enclose, it is desired to establish an International Congress of Hygiene, and to get international protective laws passed safeguarding Europe from the importation of yellow fever and the continent of America from small-pox and cholera.

If a number of persons, amounting to fifty, elect to go to Canada, they would be conveyed from London to Toronto and back, first class, for twenty guineas a head; while for another twenty guineas those who might desire to see more of the country would be carried by the Canada Pacific Railway along a most charming line of country from Quebec, Montreal, or Toronto to the terminus of the road—Vancouver, or to any part of British Columbia they might elect to stop at on the line,—and return to either of the above starting-points. I shall be happy to receive the names of persons who would like to make up a party, and shall be pleased to give any more detailed information. As this invitation is doubtless meant as an international courtesy, I make no apology for trespassing on your space, but thank you, in anticipation, for affording me the means of bringing to the notice of English sanitarians the favourable opportunity which presents itself for spending a delightful autumn holiday among our colonial and American brethren.

I am, Sir, yours obediently,

C. E. SAUNDERS, M.D.,
Hon. Sec., Society of Medical Officers of Health.
21, Lower Seymour-street, W., May 26th, 1886.

PARALYSIS OF LARYNGEAL MUSCLES AND CORTICAL CENTRE FOR PHONATION.

To the Editor of THE LANCET.

SIR,—In your issue of to-day we observe two editorial annotations referring to the above subjects, upon which we hope you will allow us to make a few remarks.

In the first you comment upon a case of paralysis of the adductors of the right vocal cord, reported by M. Charazac of Toulouse, and explained by that author to be due to compression of the right recurrent laryngeal nerve by a cystic goitre. This case, M. Charazac believes, sufficiently proves that the general law proposed by one of us some years ago—viz., that in *all* cases of progressive affection of the roots or trunks of the laryngeal motor nerves, due to *organic* lesions of the latter, the *abductor* fibres and muscles first succumb—cannot be maintained, and that a paralysis thus produced may, indeed, show itself first in the *adductor* muscles. Now, the law referred to was established not merely on clinical observation, but on the solid ground of morbid anatomy, and we may now add to this experimental evidence, which we have been accumulating for several months. Consequently, we consider that it is only fair to admit any contention to the contrary as in the least degree cogent, when it is supported by the *exhibition of specimens*, showing that in cases in which the roots or trunks of the motor nerves of the larynx were attacked by organic disease, the *adductor* muscles only had undergone degenerative changes, whilst the abductor or abductors remained unaltered.

Concerning the second annotation—viz., the one referring to M. Garel's case of paralysis of the left vocal cord, attributed by that author to two patches of softening situated in the third frontal convolutions of both hemispheres,—we

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confess we are quite unable to understand the grounds upon which he bases this opinion. We have been for some time engaged in carrying out an extensive series of researches into the localisation of the centres for the phonatory movements of the vocal cords in the cerebral cortex. In these experiments, which have been performed on monkeys, dogs, cats, and rabbits, and the results of which will soon be published in full, we have been able to confirm the results on dogs obtained by Dr. Krause of Berlin—namely, that the phonatory function of the vocal cords of the dog is bilaterally represented in the gyrus præfrontalis of each hemisphere. We find that this state of things apparently varies with different classes of animals. (In the monkey, we may mention in passing, we have found that the phonatory centre is situated in that part of the brain which corresponds exactly to the speech-centre in man; only it is bilaterally represented.) Under *all* circumstances—i.e., in *all* animals—however, we have seen (*a*) that stimulation of this centre in *one* hemisphere produced *bilateral* action of the vocal cords, and (*b*) that the effect was exactly the same whether the *right* or the *left* hemisphere was stimulated. That *bilateral* representation also exists in *man*, we consider to be established by the fact that aphasia is hardly ever accompanied by aphonia, which it necessarily would be if the phonatory centre were represented in the *left* third frontal convolution only.

Now, in the face of these facts, we are simply unable to understand in M. Garel's report how it came about that *bilateral* cortical mischief produced only paralysis of *one* vocal cord? Would it not seem more likely that some other lesion, by which this unilateral paralysis could have been more naturally explained, was present and overlooked?

We are, Sir, yours truly,

FELIX SEMON.

The Brown Institution, May 22nd, 1886. VICTOR HORSLEY.

THE LUNACY ACTS AMENDMENT BILL.

To the Editor of THE LANCET.

SIR,—In the memorandum on the Lunacy Acts Amendment Bill it is stated—"The principle of the Scotch procedure has been adopted with somewhat fuller elaboration of details. The Bill provides for the appointment of special justices to make orders for the reception of lunatics not paupers, and, except in cases of urgency, a person not a pauper is not to be confined as a lunatic without an order of a County Court judge, stipendiary magistrate, or justice, to be obtained upon a petition presented, if possible, by a relative, and accompanied by two medical certificates." But in this assimilation of English to Scotch procedure it must not be supposed that there is any assimilation of the Scotch principles of lunacy administration. If lunatics are to be confined in asylums on the order of a magistrate, there can be little doubt that our system is very much superior to that which obtains in England at the present moment. It is a calm judicial procedure applied to all cases equally, be they rich or poor. It works easily and smoothly with us, no difficulties arise in its employment, and it affords a certain degree of assurance to the public that all matters connected with the seclusion of the insane are conducted decently and in order. No feeling of doubt or suspicion exists in Scotland, and since 1859 (the date of the first Scotch Lunacy Act) not a single case has come into court arising out of circumstances occurring subsequently to that date in which suspicion has been thrown on the propriety of the confinement or detention of an insane person. But is this happy state of things due to the sheriff's order? I think not; or, if it is, it is only to a very small extent. The reason of the smooth working of lunacy matters in Scotland is mainly due to two circumstances—(1) It is a small country, with a limited number of lunatics, and (2) we have a sufficient and efficient General Board of Lunacy. In a comparatively small community like ours everybody knows everybody. The sheriff knows the certifying doctors either personally or by reputation, or he can readily procure information regarding them should he desire it. The second circumstance, the constitution of our General Lunacy Board, is, however, of much greater importance. This board consists of an unpaid chairman, two unsalaried legal and two salaried medical commissioners, who supervise twenty-nine asylums, sixteen poorhouse wards for the reception of pauper lunatics, and three training institutions for imbecile children. These various institutions contain about 6500 patients. Each of the medical commissioners visits each asylum at least twice a year. Now the practical result of this is that these officers become personally acquainted with every case of any particular importance—important, I mean, as regards the necessity or propriety of detention. In England the General Board of Lunacy consists of an unpaid chairman, and two unpaid and three paid legal commissioners, and two unpaid and three medical commissioners. In visiting the various asylums a legal and a medical commissioner hunt in couples. What practical use this is I fail to understand, nor have I ever received a reasonable explanation from any one competent to judge. In Scotland it would sound to us simply ridiculous were it proposed to start an Advocate or a Writer to the Signet in company with a doctor to make tours round asylums. I have asked many English superintendents of asylums of long and great experience, two retired and some acting inspecting officers, whether they ever knew of a case in which the slightest benefit resulted from the presence of a visiting legal commissioner. The answer was invariably No. The strongest advocate of this system may be challenged to produce a single case in its support—a case in which any legal difficulty had arisen which could not have been as well settled by reference to the General Board sitting in London. Legal commissioners are absolutely useless, and waste public money which might be applied in other directions.

The three medical commissioners have to visit something like 140 asylums, each pauper asylum being visited once, and each private one twice yearly, but not by the same men time after time. I submit that considering the enormous size of many of these institutions, the immense number of patients to be seen, and the great extent of the perigrinations, it is impossible for the English medical commissioners to have the same knowledge of individual patients as ours have. Three such officers inspect some 50,000 lunatics; whereas in Scotland something like 6500 are inspected by two commissioners. It has been suggested that our officials are not overworked—that, in fact, one medical commissioner would be sufficient; but, apart from all other considerations (and there are many), if these two officials maintain public confidence their not extravagant salaries are well-expended public money.

The principles of the Scotch system are—limited areas and ample supervision; and without these magistrates' orders will be futile. My humble opinion is that the line reform should take in England should be in the direction of the adoption of Scotch principles, not merely of Scotch legal procedure, and in this wise: First, that the constitution of the General Board of Lunacy should be improved by the conversion of legal into medical commissioners, the number of whom should be increased to ten or twelve. All legal difficulties could be considered by a standing counsel, by an efficient legal secretary to the Board, or by honorary legal commissioners sitting in London. Secondly, that England and Wales should be broken up into lunacy districts, each of which should contain not more than 10,000 lunatics. Thirdly, that two medical commissioners should be appointed *to reside* in each district, the asylums of which they should visit regularly twice a year. Periodical meetings of the General Board should be held in London, which one commissioner from each district should attend.

I believe by this means public confidence in England would be established, and that the same elasticity of management as exists in Scotland would be obtained. The Scotch Board, having the whole of our institutions immediately under its eye, can and does allow great latitude of action in the management of individual asylums, which is impossible under existing circumstances in England, where there is a much greater tendency towards officialism and red-tape than with us.

It may be fairly argued that one reason of the absence of doubt and suspicion in Scotland is the small number of private asylums. This is an argument of no small weight, as most of the legal difficulties have arisen in them; but as such institutions are not likely to be abolished, at least for some considerable time, in England, the strength of my contention is not weakened.

I am, Sir, yours obediently,

Edinburgh, May 15th, 1886. JOHN BATTY TUKE.

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RÖTHELN OR RUBELLA.

To the Editor of THE LANCET.

SIR,—Your correspondents on the above subject will find it stated in Quain's Dictionary, under the latter name, that "enlargement of the lymphatic glands in the neck is an early symptom, most marked in children." It is one that I have noted in three previous descriptions given by me of this exanthem.—I am, Sir, your obedient servant,

Orchard-street, W., May 24th, 1886. WILLIAM SQUIRE, M.D.

"THE MEDICAL BILLS."

To the Editor of THE LANCET.

SIR,—In the interest of the profession, permit us to say on behalf of the Medical Alliance Association that the "clause" sent to you by Dr. Wiglesworth of Liverpool, and which you published on Saturday last, does not restrict the practice of medicine or surgery by unqualified persons, nor does it prevent the assumption of medical or surgical titles by persons holding unrecognised medical qualifications.

We are, Sir, yours faithfully,

PRIDHAM, PIPER, & Co.,
Solicitors to the Medical Alliance Association.

Old Serjeants' Inn, W.C., May 17th, 1886.

BELFAST.

(*From our own Correspondent.*)

QUEEN'S COLLEGE: THE MEDICAL STUDENTS AND THE ROYAL UNIVERSITY EXAMINATIONS.

ON the 21st instant a joint meeting of graduates and undergraduates was held at Queen's College "to discuss certain grievances which the candidates from the Belfast Medical School have suffered at the recent examinations of the Royal University of Ireland." There was a large attendance, as the students feel deeply interested in the matter. Dr. O'Neill, surgeon to the Royal Hospital, presided. The Chairman having spoken, and a considerable number of those present having given expression to their views on the matter, the following resolutions were unanimously adopted:—1. "Whereas, of the candidates presenting themselves for the various examinations in medicine in the Royal University, Ireland, about 40 per cent. receive their professional education in the Belfast Medical School; and whereas at the first medical examination, of the four examiners only one—at the second medical examination, of the nine examiners only two—and at the M.B. examination, of the thirteen examiners only one, are from the Belfast School; and whereas we are convinced that the students of the Belfast Medical School are thereby placed at a great disadvantage, and the Belfast School materially injured: resolved that we do hereby direct the attention of the Senate of the said University to the existence of this anomaly, and that we respectfully request them to remove it by giving a fair and proportionate representation to the Belfast Medical School on the Examining Board." 2. "That the method of conducting some of the oral examinations is eminently unsatisfactory, especially the oral examinations in practical physiology at the M.B. degree examination, in which sufficient time is not allowed to the candidates for the amount of work to be done; and that in the examinations in medicine, surgery, midwifery, and gynæcology questions are asked and methods of treatment required which are not found in the standard textbooks, or recognised by the leading medical schools of the United Kingdom; and not only so, but the methods taught and advocated by the leading London physicians and surgeons are in some instances not accepted, and that on the part of some of the examiners there is a marked want of courtesy towards the candidates." 3. "That in a great many instances the questions are unscientific and devoid of practical importance, and that the tendency of the questions in medicine, surgery, midwifery, and gynæcology has been of such a nature as to render it a matter of absolute necessity to spend some time in Dublin at considerable expense and inconvenience under the charge or care of a 'grinder,' in order to be acquainted with the peculiarities and the special lines of treatment advocated by the several examiners, as in many cases these cannot be learned from the standard text-books." 4. "That additions have been made to the courses of examination without sufficient notice having been given." 5. "That copies of the foregoing resolutions be sent to the Lord-Lieutenant, Chief Secretary, Under Secretary, and to the Senate and examiners of the Royal University, and that the chairman and secretary be appointed as a deputation to wait on the Senate at their next meeting, and to present their own views to him." This deputation waited on the Senate of the Royal University on the 25th. Dr. O'Neill of Belfast, having read the resolutions (given above), stated that it was not the Queen's College nor the Belfast Royal Hospital that he represented, but the entire body of students, who attended every means given for medical instruction in Belfast. Having referred to the unsatisfactory method of conducting some of the oral examinations, to the method adopted with regard to examinations as to treatment of cases, he said no man was safe unless he answered according to the Dublin system of treatment. He complained that in many instances questions unscientific and devoid of any practical importance were sometimes put, and affirmed that it was necessary, in order to cope with the present extraordinary system, that students should come to Dublin, and be coached by grinders so as to become acquainted with the peculiarities of examiners and the several lines of treatment advocated by these examiners. In conclusion, he asked that a commission might be appointed to inquire into the allegations made, and said they were prepared to abide by the result. Lord Emly, the Vice-Chancellor, who presided, observed that Dr. O'Neill had presented the case of the Belfast Medical School fully and forcibly. The grievances complained of would receive the very best attention of the Senate. The latter decided to refer the matter to a special committee, consisting of the Standing Committee and medical members of the Senate, for consideration and report.

BELFAST ROYAL HOSPITAL.

In the report read at the quarterly meeting (May 24th), it was stated that during the quarter there were 459 in-door patients, while during the same period there were treated 2718 extern patients. The financial section of the report showed that the donations and bequests amounted to £356 19*s.* 3*d.* The general subscriptions, however, compared with last year, showed a falling off of £31 9*s.* 9*d.* The ordinary income had not kept up with the ordinary expenditure. When all the April accounts were paid there would be an amount due against the hospital of £579 17*s.* 11*d.* The board recorded with deep regret the death of their president, Lord Shaftesbury, as well as of one who had taken a deep interest in the charity, Sir Wm. G. Johnston, D.L. Saturday, May 29th, has been set apart by the board as Hospital Saturday, and great exertions are being made to render the effort a success.

THE MEDICAL SCHOOL.

The summer session has now commenced, and teaching is going on regularly at the College and Royal Hospital. Dr. Cuningham, Professor of Natural History, is conducting a special class at the College in Practical Biology for the benefit of students in these subjects, it being now necessary for medical students to pass a practical examination in zoology at the Royal University.

THE ST. JOHN AMBULANCE ASSOCIATION.

In the report presented at the first meeting of the Belfast Branch of this Association on May 24th, it is stated that the organisation of the Belfast Centre is complete. Since the foundation of the centre, courses of lectures have been delivered in Belfast, Limavady, Omagh, and Portrush. Seventy-one members have passed the examinations and received certificates from the Association. Dr. John Moore is the Honorary Secretary.

Belfast, May 25th.

HOME HOSPITALS.—At the eighth annual meeting of the Home Hospitals Association, on the 20th inst., it was reported that there had been during the year 625 applicants for admission, of whom 282 were admitted. The average number of patients in the hospital at one time was 19, and their average stay was 24 days. The balance sheet showed that the year's income amounted to £4576, and the expenditure left a balance of £787.

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PARIS.

(From our own Correspondent.)

THE ABUSE OF ALCOHOL.

OWING to the ravages that are being committed by alcoholism in this country, the authorities have felt it high time to interfere, and to adopt such measures as will prevent the physical and moral degradation to which the population is being reduced by the excessive abuse of spirits, and especially spirits of an inferior quality. The subject has been brought before the Senate, which ordered a commission to investigate the matter. The reporter suggested that whatever other measures be taken, legislative or otherwise, they would be of little or no avail unless the rectification of the alcohols delivered for consumption be exacted. Among the other measures proposed by the commission to reduce alcoholism to a minimum may be mentioned increase of the duty on alcohol, the prevention of "vinage," or the addition of alcohol to wines, and the reduction of the number of "cabarets" or wine-shops. As regards vinage, M. Girard, Director of the Municipal Laboratory of Paris, who was consulted on the subject, stated that experiments performed by him showed that the addition of alcohol to wine destroyed the properties of the latter in precipitating a portion of the tartaric acid and extractive matters it contains. Dr. Dujardin-Beaumetz, in the name of the Council of Hygiene, declared that the process of vinage profoundly altered the wine without in any way improving it, except for the purpose of preservation, which is of advantage only to the wine merchant. Dr. Brouardel, the President of the Society of Hygiene, made a statement to the same effect, and added that vinage was a source of great danger to the public health. Although this process was approved of by the Academy of Medicine in 1870, it is presumed that if it were now consulted it would express a different opinion, as the study of the physical and chemical constitution of alcohols, as well as of their toxic properties, has made considerable progress since that time. In connexion with this subject, I may note that the Academy of Sciences has been furnished with some startling facts respecting the production of the liquid commonly sold as cheap brandy. Out of more than 50,000,000 gallons of alcohol distilled annually, not quite 500,000 gallons, according to M. Girard, were distilled from the grape. The greater portion of spirit is obtained from grain, which, if sufficiently rectified, is not unwholesome; but, this being very rarely done, the spirit is noxious. Alcohol is also distilled from apples, pears, potatoes, and beetroot, all of which contain poisons of various kinds.

THE IDENTIFICATION OF CRIMINALS BY ANTHROPOMETRY.

About two years ago Dr. Bertillon, Director of the Statistical Department of the Prefecture of Police, introduced a system of anthropometry for the purpose of identifying criminals and others when arrested. This system has been attended with the best results, as it was not always easy to identify criminals by simple photographs. Since the adoption of anthropometry many old offenders have been recognised, and dealt with according to their offences.

Paris, May 25th.

BERLIN.

(From our own Correspondent.)

VIRCHOW'S JUBILEE.

TO-DAY three decennials have passed since Professor Rudolph Virchow commenced his duties as teacher of pathological anatomy in Berlin. Here he studied, and, deducting the seven years in which he occupied the chair at Würzburg, he has displayed great activity in practice since 1844 in the city. His cellular pathology, too, which procured for his name a world renown, has its roots in the soil of medical Berlin. Under the guidance of Johannes Müller, Theodor Schwann pursued his studies, in which he proved that the [illegible] consists of cells. Virchow [illegible] Reymond, Remak, [illegible] (who died in 1852). Next to Johannes Müller, it was Robert Froriep, professor at the Charité, to whom Virchow was most indebted. The former was his guide in the paths of general biology and pathology, but it was the latter who introduced him to practice and to the methods of observation. Later Virchow became the successor to his two masters—to Froriep in 1846, who out of regard to his family removed to Weimar; and to Johannes Müller in 1856, who welcomed Virchow on his return to undertake the duties of the chair of Pathological Anatomy, which till then had been united with that of Anatomy and Physiology. Virchow's career as teacher began with his appointment as prosector at the Charité. In the summer of 1846 he gave his first lecture on Pathological Anatomy. Till then Vienna had been without dispute the home of pathological anatomy. This branch had been neglected in Berlin. At the commencement of 1830 a former midwife, named Vogelsang, used to take the sections in hand. The renowned Pirogoff went through a course of pathological dissection and surgical operation under the guidance of this lady. Virchow soon gathered a circle of enthusiastic workers around him, on whom the juvenile teacher (he was only twenty five years old) exercised a mighty influence. Of the members of his first course who have later become known may be mentioned Alexander von Francius, teacher of zoology at Breslau (died 1877), Carl Hoffmann (died at Costa Rica), both distinguished *savants*, and Carl Pagenstecher. Certain events in the year 1847 led to an interruption of the lectures. Virchow took an active part in political life. It appeared to him the duty of a physician to support the efforts of the Liberal party. "The physician is the natural adviser of the poor," he wrote at that time. The managers of the Charité were offended at the democratic opinions of their prosector, and dismissed him from his post, in which, however, after a short time he was reinstated, but only with half the salary. Under such circumstances his appointment to Würzburg was very opportune, especially as he was engaged to the daughter of the gynæcologist, Carl Meyer. In May, 1856, he was recalled to Berlin, and the erection of a pathological laboratory was consented to, which Virchow had made a condition of his acceptance of the appointment; and which became a sort of shrine for aspiring medical students. A number of important works have issued from it. Many of Virchow's students and assistants became professors. Of the assistants may be mentioned Hoppe Seyler and Recklinghausen of Strasburg, Grohé, Baeter, and Grawitz of Griefswald, Kühne of Heidelberg, Klebs of Zurich, Cohnheim of Leipsic, and Ponfick of Breslau. But almost innumerable are the practical physicians who have gone forth from Virchow's school, who will never forget the shrewd conclusions and the clear expositions which distinguished the lectures of their eminent master.

Dr. Gaertner, formerly of the "Reichs Gesundheitsamt" in Berlin, has been appointed Professor of Hygiene at the University of Jena. He is known as the author of a paper on "Hygiene on Board Ship,"[1] also for experiments as to the best way of making use of the different antiseptic remedies in the treatment of wounds, on which subject he reported at last year's German Surgical Congress.

Dr. Loeffler has qualified as Privat Docent in Hygiene at the Berlin University. Dr. Loeffler has assisted in the investigations of Koch on the anthrax vaccination, which led later to a scientific feud between Drs. Koch and Pasteur. Dr. Loeffler has worked with Professor Schütz on the disease of glanders, which in 1882 led to the discovery of the specific bacillus. His works on Disinfection through Hot Water Steam and on Diphtheria in Human Beings and in Pigeons are also worth mentioning.

Berlin, May 16th.

[1] Cf. Vierteljahrschrift für öffentliche Gesundheitspflege, 1881.

DEATH OF A CENTENARIAN.—A woman named Craughwell died recently near Ballinrobe, at the advanced age of 107. Her health up to the day before her death was so good that she attended a funeral within a few hours of her decease. Married at seventeen to a soldier, she went through all the Peninsular wars, and later on was at the battle of Waterloo. She subsequently went to India and China, and returned to Ballinasloe a widow some [illegible] since. A correspondent of the *Cork Constitution*, from which these details are taken, states that on the day of her death he saw her knitting and sewing.

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Obituary.

HENRY JACKSON, M.R.C.S.

THIS young, active, and genial member of our profession, whose death took place at Barnstaple on April 26th, passed his pupilage with Dr. Harper of that town, and entered the Middlesex Hospital, where he was characterised by his persevering industry, which won him several class distinctions. Having qualified as M.R.C.S. and L.S.A., and held the resident post of obstetric officer, he returned to Barnstaple as partner with Dr. Harper in 1873. At the time of his death he was one of the surgeons at the North Devon Infirmary and consulting surgeon to the North Devon Dispensary; he was also medical officer and public vaccinator for the second and fourth districts of the Barnstaple Union, and medical officer of health for the Barnstaple Urban and Rural Sanitary Authority. In 1882 he married the only daughter of James Bilney, Esq., of Barnstaple, whom he leaves a widow with three children. The universal respect and goodwill entertained towards him, and the great sympathy felt for his relatives, were evidenced by the very large number of persons who followed him to his grave, and by the still larger concourse which lined the road to the cemetery. In the procession, besides relatives and friends from far and near, were the borough police, one hundred and thirty Oddfellows and Rechabites, a deputation from the North Devon Benevolent Society, all the medical men of the town without exception, the mayor and corporation, and representatives of the various borough institutions with which the deceased was connected, besides a goodly number of patients to whom he had endeared himself by his genuine kindness and professional skill. From one of the local papers we may cull a paragraph, as showing that the public are not wanting in appreciation of the work of the profession, which enables one even at an early age—Mr. Jackson was only thirty-five—to win a very large measure of esteem and goodwill. The *North Devon Herald* writes: "To very considerable attainments Mr. Jackson added infinite painstaking, much industry, and patient attention. His cheery presence, ready sympathy, and unvarying patience were as grateful as his advice; and that his heart was in his work was patent from the energy, time, and thought he gave to it. In his public capacities he well merited the high reputation he possessed for conscientiousness and hard work. As medical officer of health, he rendered valuable and devoted service in improving the sanitary condition of the locality. As one of the medical officers of the union, he was popular with the poor, and although they are singularly prone to grumbling, complaints from them were seldom, if ever, heard. All the more sorrow and regret are accordingly felt that so much steady application and exemplary zeal have been lost by his untimely removal. His illness only lasted some three weeks, and he succumbed to a complication of rheumatic fever, pleurisy, and heart affection."

PROF. LUIGI PAGANUCCI.

THE Tuscan School lost on the 13th inst. an able representative in Luigi Paganucci. He was born at Montalaterone, in the province of Siena, on July 8th, 1808, and devoted himself in the neighbouring seat of learning to the study of the medical sciences. He became especially accomplished in anatomy, on which he wrote a treatise ("Dell' Anatomia Umana"), which long held its ground, and was appointed Professor of the Science in 1850 at the R. Arcispedale di S. Maria Nuova in Florence. The chair, being a supplementary one, was suppressed in 1867, and three years later Prof. Paganucci had put himself on the retired list till, on March 10th, 1873, he was recalled from a by no means inactive seclusion to the Professorship of Descriptive Anatomy in the Istituto di Studi Superiori. In 1874 he assumed the post of superintendent of the Physiological Museum, and also became lecturer on Pictorial Anatomy to the students in the Fine Arts Academy.

His solidly grounded reputation for learning and teaching power was acknowledged not merely in Italy, but throughout Europe, by numerous scientific associations, of which he became active or honorary fellow—such as the Medico-Physical Academy of Florence, the Academies of the Fine Arts in Florence and Perugia, the Physio-Critical Academy of Siena, and many others. Among his published writings, besides the treatise on Human Anatomy already mentioned, may be enumerated "Della Matrice e delle sue Appartenenze nei differenti Periodi della Vita Muliebre, fuori del Tempo della Concezione" ("On the Matrix and its Appurtenances in the several Periods of Woman's Life, apart from the Time of Conception"); "Biography of Professor Tabarran"; "Parere interno all' Individualità dei due Scheletri trovati nel Mausoleo scolpito da Michel Angiolo, e che sta a sinistra di chi entra nella celebre Cappella della Basilica di S. Lorenzo" ("Opinion on the Personality of the Two Skeletons found in the Mausoleum sculptured by Michel Angelo, and standing on the left hand as you enter the celebrated Basilica of San Lorenzo")—a very ingenious tractate; and many contributions to the transactions and periodical literature of the profession.

"His loss," says a Tuscan contemporary, "will be poignantly felt wherever science and its votaries are held in honour. In Florence especially, where he had a wide circle of colleagues, pupils, friends, and admirers, the announcement will be received with a sense of almost personal bereavement."

DR. WILLIAM PATTULLO.

(OF REWA, FIJI.)

THE news of the death (said to be due to acute dysentery) of this accomplished young medical practitioner—only three years after he had accepted, along with Dr. Beith, an appointment in our latest colony—will cause much sorrow among his friends. In alluding to this sad event, Professor Gairdner recently addressed to his class a few words, to the effect that, although the majority of those present could scarcely have known personally how much Dr. Pattullo was beloved and esteemed by all his teachers, he might be allowed to claim for those who could join with him in this tribute the sincere desire to give expression to their sympathy with Dr. Pattullo's sorrowing relatives, their regard for his memory, and their appreciation of his manifold virtues. A "son of the manse," added Dr. Gairdner, "and one of the best of the many good ones I have known as their teacher, he passed through his career as an undergraduate not only with distinction, but with brilliant success, and his bright and sympathetic character made the promise of his future in that far-off home, in one of the finest climates in the world, almost a matter to be rejoiced in as if it were already sure. About a year ago he came home, married, and returned to his post, and now we have the news of his premature death from a disease of which I only know as yet that it seemed to Dr. Beith to require the transfusion of blood from his own veins into those of his companion—a disease, therefore, probably acute, and certainly attended by extreme prostration. We can only now offer this tribute of our sympathy to the young wife whom he has left alone in the world, and to the parents who watched his infancy and his manhood alike with high hopes of his future success and reputation in his profession."

MEDICAL DEFENCE UNION.—On the 6th inst. nearly a hundred members of the profession met at the Birmingham Medical Institute to consider the desirability of forming a Midland Branch of the above Union. Mr. Lawson Tait occupied the chair, and stated, as showing the imperative need for co-operative action in our profession, that he himself, during the last twenty years, had actively assisted in the defence of twenty-one cases in which criminal charges or civil actions had been brought against medical men, in every one of which the charge had broken down. In most of these cases, had it not been for the spirited action of medical brethren, financial and social ruin would have resulted to the defendants. It was resolved to form a Midland Branch of the Medical Defence Union, and about sixty at once joined in the room. At a subsequent meeting, a local committee was formed for the management of the affairs of the Branch. Mr. Lawson Tait was elected president, and Dr. Leslie Phillips of Birmingham and Mr. F. S. Goulder of Dudley hon. secretaries; from these gentlemen any information may be obtained.

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Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Notices respecting the election to the Council, for which there are four vacancies, were issued on Friday to every Fellow whose address is known to the Secretary, and the usual advertisement appeared on that date in the *London Gazette* and two daily newspapers, as required by Section 4 of the Bye-Laws. Fellows desirous of becoming candidates for re-election must apply to the Secretary for the necessary papers, which must, when duly filled up, be deposited with him *not later than Monday, June 7th next* We understand that two of the retiring members of Council will be candidates for re-election. The election will take place on Thursday, July 1st.

The following gentlemen, having previously passed the required examinations, were at the last meeting of the Council admitted Fellows and received their diplomas:—

Charles Wray, Long Marston; Membership dated Nov. 18th, 1881.
Harry Littlewood, Hempstead; April 17th, 1883.

At the same meeting the following gentlemen were elected Fellows as Members of twenty years' standing:—

George Yeoman Heath, Newcastle-on-Tyne; Membership dated May 17th, 1843.
Henry Cayley, Calcutta; December 21st, 1855.

Eighty-eight candidates presented themselves for the Primary Examination in Anatomy and Physiology on the 20th, 21st, 24th, 25th, and 26th inst., of whom 47 passed and 41 were referred.

ROYAL UNIVERSITY OF IRELAND.—The following have passed the examinations in Medicine and Surgery:—

BACHELOR OF MEDICINE.—Upper Pass: *Cornelius Bradley, *James Bradley, George Browne, James Chambers, *James Donelan, *George Freud, R. B. Gorsuch, *John L. Livingston, *Robert W. Nixon, Richard H. Wagner.—Pass: J. J. Attridge, W. F. Browne, J. K. Close, E. Curtin, S. H. Dunlop, G. F. Ewens, E. B. Hazleton, G. A. Junk, T. B. Kane, L. Lyttle, W. E. MacFeeters, W. Milligan, W. N. Murphy, A. T. Nash, J. O'Connor, C. O'Neill, W. J. Richardson, M. J. Robinson, J. T. Shaw, A. E. Thompson, J. J. Tobin, F. E. Townsend, G. R. Young.

* These candidates may present themselves for the Honour Examination.

MASTER OF SURGERY.—Cornelius Bradley, James Bradley, James Chambers, J. K. Close, Eugene Curtin, James Donelan, S. H. Dunlop, J. F. Eagleton, Robert English, John Flynn, B. Forde, G. Freud, R. M. Griffin, M. H. Hannigan, Daniel Lee, J. Livingston, W. E. MacFeeters, John Menary, S. Moore, W. U. Murphy, R. Nixon, John Oliver, C. O'Neill, W. R. Orr, W. Richardson, A. S. Thompson, A. E. Thomson, F. Townsend, R. H. Wagner, G. R. Young.

A meeting of Convocation of the University will be held on July 27th, to elect two members of the Senate in the vacancies caused by the death of Archbishop Trench and the expiration of Dr. Curtis's term of office.

COLLEGE OF PHYSICIANS IN IRELAND.—At the May examinations the following obtained the licences in Medicine and Midwifery of the College:—

MEDICINE.—Rodney Harrison Abbott, Arthur Badcock, Louis Birch, Guy Stewart L'Estrange, J. Watson Lonsdale, Daniel McCann, Francis Waldron McCanley, Elrington Simon Tuckay, Barcroft Carroll Manly, Walter John Reed, John Joseph Savage, Patrick Joseph Sheridan, William Edward Waters.

MIDWIFERY.—John H. Griffin, Guy Stewart L'Estrange, James Watson Lonsdale, Barcroft Carroll Manly, John Joseph O'Brien, Patrick Joseph Sheridan, William Edward Waters.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—The undermentioned has been admitted a Fellow of the College:—

George Edward Twiss, Army Medical Staff.

SOCIETY OF APOTHECARIES.—The following gentlemen passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on the 20th inst.:—

Hooper, Ebenezer, Kingston, Ontario.
Smith, Henry Craven, Cravensea, Cockington, Torquay.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.—The quarterly meeting of the Medico-Psychological Association was held at Bethlem Hospital on May 19th, at 4 P.M. In the absence of the President, Dr. Eames, the chair was taken by Dr. Rayner. The following papers were read:—By Dr. Savage, on a case of "Insanity cured by removal of the Beard in a Woman"; by Dr. Percy Smith, on a case of "Ovariotomy in an Insane Patient"; and by Dr. Bower, on "Suicide and the Lunacy Laws Agitation." It was announced that the annual meeting would be held on August 9th.

DR. MATTHEW HINCHLIFFE has been placed on the Commission of the Peace for the borough of Dewsbury.

FOUR CHILDREN AT A BIRTH.—Mrs. Lars Grindahl, of Chetek, Eau, Claire County, recently gave birth to four children, all boys, who are doing well.

ON the 22nd inst. a boy was rescued from drowning at Chester by the gallant conduct of Mr. Hamilton, a local surgeon.

DR. COURY, of Kilkelly, has sent to M. Pasteur the first Irish patient, a man who was bitten by a rabid dog on the 11th inst.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL.—H.R.H. the Princess of Wales has fixed Friday, June 25th, at 1 P.M., for opening the new wing of the above hospital.

A BAZAAR in aid of the funds of the Great Northern Central Hospital will be opened at the Knightsbridge Barracks by H.R.H. the Princess Christian on the 31st inst.

THE anniversary banquet on behalf of the Royal National Hospital for Consumption and Diseases of the Chest, Ventnor, has been postponed.

PRESENTATION.—The nurses of the Bradford Infirmary have presented Mr. W. J. Spence, the house-surgeon, who is leaving that institution, with a handsome walnut writing cabinet, bearing a suitable inscription.

MANSLAUGHTER BY A LUNATIC.—One of the inmates of the Richmond Lunatic Asylum, Dublin, was killed last week by another lunatic, who fractured his skull. The culprit will be sent to Dundrum Criminal Lunatic Asylum.

GUY'S HOSPITAL.—The Biennial Dinner will be held at the Holborn Restaurant on Friday, June 2nd, Mr. Durham in the chair. H.R.H. the Duke of Cambridge will distribute the school prizes on the same afternoon.

AN inquest was held at Widnes, on the 24th inst., on the body of a man who died two days previously from taking an overdose of laudanum. Although directed to take from ten to fifteen drops, the deceased took forty. A verdict of "Death from misadventure" was returned.

THE members of the Royal Commission on the Condition of the Blind, the Deaf and Dumb, &c., have left England for the purpose of inspecting the institutions for the blind and for deaf-mutes in Paris and the neighbourhood, and the systems of education there pursued.

THE LATE MR. KILGARRIFF.—This gentleman, whose death was referred to in our last issue, left his family unprovided for, and a meeting of friends interested in their welfare took place last week. The meeting was largely attended, and a sum of £200 was promised by those present.

GREAT NORTHERN CENTRAL HOSPITAL.—On Monday next, at 12 o'clock noon, Princess Christian of Schleswig-Holstein has consented to open the grand bazaar to be held at the Riding School, Knightsbridge Barracks, on the above day and June 1st and 2nd, in aid of the new buildings to be erected in the Holloway-road.

ANTHROPOLOGICAL INSTITUTE.—In connexion with the Institute conferences on the Races of the British Empire will be held on several days in the months of June and July, in the Conference Hall of the Colonial and Indian Exhibition. The first of the series will take place on June 1st, at 4 P.M., the subject being the Races of Africa.

WOLVERHAMPTON EYE INFIRMARY.—The committee of this institution have secured a suitable site of land, on the confines of the borough, on which to erect a new building, and a supporter of the charity has promised to erect an infirmary for in-patients, at a cost of £4000, provided that another building in connexion with it be constructed for out-patients, with consulting-room, waiting-room, and dispensary; and also that a sum of £2500 be subscribed as an endowment fund. It is estimated that altogether a total of about £8000 will be required to enable the committee to accept the offer made to them. The operations of the charity are at present carried on in a rented house much too small for the accommodation of the increasing number of patients.

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CASE OF CATALEPSY IN CORK UNION WORKHOUSE.—There is at present in one of the male wards of the Cork workhouse a man named O'Sullivan, aged fifty years of age, who for over twelve months—viz., April 27th, 1885—has been in a deep sleep except when awakened to partake of food. On the date above mentioned he was found by the constabulary fast asleep in the open air, and removed to the workhouse. When shaken roughly, he awakes and will do what he is told, and when food is placed before him he will take it, but he has to be shaken at intervals to prevent him going to sleep. When he has finished eating, he falls asleep in whatever posture he happens to be in at the time; if put in a standing position with his hands above his head, he remains in that posture until disturbed; and if placed on two chairs, his head resting on one and his feet on the other, he remains so, the body being quite stiff.

THE LATE DR. THOMPSON.—At the meeting of the Council of the Irish Medical Schools and Graduates' Association, held on the 19th inst., the following resolution was passed, on the proposal of the Chairman of Council (Professor Gerald F. Yeo, M.D.), seconded by Dr. Macnaughton Jones (President)—viz.: "That the Council of the Irish Medical Schools' and Graduates' Association, having regard to the late Dr. Thompson's intimate connexion with the Association, first as its founder and honorary secretary, and afterwards as honorary treasurer, hereby desires to convey to Mrs. Thompson its deep sympathy with her in her bereavement, and to express its sense of the loss the Association has sustained by the death of one to whom it has been so much indebted." Brigade-Surgeon W. Alexander, M.D., has been appointed honorary treasurer to the Association.

UNIVERSITY OF OXFORD.—Notices have been issued that examinations for the degree of Bachelor of Medicine will commence in the Medical Department of the Museum as follows:—The Second (or Final) Examination, Thursday, June 17th, at 10 A.M. The First (or Scientific) Examination, Saturday, July 3rd, at 10 A.M., for Chemistry and Physics; and on Monday, July 5th, for Anatomy and Physiology. Candidates for either of these examinations should send in their names on or before June 3rd to "the Regius Professor of Medicine, Medical Department, Museum, Oxford." Candidates for the Scientific Examination are to state whether they have passed the Preliminary Honour Examination in the School of Natural Science; and, if not, whether they desire to present themselves for Physics and Chemistry only at this examination, or for all the subjects thereof. Both the examinations will be conducted this year under the conditions of the statute of 1860.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BOND, J. W., M.D., B.Sc.Lond., M.R.C.S., has been elected a Member of the Honorary Staff of the Hospital for Diseases of the Throat, Golden-square.

BROCKATT, A. A., L.R.C.P., M.R.C.S., has been appointed Resident House-Physician to St. Thomas's Hospital.

BROWNE, OSWALD A., M.A., M.B., M.R.C.S., &c., has been appointed Physician to the Royal Hospital for Diseases of the Chest, City-road, London.

COLLIER, M. P. MAYO, M.S.Lond., F.R.C.S., Senior Assistant Surgeon, has been appointed to have charge of the Throat and Ear Department at the North-West London Hospital, Kentish Town-road.

CROWDY, F. D., M.B.Oxon., M.R.C.S., L.S.A., has been appointed Resident House-Physician to St. Thomas's Hospital.

EVANS, C. S., M.R.C.S., L.S.A., has been appointed Assistant House-Surgeon to St. Thomas's Hospital.

GODFREY, A. E., L.R.C.P., M.R.C.S., has been appointed Non-resident House-Physician to St. Thomas's Hospital.

GOODDY, E. S., M.R.C.S., L.S.A., has been appointed House-Surgeon to St. Thomas's Hospital.

HUTTON, J. S., L.R.C.P., M.R.C.S., L.S.A., has been appointed Resident Accoucheur to St. Thomas's Hospital.

KIDD, H. CAMERON, L.R.C.P., M.R.C.S., has been reappointed House-Surgeon to St. Thomas's Hospital.

LITTLE, WM. MAXWELL, M.B., C.M.Edin., has been appointed Junior Assistant Medical Officer to the Norfolk County Asylum, Thorpe, near Norwich.

MACDONALD, G., M.D., M.R.C.S., has been elected a Member of the Honorary Staff of the Hospital for Diseases of the Throat, Golden-square.

MONTAGUE, A. J. H., M.R.C.S., L.S.A., has been appointed Clinical Assistant in the Skin Department of St. Thomas's Hospital.

NAIRN, R., M.R.C.S., has been appointed Ophthalmic Clinical Assistant to St. Thomas's Hospital.

NICKOL, F. C., L.R.C.P., M.R.C.S., has been appointed Assistant House-Surgeon to St. Thomas's Hospital.

PARSONS, F. G., L.R.C.P., M.R.C.S., has been reappointed Clinical Assistant in the Throat Department of St. Thomas's Hospital.

PRINGLE, JOHN J., M.B., M.R.C.P., &c., has been appointed Physician to the Royal Hospital for Diseases of the Chest, City-road, London.

SHAW, JOHN, M.D.Lond., M.R.C.P., Senior Assistant Physician, has been appointed to have charge of the Gynæcological Department at the North-West London Hospital, Kentish Town-road.

STAVELEY, W. H. C., L.R.C.P., M.R.C.S., has been reappointed Clinical Assistant in the Ear Department of St. Thomas's Hospital.

TOBIN, MR., Assistant Surgeon, St. Vincent's Hospital, Dublin, has been appointed Surgeon to that institution.

TRAVERS, OTHO ROBERT, M.R.C.S., L.S.A., has been appointed Medical Officer for the Seventh District of the Battle Union.

WALFORD, EDWARD, M.D., S.Sc.C.Camb., has been reappointed Medical Officer of Health for the Urban Sanitary District of Ramsgate, for a term of three years.

WHITE, WILLIAM HENRY, M.A., M.D., M.R.C.P., &c., has been appointed Physician to the Royal Hospital for Diseases of the Chest, City-road, London.

WOLFENDEN, R. N., M.D., has been elected a Member of the Honorary Staff of the Hospital for Diseases of the Throat, Golden-square.

Births, Marriages, and Deaths.

BIRTHS.

BELEMORE.—On the 15th inst., at Lyndhurst, Eaton, Norwich, the wife of Brigade-Surgeon A. J. Belemore, of a son.

COOMBS.—On the 19th inst., at Redburn, Spring-grove, St. Cuthbert's, Bedford, the wife of Rowland H. Coombs, M.D., of a daughter.

CRAIG.—On the 11th inst., at Sawtry, Petertow, the wife of James Craig, M.D., of Eastwood, Notts, of a son.

MOODIE.—On the 21st inst., at Park-avenue House, Stirling, the wife of Robert Moodie, M.D., B.Sc.Ed., of a daughter.

MORTIMER.—On the 15th inst., at Haslar Hospital, Gosport, the wife of Deputy Inspector-General E. T. Mortimer, R.N., of a daughter.

PERIGAL.—On the 23rd inst., at New Barnet, Herts, the wife of Arthur Perigal, M.D., of a daughter.

WARNER.—On the 18th inst., at Rydal, Woodford-green, Essex, the wife of Percy Warner, M.R.C.S., L.R.C.P.Lond., of a son.

WELSFORD.—On the 21st inst., at 46, Oxford-gardens, W., the wife of George F. Welsford, M.B., of Woodstock, Oxon, of a son.

MARRIAGES.

CLEGHORN—BROWNING.—On the 1st ult., at the Church of the Nativity, Blenheim, New Zealand, George Cleghorn, M.R.C.S., to Annie, daughter of the late James Torry Browning, of Oxford.

MENDS—WILSON.—On the 20th inst., at St. James's, Kidbrook, Bowen Stilon Mends, Surgeon, Royal Navy, to Ada Latham, elder daughter of Colonel John J. Wilson, Royal Engineers.

OMAN—DARRACOTT.—On the 14th ult., at Holy Trinity Church, Sliema, Malta, N. Oman, M.D., to Rosie, youngest daughter of the late Thomas Bligh Darracott, Esq., of Kingsbridge, Devon, and Trinidad, W.I.

PIGGOTT — LAWRENCE. — On the 20th inst., at St. Mary Abbot's, Kensington, Fred. Cecil Holman Piggott, B.A.Cantab., M.R.C.S., &c., of Richmond and Teignmouth, to Ada Maria, daughter of the late Henry and Ellen Lawrence, of Kensington.

SCOTT—HEWETT.—On the 22nd inst., at Batu Gajah, Kinta, Perak, William Duncan Scott, M.A.Oxon., M.B., C.M., of the Perak Government Service, to Alice Mary, second daughter of the late Thomas Douglas Hewett, of H.M.'s Indian Navy.

DEATHS.

CROFTON.—On the 23rd inst., at Carlton Lodge, Teignmouth, Devon, William Crofton, M.D., of Montagu Villa, Cheltenham, and of Lakefield, co. Leitrim, J.P. for that county, in his 73rd year.

JONES.—On the 22nd inst., at Henblas, Bala, Merionethshire, Richard Owen Jones, M.R.C.S., L.S.A., aged 48.

MACNAB. — On the 23rd inst., at Greenhill, Crosshills, Yorkshire, R. A. Macnab, M.D., aged 57.

TROTTER.—On the 21st inst., at Sunny Bank, Holmfirth, Edward Trotter, Surgeon, in the 76th year of his age. Friends will please accept this the only intimation.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, May 27th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
May 21	30·15	S.W.	59	53	103	71	49	·10	Cloudy
,, 22	30·17	N.E.	59	54	89	66	54	·41	Overcast
,, 23	30·05	N.W.	55	53	86	66	49	·53	Overcast
,, 24	29·92	N.E.	56	55	...	57	50	·02	Overcast
,, 25	29·73	W.	57	53	103	63	48	1·46	Cloudy
,, 26	29·63	W.	57	51	103	62	51	·05	Cloudy
,, 27	29·37	S.W.	54	52	...	...	51	·25	Raining

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

THE IMPERIAL UNIVERSITY OF JAPAN.

THE Imperial University of Japan has been recently reorganised. One of its most important departments is the College of Medicine, which is presided over by Dr. Miyake. The main course of instruction is modelled after that in the German medical colleges; the foreign professors, of whom there are at present five, are also German. The course covers a period of four years, and the preparatory course three years more. There is also a course of lectures delivered in the vernacular, which is called the special course. The total number of students last year was nine hundred and seventy-two. The medical school of Japan is eleven hundred years old. In its early days it was presided over by a superintendent and assistant, under whom there was one professor of medicine, one of acupuncture, one of massage, one of diseases of women, a teacher of materia medica, botanists, and a number of physicians. The whole course covered seven years.

Mr. R. Hodges is referred to a general notice at the head of this column.

RINGWORM IN NEW-BORN INFANTS.

To the Editor of THE LANCET.

SIR,—The two medical practitioners who have recorded in your pages the discovery of ringworm in new-born infants would confer a boon upon medical science by giving some further proof of the correctness of their diagnosis. It would, for example, be interesting to know whether the diagnosis was verified by the discovery of spores or mycelium under the microscope. Taking into consideration all that is at present known as to the conditions of intra-uterine human life on the one hand, and all that is known as to the natural history of tinea on the other, is it not on the whole more probable that the diagnosis of ringworm was a mistake than that two children were born with patches of fungoid growth on their skin?

I am, Sir, yours truly,

May 23rd, 1886. M.B. OXON.

Mr. C. Clark Burman (Belford) asks if intense cutaneous irritation has been noticed to follow the administration of hydrobromic acid.

PRACTICE IN CANADA.

To the Editor of THE LANCET.

SIR,—Could any of your readers give any information regarding practice in Canada—nature of appointments, and how procurable; if a special licence must be obtained, and fees?—I am, Sir, yours truly,

May 25th, 1886. COLONIST.

NEURASTHENIA AND ABDOMINAL BELTS.

THE inhabitants of this globe may suffer from nervous weakness or neurasthenia simply because they neglect to wear abdominal supports! At least that is the conclusion that naturally follows from the recent teaching of M. Glénard of Lyons, who believes that some cases of nervous exhaustion are attributable to gastroptosis, or lowering of the stomach; to hepatoptosis, or descent of the liver; or to nephroptosis, which is another name for floating kidney. Imagine the following colloquy in a physician's consulting-room:—Patient: "And now, doctor, after all this sounding and examination, pray tell what is the matter with me." Physician: "My dear sir, you have habitually bolted your meals, which have likewise been too abundant; as a consequence you have caused your stomach to descend from its natural situation—*facilis descensus Averni*,—and this gastroptosis, as we call it, has acted seriously on your nervous system, hence your languor, irritability, and general loss of tone, &c. My advice to you is to read 'Strapmore,' put on an abdominal belt, and cultivate a waist!"

Beeaas is bound not to practise without the consent of the principal.

A ROUGH-AND-READY MEDICAMENT.

To the Editor of THE LANCET.

SIR,—Having a strong impression that I once read in the "Mémoires de M. le Baron Larrey," or in some other autobiographical publication of that period, that he (Larrey) or one of his subordinates had resuscitated a quasi-moribund French general or marshal by wrapping him up, *pueris in naturalibus*, in a sheep or horse's skin that had been just stripped off the living beast, during the disastrous retreat from Moscow in 1812, I am anxious to know if such is the case, and if there is any evidence to show that this practice has existed from all historic time—not only among savage races, but also among primitive or remotely situated peoples in our own midst. I believe that such will, on due inquiry, be found to have been the case, and I ask your permission to allow me to solicit authentic deliverances on or references to the point in your pages. Having had some recollection of seeing it mentioned in Homer, I glanced yesterday, with Pope in one hand and the original itself in the other, over this classic, looking especially for any allusion to it under the headings of "Podaleirius" and "Machaon," but utterly failed in this search, and the only descriptions of it I can just now recall stands as follows. Relating a hypothetical case of small-pox—or, rather, dwelling on the peculiarities of its treatment as these are developed on the spot—Mr. Thorburn says, in his "Bannu," p. 115, that the father of our supposed sufferer "nursed him for a day or two, during which the fever showed no signs of abating, and *then determined to apply the great Pathan remedy, which is practised all over Afghanistan.* He had a sheep slaughtered and skinned, and after rubbing a little oil or turmeric upon the skin, wrapped up his son in it while it was hot. He next laid him on the bed, put a large quilt over him, and kept the door shut to prevent any draught coming in. At the end of twenty-four hours the skin was removed, and a new one substituted. This time it had the desired effect, and before Sherdil had worn it ten hours, he said in a faint voice to his father, 'Papa, I have become water.'" I will only here add that the italics are mine, and that the Cabulees I questioned on this issue at Peshawur appeared to be familiar with it. Anyhow, none of them denied its occasional use or efficacy in that country.

In that fragment of autobiography with which Mr. Lockhart begins his interesting Life of Scott (I allude to the Abridgment of it only), it is said that "it is here, at Sandy Knowe, in the residence of my paternal grandfather ..... that I have the first consciousness of existence. ..... Among the odd remedies recurred to, to aid my lameness, some one had recommended that so often as a sheep was killed for the use of the family, I should be stripped and swathed up in the skin, warm, as it was flayed from the carcass of the animal. In this Tartar-like habiliment I well remember lying upon the floor of the little parlour in the farm-house, while my grandfather, a venerable old man with white hair, used every incitement to make me try to crawl. I also distinctly remember the late Sir George McDougal ..... joining in the attempt. Kneeling on the ground before me, and dragging his watch along the carpet, he, too, tried to induce me to follow it." The stratagems or incitements of these two venerable personages are only, I think, an expression of the faith with which, at all ages and in every clime, the "movement" treatment, *alias* massage or shampooing, has been employed for the cure or relief of stiff or painful joints.

I am, Sir, your obedient servant,

Auriol-road, W., May 16th, 1886. WM. GUERRAN.

P.S.—Since the above was written I have looked for information on the point in the works of Gibbon, Pliny, Quintus Curtius, and Rollin, but can find nothing bearing on it in either of these writers, and the words of Curtius would seem to imply that the practice was unknown to the followers of Alexander. Anyhow, they did not resort to it even amid the snows and ice of the "frosty Caucasus"; and we are, I fear, no whit more advanced in our knowledge or treatment of the torpidity, &c., that are produced by extreme cold than they were. "A compluribus torpentes excitabantur," says our author, "neque aliud remedium erat, quam ut ingredi cogerentur"; and if friction, and the warm bath, were here thrown in—which may be, for all we know to the contrary, included in this "excitabantur"—I know of no other, or better, "remedium" for these conditions in these our own days.—W. C.

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ALCOHOL IN POOR-LAW PRACTICE AT CAMBERWELL.

DR. GREENE having called for a return of the cost of wine and spirits issued on medical certificates for out-door relief in ten years, the returns show a diminishing quantity—thus: 1876, £67; 1877, £44; 1878, £45; 1879, £22; 1880, £25; 1881, £35; 1882, £30; 1883, £25; 1884, £22; 1885, £16. It would seem that in pauper, as in private, practice the tendency is to a diminishing quantity of alcohol. The profession, however, will not entirely abandon the right to use alcohol when it sees fit, in spite of the startling statement of the chairman of the board that alcohol had only been used in three cases at the London Temperance Hospital since it was opened, and that all three cases proved fatal.

Messrs. Davis, Bergendahl, and Co.—We have no recollection of the article.

MECHANISM OF DEFECATION, MICTURITION, AND PARTURITION.

To the Editor of THE LANCET.

SIR,—In your issue of May 15th I am reported to have said, at the Obstetrical Society's last meeting, "that in defecation, micturition, and parturition there is a reflex tonic contraction kept up in the muscular fibres, especially in the sphincters." As this is not what I said, and conveys a wrong impression of what I meant, I should be glad if you would insert this correction. What I said was that the sphincter ani (externus) and sphincter vesicæ (Henle), and probably the cervix uteri (=sphincter uteri), were ordinarily in a state of reflex tonic contraction, and that during the acts of defecation, micturition, and parturition these three sphincters were respectively relaxed. Not that the muscles actively dilate, but that they passively relax, so that the different expulsive muscles have less resistance to overcome than they would have if the reflex tonic contraction were kept up in the sphincters.

I am, Sir, yours truly,

St. Thomas's-street, S.E., May 24th, 1886. P. HORROCKS.

UNQUALIFIED ASSISTANTS.

One who has Served his Time as a Pupil.—There is nothing in the Medical Bill of the Government to alter the law as regards unqualified practice or bearing on unqualified assistants. Our correspondent's position is one to which little objection has been raised, and is very different from that of an unqualified assistant placed by a qualified practitioner in charge of a so-called dispensary, or in sole charge of patients. A private Bill before Parliament, introduced by Mr. Morgan Howard and others, aims a direct blow at the latter class of cases, and with much justification. The drift of professional and public opinion is in the direction of having all assistants qualified.

Inquirer.—A copy of the Russian pamphlet will be forwarded to our correspondent.

Fairplay.—The matter is more of local than of general interest.

THE STRENGTH OF THE SOLUTIONS OF MORPHIA AND STRYCHNINE.

To the Editor of THE LANCET.

SIR,—I have just purchased the latest edition of "Squire's Companion," and am a little surprised to find that the solutions of morphia and strychnine have been increased in strength. Ought not the medical profession to have been warned that such was the case? for many might prescribe those forms in entire want of knowledge that these alterations had been made.

I am, Sir, yours truly,

May 24th, 1886. IMPRUDENS.

A SCIENTIFIC ADDRESS A HIGHLY PRIVILEGED COMMUNICATION.

IN a case occurring in Pennsylvania before Judge Arnold, in which a Dr. Carl Seller was sued for speaking disparagingly of a proprietary medicine—not to the public, but in the course of an address delivered to the College of Pharmacy—the judge, after hearing the plaintiff's case, directed the jury to bring in a verdict for the defendant. In his charge, the law of the State was declared to be that a scientific lecture before students or a medical association is not only a privileged, but a highly privileged, communication, and that malice must be shown to exist in order to render the lecturer liable for an expression of opinion under such circumstances.

Junior.—Fees received by assistants for any purpose are the property of the principal. But such fees as are mentioned by our correspondent may fairly be shared with his assistant, if the principal sees fit.

A CORRECTION.

To the Editor of THE LANCET.

SIR,—In my observations on Mr. Eve's specimens exhibited at the Pathological Society (THE LANCET, May 22nd, p. 973) I referred not to "Harz's paper on General Anatomy" as reported, but to Harz's monograph published about two years since in the German *Archiv für Mikroskopische Anatomie.*

I am, Sir, yours truly,

Granville-place, W., May 21st, 1886. ALBAN DORAN

THE MEDICAL BILL AND PARIS DEGREES.

A Graduate of Paris.—There can be no doubt that the degree of Paris would be immediately and cheerfully recognised as entitled to registration by the Medical Council under the Bill of the Government should it become law. It is not specified, nor is any foreign or colonial degree; but it is eminently one of the degrees the registration of which is contemplated.

Justitia will find an allusion to the subject in an answer to another correspondent. Unqualified assistants have often themselves to blame for the criticism they incur by placing themselves in thoroughly false positions.

Mr. Buckingham.—We are not in possession of the information.

USE OF ICE FOR DYSPNŒA.

To the Editor of THE LANCET.

SIR,—In a case of advanced phthisis which came under my care recently, and in which acute attacks of dyspnœa, accompanied with, and apparently produced by, a febrile condition of the patient, proved the most troublesome and distressing symptom, I found that ice used locally on wrists and temples, with due regard to the state of the pulse, &c., afforded very great relief, the patient being soothed, the breathing relieved, and sleep obtained. Doubtless the lowering of temperature thus produced tended to check the excessive tissue waste, and in this way threw less work on the defective lungs.

Although I do not remember to have seen this treatment recommended in such text-books as I am familiar with, I venture to bring it to your notice, not as a startling novelty—since, if my explanation be the correct one, it is merely the bringing into play of well-recognised physiological principles,—but rather to elicit, it may be, some further illustrations of its beneficial employment, or some more experienced expression of opinion as to its applicability in cases where similar conditions exist.

I am, Sir, yours obedient servant,

May 25th, 1886. RANKINE DAWSON, M.A., M.D., &c.

A DAY IN THE COUNTRY.

THE REV. J. W. PITCHFORD, of St. Jude's Vicarage, Southwark, asks us to state that he will thankfully receive subscriptions towards a fund for enabling 400 school-children and others who have saved up their pence for the purpose, to enjoy a day's outing in the country.

Mr. Thos. Williams.—It is not incumbent upon a doctor to expose all the latent and possible diseases of his patients, though he is well within his duty in giving them such general hints as are likely to preserve their health.

DIET FOR GOUTY SUBJECTS.

To the Editor of THE LANCET.

SIR,—Will any of your numerous readers suggest the most wholesome diet for a medical brother who is a martyr to gout, with a ravenous appetite and a tendency to corpulency. He has tried "Banting," with an increase of the former evil, and a vegetarian diet with an increase of the latter. Any suggestion will be gladly received.

I am, Sir, yours faithfully,

May 17th, 1886. A SUBSCRIBER.

Medicus (Orange State) and *M.D.* (Mossley) have forgotten to enclose their cards.

ERRATA.—In our last issue, page 980, second column, third line, for "lymph" read *lymphatics.*—At page 995, first column, last line of Extraordinary Cæsarean Operation, for "woman" read *wound.*—In Mr. Leeming's letter on Amnesic Aphasia, published in our last, for "use common words" read *uncommon* words.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Prof. Marshall, London; Mr. V. Horsley, London; Dr. G. Mundie; Sir H. W. Acland, Oxford; Mr. J. Hutchinson, London; Mr. Nelson Jones, Swansea; Mr. Raymond, Louisville; Mr. Fawson Lee, Salisbury; Mr. Doran, London; Mr. Gresswell, Louth; Dr. Horrocks, London; Mr. Stephen Paget, London; Mr. R. G. Patteson, Dublin; Messrs. Burroughs and Wellcome, London; Mr. T. D. Price, Nottingham; Dr. Sachs, New York; Surg.-Major Evatt, London; Dr. Donkin, London; Dr. Ludwig Loewe, London; Mr. H. Fuller, London; Mr. T. Williams; Mr. Van Gezzel, Berhampor; Mr. R. J. Lee, London; Mr. Plowright, King's Lynn; Mr. Butterfield, Sevenoaks; Dr. O'Neill, Belfast; Dr. Semon, London; Mr. Weatherup, Belfast; Dr. Maguire, London; Dr. Squire, London; Mr. C. E. Jennings, London; Mr. McMunn; Dr. Dobie, Chester; Mr. Sinclair, London; Mr. Whysall, Grantham; Dr. N. Kerr, London; Dr. Morton, Kilburn; Mr. Ellis; Messrs. Maythorn and Son, Biggleswade; Mr. Rawlinson, Burnley; Mr. Hyatt, Shepton Mallet; Dr. Anderson, Waltham; Mr. Diggins, Lancaster; Mr. Wilson

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Plymouth; Dr. Wright, Toronto; Mrs. Grattan, Cork; Mr. Gamgee, Birmingham; Dr. Bloch, Paris; Mr. Cooper, Hull; Mr. Morse, Apple Durcombe; Mr. Abbs, Dewsbury; Dr. Branthwaite; Messrs. Ulbrich and Co., Bohemia; Mr. Abbott, Birmingham; Messrs. Livingstone and Co., Edinburgh; Messrs. Nicholas, Manchester; Messrs. Wrigley and Sons, Rochdale; Mr. Kelcey, Margate; Miss Milson, Box; Mr. W. W. Jones; Mr. Mason, Highbury; Dr. Steele, Rome; Messrs. Rideal and Co., London; Mr. Hume, Edinburgh; Messrs. Müller and Co., Glasgow; Mr. Watkinson, Crosshills; Mr. Remington, Notts; Dr. Gibson, Pennsylvania; Mr. Swanton, Tonbridge; Miss Bedboro, Eton; Mr. A. Ireland, Cradock; Mr. W. H. Kesteven, London; Dr. Reynolds, Cape Colony; Mr. Bagshaw, Salford; Dr. Wade, Birmingham; Dr. Thomas, Sheffield; Mr. G. Brown, London; Mr. Vernon; Mr. MacDonogh, Bristol; Dr. Glynn, Liverpool; Dr. Aveling, London; Dr. Lindsay, Belfast; Dr. C. E. Saunders, London; Mr. Waldie; Dr. Shepherd, London; Dr. R. Black, Brighton; Mr. Pitchford, London; Mr. J. H. Morgan, London; Dr. J. Murphy, Sunderland; Messrs. Oliver and Boyd, Edinburgh; Mr. Hartzhorne, Chiswick; Messrs. Maclachlan and Co., Edinburgh; Dr. Nisbett, Helmsley; Messrs. Benjamin and Sons, London; Mr. Ostell, Carlisle; Mr. Hope, London; Mr. Hankin, Belfast; Messrs. Dawson Bros., Montreal; Messrs. Woolley and Co., Manchester; Mr. Pritchett, Rastrick; Mr. R. Lawford Knaggs, Huddersfield; Messrs. Hooper and Co., London; Messrs. Haller and Co., London; Mr. Moring, London; Mr. McDowell, Tunbridge Wells; M.B. Oxon.; An Assistant (Essex); Imprudens; Fairplay; Medical Staff; M.D., Edmonton; Maloja; M.; Y. Z.; B. G.; Ex-House-Surgeon; B.A.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Letters, Dundee; Dr. McDougall, Pontesbury; Mr. Cox, London; Mr. Fox, Birmingham; Dr. Armstrong, Manchester; Messrs. Mottershead and Co., Manchester; Mr. Arrowsmith, Bristol; Dr. Burgess, Invergordon; Dr. Needham, Gloucester; Mr. Ryan, London; Mr. Wood, Richmond; Mr. Harrison, Derby; Mr. Hogg, London; Mr. Hamel, Tamworth; Mr. St. Dalmas, Leicester; Messrs. Schluter and Son, Hamburg; Mr. Cartland, Windsor; Mr. Guest, Melsonby; Mr. Loy, Great Ayton; Mr. Merryweather, Gainsboro'; Messrs. Goddard and Massey; Dr. Smith, Leamington; Dr. Juler, London; Miss Hunter, Manchester; Dr. Whitla, Belfast; Mr. Cobbold; Messrs. Slinger and Co., York; Dr. Eberle, Thirsk; Mr. Wraith, Darwen; Messrs. Moore and Co., Hounsditch; Mr. Oxley, Norwood; Mr. Smith, Moreton-in-Marsh; Mr. Moore, Bayswater; Mr. Nutall, Bradford; Mr. Morden, Brighton; Mr. Keldin, Manchester; Dr. Craig, Eastwood; Rev. J. Jeffery, Holmfirth; Dr. Popham, Birmingham; Messrs. Wheatley and Co., Huddersfield; Mr. Waters, Southport; Messrs. Thompson and Co., Liverpool; Mr. Purvess, Kelso; Mr. Watkinson; Mr. Davis, London; Mr. Morrison, Snaith; Mr. Wheeler, Ilfracombe; X. Y. Z.; Surrey; Locum, Middleton; E. F., Stratford-on-Avon; K. E., Southsea; M.D., Manchester; M.D., Walsall; P., London; House; G. H., Poole; Mrs. D. Hailsham; A. M., Bournemouth; B. G.; Medicus, Birmingham; D., Newcastle-on-Tyne; J. C. S. S.; Alpha; A. H. C., Derby; H. W., Southport; Medicus, Padiham; Revd.; Member, London; X. B., Canterbury; G. K., Edinburgh; Z. A. C.; M. N. C.; M. A. C.; Ambulance.

Glasgow Herald, London Commercial Record, Club and Institute Journal, Sydney Daily Telegraph, Birkenhead News, Eastbourne Standard, Cradock (Cape of Good Hope) Register, Liverpool Evening Express, &c., have been received.

Medical Diary for the ensuing Week.

Monday, May 31.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 3 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Dr. Leonard C. Wooldridge: On the Pathology of the Blood.

Tuesday, June 1.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Arthur Gamgee The Function of Circulation.

Wednesday, June 2.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Dr. Leonard C. Wooldridge: On the Pathology of the Blood.
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown by Dr. John Phillips and others. Dr. Champneys: On the Artificial Production of the so-called Lymphatic Varix.—Dr. Herman: Note on one of the Causes of Difficulty in Version, with remarks on the Practice of Amputating the Procident Arm.—Dr. John Phillips: Four cases of Spurious Hermaphroditism in one Family.

Thursday, June 3.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Professor Alexander Macalister: Habit as a Factor in Human Morphology.

Friday, June 4.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Dr. Leonard C. Wooldridge: On the Pathology of the Blood.
ROYAL INSTITUTION OF GREAT BRITAIN.—9 P.M. Dr. Walter H. Gaskell: The Sympathetic Nervous System.

Saturday, June 5.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. G. G. Stokes: Light, with special reference to Effects resulting from its Action on Various Substances.

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Ingleby Lectures
ON
SOME FUNCTIONAL DISORDERS OF FEMALES.

By WILLOUGHBY F. WADE, F.R.C.P.,
SENIOR PHYSICIAN TO THE GENERAL HOSPITAL, BIRMINGHAM.

THE late Dr. Ingleby was highly reputed in this town and district as a practitioner of the obstetric art. He was further known to the wider circle of professional students as a lucid and successful author. His representatives in 1876 resolved to devote a considerable sum of money to objects which might be serviceable to the poor whom he had so well served, and useful to the profession of which he had been so distinguished a member. Amongst these objects was the endowment of a lectureship for the delivery, annually, of lectures upon some subject connected with that branch of our art which he had loved and adorned. By the favour of the Council of the Queen's College, in whose hands the appointment is vested, I have the high honour of appearing before you to day as the Ingleby Lecturer for the year 1885.

LECTURE I.

The most unequivocal differences between the two sexes are unquestionably anatomical ones—the possession by each of organs of which the other is devoid. These organs are those which are directly concerned in the process of reproduction. This fact suggests that we have here the central point of the human race, that round which all revolves, from which all radiates. But, when we reflect, we perceive that in this fundamental respect we resemble not only all the animal but also the vegetable world.

It is not, then, so much the centre which differentiates us from the rest of the organic world—the same *leitmotif* governs the conjugation of the humble algæ and the gorgeous ceremonies of imperial nuptials. That *motif* is the impregnation of the passive by the active particle in obedience to the imperious obligation of Nature,—

> "So careful of the type she seems,
> So careless of the single life."

True, the radiations, the surroundings, the accidental accessories as distinguished from the essential elements, do place between us and the highest other grades an immense, and between us and the lowest an immeasurable, gulf.

But throughout the whole web of organic Nature one thread is never broken. Upon a common fabric the artificer may broider rude patterns in coarse materials or elaborate and complex designs in fine silk and gold thread strung with pearls and studded with precious stones. The canvas back is the law of reproduction; the rude design and sordid worsted are the conditions under which in the lower worlds this law is operative; the costly and artistic surface represents the grades of civilisation, up to the highest yet reached, which cluster round the same law in the human race. The splendid and fatal Queen of Egypt was fain to confess herself—

> "No more, but e'en a woman; and commanded
> By such poor passion as the maid that milks,
> And does the meanest chares."

Without a just appreciation, much less common than it ought to be—without a minute analysis of the subtle phases of thought and feeling, whose effects pervade the whole female organism, it is impossible to comprehend many of the cases we ordinarily meet with. Still more is it impossible to advise with wisdom in the rarer but still not infrequent cases, where upon our judgment and discretion hang, perhaps, the lasting happiness or misery of two lives. Only an inane prudery, then, can refuse to enter into a free examination of the relations of this law to "those delicate vessels in which are borne onward through the ages the treasures of human affection."

The reproductive cycle can, and indeed for the purpose of study must, be divided into stages. The time at our disposal would not suffice for even a superficial glance at each of these. I purpose, therefore, to confine myself to one, the first or preliminary stage, meaning thereby the transition of the girl into the nubile woman, and the nubile condition up to the time of marriage, which is the conclusion of the first stage. It must be borne in mind that classification is beset by difficulties from which there is no escape. Nature may be said to delight in curves; classification, on the contrary, rejoices in straight lines. "How can two walk together except they be agreed?" Nature refuses to agree to delimitation of territory, or to submit to a scientific frontier. It is as impossible to square the circle of Nature as it is that of the geometer. We shall therefore find that much which we have to consider does not exclusively appertain to this "preliminary stage." Though the circumstances and conditions of the ante-nuptial period conduce in an eminent degree to the development of certain disorders, yet these are seated deep down in woman's nature and constitution, and therefore the tendency to them is never eradicated.

The mother, within certain limits, the most subtle of observers, the nurse, informed with maternal instinct, will often point out psychical differences between the male and the female infant; it may be that such are perceptible even to the duller vision of man.

In childhood, the yearning of the girl for her doll, and of the boy for ruder diversion, presage still more clearly the subsequent divergence of the paths of each. The submission of the girl to the brother's will, her admiration and respect for his greater physical power, her general acknowledgment of his superiority, are not the outcome of an artificial state of society, but the mark of the differences of organisation which Nature has conferred, in order that each may hereafter be in accord with her reproductive laws.

With the advent of puberty, the psychical differences previously foreshadowed become clear and distinct, and there are also added physical differences, which it is unnecessary to specify. The establishment of puberty in the female is, as we know, often not unattended with derangements of the physiological equilibrium. Mothers too often are uneasy at what they consider undue retardation of the special feature of puberty, and this is a matter upon which, as you know, our advice is often sought. These cases may be usefully divided into four categories—namely: (1) Well-developed, strong, healthy girls; (2) girls in other respects healthy and strong, but of backward development; (3) well-developed but more or less unhealthy girls; (4) ill-developed and more or less unhealthy girls.

Before referring more in detail to these cases, let me offer a few words on the menstrual function generally.

We know that much has been written on the differences between the catamenial secretion and blood. That the distinctions made are just from a chemical point of view I am willing to admit. But I none the less firmly maintain that, from a clinical point of view, this discharge is a veritable hæmorrhage, and that this is a cardinal fact which can never with safety be overlooked in practice. That there are cases of menorrhagia which, no one would dispute, are to be regarded as hæmorrhages I assume. And who, I would ask, is prepared to fix the boundary which separates these from ordinary, or even from what are reckoned as insufficient, catamenia? What, then, are the systemic effects of loss of blood? These depend upon the quantity lost, the frequency of repetition, the state of the individual at the time, and no doubt to some, possibly to a large, extent upon idiosyncrasy. The effect of repeated losses depends, further, on the activity of the blood-making organs, and their power to restore the hæmatic equilibrium. It is consistent with our knowledge of these effects, as derived from examples both of spontaneous and artificial hæmorrhages, that the loss of a few ounces of blood should be a matter of indifference to a healthy person whose blood-producing apparatus was normally active. It is therefore quite comprehensible that an average catamenial evacuation, reckoned at about 5 oz., should not produce any very sensible effect on healthy women. On the other hand, in persons already the subjects of anæmia, whether that be due to spontaneous hæmorrhage, to artificial hæmorrhage, or to some more recondite cause, the effect of further loss of blood, in quantity even less than that of an average menstruation, is often to produce very distinct effects. Without going into details, it may be said that the new hæmorrhage removes the symptoms which had resulted from previous hæmorrhages. This may happen time after time, but with a difference. The difference being, that each time the period of relief is of shorter duration; that is, the symptoms return sooner, and probably with an increased intensity. Ultimately, a time comes when the hæmorrhage

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ceases to be followed by any relief, or if by any, it is so slight and so transient as to be difficult of discernment.

Now I affirm, after very numerous inquiries extending over many years, that the effect upon an anæmic girl of an ordinary catamenial loss is strictly analogous to other hæmorrhages upon similar subjects. There are two standards by which the amount of loss may be adjudged to be normal or abnormal. One is by comparing it with the average loss of women. The other, and the more important, is by comparing it with the usual loss of the individual herself. But I go further, and say that an evacuation subnormal in amount, by whichever standard it is measured, is capable, under certain circumstances of not rare occurrence, of producing similar effects. This is the case even when, in addition to being subnormal in amount, the loss is subnormal in colour. The accuracy of these observations may readily be tested by each one of you for himself. But the critic must be familiar with the effects of repeated loss of blood, even in small quantities. He must further be prepared to make a minute and exact inquiry into the clinical history of his patient. And, lastly, he must enter into the investigation with an unbiased mind, not prepossessed with the idea that because the periods are apparently normal, or even deficient in quantity or colour, it is impossible for them to produce the effects of a hæmorrhage.

But it may be said, granting the accuracy of my observations, do they prove that the anæmia of girls is due to the repeated loss of blood by the catamenia? To this I would answer, in the first place, medical authorities are not agreed to offer us any other, or rather they are agreed to offer us none, and to say that none is known. In the second place, I would ask you this question: If you met with a case of anæmia, in which there was habitual loss of blood by hæmorrhoids, by epistaxis, by hæmorrhage from any other mucous membrane, would you refuse, because the loss was comparatively small, to admit that it was the cause of anæmia, and to base your treatment upon that view? To carry, not my argument, but my statement, a little further, I may add that cases are not unfrequent in which the first period produces anæmia. And on this point let me mention a very frequent source of fallacy. A mother, when she brings her child to us under these circumstances, very often says that she does so because she has never been regular. Whereas, in a considerable number of instances minute inquiry will elicit the fact that there has been one, possibly that there have been two or three periods, and what the mother means is that menstruation has not been "regularly established." Older females will often lead us astray by stating that they have not been regular for so many months, meaning not that no period has occurred, but that it has been deficient in some respect; indeed, sometimes they will make the same statement when the loss has been, in their own opinion, excessive. Again, we meet with females of all ages who, disliking to be interrogated upon this subject, or upon the state of the bowels, or (perhaps even more frequently) upon the state of the urine, will deliberately try to put a stop to our inquiries by telling us point blank that in these respects there is nothing whatever the matter with them. These and such-like misstatements, prompted no doubt by a sense of delicacy, may, by misleading us, be most injurious to themselves. To revert to the subject of anæmia: that term, and not chlorosis, has been used advisedly. That all cases of anæmia in young women are not to be correctly styled chlorosis may be admitted. But does it necessarily follow that they differ in kind? It is held by some authorities that they do; and we are by some told that chlorosis is a neurotic disease. That is a term which in this connexion does not convey to my mind any distinct meaning. To those who use it, it conveys only, so far as I can make out, the idea that the disorder depends primarily upon some as yet undiscovered aberration of a nervous centre at present unknown. Undoubtedly attenuation of the blood may arise from other causes than direct loss of it. Amongst these may probably be included mental depression, [illegible]

As a matter of fact, disturbances of the physiological constituents of the blood-mass do in different persons produce different effects. If the general influences of the blood on the tissues are impaired or interfered with, some tissues or parts will suffer more than others. One patient's characteristic of incapacity [illegible] some active tissue. This inability to [illegible] tissue, to be supplied by [illegible] of the [illegible] tissue, due either to local [illegible] very improbable that we have [illegible] dependence of chloranæmia upon nerve disorder. A formidable objection to this theory will at once occur to many minds: cases of chloranæmia with amenorrhœa, in which a return of the period is followed by an amendment in other respects, which previous treatment had failed to procure. I pass by the explanation that possibly the flow was the first expression of returning health. It must be kept in mind that the effects of loss of blood are of two classes: one, the depression of the system at the time; the other, the totally opposite condition of "hæmorrhagic reaction."

Probably in no case would the use of venesection be more unanimously reprobated, be regarded as more inconsonant with modern views, than in long-lingering subacute rheumatic fever. Many years ago a physician, than whom no one was more profoundly acquainted with symptomatology and with the therapeutics of the old school, no one a more acute observer—the late Dr. Eccles,—made to me an observation which seemed to me then, as it seems now, a most remarkable one. It was that in several such cases, which had thwarted his best advised efforts, recovery, speedy and complete, had followed venesection.

Another consideration is by no means unimportant. While a disastrous disappointment may be concealed, so, on the other hand, may be the renovating buddings of hope; hope based oftentimes on circumstances so commonplace, or attentions so trivial, as to escape the observation of the most sympathising and watchful relative; hope sedulously concealed from the most intimate and trusted friend; hope almost unconsciously entertained by the patient herself. We are thus often left in ignorance of that indisputably potent factor in the well-being of a girl—the "state of her heart."

It seems to me a truism, the formal statement of which almost requires an apology, that a repeated loss of blood must produce anæmia unless the system is able in the interval to replace that which has been abstracted. Protracted clinical observation has made it appear to me just as true that, as a matter of fact, the system is in innumerable instances unable to effect this replacement; that, indeed, it is not unfrequently unable for a time to replace that which is lost by a first, even if small, menstruation.

The following quotation from one of the greatest clinicists of this century commands at least respectful consideration. "I may add," says Niemeyer, "that, according to my observation, obstinate chlorosis attacks all young girls without exception in whom the menses have appeared in the twelfth or thirteenth year, and before the development of the breasts and pubes"; that is to say, before the blood-forming apparatus is sufficiently active to do more than replace blood consumed in ordinary wear and tear.

It will be here convenient to remark that probably race and climate, and also no doubt other conditions, have something to do with the development of anæmia and the phases of chlorosis. During the first six or seven years of my medical life I was familiar with the practice of the Derby Infirmary. A notable feature there was the number and severity of these cases. Nor did this circumstance seem to be entirely due to the fact that the patients were many of them employed in the large hot rooms of silk-mills. When I came to Birmingham as house-physician to the General Hospital, I was struck by the comparative infrequency of severe cases; and although no doubt a good many minor cases applied for relief, these did not seem to me at all proportionate to the difference in the population and in the number of patients.

It is interesting to observe that the opinion of American writers is very strongly in favour of the neurotic theory of chlorosis. Now, so far as I have had opportunity of forming an opinion, it is that among the inhabitants of the United States are to be found an eminent proportion of neurotic constitutions. There seems, at any rate, reason to think that here, as elsewhere, the justness of our ultimate conclusions is likely to be proportionate to the breadth of our survey. Indeed, it seems to me to be antecedently probable that the secondary or more remote effects [illegible] be different in those whom we call neurotic subjects to what they would be in persons whose nervous system is differently constituted.

It will be convenient here to offer a few [illegible] upon the meaning and objects of menstruation. A superficial glance at the respective phenomena [illegible] a resemblance, and so suggests a possible [illegible] the periods of the human and the [illegible] females. It requires but little further [illegible] guish differences as marked as the resemblance.

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this latter evidence it has been concluded, in my judgment prematurely, that no analogy existed between these two physiological processes.

Evolution, though it may not prove to be the highest theory possible in the future, is one which has unravelled many of the mysteries of nature. And no inquiry of the kind now under our notice can claim to be exhaustive which has not called in this theory to its assistance. In the lower mammalia, intromission is not permitted during the intersextual periods, and therefore it is only during the *œstus* that impregnation is effected. There is not, so far as I know, any direct evidence to show whether, if permitted, it might be, or could not be, effective. In the human female these conditions are practically reversed. It is during the intercatamenial period that congress is permitted, and there is reason to believe that impregnation may occur at any date between two periods. Such an antagonism is certainly formidable. Its force is enhanced by a statement recently made in an article on the Theory of Menstruation, by Dr. Mary Putnam Jacobi, who says, "Neither can any such rhythmic alternation of sexual instinct be demonstrated in women as could lead to the inference that the menstrual crisis was an expression of this"—that is, of *œstus*.

This statement, in consequence probably of a pardonable euphemism, is somewhat obscure; but if it means what I take it to mean, I am obliged in the most unqualified manner to deny its accuracy. It seems to me to be generalised from insufficient data—that is, to be more or less a reasoning from the particular to the universal; or, if true in America, it would indicate that there is there a wider departure than in other countries from (what I am about to suggest is) the original type. It is a matter upon which, for obvious reasons, it is somewhat difficult to acquire numerous facts; but no doubt exists in my mind that it is far from exceptional to find that there is an extreme enhancement of concupiscence in the immediately precatamenial period. There is also, I believe, a general concensus of opinion that proximity to the period increases the likelihood of impregnation. I am satisfied that evidence is obtainable that in some instances ardour is at its maximum during the actual period, and suspect that cases occur in which it is almost, if not entirely, limited to that time. All this points to the probability that we are dealing with a typical example of evolution. That the period is a partially, though far from a completely effete, *œstus*.

This aberration from the original type is coincident with, and probably correlative to, other changes in the intersexual relations: the continuous affection of the woman for her husband, as contrasted with the intermittent, but when present irrepressible, attraction of the lower mammalian female to the male; the abiding love of the mother for her child, as contrasted with the ferocious defence of its young by the lower mother during the period of lactation, and the utter estrangement between them shortly after and for ever. This theory, speculation if you like to call it so, suggests why, in the interest of the perpetuation of the race, the sextual periods should recur at shorter intervals than in the lower animals, where the proclivity to congress, being purely instinctive, is more immediately imperative, and is not impeded or thwarted by the interference of higher psychical centres. Why the period should be of a twenty-eight day type, instead of any other number of days, is a mystery. The only other twenty-eight day type that we know is the moon's, and, secondarily, that of the tides. It is conceivable that the catamenial cycle may have originally coincided with the lunar phases, and the existing non-coincidence is another evolutional departure from the primitive type.

The ovulation theory has of late received a serious, perhaps fatal, blow from the fact that in a number of cases menstruation has continued after the removal of both ovaries. But we are not at present in a position to affix limits to the persistence of an acquired organic habit. It is, therefore, not quite certain that this continuance of the periods may not be an example of such persistence. I have my doubts whether the ovulation view is scientifically entitled to rank as a theory. The same remark applies to the salpingeal view. Even were it proved that the first overt act of menstruation is the grasping of the ovary by the tube, this would seem to me to be, not a theory, but a fact, though a fact of the very highest significance and importance. I should claim it as strong corroboration of the sextual hypothesis, that the first overt act, and, if it were so, *primum mobile* of the period, should be one so eminently conducive, if not essential, to impregnation.

Any complete theory must explain not only the mechanism of the period, but its recurrence. Now, in the case of all periodical manifestations the causes of which we have been able to fathom, we find the cause to be a continuous one. Day and night, the changes of the seasons, the ticking or striking of a clock, regularly recurring phenomena, are each due to a continuously acting force. The theory of Dr. Mary Jacobi has this claim to attention that it is based upon systemic changes continuing during the intermenstrual period. One of these—the progressive increase of urea—has not yet, perhaps, been unimpeachably established. Another—the progressive increase of arterial tension—is of great significance. In other recurrent hæmorrhages, notably in epistaxis, we find with great uniformity an antecedent state of high arterial tension. The old prognostic of hæmorrhage—slow pulse—is really an example of antecedent high arterial tension, followed by outpouring of blood. The immediate or, as it would formerly have been termed, proximate cause of the catamenial discharge she holds to be an enlargement of the peri-uterine plexuses, an enlargement in which the state of the arterioles must needs be a factor. This, commencing early in the menstrual interval, reaches its maximum at the following period. These views are to me extremely interesting. Clinical experience has for a long time pointed out to me the importance of using such drugs as the bromides and ergot systematically during the interval, when the object is to limit the amount of blood lost at the period. Such treatment appears to me of great advantage, inasmuch as in a large number of persons the amount lost is somewhat in excess of the reproductive capacity of the body. This theory, then, confirms the propriety of this therapeutic method by explaining its *modus operandi*.

We appear to have wandered somewhat far from the topic immediately before us. But, in the first place, it is impossible to consider the subject of first menstruation, adequately, without a consideration of the subject as a whole. In the second place, it is not conducive to sound therapeutics to draw a too stringent line of demarcation between commencing puberty and the disordered effects of its establishment, or those which may subsequently attend its continuance.

In well-developed, strong, healthy girls, we ought certainly to abide events without interference. In such we can only assume that the uterine system is less forward in its development than the system at large. Statistics show that fifteen years is the age at which, as compared with any other ages, a first menstruation is most common. But, on the other hand, there are a large number of persons in whom it is delayed for two or three years, and in not a few even later. With regard to girls who are healthy and strong, but of somewhat backward development, it is still more imperative not to interfere.

When we come to deal with the next class—that, namely, of well-developed but more or less unhealthy girls—there is room for more doubt. It is certainly a popular opinion, both within and without the profession, that there is no room for any doubt whatsoever. Menstruation, it is said, is a physiological process which ought to have come into operation, and it is our duty to establish it *vi et armis*. When there are repeated but ineffectual efforts, I think we are right in considering that nature is asking for assistance and should have it. Or, if the disorders distinctly indicate a disturbed balance of the circulation, I think we should interfere; still more, if this disturbed balance manifests itself by hæmorrhages. If the blood is to be lost, it is better, probably, that it should be lost in the natural manner. Some authorities of admitted repute refuse to recognise the existence of such a disorder as vicarious menstruation. It does not seem to me to make any exaggerated demand upon our credulity or imagination. If we admit an antecedent progressively increasing arterial tension before each period; if we admit the frequency of such an increased tension connected with other hæmorrhages; if we admit that the circulation in various parts of the body, and consequently the distribution of the blood, not only may be, but often is, affected by the menstrual *sinus*—then I think that it is not difficult to admit the possibility of vicarious menstruation.

No doubt it is not correct to assume that in every case where hæmorrhage from some other part and amenorrhœa coexist we have an example of this disease. For example, it is easy to understand that a girl may have an ordinary loss of blood from a gastric ulcer, and subsequent amenorrhœa in consequence of that loss not having been compensated.

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That I would admit, but I should ask to have it admitted, on the other hand, that, in a girl with gastric ulcer, it might happen that the disturbance of the circulation, coincident with or due to a menstrual *nisus*, might determine a hæmatemesis, which otherwise would not have happened. Any careful attention to the prodromata of the period will show frequent instances of the cotemporaneous disturbance of the circulation in other parts.

Sir Charles Locock, not a mean authority, believed in the existence of menstrual epilepsy. It is now a matter of ancient history, but perhaps worth while recalling, that it was for such cases he recommended the use of bromide of potassium. The use of that drug was subsequently extended to other cases of epilepsy, and we all know with what splendid results. Since then its use has become widely spread to other cases, often wisely and seasonably, but, on the other hand, too often unwisely and unseasonably. The lungs often afford evidence of the effect of the *nisus* upon distant organs. I have seen cases of true menstrual asthma—that is, asthma coincident with the *nisus*—passing off with the establishment of the period, and absent in the interval. In persons suffering from a bronchitis, more or less chronic, interferences, if less conspicuous, are infinitely more common; just, indeed, as bronchitis is an infinitely more common disease than asthma. If a bronchitic patient in whom the expectoration is easy, copious, and thick, is exposed to a chill, and the expectoration immediately becomes scanty, viscid, and difficult, we readily accept the view that cold has been caught. We find no difficulty in associating the change of symptoms with a change in the circulation of the mucous membrane. What difficulty, then, is there in conceiving that the circulatory disturbance attending the *nisus* should disturb the already ill-balanced circulation of the bronchial mucous membrane in a superior degree to that of other parts whose circulation is well balanced? If the associated disorders are not very distinctly and directly connected with the state of the circulation, we should be more chary of direct interference; that is to say, more reluctant to attempt to precipitate the advent of the menses.

What applies to the treatment of such cases applies also to that of the irregularities of a later period, and the attendant anæmia or chloranæmia. It is, doubtless, of advantage that we should be able to take a wide and comprehensive view of any case; that we should plant our therapeutics upon a broad basis, and so avoid trying to adapt our remedies to every little turn and phase. We thus may hope to avoid a tinkering and feeble treatment; to avoid grasping at the shadow and missing the substance. But it is of equal importance that we should retain the power, and on occasion exercise it, of disintegrating a case into its compound parts. For it happens from time to time that what seems only a part may yet be greater than the whole. It is especially necessary to bear this in mind in the case of any disorder for which we have a reputed specific. In the anæmia of girls both theory and experience combine to show that we have something approaching to a specific in the preparations of iron; but they do not always succeed. It is very likely that these failures may appear to a consultant to be more numerous than they do to others. A considerable proportion of the cases which come under their notice are what we may call therapeutical misfits—cases in which the diagnosis of the disease as a whole has been correct, and the treatment in full accordance with established rules. In such cases it is that we ought to cease to regard the disease as a whole and look at the details of its compound parts. Two recent examples occur to me. In one, the patient had failed to respond to a routine treatment skilfully adjusted. On analysis of the symptoms, the most striking special feature was the rapidity of the heart's action and the deficiency of arterial tension. Treatment, mainly by belladonna, regulated these, and general relief was procured. In another case, which indeed has been before me since the lecture was commenced, a well-marked chlorosis had not only not yielded to iron treatment, but had under it become markedly worse. Analysis of this case seemed to show that its special feature was chronic gastric catarrh. Treatment founded on this view, and mainly by ipecacuanha, was followed by immediate and progressive improvement, which has proved permanent. There is nothing very mysterious in such cases. Assuming that anæmia and chlorosis are expressions of the fact that the blood lost at the periods has not been made up, they are very clear.

Without entering into any vexed question as to where new red corpuscles originate, we shall all most likely agree that the integrity of various parts is necessary to their completion. If so, it necessarily follows that imperfection in any one of these parts may be responsible for their insufficient reproduction. Over-feeding, under-feeding, over-exercise, under-exercise, insufficient air, undue exposure, late hours, or too much bed, too much brain-work, perhaps too little, too rapid growth—any one or more of these may prevent the restoration of the blood; they may also prevent that normal plethora of which the first period is the normal cure. The brunt of any of these unhealthy influences may fall upon any one organ rather than on another. The practical inference from these considerations is that we should, at all events, delay interference in cases of afferently retarded menstruation, or of subsequently developed anæmia, till we have satisfied ourselves, by minute inquiry, that such causes have been removed, and until we have at least made a vigorous effort to rectify any functional aberration of the viscera.

As regards the last class of cases, those in which the girl is not only backward in development, but also in an indifferent state of health, no doubt we do see instances of improvement following, and sometimes apparently due to, menstruation. In some such it may be that its occurrence is an indication that the developmental forces have made a spring, of which the fresh result and sign is the period. In other cases, it may be that the sudden call upon the blood-forming organs has roused them to a response—a circumstance which, as we have seen reason to believe, may happen from the artificial removal of a portion of blood. But, if we free ourselves from a blind belief in menstruation as a sort of physiological fetish, we see other cases—cases in which the patient is precipitated by a first menstruation, or by two or three repetitions, not into a better, but into a worse state of health, and often into phthisis. One such case of phthisis has come under my notice within the last few weeks. I am quite willing to admit that this is rather a question of interpretation than of fact. No doubt, many who would admit the existence of such a case as the last, and the sequence of events, would regard it from a different point of view. They would consider, not that the menstruation had killed the child, but that a case on which such a beneficial act had failed to act beneficially was intrinsically hopeless and incurable.

Well, I ask you to study this subject for yourselves; you have plenty of opportunities. Study it dispassionately; lay aside the too common prepossession that a moderate discharge must necessarily be beneficial, and cannot possibly be injurious. Ascertain minutely, and consider, without prejudice, the primary and secondary effects of each such discharge upon the individual patient. Compare these with the well-ascertained effects of artificial or of other natural hæmorrhages, large and small. If you will do this, I think some of you will come to the conclusion that, if I have now overstated the case on one side, you have in your own minds been accustomed to overstate it on the other.

Clinical Lecture

ON A

CASE OF THORACIC ANEURYSM TREATED BY A NOVEL METHOD.

BY RICHARD BARWELL, F.R.C.S.,

SENIOR SURGEON TO CHARING-CROSS HOSPITAL.

GENTLEMEN,—I desire to call your special attention to this case, which most of you have watched, and I believe with considerable interest, for some time past. The man (aged thirty-nine) was sent to me by Dr. Churchill of Chesham, and was admitted into the hospital on October 7th, 1885. Twenty years ago he had a chancre, and suffered, but not severely, from secondary syphilis for about eight years. Till ten years ago he drank a good deal, chiefly beer. His present illness began three years ago with pain in the right mammary region. After a few months his breathing became embarrassed. He first noticed tumefaction about a year since. I will detain you but a short time with a description of his condition on admission. The particular

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symptoms, studied very closely as they were throughout their modifications, are of no great importance for my immediate purpose, which is to give you details of a new mode of treatment and my reasons for adopting it.

When the man came into the hospital he had a plainly visible tumour commencing above at the left side of the sternum, between the first two costal cartilages, very close to the middle line, and running thence obliquely downwards and outwards to the lower border of the third cartilage, two inches from the middle line. The length was four inches and a quarter; the breadth of the enlargement was three inches and a half. Not the tumour only, but also its pulsation was visible; the beat seemed very close to the hand. The sac at that part was very thin. Over this space there was no bruit, but the second sound of the heart was strongly marked. No fulness of surface veins was present. The radial pulses were equal, or nearly so. There was no evidence of pressure on the œsophagus; but considerable pressure—not probably on the left bronchus itself, but on some of its branches—was evidenced by the absence or diminution of breathing on the lower part of the left lung, by the peculiar notes, the mucous râles and dulness, and by the extremely troublesome cough, with expectoration of muco-pus.

The diagnosis was an aortic aneurysm, large, probably very large, springing from the lower or concave part of the arch, and progressing both forwards and backwards. In such a case any deligation of vessels was evidently out of the question, and I treated him by rest and restricted diet; in consideration that he had had syphilis, also by iodide of potassium[1] for a few weeks, by small doses of aconite, and by the salicylate of atropia. You will remember that under this treatment the man, though his condition varied considerably from time to time, certainly improved up to the beginning of the year 1886; indeed, in the earlier days of January the pectoral tumour had so far diminished that the chest was almost flat. Then began a period of exacerbation, the cough became worse, and the tumour, both intra- and extra-thoracic, increased. I need hardly say that when this aggravation set in my mind was greatly occupied with considering whether any more directly surgical method might be available; the only ones that appeared to me at all feasible were electrolysis or the introduction of a foreign body—wire, horsehair, catgut, or the like. The result of neither method is encouraging. It is true that of 37 cases of aortic aneurysm recorded by Ciniselli[2] he gives 6 cures, but this differs so widely from other statistics that I can hardly accept it. Dr. Vivian Poore[3] gives a much smaller number of cases, with 6 deaths. The latest writer[4] gives of aneurysm of the thoracic aorta 114 cases, with 69 benefited, 38 deaths, and 45 failures; but of the 69 benefited, the benefit, whatever it might be (if any), lasted but a few months in 37, not a longer time than might be accounted for by rest, not so long a period as that during which the symptoms of this patient had improved.

Let us turn to the other method. Foreign bodies, such as are named above, have been introduced eight times, and in all without success, save in a case of brachial aneurysm too small to furnish any data.[5] And yet both these methods recommend themselves to our reason; they seem as if they ought to succeed. What, then, is the cause of failure in every or very nearly every case? The question is important, because if the correct answer can be found it may help us to eliminate the cause or causes of failure, and lead us to success. Electro-puncture, when so carried out as to avoid irritation on sloughing of the sac—in other words, so as not to be injurious,—fails, I believe, for the following reasons. The cases in which it is used are of necessity large aneurysms, with sacs capable of containing twenty, thirty, or more ounces of blood, and into this large space from one to four needles are inserted. If these be connected with the positive pole, a hard but very small clot will be formed round each needle. It seems to me that the difficulty, the rarity of success, depends on the very slight influence that one, two, or three little nodules of coagulum can have on so large a mass of blood. If, now, we consider the other method, we find in all probability an opposite defect—namely, the wire or other substance occupies a considerable space in the sac; and I think there is little if any doubt that the blood will coagulate round substances thus introduced; but the clot is very soft, of that sort which Broca called passive; it is unstable; and some clinical facts show that such clot may be redissolved, and there is possibly also a danger that some shreds of it may be washed away in the form of embola. This review of the probable cause of failure of both methods led me to consider that if we could increase the area of galvanic action, or increase the hardness and stability of clot formed on foreign substances, we might be led to a successful method. This it seemed might be effected by introducing into an aneurysmal sac steel wire arranged to lie in wide coils, and then by passing along it a carefully regulated galvanic current.

By this time the patient was in a very critical state; both lungs admitted but very little air, in places none at all; his cough was very painful and constant; the expectoration frankly purulent, the wave of blood in the extra-thoracic part appeared almost subcutaneous. In the mechanical arrangements there was a little difficulty; an ordinary trocar and cannula, such as have been hitherto used for passing wire into sacs, was evidently unfitting on account of its conducting power. A tubular needle of vulcanite with a steel tip and several other devices were procured and rejected. At last a tube of ivory sharpened like a hypodermic needle was accepted as the most feasible arrangement. On March 2nd, the skin being rendered insensitive by the injection of cocaine, a fold was pinched up and a little incision made from within outwards over the tumour; the ivory needle was then thrust in without difficulty and about ten feet of the finest steel wire passed into the sac. The wire, having been first wound on a wooden cylinder half an inch in diameter and being of the best steel, must, after being paid through the needle, coil itself up again in the sac. Dr. Murray had kindly undertaken the management of the galvanic arrangements, whom I must thank for the great pains he took to carry out the intentions which I had explained and for writing the following short account. "The wire was connected with the positive pole of an eight-celled Garnet's battery. The negative was applied to the upper dorsal region a little to the left of the middle line. Between the electrode and the skin was interposed a piece of amadou about a foot square, thoroughly saturated with hot water. A galvanoscope and a voltameter (Gaiffe's) were included in the circuit. The resistance in the voltameter was so great that the strength of the current did not exceed four milliampères. Twenty cells of a Coxeter's "practitioner's voltaic battery" were therefore added to the Garnet battery, and the current strength was raised to about nine or ten milliampères. At this level it was maintained during the operation. The current was passed for an hour and ten minutes. Some redness of the skin was caused by the negative pole, but no indication of irritation at the place of puncture." For twelve hours signs of consolidation were absent, or nearly so; but at the end of that period the pulsation seemed considerably more distant and the tumour much harder, and this change rapidly increased. The lungs began to unload themselves of their accumulated pus and muco-pus; expectoration, very difficult previously, became easy and somewhat copious, showing decrease of pressure on the bronchi. But on March 5th (fourth day of operation) a new tumour appeared to the right of the sternum and rapidly increased. The man also became weaker. He died on March 9th, a week after the attempt, partly from exhaustion, and partly, as it appeared, from rupture of this second sac.

At the post-mortem it was found that the interior of the bronchi were of a deep-purple colour; in places the mucous membrane was nearly or entirely absent; the substance of both lungs airless and tough, sinking in water, but not from inflammatory consolidation. I have elsewhere remarked on this condition,[6] and will not now detain you with a further description. The very large aneurysm occupied the concave aspect and lower part of the front of the first and second part of the aorta; it had eroded a portion of the sternum and the ribs; the anterior portions of the almost solid lungs, more especially of the right lung, seemed to form part of the sac. On opening the aneurysm, it was found to consist of two parts: a left portion, much the larger; and a secondary or right portion, which seemed to

[1] Under this drug the sac wall seemed to become thinner.
[2] Sulla Elettro-puntura nella Cura degli Aneurismi.
[3] Electricity in Medicine and Surgery.
[4] L. H. Petit: Dictionnaire Encyclopédique, art. Galvano-puncture.
[5] Dr. Cayley, in conjunction with Mr. Hulke, and at the same sitting Dr. Paul, late of Calcutta, reported two other cases to the Medico-Chirurgical Society (February 23rd, 1886), which were also unsuccessful.
[6] See "On Aneurysm, especially of the Thorax and at the Root of the Neck"; also my article on Aneurysm in the International Encyclopædia of Surgery.

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have recently increased in size, and which, where the lung formed a part of the wall, had burst and given exit to 2 lb. 8 oz. of blood, which was found in the right pleura. The left portion contained large wide coils of steel wire, each of which was surrounded by a pretty thick coat of firm colourless fibrin, strongly adherent to it at many places—that is to say, wherever the metal was in contact, or within a moderate distance of the wall, the wire was bound to the sac by this fibrin, thus greatly increasing its strength and resisting power.

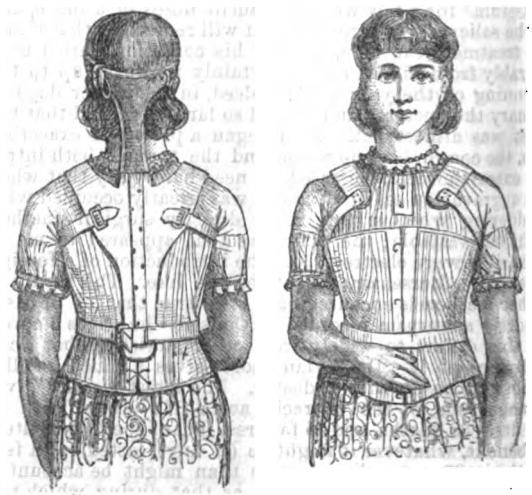
Now let me especially point out to you that my attempt was evidently too late; the man's lungs were already all but useless. The conformation of the aneurysm also was unfortunate, in that it possessed a secondary sac, into which my wire could not pass—not a new one developed after the operation, for the man told me in writing three days before his death that the tumour to the right of the sternum had existed two years previously. The endeavour to save life was by these circumstances frustrated. But consider what the condition of things found in the large sac means. Evidently it means that by passing a galvanic current not merely along two or three needles, which are afterwards removed, but along some feet of wire which is left *in situ*, we have a device by which a considerable quantity of hard, firm, and persistent clot can be produced in large quantities even though, as in this case, the aneurysm may be close to the heart. I hope I am not too dogmatic in saying that if a galvanic current and coils of wire are to be of service in such cases, they will only be so when used in combination, after the manner thus illustrated.

REST IN THE TREATMENT OF SCROFULOUS NECK.

BY FREDERICK TREVES, F.R.C.S.,
SURGEON TO, AND LECTURER ON ANATOMY AT, THE LONDON HOSPITAL.

SINCE surgery had a place in literature the treatment of scrofula has been the subject of considerable discourse. Upon few matters has the ancient writer of medicine proved more verbose and demonstrative. Like other chronic and protean maladies, scrofula has attacked and absorbed the pharmacopœias of successive generations. The strumous being has afforded ample material for experiment, and in few diseases has the subject been less affected by the manifold changes in its therapeutic environment. The treatment of this disorder has not possessed perennial interest. It has rather aroused from time to time a paroxysmal concern in the surgical mind, and its place in the history of medicine has been marked by a series of literary gusts. One such gust has lately blown. After a long period of neglect the treatment of strumous diseases has been refurbished with great vigour by certain continental surgeons. Considerable additions have been made to the burdened literature of the subject. Various new modes of treatment have been devised that are without doubt excellent, that have been well founded, and that are likely to prove of permanent value. They have been introduced and extensively adopted in this country, and are to be credited with very admirable results. Under the circumstances, therefore, some excuse is needed for adding to the further discussion of the subject. Limiting the excuse to the conditions covered by the term "scrofulous neck," it has appeared to me that there is at least one thing lacking in even the most modern modes of treatment. This one thing, I venture to think, can claim so paramount a position among the local methods of treatment as to render those methods inefficient when employed alone, and insignificant when placed in comparison or competition. This therapeutic factor consists merely in securing rest for disturbed parts. It cannot therefore be considered to be in any way new in theory, although it is, to the best of my belief, not yet recognised in practice, so far at least as the present affections are concerned.

The treatment of inflamed and damaged structures by rest can claim an antiquity that it shares only with the earliest records of surgical science. Viewing the matter from a liberal standpoint, it may be said that the familiar procedures directed against inflammation and disturbance are little other than ingenious and manifold applications of this rudimentary principle of treatment. It is strange that some of the commoner affections of the neck should have been considered exempt from such elementary influences where the art of their healing is concerned. It is needless to point out that scrofulous gland swellings in the neck, together with scrofulous abscesses and the sinuses that result therefrom are, as a rule, very chronic in their course, and very obstinate in their relation to treatment. There is little in the anatomy of the neck to account for this. The part is vascular; it is easy of access; it is not dependent. The arrangement of the cervical fascia is certainly obnoxious to the easy progress of an inflammation, but in many of the most indolent cases this fascia is in no direct manner concerned. There is this, however, to be noted: that the neck is a part of the body that is in almost constant movement, and if rest is of real import in the treatment of inflamed tissues, then there can be few parts of the body where it is more clearly demanded than it is in this place. If in the axilla or the groin there be a glandular swelling or a chronic abscess or a lingering sinus, the first injunction to the patient is an injunction to rest. Few would undertake the care of such cases if the patient persisted in continued movement of the limb. Yet there is this anomaly—that when like disorders are met with in the neck the need of rest is overlooked, and it may be possible to see an individual with a sinus about the elbow treated by splints, and a like sinus below the jaw treated without restraint of any kind. It is difficult to understand how an inflamed gland situated beneath the sterno-mastoid muscle can heal so long as it is kept in a constant condition of unrest by the movement of that



muscle, and it is still more difficult to conceive an easy and wholesome career for a sinus or an abscess cavity so placed. I would venture to urge that the employment of rest should be a routine measure in the treatment of every case of scrofulous neck; that it should supplement all other local procedures, and among them hold a predominant place. The application of this measure may be considered before the detailed treatment of the affection is discussed.

To secure rest to the neck I originally used a simple "stock" of gutta-percha.[1] This I found to be somewhat cumbrous and uncomfortable, and not applicable when any disease existed about or below the inferior maxilla. Moreover, the stock concealed from view the seat of trouble, and required to be frequently removed. For the last three years I have made use of a splint, the main features of which can be gathered from the annexed woodcut. It is made of felt, and takes its fixed point from the shoulders and back. The centre of the splint is strengthened by a slender strip of metal. This strip is carried up along the back of the neck, and at the occiput meets a cross-piece which is moulded to the outline of the skull. The cross-piece is kept in place by a narrow ribbon that encircles the forehead. In young girls and women the cervical part of the splint can be entirely concealed by the hair. The splint in children and in males may be secured by straps, as shown in the figure; in adult females it may be more conveniently attached to the stays. The felt is freely perforated, and the whole appliance is exceedingly light. It has been made for me by Messrs. Krohne and

[1] Scrofula and its Gland Diseases, 1882.

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Sesemann. I have made extensive use of this simple apparatus. It keeps the neck still, but not rigid, and after the first few days of its use it ceases to be irksome. Patients have worn it without interruption for three, six, and nine months. It is perhaps needless to say that it is not worn at night. Of its value I can speak in strong terms, and to this employment of rest I would ascribe results in some cases that I believe no other method of treatment would have secured. I have used it not only in the treatment of scrofulous affections, but also as a splint after operations upon the neck, in cases of burn and of accidental wound, in carbuncle, and also in cases of lupus that have been treated by scraping. Under these varied circumstances I have convinced myself that the healing process has been very materially aided by this simple appliance, and in many instances the wearing of the splint has increased rather than diminished the patient's comfort for the time being. So much for this one measure. It will now be convenient to consider the treatment of scrofulous neck in general terms.

Scrofula and the pathology of the scrofulous process have been legitimate objects for contention from early times. The matter is as yet by no means disposed of, and is likely to remain disquieted until the pathology of tubercle has been placed at rest. Some recent writers have urged, with affectation, that scrofula does not exist; but the paradox, being meaningless, does not advance the discussion. One point perhaps will be very generally allowed, and it is this—that the main phenomena of the scrofulous process are the outcome of a chronic inflammation of a low type. It is a matter of no great moment whether that inflammation is or is not produced by tubercle, or whether the tubercle is a product rather than a cause of the local trouble, or whether tubercle itself is a thing for terror, and not a phantasm or a pathological fetish. The great point still remains that the treatment has to concern itself with a condition the outward and visible signs of which are those of an ill-moving inflammation. In the treatment of the gland enlargements, it is necessary, in the first place, to bear in mind that the gland trouble is secondary, and will have followed some lesion in the periphery. The more recent the case, the more important is it that the initial lesion should be sought out. It is obviously a waste of means to treat an inflamed gland while the cause of that inflammation remains active and untouched. It is of little avail to rub ointment on a strumous gland in the neck while the coryza, or the sore-throat, or the eczema of the scalp that caused the enlargement remains untreated. A thorough examination of the lymphatic periphery should be an early care. The disturbances therein that may lead to gland enlargements are numerous and varied, and among them may be placed pharyngitis, especially that incident to measles or scarlet fever, tonsillitis, diseased teeth, coryza, ozœna, otorrhœa, conjunctivitis, eczema, and the like. To the relief of these disturbances, so far as relief is possible, the earliest treatment should be directed. In rare instances the gland mischief in scrofula may be primary, and I have seen such primary mischief in the neck as the result of a blow on the one hand, and of a definite exposure to cold on the other. A mysterious enlargement of many cervical glands coincident with the outbreak of phthisical changes in the lung is probably familiar to many.

As the next step in treatment, the general management of the scrofulous patient may be briefly considered. The more essential points would appear to be the following: The healthiest possible surrounding, with plenty of fresh air and especially of light, then residence by the sea, above all for those who live inland and in great towns. In the choice of a seaside resort, I think it matters little whether the spot be east, west, north, or south, so long as it presents this feature—a beach upon which a large extent of seaweed lies exposed at low water. Iodine is, or can be, obtained from seaweed; and it is reasonable to conjecture that this volatile substance may be given off into the atmosphere when acres of seaweed are drying in the summer sun. An iodine-laden air is an ideal atmosphere for a scrofulous person. Certain it is that those sea towns are most beneficial where this condition is pronounced; and it is to this circumstance and the fact that it lies surrounded on three sides by the sea that Margate probably owes its great repute as a place of healing. Sea-bathing, under proper restrictions, should play also a conspicuous part in the treatment. The bath should be in the open sea. A domestic sea-bath, constructed out of fresh water and salt, approaches the confines of a therapeutic burlesque. Such is the circulation in the majority of the scrofulous, and such is their disposition to catarrh, that every care should be taken to avoid exposure to fluctuations of temperature. To meet this end in some way, woollen garments should be worn next the skin both winter and summer, and the patient should keep within doors after sunset and on other than fine days.

Out of the medley of medicines employed, these may be selected—iodine, iron, quinine, lime, and cod-liver oil. Iodine in some form appears to be necessary in the treatment of scrofula, and the preparations that are the most useful are the syrup of the iodide of iron and iodide of potassium. Iron and quinine take place as tonics. Phosphate of lime often appears to be of great value, especially when suppuration exists. Sulphurated lime (commonly known as sulphide of calcium) is largely used in strumous gland affections. Its action is, however, most uncertain. It is supposed to concern the suppurative process. In many cases it has appeared to distinctly check the formation of pus, and to limit suppuration when the discharge has been fully established. In other instances its action has been simply negative. In any case of strumous disease, but especially in cases where suppuration exists, it is well to suspend in the patient's room a few crystals of iodine in a chip box. The air becomes lightly charged with iodine, and the patient is surrounded by an atmosphere that is at the least mildly antiseptic. Cod-liver oil is probably the most important medicine of all. It may be given as a mixture with tartarated iron, or alone, or in the form of an emulsion with the hypophosphites. It is perhaps best to administer it during the spring, autumn, and winter, and to omit it entirely during the summer months. Patients who cannot take cod-liver oil may perhaps be induced to increase the amount of fat in their food by the addition of fat bacon, clotted cream, and the like.

To return finally to local measures. I take it that the day of local applications is over. It is no longer a routine measure to paint iodine over the skin of the neck in all cases of cervical gland enlargement. Such painting appears to be of most use in certain chronic cases where the glands—few in number—have become quite inert, listless, and free from all tenderness. In a large number of instances it does harm, probably by adding to the disturbance already existing in the periphery. Suppuration in glands has, I think, been often determined by iodine paint used by lavish hands. In some slowly progressing cases, where the glands are not tender and there is no distinct evidence that suppuration exists, a steady rubbing of the part with the ointment of the iodide of lead appears often to effect considerable improvement. Poultices of seaweed and compresses of salt water do little more than divert the patient and increase his risks of catarrh. In early cases, where the trouble is active and progressing, the use of the cervical splint alone is the most effective of local measures. With its application the parts are placed at rest, the glands cease to be painful, and very commonly cease to increase. The same may be said with reference to chronic enlargements that have become once again the seat of active change.

So manifold are the aspects of the scrofulous neck, and so varied the circumstances that mould its clinical being, that the conditions under which certain operations are advisable can only be considered in bare outline. Excision with the knife, so far at least as the neck is concerned, can be but rarely practised. It is adapted for cases where a solitary gland or a small well-limited cluster of glands persists obstinately after other manifestations of scrofula have disappeared. Such glands should be movable, free from the adhesions of peri-adenitis, and emphatically chronic. Operations upon larger gland clusters, even when the individual tumours appear quite free, are often exceedingly dangerous. The glands are found on exposure to be less movable than they appeared, to extend deeply, and put in danger the great vessels and nerves or the dome of the pleura if obstinately pursued with a knife. Extensive operations of this kind appear to me to be rarely justifiable. Cautery puncture is admirably adapted for large perfectly indolent gland tumours that are near the skin, are fixed, and are too large for scraping and unsuited for excision. A slender cautery point is introduced into the gland and then thrust in many directions through its substance. The ill-conditioned mass inflames, its parts break down, and the cautery aperture affords a free exit for the débris that results. In many instances this measure has been most successful, and the resulting scar slight and without the conspicuous characters of the common strumous cicatrix. Scraping away the gland mass with a

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Volkmann's spoon is a measure that has been very extensively employed, and is applicable to a large series of cases. It is best adapted to cases where sinuses exist, or where the gland is fixed and either breaking down or else quite disorganised. The gland so treated should not be of great size. In many instances the instrument does little more than remove the products of disintegration; in other cases the diseased but still living gland tissue is broken down and removed, and the surgeon effects in a few minutes what nature would accomplish only in weeks or months by means of the suppurative process. When no sinus exists an opening should be made into the gland with the cautery. This measure is not without risk, and it cannot deal with the gland capsule that remains behind, but in spite of theoretical objections it must be owned that the procedure answers well in practice. It is obviously not applicable to an extensive series of glandular swellings.

In conclusion, a word may be said with reference to strumous abscesses and sinuses of the neck. The former, as a rule, depend upon gland disease. The pus may be within the capsule of the gland, or, as is very frequent, in the loose connective tissue around it (peri-adenitis). In other instances the collection is independent of glandular trouble, and has to be classed with cold or tubercular abscesses. I think that in any case the pus should be evacuated by cautery-puncture. The cautery point, if very highly heated, is less painful than the knife and quite as rapid. The small opening made cannot close, and as a charred tract is established between the surface and the abscess cavity, undermining of the skin can hardly occur. The cavity should be allowed to empty itself. The fussy squeezing of a recently opened abscess that appears to be to many an irresistible temptation is strongly to be condemned. When the purulent cavity has emptied itself it is duly drained. The sinuses that are so often left in the neck after the strumous storm has passed over it are ill-conditioned and seldom amenable to one stereotyped plan of treatment. Some are best dealt with by a free incision. In others, where the tract is long and narrow and deep, the sinus may be fully dilated with a sea-tangle tent, and then carefully dressed from the bottom. In any case a free scraping of the sinus wall with a sharp spoon rids it of its feeble purposeless granulations, and puts it into a fair state for healing. The bottom of the fistula should be exposed whenever possible, for in that position it is not uncommon to find an ancient fragment of a diseased gland that has secretly maintained the mischief. It only remains to be said that in all cases, and especially in all instances where operations are performed, the inflamed and disturbed tissues must be placed in a condition of rest.

Wimpole-street, W.

THE ALBUMENS OF THE URINE.[1]

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WE are accustomed in our ordinary clinical examinations of the urine to speak of albumen being present or absent according as a precipitate is or is not obtainable by the reagents we employ, and we commonly, too, consider that the precipitate so obtained is one simple albuminous body. This is not so. The precipitate obtained by nitric acid, for instance, in an albuminous urine ordinarily consists of two distinct albuminous substances—serum-albumen and paraglobulin; it may consist of egg-albumen or of hemi-albuminose; it may be confounded with a precipitate consisting of mucin, and the urine may contain peptones when no precipitate whatever is thrown down by the nitric acid. I have thought it of some scientific interest, and, as I hope to show, not without some practical value, to review the conditions under which these different substances and their modifications may be present in the urine, and to detail the results of some observations I have made in this connexion.

It is probable that the serum-albumen present in the urine may vary in its physical, although not in its chemical, properties. Just as the original albumen of the blood-serum may, according to the researches of Dr. Halliburton,[2] be separated into at least three kinds, which coagulate at different temperatures, so in all probability the serum-albumen present in the urine may so vary. But in a complex fluid like the urine these minute differences are very difficult to prove, and it is still more difficult to avoid errors. Thus Dr. Parkes and Dr. Pavy suggested that the increase of albumen in the urine after food might be due to some change undergone in digestion, which rendered the albumen more diffusible. Lépine[3] has actually found that the albumen passed after meals is more diffusible than that passed before meals, and is more easily changed into peptone by artificial digestion. Again, Drs. Lauder Brunton and Power[4] examined albuminous urines at various intervals before and after meals; they found certain differences in the temperature at which the albumen coagulated in different specimens, but their results were inconstant. Dr. Saundby,[5] on the other hand, obtained results which were at variance with both the sets of experiments mentioned. Bouchard, again, asserted that the specific gravity of the urinary albumen, or, as he called it, the "retractability," might vary. He believed that in cases of so-called physiological albuminuria the albumen coagulated by boiling did not sink to the bottom of the tube, but floated on the top of the urine. This also has been disproved. It seems, therefore, that but little help may be looked for in our clinical work from an investigation of the mere physical differences of the urinary albumen; but a chemical investigation seems to be more promising.

I have mentioned that the precipitate obtained by nitric acid in an albuminous urine ordinarily consists of both serum-albumen and paraglobulin. Paraglobulin resembles serum-albumen in being coagulated by heat and by nitric acid, and therefore comes down together with serum-albumen in the ordinary routine of testing. It may be separated from the serum-albumen in several ways. If the urine from certain cases of Bright's disease be poured into a large quantity of water, preferably water which has stood for some time, and to which a very small amount of acetic acid has been added, a cloudy precipitate is formed. This is believed to consist of paraglobulin; it is held in solution in the urine by the small quantity of salts then present, and when the percentage of these salts is diminished by copious dilution, as in the above experiment, the globulin is thrown down. Some years ago I investigated a number of urines with the view of ascertaining when this reaction was present, and found it as a rule only when there was a large amount of albumen to be detected by the ordinary tests, and generally in advanced Bright's disease. Lately I have not been able to get this reaction with urines containing no other albumen than globulin, but this in only comparatively small quantity. It is evident, however, that the above reaction can only be a very rough test for globulin, and at the best it does not show that globulin is present in excess over serum-albumen. Senator[6] attempted to separate globulin from serum-albumen by diluting the urine and passing through it a stream of carbonic acid gas. By this method he found globulin more especially in the urine of patients suffering from amyloid degeneration of the kidneys and catarrh of the bladder; but his method, again, was very unsatisfactory.

Probably the best method of obtaining globulin from its solutions is to saturate the solution with magnesium sulphate, when the globulin will be precipitated in an uncoagulated form, and can afterwards be redissolved in water. Estelle,[7] adopting this method, found that the amount of globulin in the urine always exceeded that of the serum-albumen, and in two cases he showed that the proportion of globulin to serum-albumen in the urine was exactly that of the serum from which the albumen was derived. Now, in applying this method a very essential precaution is to neutralise the urine before adding the sulphate of magnesium. One of the best tests for albumen in urine is a mixture of five parts of a saturated solution of sulphate of magnesium with one part of nitric acid, as recommended by Sir William Roberts.[8] In an acid urine magnesium sulphate alone will form an albumen test in a certain degree similar to the above; it is true that no free acids are present, but it has been shown by Ott[9] that magnesium sulphate in com-

[1] Read before the Harveian Society of London.
[2] British Medical Journal, vol. ii., 1885, p. 148.
[3] Revue Mensuelle, 1880, p. 343.
[4] St. Bartholomew's Hospital Reports, vol. xiii.
[5] British Medical Journal, 1880, vol. i., p. 841.
[6] Virch. Archiv, Bd. 60, p. 476.
[7] Revue Mensuelle, 1880.
[8] Medical Chronicle, vol. i., p. 1.
[9] See Virchow and Hirsch's Jahresber., 1886, vol. i., p. 146.

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bination with the acid salts of the urine is sufficient to precipitate a certain amount of serum-albumen together with the globulin. All determinations in which this precaution of neutralising the urine is not adapted are liable to show an excessive amount of globulin to be present, and as it does not appear from Estelle's paper that he did neutralise the urine, it is not improbable that this may account for the large amount of globulin which he found. I am the more inclined to think this as my own observations in which this precaution was adopted showed in chronic Bright's disease an excess of serum-albumen over the globulin, instead of an excess of globulin, as found by Estelle. A similar objection of imperfection of the methods then known will also attach to the observations of Dr. Saundby, in which he found in two out of forty-two cases that the whole of the albumen was precipitated by magnesium sulphate, and therefore seemed to consist of globulin. Nevertheless, Dr. Saundby concluded that the body present in the urine which is precipitated by heat is almost invariably serum-albumen, and rarely globulin, and that the occurrence of paraglobulin in the urine is obscure, and not attached to any particular clinical group of cases.

Still another method of separating globulin from serum-albumen has lately been recommended by Hofmeister and Pohl,[10] in which use is made of the fact that if albuminous urine is treated with sulphate of ammonium, the globulin is precipitated when the amount of sulphate of ammonium reaches 24·11 per cent., while the serum-albumen is not thrown down until 33·55 per cent. of the salt is dissolved. There are various sources of fallacy in connexion with this method which render it somewhat unsatisfactory, and before adopting it I preferred to wait until further observations might prove its value. I have therefore made use of the sulphate of magnesium method in the investigation of a number of albuminous urines, and I aimed, not at the mere demonstration of the presence of globulin, but at a percentage determination of the relative amounts of serum-albumen and globulin respectively in different cases and at different stages of the same case. In each experiment fifty cubic centimetres of the urine were first neutralised by liq. potassæ, and to them was added a considerable quantity of magnesium sulphate. The mixture was then placed in an incubator and maintained at a temperature of about 40° C. for at least twelve hours. It is advisable to warm the mixture in order to ensure the complete saturation of the urine by the magnesium sulphate, but it is essential that the temperature should not be raised sufficiently high to coagulate the albumen, since then serum-albumen would come down together with the globulin. During this period the mixture was well shaken several times, and if necessary more magnesium sulphate added until some remained undissolved. The solution was then filtered, the filtrate containing the serum-albumen, the precipitated globulin remaining on the filter-paper. This was well washed with a saturated solution of magnesium sulphate, the washings being added to the filtrate. The filter-paper containing the globulin was now digested in water at a constant temperature, and a solution was thus obtained containing the globulin of the original urine. The serum-albumen and the globulin in these solutions were estimated by the nitric acid dilution method. Since the object of the experiments was to ascertain the *relative* amounts of globulin and serum-albumen—and any error in the method would apply equally to the solutions of each of these—it was thought that this method of estimation was sufficiently accurate for the purpose. Manifestly, the method, especially in the presence of magnesium sulphate, is not accurate enough for exact and absolute determinations, and I am at present engaged in controlling the estimates by the more tedious process of weighing. Examined in this way, I found that the proportions of globulin and serum-albumen varied exceedingly in different urines. The first case I have to mention is one of granular kidney, with albuminuric retinitis.

CASE 1.—Thos. G——, aged forty years, was admitted into St. Mary's Hospital under Dr. Cheadle in March, 1886, and came under my care in Dr. Cheadle's absence. The family history presented no remarkable points, and his habits had been temperate. Twenty-four years before he had suffered from disease of various joints, causing ankylosis of the left elbow, and rendering necessary an amputation of the right leg. For more than twenty years, however, there had been no active joint trouble. I mention these details to show that there was present no cause for amyloid disease. The patient had never had scarlet fever or diphtheria, but had been exposed to wet and cold. The first symptoms of his present illness showed themselves eight months before admission by frequent attacks of vomiting and headache. Two months before admission his eyesight became dim. On examination the patient was somewhat pale and puffy, and a slight amount of œdema was noticed in the leg. The pulse showed very high arterial tension. The apex beat of the heart was in the sixth interspace and in the nipple line. There was a prolonged first sound of the heart, and the second was remarkably accentuated at the aortic cartilage. Several hæmorrhagic and many whitish spots were seen in each retina. The urine was copious, very pale, sp. gr. 1010, and reaction acid; it contained albumen and hyaline casts. On examination by the magnesium sulphate method, I found that in 50 cc. of urine there were 0·02125 grm. of serum-albumen and 0·0085 grm. of globulin. This would show the relation of albumen to globulin to be as 2125 to 850, or about 2½ to 1.

CASE 2.—According to its clinical appearance this case was also one of granular kidney, but complicated by mitral stenosis. Lucy B——, aged thirty-three and married, was admitted under Dr. Broadbent on April 2nd, 1886. She had suffered from rheumatism three years before admission, had been exposed much to wet and cold, and had undergone great privations. About six months before admission the patient had an attack of hæmoptysis, and four months afterwards her feet began to swell. Without going into details with regard to the present condition, I may say that there was a presystolic murmur heard at the apex of the heart; the apex beat was situated two inches below the nipple and in the sixth interspace, while it was also somewhat more to the left than is normal. The pulse was of higher tension than the mitral stenosis would account for. The urine was pale, neutral in reaction, sp. gr. 1016, and contained a considerable amount of albumen, stated in the clinical report to be one-third. Here we evidently had to do with something more than the ordinary cardiac kidney, and the low specific gravity of the urine, the high tension pulse, with the evident hypertrophy of the left ventricle when there was only mitral stenosis with no regurgitation, pointed pretty clearly to a diagnosis of granular kidney in addition to the cardiac affection. After rest in bed for a few days and medicinal treatment the œdema of the legs and the cardiac distress present on admission disappeared, and it was only after some days that I obtained a specimen of urine for examination. This showed in 50 cc. 0·0292 grm. of serum-albumen and 0·0076 grm. of globulin, or about 4 parts of albumen to 1 part of globulin.

CASE 3.—This was a case of anæmia with albuminuria, the latter being due in all probability to fatty degeneration of the kidney, combined with the vascular disturbance. This patient also was under Dr. Cheadle, and came under my care for a time in his absence. There was no history of scarlet fever or diphtheria; but the patient had had one attack of rheumatic fever, followed by perfect recovery, as far as her own account could be trusted. On admission, she was exceedingly pale, and had some œdema of the lower limbs. The *bruit de diable* was well marked in the neck; the cardiac dulness was somewhat increased in extent; the apex beat diffused, not lowered, but apparently somewhat displaced to the left. A post-systolic murmur was heard at the cardiac apex, conducted best in an upward direction towards the pulmonary area. The pulse did not show very high tension. Under treatment the œdema and paleness disappeared to a great extent, and so also did the cardiac murmurs and the apparent dilatation of the heart. The urine had in the early part of the case been found albuminous, but my attention was first called to it later on. While in bed the urine was apparently normal and contained no albumen. When, however, the patient was allowed to sit up and walk about the ward for the first time, albumen appeared in the urine. During the remainder of her stay in the hospital the albumen was very variable in its appearance, but always showed in its amount a distinct relation to the amount of exercise taken. On separating the globulin from the urine, I found that 50 cc. of the urine contained 0·0560 grm. of serum-albumen and 0·01407 grm. of globulin, or 1 part of serum-albumen to 2½ parts of globulin, the exact reversal of the proportion found in the first case described.

(To be concluded.)

[10] Archiv f. exper. Pathologie, vol. xx., 1886, p. 426.

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LIGATURE OF THE INNOMINATE ARTERY.

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AN annotation in THE LANCET of April 3rd favoured with special notice the case in which, seven days previously, I had tied the innominate artery for aneurysm. The patient was then doing well, but died from secondary hæmorrhage on the nineteenth day. This further record is from the bedside notes of our house-surgeon, Mr. A. B. Bennett.

J. N——, aged thirty, a brewer's labourer, was admitted into the Queen's Hospital on March 3rd, 1886, suffering from a large aneurysm of the right subclavian artery. His occupation had exposed him for a long term of years to great exertions and violent straining, as in carrying heavy sacks on his shoulder, and the joint of this side had been dislocated on three occasions. He had never had syphilis or rheumatism, and had been a very moderate drinker. The first symptom of the disease appeared about seventeen months previously, in the form of shooting pains down the arm and forearm, with occasional numbness of the limb; but, in spite of increasing suffering, he struggled on with his work, doing most of it with the other arm. He discovered a local swelling above the clavicle about nine weeks before admission. This steadily and rapidly grew in size, and with it the pain became more severe. He then came under the care of Mr. W. B. Sparrow, of Burton-on-Trent, who diagnosed the aneurysm and sent him to me for its treatment.

March 5th.—The tumour lies just above the inner half of the clavicle; it measures three inches in the transverse and two inches and a half in the vertical direction. On the inner side it disappears under the sterno-mastoid; externally it reaches nearly to the acromion. The common carotid artery is carried inwards towards the middle line of the neck, and can be felt distinct from the tumour, over which it can be made to roll. Pulsation in the tumour is very strong, but bruit is either extremely faint or absent. There is a pulsation in the episternal notch, obviously that of the root of the common carotid, which is prominent here. Pressure effects on the brachial plexus are marked by intense pain with numbness down the arm and forearm and wasting of the muscles. The pain, which at times is excruciating and causes extreme restlessness, appears to affect mostly the peripheral area of the musculo-spiral nerve. There is no œdema or venous engorgement of the limb, but the nails are slightly clubbed. The brachial artery, which is very superficial above the bend of the elbow, is no larger in calibre than a No. 3 catheter. The radial pulse is distinctly smaller than on the other side. All the superficial arteries are slightly fibroid. The right pupil is much smaller than the left. No laryngeal or pharyngeal symptoms exist. The chest was examined by Dr. Suckling, who found no evidence of disease of the heart or of the large bloodvessels.

Treatment.—The man was placed on Tufnell's aneurysm diet, consisting of ten ounces of light dry solid food with eight ounces of fluids daily. He would not keep recumbent, owing to the severity of his pain, which caused him to sit up in bed and roll his arm about a great deal. Hypodermic injections of morphia in frequent half-grain doses seemed almost powerless to relieve him at first. Ordered ten grains of iodide of potassium three times a day.—11th: The pain is somewhat less, the morphia being more efficacious in giving relief. Aneurysm the same.—18th: Condition much as before, but the patient is wearying of the diet, and he is thinner and weaker.—25th: The slight improvement which was at first apparent has not been sustained. Pulsation is as strong as ever, and its superficial area is much larger, while the pain is as severe as at any previous time. He is clamorous for food, and not willing to continue the restricted diet any longer.

Under these circumstances I determined upon operative treatment, and therefore abandoned all medicine and placed him on a liberal dietary for a few days. After carefully considering all the circumstances of the case, together with the results of recent experience in operations on large arteries, there appeared to me no ground for excluding our most direct and certain method of procedure—viz., the Hunterian—by ligature of the innominate artery. Accordingly on March 27th, the patient being brought well under chloroform, I made an incision along the inner third of the clavicle, and another down the line of the common carotid artery, so as to meet the first in the episternal notch. This skin flap was then dissected up, presenting veins tied and divided, the sternal with part of the clavicular origin of the sterno-mastoid cut across, and the sterno-hyoid and thyroid muscles also divided. The carotid sheath was then arrived at and opened on its inner side low in the neck. Proceeding down this artery the innominate was found. It appeared a vessel of unusually large dimensions, and was rather superficial. It seemed to be nearly an inch in diameter, but showed no local or fusiform expansion. Compression made against the sternum by a finger behind the vessel was found to control the pulsation both in the tumour and the carotid. I could not define its bifurcation nor make any approach to the first portion of the subclavian, as the structures over this vessel were matted and could hardly be identified. I afterwards found that it was flattened out over the aneurysmal sac. It was rather an arduous task to get the needle round the vessel; the difficulty was partly owing to its size, but mainly to the existence of adhesions binding the vessel to the sternum and the parts on its outer side. The needle used was an old-fashioned silver one, broad, and well rounded at the point, with a large eye, and sufficiently flexible to take any desired curve. This was passed satisfactorily round the vessel, and then threaded with a small cord, to which a strip of ox aorta material, kindly sent me by Mr. Barwell, was attached, and by it pulled through. In tightening the tape, I had to draw the ends with very considerable force to stop the pulsation, the vessel offering great resistance and pulsating with great force. Just at the critical moment, however, the material gave way and broke across, and a second piece introduced in a similar way suffered the same fate. I then endeavoured to imitate the principle of the flat ligature by using a cord made up of five or six medium-sized threads of catgut. This bore the strain very well, and after tightening with sufficient force to completely stop pulsation in the tumour and branches of the carotid, I drew on the ends still further, to allow of some subsequent relaxation in fixing the knot. At the same time I endeavoured to avoid crushing the coats of the artery. The ligature was secured with a third knot and cut short; the wound was dried from all clot, its edges brought partly together, a tube and strip of antiseptic gauze being left in one corner for drainage. The whole proceeding had been conducted under the spray and careful Listerian antiseptic details. The wound was then well padded, and covered with a gauze dressing secured by an elastic roller. On leaving the table no pulse was perceptible at the wrist or in the aneurysm. Four hours afterwards there was a faint pulse at the wrist. He had not much pain, but was restless from heat. Temperature normal; pulse 102; respiration 22. Had rallied well from the operation.

March 28th.—Seems very comfortable except for pain and burning of the arm. Temperature 98·8°; pulse (evening) 106; respiration 22. A small thready pulse can be felt at the wrist and also in the superficial temporal.—29th: Wound dressed to-day; thoroughly aseptic; tube removed, and drainage effected by a strip of antiseptic gauze carried to the bottom. This being the first occasion of exposure of the aneurysm since the operation, I found that pulsation had returned in it, and that a current of blood still continued through the sac. The force of pulsation would be represented by an estimate of about one-half of that previous to operation. The early reappearance of a pulse in the radial and superficial temporal arteries had led me to expect this, and rendered it probable that, in spite of the apparent tightness with which the ligature was drawn, a chink existed between the folds of the crumpled-up artery through which the direct current continued.—31st: Wound dressed: thoroughly aseptic. Pulse 96; temperature normal; respiration 20. I may say now that this condition was maintained throughout, the patient kept absolutely free from fever or constitutional disturbance, and the wound aseptic till the final hæmorrhages necessitated a discontinuance of the dressings; these were changed about every third day. The pulsation in the aneurysm was slightly less than on the previous occasion, and in the radial artery was still further diminished. I hoped to favour the process of consolidation and cure of the aneurysm by immobilising the arm to the side, but though his pain and suffering were materially better than before operation, he was rather intolerant of this, and

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it could not be carried out very effectually.—April 5th: Has had rather more pain again, for which the use of morphia was resumed. Aneurysm harder and smaller. Pulsation distinctly less; radial pulse almost imperceptible; temporal pulse increasing.—8th: Aneurysm still harder and smaller. There appears now less doubt about the object for which the operation was undertaken being accomplished if he should recover from its effects.—10th: A stain of blood looking a day or so old was seen for the first time on changing the dressings.—11th: Late at night a sharp hæmorrhage occurred, which was stopped by plugging the wound.—12th: Several small hæmorrhages took place every few hours, and were controlled by pressure. Patient kept well under morphia.—13th: Late at night another general hæmorrhage.—14th: Died in the evening.

Necropsy.[1]—Part of the incision was firmly cicatrised; the unhealed part opened into a cavity containing clot. The walls of this cavity were well consolidated, and at the bottom was the artery, on which the knot of the ligature could be felt. The aneurysm was of much larger dimensions than appeared on the surface; it completely filled the upper aperture of the thorax, bulging into this cavity; it lay against the spinal column, and had absorbed and eroded almost quite across the bodies of several of the vertebræ; it was quite inseparable from the column. The cords of the brachial plexus were flattened out behind the tumour; the internal jugular and subclavian veins were collapsed and flattened in front of it. The aneurysm sprang from the upper and back part of the artery. The mouth of the sac was very large, extending from within half an inch of the commencement nearly to the termination of the artery, so that the whole of the second, about half of the first, and a considerable portion of the third stages of the vessel were occupied by it. All the branches of the artery were in this area and opened into the aneurysmal sac. The remainder of the first portion of the vessel was of large size and flattened out in front of the sac, to which it was adherent. The aneurysm contained a large central mass of passive clot. Some portions were lined with old fibrinous layers to the depth of a quarter of an inch, and within these and also incorporated with other parts of the sac wall was a less firm coagulum. Elsewhere, and particularly near the large mouths of entering vessels, the interior appeared as a serous lining. The arch of the aorta and innominate were vessels of large dimensions, but without local or fusiform expansion. They contrasted markedly with the exceptionally small size of the left common carotid and subclavian and of the right subclavian beyond the aneurysm; the latter was much reduced in size. The aorta was thickened and atheromatous; the innominate also thickened and fibroid to a less degree. The position of the ligature was marked by a deep constriction almost exactly in its centre; the structures over the ligature were solid and organised, except at the knot, which was exposed; there was no purulent infiltration. The ligature still retained a firm hold on the vessel; one or two of the threads were partially absorbed and softened, but others scarcely changed. The knot, unfortunately very large and hard, was quite unaltered. Under the knot, in the front of the vessel and in the line of a fold or bend of its wall, was the obvious source of the hæmorrhage, in the form of a ragged hole about the size of a small pea; this opened into the vessel on both sides of the ligature. The further appearances were interesting and instructive in view of the debatable questions surrounding the use of animal ligatures. The wall of the innominate was thickened on each side of the ligature, the thickness gradually decreasing away from it. With the exception of the hole corresponding to the knot, no part of the arterial wall was injured or divided, though under the ligature itself the wall was thinner than elsewhere. The inner coats were intact. It was obvious that a small chink remained between the crumpled-up folds of the vessel, the remainder being occluded by adhesion of the inner coats. The chink was closed by a moderately firm clot; a similar clot, with conical end, extended along the distal side of the artery nearly to the bifurcation. The clot was only slightly adherent to the interior of the vessel, except under the ligature, where the adhesion was more firm. The hole in the wall of the artery having been closed, it was shown, by injecting water, that the vessel was wholly occluded at the seat of ligature. On the heart side there was a thin diaphragm of clot with a conical end, but it extended a very inconsiderable distance. As the bulk of the hæmorrhage no doubt occurred here, some of the clot may have got carried out during life. The walls of the common carotid were thickened, its cavity much contracted, but free from clot. There was free communication between it and the subclavian.

The observations which I submit on this case will be very brief. Into the general history and merits of the operation I do not propose to enter. Mr. William Thompson has recently handled this part of the subject in a complete manner,[2] and the grounds on which he defends and justifies the operation in suitable cases appear to me to be thoroughly sound. His own case, which is reported in his able and exhaustive paper, and which so nearly obtained success, goes far in support of them. I certainly do not think that, on the experience of the old methods of ligature, we are to regard the subject as a closed book not to be reopened. In dealing with this particular case I was not unmindful of the alternative courses. I had satisfied myself that medical treatment would be unavailing, while the severity of the patient's suffering rendered it most undesirable to abandon the case altogether. My reason for selecting this operation was simply its directness and certainty of action, and the belief that in it alone lay any hope of cure. I at once eliminated from consideration such methods of treatment as galvano-puncture and introduction of foreign material, on the ground that, from what I have read and seen of them, they are exceedingly fatal, while their value as a means of cure is almost problematical. Proximal pressure was impossible, the aneurysmal sac lying behind the first part of the artery. Amputation at the shoulder-joint needs, I think, more to recommend it than the hitherto limited experience of its use affords us before a surgeon will strongly urge such a serious mutilation on a patient. The distal ligature might have been tried, and could I have realised beforehand the condition of the artery it is quite likely this would have been the case. However, the vessel was fully exposed before I was aware of its state. There was no physical sign in the chest to reveal it, and the pulsation in the episternal notch was clearly that of the common carotid displaced by the tumour. Moreover, it appeared from the position of the tumour and the absence of a bruit that the mouth of the sac was of large size, and included just that portion of the vessel most occupied by large branches. Consequently I entertained but little hope of any backward development of a thrombus and a cure in this way. The post-mortem examination verifies the truth of this. When the artery was exposed the condition was obviously very unfavourable to success. I could see there would be increased difficulty in stopping pulsation and unusual risk of rupture of the artery, but I did not feel called upon to abandon the operation and close the wound, as so large a share of the operative risk had already been surmounted, and the vessel, though large in size, showed no local or fusiform expansion. I regarded the dilatation as in great part due to the resistance of the aneurysm beyond. The fact that I was unable to complete the ligature with the material originally intended may be matter for regret. The subsequent history and the post-mortem appearances show that if a knot could be avoided a different result was possible, even on a vessel so unfavourable. But I confess that the case would scarcely have been a fair one as a test for the material, and I quite anticipate that Mr. Barwell would not contemplate its application to such a vessel. In explanation of the breakage, I think it fair to say that the ligature was not only submitted to an exceptionally severe strain, but had probably got damaged in its dry state. The use of silk, or of any material which, though having the advantage of unlimited strength, must necessarily cut through the vessel and be cast off by ulceration, was out of the question. In employing catgut, sufficient had to be used to bear a good strain in tightening, to last a considerable time without absorption, and to maintain the integrity of the arterial wall. To gain all these advantages I used a cord of five or six medium-sized threads laid side by side, and as a material like this requires very careful tying to secure it, I felt it prudent to make a third knot. This knot, lying on a fold of the vessel, was, by its hardness and resistance to the forcible pulsation, the immediate cause of rupture of the artery.

In undertaking the operation, I entertained the greatest confidence, as I do now, in the value of the animal absorbable material for ligature, of the strict antiseptic condition of the wound, and in the principle of maintaining the integrity of

[1] Specimen shown at the meeting of the Pathological Section of the Birmingham and Midland Counties Branch of the British Medical Association, May 7th.

[2] British Medical Journal, Oct. 14th, 1882.

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the arterial wall by the flat ligature so ably advocated by Mr. Barwell. It is on the latter of these points that opinion seems to be most divided. Should the arterial coats be cut through or not? I do not think we need seek to give one uniform answer to this question for all cases, but that it may wisely vary for different circumstances. With vessels of secondary size, in positions where the strict antiseptic condition of the wound is pretty sure, and, above all, where early deep union of the wound can be effected, a simple round cord of absorbable material (ordinary catgut), tied so as to divide the walls, leaves little room for improvement. There is in the latter point an additional security for permanent occlusion of the vessel. But it is well known that if the wound inflames and suppurates, the advantages of the animal ligature may be forfeited by solution of continuity of the vessel. It is to be recognised that the wound after ligature of the innominate is ill adapted for early union, and difficult to keep antiseptic. Though I was successful in securing the latter point in this patient, I found that the bony framework of the chest prevented deep apposition of the parts, and that a considerable cavity resulted in spite of graduated and elastic pressure applied to that end, as recommended by Mr. Thompson in the paper referred to. There can be little doubt, therefore, about the importance of the principle of maintaining the integrity of the arterial wall by the flat ligature in the case of the innominate artery. That an artery ligatured in this way becomes permanently occluded has been amply proved by Mr. Barwell's cases, and by those of Lister, Thompson, and others; it also seems that the existence of a chink at the point of ligature permitting a direct current of blood is no bar to the process. On this latter point I think the post-mortem appearances in my case bear in an interesting manner. They show that such a process of occlusion was in actual progress, though to an inconsiderable degree. When I found that pulsation had returned in the sac and in the radial and temporal arteries, I inferred that this was wholly due to the direct current past the ligature, and I seriously entertained the idea of reopening the wound and replacing it. Then, as the pulsation in the sac and the radial subsequently diminished, it appeared as if occlusion were gradually being effected by coagulation at the ligature, and there seemed increasing likelihood of the aneurysm being cured if the operation were survived. But the pulsation was still going on at a time when, as the necropsy shows, there could be no direct current past the ligature, so that it appears as if a good deal of this pulsation was due to the current of blood into the sac from the mouths of the large vessels opening there and from the common carotid. This fact, with the comparatively little change effected in the aneurysm, leave it still open to doubt whether the object for which the operation was undertaken would have been accomplished had the patient lived. The collateral circulation might have proved too direct and free.

ABSCESS OF THE SPLEEN OCCURRING IN ENTERIC FEVER.[1]

BY ROBERT S. ARCHER, B.A., M.B.
PHYSICIAN TO THE NETHERFIELD FEVER HOSPITAL, LIVERPOOL.

ON assuming duty at Netherfield Fever Hospital towards the end of last October, I found a boy, aged fourteen years, suffering from what appeared to be an intercurrent relapse or recrudescence of enteric fever. He had been admitted to hospital on Oct. 5th, 1885, under the care of my colleague, Dr. Dunbar, with a history of illness of two days' duration, which commenced with anorexia, vomiting, and rigors. His throat is reported to have been sore, and the tonsils superficially ulcerated. He, as far as I could ascertain, presented none of the common signs or symptoms of enteric fever; in fact, I believe he was sent to hospital as suffering from scarlatina, which was doubtless owing to the slight throat symptoms and a doubtful evanescent red rash. The temperature, which had been febrile since his admission, became normal on Oct. 18th, or about the sixteenth day of apparent illness. It remained normal until the 21st, when it again became febrile, and remained so till the patient's death on Nov. 1st. Oct. 24th was marked by slight pain along the course of the lower ribs on the left side, which was thought might have been due to pericarditis or pleuritis. However, careful examination failed to detect the existence of either of these conditions. On Oct. 26th the left hypochondriac pain became more marked, and on the evening of the following day there was slight general abdominal tenderness. The next twenty-four hours was marked by vomiting, intensification of the abdominal tenderness, and increased tympanitis, especially manifest along the course of the transverse colon. All these signs became more painfully apparent during the next three days, and there was superadded a certain amount of stupor and low muttering delirium. The patient died early on the morning of Nov. 1st apparently from peritonitis, due, as was thought, solely to perforation of the intestine.

At the necropsy (made about ten hours after death) there was fairly marked rigor mortis and considerable emaciation. The abdomen was generally and equally distended, and there was distinct general purulent peritonitis. The omentum and coils of the intestines were loosely held together by layers of yellow puriform lymph. A large quantity of yellow fluid, which had evidently escaped from the intestines, occupied the depending portions of the abdominal and pelvic cavities. The intestines contained some yellow semi-solid fæces. There was a perforation situated about a foot and a half from the ileo-cæcal valve, occupying the base of a cicatrising ulcer. Several of Peyer's patches were observed to be ulcerated, quite free from sloughs, and evidently in process of cicatrisation. The long axis of the ulcers was usually transverse to the course of the intestine, owing, I suppose, to the fact that cicatrisation had commenced from each end, and not laterally. There was a mass of almost entirely cicatrised ulceration in the neighbourhood of the ileo-cæcal valve. The liver was enlarged and pale. The spleen was enlarged, and generally soft and congested. Its convex surface was covered by a more or less uniform layer of yellow puriform lymph. In its upper part, and under the surface of its external aspect, was an abscess which would contain a large-sized walnut. This collection of pus had ruptured into the peritoneal cavity. The lungs were found to be hypostatically congested, but otherwise healthy. The pericardium contained a considerable quantity of clear, straw-coloured fluid. The heart was healthy.

Remarks.—Abscess of the spleen, a rare affection under all circumstances, would appear to be, contrary to what might be expected when we have regard to the fact that this organ is always affected to a greater or less degree in enteric fever, of very infrequent occurrence in this disease. Murchison's vast experience gives only two cases, both of which died, in what appeared to be a relapse, from general peritonitis, and he mentions five others from other authors. A considerable number of necropsies on the bodies of patients dying of enteric fever at Netherfield Fever Hospital during the last five years supplies only this single example of splenic abscess. In November, 1883, Dr. Coates showed at the Calcutta Medical Society a boy aged four with enlargement of the spleen, the result of malarious fever. An incision was made into an abscess, and about ten ounces of pus discharged.[2] As regards diagnosis, it may be mentioned that in this case the actual condition of affairs, as far as the spleen was concerned, was not determined clinically. But if in another case there were presented for our observation tenderness in the region of the spleen, pain under the left ribs, and a "creeping" peritonitis gradually extending from this as a centre over the abdomen, the existence of splenic abscess would be suggested to the mind; and, further, that the abscess had burst and set up general inflammation of the serous membrane would be quite a reasonable conclusion to arrive at. Although the boy was reported to have been taken ill only two days before admission to hospital, judging from the condition of the ulcers I am strongly inclined to believe he must have been going about with the fever on him for at least a week before the apparent onset of the disease. The reappearance of febrile symptoms after an apyrexial state of three days cannot be regarded as a relapse in the true sense of the word, but must be looked upon rather as symptomatic of the splenic mischief, just as in this disease, as well as in any other of the specific fevers, a continuance of the fever beyond the usual time, or a reappearance of fever, accompanied by manifest local lesions, must be regarded as purely symptomatic.

[1] Read at a meeting of the Liverpool Medical Institution, Nov. 19th, 1885.

[2] British Medical Journal, July 19th, 1884, p. 143.

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A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

ST. BARTHOLOMEW'S HOSPITAL.

CASE OF IDIOPATHIC ŒDEMA OF SCROTUM, FOLLOWED BY SLOUGHING OF ITS GREATER PORTION, WITH CELLULITIS AND SUPPURATION OF ABDOMINAL WALL; RECOVERY; REMARKS.

(Under the care of Mr. MORRANT BAKER.)

OUR readers will probably recollect the two cases of a similar description which are referred to in the remarks by Mr. Morrant Baker (see THE LANCET, 1885, vol. ii., p. 124). In both there was albuminuria, and the patients were considerably older (fifty-four and sixty-four) than the man whose case is recorded below. In one the symptoms had commenced a fortnight before he came under observation, and in the other seven days; both died, but the latter recovered from the local effects of the disease. The age of the patient in the present case, and the fact that he came under surgical treatment soon after the commencement of the symptoms, were greatly in his favour. For the notes we are indebted to Dr. F. Wigmore, late house-surgeon.

William P. H——, aged twenty-six, a cabinet-maker, was admitted into Harley ward on Feb. 16th, 1886, suffering from œdema of the scrotum. The patient stated that he was quite well until about **six weeks** ago, when he noticed a swelling in the right groin, which grew larger for about a week, and gave him a good deal of pain. It was opened at the Metropolitan Free Hospital, and, some pus being let out, he had no further trouble until the day before his admission into St. Bartholomew's, when he was suddenly seized with a severe pain in the scrotum, which swelled with extreme rapidity, and was very tender when touched.

On admission he was found to have a scrotum swollen to the size of a large cocoa-nut. It was very tense, and of a dusky-red colour with patches of dark purple. It presented all the appearances of approaching sloughing. The perineum was quite unaffected. The urethra also was entire, a No. 8 black catheter passing easily into the bladder. Four incisions were made into the scrotum where it appeared most tense, and a little blood and a good deal of serum escaped through them. The pain was much relieved. A charcoal poultice was applied. The temperature was 100·4°.

Feb. 17th. — The swelling has considerably diminished, and pieces of slough have come away. His temperature is normal. In the evening he was delirious and violent, and his temperature went up to 102°.

18th.—He obtained no sleep last night, in spite of chloral and bromide and the hypodermic injection of morphia. He appears much weaker, and his mind is very confused. The scrotum is quite lax, and most of the anterior part is occupied by a greyish slough. Urine: sp. gr. 1020; loaded with urates; contains a large trace of albumen, but there is no blood or pus. In the evening he became more delirious, and his temperature went up to 103°. His bowels have not yet been open.

19th.—Had a better night after the hypodermic injection of morphia. His temperature is 102·8°. He complains of great tenderness in the left groin, and great thirst. The skin of both groins is red, the redness extending up the left side to a considerable distance; poultices were applied over the inflamed areas; has been sick; pulse 132. He was transferred to the erysipelas ward in the afternoon. His temperature in the evening was 102·6°.

20th.—Had a much quieter night. His temperature this morning is 101·8°, and his pulse is 128 to the minute. The redness has spread up both sides, the left being the larger area. The sloughing of the scrotum has increased, and the discharge proceeding from it is very foul. The patient was put under chloroform, and several superficial incisions were made around the inflamed patches.

22nd.—The patient has improved. General condition better. Temperature 99·1°; pulse 136; respiration 48. The anterior aspect of the scrotum has almost entirely disappeared by sloughing, and both testes are exposed. The smell is still very foul. The erysipelas has diminished, and not extended beyond the incisions in any place. Charcoal poultices are applied to the scrotum, and large ones of linseed to the abdomen. The patient has developed a pleuritic friction sound, and some broncho-pneumonia over both bases. He is kept under a tent, with steam playing into it.

23rd.—Has not lost ground. Slept well. Temperature subnormal this morning; pulse 130; respiration 44. The urine contains no albumen now.

25th.—Is doing as well as can be expected. The condition of the base of the left lung is improving, but the signs have rather developed at the right base. The scrotum is healthier, and less foul. Erysipelatous condition nearly subsided. Temperature 99·2°; pulse 124, very soft; respiration 40.

28th.—The redness has completely disappeared. Odour from scrotum very offensive.

March 1st.—Feels slightly better. Temperature normal; pulse 120; respiration 40. A swelling has developed on the left side of the abdomen on a level with the umbilicus; it is red and distinctly fluctuating; it is also tender. There is an offensive blackish-green discharge from the scrotum. The patient was put under chloroform, and Mr. Baker made an incision into the swelling at its upper end and back part in the anterior lumbar region, when some dark, bloody, and very offensive discharge escaped. A long probe was then passed into the opening thus made, and the abscess cavity was found to track downwards and forwards to the pubes. Two other openings were made, the lowest just above the pubes, and drainage-tubes inserted. The poultices were continued.

3rd.—Seems considerably better this morning. A good deal of pus has escaped from the incisions of yesterday, and free drainage is maintained by the tubes. The discharge from the granulating scrotum not nearly so offensive as heretofore. Temperature subnormal; pulse 108; respiration 34.

8th.—Getting on well. Takes food well. Local conditions much improved.

10th.—Better in every way. Condition of abdomen very good; very little discharge. Tubes taken out; scrotum looks healthy.

15th.—Patient quite well up to 9 o'clock last night, when he became feverish, and his temperature went up to 101·6°. This morning he complains of headache and thirst. Edges of scrotal wound thickened and œdematous. There is redness over the right groin and extending a little upon the abdomen and over the buttock. Several incisions were made in the skin surrounding the patch.

16th.—The redness has almost entirely disappeared; the incisions seem to have controlled its spread. Scrotum healthier and less œdematous.

17th.—Redness less. Patient much better. Urine natural.

23rd.—Scrotum granulating nicely; dressed with boracic ointment.

April 21st.—Patient went to a convalescent home nearly well.

Remarks by Mr. MORRANT BAKER.—The foregoing case is an interesting example of a disease which is very apt to be confounded with extravasation of urine, and the notes may be compared with those of similar cases recorded in THE LANCET of July 25th, 1885. The diagnosis from extravasation of urine may be made, indeed, without much difficulty; but the superficial likeness in the two cases is very close. Apart from the history, the less marked hardness and tension of the scrotum, with the absence usually of any tense swelling in the perineum, in the erysipelatous cases will raise a suspicion of the nature of the disease, and the passage of a full-sized catheter without difficulty into the bladder will complete the diagnosis. In the present instance the extension of the cellulitis with suppuration to the abdominal wall above the line of Poupart's ligament is of much interest in connexion with the other points of similarity in the two groups of cases. The benefits arising, in what seemed a hopeless case, from free incisions of the abdominal wall, both in preventing extension of the disease and subsequently, with free drainage, in allowing the escape of decomposing fluid, which tracked from the scrotum nearly to the loin, were most marked. In many cases erysipelatous sloughing of the scrotum seems indicative of some profound deteriora-

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tion of the general health. The patients whose cases were recorded last year both died; one within a few hours after admission into the hospital, and the other within a week or two of going to a convalescent home. The present case—a much younger patient—seems to be an exception, if one may judge from the apparently complete restoration to health which took place before his leaving the hospital.

MONTGOMERYSHIRE INFIRMARY.

A CASE OF PREGNANCY WITH ALMOST COMPLETE OCCLUSION OF THE VAGINA. (? CONGENITAL.)

(Under the care of Mr. C. E. MONRO.)

TOWARDS the end of October, 1884, C. K——, aged twenty-two, single, was brought by her mother, for the purpose of ascertaining the existence or non-existence of pregnancy. The mother, in common with the neighbours, had noticed her daughter's marked increase in size, and had arrived at the conclusion that she was pregnant. While strenuously denying this, the girl admitted that she had not menstruated since the beginning of April; menstruation had always been painful to her. The breasts were full, and the nipple and areola typical in appearance. She would not admit marked morning sickness, but indigestion, acidity, and flatulence were generally present, especially in the earlier portion of the day. It was endeavoured to ascertain the presence or absence of *balottement*, but about an inch and a half within the vagina an obstruction was found, which appeared to be complete—in fact seemed to form a "cul de sac"; apparently there was no aperture, but it was thought at one part of the obstructing membrane there was a slight depression. The urethra was suggestively dilated, admitting the index finger, and she had suffered from a certain amount of incontinence of urine. The opinion was then expressed to the mother that her daughter was about six and a half months advanced in pregnancy, but that there existed an obstruction which would necessitate an operation before she could be delivered. At the same time she was recommended to send the patient into the infirmary. It was then ascertained that when she was two years of age a boy had pushed a pointed stick into the vagina, causing laceration and hæmorrhage. When taken to a medical man, he expressed the opinion that "the injury might cause future trouble."

On admission she was examined with a speculum, and by means of a probe a minute aperture was discovered, just admitting an ordinary probe; by cautiously pushing it some distance above, the cervix could be felt. It was proposed to defer any operation till the child was viable, which would be about the second week in November.

Nov. 12th.—Assisted by Dr. Gowan and Mr. W. B. Ray, having first placed the patient under chloroform (before which both Dr. Gowan and myself detected the fœtal heart sounds to be 144 to the minute, the mother's pulse being 72, though the patient still persisted that she did not feel any fœtal movements, and that she was not *enceinte*), Mr. Monro proceeded to divide the obstruction with a hernia knife through a speculum from before backwards, the blunt-pointed knife being pushed through the minute aperture above mentioned; the incision was somewhat limited, the rest of the tissue being broken down with the fingers. The hæmorrhage was inconsiderable. The os uteri was then felt high up, with the fœtal head presenting. The vagina was washed out with permanganate of potash solution, and a Barnes's hydrostatic dilator (medium size) introduced; after the lapse of twelve hours this was removed, the vagina again syringed out, and the dilator reintroduced. This treatment was persisted with until the full-sized dilator had been brought to bear upon the still somewhat constricted portion of the vagina.

After a day or two it was deemed advisable to bring on labour; the os was dilated, the membranes ruptured, and a dose of ergot given. A fair labour followed, and, without any unusual difficulty, a moderately nourished child was born, weighing five pounds and a half, which survived its birth several hours.

Remarks by Mr. MONRO.—My reasons for heading this case "? congenital" are—1. That the slight injury in childhood was to the vulva or hymen (or is it possible that the obstructing membrane could have been the hymen abnormally placed and persistent?). 2. The appearance and feel of the tissue divided was that of a musculo-membranous structure similar to that of the vaginal wall, and by no means *cicatricial* tissue. If the case had not presented itself when it did, it would have been a critical complication at term, with the descending head pressing upon the obstruction. She was discharged from the infirmary at the end of three weeks, but was treated as an out-patient for incontinence of urine, from which she recovered. I ascertained that the vagina had again contracted so as to admit my index finger with difficulty, and then strongly cautioned her against running the risk of becoming pregnant again. My advice does not appear to have been taken, for I was informed that two months after leaving the infirmary she was married.

Medical Societies.

CLINICAL SOCIETY OF LONDON.

Report of Albumen Test Committee.—Aneurysm of Hepatic Artery.—Treatment of Nævus by Excision.—Suppuration in Mastoid Cells, with Thrombosis of Lateral Sinus and Septic Embolism.—Simultaneous Inflammation of Serous Membranes.

THE last ordinary meeting of this Society was held on the 28th ult., Sir Henry Thompson, Vice-President, in the chair.

The Albumen Test Committee presented a report of the work accomplished by them, which, according to custom, was received without discussion. In it the committee briefly reviewed the various modes of urinary testing for albumen in common use, and compared in turn Dr. Oliver's test-papers, Dr. Johnson's picric acid method, the potassio-mercuric iodide and acid, Dr. Pavy's pellets, the acid brine method, picric acid and brine, the acetic acid, and the nitric acid methods. The portability and delicacy of reaction of Dr. Oliver's papers were strong recommendations, but, apart from the question of easy carriage and compactness, the committee considered that nitric acid was most reliable and delicate. All the methods were said, however, to be respectively useful for the determination of the various proteids that might be contained in urine.

Dr. R. CATON read a case of Aneurysm of the Hepatic Artery. Only ten cases were believed to have been placed on record in European and American medical literature. The patient, a man aged forty, was admitted on Aug. 8th into the Liverpool Northern Hospital. He had had an attack of pain in the right hypochondrium accompanied by jaundice at Christmas, 1884; this lasted fourteen days, and was followed by complete recovery. Otherwise he had enjoyed good health till August 3rd, when the pain and jaundice recurred with great severity. He was admitted complaining of intense cutting pain in the right hypochondriac region; was in a state of partial collapse; the face and forehead covered with cold sweat; the pulse feeble and beating 92 times a minute; the temperature normal. He recovered under the administration of stimulants, warmth, and hypodermic injections of morphia. The hepatic dulness was found to extend 3½ in. in the mammary line, and percussion elicited tenderness over the liver. A rounded tender swelling, taken for the gall-bladder, was felt below the liver, a little to the left of the mammary line. The tongue was furred; skin and conjunctivæ yellow. The bowels acted with copious loose dark evacuations. The heart's dulness seemed increased; the thorax generally was hyper-resonant on percussion. The day after admission the patient was in a peaceful state. But the pain returned a day later and vomiting set in. On Aug. 11th the stools contained blood clots. This was the first time there had been any evidence of the presence of blood in the stools; it was now understood that the dark-coloured evacuation spoken of by the patient had consisted of altered blood. The diagnosis hitherto had been that of obstructive jaundice due to impacted gall-stones, but the occurrence of hæmorrhage cast doubts upon it. Two or three theories suggested themselves—viz., hæmorrhage from the bile duct, but the amount of blood was too great for such a source; or hæmorrhage from the bowel, having no special connexion with the liver affection; this seemed more probable, but was not a satisfactory explanation. Dr. Caton confessed that aneurysm of the hepatic artery never occurred to him. During the whole of Aug. 12th the pain was absent. Two stools were passed, both containing blood. The tongue was thickly furred. Temperature in the morning, 99·4°; and at 8 P.M., 102°. At 11.15 P.M. the house-physician was hastily summoned to the

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ward, where the patient was found lying on the floor apparently dead. His face was pale and contracted, large drops of perspiration stood on his forehead, the pulse was scarcely perceptible, and he was for a few minutes only partially conscious. An ounce of brandy was administered, and half a grain of morphia was injected subcutaneously. The patient rallied for a time. He stated that sudden and intense pain had occurred in the right hypochondrium, and in struggling he had fallen out of bed. Considerable quantities of blood were vomited. He gradually sank, and died early in the morning. At the necropsy, an aneurysm about the size of a large marble was found in the hepatic artery; it had burst into the hepatic duct; the blood had passed back, injecting all the large bile ducts in the substance of the liver; it had also entered the gall-bladder, which was full of clots; and a large quantity of blood was also found in the duodenum, stomach, and intestine generally. Nothing noteworthy was found in any other organ.—Dr. GLOVER inquired whether a bruit had been detected over the tumour, and if there were any history of syphilis in the patient.—Dr. CATON replied in the negative to the first question; the notes would not supply an answer to the second.

Mr. R. W. PARKER read a paper on the Treatment of Nævus by Excision. He first read notes of a case of suppurating nævus situated on the back of a child aged ten months. It was of the mixed variety—that is, partly cutaneous and partly subcutaneous. When first seen it measured 2½ in. by 2½ in., and was considerably raised above the surface. The central (cutaneous) area was bright-red in colour; the subcutaneous (raised) portion extended several inches around this central one. It was stated that it had rapidly increased in size within the last few weeks. The nævus was excised through an elliptical incision, the edges of which were subsequently brought together with catgut sutures, and then coated with iodoform collodion. The child made a rapid recovery and left the hospital within three weeks. After removal the nævus was cut into and found to contain about an ounce of blood-stained pus. The interior of the sac was rough and corrugated, and divided into numerous loculi by strands of shreddy tissue running across the cavity. This case, the author said, was selected as being unusual on account of the suppuration within the sac; and because, on account of the size and of the largely subcutaneous nature of the nævus, it well illustrated the adaptability of excision as a means of treatment for this (mixed) variety of nævus. Mr. Parker divided nævi into three chief classes—the cutaneous, the subcutaneous, and the mixed variety, the last mentioned being by far the most numerous. For cutaneous nævi one of the simplest and most efficacious methods of treatment was the application of fuming nitric acid; for the subcutaneous variety, he advocated electrolysis or excision; for the mixed variety, excision was regarded as the surest and most speedy as well as the most radical method. The paper concluded with an analysis of 564 cases, and a description of the histological characters of nævus, microscopic specimens of which were exhibited.—Mr. GOLDING BIRD took exception to the sweeping statement that excision should be applied to all cases of nævus. Ligature was much to be preferred in cases which occurred in out-patient practice. A smaller scar followed the ligature than after excision, and the latter method was inapplicable to nævi of the scalp. In nævi below the lower eyelid and at the end of the nose the galvanic cautery alone could be used, and neither ligature nor excision could be adopted in these situations. Properly employed, the cautery left a minimum of scar and the least amount of contraction; cicatrisation being slow and cauterisation frequent at first. The cautery should be applied always at the circumference in commencing the treatment. He had lately employed this practice frequently.—Dr. WARD COUSINS said in some cases the knife was the best mode of treatment, but the worst in others. Some nævi disappeared under any kind of treatment. Nævi of the eyelids and nose should be cautiously and slowly treated; frequent and long-continued scarification was the method he himself adopted for these nævi. He approved of the extended use of the actual cautery, and never now made use of injections and never employed the ligature under any circumstances.—Mr. PARKER, in reply, said he had formerly had much experience in the use of the actual cautery. For nævi about the nose and eyelid he employed electrolytic needles. He advocated excision as being a radical cure, and because the after-treatment was so simple, especially when the edges of the wound could be brought well together.

Mr. VICTOR HORSLEY read a case of Suppuration in the Mastoid Cells complicated by Thrombosis in the Right Lateral Sinus, and Septic Embolism of the Heart and Left Lung, in which Recovery followed Trephining of the Mastoid Process, &c.; with Remarks on the Prevention of Septic Embolism in such cases. The patient, a female aged seventeen, was admitted into University College Hospital on July 31st, 1885. The history of the present illness showed that she had suffered from chronic otitis media since an attack of the measles at three years of age. This was aggravated by small-pox at thirteen years of age. Fourteen days before admission she "caught cold," and the parts around the right ear became acutely inflamed. The present state revealed total deafness in the right ear and extensive cellulitis, extending in front over the parotid, and above as high as the parietal eminence, while posteriorly it covered the mastoid bone and extended on to the occipital. The patient was evidently very ill, the temperature was 101°, and there was a foul discharge from the ear. Immediately on admission, Dr. Penrose, the house-surgeon in charge, made a free opening over the mastoid process. A quantity of fetid pus escaped, and the bone was found to be bare for some distance. On August 6th the patient's condition had become more unfavourable, and at midday the temperature was 105°. Mr. Horsley therefore considerably extended the wound, and found that the skull was bare over the lower and posterior fourth of the parietal bone, the whole of the mastoid, and part of the occipital. He trephined into the mastoid antrum, opening up the cells freely afterwards with a gouge, &c. He then cut away all the posterior wall of the external auditory meatus, converting the whole of the middle ear, mastoid cavities, &c., into an open gutter. The mastoid was full of horribly fetid pus. The whole wound was very thoroughly disinfected, and dressed with iodoform and iodoform wool. Next day the patient was drowsy, and the temperature exhibited a typical pyæmic curve. On the 9th—i.e., three days after the foregoing operation—the patient was seized at midnight with severe præcordial pain, dyspnœa, &c., lasting about half an hour. These symptoms of cardiac embolism were soon changed for those of pulmonary embolism, for the patient complained of severe pain under the lower angle of the left shoulder-blade, and here the physical signs of such a condition became evident. The patient, who had been treated at first with antipyrin, which produced violent and exhausting after-effects, was now kept perfectly quiet, and given large doses of Warburg's tincture. From this time she slowly gained ground, and convalesced completely about the end of September. In December the drainage-tube was left off. The suggestion was that thrombosis of the lateral sinus, if diagnosed (the symptoms were summed up in the original paper), could be successfully treated by very thorough clearing out of the temporal bone, &c. It became an open question whether under these circumstances it was not justifiable to ligature the internal jugular vein, since awkward complications arose from the very simple effect of detachment of portions of the septic clot.—Sir WILLIAM DALBY thought a procedure such as ligature of the jugular vein would require much careful consideration. It was important, however, to formulate rules for the opening of the mastoid cells. Many lives were sacrificed because this was too long delayed. These rules had been suggested by himself in former papers read before the Royal Medical and Chirurgical Society. When great tenderness existed, and a discharge was present through a ruptured tympanum, with pain and with high temperature, it was time to think about opening the mastoid cells. In one case symptoms of infantile palsy suggested the operation, the results being good. A special drill, devised for the purpose by himself, allowed of the easy and safe opening of the mastoid cells.—Mr. HORSLEY agreed as to the advisability of early opening of the cells; he would like to have discussed the question of opening the tympanum in cases of otitis.

Dr. HALE WHITE read a paper on Simultaneous Inflammation of several Serous Membranes. The patient, a girl aged nineteen, had never had rheumatic fever, but her father and mother had both died of heart disease. On admission she had some fever, abdominal pains, tenderness, constipation, impaired abdominal movement, slightly albuminous urine, and general pains about the body, especially the legs. The signs of peritonitis increased, but no cause for it could be made out. Two days after admission, the heart, which was normal on her coming to the hospital, showed increased cardiac dulness, extending upwards to the lower part of the second rib; there was a basic systolic murmur. The next day she was much worse, passing everything under her, and was sick. The breathing was entirely

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thoracic. The cardiac dulness extended to the right of the sternum, and the cardiac pulsations were very visible over the whole area. Two days later there was a pericardiac trill present. In addition to the basic systolic, there was an apex systolic murmur. There was some dulness at the base of the right lung. A few days later some fluid was drawn off with a hypodermic needle from the right base. The signs of pericarditis became definite, and a pleuritic rub appeared on the right side. From this time the patient began slowly to improve; the cardiac dulness became normal; the dulness at the bases of the lungs disappeared, as did also the signs of peritonitis. During her convalescence the basic systolic murmur remained, but the apex systolic gave way to a presystolic, which persisted till her exit from the hospital, at which time, except for the presence of these murmurs, she was quite well. The examination of the sputum for tubercle bacilli and the choroid for tubercles gave negative results. During the severe part of her illness she was treated with opium, during her convalescence with iron and quinine. There can be no doubt that this patient had pericarditis, peritonitis, and pleurisy, and, in addition to this inflammation of three serous membranes, endocarditis, which led to a permanent presystolic murmur. The causes for inflammation of several serous membranes might be tubercle, Bright's disease, rheumatism, and pyæmia; or it may be that in certain exceptional cases the serous membranes have a tendency to inflame apart from any of the above causes. With regard to tubercle, it is certainly a possible cause in this case, for a boy was some years ago admitted into Guy's Hospital with pericarditis, pleurisy, and peritonitis. He got better and was discharged, and was readmitted shortly after with meningitis, which proved fatal, and it was then discovered that the pleurisy, pericarditis, and peritonitis were tubercular; but in the present case such an explanation leaves unexplained the endocarditis, and a careful examination of the sputum and choroid gave negative results. The slight albuminuria present on admission quickly disappeared, and the patient clearly had not got Bright's disease, and certainly also she had not pyæmia; and then, again, pyæmia rarely, if ever, caused peritonitis, apart from a spreading from some local suppuration. The late Dr. Fagge used to teach at the bedside, and had also mentioned in his recently published book, that sometimes he met with cases in which the three serous membranes now under consideration were inflamed at the same time apart from any cause that has been previously mentioned. The present may be an example of such a group of cases. Lastly, there is the rheumatic hypothesis. In favour of this is the fact that the patient's parents died of heart disease, that during the attack she developed endocarditis, and that the pains in the legs, which at the time were set down to her febrile condition, were severe, and might possibly have been rheumatic. The great objection to this view was that many who have had large experience deny the existence of rheumatic peritonitis, although now that it had been shown that Bright's disease would cause peritonitis, we must allow the existence of general causes for it. The case was put on record because it was of great interest as belonging to the very obscure group of inflammation of several serous membranes, and might perhaps, by the light of future cases, show that they were due to a rheumatic diathesis.

The following living specimens were exhibited:—Mr. Wainewright: Vertical Fracture of Head of Radius with Fracture of Coronoid Process of Ulna, treated by removal of the fractured portions. Mr. Godlee: A case of Myositis Ossificans. Mr. Battle: Charcot's Disease of Knee-joint in a woman aged forty-seven.

HARVEIAN SOCIETY.

Nerve-stretching for Leprosy.—The Albumens of the Urine.

A MEETING of the Society was held on May 20th, J. Hughlings Jackson, M.D., F.R.S., President, in the chair.

Dr. E. DOWNES read a paper on Nerve-stretching for Leprosy, founded on a large experience in nerve-stretching for leprosy and sciatica in Kashmir. Of forty-two cases recorded, thirty-two were well-marked cases of leprosy, and in all these anæsthesia of the lower extremities was an early and well-marked symptom. It was sometimes absolute and sometimes partial, being occasionally accompanied by absence of pigment or by tubercles, the latter occurring more commonly on the face, and often with severe neuralgia of the deeper parts. Ulceration commonly occurred in course of time, and especially in the feet, possibly beginning in some cases as a result of direct injury to the anæsthetic tissues, and often extending to complete destruction of the parts. Some of the cases recorded had lasted from one to seven years, and longer in two instances. The operation was done through a three-inch incision at the back of the thigh, the finger being hooked round the nerve and the limb lifted from the table. All the cases were benefited by the operation, and in some the ulcers healed completely and sensation was nearly restored to its normal state; the latter generally took place in the first few days. This success was fully appreciated by the patients, who repeatedly sent their friends suffering from leprosy to be similarly operated upon. The author observed that an exclusive diet of dried fish was not always an element in the production of the disease, many of his cases coming from districts where none was obtainable. He believed the ulceration to be due to peripheral neuritis, consequent upon some altered condition of the blood, for which the presence of bacilli might be answerable.—Dr. BUZZARD observed that these cases afforded direct proof of the relation of leprosy to affections of the peripheral nerves, and not to those of the spinal cord. The neuralgia and the immediate results of stretching were strong evidence in this direction. Although few English medical men had to deal with leprosy, he thought that a practical knowledge of the disease would lead to more thorough investigation of other forms of degeneration of nervous origin. Leprosy was at one time endemic in England, and he suggested that remnants and traces of it might still be existent in the form of localised atrophy or leukoderma.—Dr. DOWNES, in reply to questions, stated that in one of his cases sensation had continued good for two years; none others had been under observation for so long a period. He had obtained uniformly good results in nerve-stretching for neuralgia and sciatica.

Dr. ROBERT MAGUIRE read a paper on the Albumens of the Urine, the first portion of which will be found in our present issue.—Dr. BROADBENT, in acknowledging the extreme practical value of Dr. Maguire's observations, commented upon the clinical varieties of urinary albumen, sometimes associated with conditions of high arterial tension and sometimes with the reverse. Patients in the former condition were rarely in vigorous health, as suggested by Dr. Maguire, but always more or less ailing, and tonics did no good; these cases were generally associated with over-exertion or mental worry. The albuminous condition in early chronic renal disease was not always of the ordinary type.—Dr. SEDGWICK asked for information as to the relative amount of urea in the cases examined.—Dr. M. HANDFIELD JONES commented on the prognostic value of Dr. Maguire's experiments in deciding upon treatment in cases of albuminuria in pregnancy.—Dr. MAGUIRE warned the Society that his experiments must not be accepted as absolutely proven facts until they had been confirmed by further work. He had not estimated the quantity of urea.

ACADEMY OF MEDICINE IN IRELAND.

Causation and Treatment of Pneumonia.—Hyperpyrexia in Rheumatic Fever.

AT a meeting of the Medical Section on Feb. 26th, Dr. MARTIN (Portlaw) read a paper on the occurrence of a large number of cases of Pneumonia within a period of three months in a space about equal to half a mile square in that town. In only one instance did two cases occur in the same house, and in one of these the man was seized while working at a place six miles distant, where he had been residing for three weeks previously, and only returned home to be nursed. No person occupied in attending on or nursing a case was affected, even under circumstances particularly favourable to such a result. A certain amount of insanitary surroundings generally existed, and to this, aided by the particularly unfavourable climatic influence which prevailed, he attributed the outbreak, especially as in almost every instance the patient stated that the illness was produced by a chill caused by exposure to the peculiarly severe easterly winds which prevailed, when heated by exertion. Of the twenty-eight individuals attacked, twenty-six recovered. The treatment was based on old-fashioned lines: in the early stage, aconite, salines, diaphoretics, poultices, leeches; and in the advanced stage, occasionally flying blisters, and after their removal cotton-wool covered by gutta-percha paper, the patient's strength being supported all through by milk, beef-tea, eggs, and sometimes stimulants, but in very moderate quantities.

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Dr. MARTIN tried quinine in some cases, and though perhaps with advantage, he was not in love with it as a remedy, preferring brandy when the temperature ran high, which agreed better with the patient and acted more speedily; but he stated that when one considered the very unfavourable circumstances under which he had to treat these patients in their own homes—seldom clean and amidst extreme dirt and poverty—his opinion on the action of a special drug like quinine could not be very positive or reliable.—Dr. H. KENNEDY did not look on pneumonia in any form as an infectious disease. In any acute disease rigor was the rule, and therefore he did not give any particular weight to its occurrence in pneumonia. He knew of an instance of nine out of twenty-one cows, all grazing on the same grass at Santry, dying of pneumonia; but the nine were Alderney cows, while the remaining twelve which remained healthy were of a different breed; in those cases he set down the disease to the difference in breed. Again, as to the epidemic character of pneumonia, he remembered, a good many years ago, having within three weeks nearly twenty in hospital in whom the upper lobe of the lung—generally the right—was attacked. The health of animals was no doubt deteriorated by bad sewage, but why the result should be pneumonia at one time and typhoid fever at another was a matter still *sub judice*.—Dr. WALTER SMITH said we must still confess to ignorance of what determined the outbreak in a large number of cases. He was struck with the remarkable contrast which the mortality of Dr. Martin's cases presented (only two deaths out of twenty-eight cases) as compared with that of the epidemic in Dublin. In Dr. Martin's cases it was of great practical interest to note that the pneumonia left permanent traces behind, as contradistinguished from the usual experience of acute pneumonia, which as a rule subsided, and the lung in many cases perfectly recovered, the patient being not a whit the worse—excluding, of course, cases of bad pleurisy—Dr. W. MOORE, referring to the contagiousness of pneumonia, instanced the case of a man, aged seventy, who died of it, and whose attendant, aged twenty-two, was attacked three or four days afterwards with the disease, from which he recovered.

Dr. A. N. MONTGOMERY, in the absence of Mr. W. Langford Symes, read his paper on Hyperpyrexia in Rheumatic Fever. The patient was a lady aged twenty-seven years, who, on a passage from Liverpool to Valparaiso, was attacked on board ship with all the symptoms of acute articular rheumatism. The temperature rose on the third day to 102°. She was put on the salicylate of sodium treatment, and in ten days the temperature was normal, and the patient was walking about free from pain and fever. However, after a convalescence of ten days she got wet through while in bed by the sea coming through the port-hole, and all her old symptoms returned, with a rapid rise of temperature to 106° within thirty-six hours. A full dose of twenty grains of quinine failing to have any effect in lowering the temperature, which continued to rise rapidly until the thermometer reached 108°, as a *dernier ressort* recourse was then had to the ice-pack, using towels wrung out of iced water, the application being gradually extended from the head to the lower extremities, and the patient being then rolled up in blankets, she was kept thus for ten minutes at a time. After the third and last application the temperature had fallen to 97·8°, thus making a sudden fall of 10·2° in the space of forty minutes, with marked relief to the head symptoms, as she completely lost her delirium, spoke rationally, and expressed her delight at feeling the icy cloths around her. The temperature after three days rose again to 102°, but never went higher; and from this point the pains diminished, and she finally landed in Chili thirty days after her first attack, free from any acute rheumatic symptoms other than a damaged mitral valve. The author remarked that though this plan of treatment was not free from danger from endocarditis, considering the weakened condition of the heart, still in this case, when other methods had failed to reduce the high temperature, it had succeeded, when if left alone the case must have ended fatally. He therefore thought that he was justified in using it.—Dr. W. MOORE believed there was no disease in which hyperpyrexia occurred less frequently than in acute rheumatism. He saw recently a young gentleman with this affection, and the temperature never rose above 101°; and very lately he saw a lady perfectly powerless, whose pulse was 120, while her temperature was normal. As to temperatures of 108°, 109°, and 110°, he never saw them. There was a form of rheumatism, which for want of a better name was called pyæmic, in which high temperature might occur.

THE GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

TUESDAY, JUNE 1ST.

SIR HENRY ACLAND, PRESIDENT, IN THE CHAIR.

A LETTER was read from Sir Henry Pitman, resigning his appointment as member of the Council; and official notifications were read of the appointments of Sir William Gull as representative of the University of London, and of Sir Dyce Duckworth as representative of the Royal College of Physicians of London.

The PRESIDENT then delivered his opening address. He said that in this its thirty-ninth session the Council entered on its accustomed work with better hope than in past days, there being a fair prospect that the delay of the last fifteen years in granting further powers to the Council might come to an end in a way which might be considered a safe adjustment by the Legislature and the public. Having given a general outline of the new Medical Bill, he said that the new powers imposed no fresh duties on the Council, but enabled it to discharge with facilities the duties which hitherto it had not been able to fulfil. "The constitution of the Council," he said, "and even the individual members of the Council, remain the same, with the addition only of such fresh blood as the practitioners of the three divisions of the kingdom may in their discretion see fit to add to your body. Thus your educational work now in continuous progress need receive no check, but will obtain assistance rather from the cessation of a weary period of uncertainty. You can steadily proceed with that which is in hand without the fear, hitherto always impending, that your labour might be thrown away. For this result the medical profession and the public have reason to be grateful to the Government. I proceed to say briefly what is the work before the Council in this session. Primarily, it is still educational. Time was when it was hoped that some final resolutions would be arrived at, and that a royal road could be found for laying down rules for general, for scientific, and for professional education and examination. This road, after much exploration, is not yet discovered. But assuredly for the present we have data enough without further reports and inquiries. Do not students, not to say teachers and examiners, want rest rather than change? Do they not all need the assurance that their work, faithfully done, with the simple aim of making good practitioners, will be accepted without the endeavour to draw 'hard and fast lines' which will be frequently changed? Can it be that such details as the modes of marking the duration of time for written papers, and even the modes of distributing the papers, adopted by the great examining bodies, are to be any longer subjects of detailed and costly investigation? For myself, I feel bound to say that, should the Council deliberately believe it needful to see, for instance, that the mode of supervision during the writing of the papers is correctly carried on by any of the licensing bodies, the question arises whether the certificates of such institutions are any longer entitled to credit. But, in fact, inquiries of this elementary nature may, perhaps, be considered as completed by the publication of the series of papers now to be laid before you on the final examinations of the universities. These papers, together with the report of Mr. Teale, Professor Gairdner, and Mr. Stokes, substantially give a picture of the condition of all the licensing bodies in the kingdom up to the present date. It is not alleged that any body now wilfully makes default in examining, though it may be still possible that among large numbers of candidates some good are rejected, and also that through the skill of 'crammers'—or, to be more truthful, through the want of power to make examinations an unerring test of practical knowledge which cannot be evaded—some bad occasionally succeed. It is therefore proposed to refer the whole subject once again to a committee, which shall, at the next meeting of the Council, report on the whole subject of examinations. No one can reasonably doubt that each licensing body in the kingdom will accept recommendations deliberately made by the Council, and all the more if these recommendations are not often changed, and are not drawn out in too minute detail.

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The Government Bill seems somewhat unnecessarily to dwell on the importance of appointing inspectors. The branch Council of England judiciously lays before you a brief but careful account of the course which visitations have taken in the last twenty years; it draws attention to the great increase of expense which has taken place in conducting them, and chiefly for this reason it recommends a complete revision of the regulations concerning them. In cordially agreeing to this proposal, I would not wish to be understood to express a doubt as to the expediency of the steps hitherto taken, nor as to the work of the visitors, whose zeal and success is appreciated by all. These steps have necessarily brought us by successive stages from a condition of educational chaos to one of more and more complete information. But I venture to repeat that, if there be any body which needs constant and minute inspection, from whatever cause, it is quite unfit to be entrusted with the function of licensing. Within the last quarter of a century the examination conditions have been greatly altered. The broad principles of medical education are now universally understood. If there be any bodies which do not, or cannot, adopt them, they are not entitled to public confidence. Personally, I do not believe that any such bodies now exist." After referring to several subjects to be brought before the Council, the President proceeded:—"It is clear that the machinery of medical education in this metropolis is about to undergo complete revision. The new buildings of the Royal Colleges, with their projected apparatus for education and examination, will, by aiding the unity and completeness of examination, aid the unity and completeness of teaching in the now numerous and separated schools of London. As the colleges in the old English universities have united in various ways for teaching purposes, so it is not impossible that the great medical schools may find an advantage in some form of union, both professorial and tutorial. Equalised instruction will in the present day generally produce higher and better organised instruction. We have to get rid of the old idea that all competition is downwards. The reverse is becoming the case. It is certain—and it is almost startling to say this—that some of the instruction given in London hospitals for the average learner is tenfold more detailed and more precise than in the student days of Hunter and of Brodie. Still, that it should be equal in all schools is impossible. But the clinical material in the hospitals, workhouses, and dispensaries is amazing by its vastness, as is too well known to philanthropists. Whether very minute teaching of this mass is valuable for the strong and independent youth, already trained and disciplined in scientific methods and university life, may, perhaps, be open to question. Strong men with large opportunity teach themselves. Students trained through really scientific methods will outstrip their less fortunate comrades at the bedside. But the general result throughout the whole kingdom of this movement must be a prudent regulating of the average education of the so-called pass-men. This is our real business. And then will follow of necessity the question, if it has not already been raised, of the recognition of such pass or training by title or degree. Then almost with certainty will be forced on this Council, in some form, the nature of 'higher titles.' The old traditional notion is not yet exploded that the titles of Fellow or Doctor, howsoever obtained, imply distinction. Is not the time now coming when an educated public will know that it is not the name, but the body that gives the name, which sets a stamp of honour or of nullity? The meetings of this Council will, under the pressure of new conditions, become a means of valuable interchange of thought on methods of study, by a skilled representative from every part of the kingdom, rather than meetings to inquire into examination details which are thoroughly understood by all examining bodies, and whose discussion will therefore be a thing of the past. The coming modes and the progress of the average teaching will, while science moves onwards, be a never-failing object of careful study." Having briefly expressed the regret of the Council at the loss of Dr. Storrar and Dr. Scott Orr, the President concluded:—"When, at the outset of my address, I spoke of the relief afforded to the Council by the thought that the constant threat of legislation might cease for a time, in consequence of the change which has been made in the constitution of the Council, I did not intend, certainly not from the chair, to express any opinion on the legislative policy of appointing persons to the Council in a particular manner. In this chamber, however constituted, whether we be many or few, there is highly complicated educational work to be done, and the will to do it. The present faith in large numbers of electors rather than in individual responsibitity may or may not be a passing political faith. On matters such as this, it is not for me here to speak. But of one thing I may remind you: under this Bill all the old local institutions are left unaltered to carry on their work. It rests with them whether their representatives on this Council shall labour for some supposed gain to any one division of the country and to their own special class, or whether, by here maintaining touch with their peers, they seek in the department entrusted to them the common weal of the Empire, at home, in India, and in the Colonies. If they steadfastly do this, they will continue to promote the health and comfort of large portions of mankind, sending out capable and upright men, to prevent, as well as to treat, disease in every part of the globe."

The Executive Committee was then appointed, consisting of Dr. Haldane, Dr. Quain, Mr. Marshall, Dr. A. Smith, Mr. Simon, and Dr. Humphry.

Sir Dyce Duckworth was appointed a treasurer in the place of Sir Henry Pitman, and Mr. Marshall was appointed chairman of the Business Committee.

The Finance Committee having been appointed, the President, in the absence of the public, made a statement of the facts that had come to the knowledge of the Council in regard to the discovery of Mr. Philp's defalcations. On the readmission of the public, the usual tables were received showing the results of preliminary education in 1885; the number of exceptional cases in 1885 under Clause 20 of the Council's recommendations on education and examination; the results of professional examinations held in 1885 for qualifications granted under the Dentists Act; also returns from the Army Medical Department, and the reports of the visitors of examinations held in 1885, with the remarks of the bodies visited.

Mr. MARSHALL moved, "That a committee consisting of five members, including one from each Branch Council, to prepare a summary of the reports of the Visitors to the examinations of the universities, and of the remarks by the bodies visited, now presented to the Council; and that this summary be submitted to the Council at its next meeting, together with such comments as the committee may think it desirable to make."

Dr. QUAIN seconded the motion.

Mr. MACNAMARA said he could not agree with the proposal. He considered that it would be a waste of time to appoint the committee, because the whole matter would have to be discussed by the Council. He deprecated altogether the Council shunting on to the shoulders of a few the duties that should be undertaken by the whole Council. The Council was established for the special purpose of discussing medical examination and education. Visitors had been appointed, their reports had been furnished and circulated to the bodies interested, and those bodies had sent in their answers, and no advantage could be gained by the appointment of a committee. The Council would be abdicating its functions and exposing itself to very just public censure if they were to give over into the hands of a committee that which it was their own duty to discharge. It might be said that members of the Council had not had time to master these reports, but he thought that would be a reflection as to the manner in which they were discharging their duties. The reports and answers had been sent to each member, and it was their duty to have studied them and be prepared to discuss them at once. Another reason why they should not be referred was that some of the remarks contained in the reports were anything but complimentary to some of the bodies that had been visited, and it was not just to such bodies that they should remain for perhaps twelve months longer under those imputations. In justice to those bodies the matter should be discussed forthwith.

Dr. CHAMBERS agreed that it was the duty of the Council to read through the reports, and to form an opinion upon them. He thought it would be impossible for a committee to draw up a summary without giving a colour to certain items, and, however convenient such a course might seem, would be a dangerous proceeding.

Dr. PETTIGREW objected, on the part of St. Andrews University, to keep the matter waiting a whole year till the preparation of a summary might prevent members from reading the entire reports.

Dr. DUNCAN thought that the main object [illegible]

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by the reports had been already accomplished, and that it was necessary for the Council to give a judicial decision upon them.

Mr. TEALE considered that the reports ought to be summarised as proposed, and that the object sought should be, without any judicial decision, to ascertain broadly what could be learned from the picture brought before the Council as to the principles on which examinations should be conducted.

Dr. HERON WATSON said that the reports of the Visitors of the corporations were duly considered by a committee of the entire Council, and recommendations founded on them were issued, and he saw no reason why that course should not be adopted on the present occasion. It was proposed to postpone the matter to the next meeting, but who could tell when that would be, or how long the present Council would exist? The new Council might decline to take up a matter which it had not initiated.

Mr. SIMON objected to an indefinite delay, and thought that a small committee might at the present sitting deal with such parts of the reports as claimed judgment.

Dr. HAUGHTON opposed remitting the subject to the next meeting of the Council. He felt, with regard to his own body, that he was on his trial, and wished to be tried at once. He should have some very hot and lively remarks to make on the subject when it came up for discussion. (Laughter.)

Dr. A. SMITH preferred that the subject should be considered at once, and not kept in suspense.

Dr. STRUTHERS suggested that the committee also consider the reports of the Visitors of examinations of 1881.

Dr. QUAIN said that the reports were extremely valuable, and he should regret extremely if they were to be hurriedly dealt with at the present meeting of the Council. If each report were to be brought up and the Council were to act as arbiter in each case, the proceedings would be endless. He thought their consideration had better be postponed till the winter session.

Dr. HAUGHTON moved as an amendment: "That a committee be appointed consisting of five members, including one from each Branch Council, to prepare a summary of the reports of the Visitors to the examinations of the universities, and of the remarks by the bodies visited, now presented to the Council; and that this summary be submitted to the Council at this meeting, together with such comments as the committee may think it desirable to make."

Dr. PETTIGREW seconded the amendment, which, on being put to the Council, was carried.

On its being put as a substantive motion,

Mr. SIMON moved as an amendment: "That a committee be appointed, consisting of five members, including one from each Branch Council, to suggest for consideration during the present session of the Council such resolutions as they may think requisite in relation to the reports of the Visitors to the examinations of the universities, and of the remarks by the bodies visited, now presented to the Council; that other members of the Council desiring to suggest resolutions be requested without delay to send them to the committee."

Dr. MATTHEWS DUNCAN seconded the amendment, which after a short discussion was put and negatived.

The first amendment was then put as a substantive motion, and carried by nine votes to eight.

On the motion of Dr. HAUGHTON the committee was thus constituted: Sir Dyce Duckworth, Mr. Marshall, Dr. Haldane, Mr. Teale, and Dr. Lyons.

The Council then adjourned.

WEDNESDAY, JUNE 2ND.

SIR HENRY ACLAND, PRESIDENT, IN THE CHAIR.

The reports of the English, Scotch, and Irish Branch Councils, in regard to the methods hitherto adopted and to be adopted in the future in the visitations of examinations and the cost of such visitations, were received.

Dr. STRUTHERS moved a series of resolutions founded on the reports and the tables accompanying them; but on an expression of opinion on the part of several members of the Council that they should be postponed till the committee appointed yesterday had reported, he withdrew them.

The Council then resolved itself into committee for the consideration of reports by the Branch Councils in regard to the subject of elementary mechanics. The English and Scotch Branch Councils recommended the enforcement of the regulation of the General Council that the subject should be passed before registration; but the Irish Branch reported that, in its opinion, to insist upon compliance with the regulation would be impracticable and undesirable, owing chiefly to the want of appliances in the colleges and schools for teaching statics, dynamics and hydrostatics.

Dr. HUMPHRY moved: "That in accordance with the report of the English Branch Council, elementary mechanics of solids should form one of the subjects of preliminary examinations." Those reports, he said, indicated a desire that elementary mechanics should form one of the subjects of the preliminary examination. In order to ascertain whether it would be advisable to insist on this, he obtained information from various quarters. The Secretary of the Science and Art Department at South Kensington wrote that at the examination in theoretical mechanics, in May, 2375 candidates presented themselves. At the last local examinations at Oxford, 104 senior and 82 junior candidates took mechanics; and at the local examinations at Cambridge, 783 boys under sixteen took mechanics. It was therefore evident that a large number of students in England were taking mechanics, and in a very considerable number of schools there were means for studying the subject. But with regard to hydrostatics, a different state of things prevailed. Although there were numerous good elementary books on mechanics, from which students could obtain a knowledge of the subject, there was hardly any such book on hydrostatics.

Dr. HAUGHTON: Oh, yes; Galbraith and Haughton's. (Laughter.)

Dr. HUMPHRY said that at present the demand for a knowledge of hydrostatics had not been sufficient to induce anyone to bring forward a good elementary book upon it. Much, therefore, as he might desire for the purposes of physiology, that students entering the profession should have a knowledge of hydrostatics as well as well as mechanics, it seemed that at present that object could not be attained. The Irish Branch Council did not seem to have made that distinction. They sent to the various schools to ascertain what was the teaching in mechanics and hydrostatics, and the result came out that the two subjects were not by any means generally taught. Had the Irish Branch Council inquired separately as to mechanics, they would probably have obtained information similar to that received in England.

Dr. HAUGHTON said that elementary mechanics included hydrostatics.

Dr. HUMPHRY said the expression was commonly understood to relate only to solids.

Dr. PETTIGREW seconded the motion.

Dr. HERON WATSON objected to the exclusion of hydrostatics. It appeared from the report of the Scotch Branch Council that in Scotland there was no real difficulty in carrying out such an examination as had been recommended by the Council, including hydrostatics. If they departed from the repeatedly expressed opinion of the Council they would be creating great confusion in the minds of students, and introducing serious difficulties in the way of registration. As long as the subject of elementary mechanics was not enforced the subject would not be generally taught; but if the requirement were insisted upon the supply would soon meet the demand. He would move as an amendment: "That an examination in the subject of elementary mechanics of solids and fluids, comprising the elements of statics, dynamics, and hydrostatics, should be required as an essential part of the preliminary examination, and should be passed before registration on the Students' Register."

Dr. PETTIGREW asked and obtained permission to withdraw his seconding of the motion of Mr. Marshall, sharing, as he said he did, the views expressed by Dr. H. Watson.

Mr. SIMON said that the Council had so often affirmed its recommendation, that the continual reopening of the question reminded him of the labours of Sisyphus. It was not a question of enforcing the subject, but merely of recommending it as far as practicable. There was no good reason for cutting the subject in two, and thereby dislocating arrangements already made. Indeed, it was more important that students should be taught hydrostatics than that they should be taught solids and statics, and the importance of the subject had been over and over again affirmed.

Mr. MACNAMARA said he would second Dr. Humphry's motion; the regulation was compulsory and not merely a recommendation, and the Registrar of the Irish Branch

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Council would not register any student as a medical student who had not passed in the required subject. It was because that Branch Council were impressed with the importance of the subject that they claimed to allow students to pass the examination before the first professional examination. It had been said that the demand would cause the supply, but he believed the result would be a sham examination.

Dr. HUMPHRY, speaking to the amendment, said that at the universities there were higher examinations in classics and mathematics than those required by the Council, but they did not include some of the subjects which the Council were endeavouring to enforce. They did not require hydrostatics, because it did not form, in England, a sufficient subject of school education. A few years hence there might be a change, but meanwhile he suggested a compromise. It was a great pity that the regulations of the Council should be such that the several great educational bodies should not be able to comply with them.

Dr. PETTIGREW thought that the Council would double back on themselves if they omitted hydrostatics as a part of the preliminary examination, and he hoped that they would see their way to simply reaffirm their regulation, for the supply would undoubtedly arise to meet the demand.

At this point, the hour having arrived when two medical practitioners (Wm. Turnbull and Robert Thorburn) had been summoned to appear before the Council, the debate was adjourned, and the Council resumed and considered the cases of the practitioners in private. On the readmission of the public, the President informed the Council that the Registrar had been instructed to erase from the Register the name of William Turnbull, Licentiate of the Society of Apothecaries, London, 1854, Member of the Royal College of Surgeons of England, 1859, convicted of manslaughter in an attempt at abortion, and sentenced to ten years' penal servitude; and also the name of Robert Thorburn, M.D. Edin., convicted of theft and sentenced to six months' imprisonment.

The Solicitor (Mr. FARRER) then read the opinion by Mr. Muir Mackenzie on a case in regard to the removal of qualifications from the Medical Register on the withdrawal of such qualifications by the licensing bodies. The effect of the opinion was that the removal could only be effected after the Council had been satisfied that the withdrawal of the qualifications by the licensing bodies had not been in consequence of the adoption of any particular theory of medicine or surgery.

Dr. A. SMITH said it would be in the recollection of the members that last year a letter was received from the Registrar of the College of Physicians, Ireland, stating that the name of Robert Locke Evans as Licentiate in Medicine and Surgery had been erased from their roll, and he thereupon moved that those qualifications should be removed from the Medical Register. An amendment was, however, passed postponing the consideration of the case until counsel's opinion had been taken as to the right of the Council to know the nature of the offence for which the name had been removed. He reported that decision to his College, who by resolution unanimously approved of his action in refusing to state the reasons. On Jan. 1st it was resolved: "That the President be authorised to give their representative on the General Medical Council a certificate in conformity with Section 28 of the Medical Act, that Mr. Robert Locke Evans' name was not removed for adopting or refraining from adopting the practice of any particular theory in medicine or surgery." He now produced the certificate, and moved: "That the qualifications of Licentiate in Medicine and Licentiate in Midwifery of the King and Queen's College of Physicians in Ireland, appended to the name of Robert Locke Evans in the Medical Register be removed by the Registrar."

Dr. BANKS seconded the motion, which was agreed to.

Mr. FARRER then read Mr. Muir Mackenzie's opinion on the case of Henry Francis Partridge, whose diploma in Dental Surgery, Royal College of Surgeons in Ireland, had been withdrawn, "because of his having, in violation of his undertaking given to the College, resorted to advertising in connexion with the Ladies' Dental Institution, South Kensington." The opinion was to the same effect as that previously read, and the Solicitor accordingly thought that the Council had power to remove the name from the Dentists' Register.

Strangers were again requested to withdraw, and on their readmission,

The PRESIDENT announced that the Council had passed the following resolutions: (*a*) "That the qualification of Licentiate in Dental Surgery of the Royal College of Surgeons in Ireland, appended to the name of Henry Francis Partridge, be erased from the Dentists' Register." (*b*) "That the name of the said Henry Francis Partridge be also erased from the Dentists' Register."

On the motion of Mr. MARSHALL, seconded by Mr. SIMON, counsel's opinions were referred to the Executive Committee with a view to the proposal of a standing order guiding the procedure in dealing with similar cases in future.

The Council again resolved itself into committee to continue the consideration of the motion and amendment relating to elementary mechanics.

Dr. CHAMBERS said he thought it very unlikely that the University of Oxford would be able to comply with the desire of the Council that hydrostatics should be made a subject of preliminary examination. The schools which fed the University were not able to introduce good teaching of it into their curricula. It was found that the higher physical sciences were not good gymnasia for the mental faculties in boys. These sciences, which involved the doctrines of classification, such as botany, general natural history, and chemistry, might be introduced into the curricula, but hydrostatics could not be made a compulsory subject.

Dr. HAUGHTON said that if the original rule of the Council were adhered to, the most highly educated students would cease registering. Would it not be better to go back to the regulation that the student might pass in elementary mechanics either before registration or before the end of the first professional year?

Mr. MACNAMARA said that it had been clearly demonstrated that it was impossible to give education in these subjects at present in the Irish schools; and an extra year was inflicted on the medical student, at a cost of £100, for not doing what it was impossible to do.

Dr. HERON WATSON thought that if the Council insisted on maintaining their regulation, the schools would soon be compelled to provide the requisite appliances.

Dr. PETTIGREW said that if mechanics were not passed at the preliminary, the first year's study in anatomy and chemistry would be seriously interfered with in Scotland.

Dr. STRUTHERS supported the amendment. Oxford and Cambridge had only to say, "Our entrance examination will require this subject," and it would be taught; or if some schools did not conform, intending students would go to others that did.

The debate was adjourned.

THURSDAY, JUNE 3RD.

The Council resumed the debate on the subject of elementary mechanics, and finally resolved, "That examination in the subject of elementary mechanics of solids and fluids, comprising the elements of statics, dynamics, and hydrostatics, should be required in the preliminary examination, and should be passed before registration on the Students' Register; but in universities with a prolonged curriculum, where the examination in mechanics required for a degree is taken at a more advanced period of study than before commencing medical education, the registration may be effected on having passed the examination in mechanics, and it should be the duty of the Registrar to antedate the entry to the period at which the preliminary examination was passed."

The Council then proceeded to consider the following motion by Dr. Haughton: "That in the opinion of the Council it is highly important to visit and report upon the methods of teaching required by the licensing bodies." Dr. Struthers was in possession of the meeting when the hour for adjournment arrived.

A fuller report of the day's proceedings will appear in our next number.

THE YORKSHIRE COUNTY FOOTBALL CLUB.—At a recent meeting of the committee of this Club it was resolved to apply the sum of £1000 to public charities of the county from the proceeds of the Challenge Cup Competition. The following are the sums awarded to the medical charities:—Leeds Infirmary, £200; Bradford Infirmary, £110: Clayton Hospital, Wakefield, £85: Halifax Infirmary, £85; Huddersfield Infirmary, £85; Hull Infirmary, £85; Dewsbury Infirmary, £70; York County Hospital, £60; Batley Cottage Hospital, £60; Keighley Cottage Hospital, £20; Bradford Eye and Ear Hospital, £20; Doncaster Infirmary, £10; Sheffield Infirmary, £10; Beverley Cottage Hospital, £8 10s; Harrogate Bath Hospital, £10.

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THE LANCET.

LONDON: SATURDAY, JUNE 5, 1886.

THE Medical Bill still continues its precarious existence. If the Government survive a week or ten days, it may survive too; if not, it will share the fate of all its predecessors for the last fifteen years. On Monday night Sir LYON PLAYFAIR hoped to run it through Committee. We are sorry to use such an expression, but the duty of accuracy compels us. It is to be hoped that Parliament goes into other matters more thoroughly and with more knowledge of what it is about and of the principles which should determine legislation. But it is difficult to believe in the case of a Medical Bill that it approaches the subject with any such clear intelligence. It is a scramble between one corporation and another, or one university and another, or one division of the kingdom and another. When the Bill comes on in the small hours, most of the members have gone home to bed exhausted with the close air of the House and the excited debates of the period, and only a few interested members or obedient servants of the whips remain. When the division bell rings, most of them issue from the smoking-rooms as if they had been indulging in sleep rather than in tobacco. Some attempt at amendment of the fifth clause was made by the Irish members, but without any immediate effect. This is the clause that provides a new era for the Apothecaries' Companies, and which cynical critics say is the object of the Bill. But those who remained in the House in the small hours of Tuesday morning with any active purpose were divisible into two classes—those who wanted to get additional representation for their particular corporation, and those who perceived that the corporations have already too much power in the Council and have made it the powerless body which it is. The fight for more representatives of the bodies on the Council led to two divisions. It prevented the Bill getting through that night, which, in the present state of affairs, is very much like saying that it took away the last chance of the measure becoming law. The Bill proposed that Durham and Victoria Universities should have a joint representative, just as the Scottish universities have had since 1858. The first fight, begun by Sir HENRY ROSCOE, was to get a single representative for Victoria University. In this he was backed by Dr. FARQUHARSON, who, with characteristic honesty, announced that he supported Sir HENRY because he had a similar fight to make for the University of Aberdeen and expected to be backed by him in return. Sir HENRY magnified the claims and prospects of the Victoria University, though he could not maintain that it represented more than fifty medical graduates. He and all his supporters spoke very disparagingly of the Durham University and its methods. In spite of a spirited protest from Dr. FOSTER against increasing the already too large Council, Sir HENRY prevailed, partly we must say, from a most unfortunate want of firmness in Sir LYON PLAYFAIR. After this successful division came another discussion and another division on the claims of Aberdeen and St. Andrews to a separate member. Dr. FOSTER here was helped in his able opposition by Dr. TANNER and Sir JOHN LUBBOCK, and the motion was lost. But, as it is, we have the prospect of a Council with twenty-nine members, in which university representation will predominate. At present the interests stand thus: Crown five, corporations nine, universities ten, and direct representatives of the profession five. After the House had been treated to two discussions and divisions on the claims of universities, it was nearly 3 o'clock, the patience of members was gone, and progress was reported—which means that no further progress was made. Dr. FOSTER does not mean to let the matter rest where it is, but to try hard to get six direct representatives of the profession. We do hope that Sir LYON PLAYFAIR will give his hearty support, and will resist further attempts on the part of the bodies already over-represented.

IT is not long since we recorded some of the difficulties experienced by Australian colonies in the matter of the imposition of quarantine against cholera importation, the special instance being the emigrant ship *Dorunda*, which appeared to have contracted the infection after coaling at Batavia. Now, again, difficulty has arisen with the emigrant ship *Quetta*, which, after similarly touching at Batavia, was reported on March 29th to have arrived at Cooktown after having had on board during the preceding seven days several cases of diarrhœa and vomiting. She was, however, allowed free pratique; but the health officer at Townsville was prepared in advance and ordered to make careful inspection of her on her arrival. He telegraphed information to Brisbane to the effect that twenty-eight cases of colic and twenty-seven cases of diarrhœa and vomiting had occurred, and also that four persons had been poisoned by cocoa-nuts; adding that he had ascertained that the diarrhœa had been prevalent before, as well as after, touching at Batavia. But he recommended that the vessel should remain "in quarantine for observation" at Townsville. The Colonial Secretary, on the other hand, declined to sanction the proceeding, and hence the latest intelligence was to the effect that the *Quetta* was proceeding down the coast in the usual way, touching at the usual ports and landing passengers at each. Such a conflict of opinion and the setting aside of the advice of the medical officer of health on such a point are most unfortunate. Still, we cannot but feel that the difficulty arises mainly from the system which it has been decided to follow as regards infectious diseases on vessels touching at Australian ports. Where there is any substantial risk, or the fear of risk, the medical officer of health is bound to act on it; whereas the lay official, knowing but little as to the real risks, simply trusts to his common sense, and acts upon it. In all probability there was no cholera on board the *Quetta*. If so, there was no need for the detention. And if there had been cholera on board, anything more cruel than the proposed detention of the vessel under "observation" can hardly be conceived, for the result probably would have led to a considerable diffusion of the disease, and this under circumstances which would give the sufferers the worst chance of recovery. If instead of this so-called "observation," which under a new name retains the worst features of quarantine, the system known as that of medical

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inspection had been adopted, no one would have been the worse for it; and, as it would have produced no avoidable hardship, the medical officer of health would doubtless not have found his opinion overridden. In short, no one could object to the landing and isolation of actual cholera cases, nor to a brief detention for the purposes of diagnosis of persons whose illness was such as to give rise to a genuine suspicion of cholera. But to detain a whole ship's crew and passengers, the majority of whom are in perfect health, merely to see if a certain disease prevails amongst a few of them, is a proceeding which is harassing to commerce and passenger traffic, and is a direct wrong to the healthy; because if the fears of those who detain the vessel are realised, it simply means that the healthy are to remain exposed to infection. The story of the *Dorunda* and that of the *Quetta* seem to imply that those who are responsible for the protection of public health against disease imported by sea in these colonies are halting between two opinions. The quarantine system advocated by the colonies is but a slight advance on the antiquated system of quarantine to which the Turk clings with tenacity; and the progress exhibited in favour of the system of medical inspection, as carried out in this country, is also so slight that it is but little akin to it; and the result is that there is no uniformity of practice, and that, although medical judgment is sought in the individual case, it may at once be set aside on other than medical grounds. The system resorted to is mainly responsible for the anomaly.

WE are glad to see that the movement for granting degrees to medical students in London, on the same conditions as those now existing at many of the universities, is making steady progress. A meeting of the Metropolitan Counties Branch of the British Medical Association, at which only one or two members were in opposition to the movement, showed clearly how strong is the feeling in its favour among London practitioners and teachers. It is so clearly a demand for simple justice and fair play, that, except for the fact of there being already a University in London, it is difficult to understand on what basis opposition could really be made. Sir ANDREW CLARK so forcibly and clearly put the demand and the reason for it, that practically nothing further remains to be said. "The curriculum is equal, the examination is equal, the age is equal, but the result is an unequal symbol of efficiency. It is a real practical grievance, which affects medical men in England, not only socially and materially, but even in their practice with their professional brethren, when the holder of a degree is held in higher estimation than the holder of the diplomas of the two Colleges." The professional examinations of the Conjoint Examining Board are admitted by all to be equal and in some respects superior to many universities granting a degree, and the teaching in the London schools is quite as good as at the universities, whilst the clinical teaching and the means for clinical instruction are far better. The difference to the average student is not in the curriculum of study, but in the reward for his industry. In the one case he gets a diploma, in the other a degree, and he quickly learns that the latter is more profitable and held in higher esteem by the public, and even by the profession, than the former. It is idle to suppose that the University of London will do anything to meet this just demand. The path on which it entered as an examining board, whose degrees were only to be attained by a select few, is one along which it is impossible for it now to retrace its steps. It may and should do much to facilitate the taking of its degrees, but the conditions on which they may be obtained can never be so altered as to make them attainable for the student of average ability and industry, and it is on behalf of these that the demand has been raised. No one suggests that a degree should be conferred on minimum terms, and the large majority of students come between the minimum and the maximum standard as fixed by the London University. An examination in general education of a higher class than at present demanded by the College of Preceptors, and another in elementary biological science, could easily be passed by such students, and then there could not be the slightest cavil at either their general culture or their professional knowledge. Sir GEORGE YOUNG has just taken an opportunity of publicly denying that the project of a Teaching University for London has "fallen through"; but if his scheme is to live it will only be by its fusion with this movement of the two Colleges, and thus gaining a first start in one Faculty.

THE state of the laryngeal muscles concerns the general physician as well as the neurologist and laryngologist. The last two numbers of THE LANCET have contained matter relating to the question. As the knowledge concerning these muscles does not appear to have become diffused throughout the profession, the present seems a favourable opportunity for a review of the subject, our aim being to place before our readers the actual facts and general tendency of knowledge. We shall not concern ourselves with those facts of laryngeal physiology that have but little present bearing on high pathology. Thus we are narrowed down considerably in our task, for the high laryngeal pathology of to-day has chiefly to do with the abductors and adductors of the larynx, or, more strictly speaking, with the openers and closers of the rima glottidis. The posterior crico-arytænoid is the chief abductor, and the lateral crico-arytænoid is the most important adductor. Both sets of muscles are supplied by the spinal accessory nucleus, which transmits its influences along the nerve fibres contained in the pneumogastric and recurrent laryngeal trunks. If all the muscles of the larynx be paralysed (complete palsy) the vocal cords are in the "cadaveric posture"—that is, a position of slight abduction from the middle line. During inspiration the vocal cords are separated by a considerable interval from one another. During expiration the cords come closer together, and in phonation are approximated still more. This close approximation or adduction is also seen when the recurrent laryngeal is stimulated by a strong electrical current—a remarkable result when we remember that the electrical stimulus must act equally, so far as its mere physical characters are concerned, on the nerve fibres of the abductors as well as on those of the adductors. The bearing of this fact will be understood later on.

Much discussion has taken place on the position of the vocal cords in disease of the neuro-muscular apparatus of the larynx, and the influences at work are so numerous that

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this is not to be wondered at. But what there is to be known may be stated in a few propositions. If both the abductors are paralysed, the vocal cords are nearer together than in the "cadaveric posture"; they can still be brought closer together by voluntary action of the adductors, and after the abductor palsy has lasted some time, a secondary contracture of the adductors keeps the cords in a state of proximity almost equal to that of phonation. This abductor palsy may be caused by disease of the nuclei in the base of the brain; but palsy of one abductor may also be due to a general affection of the whole recurrent laryngeal nerve on the same side—a curious fact to be borne in mind with the equally interesting and in a measure complementary fact that electrical stimulation, as above mentioned, of the same nerve causes adduction of the cords. Indeed, this naturally leads up to the most interesting question in connexion with laryngeal pathology and physiology. Why should a general cause acting on the recurrent laryngeal effect adduction if it be of a stimulant character, and a tendency to adduction also if of a depressant kind? In a general way an answer to this problem is not difficult to discover. We may start with the assumption that the adductor apparatus is naturally stronger than the abductor system. A lowering of the power of both together finally leaves the adductor alone effective, whilst an increase, as by electrical stimulation, does but improve the adductor advantage. Now the difficulty is to know whether this difference between the two sets of muscles is of nervous or muscular origin, or whether it is related to both the nerves and muscles. The larynx is not without its parallel in possessing muscles and nerves of obviously different power. The generalisation made by Dr. FERRIER in *Brain* some seven years ago, to the effect that the abductors and extensors of the body generally are weaker than the flexors and adductors, may be mentioned here. Dr. FELIX SEMON'S anatomical and clinical proof, established by a large series of observations, that the abductors are more prone to paralysis than the adductors, is really of the same order as Dr. FERRIER'S generalisation, but the similarity in the names of the muscles enjoying power and relative weakness can perhaps hardly be regarded as more than accidental. The great truth to be recognised is that muscles of antagonistic action are not endowed with equal strength. This difference in strength shows itself in a greater proclivity to paralysis, as well as in a less ready power of recuperation. In the larynx progressive disease of the recurrent nerve has been observed by several laryngologists to show itself first by abductor palsy, which passes on to total palsy, with corresponding changes of position of the vocal cords, which are first in a position of slight adduction, later still more closely approximated, and finally assume the cadaveric posture. Whilst admitting that there is a general difference in the strength of the antagonistic apparatus, Dr. GOWERS has brought forward a strong argument[1] tending to show that a mechanical explanation would go far towards interpreting the reason why adduction is more powerful than abduction. "A force acts on a lever at greatest advantage when applied at right angles to the lever." The mechanical advantage at which the chief adductor acts, as compared with the chief abductor, gives greater power to the former, since it passes nearly at right angles, whilst the abductor passes at a very acute angle, to their identical insertion into the muscular process at the outer angle of the base of the arytænoid cartilage. This mechanical consideration may afford at least some explanation of the effect of a general under-action of the recurrent nerve in impairing "the effect of the abductors more than that of the adductors, just as the general over-action on electrical stimulation increases the effect of the adductors out of proportion to that of the abductors." In some cases of slowly progressive paralysis it has been observed that, notwithstanding a final total palsy, the vocal cords have been nearer together than in the cadaveric position. This has been explained by assuming that secondary contracture, having lasted a long time, had given rise to fibrotic processes, which had *set* the adductors in a fixed position, much as happens in the permanent rigidity of cases of hemiplegia and infantile palsy. Another interesting fact of laryngeal pathology is the establishment by Dr. FELIX SEMON and Dr. ORD of a progressive weakening of the abductor muscles in the laryngeal *crises* occurring in some cases of tabes dorsalis.

[1] See Diagnosis of Diseases of the Brain, p. 101.

UP to the present time nothing has transpired at the Medical Council calling for much notice or likely to affect either medical legislation or education. The President, in his Address, skims pleasantly and benignantly over everything that has been, might have been, or may be. Sir HENRY ACLAND is one of those happy men who see the good of everything that happens, and if things don't happen that he expects he is happy enough to see the good of their not coming to pass. The indiscriminate acceptance of whatever turns up may be a cheerful, perhaps a pious, frame of mind. But it is not one which excites our highest admiration. We could wish from a President more positive guidance, more decisive deliverances, more outspoken approval or condemnation. Let us take an illustration or two. A Bill is before Parliament adding seriously to the size of the Council, but not adding much to its power, importing the co-operation or sanction of the Privy Council into the work of the Medical Council. In the matter of the registration of foreign degrees, the Bill provides for the Privy Council overriding the Medical Council, and requires the latter to recognise and register a degree of which it may disapprove. The President, in his outline of the main features of the Bill, never alludes to the Privy Council. He expresses no dissatisfaction with the increased size of the Medical Council. In regard to the one good feature of the Bill, the addition of direct representatives of the profession on the Council, he has not one word of praise. The claims of the practitioners of the country to representation cannot any longer be resisted. They find at length spirited and earnest advocacy in Parliament. But it is disappointing and depressing to the profession to find so genial a man as the President of the Medical Council without a word of welcome for them or of hearty satisfaction at their prospect of admission to a Council of which they provide all the funds, and to whose deliberations they will bring a practical element which has been too often conspicuous by its absence.

One great feature of the present meeting is the presentation of Reports from the Visitors of examinations. It may

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be remembered that gentlemen of eminence were appointed to visit all the universities in 1885. The reports are not yet available for criticism. They are understood to be interesting. They certainly have been rather costly. The bill is now before the Council, and reaches the large sum of £2225 9*s*. 4*d*. The average payment to each Visitor was £67 13*s*., and the average cost for each university visited (exclusive of printing) was £203. Considering the eminence of the Visitors, we do not think that there is anything excessive in their reward; but surely, if so much money is paid for Reports on the examinations of universities, we may expect them to be thoroughly critical, and to tell whether the universities are really doing university work. The profession will be apt to think that universities should not need such costly supervision, or that if they do need it, their whole system requires revision.

It is almost superfluous to add that the Medical Council has again collided with the subject of examination in elementary mechanics in connexion with reports from the Branch Councils on the subject. This is a yearly accident, and threatens, as on former occasions, to be a main occupation of the Council.

Annotations.

"Ne quid nimis."

THE REGISTRAR-GENERAL'S ANNUAL REPORT.

THE Registrar-General's forty-seventh annual report, which has just been issued, deals with the vital statistics of England and Wales for the year 1884. The interest in the main statistical facts for that year has been long since discounted by the summary of the figures in the four quarterly returns, issued with the report upon the last three months of that year on February 1st, 1885. The detailed report now published, however, gives information relating to the causes of death and the ages at death, which are absolutely necessary for the apprehension of the true import of marriage, birth, and death rates, measured by the proportion of those facts to the population at all ages. The introductory remarks to the present report discuss the causes of the remarkable decline of English mortality in recent years. The death-rate in 1884 was 19·6 per 1000, with reference to which it is remarked that "this is the fourth consecutive year in which the death-rate was under 20 per 1000, whereas in no single previous year since civil registration began had the rate fallen to that level." Pessimists have sought to ascribe the decline in the English death-rate to a "series of years of favourable meteorological character, and notably to the absence of excessively cold winters and excessively hot summers." This assertion is conclusively disposed of in the report before us, which points out that the "decline of mortality has been common to all four quarters of the year, and shared by them in pretty equal degrees; so that in order to give consistency to the suggested explanation, it would be necessary to assume a succession of years in which all four quarters alike—spring, summer, autumn, and winter—were marked by gradually improving meteorological conditions, an improbable supposition, for which there is no apparent warrant." It appears that English mortality in the four years 1881-84, compared with that in the thirty-three years 1838-70, showed a decline of 15 per cent. in the first quarter, 14 per cent. in the second and third quarters, and 11 per cent. in the fourth quarters of those years. Among other special points of interest dealt with in the report just issued may be noted the geographical and seasonable distribution of some of the principal zymotic diseases; and an exhaustive examination of the statistics of cancer mortality during the past thirty-five years, with especial reference to the recorded increase of that mortality and its geographical distribution, after due correction for the variations in the age and sex proportions of the population in the several counties of England. The results of this elaborate examination are admitted to be rather negative than positive, but it is urged that "the labour will not have been altogether wasted if it prevents incautious inquirers from forming hasty conclusions from rates that have neither been corrected nor based on a sufficient number of years."

THE STATUE OF HUNTER.

ON the 29th ult., a statue of John Hunter, "the father of scientific surgery," was unveiled in the new Museum at Oxford by Her Royal Highness Princess Christian, in the presence of a large assembly of spectators. Previous to the ceremony an address was delivered in the lecture-room of the Museum by Sir James Paget, who dwelt on Hunter's scientific curiosity and power of amassing facts, and the duties of a university to its students of science. Of this address we hope to give a report next week. An interesting account of the scientific movement in Oxford and the foundation of the Museum some forty years back was afterwards read by Sir Henry Acland, who concluded by paying an eloquent tribute to the interest shown by the Queen and the late Prince Consort in the establishment of science in Oxford, and indicating the propriety of the act about to be performed by their daughter, the Princess, to whose interest in medical science and in all means for alleviating suffering he referred. The statue, which was then unveiled, is one of five statues, representing heroes of science, presented to the university by Her Majesty. It represents the great *savant* standing with the legs crossed, and supporting himself on a pillar or post, with a remarkably keen and searching countenance. The statue is in soft stone, and stands upon a bracket against a pillar, near the entrance to the Museum.

SUCCESSFUL EXTIRPATION OF THE SPLEEN.

La Gazzetta degli Ospitali (May 23rd) reports a case from the surgical clinique of the University of Genoa in which Professor A. Ceci removed a greatly enlarged spleen. The patient, an imperfectly developed and very thin girl, aged seventeen, weighing 40 kilogrammes, and 1·40 metre in height, with very small pulse, had had an abdominal tumour from birth. The transverse diameter of the tumour was 34 centim., the vertical 23 centim., and the circumference about 64 centim. The anterior surface was smooth and convex, the margins sharp and fissured. The posterior surface presented a large lobe on the left. The abdominal walls were very flaccid, so that the tumour could be completely rotated vertically and transversely, and also be pushed into the left hypochondrium, whence, however, the respiratory movements soon caused it to advance to the front of the abdomen. The liver was in normal position. The enormous size of the floating spleen interfered with the patient's movement and nutrition, and was an occasional source of very severe attacks of pain, radiating from the left hypochondrium to the præcordial region and the left upper limb, and attended with violent dyspnœa and insensibility. Extirpation having been resolved upon, it was performed on March 20th, with strict antiseptic precautions. The incision in the linea alba from above downwards through the umbilicus was 23 centim. (9¼ in.) in length. On opening the abdomen, serious signs of suffocation compelled the

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suspension of the operation for nearly thirty minutes. Anæsthesia having been commenced with bichloride of methylene, chloroform was substituted for it. A triple catgut and carbolised silk ligature having been applied to the pedicle, it was dropped in. The peritoneum was sutured separately. The abdominal walls were brought together by three metallic points, after Billroth's method. The splenic artery was larger than the subclavian. The whole operation, including the interruption, lasted an hour and a quarter. Violent delirium and nervous phenomena simulating angina pectoris soon followed. For two days the pulse could not be counted, and the respiration varied from 70 to 80 per minute. The treatment was by oxygen and nutritive clysters. The wound was first dressed on the eighth day, and almost the whole of the wound-tract suppurated. In spite of strict antiseptic treatment erysipelas supervened, and yet the patient recovered. On April 22nd (thirty-one days after the operation) her condition was reported as excellent, only a small superficial wound remaining. The extirpated spleen, with the contained blood, weighed 2400 grammes, equal to 37,036·8 grains, or 77·16 ounces. A courteous note just received from Professor Ceci states the patient is in good health; pulse 80; respiration 22; weight increasing rapidly; complexion florid.

HONOUR TO THE MEDICAL PROFESSION.

THE Queen has been graciously pleased, on the occasion of the celebration of Her Majesty's birthday, to sanction the following amongst other appointments. To be ordinary members of the Military Division of the Third Class or Companions of the Order of the Bath: Deputy Surgeon-General John By Cole Reade, Medical Staff, and Brigade Surgeon George Farrell, Bengal Medical Establishment. To be an ordinary member of the Civil Division of the Third Class or Companion of the said Order:—William Orange, M.D., Superintendent of Broadmoor Criminal Lunatic Asylum. Surgeon-General Michael Cudmore Furnell, M.D., Indian Medical Department, Madras, Surgeon-General with the Government of Madras; and Deputy Surgeon-General Alexander Morison Dallas, Indian Medical Department, Bengal, Inspector-General of Civil Hospitals, Punjaub, have been nominated and appointed to be Companions of the Order of the Indian Empire. The honour of Knight Bachelor has been conferred on the following gentlemen: Surgeon-General T. Longmore, Professor of Military Surgery, Netley Hospital, Dr. E. H. Sieveking, Mr. W. White Cooper, Dr. Douglas Maclagan, Professor of Medical Jurisprudence in the University of Edinburgh, and Mr. John Tomes. We regret to announce that since the publication of Her Majesty's intention to confer the above-mentioned honour on Mr. White Cooper his death has occurred, to the great sorrow of Her Majesty, whom Mr. Cooper had attended as oculist for upwards of thirty years.

SUDDEN DEATHS AFTER SEVERE EXERTION.

Two deaths have recently occurred which ought to serve as a note of warning to those who undertake severe muscular exertion without due preparation for the same. In one case the fatal results occurred during an Alpine expedition; in the other after a sharp row on the river; in both death was by syncope. It is probable that in each case, had the work been undertaken gradually and with some degree of training, instead of a fatal result ensuing, the bodily health might have been improved. Both of the deceased persons were of an age when degenerative changes in the muscular tissue of the heart or of the vessels would hardly be expected, and the syncope must have resulted from the sudden strain thrown on the cavities of a heart weakened previously by a long period of inactivity, and before the concordant action between the heart and great vessels had been established. This is always a danger when violent exercise is suddenly undertaken, and the mischief is of course greater in elderly persons than in young adults. Many middle-aged men who, at the commencement of their autumn holidays, after months of comparative inactivity, undertake without preparation some feat of Alpine climbing, or a long day's grouse shooting on the moors, lay the foundation of future heart troubles or aneurysm simply because they will not allow time for the concordant action between the heart and great bloodvessels to be established. In all cases where men are suddenly called upon to exchange a sedentary life for one of increased activity, they should consult their medical attendant as to the condition of their circulatory system. One instance is particularly recalled to us of a distinguished general practitioner, who had long been troubled with a spasmodic cough, which he thought proceeded from deranged stomach, and which a month among the Alps would soon put right. He started on his journey, but fortunately *en route* he travelled in the same carriage with a physician who was personally a stranger. During the journey the physician was struck with the character of the cough, and after a little conversation an examination of the chest was made, which resulted in the discovery of an aneurysm of the transverse aorta, which had escaped the patient's notice. Had he made any of his contemplated ascents he would have aggravated the condition, even if the attempt had not led to sudden rupture of the sac and immediate death.

NITRO-GLYCERINE.

IN the annual report just issued by Her Majesty's Inspectors of Explosives, it is stated that "it may be interesting to record that the use of nitro-glycerine as a medicine has for the first time been recognised in the British Pharmacopœa, and that the substance made up into lozenges and solutions is now rather largely and, so to speak, authoritatively employed in cases of angina pectoris, &c., for which purpose it has hitherto been irregularly employed for some years." We do not know what significance is attached by the Explosives Department to the word "irregularly," but it may be as well to point out that the nitro-glycerine has now been used in legitimate medicine and on well-established principles for the last six or eight years, and that it is not necessary for a remedy to find a place in the British Pharmacopœia to sanction its use in the treatment of disease. The report goes on to say that "this legitimised use of nitro-glycerine as a medicine has led to the question being raised as to the conditions as to which the same could be made and sold, and the Secretary of State has signified that it is not proposed to interfere with chemists manufacturing small quantities of nitro-glycerine for *bonâ fide* medicinal purposes; but that if it appears at any future time that the public safety is endangered by such manufacture, this statement is not to prejudice such steps as may then be considered expedient; and that as the maximum amount of nitro-glycerine contained in the tablets is very small, it is not proposed, for the present at least, to put any restrictions on their manufacture or sale, as it appears that a very large number of them would have to be treated to extract a sensible amount of explosive from them for practical purposes." This statement, cautious though it be, practically legalises the manufacture of nitro-glycerine; and all that is necessary in case of a prosecution will be for the prisoner to plead that he was making the explosive for medicinal purposes. It is further stated that "the question of scheduling nitro-glycerine, when employed as a drug in medicinal preparations, as a poison, is at present under consideration; and it seems desirable, having regard to the somewhat attractive forms—e.g., chocolate tablets—in which such

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preparations are sometimes presented, that their sale and handling should be surrounded with the precautions which attach to poisons generally. The excessively narrow limits of quantity which is deemed prudent to authorise for a dose lends weight to this suggestion. The question has already been raised by the Department, and is at present occupying the attention of the Medical Department of the Privy Council, by whom it will no doubt be referred in due course to the Pharmaceutical Society."

ACTION AT LAW FOR ALLEGED TIGHT-BANDAGING.

AT the late Leeds Assizes an action was brought to recover damages by Mabel Moss, a minor, through her father as next of kin, from Dr. West-Symes, a surgeon living at Halifax. The allegation made by the plaintiff was that Dr. Symes had not used "fair, reasonable, and competent skill" in the treatment of a simple fracture of the clavicle, which the child in question had sustained. The main charge of malpraxis was that defendant had bandaged the arm over the elbow-joint whilst the limb was in an extended position, and that he then flexed it, with the result that gangrene supervened, necessitating amputation. It was further alleged that on the day on which Dr. Symes set the fracture he expressed the wish to see the patient after a week had elapsed. These charges were specifically traversed by the defendant. Two medical men called for the plaintiff deposed that in their opinion the gangrene was due to faulty bandaging. For the defence, Messrs. Wheelhouse, Pridgin Teale, Jessop, and McGill testified that it was quite possible for the arm to have been skilfully bandaged and for the swelling to have come on subsequently. If this were the case, there could be no doubt that the parents were careless in not noting the advent of the very pronounced signs of difficulty and arrest of the circulation; and, indeed, one witness, a chemist, said that the mother of the child admitted the latter had been in great pain, and had been rambling and talking at night, and that her finger-nails were black. This was said to have happened on a Thursday, and yet the mother expressed her intention of not taking her daughter to the doctor until the following Monday. There can be no doubt that had the apparatus not been applied gangrene would not have ensued, for the treatment of the fracture was not carried out until three days had elapsed from the date of the accident. The supposition that a splinter had penetrated or compressed the subclavian vein, or that the main vessels had been torn by the injury, could not therefore be entertained. But, as the judge remarked, the doctor would be less likely to depart from the precepts he had learned in his earlier days and afterwards carried out in practice, than the plaintiff to note the exact order in which the bandaging was effected in reference to the flexed or extended position of the arm. Very properly too, as we think, he laid little value on the evidence of the child. The verdict of the jury could scarcely have been different in the face of the opinion of such unimpeachable authorities as the gentlemen above named. Dr. Symes has our sincere sympathy, and doubly so inasmuch as he magnanimously declined to ask for costs. His character as a surgeon had been impeached, and he had rebutted the charge successfully. He cannot be blamed for employing the particular method (Desault's) of treating fractured clavicle, seeing that it is recommended by surgeons of the highest repute. We cannot help saying, however, that we prefer other plans, as being attended with less risks of gangrene. A modern authority has described Desault's plan as "classical, but clumsy and complicated." Nor can we entirely subscribe to Mr. Wheelhouse's assertion, as reported, that the axillary pad is essentially necessary. It does not form a part of Sayre's treatment of broken collar-bone, and yet we think that for children this is preferable to any other. It is certainly not desirable, much less necessary, to confine the patient to bed, as seems to have been suggested by one of the medical witnesses for the prosecution.

THE RETIREMENT OF DR. ORANGE, C.B.

IT is now close upon a quarter of a century since a great public want was removed by the erection of a central asylum for the reception of the criminal lunatics of England and Wales, instead of having them scattered all over the country in various prisons and county and private asylums. When Broadmoor was opened in 1863, Dr. Meyer and Dr. Orange, from the Surrey County Asylum at Wandsworth, were appointed respectively superintendent and deputy superintendent. Upon Dr. Meyer's lamented death in 1870 Dr. Orange was promoted by the Secretary of State to the vacant superintendentship. The success of his administration of this anxious and responsible post is too well known, both in this and other countries, to require notice in these columns. In 1882 Dr. Orange was unfortunate enough, while in the discharge of his duties, to be assaulted by one of the inmates (the Rev. H. J. Dodwell, who some years ago was found insane by a jury when tried for firing a pistol at the late Master of the Rolls). He received a severe blow on the head with a stone slung in a handkerchief, and we much regret to learn that the effects of this blow have necessitated the retirement of Dr. Orange from a post in which he has most efficiently administered a grave and responsible public trust. In the hope that the step might enable him to carry on his work at Broadmoor, Dr. Orange was last year, at his own request, relieved of the trying duties devolving on him as one of the advisers of the Home Office authorities in cases where capital crimes had been committed, and where the question of insanity arose. It is in this relation that the general public have to be especially grateful to Dr. Orange, for, with an exceptional experience on the subject, his scientific penetration, his sound judgment, and his shrewd common sense never failed to secure universal approval for his decisions on these momentous issues. The public will hear with satisfaction that Her Majesty the Queen has been pleased to decorate Dr. Orange with the Civil Companionship of the Order of the Bath in recognition of his eminent services. On the evening of the 31st ult. the officers and staff of Broadmoor Asylum presented him with a handsome silver salver "as a parting token of their personal esteem, and in grateful appreciation of his many acts of kindness." We congratulate Dr. Orange upon the successful results of his labours in the public service; he carries with him into his retirement our best wishes and those of the whole profession: and we trust that prolonged rest and freedom from official anxiety and strain will very largely, if not altogether, restore him to health.

A YACHTING HOLIDAY.

A WANT which must have been felt by many summer residents at the coast appears to have been met by the enterprise of Major Colwell of Portsmouth. This gentleman, we are informed, proposes to take on board of his fine yacht, the *Erminia*, a limited number of ladies and gentlemen at a moderate daily cost. The idea is not quite a new one, having already found practical expression in the voyages undertaken by the *Ceylon* and various coasting steam yachts. In the present instance, however, a salutary variation has been introduced by the employment of a sailing vessel for the same purpose. The example set will not, we hope, lack imitation. We have repeatedly spoken of the benefit which may

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be derived from a holiday spent, not at the seaboard merely, but upon the sea. For men in fair general health, but fatigued with the cares of business or professional life, the combination of rest of mind and body with the freshest of pure air is a very happy one. The same might be said of convalescents from illness, who require only a bracing atmosphere to restore their general tone. Many invalided men from abroad would profit by the same wholesome exposure. It is understood, of course, that in each case the would-be sailor is jaded rather than ill, and is not peculiarly subject to sea-sickness. Under such conditions we do not doubt that he would equally gain in pleasure and in profit by the refreshing leisure of a yachting voyage.

PREVENTIVE INOCULATION IN YELLOW FEVER.

THE subject of inoculation for yellow fever, as practised by Dr. Domingos Freire, of Rio de Janeiro, was brought under the notice of the Société de Biologie of Paris at its last meeting. M. Rebourgeon communicated the results obtained by himself and Dr. Freire in December, 1885, and January and February, 1886. The weather during these months in Brazil was intensely hot, and yellow fever prevailed severely. Of 3051 subjects inoculated at Rio not one had died, whereas in the same districts and houses 278 non-vaccinated had succumbed to the disease. The number of the inoculated has now reached 6000, and not one of them has been attacked with the fever; and, what is more remarkable, severe cases inoculated in the second stage of the disease had all recovered. In reply to M. Brown-Séquard, M. Rebourgeon said that but few foreigners were inoculated, but yellow fever is at the present time creating great ravages among the Brazilians and mulattoes; the negroes even are being largely attacked, which is a rare occurrence; and the area of the disease was extending inland from the littoral. He explained that some specimens of virus sent two years ago to M. Cornil, and found by him to be worthless, had not been sent by Dr. Freire, but by opponents to his method. He had often inoculated himself, and was so convinced of the efficacy of the attenuated virus that he had frequently offered to undergo inoculation with the yellow fever itself. He presented a specimen of the vaccine to the Society for examination. In reply to M. Maurel, he said that he had met with yellow fever at an altitude of more than 700 metres, and had seen many cases among emancipated negroes, although less than among mulattoes, who were attacked in about the same proportion as the whites. M. Maurel attributed the former immunity of negroes to their vegetable diet, but since emancipation negroes had largely adopted the customs of the whites and consumed more animal food. A commission to study the method of inoculation was appointed, consisting of MM. Brown-Séquard, Cornil, Duval, Bourquelot, and Maurel.

ADULTERATION IN PARIS.

THE Paris Municipal Laboratory has recently done some good work, both from an economic and sanitary point of view. The adulteration of olive oil with American cotton oil has been practised to so large an extent that the public revenue and health are seriously affected. Olive oil is not only dearer in itself, but pays an entrance due of 16*s.* more per 100 kilogrammes than cotton oil. The result is that the falling off in the purchase of olive oil has considerably impoverished the French olive-tree cultivators. The public, however, consumes unknowingly the cheaper and less wholesome article. The olive stones are pulverised and mixed with pepper to an extent which causes an annual loss to the French treasury of £200,000, while bad coffee is dyed in Holland to give it a good appearance. Again, a tapioca called "tapioca indigéne" is sold and largely used as infant food, though it is made with potato, and is therefore not as nutritious nor as easily digested as the genuine article. Such are some of the grievances resulting from unscrupulous and unrestrained competition which the chemical laboratory established by the Paris Municipal Council has brought prominently forward. A special commission has been appointed to inquire into the matter, and hopes are entertained that active measures will be adopted.

VAGRANCY.

WE have repeatedly drawn attention to the very unsatisfactory rules and regulations in force with regard to the control of those numerous and ever-shifting items of our population known as vagrants. How numerous this class is may be shown by the fact that during the first eighteen weeks of the current year 2374 persons passed through the vagrant wards of the York Workhouse. This considerable population is always on the move, pushed on from the casual ward of one workhouse to the casual ward of another; often finding the greatest difficulty in obtaining a day's rest or the liberty of seeing the medical officer if ill. Mr. S. W. North, medical officer of health, in an interesting and valuable report recently read before the York Board of Guardians, speaks strongly on this point and of the obstacles that sick vagrants meet with in obtaining admission to any workhouse. Cases of acute ophthalmia needing early treatment often occurred, yet, never seen by the medical officer, they were pushed on by the master and other officials as only suffering from "a little cold"; cases are mentioned of severe ulceration of the legs, inflamed and sometimes gangrenous; chronic bronchitis and asthma, from which the persons must have suffered considerable distress; whilst instances of persons simply worn out by exposure, long travel, and want of sufficient food are common enough—all manifestly requiring medical relief, and all, unless the case seemed likely to prove immediately fatal, or the disease was manifestly infectious, sent tramping the next morning. Some boards seem more humane than others; but when this is the case, they suffer the usual penalty by attracting from all quarters the halt, the maimed, the sick, and the blind who have been ruthlessly rejected by their neighbours. To do away with the present scandal, Mr. North proposes that the Local Government Board should at once furnish the various workhouse boards and their officers with information with respect to the treatment of vagrants, and state plainly whether, in accordance with the Act, it is or is not the duty of the master of the workhouse, &c., to allow any vagrant alleging he is sick to see the medical officer, and also whether the medical officer can direct the admission from the casual ward into the workhouse of all persons who, in his opinion, after examination, cannot travel without risking an aggravation of the disorder or danger to life. Mr. North is of opinion that the Act 30 and 31 Vict. does apply to these cases; but it is of importance that the interpretation of the Act should not be left in doubt. If the vagrant is to receive no medical assistance, the sooner he is told so the better; he will not then waste valuable time by seeking relief in that quarter, but will turn to private charity. If the vagrant, by 30 and 31 Vict., is really entitled to admission from the casual wards to the workhouse, when it can be shown that he cannot further travel without aggravating his disease or endangering his life, then many masters of workhouses have broken the law by compelling vagrants to push on when utterly unfit to do so. In justice to the ratepayers, moreover, uniformity should be enforced; it is hard on a town, whose board adopts a liberal interpretation of the Act, to pay for the shortcoming of neighbouring towns whose boards are less humane. Either the Act

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allows relief to vagrants or it does not; if it does, then all should bear the burden equally; if it does not, then steps ought to be taken to enforce a uniform rule for the relief and maintenance of sick vagrants.

HONOURS TO THE DENTAL PROFESSION.

THE announcement that the Queen has been graciously pleased to confer the honour of knighthood on Mr. John Tomes will be received with great satisfaction, not only by the dental section but by all branches of the profession. Sir John Tomes, who comes of an old Gloucestershire family, was apprenticed to a general practitioner at Evesham, and afterwards entered as a student at King's College and Middlesex Hospitals, at the latter of which he was house-surgeon for two years, and by his energy and scientific attainments won the esteem and sincere friendship of Sir Thomas Watson, Messrs. Henry Arnott and Campbell De Morgan, a friendship which only terminated with their lives; and it was chiefly by the advice of Sir Thomas Watson that he turned his attention to dental surgery. For some years he devoted a considerable portion of his time to the compilation of numerous papers on Dental Surgery and Dental Comparative Anatomy, and in recognition of his original researches was elected a Fellow of the Royal Society in 1852. To Sir John Tomes is due the gratitude of the dental profession for having prevailed upon the Council of the Royal College of Surgeons to apply for a charter to enable them to grant a licence in Dental Surgery, and in this he was greatly assisted by his friends Arnott, Lawrence, and Green, who were then members of the Council. Sir John Tomes was one of the first examiners in connexion with the new licence, and also on the original staff of the Dental Hospital, London, which he largely helped to found. In 1862 he was presented with a testimonial, consisting of a silver tea and coffee service, by his brother practitioners, "in acknowledgment of the many valuable services he has rendered to his profession." Some ten years ago, after a severe illness, he began to relinquish practice, and ultimately gave up altogether, but only to work all the harder for the interests of his profession. He was one of the most powerful promoters of the Dentists Act, which he always looked upon as a natural sequel of the granting of a diploma by the College. In 1883 the honour of the Fellowship of the Royal College of Surgeons was conferred upon him at the same time as it was upon Professor Huxley.

TARTAR.

THE situations upon which deposits of tartar are found upon the teeth are, in order of frequency, the lingual aspect of the inferior incisors—that is, opposite the openings of the ducts of the submaxillary and sublingual glands, the buccal surfaces of the upper molars which face the orifices of Steno's duct, next the buccal surface of the lower molars, and sometimes the lingual surface of the molars of both jaws. The deposit is never found upon the lingual aspect of the upper incisors, which are not bathed with saliva, and, moreover, are constantly being swept by the tongue. It is capable of being formed in great abundance, especially when from any cause, such as a carious tooth, one side of the mouth only is used for mastication. Tartar is composed chiefly of earthy phosphates and carbonates, with which is mingled a certain proportion of organic matter, epithelial scales, fatty particles, filiform fungi, vibrios, and monas. The relative proportion of phosphates or carbonates varies very considerably in different analyses, and this is due to the material being taken from different parts of the mouth. Thus, if from the buccal surface of an upper molar, it will be richest in carbonates, like the parotid saliva; whereas, when taken from the back of the lower incisors, it contains an excess of phosphates. Tartar is simply a deposition by precipitation of the salts held in solution in the saliva, which is brought about by its contact with air or mucus. The quantity of tartar varies largely in different subjects, for some salivas contain a small proportion of salts, and therefore the deposit is small; also if the precipitate meets with an acid—such as is so frequently found round the necks of the teeth and due to fermentation—sufficient to neutralise it, it will be redissolved. Thus the presence or absence of tartar has a clinical significance. If it is very abundant, it indicates an alkaline reaction both of the saliva and of the parts around the teeth, and a consequent immunity from caries; but if allowed to accumulate, it produces gingivitis by simple traumatic irritation. In some very rare cases it is entirely absent, owing to an acid reaction in the mouth, which leads to the most disastrous ravages upon the teeth. Between these two extremes there is every mean. The gingivitis due to tartar varies according to the quantity deposited; in a mild case there will be merely a line of redness along the free border of the gum; in a more severe case the roots of the teeth will be stripped of gum and its place taken by tartar; the gum will be festooned, have a fungating appearance, and bleed at the slightest touch; the teeth will loosen and change their position, owing to the inflammation having extended to the alveolo-dental membrane and the absorption of the alveolus. The treatment consists essentially in a vigorous use of the tooth-brush and the periodical removal of the incrustation. Any tooth-powder or preparation which will remove it must be acid, and therefore very deleterious to the teeth themselves. Mr. Bland Sutton has found accumulations of tartar upon the teeth of monkeys, kangaroos, and lemurs at the Gardens of the Zoological Society, where it is an occasional cause of death from septic pneumonia. These deposits are almost invariably found in association with a carious tooth or necrosed bone.

THE HYDROPHOBIA COMMISSION.

THE Commission are prosecuting their inquiries respecting the success of M. Pasteur's method. We understand that clinical reports of all the cases as they occur are supplied to the Commissioners from Paris. Whatever may be their verdict on the value of M. Pasteur's preventive treatment in the case of patients who have been bitten by presumably rabid dogs, there can be no doubt that our best and most reliable precautions against hydrophobia lie in the police regulations at present adopted in the metropolis. These regulations should be put in force throughout the kingdom. If this were done, and, as suggested by a sporting contemporary, a tax treble the ordinary amount imposed (and rigorously enforced) on female dogs, there would probably be no need for the employment of M. Pasteur's method in this country. We believe that of those bitten by reputed mad dogs only from 5 to 15 per cent. are subsequently attacked with hydrophobia.

REMARKABLE LONGEVITY.

A CORRESPONDENT of a contemporary states that he has just conducted an insurance upon the life of a man aged 102 years. This centenarian enjoys good health and appears to be in the possession of his faculties. He states that his father lived to the age of 110, and met his death from an injury due to the breaking of a mill-stone. His grandfather was, he asserts, accidentally killed in his mill at the age of 126. His great-grandfather lived to the age of 133. The man in question distinctly remembers his great-grandfather, and has now living a great-great-niece, so that he has seen seven generations of his family. It would be very interesting to have these facts thoroughly investigated, and if possible established.

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OUR DIPLOMAS AND THE MEDICAL COUNCIL.

THE diplomas of the Royal Colleges of England are still in far greater demand than those of any other bodies in the kingdom. The latest table on this question contained in the Agenda of the Medical Council is interesting, especially at present, when there seems so much jealousy between rival bodies. The number of men passed by the Royal College of Surgeons of England is more than double that passed by any other medical authority in the kingdom. The Royal College of Physicians of London in this respect comes next. The College of Surgeons passed last year in the Final Membership Examination 561 candidates; the College of Physicians in the Final Examination for the licence 242, a number exceeding that of the Apothecaries' Society by 7. The great rival of the English Colleges, the Edinburgh University, confers its degree on little more than one-third of the number—viz., 196; Aberdeen University on 68; Glasgow University on 115. The Royal Colleges of Physicians and Surgeons of Edinburgh passed 91 gentlemen at its Final Examination. The King and Queen's College of Physicians gave its licence to 142. The University of Dublin bestowed its degree on 24. The Royal University of Ireland gave its M.B. to 76, and its M.C. to 58. The University of Cambridge passed in its Final Examination 26. The numbers passed in all the Final Examinations of the kingdom were—in the Division of England 1266, with 806 rejections; in that of Scotland 655, with 335 rejections; in that of Ireland 539, with 222 rejections. These tables are worthy of more attention than they generally receive from the Medical Council.

INSANITY AND CRIME.

THAT the criminal in general and the confirmed criminal in particular is mentally unsound may be as hazardous a doctrine as jurists are apt to call it, but it is one of which the French alienists have been most strenuous vindicators—in proportion, too, as their practice has favoured their cognisance of crime. Of these the ablest was certainly Dr. Legrand du Saulle, whose death we noticed on the 15th. He was already an accomplished physician, especially in mental disease, when he became Médecin en chef du Depôt—that parade-ground, so to speak, on which every morning the criminals of Paris are passed in review. Knowing exactly with what offence they were charged, and familiar enough with the law to appreciate the magistrate's view of their several cases, he never hesitated to apply to them the sifting process of which only the alienist is master. Hysteria in its protean forms, hallucination, mania in all its phases—he knew them not only in their mental and physical signs but in their characteristic acts; and the wretched creature whom a rough-and-ready police system would have relegated to prison with all its contaminating horrors, he would see occasion to put *en observation*, with the result of showing that the offence with which he was charged was as non-voluntary as if done in a dream, and that with the removal of the deranging cause a worthy life might be restored to itself and to society. As one by one the arrested of the previous night were brought before him, his keen scrutiny, aided by a centripetal question, would separate the calculating criminal from the unconscious one, and he would consign them to their several destinations accordingly. "What took you to the Place Vendôme, barefooted and bareheaded?" he would ask of a scared-looking female with the makings in her of a Madge Wildfire. "It is a case of *mania errabunda*," he would remark *sotto voce* to a professional bystander, and the poor night-walker is saved from the prison and is put *en observation*"—to thank, four years after, Dr. Legrand du Saulle himself, who recognises in her an honest *bourgeoise*, married and mother of a family. His experience was rich in such surprises, as indeed is not to be marvelled at when the average number of so-called criminal cases that passed under his scrutiny was 2500 a year. During the terrible weeks of the Commune, when every wayward impulse which a disorganised society could prompt enjoyed congenial opportunity, his work was aggravated and multiplied to an extent that put his resources of mind and body to the severest trial; but he survived it all, to earn the gratitude of many a saved life and of many a career unmarred. He wrote much, but, though far from averse to the refinements of classification, which seem so unreal to the "plain-man view," he was very careful to lay down no rules for the guidance of other physicians in circumstances similar to his own. Indeed, it is doubtful whether he could have succeeded in such a task if he had tried, for his power of diagnosis was as distinctly a gift as that of the born poet or the artist. He lived and worked, however, to secure this advantage for his profession—a far more respectful hearing in courts of law than had previously been accorded to the "medical witness."

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

WE may remind our readers that the election of new members to serve on the Council of the College will take place on Thursday, July 1st. The nomination papers, however, must be sent in to the Secretary at the College, duly filled in, not later than Monday next, June 7th. There will be four vacancies; three by lapse of time, and one in consequence of the death of Mr. Cooper Forster. Of the retiring Councillors, one (Mr. Allingham) we believe will not offer himself for re-election. The other two, Mr. Lund and Mr. Berkeley Hill, have signified their intention of seeking re-election. Under these circumstances, there will be two absolute vacancies. It is much to be wished that candidates will be selected, not on account of mere seniority or professional success, but rather on account of their special knowledge of College matters and their fitness to grapple with the political problems that have been agitating the Council for some years past.

MYSTERIOUS DEATH AT HACKNEY.

THE adjourned inquiry into the cause of death of Katherine Martha Huntley, aged twenty, was held at the Mermaid public-house, Mare-street, Hackney, on May 27th. From the evidence given on a former occasion it appears that deceased, a single woman, was living up to the time of her death as the wife of her employer under the name of "Mrs. Taylor," that she was five or six months advanced in pregnancy, and that, apart from the result of the post-mortem examination, there was nothing to throw any light on the cause of death. The symptoms were said to be "not inconsistent with the presence of an irritant poison." Dr. Tidy was commissioned to analyse the stomach and its contents. This gentleman obtained an alcoholic extract of a yellowish colour, which coincided, as did also the solid material found in the stomach, with the extracts from Keating's vermin powder. Dr. Tidy was of opinion that a quantity of this powder had been taken shortly before death. Experiments made on some rabbits gave negative results; in fact, one rabbit took as much as three ounces. It was found impossible to get dogs to take the powder. Our standard text-books on forensic medicine do not state what is the destructive element in Keating's vermin powder, but it can scarcely be a very potent one when a rabbit can take three ounces with impunity. We do not for one moment question the accuracy of Dr. Tidy's analysis and observations, but, to say the least, we think the inference that deceased had taken the powder was scarcely warranted by the facts stated in the report of the inquest, seeing that the active principle of the powder had

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such few physical, chemical, and physiological properties by which it could be recognised. The stomach of deceased showed "signs of inflammation not uniformly spread over it, but in dark lines and patches." These signs, however, were far from showing that an irritant poison had been taken, since they may be produced by natural causes, such as typhoid fever, severe vomiting, &c. The coroner, in his summing-up, remarked, "such a heart as deceased had might bring about death at any time." Wisely as we think, the jury returned an open verdict without comment. In the newspaper report of the inquest we see no mention of the condition of the urine. This is important, for, in the absence of proof to the contrary, it seems by no means improbable that deceased may have succumbed to the effects of the albuminuria of pregnancy or of acetonæmia. The case as it stands remains as the jury left it—an open question.

CHOLERA INTELLIGENCE.

As we anticipated last week, the cessation of the daily bulletin of cholera cases and deaths in Italy by no means implied that the disease had ceased. It probably meant nothing more than that the Italian Government were anxious to avoid the imposition of measures of quarantine upon their vessels by foreign countries, and the silence was maintained only so long as the news did not find its way out by other channels. But on May 26th news came *viâ* Austria to the effect that at Udine on the Austrian frontier, and at the junction of two lines of railway to Venice, two deaths from cholera had taken place on the previous day. This was by no means the first proof which had been obtained, by an extension of the disease inland, that cholera was still prevalent at Venice. Following on this announcement, news as to cholera in that city has been resumed through Italian sources, and intelligence received from Rome to the effect that between May 27th and June 1st fatal attacks varying from twelve to twenty-one in number have occurred day by day, the whole number between those dates amounting to eighty-nine. There is still a cessation of news as regards the province of Brindisi and the town of Bari, where cholera was admitted to have held its ground up to the middle of the last month. Viewing all the circumstances, it is impossible not to regard the advent of July weather with grave misgivings in so far as European cholera is concerned.

GUARDIANS AND MEDICAL OFFICERS.

ONE of the chief wants in London is public opinion. The proceedings of local authorities are reported in the briefest way in local journals, which do not as a rule circulate outside the sphere of those who administer local affairs; hence nothing is often heard of their doings until some act of injustice is perpetrated and the public have been deprived of the services of a useful officer. The parish of St. Pancras has always been exceptionally unfortunate in this respect, and recent events have shown the need for greater watchfulness over its treatment of its medical officers. The independent performance of duty is not understood by the body constituting the chief local authority, and as a result, on more than one occasion, the officer has declined to submit to the intolerable persecution to which he is subjected, and has resigned his appointment. The board of guardians of the poor is, however, in some degree differently constituted; but, nevertheless, they appear unable to divest themselves of the tradition of the parish for which it has earned an unfortunate notoriety; for even those upon the board from whom, from their social position, other conduct might be expected, appear unable to refrain from adopting a method of annoying an exceptionally able officer. We read in a local newspaper which we have received that the St. Pancras guardians have adopted a recommendation of their Schools Visiting Committee calling upon Mr. Adams Clarke, the medical officer of their Leavesden schools, "to remove every case of infectious or contagious disease found in either of the quarantine houses to one of the infirmaries immediately such case is detected; and also that the medical officer be urged to be most careful not to discharge cases of contagious disease from the infirmary before being cured." The resolution, standing as it does without any expression of opinion that this officer has failed to observe so obvious and ordinary a duty, is calculated to make the guardians appear ridiculous, and Mr. Adams Clarke, who has taken much pains to promote school hygiene, and who, as a member of the Council of the Society of Medical Officers of Schools, is deservedly known as an earnest worker in the field of school health, can well afford to pass by silently this sterile record. But the treatment of medical officers in St. Pancras has come to be matter of serious public concern, and especial interest will be felt in this subject for the reason that a perusal of the local newspaper leads to the conclusion that two members of Mr. Clarke's own profession have agreed with the guardians in adopting a resolution which could have been only justified had there been a failure in duty on the part of that gentleman.

ENCOURAGEMENT OF PHARMACEUTICAL RESEARCH.

MR. THOMAS CHRISTY, in a paper on "New Commercial Plants and Drugs," laments the fact that Germany and the United States are so much more advanced and active in pharmaceutical investigation than we are, and appeals to scientific men amongst us, and especially to the authorities in our new technical schools in South Kensington and elsewhere, to give their help in the removal of this reproach. With our colonial empire the material is practically boundless, and it is nothing less than disgraceful that we should have to forward a plant sent newly to England to Germany to have its uses and properties ascertained. We would appeal to the Medical Council, with its accumulating funds and its great influence and responsibility as the source of the British Pharmacopœia, to aid in this matter. There is a commercial side, too, to this question, of great importance to England in these times, when new industries are wanted.

KING'S COLLEGE HOSPITAL.

THE festival dinner of this hospital was held in the hall of the Benchers of Lincoln's-inn on June 1st, under the presidency of Lord Halsbury, and the donations at the dinner and from the special appeal amounted to nearly £3400. One of the most interesting features at the dinner was the speech of His Eminence Cardinal Manning, who, in referring to the great increase of hospitals in London during this century on the voluntary system, remarked on the kindness which his poor co-religionists always met with, not only in King's College Hospital, but in all the large London hospitals. Surely no better testimony could be obtained with regard to the absence of sectarianism in these institutions.

AMERICAN PUBLIC HEALTH ASSOCIATION.

IN our last issue Dr. Saunders, one of the secretaries of the Society of Medical Officers of Health, called the attention of our readers to a meeting of the American Public Health Association, which will be held at Toronto in the early part of October of the present year. The Executive Committee have arranged an attractive programme, embracing the disposal of refuse matters, water-supply, school hygiene, epidemic disease, and the planning of dwelling-houses. There is no doubt the meeting will be

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largely attended by medical practitioners on the American Continent, and the facilities which are offered to their European brethren for visiting Canada at very small cost should tempt those among us who are interested in public health questions, to exchange views with those who have considered hygienic problems under conditions different from those of England, and to enjoy the pleasant holiday which is promised them. The arrangements have evidently been made in the most generous spirit, and English practitioners will do well not to lose so good an opportunity of making themselves acquainted with the far West. Those members of the profession in England who have been so fortunate as to become familiar with the admirable work of their American *confrères* will be glad to learn that the names of Dr. John S. Billings and Dr. Ezra M. Hunt appear on the Executive Committee of the Association.

BELFAST MEDICAL SCHOOL.

ON the 26th ult. an enthusiastic meeting of the students of the Belfast Medical School was held in one of the lecture rooms of the Queen's College to hear a report from a deputation which, as stated in our last issue, had laid their grievances before the Senate of the Royal University of Ireland on the 25th ult. Dr. O'Neill reported the courtesy and kindness with which the deputation had been received by the officials of the Senate, and an association of medical students was formed, the objects of which were stated to be the careful consideration and remedy at the College, hospital, and university examinations of every just grievance of the members. The reply of the Senate to the claim for further representation of Belfast graduates as examiners is awaited with interest. It is to be hoped that the Senate will impartially inquire into the matters complained of, and, whilst refusing to be intimidated, will, in a just spirit, consider and remedy any abuses which exist in their system of medical examination.

SEWER GAS IN PARLIAMENT.

IT is a grim satire on the fatuity of the policy which finds favour in high places that the British houses of parliament should be condemned, as they now are, for their insanitary condition owing to defective drainage. It is abundantly evident that nothing short of a complete reconstruction of the drainage system will be effective. We would urge that the question of drainage and ventilation for the Palace at Westminster should be considered together and *de novo*. It will be less costly and incomparably better on all accounts to make a thorough change at once. The whole existing arrangement is bad and has been so for years. The committee-rooms and offices are, many of them, in a deplorable condition, and as yet the truth is very imperfectly known, and still less well understood.

"AN ERRING FELLOW."

AT the last meeting of the Faculty of Physicians and Surgeons of Glasgow, the conduct of a Fellow, in allowing his name to be attached to a much-advertised liniment, was seriously impeached. At the meeting referred to the Fellows were inclined to be lenient to their erring brother, and remitted the affair to the Council. The matter has now assumed a much graver aspect, and we are informed that the Council on June 7th will bring forward a report emphatically condemning his conduct from a professional point of view. A strong adverse feeling exists, yet we believe even at the eleventh hour justice would lean to mercy's side if the Fellow would acknowledge his mistake, and free himself and his name from any interest in the liniment.

THE EDUCATION OF DEAF-MUTES.

WE observe with satisfaction that the work of educating deaf and dumb children is being systematically carried on by the London School Board. Sixty per cent. of the children who are thus afflicted are now under tuition, and every effort is being made to classify the remainder in convenient groups. Necessarily, the centres of instruction are not yet numerous, but their number is increasing, and care is taken to distribute them over the metropolitan area. Three new classes are mentioned in the report just issued, at Drury-lane, Deptford, and Islington respectively. To second the efforts of the Board officials, time and trouble on the part of parents would be well spent in the endeavour to secure the attendance of any deaf-mute among their children at the nearest centre for this special form of instruction. The method followed is the oral or German. The merit of this system, we may remind our readers, consists in its teaching the mute whose defect is primarily an aural one to use his tongue in speaking and ultimately to read and write intelligently. He thus grows up a man deficient in hearing only, and able to exchange ideas with his fellow-men. A movement of this kind can hardly be expected to extend itself very rapidly. The disease is just rare enough to interfere materially with that concentration of the cases in districts which is so desirable. It may be expected, however, that the process of development, once begun, will not fail to go on, both in London and the country at large.

HOSPITAL MISSION WEEK.

THE scheme of holding six meetings in six separate districts of the metropolis on the six days preceding Hospital Sunday is gradually taking shape, though the particulars are not yet sufficiently determined for publication. Some good advocates have been already retained, including Sir Andrew Clark, the Earl of Dartmouth, Sir William Mac Cormac, the Right Hon. W. H. Smith, Sir Algernon Borthwick, M.P., Lord Northbrook, Sir Henry Holland, the Duke of Westminster, K.G., Mr. Murdoch, M.P., the Duke of Cambridge, and Lord Salisbury. The political crisis should only enhance the interest of such a week by drawing men of all classes and creeds together for the high purposes of human help to the sick poor.

AUSCULTATION OF THE EYEBALL.

M. GENÉ has recently described to the Biological Society of Paris a new method of estimating the tension of the eyeball. This consists in auscultating the organ by means of M. d'Arsonval's telephone. The instrument is applied to the globe, and a sound, such as that of the interrupter of a faradisation instrument, made to pass: the differences of degree and intensity of the sound as perceived by the observer afford a valuable and accurate means of diagnosis. M. Gené's experiments being as yet somewhat incomplete, he hopes at some future time to lay the subject before the Society in greater detail.

A FIREMAN'S DUTY.

THE recent case in which the absence of a fire-escape man from his post is alleged to have been the cause of loss of life has attracted attention to the need of reform in respect to the "duty" of firemen generally. There can be no question that the Metropolitan Brigade is sadly undermanned; and to this we owe the fact that firemen are practically never "off duty," except when they have special leave of absence. This is a most regrettable state of matters, but the remedy is very simple: expend a little more money on the Brigade, and Captain Shaw will soon know how to secure and train a larger number of men.

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MILITARY MEDICAL SERVICE IN SPAIN.

THE Spanish Government, having recently established a military medical academy, through which all military medical officers will as a rule have to pass, has just issued a long programme of regulations regarding the admission of candidates to this academy. It is open, of course, only to Spanish subjects, who must be licentiates or doctors of medicine of a Spanish university, under twenty-eight years of age, and of good character and physical constitution. The selection will be made by open competition, consisting of four examinations or exercises. The first takes the form of an extempore dissertation in writing, limited to four hours, on a subject connected with pathology, therapeutics, hygiene, or forensic medicine, drawn by lot out of an urn; the second exercise is entirely clinical, and consists in the examination of a patient, also drawn by lot by the candidates. The third is *vivâ voce*, and the fourth an operation on the dead body.

LEICESTER PROTECTED BY VACCINATION.

ONE of our Commissioners has been to Leicester to ascertain for himself if that town is really so independent of vaccination for its immunity from small-pox as some might think from what they read of the neglect of the vaccination laws by the sanitary authorities. All who are interested in vaccination, either in its scientific or sanitary aspects, will do well to read what he says. He does full justice to the sanitary arrangements of Leicester. But he shows that the first line of defence again the horrible disease there, as everywhere else, is vaccination and revaccination. The medical officer of health is revaccinated; so are the sanitary inspectors; so are the nurses of the Infectious Hospital. Without such use of the beneficent operation so much decried by the Leicester authorities all their officers would be disabled, and all their boasted arrangements mocked. After this it may be hoped that these authorities will speak a little more gratefully of vaccination.

A MISSION TO THIBET.

A MISSION is shortly to be despatched to Thibet for the purpose of establishing friendly commercial relations between that country and India. The mission leaves Bengal for Lhasa, the capital of Thibet, about the end of May or the beginning of June, and Mr. Colman Macaulay will go as political officer in charge. Dr. A. Leahy, of the Indian Army, will also accompany it as medical officer. This expedition should be fraught with the greatest interest, as the country to which it goes is almost unknown. In 1811 a gentleman named Manning, after learning to speak Chinese in Canton, visited Lhasa disguised as a Chinaman, but neither before nor since that time has any Englishman ever set foot within the walls of the holy city of the Dalai Lama.

OPHTHALMIC OPERATIONS AND TETANUS.

DR. D. JUAN SANTOS FERNANDOS, of Havana, gives in the *Crónica Médico-Quirúrgica* an account of a fatal case of tetanus following the extirpation of the eyeball for atrophy following the removal of a sarcomatous tumour from the orbit. In commenting upon it, he remarks that the only four other cases of tetanus following ophthalmic operations which he has been able to find in medical literature all proved fatal, which tends to show that though tetanus rarely follows such operations, it is particularly dangerous when it does supervene. In none of the cases was the operation intraocular merely, such as cataract extraction or iridectomy, a class of operation which Dr. Fernandos believes never to have been followed by tetanus.

CLUBS FOR YOUNG WORKWOMEN.

IN accordance with the universal conviction that work, if it is to be hearty, effective, healthy, and successful, as it should be, must give place at times to recreation as well as rest, a movement exists for the establishment of clubs for young workwomen. The promoters of the scheme appear to appreciate very fairly the requirements of their case. They recognise the fact that idleness is not profitable, as a rule, even in leisure time; that diversion of energy, mental and physical, albeit a light diversion, is an essential part of recreation, and that such diversion must vary in particulars to suit varieties of temperament and habit. Books, magazines, music, round games, have all their advantages, and these come naturally to form a part of the plan. In order to be of real benefit, they must, as Mrs. Fawcett aptly observes, be of the best. We may be allowed, as taking a professional interest in the subject, to suggest that space should be a prominent object in the selection of rooms for this purpose, and that ventilation by the outer air be insisted on. Bright fires and brilliant gas are useful adjuncts to such an establishment. At the same time they must not be over-done, so as to impoverish the atmosphere. It is also worth remembering that a club does not necessarily lose its utility in summer, though the time at which in-door occupations are most suitable may be somewhat postponed. The effect of personal influence is an important factor in the success of such institutions. In no case need the fruit of good intentions and efforts be at once expected, but there is very little doubt that if some energy and tact be devoted to the work, or, as we may say, invested in it, the result will repay the trouble taken.

A CONVENT TURNED INTO A HOSPITAL.

A CHARITABLY disposed Mexican lady having left a large sum of money for the purpose of building a hospital, her executors have obtained an old convent in Regina and fitted it out magnificently, according to their lights, for the reception of patients. Though there is plenty of luxurious display, the arrangement of the wards is, as might be expected, far from conducive to isolation or good ventilation. For this no provision has been made, the air having to enter and pass out as best it can. The drainage, too, is very unsatisfactory. Altogether it is a great pity, according to *La Voz de Hippocrates*, that a building of less pretentious appearance, but of better hygienic construction, was not erected with the deceased lady's wealth.

CLUB-FOOT.

PROFESSOR VERNEUIL lately cured a severe case of club-foot by removing the scaphoid, cuboid, astragalus, and a part of the os calcis; the vast gap notwithstanding, the child recovered perfectly and was able to walk very fairly. An open dressing with iodoform was employed.

FOREIGN APPOINTMENTS.

THE University of Havana has elected Professor Dr. D. José Maria Carbonell y Ruiz as Senator. M. Jourdan has been appointed Professor of Histology in Marseilles. Dr. Stintzing of Munich has been appointed Extraordinary Professor of Children's Diseases in Berlin.

CARPET-BEATING IN SUBURBAN GARDENS.

THE beating of carpets in suburban gardens, and, we may add, in the back-yards and courts of houses generally, is a great nuisance. The noise is irritating to invalids especially, and to the multitude of sensitive folk

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Moreover, it is not a sanitary process by any means, this accummulation of dirt in carpets, with periodical disseminations of the disgusting and perhaps noxious filth in the atmosphere. It would be wiser far to adopt measures for cleansing carpets in properly heated chambers than to scatter the dust they contain broadcast.

DR. D. NICOLSON has been appointed by the Home Secretary Medical Superintendent of Broadmoor State Lunatic Asylum, *vice* Dr. Orange, resigned. Dr. Nicolson has seen nearly twenty years' service under the Home Office, having been assistant-surgeon at Portland, Woking, and Millbank Prisons. He was transferred in 1876 from being senior medical officer of Portsmouth Prison to be Deputy Superintendent at Broadmoor.

A PAPER will be read by Dr. Thorne Thorne at the next meeting of the Epidemiological Society, at 8 P.M. on Wednesday, June 9th, on the Results of the International Sanitary Conference of Rome. The Society meet in the rooms of the Medical Society, Chandos-street.

THE death is announced of Dr. D. Francisco Ortega, Director of the Medical School of Mexico.

Pharmacology and Therapeutics.

SAVORY AND MOORE'S MEAT PEPTONE AND PEPTONISING PELLETS.

THE objection commonly made to all preparations of meat peptones is that they have a nauseous sickly taste. The difficulty has at last been overcome by Messrs. Savory and Moore, who have recently introduced a meat peptone which fulfils all the requirements of the sick-room. A small jar containing one ounce, when mixed with hot water, makes, without further addition or seasoning, a pint and a half of palatable and appetising soup. The peptonising pellets issued by the same firm are excellent, and will be found useful for predigesting milk.

MARTINDALE'S COCAINE PASTILS AND TABLETS.

Cocaine is of such value as a therapeutic agent, and is now so commonly employed in the treatment of a variety of different complaints, that pharmacists are naturally desirous of presenting it in as agreeable a form as possible for administration. Mr. Martindale sends us specimens of cocaine pastils, presumably made with a basis of glycerine and gelatine. They are attractive in appearance, and have little or no taste. They are recommended "for giving tone and flexibility to the vocal organs, and allaying irritation of the throat, trachea, and vocal cords." They are said also to be useful "for irritated conditions of the stomach, nervous depression, and distaste for food from various causes," and it is added that they are "specially adapted to the wants of singers and public speakers." They presumably contain one-twentieth of a grain in each, although, curiously enough, the strength is not stated on the label. Respecting the value of cocaine as a remedy for sea-sickness, there is still much difference of opinion; but Martindale's cocaine tablets undoubtedly form one of the most convenient methods of administering this remedy. Prescribers are indebted to Mr. Martindale for the energy he has displayed in preparing these pastils and tablets.

STATIC ELECTRICITY IN TABES DORSALIS.

Static electricity has been made use of in tabes dorsalis by Dr. Shurigin, who discusses the subject in the *Vrach*, and concludes that this form of treatment is beneficial if it is commenced before any visible atrophic and paralytic ymptoms have made their appearance.

BENZOYL-ECGONINE.

The physiological action of benzoyl-ecgonine has been studied by Mr. Ralph Stockman, who has communicated his results to the *Pharmaceutical Journal* of April 24th. The subcutaneous injection of from one-tenth to one-third of a grain caused slowly developed muscular stiffness, and the pupil gradually dilated. In from eighteen to twenty-four hours after the administration the reflex actions became greatly exaggerated, this increasing until the slightest irritation brought on tetanic spasms. This condition may last one or more days, and the frog ultimately recovers or dies of exhaustion. Division of the spinal cord at the medulla had no effect in hindering the appearance of convulsions after these had become established. With moderate doses the rapidity of the heart's action was increased; large doses caused great irregularity and arrest in diastole. No effect was observed on the vessels of the web. The sensory and motor nerves were unaffected. On striped muscle it acted as a poison like caffeine. A rabbit received twenty-four grains subcutaneously without apparent effect. Cats were more susceptible; twenty-four grains subcutaneously injected caused diarrhœa and vomiting, with dilated pupils, tetanic spasms, and death. The heart was in a relaxed condition, but the intestines were firmly contracted. Benzoyl-ecgonine appears, therefore, to be practically identical in its physiological action with caffeine, although there are some minor points of difference. The chief action of cocaine—paralysis of the sensory nerves—is absent; in fact, the relationship between the action of the two substances seems to be as profoundly altered by the subtraction of the methyl group (CH_3) as obtains in the analogous case of methyl-strychnine and strychnia.

IODOFORM AND NITRATE OF SILVER IN INDOLENT ULCERS.

Dr. Maethe, writing in the *Norwegian Medical Archives*, recommends a combined application of iodoform and nitrate of silver to indolent ulcers, fistulæ, and all badly healing granulating surfaces. He first applies a thin coating of powdered iodoform, and then cauterises with nitrate of silver, after which more iodoform is applied. There are formed in this way nitric acid, iodoform, and iodide of silver, and their nascent condition effects a great change in the conditions of tissue life. The advantages of this method of treating ulcers are that the action is purely local and that the cicatrisation of the surface is effected under an antiseptic covering.

OSMATE OF POTASSIUM.

Merck of Darmstadt has prepared the osmate of potassium to obviate the use of osmic acid, which is so irritating to the respiratory organs, and so hygroscopic. The *British and Colonial Druggist* is informed that an English firm has also manufactured the sodium and lithium salts. The potassium compound is said by Wildermuth to have proved beneficial in some cases of epilepsy, the daily dose being one dozen pills, each containing $\frac{1}{24}$th of a grain in combination or alternation with bromide of potassium. A 1 per cent. solution of the potassic osmate has also been recommended in the treatment of goitre, neuralgia, tumours, and other diseases.

PHARMACOPŒIAL OPIUM.

In an article published in the *Chemist and Druggist*, Mr. John Moss points out the variable quality of different opiums, that which contains 8 per cent. of morphine being sanctioned in the Pharmacopœia. It is also shown that Turkish opium, as well as the best grown in Smyrna and Asia Minor, generally yields from 12 to 15 per cent. Mr. Moss suggests that the morphine standard of opium should be raised from 13 to 15 per cent. in powdered opium, to encourage the production of high-class opium in Asia Minor, and permit the use of Turkey opium, which is not merely rich in morphine, but uniform in richness.

CHIONANTHUS VIRGINICA.

The root bark of the "snowdrop tree" or "fringe tree" of North America, an oleaceous shrub or small tree, has been found by Dr. Henning to be a useful aperient, cholagogue, diuretic, and alterative. A liquid extract is prepared and given in doses of one fluid drachm thrice or twice a day. In jaundice its value is said to be conspicuous; it is not a powerful hepatic stimulant, but it is of value in portal congestion.

GUY'S BIENNIAL DINNER will be held on July 2nd, not June 2nd, as stated in our last.

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MEDICAL DEGREES FOR LONDON STUDENTS.

A SPECIAL general meeting of the Metropolitan Counties Branch of the British Medical Association was held at the Royal School of Mines on the 31st ult., Dr. Walter Dickson, President of the Branch, in the chair. The attendance was fairly numerous.

The CHAIRMAN, in opening the proceedings, recapitulated the steps taken by the Branch since its meeting on March 6th, 1885, to carry out the resolutions then passed. He said that upon the question of giving facilities to London students for medical degrees depended the future welfare and prosperity of London as a school of medicine; and he reminded the meeting that the question was raised in the Branch in 1879, in which year also Dr. Bristowe addressed a letter to the Chancellor of the University of London upon the need for reducing the stringency of the Matriculation and Preliminary Scientific Examinations. He referred to the origin of the Medical Faculty of the Edinburgh University by the united efforts of the Colleges of Physicians and Surgeons of that city to furnish the first professors, and spoke of the great impetus given to that faculty when Monro primus was appointed Professor of Anatomy in 1720. He also pointed out that as long ago as 1827 the proportion of English students graduating in the Medical Faculty of the University of Edinburgh was greater even than at present. But the unrivalled clinical opportunities of London demanded that it should take a foremost place in medical education.

Sir ANDREW CLARK, on rising to move the resolution, said that the question was a very grave one, that it was about to be taken up by the greatest Medical Association in the world, and that it would not, therefore, in the end fail to be carried. In the statistical report compiled by Dr. Gilbart Smith, and in Dr. Hickman's pamphlet, the subject was viewed so exhaustively as to leave little to be said. It is a fact that the number of medical students in London is steadily decreasing, whereas in other parts of the country they are increasing. Why do they leave London for Edinburgh? Is it because the teaching is better or living cheaper? No, everything leads to this result: that after their education they are examined by their teachers, and in the end get a degree which is far more profitable than a licence to practise. This is the grievance, and it is a just one. The curriculum is equal, the examination is equal, the age is equal; but the result is an unequal symbol of efficiency. In some senses it is a sentimental grievance, but not merely so, for it is also a real practical grievance, which affects medical men in England not only socially and materially, but even in their practice with their professional brethren, for the holder of a degree is held in higher estimation than the holder of the diplomas of the two Colleges. The grievance is widely and seriously felt, and to such an extent that parents and guardians send their children elsewhere than to London for their education. As there is no reason to believe that education in London is below that of Scotland, they had a right to claim that those who are trained here should obtain the symbol which should testify as much as if they had been educated in Glasgow or Edinburgh. It must not be forgotten that medicine is an art, and must be learned by observation and work in the hospital ward. There is no medical school in the world where there is such practical teaching and so much personal influence of the teacher upon the pupil as in London. There is no need to disparage Edinburgh; its success has rendered this impossible; there are at least 2000 medical students there, and how is it possible to teach them otherwise than by lectures? And how can any didactic teaching, however good, make a man a doctor? The University of London has done an enormous work in raising medical education and giving a dignity to medical degrees which they never had before; but it has committed one grave mistake in insisting upon a knowledge of moral philosophy at the M.D. examination and rejecting in this subject some of those who were best in medicine. He characterised this introduction of so vast a subject at the close of a medical curriculum as a sham and as offering a premium upon "cramming." They could not go to the University of London to remedy this grievance, but there was a prospect that the two Colleges of Physicians and Surgeons might unite and form a Teaching University, and thereby do a great service to society and the State. If rightly constituted (with the introduction of an examination in preliminary science and of a third practical examination at the close, a university would be formed which would not only be venerable in age and catholic in its constitution, but which would be able to give strength to the profession and fulfil better the work which is demanded of the Colleges. He had been struck with the paucity of the objections to this scheme. It had been said, what is the good of founding a new university when there is already one in London? But why, he asked in reply, is Scotland, with its 3,000,000 or 4,000,000, to have four universities, and London, with its 5,000,000, to have only one? Again, it was objected that students would be deprived of culture and refinement. But culture is innate; it is that in a man which enables him to see, beneath the common things with which he deals, all that is pure, just, true, and good. There is no need for a university to bring this out; and if he felt that the proposed scheme would deprive men of culture he would oppose it. Sir Andrew concluded by moving, "That negotiations with the University of London not having led to the desired result, this meeting recommends that the Royal College of Physicians of London and the Royal College of Surgeons of England be requested to endeavour to obtain power to grant degrees in Medicine."

Mr. JONATHAN HUTCHINSON seconded the resolution, and said that he had long ago advocated the union of the Colleges and the granting of one general title to all general practitioners. One of these objects had already been attained, and no one who took a broad view of the interests of the English profession could fail to support the other question. It was absurd that there should be such a difference in the matter of titles among men who are exactly equal as to their professional attainments; and the existence of these differences led to much heartburning and rivalry, as well as confusion in the public mind. If such common title were conferred, it had been said that it would be unjust to those who possess university degrees; but each degree-conferring body must stand on its own merits. Universities were originally local, and it is not consistent that men educated in London should be sent to graduate at John-o'-Groats because in mediæval times a university had been founded at John-o'-Groats. It was not at all unjust to existing universities to create a new one. The difficulty might be surmounted by asking, not for a degree but for a title, something which would not imply a "university education"; indeed, it is absurd that the Colleges should ask for powers to give a university degree upon a merely medical curriculum. But the title "Doctor of Medicine" was different from the degree M.D., and the conferring of such a title would work no injustice on the holders of degrees. If the title were granted to all who held the double qualification, there might be a little temporary injustice to those who had but one qualification; but, as a matter of fact, he had found that the senior practitioners were those who cared least for a change which was almost universally felt by the juniors as essential and necessary to success. The possession of a degree-granting monopoly by the universities had led to a degradation of the university curriculum; for in many of the most meritorious universities a man may at once proceed to professional studies with no further evidence of general education than the ability to pass his "little-go." The only restriction imposed by a university was that the student must go "into residence"; but this, instead of a good, becomes an evil when it takes a student from his clinical work in London just at the time when he will most profit by it. The examinations of the Colleges of Physicians and Surgeons are equal to those of the universities; many have the same examiners; and, since the number of examiners was greater in London, the risks of injustice to candidates were much lessened. He would not grant the title to all licentiates, but only to those who, a year after qualifying, should pass a purely practical examination, which need not be one whit stronger than the previous examination, whilst it would encourage men to keep at hospital work for another year.

Dr. PYE-SMITH, as a graduate of London University, thanked Sir A. Clark for his liberal mention of it, but asked whether it was correct to say that negotiations had failed with the University, which was at present engaged in considering questions of reform. It is important to distinguish between making an examination easier to pass and making it easier to take degrees. The examinations of the London University need not be diminished in severity, but it is quite possible to facilitate the taking of degrees—e.g., by making examinations more frequent, deviating from their

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strict order and in other ways. So that it is not hopeless to render the degrees of the London University more accessible; but if any benefit is to be gained from the University the standard must not be lowered. He admitted the present grievance, but asked if from a certain date all students be admitted to the title of Doctor or the degree of M.D., would not great injustice be done to those who had taken their diplomas in the preceding years. If additions were made to the present College curriculum for intending graduates, the grievance would not be thoroughly remedied; and if, on the other hand, all London students were admitted it would make the degree equivalent to a minimum qualification. Again, if the London Colleges gained the power to grant degrees, the colleges in Edinburgh and elsewhere would obtain it also. For his own part, he felt that this university title, which is of no meaning, should be put an end to, and would be glad if the prefix "Dr." could be dropped by graduates. After all, the most important question is untouched by the resolution—he meant the status and education of London students. We are in want of university life in London. The prospect of founding a medical university is delusive; but it is possible for existing institutions to combine and form a real useful university, which should not simply exist to give degrees, but should widen and deepen the training of students and raise the tone of the profession.

Mr. MACNAMARA pointed out that it was not suggested that every student should be granted a degree, but that the anomaly should be rectified whereby in Scotland 86 per cent. of the medical students graduate, whereas in England only 12 per cent. do so. No one would dream of asking that powers should be granted to confer degrees upon minimum terms. The branch had sent two deputations to the University of London, but had had no response, and he would ask how much longer they were to wait for it. The scheme for founding a Teaching University did not touch this question. Our medical students find themselves practically shut out from degrees, or else they break off their career in London in order to go elsewhere to obtain them. He had not heard any reasonable objections to the right being given to the Colleges of Physicians and Surgeons; and if they could be got to unite for this purpose they might draw up a well-devised scheme to carry it into effect.

Dr. W. J. COLLINS pointed out that the University of London had already made reforms in the direction of the memorialists of last year. Two preliminary scientific examinations were now held annually; the scheme of Mr. Magnus, based on that of Lord Justice Fry, was in the direction of increasing the educational authorities in the Senate, and was now passing through Convocation; the subject of Moral Philosophy at the M.D. had been replaced by Mental Physiology. It seemed to him that the ideal sketched in the Report of the Branch Council last year was to reduce the London University to the plan of Edinburgh, in order to enable the majority of students to take medical degrees. The whole question was one of insufficient preliminary education, and he predicted that the natural tendency of this movement would be a downward one.

Dr. HABERSHON said that one would think, from the remarks of Drs. Pye-Smith and Collins, that it was contemplated to grant an insignificant degree, but this was not their object; on the contrary, it was hoped by this movement to raise the standard of education. The matriculation examination of the University of London embraced so many subjects and such difficult questions that it encouraged cram; for no matter how well a student succeeded in one subject, if he failed in one he was rejected in all. The Preliminary Scientific Examination also tended to make the London degree an exclusive one, and the changes made by the University did not meet this point. His late colleague, Dr. Mahomed, in order to obtain a degree which carried more weight with it than the one he already held, was obliged to travel to Cambridge every night in order to "keep terms," as if that would qualify him any the more for holding a degree for which he had a right. He did not think the examinations for the M.R.C.S. and L.R.C.P. were insignificant; they were equal to those of a University; and if a preliminary examination were introduced, not inferior to those of other Universities, their candidates might then justly demand a title not inferior to those obtained from a University. He fully endorsed what had been said of the value of clinical work in London, and would not urge anything which tended to lower the standard of professional education.

Dr. MOXON said that the arguments of Sir A. Clark had not been met. The fact was that the degrees of the University of London were too stiff to be obtained by the majority of students, and whatever changes might be made, there would never be anything done to lower the degree. He did not think Drs. Pye-Smith and Collins were in earnest in holding that if degrees are to be given on a large scale they must be given in the very lowest standard. He felt that in this vast metropolis, where many persons more or less distinguished practised and taught, they ought to have, not the smallest and most dwindling of medical courses, but the largest and most important. That lofty and honourable body, the University of London, must not refuse to allow others to do what it was unwilling or unable to effect.

Dr. WALTER SMITH, commenting upon the confusion that existed whether a title or a degree should be asked for from the Colleges, advocated the formation of a Teaching University, and moved an amendment to insert after the word "recommends," instead of the remainder of the resolution, the words, "that steps be taken to found a Teaching University for London."

Mr. SWINFORD EDWARDS seconded the amendment.

Dr. BROADBENT said that although the primary object was to request the two Colleges to give degrees in medicine and thus remove a serious grievance, yet beneath that there was the other object of raising the culture of London medical students. It would be one way of starting a Teaching University; and already the Colleges possessed a site upon which they could found a great scientific institution. From this movement all the advantages of a Teaching University would be obtained; but to suppose that the scheme now before the University of London would meet these wants was trifling with intelligence.

Dr. SANSOM said that at the last meeting of Convocation there was evidence, both on the part of Mr. Magnus and others, that no opposition to this movement would come from the existing University.

Sir A. CLARK, in reply, said that Dr. Collins had no shadow of ground for his assertion that one of the issues of this movement would be a competition downwards to a minimum degree. The Colleges had progressed upwards in raising the standard of their examinations, and there was no reason why they should go back. Drs. Pye-Smith and Collins would admit that the degree of the University of Edinburgh is an honourable one; and he contended that the examinations for the double qualification of the Colleges were precisely equivalent to those of Edinburgh University, one difference being that in Edinburgh students are examined by their own teachers. He satirised the substitution of Psychology for Moral Philosophy at the M.D. examination of the London University, and concluded by affirming that it was the object of the promoters of this movement to make Doctors of Medicine, and that their contention had not been gainsaid.

The amendment was then put and lost, only the mover and seconder voting for it.

The original resolution was then put and carried, with but one or two dissentients.

LUNATIC ASYLUMS, 1885.

No. II.

A VERY interesting report is sent in by the Superintendent of the Sussex County Asylum at Hayward's Heath (Dr. Williams). He finds that the forms of admission accompanying patients are often very imperfectly filled up, and that in some cases they have been absolutely invalid, necessitating the refusal of admission to the patient until the form was amended. "The imperfect filling up of these forms is a very serious matter: because, on the one hand, if the asylum authorities admit and detain an alleged lunatic on an imperfect order of admission, they may render themselves liable to an action for illegal imprisonment; whilst, on the other hand, the delay caused in taking a patient back to have the imperfect order amended may be of the greatest harm to him, besides causing endless worry to all concerned."

Dr. Campbell gives a sad tale of hopelessness for the inmates of his asylum (Garlands). "At the present time," he says, "there are only 16 males and 49 females out of the total number of 850 in the asylum in whom there is the slightest

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prospect of recovery. All the rest are either idiots, imbeciles, dements, or chronic lunatics, whose mental aberration can only terminate with their death"—that is to say, a proportion of 1 in 13. With a view to the more systematic instruction of the attendants and nurses in their duties, Dr. Campbell has prepared a pamphlet for their guidance. Each attendant and nurse receives a copy of this pamphlet on their arrival. We regard this as being a step in the right direction, and would be glad if such a course were taken more frequently, for it too often happens that new attendants are left to learn their duties at haphazard. We have a copy of Dr. Campbell's little work before us; it is entitled "Hints for the Guidance of Attendants on the Insane," and we can thoroughly commend it as being likely to serve a most useful purpose.

At the Derbyshire County Asylum, the Superintendent (Dr. Murray Lindsay) says the high mortality (14·93 per cent. on the daily average number resident) is "again attributable to the excessive number of deaths from pulmonary consumption, and to the very unfavourable character of the cases admitted, many of whom were in such a debilitated or diseased condition that they died within short periods of admission, one man only surviving five hours, and another nine days, eighteen dying within twelve months of admission. Dr. Lindsay laments that the proposal to erect a detached hospital for the isolation and treatment of infectious disease, "a matter so urgently pressed by the Lunacy Commissioners," was negatived by his committee on the ground of expense. They, however, have granted him a solatium in the form of a disinfecting-room and apparatus costing £300. Dr. Lindsay records his thankfulness for this small mercy; but states that a disinfecting apparatus "is only one weapon, and that not the strongest, in the necessary armour with which to fight the battle of infectious disease."

The Surrey County Asylum at Cane-hill is as yet an asylum without a history, but it would appear to be starting under favourable auspices, for the Commissioners in Lunacy, in recording their first visit since its occupation by patients, are able to say that, "considering the short period which has elapsed since this asylum was opened, the progress made in its adaptation to the purposes for which it was built is highly creditable to the committee and medical superintendent." The death-rate is somewhat high. One patient, according to Mr. Moody's report, would appear to have put one of his delusional ideas to a practical test. "This man was the subject of general paralysis, with delusions of an exalted character, one of these being that he could fly. Suddenly, without any warning, he threw up a window, got his legs on the ledge, and slid off, falling to the ground a distance of eighteen feet." He survived the experiment for ten days.

"Herefordshire," says Dr. Chapman in his report as Superintendent of the Hereford County and City Lunatic Asylum, "has always had a larger proportion of lunatics to population than any other county; it now has just over 4 per 1000; the average for England and Wales is 2·59 per 1000." Dr. Chapman is afflicted with a plethora of "idiots and persons over seventy years of age," cases of helplessness, which he thinks should largely and more fittingly be provided for in workhouses. The chief result, apart from the mortality, that arises from the presence of these helpless and dirty patients is that the "foul washing" amounts to something considerable; and, curiously enough, the amount would appear to double itself every five years. And Dr. Chapman gives statistics which fully bear out his remark. It is perhaps not to be wondered at that erysipelas showed itself twice during the year. The death-rate, however, is "again very low—viz., 5·2 per cent. on the average number resident"; and Dr. Chapman thinks the abundant out-door exercise the patients enjoy must take a first place in explaining the low death-rate, added to which there are the abundant dietary and the warmth of the clothing; and doubtless these are all very essential points, and points not always sufficiently looked to in the treatment of patients in asylums.

The Superintendent (Dr. Spence) of the Staffordshire County Asylum at Burntwood refers to the total number of admissions for 1885 as being less than for any year since 1880. "A part of the decrease may, in all probability, be attributed to the not unnatural reluctance on the part of medical men to undertake the duty of certifying patients in face of the present state of the law, which appears to render them liable to considerable worry, to say nothing of pecuniary loss, no matter how conscientiously the duty of certification may have been performed." We are glad to see that Dr. Spence has "introduced a plan for the systematic weighing of every patient once a month." In our opinion this practice is a most useful one; it serves to bring to notice the falling off in weight of quiet uncomplaining patients, and it often checkmates the noisy clamour of grumblers who are "being starved," by showing an increase in their body-weight.

At the Barnwood House Hospital for the Insane, Dr. Needham reports that a considerable number of patients have again had to be refused from want of room, also that the admissions were marked, in the great majority of cases, by extreme despondency and a suicidal disposition, but that there is no casualty to record. On the question of "open doors" Dr. Needham thus expresses himself: "While personal freedom has been widely extended to the patients, I have still been unable to persuade myself of the practical value or expediency of the general application of an arrangement which has been called the 'open-door system,' and which I have therefore not attempted to adopt generally."

The Superintendent of the Asylum for the City and County of Bristol (Dr. Thompson) attributes his unusually high percentage of recoveries during the year as being to some extent due to the partial stoppage of the system of allowing new and acute cases to rest for a longer or shorter period at the workhouses. His remarks on the successful results of the introduction of Cornish boilers with the view of keeping the asylum "always in hot water" are well worth attention.

Dr. Glendinning, the Superintendent of the Joint Lunatic Asylum at Abergavenny, reports that, although the number of the admissions for the year was low, they were not of a very favourable character, as only 60 per cent. were deemed curable. Frequent changes took place among the attendants, but "dismissal for misconduct or ill-treatment of the patients has been seldom found necessary."

LEICESTER, AND ITS IMMUNITY FROM SMALL-POX.

(*From our Special Commissioner.*)

THE public hears so much about the neglect of vaccination in Leicester and the absence of small-pox that in a less enlightened age we might be in danger of a reversal of public intelligence on the subject. The protection of the community from a plague so deadly and so disgusting may well excite admiration, whatever arrangements conduce to so great an end. It is of great moment, therefore, to ascertain what the arrangements are. Jenner is a great name in medicine, and is not likely soon to lose its fame. And small-pox, when it occurs, can be as fatal at Leicester as anywhere else. It is sometimes hæmorrhagic, sometimes confluent. In 1877 of twelve cases five died. Isolation and disinfection, promptly and thoroughly carried out, are the vaunted measures in Leicester, and to read the newspapers, or even the sanitary reports, one would almost think they were all-sufficient. For ten years they have not had a great epidemic. Much inflammable material is being prepared. But does not Leicester by sanitation and isolation almost nullify the fact, and justify its authorities in their disrespectful and even hostile attitude to vaccination?

The methods of Leicester are thus summarised in the Annual Report for 1884 of the Sanitary Condition of the Borough, by the late able Medical Officer of Health, Dr. William Johnston:—

"During the last eight years there have been no fewer than twenty importations of small-pox into the town and its immediate neighbourhood; the *disease has always been stamped out, owing to the fact that the Health Committee have always succeeded in promptly removing to hospital, not only those stricken with the malady, but also all the other inmates of each infected house.*"

I make this quotation because it is the statement of the case of the Leicester authorities in a nutshell, and by no unfriendly hand, and by a medical man, let me add, who knows well the importance of vaccination. Here, then, seemed a case calling for investigation and some revision of our severe condemnation of those guardians and town councillors who are unfaithful to their duties as Vaccination Authorities. The threat of a future retribution, however

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well founded, has little effect on those who enjoy present immunity and think they have discovered a method of proceeding which supersedes vaccination.

In my endeavours to ascertain the real secrets of an immunity which seemed capable of a very different explanation from that given by the anti-vaccination authorities, I have to acknowledge the courtesy of the municipal authorities and the perfection of the sanitary arrangements. I must, too, in passing, pay a tribute to the architect of the Municipal Buildings, as well as to the community whose conception of municipal functions was so high as to raise such structures for their public offices. I must specially thank Mr. Windley, Chairman of the Sanitary Committee, and the medical officers of health, the late and the present, Dr. Johnston and Dr. Tomkins, for an explanation of the system which is followed when a case of small-pox occurs, which is very briefly told. The radical community of Leicester has no compunctions in restricting personal liberty except in the matter of vaccination. They have a law of compulsory notification of infectious diseases, requiring a medical man to report the case as soon as he is aware of it. It is alleged that this law works so well that all the objections of medical men to it have ceased. No sooner is there a case of small-pox reported than the medical officer of health is down upon it with his staff of inspectors. Unless the house is very favourable for isolation, the patient's removal to the Infectious Hospital is urged, and is promptly executed. Not only so, the removal of all the other inmates of the house is pressed strongly. Actual legal powers do not exist. But without these pressure can be applied. If a workman has to be influenced, and is rather rebellious, he is told that his employers shall be informed of the facts of his obstinacy. He is offered compensation for loss of time and loss of property. So with all other inmates. And up to this time all resistance has been overcome, and for ten years Leicester has not had a bad epidemic. And its authorities boast of their promptness and success in carrying out isolation. Disinfection too, is energetically applied to premises and property. I acknowledge that they do this part of their duty well and successfully. Equal success has been attained in other places, notably South Shields, where Dr. Munro reports that in three years and a half small-pox has been introduced thirty-three times, and each first case has been removed to hospital, with the result that in no single instance has there been any extension of the disease after it has been reported to the Health Office. In Leicester there have been occasionally two or three cases among those removed to quarantine. But the success of the system has been great, and undoubtedly goes far to show the desirableness of a general compulsory notification system.

But now I come to another little factor in the protection of Leicester from small-pox, which will surprise plain people out of the profession, and I am persuaded not a few of the good people of Leicester themselves, when they have their minds directed to it. Tell it not in Gath—but it is even so,—Leicester owes its protection, even with all its boasted and really good sanitary arrangements, to VACCINATION! or rather, I should say, to *revaccination*. All the persons in the house of the patient are vaccinated or revaccinated. Every person brought into contact officially with the case of small-pox—the medical officer of health, the inspectors, the nurses and matron of the infectious hospital—are all vaccinated and revaccinated. And I am bold to say that without this protection of vaccination the perfect sanitary arrangements of Leicester would break down in a month. For it is not only that people who are revaccinated never take the disease; but that people who are not revaccinated, who are brought into close quarters with it, do generally take it. Certainly we ought to hear no more of Leicester's independence of vaccination. If her sanitary authorities really believe in their sanitary and disinfecting appliances *per se*, let them put our statements to the test. Let them remove the *cordon* of protected persons about the cases, and their boasted arrangements will prove a delusion; the sick will be without nurses, and the very industry of Leicester will be molested by a plague which will stagger the radical authorities of the borough, and bring the thousands of unvaccinated and unrevaccinated inhabitants to cry for the blessings discovered by Jenner. I need not say that Dr. Johnston and Dr. Tomkins entirely agree with me in this estimate of the part played by vaccination in Leicester. Like most officers of health, they attach great importance to the compulsory notification of diseases; and Dr. Johnston at least is of opinion that with a universal system of this kind, and an efficient and energetic staff for carrying it out, the severity of the vaccination laws might at least be relaxed. Dr. Tomkins lately expressed his views of the urgent need for such a system in the metropolis in THE LANCET of May 2nd, and few could speak with more authority. But it is superfluous to say that they believe in vaccination, and that but for their use of it the authorities of Leicester would be mocked in their boast of mere sanitary precautions. Dr. Tomkins, indeed, is the author of one of the most powerful arguments for compulsory vaccination in the language, read before the Society for the Abolition of Compulsory Vaccination, London.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5704 births and 3033 deaths were registered during the week ending May 29th. The annual death-rate in these towns, which had declined in the preceding ten weeks from 29·3 to 18·7, further fell last week to 17·4, and was lower than in any week since September last. During the first eight weeks of the current quarter the death-rate in these towns averaged 19·5 per 1000, and was 3·1 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 12·2 in Nottingham, 12·5 in Norwich, 12·8 in Bristol, and 14·4 in Wolverhampton. The rates in the other towns ranged upwards to 25·7 in Portsmouth, 28·7 in Blackburn, 30·0 in Halifax, and 32·8 in Bolton. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 367, 324, and 286 in the previous three weeks, further declined to 278 last week; they included 90 from measles, 76 from whooping-cough, 36 from diarrhœa, 28 from diphtheria, 25 from "fever" (principally enteric), 23 from scarlet fever, and not one from small-pox. No death from any of these principal zymotic diseases was recorded last week either in Norwich, Wolverhampton, or Halifax; whereas they caused the highest death-rates in Portsmouth, Blackburn, Preston, and Bolton. The greatest mortality from measles occurred in Portsmouth, Blackburn, Preston, and Bolton; from whooping-cough in Salford, Sheffield, and Newcastle-upon-Tyne; and from "fever" in Bolton, Portsmouth, and Derby. The 28 deaths from diphtheria in the twenty-eight towns included 20 in London, 2 in Portsmouth, 2 in Birmingham, and 2 in Leeds. Small-pox caused no death either in London or in any of the twenty-seven large provincial towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had steadily increased in the previous nine weeks from 7 to 35, was again 35 at the end of last week; 6 cases were admitted to these hospitals during the week, against 9 and 10 in the preceding two weeks. The Highgate Small-pox Hospital contained 4 patients on Saturday last, no case having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 309, 293, and 282 in the preceding three weeks, further declined last week to 225, and were 70 below the corrected average. The causes of 57, or 1·9 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Nottingham, Sunderland, Leicester, and in six other smaller towns. The largest proportions of uncertified deaths were registered in Salford, Derby, and Halifax.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 23·1, 22·3, 22·2, and 21·8 per 1000 in the preceding four weeks, further declined to 21·3 in the week ending May 29th, but exceeded by 3·9 the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 9·0 in Greenock and 19·1 in Dundee and Paisley, to 24·7 in Paisley and 27·9 in Perth. The 526 deaths in the eight towns showed a further decline of 12 from the numbers in recent weeks, and included 17 which were referred to whooping-cough, 17 to measles, 7 to scarlet fever, 8 to diarrhœa, 6 to "fever" (typhus, enteric, or simple), 3 to diphtheria, and not on

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to small-pox; in all, 60 deaths resulted from these principal zymotic diseases, against 55 and 44 in the previous two weeks. These 60 deaths were equal to an annual rate of 2·4 per 1000, which was 0·8 below the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 20, 14, and 11 in the preceding three weeks, rose again last week to 17, of which 16 occurred in Glasgow. The deaths from measles, which had been 17 and 10 in the previous two weeks, rose again last week to 17, and included 10 in Edinburgh, 3 in Glasgow, and 3 in Leith. The 9 fatal cases of scarlet fever, of which 8 were returned in Glasgow, also showed an increase upon the numbers in recent weeks. The 8 deaths attributed to diarrhœa exceeded the number in the previous week by 1, but were 2 below the number in the corresponding week of last year. Of the 6 deaths from "fever," 2 occurred in Glasgow and 2 in Dundee. The 3 deaths referred to diphtheria showed a decline of 2 from the number in the previous week. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 103 and 119 in the previous two weeks, declined last week to 86, which were 1 below the number in the corresponding week of last year. The causes of 63, or 12 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 23·3 and 28·7 per 1000 in the preceding two weeks, declined again to 26·0 in the week ending May 29th. During the first eight weeks of the current quarter the death-rate in the city averaged 26·9 per 1000; the mean rate during the same period did not exceed 18·2 in London and 19·4 in Edinburgh. The 176 deaths in Dublin last week showed a decline of 18 from the number in the previous week, and included 6 which were referred to the principal zymotic diseases, against 14, 8, and 6 in the previous three weeks; 2 resulted from whooping-cough, 2 from scarlet fever, 1 from diphtheria, 1 from "fever" (typhus, enteric, or simple), and not one either from small-pox, measles, or diarrhœa. These 6 deaths were equal to an annual rate of 0·9 per 1000, the rates from the same diseases being 1·5 in London and 2·5 in Edinburgh. The 2 fatal cases of whooping-cough corresponded with the number in each of the preceding two weeks. The deaths from scarlet fever in the city in the first eight weeks of the current quarter were 10, against 20 in the thirteen weeks of the first quarter of the year. The deaths referred to "fever" have shown a marked decline in recent weeks. Five inquest cases and 6 deaths from violence were registered; and 49, or more than a fourth of the deaths, were recorded in public institutions. The deaths both of infants and of elderly persons showed a considerable decline from the numbers in recent weeks. The causes of 22, or nearly 13 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

THE Queen has been pleased to grant Harry Maule Crookshank, M.K.Q.C.P.I., M.R.C.S., Director-General of Egyptian Prisons, permission to accept and wear the Insignia of the Third Class of the Order of the Medjidieh, which His Highness the Khedive of Egypt, authorised by His Imperial Majesty the Sultan, has been pleased to confer upon him, in recognition of his services whilst actually and entirely employed beyond Her Majesty's Dominions in His Highness's Service.

WAR OFFICE.—Army Medical Staff: Brigade Surgeon Edmund Humphrey Roberts to be Deputy Surgeon-General, vice W. H. Corbett, M.D., deceased; Brigade Surgeon William Collis to be Deputy Surgeon-General, vice W. H. Muschamp, granted retired pay; Surgeon-Major Samuel Edward Maunsell to be Brigade Surgeon, vice E. H. Roberts; Surgeon-Major William Christy Robinson to be Brigade Surgeon, vice W. Collis. The undermentioned Surgeons-Major are granted retired pay, with the honorary rank of Brigade Surgeon:—Thomas Butler Power O'Brien; Bronislaw James Jazdowski, M.B.

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Inspector-General of Hospitals and Fleets John Denis Macdonald, M.D., F.R.S., has been placed on the retired list.

The following appointments have been made:—Surgeon John Corshin, to Jamaica Hospital; Surgeon Anthony Kidd, to the *Mistletoe;* and Surgeon J. J. Walsh, to the *Impregnable;* Fleet Surgeon C. Morton, to the *Trincomalee;* and Fleet Surgeon T. L. Burnett, to the Portsmouth Division of Royal Marines.

MILITIA INFANTRY.—5th Battalion, the Royal Irish Rifles: Surgeon Edwin F. Nelson, M.D., is granted the honorary rank of Surgeon-Major.

YEOMANRY CAVALRY (Derbyshire).—Chas. Henry Hough, Gent., to be Surgeon.

ARTILLERY VOLUNTEERS.—1st Cumberland: Acting Surgeon John A. Macdougall to be Surgeon.—2nd Derham (Seaham): Surgeon T. C. Beatty is granted the honorary rank of Surgeon-Major.—3rd Middlesex: Surgeon Richard Davy is granted the honorary rank of Surgeon-Major.

RIFLE VOLUNTEERS.—1st Cinque Ports: Ernest William Skinner, Gent., M.B., to be Acting Surgeon.—3rd Volunteer Battalion, the Hampshire Regiment: Surgeon H. R. Smith is granted the honorary rank of Surgeon-Major.—1st Volunteer Battalion, the Lincolnshire Regiment: Acting Surgeon Edwin William Barton, M.D., resigns his appointment.—3rd Volunteer Battalion, the Norfolk Regiment: Charles Richard Whitty, Gent., M.D., to be Acting Surgeon.

Correspondence.

"Audi alteram partem."

MEDICAL DEGREES FOR LONDON STUDENTS.

To the Editor of THE LANCET.

SIR,—I should not venture to add to the already large contributions upon a subject which is practically exhausted so far as argument goes, were it not for the feeling that we are in danger of losing sight of its main issues in aiming at an ideal which it is not possible as yet to attain. That ideal is the consolidation of medical education in London, under the ægis of a real university, which should direct, control, and influence the curriculum, should grant degrees to students trained on its courses, and thereby do much to concentrate scientific and theoretical instruction as distinguished from the practical and clinical. No one will venture to say that this ideal of a Teaching University is at all near to realisation. There are so many conflicting interests to be reconciled, and so much care to be taken to avoid doing an injustice to those who have hitherto had so large a share in education, that it can only be by the slow process of evolution that we shall obtain in London anything like a university organisation. Meanwhile we see, year by year, our students dwindling in number, or breaking off their London career to go elsewhere to obtain that which we are unable to give them; and here it is important to state that a mere title, such as that proposed last night by Mr. Hutchinson, and granted to every doubly qualified man (even with the proviso of passing an additional examination), is not what is desired, nor will it meet the demands of the London student. The remarkable and merited success of the Edinburgh University has rendered such a solution of the question practically impossible. If in London we can establish a curriculum and an examination system which in all respects shall be equivalent to that of the Edinburgh University, then we may reasonably demand that our students should have equal facilities for obtaining degrees as those of Edinburgh. That in some respects we may take a lesson from Edinburgh, and not be ashamed of doing so, must be admitted; just as, I doubt not, there are directions in which even the course at that University may be improved and placed more on a level with London. I cannot, then, agree with Sir Andrew Clark in the statement that the curriculum and examinations of the Colleges are precisely on the same footing as those of the University of Edinburgh; but there is no reason at all why they should not be.

The University of London stands on an admittedly higher level—indeed, the highest; and being, as was remarked the

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other day in Convocation, world-wide in its scope, it is not to be expected, nor indeed desired, that it should lower its standard to remedy the grievances of those who happen to be educated in the city in which this institution has its local habitation. Even if Mr. Magnus's scheme be carried and the University be brought into more intimate connexion with teaching bodies, it can never meet the grievance which we desire to remedy. Its medical degrees are difficult of attainment; and he would indeed be sanguine who could imagine that it would ever be possible so to raise the general standard of education that every student in London could be put through its curriculum with a reasonable hope of graduation. Why, as it is, a considerable number of those who do enter the London University are compelled to turn away after having fruitlessly devoted one or two years in the attempt to master the subjects of the Preliminary Scientific Examination; and these, be it remembered, are students who have been specially trained in these subjects with a view to that examination. The University of London is, and always will remain, open to but a few, and only a minority of those who enter it will succeed in obtaining its degrees.

Is there no alternative to the London student, or must he be driven to seek a degree elsewhere? Surely, if the Colleges of Physicians and Surgeons could meet this demand by constituting a medical faculty, they would not only revive the prosperity of the London schools, but take a great step forward in raising the standard of education. The demand ought to be that degrees granted by the Colleges should be given after a course of training equivalent to that required by universities. We might have instituted a graduation curriculum which should embrace a certain amount of preliminary science at the commencement, and such subjects as pathology, therapeutics, and public health at the close, over and above the course required for the mere diplomas or title. Students on entry would determine whether they intended to graduate or not, and many doubtless would be well satisfied with the honourable titles of M.R.C.S. and L.R.C.P.; but all would have the opportunity of obtaining the degree if they only worked for it; and those who already hold the two diplomas might obtain the degree after an additional examination. There is little question that the majority of our students would show themselves capable of graduation, whilst a reproach would be removed from London and a greater encouragement given to those who are engaged in utilising the splendid material of London hospitals for the purpose of instruction. Moreover, the Colleges would take a larger share in directing education than hitherto, and a way would be found for realising the ideal embodied in the scheme of a Teaching University.

I am, Sir, yours faithfully,

Weymouth-street, W., June 1st, 1886. SIDNEY COUPLAND.

To the Editor of THE LANCET.

SIR,—I have followed with much interest the whole of the proceedings and correspondence relative to the proposed M.D. degree for those who take the diplomas of L.R.C.P. Lond. and M.R.C.S. So far as I have seen, no direct proposal has been made to cause a retrospective action, without which of course a large class of the medical profession would be left "out in the cold." I feel quite sure that most, if not all, who belong to this class would be perfectly willing to pass an examination in Arts, equal at least in its standard to that required for a "poll" degree: and this being so, as it indubitably is, there can be no valid reason why such a course should not be adopted, inasmuch as it cannot be denied that any man who has been able to pass the ordeal of the two Colleges has been as severely tested, so far as his professional knowledge goes, as a M.B. of either of the older universities or even a "pass" man of the University of London. That the absence of the M.D. degree is no slight drawback is becoming more felt every day by men who never realised its value until their course was too far advanced to permit of their retracing their steps. A short time ago a patient who had recommended a friend to engage me to attend her in her confinement told me that the individual in question had come to the house, but seeing "Mr. ——" on the door-plate, had concluded that I was unqualified, and gone elsewhere. Licentiates of the London College of Physicians are, as a rule, too high-minded to assume a title which is explicitly denied to them by the bye-laws of the institution with which they are proud to be connected, and have to suffer for their honesty by seeing men with inferior qualifications attract the public by the display of the coveted "Dr." on their door-plates. The difficulty might have been avoided years ago had the University of London been sufficiently liberal-minded to recognise medical studies which had been carried on after registration as "medical student," but before matriculation. This would in no way have lowered the standard, the whole of the examinations could have remained the same, and the small indulgence thus allowed would have done very much to bring the University *en rapport* with a large class of hardworking students, who would gladly have gone through the needful steps but for the loss of time and of money which it would have entailed under the existing regulations.

Hoping to see the M.D. of the Medical University of London an established fact ere long, and to be able to avail myself of its facilities, I beg for the present to subscribe myself, Your obedient servant,

May, 1886. L.R.C.P. LOND., M.R.C.S. ENG.

THE BRITISH MEDICAL BENEVOLENT FUND.

To the Editor of THE LANCET.

SIR,—For many years you have allowed me at Christmas-time to bring the claims of the British Medical Benevolent Fund before the profession, always with good results. This year is the fiftieth of its existence, and as a jubilee celebration was contemplated, my appeal, with which Sir George Burrows, as president of the fund, desires to be associated, was postponed until it could be made in connexion with that event.

I have now to announce that Sir James Paget will preside at a jubilee banquet to be given at the Holborn Restaurant on July 8th. We are already assured of success, a donation of an altogether unexpected amount having been sent to Sir James Paget, and other important donations having been received, while we have reason to expect that Sir James will be supported by a most distinguished gathering of medical men from all parts of the country. It is true that the jubilee of the Fund falls at a period of great and general financial depression; but while this impairs the power to give, it increases the number of those who are in need, so that we dare not postpone our appeal even if we could put off the celebration till better times. If all who can afford it would give but a little, relief would be carried to a large proportion of the poverty-stricken homes and families of medical men which are brought to the notice of the committee.

The object and mode of operation of the Fund are not even yet fully known. It has two departments: an annuity department, which supports at present fifty-five annuitants, who must be over sixty years of age when elected; and a donation department, which distributes nearly £2000 yearly in sums of from £5 to £20 to meet urgent necessities of broken-down medical men, relieve widows, help struggling daughters, and educate children. This last department is peculiar to the Fund.

No canvassing is required in order to obtain its benefits, with the heart-breaking delay, demoralising exposure, and wearying labour attending this process. Twice a year the list of all applicants over the age of sixty whose cases have come before the Committee is carefully gone over, and the oldest and most necessitous are selected to fill any vacancies which may have arisen. Urgent necessities are still more promptly met, the Committee sitting once a month for the purpose of allocating donations. Another feature of the Fund is that there are no salaries, all the work being done by medical men without fee or reward.

In commending the Fund once more to the favourable attention of the profession, I have only to add that the Honorary Secretaries, Mr. George Field, 13, Wimpole-street, and Mr. Edward East, 18, Clifton-gardens, Maida-vale, will be glad to receive the names of all who desire to help us and to take part in the jubilee dinner.

I remain, Sir, your obedient servant,

W. H. BROADBENT, M.D., Treasurer.

34, Seymour-street, June 1st, 1886.

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THE LUNACY ACTS AMENDMENT BILL.

To the Editor of THE LANCET.

SIR,—Superintendents of Asylums in England, with few exceptions, will endorse Dr. Batty Tuke's remarks on the absurdity of sending barristers to inspect asylums, and on the necessity for greater supervision by an increase of the number of medical commissioners. Having been superintendent of a large asylum for fourteen years, I may say that I have never in that time seen an occasion or occurrence which in the least called for a legal visitation, or in which the barrister commissioners were of any legal service. I have had experience of visitation by new legal commissioners, including men whom I esteem and respect, and they, I believe, would be the first to admit that their inspection of asylums during the early part of their appointment was of no value. I entirely agree with the suggestion of resident district commissioners as the only means by which an individual knowledge of the vast number of the insane in England can be acquired by supervisors. An increased number of commissioners would exercise a very beneficial influence on the asylum medical service, by attracting a superior class of medical officers, and the preponderance of the medical element in the commission might depose the legal idea, which at present appears to be dominant, that "detention" is the great object of asylums, in favour of the belief that "treatment" is their essential and most important function. Such changes would greatly advantage the insane, and would tend more than anything else to establish public confidence in the Commission and in asylums.

I am, Sir, your obedient servant,

May 29th, 1886. A MEDICAL SUPERINTENDENT.

ELECTROLYSIS OF STRICTURE OF THE URETHRA.

To the Editor of THE LANCET.

SIR,—My attention was directed to this subject by Mr. Bruce Clarke some months ago, and as I had a large amount of material to work upon, I determined to investigate the effects of the weaker constant currents upon stricture, in order to supplement Dr. Newman, M. Tripier of Paris, and Mr. Clarke's experiences of the stronger currents upon the same. To my regret, however, I was unavoidably prevented attending the meeting of the Medical and Chirurgical Society when the subject was brought forward, and I venture, therefore, to ask for space for the quota of experience which I had hoped to have furnished to the discussion upon the paper.

The question which I sought to answer was this. If stronger currents burn through the cicatrix and leave a scar, which must necessarily contract, would not weaker currents soften that scar tissue and allow of rapid dilatation? I took twenty cases of stricture at haphazard, all of them of small calibre, some unpassable, varying as to duration from three to twenty years. I subjected each to the influence of from three to four cells, the sittings lasting from fifteen to twenty minutes. With two exceptions, each stream was larger after the sitting, and I could pass a bougie of one size (French gauge) larger than I could before. In two cases the stream was worse. At first I deemed the slight improvement due to the mere pressure of the bulbous electrode against the stricture, but I have since come to the conclusion that weak currents diminish spasm.

Possible danger of reflex shock should be remembered. I quote the only case I have had as yet. Mr. Hichens of Oxford sent me a man with stricture of many years' standing, who, on the application of three cells, had the severest rigor I have witnessed, terminating in profound collapse. Ammonia and water rapidly revived him, and he was able to reach home. Next day I performed internal urethrotomy, which, curiously enough, was followed by no neurotic disturbance. One patient returned with a severe urethritis. So few months have elapsed since my first case was *cured* by means of a *stronger* current, that I do not feel justified in passing an opinion upon it. If the success be honest, then we may expect to do good work with other cicatricial contractions—e.g., of burns, strictures of the œsophagus, pylorus, and other tubes.—I remain, Sir, yours truly,

E. HURRY FENWICK.

George-street, Hanover-square, May 1886.

THE FELLOWSHIP OF THE COLLEGE OF PHYSICIANS.

To the Editor of THE LANCET.

SIR,—All must agree in your recommendation that the teachers in our medical schools, alike in the provinces and London, should be preferred at election to the Fellowship; probably some even while only lecturers, without as yet hospital staff appointment. But, on the other hand, length of hospital experience alone, be it only attendance and not practice, should be recognised by the Council as qualifying for nomination. For, at the present time, excellent clinical workers may never have the chance of becoming either lecturer or hospital physician; the latter appointment now being the reserved reward for lecturing. Yet the clinical student is often not less gifted with powers and taste for original research than his lecturer, and should at least have the Fellowship retained for his goal, if only as a stimulant to further clinical pursuit, which ere now has made the pupil teacher to the master. Hope, Williams, and Bence-Jones, all while *in statu pupillari*, taught to their chiefs at hospital, on their own patients, a later and more recondite science than those seniors had till then acquired; and two at least of the greatest hospital physicians dating between Baillie and Bright—viz., Drs. Chambers and Latham—gracefully owned the sources of such later knowledge. Discouragement and curtailment of independent clinique, by withholding the Fellowship from it, will degrade such students into less responsible specialism, to the loss of more exact medical science. Their work is now the highest. Indeed, their great prototype won *there and then* the true blue riband of the race when, after the best of two years in a fever ward, he interpreted a writing till then undeciphered through ages. I am, Sir, yours truly,

May 31, 1886. A MEMBER PRIOR TO 1859.

LIVERPOOL.

(From our own Correspondent.)

HOSPITAL SATURDAY.

SATURDAY, the 29th ult., was observed as Hospital Saturday, and great efforts have been made this year to promote its success by making working men more familiar with our local medical charities, their financial position, and their claims upon those whom they benefit. It is believed, therefore, that the fund will be augmented this year—a belief which is increased by the recent visit of Her Majesty, the International Exhibition and other collateral causes tending to an improvement in commerce and trade.

LIVERPOOL AND THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Whilst Birmingham, Leeds, and Manchester have had representatives on the Council of the Royal College of Surgeons in the respective persons of Oliver Pemberton, Wheelhouse, and Lund, Liverpool still remains as it has hitherto been, wholly unrepresented. This circumstance creates, as it very justly may, great dissatisfaction. For many years past Liverpool has possessed in the number and status of its medical practitioners, its medical school, and its hospitals, ample claims for recognition in the Council of the College of Surgeons of England. These claims are now enhanced in the fact that Liverpool possesses a University College in conjunction with the Victoria University of Manchester, while the status of its physicians and surgeons is quite equal to that of other provincial cities, in spite of the disadvantages which Liverpool has had to contend with in being younger in its growth. Mr. Reginald Harrison, surgeon to the Royal Infirmary and lecturer on Clinical Surgery in the Victoria University, is again coming forward for one of the vacancies which will shortly occur in the Council. His election would be a gain to the latter, would be extremely popular to most local and many provincial and metropolitan Fellows, and would remove what is now felt to be a slight to an important medical and surgical community.

THE THORNTON WARDS OF THE ROYAL INFIRMARY.

In these wards Dr. Wallace performed abdominal section in one of those desperate cases which abound here, of

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neglected ovarian disease for septic peritonitis. The tumour was necrosal and the abdomen distended to its utmost with grumous fluid, the intestines and omentum glued together with a mass bound down over the lumbar vertebræ and the whole peritoneum was covered with lymph. She is now convalescent. Dr. Wallace also did nephrectomy for dilated right kidney, by opening the tumour, the size of a year-old child's head, outside the sheath of the rectus, removing part of the cyst and stitching for drainage in the line of the incision of the remaining portion. Suppression of urine followed, and she died. Dr. Wallace also pointed out a case of hysterical hyperpyrexia, the temperature varying from normal to 108° and even 115°. On Wednesday the same gentleman performed laparotomy for a large solid tumour, which displaced the uterus to the right and filled the pelvic brim. It was found to be a subperitoneal sessile myoma, attached to the uterus to the extent of nearly three inches. It was enucleated, and its cyst stitched for drainage to the lower end of the abdominal incision. The patient is doing well.

COMPULSORY SWIMMING IN SCHOOLS.

The suggestion given in THE LANCET of May 22nd has been favourably noticed in a local daily paper. If the children of the poor in and around Liverpool were more generally able to swim, the number of drowning cases would be greatly reduced. The fondness boys have of bathing is shown by the number seen in the canals and along the sides of the River Mersey, in spite of frequent warnings and fatal examples. No children of either sex should be allowed to venture on the ice until they have learnt the simple and natural art of swimming. The facilities for learning it in this city are ample, and should be better appreciated.

THE ASSIZES.

Among the cases tried at the present assizes was that of the mutineers of the Roman Catholic training ship. One of the officers of the latter received a wound in the chest, which, according to Dr. Main, of Rock Ferry, penetrated the lung, the patient being in great danger for some days. Justice Grantham, who presided in the Crown Court, referred frequently and severely to the number of crimes which had their origin in drunken habits. There were also numerous cases of criminal assaults on females. In one of these the prisoner was under sixteen years of age, and was therefore sentenced to corporal punishment, the judge lamenting that he could not award a similar punishment upon offenders above the age of sixteen.

PRESENTATION TO DR. WATSON OF SEACOMBE.

On the 31st ult., Dr. T. B. Watson, who is leaving Seacombe, where he has been practising for eleven years, was presented with two very handsome testimonials. The first was in the form of a purse containing one hundred sovereigns and a beautifully illuminated address, and was the gift of residents in the neighbourhood. The second was from the inhabitants of Wallasey to the cottage hospital of which Dr. Watson had been medical officer, and consisted of a marble timepiece and ornaments. Some of the principal residents were present, and great regret was expressed at the loss which the district would sustain at Dr. Watson's absence.

THE LIVERPOOL EXHIBITION.

The Shipperies is by no means so devoid of interest to medical visitors as its name would imply. On Saturday last, in what is known as the Indian Village, the visitors had the opportunity of witnessing the performances of the so-called "devil-dancers." These are the individuals called in whom the regular medicine men have failed to cure, and though their gyrations, practised from nine at night until seven in the morning, never produce any favourable result, the natives repose great faith in them as having a great effect upon the soul, even though the patient dies. The Vegetarian Society's restaurant is largely patronised. It is not intended for profit, but for educational purposes, and to show the pleasantness, variety, wholesomeness, and economy of the food products of the vegetable kingdom. Nearly a thousand persons dined here on Saturday, the price of a good meal ranging from sixpence to tenpence. There are also exhibited invalid carriages by Mr. Bell, of Basford, Nottingham, who has succeeded in bringing them to a great state of perfection.

Liverpool June 1st.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

THE PRUDHOE MEMORIAL CONVALESCENT HOME.

THE annual meeting of this excellent charity was held on the 20th inst. at Whitley. The report for the year exhibited very gratifying results. The financial statement showed that the income of the year had been £3566, the three chief items of which were: subscriptions, £1261; Hospital Sunday Fund, £888 11*s.* 2*d.*; and a legacy from the late Mr. Richard Shorthouse, £500. After meeting all expenses there remained a balance in hand of £78. Dr. Philipson read the medical report, in which it was stated that the total number of cases treated during the twelve months was 1444; of these 486 were from Northumberland, 484 from Newcastle, 463 from Durham, 9 from Yorkshire, and 2 from Cumberland. With regard to the character of the diseases, 1163 were medical and 281 surgical. Of the whole number, 1296 were cured, 102 were greatly benefited, 15 were somewhat better, and 31 were *in statu quo*. Taken altogether, 1413 received benefit, or over 97 per cent.

AMBULANCE WORK IN THE NORTH.

Some fifteen or sixteen years ago the late Dr. Stephens, the surgeon to the Tynemouth Artillery, established an ambulance class. This has been continued with little intermission up to the present. About twelve months ago Dr. Mears, who holds the chair of Anatomy at the Newcastle College of Medicine, took the position of surgeon to the corps. Since then he has devoted much time and attention to the ambulance corps, which is now composed of about fifty members, of whom some thirty are medical students from Newcastle, who have joined the Tynemouth corps owing to the absence of such a body at Newcastle. They were inspected on the 21st instant by Surgeon-Major Irvine, of the Army Medical Department. The class, which is the largest in the country, were put through a rigorous drill by Surgeon Mears. After the examination the inspecting surgeon said, addressing the class, that he had carefully watched the two hours' severe drill they had had, and was highly pleased with all he had seen. On Saturday (the 22nd) an ambulance ceremony took place at North Seaton, at which were present the members who have successfully passed the examinations and attended the course of lectures qualifying them to render "first aid to the wounded." Dr. Clark Newton of Newcastle gave an interesting and concise address on "Ambulance Work." A supper and concert gave variety to the evening's entertainment, and a very fitting conclusion was made by the presentation on the part of the members of the class of a handsome timepiece to Dr. Evers, who had spared no pains in the efficient instruction of his class, and who, in the words of the chairman, had given it every attention "in will and skill."

Newcastle-on-Tyne, May 24th.

EDINBURGH.

(From our own Correspondent.)

PROFESSOR SIR DOUGLAS MACLAGAN.

THE announcement that Her Majesty has bestowed the honour of knighthood upon Professor Douglas Maclagan has created a widespread sense of satisfaction in Edinburgh in very many other spheres besides that of medicine, whilst amongst medical men generally, and especially amongst those *alumni* of the University and the Royal Colleges of Edinburgh who have come in contact with its recipient, this honour is regarded with the greatest personal gratification, as bestowed upon one pre-eminently fitted to sustain it. Sir Douglas Maclagan's honours in connexion with medicine have been both numerous and varied, and his long and brilliant career as a teacher in the Edinburgh School has rendered him in a very special manner representative of medical institutions in this city. But it would give a very partial view of the nature of the feeling elicited by this event were its relations to the medical world alone portrayed, for Sir Douglas Maclagan is as closely associated with the Scottish school of law as he is with that of medicine, and the many-sided nature of his personality is further evidenced

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by the numerous official or honorary positions that he fills in connexion with various important institutions concerned in promoting the public weal—the advancement of science and national security. By his tenure of the Chair of Medical Jurisprudence in the University, Sir Douglas Maclagan is directly concerned in carrying out the curricula in the Faculties of Law and Medicine. He is President of the Royal College of Physicians of Edinburgh, and was formerly President of its Royal College of Surgeons. By his Vice-Presidency of the Royal Society of Edinburgh and his Fellowship of the Botanical and Chemical Societies he is intimately associated with scientific interests; and he is honourably connected with the public services as Surgeon-General to the Queen's Body Guard for Scotland and Surgeon-Major to the Queen's Edinburgh Volunteer Brigade. He has been a professor in the University for twenty-five years, and previously to that was a lecturer in the Extra-Academical School for eighteen years, and during the whole of his career as a teacher he has been consulted by the Crown authorities in cases of medico-legal importance. As a writer he has attained eminence in two widely different spheres—those of toxicology and therapeutics on the one hand, and of poetry on the other. Many of his songs have become national property, and he is the author of the most popular and best known of our student songs. Add to these characteristics the qualities which he possesses as an eminent physician, a cultured scholar, and a genial and widely esteemed friend, and it will give some explanation of the great feeling of satisfaction which has spread itself through the Edinburgh community generally in regard to Sir Douglas Maclagan's most recent honour.

Edinburgh, June 1st.

IRELAND.

(From our own Correspondent.)

ROYAL UNIVERSITY OF IRELAND.

A MEETING of Convocation will be held on July 27th, to elect two members of the Senate in the vacancies caused by the decease of ex-Archbishop Trench, and the expiration of Dr. Curtis's term of office. As probably Dr. Curtis will offer himself for re-election, one vacancy may only be considered, and for this it may be expected Mr. Farrelly, recently a member of the Senate, will compete. Dr. Knight is not likely to be a candidate on this occasion.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

The annual election for President, Vice-President, Secretary, and Council, will take place on Monday next, the 7th inst. It is gratifying to find that the present Vice-President, Mr. William Stokes, the eminent surgeon, will not be opposed for the presidency, notwithstanding a rumour which prevailed lately to that effect. There will be a contest for the Vice-Presidentship, a circumstance greatly to be regretted, Mr. Corley and Mr. Frazer being the candidates. I have already said as much on this subject as is necessary, and shall not again discuss the subject. Mr. William Colles will be re-elected secretary without opposition. As regards the Council, there are twenty-two candidates for nineteen places. A meeting will be held on Saturday next, the 5th inst., to receive the annual report of the Council and discuss any matters that may be brought before the Fellows; and, in the evening the Council and Examiners and their guests will dine together at the College.

CASTLEBRAGH DISPENSARY: CHARGE AGAINST DR. CROKER.

An extraordinary meeting of the dispensary committee was held last week for the purpose of investigating a charge of alleged neglect on the part of Dr. Croker, the medical officer of the district. The case had already been the subject of a question in the House of Commons, and much interest attached to the inquiry. The committee went thoroughly into the alleged matters, and examined several witnesses, including Dr. Gibson, who proved that the case was not of the urgent or difficult character that had been stated. Finally the committee unanimously found that Dr. Croker was not guilty of any negligence in the discharge of his duty.

DEATH OF DR. GRATTAN.

At Drummin House, Carbury, Richard Grattan, M.D., died on May 27th. The deceased was, I believe, the oldest medical man in Ireland, having arrived at the mature age of ninety-eight years. Dr. Grattan was the Senior Fellow of the College of Physicians in Ireland.

COUNTY KILDARE INFIRMARY.

The half-yearly presentment for the support of this useful institution has been thrown out, and the cesspayers may regret their foolish conduct in refusing a grant to a deserving charity. Probably those who have taken an active part in opposing a grant to the hospital may be rather surprised to learn that, by the terms of the lease, the landlord will come into possession of the building directly the infirmary ceases to be used for its present purpose. I have been informed that at a special meeting of the governors held recently, it has been decided to close the institution after the next Kildare Assizes. One cannot but sympathise with the surgeon to the infirmary, who has always performed his duties in a satisfactory manner, and who, for no fault of his own, is deprived of the emoluments of the office he has held for so many years. I may add that the infirmary and residence of the surgeon are held on lease from the Duke of Leinster at a nominal rent of 2½d. a year. During 1885 there were twenty-seven county infirmaries in Ireland, and over 800 beds were in daily occupation; the average cost per head being £37 7*s.* 8*d.*, while the amount levied by presentments last year was £23,643.

The Queen has, upon the recommendation of the Lord-Lieutenant, been pleased to appoint Sir John Lentaigne, C.B., a member of Her Majesty's Privy Council in Ireland.

The vacant surgeoncy in the Mater Misericordiæ Hospital, Dublin, occasioned by the death of Mr. Kilgarriff, has been filled up by the appointment of Mr. Arthur Chance, surgeon to Jervis-street Hospital.

Dublin, June 1st.

PARIS.

(From our own Correspondent.)

THE LATE COLONEL HERBINGER.

A SHORT time before his death, which took place a few days ago, Colonel Herbinger, who was accused of intemperate habits during his field service at Tonquin, for which he was recalled to Paris, where he was summoned before a court of inquiry and honourably acquitted, called on Professor Peter to consult him, as he did not feel very well. Professor Peter states in a note published by him that he was struck with the countenance of the Colonel, which was expressive of profound suffering, and formed in his own mind an unfavourable prognosis. From the oppression evinced by the Colonel when he presented himself before the Doctor, and from other concomitant symptoms, the latter concluded that his malady was not of recent date, and expressed his astonishment that, if he was so oppressed in having ascended only a few steps, he could have supported the fatigues incidental to such an expedition as to that of Tonquin. To this the Colonel replied that when he felt his strength failing him he mounted his horse nevertheless, and ordered his men to watch and support him in case he should fall. At this moment Dr. Peter formed his diagnosis, which, although a posthumous one, is considered sufficient to refute the calumnious charges that were brought against him. "One of the consequences," the Doctor went on to say, "of cerebral anæmia to which the Colonel was subject was the absolute impossibility of his maintaining his equilibrium owing to the attacks that he felt at certain moments of symptoms of giddiness similar to those produced by the abuse of alcohol. Moreover, patients affected in this way wear a purple hue on their countenances, which are also bloated like those of persons whose necks are violently constricted. I am persuaded," added the Doctor, "that these external signs were sufficient to originate the terrible accusation that was brought against Colonel Herbinger." I send you this note that it may serve as a lesson to those who are ever ready to attribute to drunkenness the symptoms above described.

COW BYRES IN TOWNS.

At a recent meeting of the Council of Hygiene a discussion took place as to the advisability of preventing cows being kept in the town, alike on sanitary grounds, and because the milk of the animals so confined is prejudicial to health, on account not only of its deteriorated condition,

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but of its being often a vehicle for the transmission of tuberculosis, with which the cows so situated are generally affected. No decision had been arrived at, as some of the members present admitted that, although the milk would be much improved by keeping the cows in the country, yet their presence in town is almost indispensable in a certain number of cases, and the risk of infection may be reduced to a minimum if the consumers would only boil the milk before they use it. This risk is considerably less in this country, as the inhabitants seldom or never drink raw milk.

Paris, June 1st.

NEW YORK.

(From our own Correspondent.)

AMERICAN MEDICAL ASSOCIATION.

THIS body met at St. Louis in annual session last week. The chief interest to the profession at large was its action in regard to the proposed International Medical Congress. It was rumoured that the Association would reinstate the old committee, but no such change was made, and the efforts to organise the Congress will continue on the present basis. It should be understood abroad that there is no hostility of the profession in this country to the Congress; but, on the contrary, there is the most cordial feeling in its favour, and it will be well attended.

SPLENECTOMY.

Dr. Polk exhibited a spleen which he had removed from a woman to the Surgical Section of the Academy. The peculiarity of the case was that he was performing Tait's operation, and, instead of finding diseased ovaries, he discovered a tumour lying between the bladder and uterus, which he proceeded to remove. There had been much inflammation about the tumour and many vessels were ligated. When removed, the tumour had so much the shape and appearance of a kidney that search was made for these organs, and both were found in position. It was then submitted to microscopical examination, and found to be a spleen. The patient made a good recovery.

AMERICAN PUBLIC HEALTH ASSOCIATION.

The next meeting of this body will be held at Toronto, Canada, in October, and the programme of the session has already been issued. There is much interest in the provinces in sanitary questions, and provincial boards of health have been organised. The widespread and disastrous epidemic of small-pox last year has intensified the interest of the people on health subjects, and the leading sanitarians have been desirous of having the Association meet with them for the purpose of awakening a more general public feeling in favour of the new health organisation. The meeting promises to be one of unusual prominence in the history of this powerful body.

AMERICAN SURGICAL ASSOCIATION.

This Association has just completed its seventh annual session. One of the most prominent topics of discussion was laparotomy for the purpose of diagnosis, the affirmative being strongly maintained. A proposition was entertained to unite in a congress no less than nine national associations of specialists, with the general title of "A Congress of American Physicians and Surgeons." This Congress is to meet annually at Washington, but each body is to maintain its separate organisation and publish its own transactions.

ANOTHER GIFT FROM THE VANDERBILTS.

The family of the late Mr. Vanderbilt have added another 500,000 dollars to the like sum given by Mr. Vanderbilt to the College of Physicians and Surgeons, making a total of 1,000,000 dollars to this old medical school. A few days since the corner stone of the new college buildings was laid with much ceremony, and it is the intention of the trustees to complete the structure in time for the next session.

THE CARTWRIGHT LECTURES.

This course of lectures before the *alumni* of the College of Physicians and Surgeons was given by Professor Osler of Philadelphia on "Certain Problems in the Physiology of the Blood." The first lecture was devoted to the so-called third corpuscle.

TRAINING SCHOOL FOR ATTENDANTS ON THE INSANE.

The medical officers of the Buffalo Asylum for the Insane have established a school for the training of attendants, and on April 20th a class of graduates, six in number, received certificates. The graduates were all attendants in the asylum, and they passed a very creditable examination.

New York, May 16th.

MEDICAL NOTES IN PARLIAMENT.

Contagious Diseases (Animals) Act.

IN the House of Lords, on the 28th ult., Earl Spencer moved the second reading of this Bill, stating that besides powers of minor importance which were taken by this Bill was that of bringing dogs under its provisions. In view of the prevalence of rabies in the country, Her Majesty's Government thought it very important to extend the powers of the Privy Council in this direction. The Duke of Richmond and Gordon, the Marquis of Huntly, and the Earl of Ravensworth having expressed approval of the measure, the motion was agreed to.

Lea River Purification Bill.

In the House of Commons, on the 28th ult., the Lea River Purification Bill was read a third time.

Metropolitan Asylums Board.

Mr. Stansfeld, in reply to Mr. Sclater-Booth, stated that it has been the practice for the managers of the metropolitan asylums district to have annual inspections of the Leavesden, Caterham, and Darenth Asylums, and the ship *Exmouth*. The chairmen and other influential members of the boards of guardians in the metropolis and representatives of the press are invited to attend on these occasions, and refreshments are provided. The cost of the four annual inspections in 1885 amounted to £245. This is a considerable reduction upon the amount expended in some previous years, and the Board trusts that the expenditure will be still further reduced. These annual inspections are the occasions when the asylums are officially visited by the managers, who are not on the committees for the management of those asylums.

Rating of Lunatic Asylums, &c.

In reply to Mr. Kimber, Mr. Stansfeld stated that he was not prepared to make any statement as to the scheme of local government contemplated by Her Majesty's Government; but he might say that he did not think it would be expedient to attempt to deal with questions as to the rating of particular classes of property in a Bill having for its primary object the constitution of local authorities and the determination of the areas within which they shall have jurisdiction. Such subjects would, he thought, find their more fitting place in a rating Bill. In reply to a further question, Mr. Stansfeld said that he did not expect to bring in such a Bill.

Belfast Main Drainage Bill.

On the 31st ult. a long discussion took place on an amendment to the Belfast Main Drainage Bill, proposed by Mr. Sexton. The amendment consisted in the insertion of a clause assimilating the qualifications of burgesses in the borough of Belfast to the qualification now existing in the borough of Dublin and in the boroughs of England and Scotland. The consideration of the Bill was ultimately adjourned to the 21st inst.

M. Pasteur's Experiments on Cattle.

In reply to Sir R. Paget, Sir U. Kay-Shuttleworth said that the attention of the Agricultural Department had been called to M. Pasteur's investigations regarding the contagious diseases of cattle, and, by way of a first step in the direction suggested by the hon. baronet, instructions had been given to Professor Brown to undertake a series of experiments with the virus of swine fever.

Medical Acts Amendment Bill.

The House went into Committee on this Bill, and clauses up to Clause 6 were agreed to with amendments. On Clause 7, Sir H. Roscoe moved an amendment which would have the effect of giving to the Victoria University and Durham University each a representative on the Council, instead of being linked together to return one member. Mr. F. S. Powell and Mr. Rathbone supported the amendment. Dr. Foster opposed it on the ground that it increased unduly the power of the corporations and universities in the Council as compared with the representation of the profession. Sir L. Playfair said that, although the general sense of the Com-

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mittee appeared to be in favour of the amendment, he felt bound to adhere to the Bill as it stood. Sir J. Lubbock said his vote would be influenced largely by any information he might receive as to the extent of the constituency in the Victoria University. Dr. Foster supposed that the constituency would consist of from 50 to 100 medical graduates. After some further conversation the Committee divided, and the numbers were—for the amendment, 119; against it, 42.

Obituary.

HENRY MAC CORMAC, M.D.

IT is with sincere regret we have to announce the death of one of the oldest medical practitioners in Ireland. We refer to Dr. H. Mac Cormac, who died at his residence, Fisherwick-place, Belfast, on May 26th. The deceased gentleman, who for many years has been the father of the profession in this town, was born at the beginning of the present century, and had attained the advanced age of eighty-six years. Having studied at Dublin, Paris, and Edinburgh, he took his M.D. degree in the latter University in 1824, and in the same year became a Licentiate of the Royal College of Surgeons of Edinburgh. He then proceeded on extensive foreign travel, journeying first to Africa. He visited the Cape of Good Hope, and went to Sierra Leone by land. During this voyage he had an attack of jungle fever, to which he nearly succumbed. After his return to England, he made a lengthened visit to North America, which he repeated. Soon afterwards he commenced practice as a physician in Belfast, where his abilities and professional knowledge were speedily recognised, as evidenced by his appointment to the post of physician to the Royal Hospital, then known as the Belfast Fever Hospital. In 1832, when the first epidemic of Asiatic cholera visited Belfast, being then only thirty-two, Dr. Mac Cormac was appointed to take charge of the Cholera Hospital, and so thoroughly were his services appreciated at this critical time by his fellow-townsmen that they presented him with a valuable testimonial. He was subsequently appointed visiting physician to the Belfast District Lunatic Asylum, an office which he held up to the time of his death. He soon brought about a marked change in the condition of the inmates by his insistence upon more generous dietary, and it is worth noting that while in all other public institutions during a subsequent attack of cholera death from that malady was but too prevalent, there was not a single death in the asylum. The deceased was also for a time Professor of the Theory and Practice of Medicine in the Royal Belfast Institution, and a Corresponding Member of the National Institution of Washington. For many years he enjoyed an extensive consultation practice, but he gradually became more devoted to literary and scientific study until, about twenty years ago, he relinquished the active duties of the profession, and devoted himself to writing works on a variety of subjects. The topics, however, on which he most insisted were his method of prevention and treatment of consumption and the danger of inhaling prebreathed air. He insisted most strongly on the necessity of the abundance of pure air, as, he writes, "Pure, fresh, untainted air, at all hours, at all times, and in all places, is the one condition with which nothing should be allowed to interfere." He was also a most ardent advocate of active physical exercise in the preservation of health. During his long and busy career, Dr. Mac Cormac contributed most extensively to the literature of medicine, and amongst the works which he produced were: "A Treatise on Stammering," "The Philosophy of Human Nature," "Methodus Medendi, or the Practice of Medicine," "Translation of Antoninus Epictetus," "Aspirations from the Inner—the Spiritual Life," "Metanoia—a Plea for the Insane," "The Nature and Treatment of Asiatic Cholera," "Proposal for the Painless Extinction of Life in Animals designed for Human Food," "Consumption as Engendered by Prebreathed Air" (which reached a second edition and was translated into German, Dutch, and other languages), "On the Prophylaxis and Arrest of English and Asiatic Cholera by Dilute Acids, especially Dilute Sulphuric Acid," "On the Open-air Treatment of Fever and of Febrile Eruptive Maladies," "Synthesis as taking the place of Analysis in Education," "Etiology of Tubercle," "The Conversation of a Soul with God," and "Moral Secular Education for the Irish People." The above contributions show that Dr. Mac Cormac was a man of most versatile genius, and as an evidence of his cultivation it has been stated that he possessed a knowledge of at least twenty languages. At the time of his death he had in course of preparation for his publishers, MSS. on the subjects of "Philology" and "Insanity." He was held in the very highest respect by the inhabitants of Belfast, whose welfare he had always so much at heart: and his death is deeply deplored by his medical brethren, who looked on him as one who, by his broad sympathies and kindly nature, as well as by his brilliant scientific attainments and writings, had done much to raise the status of the medical profession. Dr. Mac Cormac was the father of Sir William Mac Cormac of St. Thomas's Hospital. The funeral took place on Saturday last, when nearly all the medical men of Belfast were present, as well as a large number of the inhabitants.

Medical News.

UNIVERSITY OF DUBLIN.—The following degrees were conferred last week:—

BACHELOR OF MEDICINE.—Patrick Colley Pounden.
DOCTOR OF MEDICINE.—John Allman Powell.

ROYAL UNIVERSITY OF IRELAND.—The following degrees were conferred last week at a public meeting of the University:—

DOCTOR OF MEDICINE.—James Bradley, John Lockhart Livingston, Cornelius Bradley, George Browne, James Chambers, George Freud, R. B. Gorsuch, R. Nixon, R. H. Wagner, J. J. Attridge, J. K. Close, E. Curtin, S. H. Dunlop, E. B. Hazleton, George A. Junk, T. A. Kane, L. Lyttle, W. E. MacFeeters, John Menary, William Mulligan, Wm. N. Murphy, A. T. Nash, Joseph O'Connor, Chas. O'Neill, W. J. Richardson, M. J. Robinson, J. T. Shaw, A. E. Thomson, F. E. Townsend, G. R. Young.

BACHELOR OF MEDICINE.—James Donelan, Francis C. Browne-Webber, Bernard Forde, G. F. Ewens, J. J. Tobin.

MASTER OF SURGERY.—C. Bradley, James Bradley, James Chambers, J. K. Close, Eugene Curtin, James Donelan, S. H. Dunlop, J. F. Eagleton, Robert English, John Flynn, Bernard Forde, George Freud, R. M. Griffin, M. H. Hannigan, Daniel Lee, J. L. Livingston, W. E. MacFeeters, John Menary, S. Moore, Wm. Murphy, R. Nixon, John Oliver, C. O'Neill, Wm. Orr, Wm. Richardson, A. Thompson, A. Thomson, F. E. Townsend, R. H. Wagner, G. R. Young.

MASTER OF OBSTETRICS.—C. Bradley, J. Livingston, J. Attridge, J. Bradley, G. Browne, J. K. Close, Eugene Curtin, George Freud, R. B. Gorsuch, Daniel Lee, John Menary, Wm. Milligan, Samuel Moore, R. Nixon, J. W. Oliver, C. O'Neill, W. R. Orr, R. H. Wagner, John Blair, G. Garry, John Lynham, James McEvoy, John Wheeler.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on the 27th ult.:—

Cross, Robert George, M.R.C.S., Petersfield.
Mitchell, A. Waldegrave, Slane House, Wandsworth-common.
Smith, Robert Bramwell, Pin Mill Brow, Ardwick, Manchester.
Williams, Lionel Henry, M.R.C.S., Beaconsfield-road, Bristol.

DR. ROBERT GEE has been placed upon the Commission of the Peace for the city of Liverpool.

THE annual festival on behalf of the Hospital for Sick Children, Great Ormond-street, was held on the 27th ult. Subscriptions amounting to £1456 were announced.

AT a meeting of the Middlesex magistrates on May 27th, the salary of Dr. Diplock, coroner for the western division of the county, was increased from £800 to £1000.

THE annual meeting of the supporters of the London Temperance Hospital was held on the 27th ult., when a satisfactory report was presented.

A MATINEE in aid of this year's Hospital Saturday Fund is announced to take place on the 16th inst., at the Gaiety Theatre, when occasion will be taken to present an adaptation of Sardou's "Les Vieux Garçons."

ARRANGEMENTS are being made for holding a public meeting in the Holborn Town Hall on the 25th inst., to lay the claims of the hospitals and dispensaries of the district before the people of the metropolis, and to excite public interest in Hospital Sunday. The chair is to be occupied by the Duke of Westminster, and the Duke and Duchess of Connaught are expected to be present.

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THE sixty-fourth half-yearly election of candidates for the Royal Hospital for Incurables was held on the 28th ult. There were 25 vacancies to be filled, and for these there were 154 candidates.

AT Old Hill, Rowley Regis, recently, a young woman named HANCOX, who is said to be under eighteen years of age, gave birth to triplets—sons. The young mother and children are doing well.

DR. FREDERICK N. PALMER, a well-known Boston physician, jumped overboard with his little grandson from the Boston and Portland steamer *John Brooks*, while out at sea on the night of the 10th ult.; both were lost.

THE annual meeting of the members of the Victoria Institute or Philosophical Society of Great Britain was held on the 28th ult., when an address was delivered by Professor Hull, F.R.S., the director of the geological survey of Ireland.

SINCE the 28th ult., five people have been bitten by rabid dogs in Huddersfield and the neighbourhood. Four have already left for Paris to be treated by M. Pasteur, their expenses being defrayed by public subscription.

A SURGEON at Cheltenham has been fined £10 and costs for making a false declaration on a certificate of death. He stated that he had attended a deceased woman during her illness, whereas he had only seen her half an hour after death.

PRESENTATION.—Mr. Dale, M.R.C.S., L.R.C.P., Ed., has been presented by the members of the Devizes Independent Lodge of Oddfellows, with an emblem and certificate of membership, in token of their appreciation of his services as medical officer to the lodge.

DR. SEDGWICK SAUNDERS, the medical officer of health, reported at a meeting of the City Commission of Sewers on the 1st inst., that during the past week 315 houses in the City had been inspected, and that of these fifteen required sanitary improvement.

BROMPTON CONSUMPTION HOSPITAL.—At the annual court of the governors of this charity on the 27th ult. it was reported that 1955 in-patients, and 13,805 new out-patients had received advice and treatment during the past year. The total income had amounted to £26,222, and the expenditure to £24,780.

THE new sewerage works at Sheffield, which include main sewers throughout the town, and an elaborate series of tanks, machinery, and appliances for purifying the sewage before it is discharged into the river Don, were opened on the 2nd inst. The cost has amounted to upwards of £140,000.

CONVICTION OF AN ASYLUM ATTENDANT.—At the Taunton Assizes, on the 29th ult., Edward Hill, asylum attendant, was sentenced to twelve months' imprisonment for the manslaughter of Frank Barnes, an inmate of the Wells Asylum, whom he allowed to get fatally scalded in a bath.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Professor Henry Power, F.R.C.S., will commence his course of lectures on Monday, June 7th, at 4 o'clock, on the "Diseases of the Lacrymal Organs." The library of the College will be closed on Wednesday and Thursday, June 9th and 10th.

THE MIDLAND MEDICAL BENEVOLENT SOCIETY.—The sixty-fourth annual general meeting of the members of this Society was held at the Grand Hotel, Birmingham, on the 28th May, under the presidency of Mr. C. A. Newnham, who is succeeded by Dr. James Johnston. The directors reported that during the year 1885 £430 had been expended in grants to fifteen annuitants; two of these spontaneously signified their intention not to seek further help from the Society in consequence of the improved state of their affairs. The roll of benefit members is now 268, and the capital of the Society on the 31st of last December was £10,805 0*s.* 3*d.*, which is steadily on the increase. Mr. Bartleet and Sir J. Sawyer were reappointed treasurers, and Dr. Thomas Savage was re-elected hon. secretary; also the following gentlemen were added to the Court of Directors: Dr. Rickards, Mr. H. M. Morgan, and Mr. Priestley Smith.

UNIVERSITY COLLEGE HOSPITAL.—A fancy dress ball in aid of the funds of this hospital, took place at Willis's Rooms on June 1st. The attendance was very large and the room presented a most brilliant appearance. The Lord Mayor and sheriffs testified to their interest in this deserving charity by being present. The company included many persons of distinction in society, and in the military, artistic, legal, scientific, and medical professions. Dancing was continued till the small hours.

HARROGATE SULPHUR WATERS.—On the 29th ult. the first sod of new reservoirs for the storage of sulphur water was turned at Harrogate. The extent of the demand for this class of water may be gathered from the circumstance that no less than 27,000 sulphur baths were given in the year 1884. The scheme inaugurated on Saturday will not only enable this service to be increased so as to supply 35,000 baths annually, but by a device to be adopted the essential properties of the water will be so retained as to add to its usefulness in a considerable degree. The scheme provides for the construction on one site of a series of a dozen reservoirs for the storage of the sulphur water at a cost of about £4000. Each tank will be 20 feet square and 13 feet deep, and hold 31,000 gallons; the twelve thus giving a total storage of 372,000 gallons. The reservoirs will be constructed of brick in cement, and have a concrete foundation, and will be covered over with concrete arches supported upon iron girders. Above this asphalte will be placed, and the whole turfed over so as to present a flat surface.

SOCIETY FOR THE STUDY AND CURE OF INEBRIETY.—A meeting of this Society was held in the rooms of the Medical Society of London on the 27th ult., the President, Dr. Norman Kerr, in the chair. The first paper was by Dr. T. D. Crothers, Hartford, Conn., U.S.A., editor of the *Journal for Inebriety*, on the Sanitary Aspect of Inebriety. Dr. Crothers pointed out the very great influence which inebriety wielded over the general health of the community, by increasing the susceptibility to sickness, and by diminishing the recuperative power, as well as by causing an enormous premature mortality. At the lowest computation, it was reckoned that in the United States 60,000 lives were annually prematurely terminated by personal alcoholic excess. The proportion of crime caused by inebriety was calculated in Canada at 98 per cent.; in New York city at 80 per cent.; and over America generally at 50 per cent. and upwards. Inebriety was a true disease, and must be treated as such. Professor Justus Radius, of Leipsic, read a paper on Delirium Tremens, stating that he had found the plan of giving the patients a hip bath at 91 deg. Fahr. very useful. Two or three buckets of water, at 51 deg. Fahr., were thrown over the upper part of the body. All this was followed by friction with coarse linen. Sleep was thus often induced.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—The annual general meeting of the Society was held at 53, Berners-street, on May 19th, at 5 P.M., the President, Sir James Paget, in the chair. The death of Dr. Harvey Kingston Owen, a Vice-President, was announced, and a vote of condolence to the family passed. The report of 1885 was read, and showed a decrease of three members on those of the year before, the total number of members being 363, out of a possible 4000. The number of widows receiving grants had increased from sixty-one to sixty-four, and one orphan had been added to the list. The grants during the year had amounted to £3028, the largest sum ever given. The expenses of the year were £220. The receipts during the year had not sufficed to pay the grants and expenses, and the deposit account had been drawn upon to the extent of £103 to make up the deficit. A legacy of £100 had been received from Dr. Nathaniel Rogers, and had been invested in accordance with the bye-laws. The grant of £26 was made to a widow under Law 78. A vote of thanks to the editors of the medical journals for their assistance in making public the objects of the Society was carried unanimously. Sir William Bowman and Dr. Iliff were elected Vice-Presidents to fill the vacancies in the list; and the following gentlemen were added to the directorate: Mr. T. H. Smith, Mr. Merriman, Mr. Vasey, Mr. Hutchinson, Dr. Godson, and Dr. Potter. The best means of extending the Society and of inducing members to join were discussed. The Secretary mentioned the case of a widow who had received for herself and children £2272, her husband having only paid eighteen guineas subscriptions.

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Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BEAN, CHARLES E., M.R.C.S., L.R.C.P.Lond., has been appointed Surgeon to the Devon and Cornwall Ear and Throat Hospital, Plymouth.

BREACH, JAMES H., M.R.C.S., L.S.A., has been appointed Medical Officer for the Fifth District of the Bradfield Union.

COX, A. H. LISSANT, L.S.A., has been appointed House-Physician to King's College Hospital, vice T. G. Lewis, resigned.

CROPLEY, H., M.R.C.S., has been appointed House-Surgeon to the London Hospital.

EAST, CHARLES E., M.R.C.S., L.S.A., has been appointed House-Surgeon to King's College Hospital, vice E. A. Hughes, resigned.

EVANS, G. F. W., M.B.Dub., M.R.C.S., L.R.C.P., has been appointed Assistant House-Physician to King's College Hospital, vice A. H. L. Cox, resigned.

GARRY, T. GERALD, M.D., M.Ch., M.A.O., has been appointed Resident Physician to the Ben Rhydding Hydropathic Establishment, vice Dr. Little, appointed Consulting Physician.

GOWING, B. C., M.R.C.S., L.S.A., has been appointed Medical Officer to the Workhouse of the Penistone Union.

HALL, FREDERICK, M.D., has been appointed Honorary Physician to St. Mary's Cottage Hospital, Southampton, vice Knapton, resigned.

HARRIS, JOHN B., M.D., has been appointed Medical Officer to the Postal District of Lower Norwood.

HUBBARD, D. L., M.R.C.S., L.S.A., has been appointed House-Surgeon to King's College Hospital, vice E. H. Smith, resigned.

HUGHES, EDGAR, M.R.C.S., L.R.C.P., L.S.A., has been appointed Ophthalmic Clinical Assistant to King's College Hospital, vice J. F. Harries, resigned.

JACKSON, GEORGE, F.R.C.S.Eng., L.R.C.P.Lond., has been appointed Surgeon to the Devon and Cornwall Ear and Throat Hospital, Plymouth.

JACOMB-HOOD, CHARLES J., M.R.C.S., L.S.A., has been appointed Physician Accoucheur's Assistant to King's College Hospital, vice Frank Penny, resigned.

JEULEY, RICHARD, M.R.C.S., L.S.A., has been appointed Deputy Coroner for the Totnes District.

LAVIES, HARRY B., M.R.C.S., L.S.A., has been appointed House-Surgeon to King's College Hospital, vice A. Carless, resigned.

O'MEARA, F. A. T., L.R.C.P., M.R.C.S., has been appointed Assistant House-Accoucheur to King's College Hospital, vice C. J. Jacomb-Hood, resigned.

SCHACHT, FRANK F., B.A., M.B.Cantab., &c., has been appointed Physician to the Westminster General Dispensary.

SMITH, FREDERICK OSBORNE, M.R.C.S., L.K.Q.C.P.I., and L.M., has been appointed Surgeon to the Surgical Appliance Society, Finsbury-circus, E.C.

STOOKES, ALEXANDER, M.B., C.M., L.R.C.S., has been appointed Head Surgeon to the Liverpool South Dispensary.

WALKER, NORMAN P., M.B., C.M.Ed., has been appointed Medical Officer for the Dalston District of the Carlisle Union.

WESTBY, GEORGE, M.L. & L.M.K.Q.C.P.I., L.R.C.S.I., has been appointed Honorary Medical Officer to No. 6 District of the Ladies' Charity and the Lying-in Hospital, Liverpool.

WILLS, W. A., M.B.Lond., has been appointed Resident Clinical Assistant to the Brompton Hospital for Consumption and Diseases of the Chest.

Births, Marriages, and Deaths.

BIRTHS.

BOUSFIELD.—On the 28th ult., at Old Kent-road, S.E., the wife of Edward C. Bousfield, L.R.C.P.Lond., of twins (son and daughter).

FARNELL.—On the 28th ult., at The Goffs, Eastbourne, the wife of Henry D. Farnell, F.R.C.S., of a son.

GABB.—On the 28th ult., at Copthorne, Guildford, Surrey, the wife of J. Percy A. Gabb, M.D.Lond., of a son.

GRIFFITH.—On the 26th ult., at Harley-street, W., the wife of Walter S. A. Griffith, M.B., F.R.C.S., of a son.

HULSEBERG.—On the 20th ult., at Maidstone, the wife of Brigade-Surgeon Hulseberg (R.P.), Medical Staff, of twins (sons).

LUNN.—On the 30th ult., the wife of John R. Lunn, F.R.C.S.Ed., Medical Superintendent of the New Saint Marylebone Infirmary, Notting-hill (prematurely), of a son, who survived his birth only a few hours.

PENNY.—On the 25th ult., at Marlborough, Wilts, the wife of Edward Penny, M.D., of a son.

UPTON.—On the 22nd ult., at Medina-villas, Brighton, W., the wife of H. Chrippes Upton, L.R.C.P., of a son.

WARD.—On Feb. 24th, at Pietermaritzburg, Natal, South Africa, the wife of Charles Ward, M.R.C.S.Eng., L.R.C.P.Ed., F.R.G.S., District Surgeon, Umgeni Division, of a son.

MARRIAGES.

ACKLAND—STUBBS.—On the 1st inst., at St. Mark's, Surbiton, Charles Kingsley Ackland, L.R.C.P.Lond., M.R.C.S., to Edith Stubbs, of Maple-road, Surbiton.

BAKER—GLASSPOOL.—On the 27th ult., at All Saints' Church, Southampton, Thomas Baker, M.R.C.S., L.S.A., of Waterloo-Ville, Cosham, Hants, to Laurie Hannah, only daughter of John T. Glasspool, of West Marlands, Southampton.

GARROD—SMITH.—On the 27th ult., at St. Thomas's, Portman square, Archibald Garrod, M.B., M.R.C.P., M.R.C.S., of Chandos-street, Cavendish-square, to Laura Elizabeth, eldest daughter of Thomas Smith, Esq., of Stratford-place, W.

HUNT—VAUGHAN.—On the 31st ult., at Camberwell, Lewis Gibson Hunt, M.D., of Sheffield, to Emma Lydia Flora, daughter of the Rev. James Stuart Vaughan, M.A., Chaplain of Bethlem Royal Hospital.

LANG—STEWART.—On April 15th, at St. John's Church, Ocho Rios, Jamaica, Alexander Morrison Lang, M.B., to Wilhelmina Ann, youngest daughter of James Stewart, Esq., of Shaw-park, St. Anne's, Jamaica, and formerly of the 22nd Regiment.

MEEK—SALVAGE.—On the 2nd inst., at the Wesleyan Church, Roupell-park, by the Rev. Charles W. Prest, brother-in-law of the bridegroom, assisted by the Rev. Wm. Hawken, John William Meek, M.D.Lond., son of the late John Meek, Esq., of Macclesfield, to Emmeline, eldest daughter of Samuel Salvage, Esq., of West Dulwich.

PERKINS—RUMBALL.—On the 2nd inst., at All Saints', Carshalton, Surrey, Alfred Temple Perkins, M.R.C.S., L.R.C.P.Ed., to Emily Kate Rumball, niece of George R. Forster, Esq., of Warwick House, Carshalton.

TRATMAN—PORTER.—On the 2nd inst., at the Parish Church of Westbury-upon-Trym, Bristol, by the Rev. Wm. Cartwright, Vicar, assisted by the Rev. H. H. Streeten, M.A., Frank Tratman, M.B.Lond., L.R.C.P., M.R.C.S., Government Medical Officer of Gascoyne, Western Australia, fourth son of A. R. Tratman, of Berkeley-square, Clifton, Bristol, to Mary Lydia Waltham, only daughter of Christopher W. Porter, of Redland, Bristol.

WEST—WALFORD-GOSNALL.—On the 2nd inst., at the Church of St. John the Evangelist, Fitzroy-square, W., John Arthur West, L.R.C.P., M.R.C.S., to Emma Louisa, younger daughter of J. D. Walford-Gosnall, of Museum-street, Ipswich.

DEATHS.

COX.—On the 23rd ult., at Clifton, Surgeon-General Charles Lindsay Cox, Retired List, H.M. Bengal Army.

JONES.—On the 22nd ult., at Henblas, Bala, Merionethshire, Richard Owen-Jones, Esq., M.R.C.S.Eng., L.S.A.Lond., in his 49th year.

KIRKWOOD.—On the 7th ult., at Madras (suddenly), of fever, Surgeon-Major T. M. Kirkwood, Medical Staff.

MAC CORMAC.—On the 26th ult., at his residence, Belfast, Henry MacCormac, M.D., Consulting Physician to the Royal Hospital, aged 86.

MONTEITH.—On the 2nd inst., at Oak Holm, Parklands, Surbiton-hill, Lowry John Monteith, Fleet Surgeon, Royal Navy, retired, aged 68.

PALEY.—On the 31st ult., at his residence, Addison-road, Kensington (after a short illness), Edward Paley, M.R.C.S., in his 61st year.

WARD.—On April 17th, at Pietermaritzburg, Natal (after fifty-two days' illness), of enteric fever, phlebitis, and pyæmia, Dorothea Agnes, the beloved wife of Charles Ward, District Surgeon, Umgeni Division.

WARD.—On April 29th, at Pietermaritsberg, Natal, Reginald James Yorke Ward, son of Charles Ward, District Surgeon, Umgeni Division, aged two months and five days.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

BOOKS ETC. RECEIVED.

APPLETON & Co., New York.

Transactions of the American Gynecological Society. Vol. X., for 1885. pp. 357, with Illustrations.

ARGUS COMPANY, Albany, U.S.A.

Third Annual Report of the Bureau of the Statistics of Labour of the State of New York for the year 1885. pp. 653.

BAILLIÈRE, TINDALL, & COX, King William-street, Strand, London.

The Voice, Musically and Medically Considered. By Armand Semple, B.A., M.B.Cantab., &c. pp. 128, with Illustrations.

BELL, G. & SONS, York-street, Covent-garden.

Manual of Operative Surgery. By W. Arbuthnot Lane, M.B., M.S., F.R.C.S. pp. 276, with Illustrations.

BERGMANN, J. F., Wiesbaden. TRÜBNER & Co., London.

Habitual Constipation and its Treatment by Electricity, Massage, and Water. By Georg Hünerfauth, M.D.

BRIGGS, W., Toronto.

Manual of Hygiene for Schools and Colleges. Prepared by the Provincial Board of Health, Ontario. pp. 293.

BRIGHT, J. F., Bournemouth.

Bright's Guide to Bournemouth. Edited by C. H. O. Curtis, F.S.A. pp. 182, Illustrated.

BUREAU DU PROGRÈS MÉDICAL, Paris.

Traité élémentaire d'Anatomie Médicale du Système Nerveux. Par Dr. Ch. Féré. pp. 494.

CASSELL & Co., London, Paris, New York, & Melbourne.

Materia Medica and Therapeutics. By J. Mitchell Bruce, M.A., M.D. Third Edition. pp. 582.

CHURCHILL, J. & A., New Burlington-street, London.

Notes on Analytical Chemistry for Students in Medicine. By A. J. Bernays, Ph.D., F.C.S., &c. Second Edition. pp. 129.

What is Consumption? By G. W. Hambleton, L.R.Q.C.P.I. pp. 64.

A Manual of Practical Therapeutics. By E. J. Waring, C.I.E., M.D. Fourth Edition. Edited by D. W. Buxton, M.D., B.S.Lond.

Inflammations of the Liver and their Sequelæ. By Dr. George Harley, F.R.S. pp. 142.

On Inversion of the Uterus; with eleven cases successfully treated by the Sigmoid Repositor. By J. H. Aveling, M.D. pp. 54.

On Cancer of the Mouth, Tongue, and Alimentary Tract; their Pathology, Symptoms, Diagnosis, and Treatment. By F. B. Jessett, F.R.C.S. pp. 309, with Illustrations.

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Regional Surgery, including Surgical Diagnosis. By F. A. Southam, M.A., M.B.Oxon., F.R.C.S. Part III.: The Abdomen and Lower Extremity. pp. 861.
Companion to the latest Edition of the British Pharmacopœia. By Peter Squire. Fourteenth Edition, revised by P. W. Squire, F.L.S., F.C.S., and A. H. Squire. pp. 526.

GRIFFIN & Co., Exeter-street, Strand, London.
The Year-book of the Scientific and Learned Societies of Great Britain and Ireland. Third Annual Issue. pp. 236.

KEGAN PAUL, TRENCH, & Co., Paternoster-square, London.
Microbes, Ferments, and Moulds. By E. L. Trouessart. pp. 314, with 107 Illustrations.

KIMPTON, HENRY, High Holborn, London.
The Medical Annual and the Practitioner's Index, for 1885-6. pp. 266.

LONGMANS, GREEN, & Co., Paternoster-row, London.
Conference on Temperance Legislation, London, 1885 (Trans. Nat. Assoc. Prom. Soc. Sci.). pp. 192.

MACMILLAN & Co., London.
The International Encyclopædia of Surgery. Edited by John Ashhurst, jun., M.D. In Six Volumes. Vol. VI. pp. 1272, with Chromo-lithographs and Woodcuts.

MOORE, W. H., Madras.
A Manual of the Diseases of the Elephant, and of his Management and Uses. By J. H. Steel, V.S., A.V.D., &c. pp. 90, illustrated.

NATIONAL PUBLISHING COMPANY, Featherstone-buildings, London.
Prison Despotism: A Personal Narrative. By Dr. M'Cook Weir. pp. 363.

NEW SYDENHAM SOCIETY, London.
Recent Essays by various Authors on Bacteria in relation to Disease. Selected and edited by W. Watson Cheyne, M.B., F.R.C.S. pp. 350, with Plates, some Coloured.

PUTNAM'S SONS, New York & London.
The Disorders of Menstruation. By John N. Upshur, M.D. pp. 200.

SAMPSON LOW, MARSTON, SEARLE & RIVINGTON, Crown-buildings, Fleet-street, London.
The Baths, Bathing, and Attractions of Aix-les-Bains, Savoy. By W. Wakefield, M.D. pp. 223.

SHAW & SONS, Fetter-lane, London.
The Sale of Food and Drugs Acts, 1875 and 1879; with Notes and Cases. By W. J. Bell, B.A., LL.M. pp. 101.

SMITH, ELDER, & Co., Waterloo-place, London.
Dictionary of Practical Surgery. By various British Hospital Surgeons. Edited by Christopher Heath, F.R.C.S. In Two Volumes. pp. 976-884.
Von Ziemssen's Handbook of General Therapeutics. Vol. V.: General Orthopædics, Gymnastics, and Massage. By Prof. Dr. Friedrich Busch. Hydrotherapeutics by Dr. W. Winternitz. pp. 624.
Manual of Pathological Histology by Cornil and Ranvier. Second Edition, re-edited and enlarged. Translated by A. M. Hart. Vol. II. Special Pathological Histology: Part II. pp. 774, with numerous Illustrations.

STANFORD, EDWARD, Charing-cross.
Practical Notes on the Treatment of Deformities. By Henry F. Baker, F.R.C.S.Eng. pp. 72, with Illustrations.

SWAN SONNENSCHEIN, LE BAS, & LOWREY, Paternoster-square.
The Naturalist's Diary: a Day-book of Meteorology, Phenology, and Rural Biology. Arranged and edited by Charles Roberts, F.R.C.S., &c. pp. 384, with Chart.

UNWIN, T. F., Paternoster-square.
Medical Missions, their Place and Power. By John Lowe, F.R.C.S. With Introduction by Sir Wm. Muir, K.C.S.I., &c. pp. 292.

Glycosuria and the Treatment of Diabetes; by Wm. Squire, M.D.—On the Rational Alimentation of the Labouring Classes; by Capt. M. P. Wolff, F.S.S. (Allen & Co., Waterloo-place).—Études Cliniques et Physiologiques sur la Marche; par le Dr. G. de la Tourette.—Erkenntniss und Behandlung der Frauenkrankheiten im Allgemeinen; von Dr. C. C. T. Litzmann. (Hirschwald, Berlin).—Le Rein dans ses Rapports avec le Diabète; par le Dr. P. S. Ingiessis. (Cocoz, Paris).—Colonial and Indian Exhibition Railway Guide and Route Book.—Boycotting in the County of Cork.—La Litolopaxia; por el Dr. A. Settier.—Arsberättelse fran Sabbatsberg i Stockholm för 1884; afgifven af Dr. F. W. Warfvinge.—New Theory and Old Practice in relation to Medicine and Certain Industries; by Surgeon-General C. A. Gordon, M.D. (Williams and Norgate).—Diet in relation to Age and Activity; by Sir H. Thompson, F.R.C.S. (Regan Paul & Co.).—Index Medicus, Vol. VIII., No. 4.—Charles Darwin; by H. W. S. Worsley-Benison, F.L.S. (Scers).—Primera Serie de Diez Ovariotomias; por el Dr. D. Miguel A. Fargas.—Contra-indications for Visiting the High Altitudes; by A. Tucker Wise, M.D. (Churchills).—Guide to Carlsbad; edited by W. Schacht & Co.—La Limonea Clorofórica nell' ultima Pandemia di Colera; pel Dr. Cav. Ottavio de Stefano.—Experimental Researches upon Tuberculosis and Scrofula; by Edwin Wooton.—Notes on the Pictures of Mr. Holman Hunt; with Criticisms by John Ruskin, LL.D. (Reeves).—Good Words and Sunday Magazine for June. (Isbister).—Leisure Hour, Sunday at Home, Boys' Own Paper, Girls' Own Paper, for June.—Transactions of the Alumni Association of the Woman's Hospital in New York.—L'Année Médicale, 1885. (Plon, Nourrit et Cie, Paris).—Climate and Health in Australasia; edited by Jas. Bonwick, F.R.G.S.—Hydrophobia: M. Pasteur and his Methods; by T. M. Dolan, M.D., F.R.C.S.—Among the Tetchas of Central Asia. (Southern Publishing Company, Fleet-street).

Medical Diary for the ensuing Week.

Monday, June 7.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 3 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Henry Power: On the Diseases of the Lacrymal Organs.
ROYAL INSTITUTION OF GREAT BRITAIN.—5 P.M. General Monthly Meeting.
ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—8 P.M. Communications from Messrs. S. J. Hutchinson, W. St. George Elliott, and A. Morton Smale.—Mr. T. W. Groves: Practical Microscopy in application to Odontology.

Tuesday, June 8.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Arthur Gamgee: The Function of Circulation.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Mr. Chavasse: On a case of Multiple Neuromata.—Dr. Angel Money: Some Statistics of Pneumonia, with especial reference to the Relations of Delirium and Temperature.—Dr. Gervis: A case of Extra-uterine Gestation.

Wednesday, June 9.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Henry Power: On the Diseases of the Lacrymal Organs.
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Mr. F. R. Cheshire: Device for the Better Examination of Bacteria in Culture Tubes.—Dr. E. M. Crookshank: On Photomicrography.
EPIDEMIOLOGICAL SOCIETY OF LONDON.—8 P.M. Dr. Thorne Thorne: The International Sanitary Conference of Rome, 1885.—Mr. Bolton G. Corney: The Recent Prevalence of Cerebro-spinal Fever among Polynesian Immigrants.
BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens will be shown. Dr. Grigg: Pyosalpinx in the Puerpera.

Thursday, June 10.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Professor Alexander Macalister: Habit as a Factor in Human Morphology.
OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8.30 P.M. (1) Mr. S. Snell: Embolism of the Central Artery of the Retina occurring in a case of Puerperal Septicæmia; (2) Cholesterine in a case of Detached Retina.—Mr. R. Brudenell Carter: (1) Case of Foreign Body embedded innocuously in the Retina; (2) On some Points in Cataract Extraction.—Mr. W. O. Maher: (1) A Rare Case of Exophthalmic Goitre; (2) Case of Retinal Detachment.—Dr. Stephen Mackenzie (for Dr. Davidson): Fatal Meningitis after Enucleation.—Mr. J. B. Lawford: New Tissue Formation in Choroid and Retina. (Living and Card Specimens at 8 P.M.)

Friday, June 11.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Henry Power: On the Diseases of the Lacrymal Organs.
ROYAL INSTITUTION OF GREAT BRITAIN.—9 P.M. Professor Dewar: Meteorite Problems.

Saturday, June 13.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. G. G. Stokes: Light, with special reference to Effects resulting from its Action on Various Substances.

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, June 3rd, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
May 28	29·90	W.	55	47	107	61	47	·06	Cloudy
,, 29	29·88	S.W.	55	49	97	64	46	...	Cloudy
,, 30	29·96	S.W.	60	52	99	66	47	·01	Cloudy
,, 31	30·03	E.	57	53	116	69	49	...	Hazy
June 1	29·85	S.E.	59	57	107	74	57	·01	Overcast
,, 2	29·93	S.W.	60	52	111	76	52	·28	Fine
,, 3	30·11	E.	52	50	86	57	50	...	Overcast

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

TEREBENE RASH.

REFERRING to the case of terebene rash published in our issue of the 22nd ult., Mr. Lascelles Scott has written describing a similar rash produced on himself after the use of a certain sample of terebene, other specimens having been used without any inconvenient result. Upon examination the sample was found to contain a little admixed or unaltered turpentine, a resinous body, and a comparatively large quantity of peroxide of hydrogen. The natural inference is that the rash is produced not by the terebene *per se*, but by some impurity existing in the particular sample employed. Mr. Lascelles Scott concludes by expressing the opinion that all terebene for medicinal use should be carefully tested, and all that is not free from H_2O_2, unchanged turpentine, and dissolved resin should be rejected.

Dr. F. P. Atkinson.—The battery can no doubt be obtained through any first-class philosophical instrument maker.

"A ROUGH-AND-READY MEDICAMENT."

To the Editor of THE LANCET.

SIR,—The reference which Dr. Curran asks for in your last issue is to be found in Baron Larrey's "Mémoires et Campagnes," vol. iv., p. 237. The incident occurred to Marshal Lannes during Napoleon's advance into Spain—not during the retreat from Moscow. His horse having fallen with him whilst crossing a mountain range near Tolosa, the Marshal sustained several severe and dangerous bruises. He was at once wrapped in the warm skin of a newly slain sheep, and was able in two days to resume his command. This must be regarded as a rough-and-ready method of applying the wet pack. With regard to the question whether this practice is to be found among "primitive or remotely situated people in our midst," the custom of Highland seers, up to a late period, of wrapping themselves in the hide of a recently slaughtered bull may be mentioned. This was, however, for distinctly prophetic purposes; I am not aware that it was employed by them for medical purposes. But with primitive people medicine is rarely divorced from religious practices, and the bull's hide might be found to be as powerful a physical as it was a spiritual stimulant.

I am, Sir, yours truly,

May 31st, 1886. CHARLES H. RALFE.

To the Editor of THE LANCET.

SIR,—In some editions of Druitt's Surgery Dr. Curran will find an account of how Marshal Lannes was resuscitated by being wrapped in a sheep's skin in one of the passes of the Pyrenees after exposure to cold.

I am, Sir, yours truly,

June 1st, 1886. A SURGEON.

MEDIÆVAL MEDICINE.

F. A. (Leicester).—It was not till the last three centuries before the Renaissance that the distinction between physician and surgeon became commonly recognised. The distinction arose from the special instruction in the two great departments of the healing art that began to be given in the schools, the official title to practise being that of "Master," while the official title to teach was that of "Doctor." Empirics, particularly in minor surgery, were then in great request, and between them and the officially qualified there was continual war. It was then, too, that, according to Dr. Chiappelli, whose work on Mediæval Medicine may be recommended, there arose specialists, such as "ocularii," "vulnerarii," &c., whose ranks were often reinforced by women, to whom diplomas were given by such schools as those of Naples, Florence, Bologna, and Venice. In process of time Corporations, with the sanction of the several States, were formed, to guard the rights and interests of the profession, and we find everywhere penalties more or less grave attached to the illicit practice of the healing art. At Naples, for example, a fine of 200 lire (£8) was exacted from the apothecary who received the prescriptions of an irregular practitioner. The connexion between medicine and law was at first slight; only at Venice the medical man was obliged to report cases of wounding and suspicious death; and, later, courts of justice called in physicians and surgeons as experts, and also to tend the sick in prison, to assist at tortures, and even in some cases, notably at Florence, to direct them. The public authority, however, provided medical assistance to the poor, compelling it to be given gratuitously, but gradually coming to remunerate it out of the civic chest. Fees varied with different localities. At Pisa, for example, the statutes assigned for a medical examination in official cases from five to ten soldi (from 2½*d.* to 5*d.*). At Milan the College of Physicians fixed the sum of from ten to twenty soldi for each day's visit during the plague. The consultant was more handsomely rewarded than the physician in attendance. Communes paid their medical officers either in stipulated sums or their equivalent in kind, according to the service done; but at Courts there was no limit to what the surgeon or physician might receive. Clerics and Jews in the earlier mediæval time had the monopoly of practice, because to the laity study was made impossible by barbaric turbulence, while the priests had readiest access to the sick and wounded. But their power was often so abused that the Church had to prohibit its exercise. The influence of the Jews, again, originated in their reputation for skill in Arabian science, and in their case also the Church, not with complete success, interposed its veto. The attitude of literature to medicine was in those days hostile, according to Dr. Chiappelli, who explains it by the antagonism then prevailing between physicians and men of letters, the latter maintaining idealistic aspirations nourished on the classical Renaissance, while the former adhered to the positive and material tradition, especially of the Arabian schools. It was reserved for a more enlightened age to bring the two into harmony.

Nurse.—A letter addressed to the Secretary of the Society, 53, Berners-street, will meet with attention.

THE DEGREE OF LOUVAIN.

To the Editor of THE LANCET.

SIR,—Under the above heading, in your issue of May 22nd, occurs the following: "A medical man with British diplomas thinks it is a great mistake.....to propose that foreign diplomas shall be registered, especially considering how easily these foreign diplomas are obtained." I will not attempt to deny that there are on the Continent (as is also the case in the United Kingdom) some schools whose diplomas are held in less esteem than the degrees of other establishments; but to hold forth that foreign diplomas, as a rule, are *now* easily obtained is running very wide of the mark. I will only say this, that if the "medical man with British diplomas" will come over here in July or February to investigate the curriculum, and take notes of what he hears at the six theoretical and several practical examinations in science, medicine, and surgery (all of them public) required for the "M.D." degree, his opinion as expressed in THE LANCET will be very considerably modified—at least, as regards the old University of Louvain, whose "M.D." I am hoping to complete next year. I might ask, *par contre*, whether the free advertising in English medical papers for unqualified men to "visit, dispense, and attend midwifery" is calculated to add, in the eyes of foreigners, to the value of, or even the necessity for, a qualification in England.

I am, Sir, yours faithfully,

Louvain, May 26th, 1886. A FOREIGN STUDENT AND SUBSCRIBER.

"SUMMER RAMBLES IN MY CARAVAN."

A PLEASANT paper is that supplied by Gordon Stables, M.D., R.N., to the *Leisure Hour* from month to month; full of vivid description of place and people, with bits of quaint humour here and there, and telling anecdote. The article is calculated to enhance one's love of British hills and dales and breezy moors. Dr. Stables should have many imitators in his method of spending a holiday.

G. G.—We cannot assist our correspondent in the matter.

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THE FORM OF THE DENTAL ARCH.

AFTER carefully examining and measuring the mouths of more than two hundred persons, Dr. Dementyeff has come to the conclusion that the normal form of the dental arch is elliptical in the upper jaw, but paraboloid in the lower, the internal corresponding with the external arches. These normal forms were, however, only found in 50 per cent. of the cases. A link between the normal and abnormal forms is supplied by the straight jaw, which occurred in 18 per cent. of the cases examined. Carious teeth were observed in 50 per cent. of the jaws examined, the proportion of disease being distinctly higher in those of abnormal form.

An Assistant (Essex).—When an assistant gives evidence he does so in his capacity as assistant. He is entitled to his expenses, and, if he does his work well, perhaps to share the fees; but he cannot claim them as a matter of right.

M.D. Erlang.—1. The degree mentioned is registrable, and stands on the same footing as the corresponding degree in other universities.—2. Yes, but the selection of the particular corporation must be left to our correspondent.

HYDROPHOBIA.

To the Editor of THE LANCET.

SIR,—The brilliant discovery of M. Pasteur has one important drawback: it is a delicate and difficult process, only to be carried out by an expert, and in an institute specially arranged for the purpose. May not the process be simplified, and the same result be obtained by a less complicated method? Rabies and hydrophobia are unknown in this part of the world; and though a recent traveller has described both diseases as being common in Dammarsland, no case of either disease has ever been known to occur either in the Cape Colony or in the adjoining States. Experiments are therefore impossible here. It is well known that certain virulent diseases differ very greatly in their degree of intensity, according to the channel by which they are introduced into the system. Small-pox by inoculation is much milder than the disease taken in the ordinary way, whilst affording equal protection. So, again, with the pleuro-pneumonia of cattle, inoculation has been largely and successfully employed to induce a milder form of the affection; but in this part of the world the latter process has been entirely superseded by the practice of administering the pleuritic fluid itself by the mouth. On the appearance of the disease in a flock, the sick animal is at once slaughtered, and the carefully strained pleuritic effusion administered to all the healthy members of the herd. In this way a form of disease is induced which is even milder than that by inoculation, and at least equally protective. Now, it does not seem unreasonable to suppose that something of the same sort might be done in cases of persons bitten by rabid dogs—that the morbid saliva might be given by the mouth to such persons as soon as possible after the injury, and repeated for several days, the form of administration being pills, to prevent the possibility of absorption by slight wounds of the mucous membrane. In this way we might expect a slight but protective form of the disease to take place. Nor is this altogether novel. Amongst innumerable suggestions for the cure or prevention of hydrophobia at various times, a hair taken from the muzzle of the diseased dog has been recommended to be swallowed by the patient. Such a hair would be saturated with saliva. Whether this treatment has ever been successfully carried out I cannot say. At any rate, the idea has survived in the well-known phrase, "A hair of the dog that bit you."

I am, Sir, yours obediently,
Cape Colony, May, 1886. M.

CONSULTING AND GENERAL PRACTITIONERS.

W. H. K.—The duty of a consultant undoubtedly is to refer his patient to his ordinary medical adviser, with undiminished respect for his services. If it is not the rule of the profession, so much the worse for that high order of practitioners by whose ethics and *morale* in past times the whole tone of the profession has been sustained. We can only advise practitioners to note those consultants who do not act up to this rule, and to have no company with them.

Mr. W. F. MacDonogh.—Such a distribution of cards would be professional advertising, and decidedly objectionable. Our correspondent will see at once that it would be a suggestion to the patients of other medical men.

SPINA BIFIDA.

To the Editor of THE LANCET.

SIR,—I agree with Dr. Morton that the remark in the *Dublin Medical Journal* of March last concerning the hopelessness of cases of spina bifida should not pass unnoticed. Besides several cases cured by excision of the sac reported previously and several unpublished, only to-day I dismissed cured a child three months old operated on three weeks ago. Recently Mr. Pridgin Teale excised a sac in the cervical region, effecting a perfect cure; and a short time previously my colleague, Mr. Ward, successfully excised one in the lumbar region. Although Dr. Morton's method by injection differs very materially from mine, which is a plastic operation, undoubted cures have been effected by both plans, and it is not affirming too much to say that in by far the greater number of cases of spina bifida the prognosis is good if an operation be properly performed.

I am, Sir, yours truly,
Leeds, May 11th, 1886. A. W. MAYO ROBSON.

PRACTICE IN CANADA.

A Toronto University Man has favoured us with the following information on a matter on which questions are frequently put to us:—"Before being legally qualified to practise in the Dominion it is requisite that the diploma of the College of Physicians and Surgeons (Quebec or Ontario) be obtained. If a British diploma covers examination in medicine, surgery, and obstetrics, on presentation of the same with good credentials, and on payment of the fee, $5, the licence will be granted without examination; if one subject has been omitted, a candidate must undergo examination in that subject. If he decides on practising in the province of Quebec, on arrival at Montreal he should call on Dr. Campbell of Beaver-hill, who is the secretary, and will give him every information. Appointments other than hospital are, I believe, in the gift of the Dominion or Corporations, and for a stranger to expect to get one on arrival will only lead to disappointment. Appointments there, as in this country, require private influence. A general practitioner's position in Canada is invariably much better than in England. He takes a social standing there, and is respected and looked up to by his patients, provided he respects himself. Bad debts are the exception. If patients are poor, the practitioner must make his accounts to meet their circumstances. This consideration will be appreciated. If a practitioner has in England descended to sixpenny or shilling dispensary work, he must not think of continuing it in Canada. A few of the lower class would perhaps accept his services, but the respectable working classes would despise him, and medical men would treat him as beneath their contempt."

Mr. Thomas Williams.—We are quite satisfied with our first answer A medical man would do a very questionable service to his patients by directing their attention, or that of their friends, to all the possible diseases which they might develop.

Marishal is referred to our Students' Number, published in September last.

IODOFORM SPRAY.

To the Editor of THE LANCET.

SIR,—In the different articles on the use of iodoform I do not remember any allusion having been made to its use in the form of spray, although for a long time I have supposed in many conditions of throat affection, and perhaps even pertussis, it might be so used advantageously; lately, however, I have employed it in many cases, and have been struck with the rapidity with which it often gives marked relief. The ether in which it is dissolved appears to immediately constringe the congested capillary vessels, while the iodoform being deposited in a thick film is more efficiently applied and retained longer, and by its sedative influence continues to relieve the tension and engorgement, as an instance of which I give the following case.

On Tuesday last a man, a carpenter by trade, consulted me. He said he had been shivering all day at the bench (he looked very ill), and had some aching pains over the body, especially the back, and the throat was very sore; on examining which I found the whole fauces, uvula, &c., bright-red and slightly swollen; pulse 110, temperature 102·5°. I advised him to declare upon his club at once, as I thought he would require at least a week's rest. I well sprayed his throat, and he expressed himself immediately as feeling relieved. I gave him also some mindererus and a Dover's powder to be taken at night. Next day he called upon me, saying he felt quite well, and that his sore-throat was quite relieved. I have used iodoform mixed with sugar, benzoate of soda, and other ingredients, applying it by means of a camel-hair brush; but as it is often difficult to get it to adhere, I consider the spray much more efficacious. I use a spray bottle, which I can use with one hand and depress the tongue with the other.

I am, Sir, yours faithfully,
May 26th, 1886. GEO. MUNDIE, M.D.

AFGHAN ZOOLOGICAL COLLECTION.

BY permission of Professor Flower, the zoological collection made by Brigade-Surgeon Aitchison, C.I.E., lately attached to the Afghan Delimitation Commission, is to be for a short time placed on view in the South Kensington Department. The collection will, we understand, ultimately be sent to India, and distributed amongst various museums in that dependency.

Mr. W. Gibson Bott.—There appears to have been misinterpretation on both sides, and no real cause for unpleasant feeling.

Professor Ray Lankester.—Too late for this week.

A. R. C.—From 10*s.* 6*d.* upwards, according to sum assured.

A CORRECTION.

To the Editor of THE LANCET.

SIR,—May I ask you to correct two misreadings in the explanations attached to the temperature chart of my article on Rheumatic Hyperpyrexia, which appeared in your issue of last week. Line A and Line F, for "given twice" read *given every two hours;* Line B and Line C, for "given four times" read *given every four hours.*

I am, Sir, yours truly,
Birmingham, May 31st, 1886. ARTHUR FOXWELL.

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CHOLERA: ITS INVESTIGATION AND TREATMENT.

A CORRESPONDENT writing from Tangiers says:—"I believe myself to be on the eve of discovering a specific for cholera; but to enable me to carry my investigations to a close it is necessary for me to see some more cases of the disease. As, however, my means will not permit me to leave my practice here for any considerable length of time, I write to ask you if there is any fund available that would furnish me with the necessary money to carry on my investigations in Spain should cholera reappear there this summer. As I am a married man with a family I cannot sacrifice my practice to carry on investigations respecting cholera and its treatment unless I am compensated for so doing by my expenses being paid."

Acarus might apply to one or other of the firms whose announcements appear in our advertising columns.

Mr. Mason should consult his usual medical attendant. We do not give advice.

RINGWORM IN NEW-BORN INFANTS.

To the Editor of THE LANCET.

SIR,—Your correspondent, "M.B. Oxon.," alludes to the question of the intra-uterine existence of ringworm. Our knowledge of the conditions of intra-uterine life negatives the likelihood of such an occurrence, and clinical observation confirms this view. The earliest age at which I have seen ringworm in an infant is nine days. In this case there was a well-defined ring, involving part of one upper eyelid, eyebrow, and adjacent skin of the forehead, and the diagnosis was confirmed by the microscope. Other children of the same family had ringworm at the time, and I can see no reason to suppose that this infant was not infected in the ordinary way. In after-life the possibility of the existence of ringworm is not so defined. In children and young people it may be met with in almost any position. It may occur at any age on the less hairy portions of the skin and in men's beards. On the scalp it is rare in adults in its ordinary forms. I have seen well-marked ringworm in three cases in this position. The first case was that of a woman sixty years of age, a large portion of whose scalp was the seat of a vigorous development of the disease; the second that of a lady of thirty-five years, who had acquired it in India three years before I saw her, when I found evidence of the complaint over the occiput; and the third that of a lady of twenty-six, who had had charge of a child similarly affected.

I am, Sir, yours truly,

Savile-row, W., June 1st, 1886. WYNDHAM COTTLE.

WILD BEASTS AND SNAKES IN INDIA.

DURING the past year wild beasts and snakes have been unusually destructive to human life in the central provinces of India, there having been an increase of 262 in the number of persons killed, as compared with the preceding year. Of wild beasts, tigers, of course, were the most destructive, their victims numbering 110, as against 98 in 1884, while the number of tigers killed was only 221, against 260. The deaths from snake-bite last year amounted to 1666, against 797 in 1884, while only 1997 snakes were killed, as compared with 2378. In an official note on the subject it is observed that there has been a "satisfactory increase" in the number of wild animals killed; but this increase is due to the larger number of bears, wolves, and hyænas destroyed.

Africanus.—The position is not a dignified one, and should be declined.

M.D.—It is a matter of individual taste.

JOHNSON'S LECTURES ON BOTANY.

To the Editor of THE LANCET.

SIR,—I shall be obliged if any past or present Guy's man can tell me whether the "Key to the Botanical Orders," in green paper cover, by Mr. Johnson, late lecturer on botany at the hospital, is still in print; and, if so, where it may be obtained. I am, Sir, yours faithfully,

June 1st, 1886. E.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

CORRESPONDENTS, LETTERS, &c., have been received from—Mr. Godlee, London; Dr. Coats, Glasgow; Dr. Broadbent, London; Dr. Brailey, London; Dr. Brodie, Detroit; Dr. E. W. Symes, Halifax; Prof. Ray Lankester, London; Mr. W. G. Bott, London; Mr. T. C. Jones; Mr. Blackett, London; Mr. Essex, Pontypool; Messrs. Gilson and Co., London; Dr. Pearse, Haslemere; Dr. Collins, London; Dr. James Gairdner, Crieff; Mr. W. Grant, London; Mr. Lascelles-Scott, Forest Gate; Dr. Ralfe, London; Mr. F. W. Lowndes, Liverpool; Mr. Hurry Fenwick, London; Dr. Swann, Batley; Mr. Pratt, London; Mr. Fuge, Taunton; Mr. Hambly, Bristol; Mr. Shanks, London; Messrs. Edge Bros., London; Madame Leon, Brighton; Mr. Ellis, Newcastle-on-Tyne; Mr. Immisch, London; Mrs. Chapman, Clapham; Dr. Sydney Ringer, London; Dr. Savage, Birmingham; Messrs. Maythorn and Son, Biggleswade; Mr. Newsholme, Sheffield; Messrs. Street and Co., London; Mr. Mays, Sheffield; Dr. Eberle, Thirsk; Messrs. Plon and Co., Paris; Mr. Hall, Kilburn; Mr. Bentley, London; Mr. Keay, Eastbourne; Mr. Hawking, London; Mr. Alcan, Paris; Dr. Nisbett, Helmsley; Mr. Adams, Maidstone; Dr. Dukes, Rugby; Mr. Johnson, Leicester; Mr. Bagshaw, Salford; Dr. Fenwick, London; Mr. Aitkin, Inverness; Mr. Howard, Littleport; Mr. Gurner, London; Mr. Morton, Brighton; Mr. O'Neal, Stafford; Mr. Maclean, Harpenden; Mr. Geale, West Brighton; Lady John Manners, London; Messrs. Beal and Sons, Brighton; Capt. Petrie, London; Mr. Colwell; Dr. Wyndham Cottle, London; Mr. Callaghan; Dr. Vachell, Cardiff; Messrs. Hall and English, Birmingham; Mr. Gordon, Liverpool; Mr. Plowright, King's Lynn; Mr. H. W. Paul, Tangiers; Mr. T. S. Price, London; Mr. J. L. Hewer, London; Dr. Doble, Chester; Mr. Crosse, London; Mr. Ford, Devonport; Mr. Mercier, London; Mr. Dawe, Taunton; Mr. Collins, Saxmundham; Mr. Birchall, Liverpool; Mr. Hearder, Newton Abbot; Mr. J. H. G. Drummond, Manchester; A Surgeon; M.D. Lond.; Acarus; M. H.; L.R.C.P.L., M.R.C.S. Eng.; A Foreign Student and Subscriber; M.R.C.S., L.S.A.; Oppression; Aristarchus; A Medical Superintendent; D. R. D., London; Ajax, London; G. L.; A Country Practitioner; M.D., Erlang.; G. G.; A. S.; Physician, Plymouth; E. A.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Lloyd, Rhyl; Mr. Turner, Hinckley; Mr. Gentles, Derby; Mr. Bunting, Notts; Mr. Aveling, Paddington; Mr. Elliott, Andover; Mrs. Hitch, St. Leonards; Mr. J. N. Lloyd, London; Mr. Hills, Bristol; Mr. J. Carter, London; Mr. Owen; Mr. Colewell, Portsmouth; Mr. Norman, Great Torrington; Mr. Jordan, Birmingham; Messrs. Woolley and Sons, Manchester; Mr. Tunmer, Harrogate; Mr. Ward, Pietermaritzburg; Dr. Murphy, Sunderland; Mr. Strong, Glasgow; Mr. Leason, Stoke-on-Trent; Mr. Thorne, Sheffield; Mr. Stockwell; Mr. Machin, Winchfield; Mr. Doble, Coldstream; Mr. Trotman, Clifton; Mr. Smith, Rotherham; Mr. Popham, Birmingham; Mr. Stroyer, Sandy; Mr. H. Freeman, London; Mr. Walker, Lowestoft; Mr. Hamilton; Mr. Wills, Axminster; Mr. Kinder, Leicester; Dr. O'Neal, Belfast; Mr. Davies, Penygraig; Mr. Stepstone, Woking; Mr. Green, Ripon; Mr. Gabriel, Barnes; Dr. Charteris, Glasgow; Messrs. Eason and Son, Dublin; Mr. Atkinson, Kensington; Mr. Prest, Birmingham; C. A., Bristol; H. F.; Medicus, Burgess Hill; Boaz; Practice; F.R.C.S.; Lady Superintendent, Derby; Splenic, Manchester; Spes; M.R.C.S., Ashburton; Yorkshire; H. N.; Alpha, Notting-hill; W. A., Edinburgh; R. P.; A. B., Newbury; Medicus, Stafford; H. F. N.; Medicus, Westminster; R. N. H., Walthamstow; M.D., Chester; Telegram; I. J., Barnsley; Medicus, Torquay; Veritas, Windsor; J. P., London; Z. A.

Liverpool Mercury, Tewkesbury Register, Keble's Margate Gazette, Liverpool Courier, Western Morning News, Halifax Guardian, Birkenhead News, Retford News, Imperial Review (Melbourne), &c., have been received.

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Ingleby Lectures
ON
SOME FUNCTIONAL DISORDERS OF FEMALES.

By WILLOUGHBY F. WADE, F.R.C.P.,
SENIOR PHYSICIAN TO THE GENERAL HOSPITAL, BIRMINGHAM.

LECTURE II.

THE preliminary stage of the reproductive cycle includes, as I have said, the whole life of a woman antecedent to marriage. The hope of marriage, or if not the hope the idea of its possibility, is never quite extinguished in the female breast. And it must be confessed that events occur from time to time which afford sufficient justification for this tenacity. Disappointment in the realisation of these hopes produces different effects upon different mental constitutions. In some cases it produces a hardening and deleterious effect upon the character; in others, it ripens and intensifies all the most beautiful and charming qualities of the woman. We may say that, if it takes a good woman to make a good wife, it takes a still better to make a good "old maid." Yet it is but simple justice to say that examples of both classes abound, fortunately for it, in the world.

The appearance of the most striking evidence of puberty, the catamenia, is rather the beginning than the end of those changes of body and mind which result in the production of the woman. We may be permitted to imagine the body divided into that which is nervous system and that which is not. Of these two parts, it is the former which chiefly, that is essentially, differentiates the woman from the man; which most clearly justifies the statement that the key to the difference between the two sexes is only to be found in the different part which each has to play in the business of continuing the species. The quickness of perception, the rapidity, and within limits the accuracy of interpretation, the ready responsiveness, the too often fatal, but always interesting credulity—all these are necessary to the successful transaction of the instinctive business of her life, the attraction and retention of an admirer, the detection and annihilation of a rival. Nor is there any incongruity between the higher qualities of the mind and the lower or quasi-instinctive ones.

Any adequate discussion of this subject would absorb more time than we have to spare. If it interest you, study it for yourselves in the book of Nature. For yourselves, but not by yourselves; take for your guides and teachers the great masters and mistresses of fiction. I need not enumerate those whose genius has enabled them to penetrate and portray the innermost workings of the heart. All afford materials which may assist you in your research, for "the truest tales are not those which really happen." All, even the most antipodal—as amongst living authors the American Howells and the French Zola—can tell something of the workings of the human mind, as affected by the conditions under which it operates. Thus we may learn that the passions, like bacilli, can be malignantly intensified or usefully attenuated, according to the medium in which they are developed. If the attenuation is carried to the point of uninfectiveness, the form may remain the same, but the vital characteristics are abolished.

We are told in a pungent modern satire, acidulated no doubt by the unhappy personal experiences of the author, that in "the coming race" woman will claim the privilege, now "usurped by men, of proclaiming their love and urging their suit—in other words, of being the wooing party rather than the wooed." This gibe is not altogether gratuitous; but, nevertheless, we should all sympathise with, and according to our opportunities further the intellectual elevation of, the other sex—if on no other than selfish grounds, and for the purpose of perpetuating the ascendancy of our own sex; for we know how often and in how large a degree great men are indebted for their superior powers to their mothers. It is not art, but Nature providing for the continuation of the species, that has framed the minds and bodies of the race; that has implanted in each sex those peculiarities which are responsible for things as they are, and, for the most part, must continue to be. But it must be repeated, this is no justification for artificially intensifying these differences; nor is it any reason why the higher powers of the female mind should not be educated, with the view of fortifying them by cultivation. No sensible person would assert that all men are superior, either physically or mentally, to all women. On the other hand, few would deny that in both these respects the average of man is higher than the average of woman, or that the highest man is higher than the highest woman. I have already referred to those qualities which are by common consent accepted as being peculiarly characteristic of the female mind; these are acuteness of perception and rapidity of interpretation. The woman sees many things which pass before a man's eyes unperceived; or, if perceived by both, the woman's conclusions are drawn instantaneously. The man revolves the circumstances in his brain, comes to a conclusion more slowly, and often less correctly. We have here, as it seems to me, the key to many of the functional disorders of women. The same peculiarity characterises the structure of the whole nervous system, from that of the highest centres of the brain to that of the lowest ganglia of the sympathetic system. This difference in structure is not discoverable by anatomy, however minute. It is by its fruits that we know it. Sensitiveness to impressions, or excitability; facility of transmission of these impressions from one centre to another; this we may be permitted to call "permeability"—a clinical phenomena which has not received due attention, and which I venture to call "the radiation of pain," may be cited in illustration of this permeability. The following cases, which I quote as examples of radiation of pain, are worthy of consideration, even by those who may not be prepared to accept my theoretical explanation of them.

Some years ago my opinion was requested in regard to a lady, aged about thirty-two. She had been for a good many months under medical care for general and somewhat indefinite ill-health. For some weeks previous to my visit pains about each subclavicular region and a dry cough had raised fears in the minds of her medical attendants that she might be becoming consumptive. My examination confirmed the opinion previously entertained, that no physical sign of lung disease was to be discovered. We all know that many patients are extremely loth to let us get away from the consideration of an existent pain to that of any other symptom. She was of this class. It required, therefore, much insistance to elicit the following facts: Before the pain attacked the subclavicular region there had been a zone of pain round the middle of the chest; previous to that a similar zone round the lower part of the chest and the upper part of the abdomen; that in its turn had been preceded by pain occupying the middle third of the abdomen; and then we found that the original seat of the pain had been the two hypogastric and the pubic regions. It came out that, though her attention had been engrossed by each new development of pain, those previously existent had never entirely subsided. This history suggested that perhaps, after all, the disorder had a uterine origin; and so it turned out. On examination, we found that the os uteri was extremely tender, and also, as it was then termed (for it was a good many years ago), ulcerated. This condition was in a short time relieved by local treatment, and, coincidently, all her pains and the cough disappeared, and she was restored to health.

It may not be disadvantageous to diverge here for a moment from our immediate subject, and interpolate a few words upon a very important topic. This is the relation of such a lesion as that just mentioned to the symptoms described, and more especially to the earlier symptoms. A very large number of female cases may be resolved into three groups or categories. The first comprises local lesions, such as the one above mentioned, and flexions, versions, and fibroids accompanied by pains and irritations in or near the lesion. In the second group, we find the same lesions, but unaccompanied by any symptom whatever. Whilst in the third we put cases with similar symptoms, but without any discoverable local lesion. Experience has taught me that by treatment not a few cases may be removed from the first class into the second—that is to say, that the symptoms complained of may be removed, though the anatomical changes remain precisely what they were. In one case the treatment required may be, as in the one quoted, local; in another, it may be directed to the part or parts secondarily

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affected; whilst in a third, it may be of a purely general character, aiming, for example, at the correction of some disturbance of the blood-forming or blood-purifying organs, or, which may or may not be the same thing, those of complex conditions, which we term gout or rheumatism. It seems to me equally true that cases may, by influences sometimes traceable, at other times mysterious, be removed from the second class into the first. In other words, the anatomical lesion may, in any case, be at one time latent, and may at other times manifest itself by symptoms, and such alternations may recur with indefinite frequency. In saying this, we are admitting that the symptoms are epiphenomena, caused by or arising out of the gross lesion; and this I believe to be in some instances true. But on the other hand if we admit, as I contend we should, the existence of similar symptoms without any gross lesion, then probably in some cases the concomitance of symptoms with such lesions is purely accidental. These opinions are of far-reaching importance to practice in many ways, some of which I need not point out. But there is a widespread feeling in the profession that many women have been subjected to unnecessarily protracted courses of local treatment not only depleting their pockets, but impairing their delicacy, and even attenuating their morality. If such things are, it may be that a frank recognition of these views would safeguard patients from such meddlesomeness.

One other very important question awaits an answer. What is the pathological explanation of these symptoms? If we say that they are partly neuralgic and partly circulatory, the relation of the two being obscure, perhaps it is the best answer we can at present give, indefinite or insufficient though it may be. It is certain that some of these cases are relieved, and that very speedily, by a combination of ergot with some of the bromides. Other cases seem rather connected with disturbance, especially with insufficiency and concentration of the secretion of the kidneys. It has long appeared to me that such renal disorders are more resented by the female than by the male system. And that in the former, this resentment more often finds expression in the state of the generative organs. I would, at all events, ask you whether you accept or reject the speculative opinions with which I have associated them, to receive these therapeutical hints as at least worthy of being tested in practice. There is one other suggestion to be made in reference to this subject. It is that some, possibly many, of the cases in which no substantial disease can be detected, may nevertheless be outside the category of what we style "functional disorders." It may be that they are really cases of slight and more or less transient inflammation of uterine appendages, including in this term the adjacent peritoneum. An adequate discussion of this most important question would be outside the scope of my lecture. But it is essential to remember that peritonitis is not necessarily attended by rise of temperature. To return now to our more immediate topic. The circumstances of a second example of the radiation of pain were as follows.

A young lady of about eighteen was represented to me, both by her experienced medical attendant and herself, as suffering from excruciating pain in her forehead and temples, nor did her aspect belie this representation. A course of inquiry, similar to that pursued in the former case, elicited a similar sequence of events. The frontal pain had been preceded by pain occupying the vertex and the head on each side of it. That, again, had been preceded by pain towards the back part of the head, which had succeeded to pain in the extreme back of the head and upper part of the neck. Having thus arrived at the original seat of pain, its cause was soon ascertained. It appeared that some months before the patient had occasion to "duck" in order to pass under a transverse beam; coming up too soon, she struck the top of her head with sufficient violence to render her for a short time insensible. It was not for two or three weeks that the pain began in the neck and occiput; and it was not till three or four months after that I saw her. She was suffering from caries of the cervical vertebræ; at all events under treatment based upon this view she ultimately recovered. But the question of diagnosis is of no particular moment as regards my present object. In this, as in the former case, although the attention of the patient was concentrated on each new zone of pain, the previous pains remained; very much as a new baby causes the previous one to sink into comparative oblivion, although it does not efface it. In another somewhat analogous case of occipital headache it required a good deal of perseverance to arrive at the truth. This was that the patient was suffering from fissure of the anus; this being cured, the headache ceased.

The two cases above narrated are, no doubt, exceptional in regard to their intensity and completeness; but these apart, I cannot admit that they are at all exceptional. On the contrary, I think that the same kind of thing is of very ordinary occurrence; and that many incomprehensible pains may, under the guidance of this theory, be traced to their source, and so successfully dealt with. On talking over such cases with medical friends, I have not unfrequently been told that they would call such cases "hysteria." Possibly some of you might do the same. In a certain non-natural sense (to borrow a term from another science), I might, perhaps, do so myself.

You will have foreseen that the introduction of the word "hysteria" was, sooner or later, inevitable, and, perhaps, may give me some credit for having abstained from it so long. Some persons object to the word on account of its derivation. This no doubt embodies an idea, now—and with perfect justice—discarded. No one, probably, at the present moment conserves the notion that hysterical disorders necessarily originate in that anatomical entity known as the uterus. But let us regard the uterus not merely as an anatomical entity, but as a symbol, representing, not simply itself and its appendages, but the sum-total of the peculiarities of the female organisation. The name hysteria, of which, by the way, we cannot rid ourselves, will then serve our purpose without offence. It will embody, not the obsolete conception of a ruder epoch, but one which is in accordance with a wider generalisation from deeper knowledge of the secrets of Nature. It will help to keep present in our minds, as names ought to do, the existence of an extensive series of phenomena, the correlation of these one with another, and their harmony with the reproductive obligations of the female sex. It will suggest also what many insufficiently realise, that when we qualify a disorder or a symptom as "hysterical," we have got not to the end, but rather to the beginning of our clinical investigation. For it is only a first step, though often a very difficult one, to say "this is one of those nervous disorders which are peculiar to women." It still remains for us to discover, if we can, in what particular portion of that immense and complex system the mischief lies. Whether it is intrinsic in or extrinsic to that portion; whether it is due to local or to general causes; whether it is to be met by dietetic, hygienic, moral, or medicinal treatment. If by a combination of these, by which and in what measure of each? Above all, let us remember that these disorders may make life valueless, though they rarely destroy it. And, further, that though difficult to cure, they are rarely incurable if due diligence and sound judgment be brought to bear on them.

(To be concluded.)

THE ALBUMENS OF THE URINE.

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(Concluded from page 1063.)

IN four cases I have found the urinary albumen to consist entirely of globulin. No serum-albumen, or at most only the faintest trace, which was impossible to estimate, being apparent. Three of these have been to all appearances cases of so-called cyclic albuminuria, and the fourth one of puerperal albuminuria in process of disappearance, and thus resembling the same class of case.

CASE 4.—Mr. B——, whom I saw with Dr. Ransford, had been twice rejected by an insurance company on account of the presence of albumen in his urine. He was somewhat pale and delicate in appearance, of spare habit, and disinclined for exertion. There was no history of scarlatina or diphtheria. The pulse was of quite normal tension, the deep cardiac dulness of normal extent, the cardiac apex-beat in its normal position, and the cardiac sounds and intervals were also of normal duration. He had some slight dyspeptic symptoms, but practically showed no other signs of disease than those found in the urine. This was pale, clear, acid, sp. gr. 1024; it deposited mucus, but no casts or crystals,

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upon standing. The urine passed before breakfast contained the merest trace of albumen, but later on in the day the amount of albumen was considerable. The amount of albumen was increased by exercise, but not very much influenced by meals. Taking a specimen of urine which contained as large an amount of albumen as possible, I found that this consisted entirely of globulin.

CASE 5.—The patient was a gentleman aged twenty-nine, in whose case I was asked to give an opinion as to the condition of his chest before he presented himself for life insurance. There was a family history of phthisis, and the patient himself was pale and delicate in appearance, though not emaciated. There was no sign of disease anywhere except in the urine, and this contained quite one-fourth of albumen. Now, in the absence of a history of scarlet fever, of dropsy of any kind, of high arterial tension or any cause for amyloid disease, or of any increase in quantity of the urine passed, I suspected this to be a case of functional albuminuria, even though the quantity of albumen was much larger than is usually found in such cases. I asked for two specimens of urine to be sent to me, one passed before and the other one hour after breakfast, and found the former quite free from albumen, the latter containing as much as in the previous examination. The opinion I expressed was that this was probably a case of merely functional albuminuria, and that it was desirable to postpone the proposal for life insurance for at least six months, the patient in the meantime taking tonics and iron. It is now nine months since I saw this case, but Dr. Sworder, of Luton, under whose charge the patient is, has recently forwarded me a specimen of the urine, which now contains much less albumen than it did previously, and this I found to consist entirely of globulin. The patient, in sending the urine, stated that he never felt better in his life than he did at the present time, and he had gained in weight during the last few months.

CASE 6.—A diagnosis of functional albuminuria was made in this case, but the present condition of the patient will be discussed shortly. Mr. S——, a medical student, aged twenty-three, had suffered from repeated attacks of bronchitis as a child, and had had measles, but never scarlatina or diphtheria, nor had he been exposed to the poison of these disorders. A month before consulting me he caught a cold in his head, which, according to his own account, passed to his throat and downwards to the bronchi. He thought his face seemed a little swollen, and said that his hands a little later *felt* swollen, but did not look so, and he was positive there was no œdema. He is of an exceedingly nervous temperament. I at once examined his urine, and found it albuminous. When he consulted me he seemed pale, but not (he told me) more than was habitual to him, and, according to his statement, he felt absolutely nothing wrong with him. He had not lost flesh, he suffered from no dyspepsia, there was no headache, the pulse was of low tension, and there was no extension of the cardiac area of dulness. The specific gravity of the urine was 10·25, it was acid, and contained no casts. That passed before breakfast was perfectly free from albumen; that passed after breakfast, however, gave the mucin reaction which I have to describe later, and contained 0·05 grm. of albumen in 100 cc. of urine. The absence of albumen from the early morning urine was invariable. On four separate occasions I found that the urinary albumen was composed entirely of globulin. If it were not for the history of swelling of the face, this case would at the time have been looked upon as without doubt one of functional albuminuria. The swelling, however, was somewhat doubtful, it lasted for only a short time, and then only while the coryza was in progress, and on deliberation I determined to neglect it. Then, considering the high specific gravity of the urine, the absence of casts, the variability in the appearance of the albumen, the low tension pulse, and the absence of any cardiac enlargement, I made a diagnosis of functional albuminuria. At the same time I recommended great hygienic care and a mixture of arsenic and iron. About one month ago he foolishly went out on a very cold night to attend a midwifery case and caught a chill. Two days afterwards, when I saw him, I found him with a temperature of 101°, and with marked signs of bronchial catarrh. There was no œdema of any kind. The urine, however, was scanty, smoky, and gave abundant evidence of the presence of blood. This lasted for three or four days, when the acute symptoms disappeared and the patient resumed, apparently, his usual health. However, there was now a distinct increase in the tension of the pulse, and the urine contained a larger amount of albumen. On examining the latter, too, I found that it now contained a considerable amount of serum-albumen in addition to the globulin. The present condition of this patient naturally causes one to doubt the diagnosis, made in its earlier stages, of functional abuminuria. Nevertheless, without wishing to force so far-fetched an opinion, I would submit that it is not impossible that the diagnosis formed in the earlier stages might have been correct. It cannot, I think, be too strongly insisted upon that in these cases of so-called physiological albuminu ia we have to do with a pathological condition—a condition which in the majority of cases is recovered from and leaves no trace behind, but which in a certain proportion of the cases results in confirmed kidney disease. There is a weak spot in the body, and that is the kidney. From experimental evidence we know that the passage of foreign albumens through the kidneys will irritate them, and cause the presence of serum-albumen in the urine. So, I believe, in these cases the passage of albumen through the kidneys, even from a functional cause, keeps them in a continual state of irritation, which may in time set up interstitial nephritis, or may render the kidney more liable to the ordinary causes of acute nephritis. The latter, I would submit, is a probable explanation of the hæmaturia in the case I have described, and this view is supported by the change in the constitution of the urinary albumen since the acute attack. Nevertheless, it is also open to consider it a case of Bright's disease from the first, and for scientific verity it should be considered apart.

CASE 7.—This was a case puerperal albuminuria occurring in the practice of my friends Messrs. Crosby and Johnson of Salford, who kindly sent me the urine for analysis. Albumen had appeared in the urine during the later stages of pregnancy; but the pregnancy and labour had terminated without mishap. The urine, which I received a few days after labour, contained 0·1262 grm. of albumen in 100 cc., and this, I found, consisted entirely of globulin. A similar observation made a few days later, when the albumen was much less in amount, gave a like result. This contrasts with the urine of a case under the care of my colleague Mr. Juler, in which after labour the albuminuria persisted, and albuminuric retinitis was present, doubtless from the existence of granular kidney. Here I found a considerable quantity of albumen in the urine, in addition to some globulin; but, unfortunately, I have mislaid the records of the experiment.

To summarise, then, these results. In two cases of granular kidney I found a proportion of 2½ and 4 parts respectively of serum-albumen to 1 part of globulin; in one case of anæmic disorder of the kidney, 1 part of serum-albumen to 2½ parts of globulin; while in two undoubted and one doubtful case of functional or physiological albuminuria, and also in one case of puerperal albuminuria in process of recovery, the urinary albumen consisted entirely of globulin. It may be pointed out that in the above cases the ratio of globulin to serum-albumen was inversely proportional to the gravity of the case, and if the results were to be relied on, an obvious practical import attaches to them. Nevertheless, it is manifestly impossible to draw any conclusion or make any generalisation from so few and, I must confess, such imperfect observations. I am still working at the subject, endeavouring to collect a large number of results from cases of various kinds, and determining the albumen and globulin by a more accurate method.

Dr. Hughlings Jackson has asked me to give an explanation of the occurrence of albuminuria in some cases of exophthalmic goitre, as described by the late Dr. Begbie, and, as such cases are allied to those of functional albuminuria under consideration, it is convenient to discuss them here. The albuminuria in such cases is exactly comparable to that produced by puncture of the floor of the fourth ventricle, or by section of the nerves round the renal artery. In all we have a paralysis of the vaso-motor nerves of the kidney, and hence the albuminuria is due to a vascular lesion. This, however, is not an explanation of how the albumen comes to escape through the vessel wall. Opinions still differ as to the reason why no albumen appears in the urine under ordinary circumstances; but amongst physiologists, at any rate, more stress is now laid upon the functions of that thin layer of epithelium which covers the glomerular tuft—the glomerular epithelium proper as distinct from the capsular epithelium—than was formerly the case. It is this epithelium which secretes the water and salts

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of the urine, and has probably for one of its functions that of preventing albumen passing into the renal tubes.[1] If this membrane be grossly injured—as, for instance, by the administration of cantharides,—then it ceases to restrain the albumen, and this appears in the urine. But it is not necessary that the lesion should be a gross one; a mere disturbance of nutrition will suffice to disorder the functions of these cells. Thus, the clamping of the renal artery for half an hour will cause albuminuria on the return of the circulation. Now, when the vaso-motor nerves of the kidneys are injured, there is, in all probability, delay in the passage of blood through the glomerulus, and the glomerular epithelium, being insufficiently nourished, ceases to retain the albumens of the blood-serum. This, too, is one of the explanations given for the functional albuminurias which have been mentioned above, and which go by so many different names. It is conceivable, too, that a membrane slightly injured—as, for instance, by such a nutritive disorder as that described, would be unable to retain the highly diffusible globulin, while it might still have the power of keeping back the less diffusible serum-albumen. Saundby and Estelle, to whose observations, as I have described, some little objection attaches, each found two cases in which the urinary albumen consisted entirely of globulin; the diagnosis in these cases were respectively phthisis, physiological albuminuria, locomotor ataxy, and generalised atheroma of vessels, although in the latter there was found, post mortem, a kidney containing cysts.

In a clinical lecture delivered recently at St. Mary's Hospital, I divided cases of functional or cyclic albuminuria into three classes. First, those accompanied by general languor, low tension pulse, and no deposit of uric acid in the urine; secondly, those in which there was robust health, a high-tension pulse, frequently some dyspepsia, and a copious deposit of uric acid in the urine; and, thirdly, those rare cases in which there was some abnormal albumen in the urine. It was, however, pointed out in the lecture that these were rather groups which did exist than parts of a complete classification. Cases do occur in which paleness &c. are accompanied by a high-tension pulse. Now, the cases of functional albuminuria I have mentioned in this paper all belonged to the first group, and, I find, that in a recent paper van Noorden of Giessen[2] has noticed in similar cases an excess, as he states it, of a body having a globulin character, although he gives no further details as to its reaction or the method adopted for its demonstration. I may add, briefly, one case belonging, apparently, to the second group mentioned, as in it the urinary albumen differed from that of the first group.

CASE 8.—Mr. W——, aged thirty-eight, some little time before I saw him, suffered from slight headache, but was at the time of examination apparently in perfect health. Nevertheless, the pulse was of very high tension, and I thought there was some enlargement of the cardiac area, but this was doubtful. There was no history of gout, or of recent exposure to scarlatina or diphtheria. Twenty years before, the patient had had scarlatina, but had recovered without any bad effects. The urine was very acid; specific gravity 1030, deposited a very copious sediment of uric acid and a few hyaline casts on standing, and contained quite one-third albumen. I found that this consisted of 0·22 grm. of serum-albumen, and 0·0406 grm. of globulin in 100 cc. of urine, or a proportion of about 5½ parts of albumen to 1 part of globulin. After treatment for some little time with large doses of carbonate of potash, the deposit of uric acid in the urine disappeared, and with it the albumen become much diminished in amount.

There is another form of true albumen which may appear in the urine. It has been known for some time[3] that a diet of eggs will produce albuminuria, but unquestionably this is difficult to effect. Brown-Séquard[4] produced albuminuria in himself by subsisting entirely upon eggs for nine days, but in doing so he rendered himself seriously ill. The albuminuria so caused is, moreover, not egg-albuminuria. Egg-albumen differs from serum-albumen in its chemical reactions; when precipitated by nitric acid it is not re-dissolved by excess of the acid like serum-albumen, and it is coagulated by ether, while serum-albumen is not.[5] Now, if eggs are taken into the stomach in the cooked form, they cannot possibly enter the circulation until they are transformed into peptones when of course they lose all the characters of egg-albumen. Any albuminuria, therefore, produced by a diet of cooked eggs must be an ordinary albuminuria, and be produced either by a concomitant dyspepsia or by the overloading of the blood with nitrogenous matters, which during their excretion by the kidneys irritate those organs, and so cause the albuminuria. If a diet of eggs is to cause egg-albuminuria, they must be taken in the uncooked state, and even then it is difficult to produce albuminuria. Bernard[6] found albumen in his urine after eating six raw eggs while fasting. Dr. Lauder Brunton informs me that he swallowed six raw eggs without producing albuminuria, but Dr. D'Arcy Power managed to consume more and did produce a slight temporary albuminuria. None of these observers, however, ascertained whether the urinary albumen was egg- or serum-albumen. Stockvis[7] failed to produce albuminuria either in himself or others by the ingestion of from eight to ten raw eggs. I myself a few days ago, after fasting for fourteen hours, swallowed the whites of twelve uncooked eggs, and then fasted for another four hours. One would suppose that under these conditions the egg-albumen would have a fair chance of entering the circulation and appearing in the urine. In my own case, beyond a slight headache, no effect was produced. Stockvis fed rabbits and dogs on raw egg albumen for from three to seven days, and so produced albuminuria. But it does not appear that in this set of experiments Stockvis ascertained whether the albumen in the urine was really egg-albumen or not; moreover, the albuminuria was accompanied by diarrhœa and by the presence of bile-pigment in the urine, and the albuminuria lasted in rabbits for three or four days after the last ingestion of albumen. Thus, the albuminuria may well have been due to the digestive disturbance or to the excessively nitrogenous diet, as in that produced by cooked eggs. On the other hand, if egg-albumen be injected into the veins or beneath the skin of an animal albumen appears at once in the urine, and this Stockvis[8] found to be true albumen. It is evident, then, from what appears above, that the interest attaching to the occurrence of egg-albumen in the urine is purely experimental, and that this substance has at present no place in natural pathology.

Hemi-albumose, a product of the peptic digestion of albumen, is occasionally found in the urine in various morbid conditions. It is precipitated by nitric acid, but on heating dissolves in the acid, giving a bright-yellow solution. When the urine is heated, at first a cloudiness appears, which clears up as further heat is applied; but the precipitate reappears on cooling. It is precipitated by acetic acid, ferrocyanide of potassium, and by various other albumen reagents. Hence, it resembles the albumens on the one hand and the peptones on the other. On standing, it is transformed into peptone. It has been found by Bence Jones[9], Kühne[10], Langendorff and Mommsen[11], in cases of osteomalacia; by Lassar[12] after annointing a dog with petroleum. Dr. Gowers[13] found it once in the urine of a patient who had formerly suffered from glycosuria; and Von Jaksch[14] has seen it in a case of phthisis. Senator[15] denies that its occurrence is so rare, and describes seven cases of various kinds in which he discovered this body in the urine; a similar opinion is given by Huppert.[16] Experimentally, Stokvis[17] found it in the urine when injected into the rectum; while, on the other hand, v. Noorden[18] obtained an opposite result; and when he injected it under the skin of a dog, in only one experiment did a trace of hemi-albumose appear in the urine, although in three experiments albumen was found.

I have several times had urines brought to me which gave a precipitate with nitric acid, but not with heat, and were hence believed to contain this body; but I have always found that the boiling had been performed in a dirty test-tube to which some nitric acid had clung, and this prevented the precipitation of an ordinary albumen by heat. Nevertheless, I have sometimes, in an albuminous urine which has stood for a little time, obtained a precipitate with nitric acid, after filtering off while hot all the albumen which

[1] See Heidenhain in Hermann's Handb. der Physiologie, Bd. v., Part i.
[2] Deutsches Arch. f. Klin. Medic., vol. xxxix., p. 205.
[3] Tégart: Thèse de Paris, 1845. [4] Tessier: Thèse de Paris, 1856.
[5] See Charcot: Conditions Pathogéniques de l'Albuminurie, p. 17. Paris, 1881.
[6] Leçons sur les Liquides, vol. ii., p. 136.
[7] Journal de Méd. de Bruxelles, 1867, p. 293. [8] Loc. cit., p. 168.
[9] Philosoph. Trans., 1848, vol. i., p. 55.
[10] Zeitschr. f. Biolog., vol. xix., p. 209.
[11] Virch. Arch., vol. lxix., p. 452.
[12] Virch. Arch., vol. lxxvii., p. 157. [13] THE LANCET, vol. ii., 1879, p. 3.
[14] Zeitschr f. Klin., Medic., 1884. [15] Albuminuria, Syd. Soc., p. 98.
[16] Neubauer and Vogel, edition 1881, p. 153. [17] Quoted by v. Noorden.
[18] Loc. cit., p. 238.

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could be precipitated by boiling, even when great care had been taken to prevent a too great acidity of the urine. I suspect that in some cases a small amount of hemi-albumose may result from digestion of albumen in the urine after it has left the kidneys; for we know that the urine ordinarily contains some pepsine which could easily act on the albumen when in an acid solution. Gehrig[19] has recently made use of this digestive power of urine to determine the amount of proteolytic ferment contained in it. In this connexion, too, there may be mentioned a case reported by Ter. Grigoriantz,[20] in which hemi-albumose was found—seldom, however, alone, but usually with either albumen or peptone. He also found that on standing the hemi-albumose changed into peptone, and after a time it ceased to appear at all in the urine, its place being taken by peptone. In many cases he discovered hemi-albumose, but nearly always with albumen or peptone.

Peptones, on the other hand, are present in the urine with comparative frequency. They are not coagulated by heat or by nitric acid, and they may be detected by precipitating all the albumens by heat and filtering; then peptones may be precipitated in the clear filtrate by picric acid or the brine test. A more reliable and accurate method is that of Hofmeister.[21] The urine is boiled with a few drops of solution of acetate of lead to remove all other albuminous matters; and to the filtrate from these one-fifth of its volume of acetic acid is added, and a small quantity of sodium phospho-tungstate; the peptones are by this precipitated from the solution, and their presence can be further demonstrated by the biuret reaction. The clinical conditions under which peptones are found in the urine are as yet uncertain, and as I have no observations of my own to give they need not detain us long. It will suffice to say that they may be arranged into three groups. The first group comprises those cases in which peptone in the urine is associated with the breaking down of collections of pus in the body, and this may be styled the pyogenic form. The second group contains a few cases which have been described, in which the peptonuria has apparently resulted from profound blood change, and this may be called the hæmatogenic form. In the third group we have definite lesions of the alimentary tract. Now, it is asserted by some physiologists that the peptone formed in the intestine is transformed into soluble albumen in the intestinal wall, and Maixner[22] believes that by disorder of this function peptonuria may result. He thus would explain the peptonuria which accompanies enteric fever and some cases of carcinoma of the stomach, and suggests that this should be styled the enterogenic form.

There is only one more albuminous body which I have to mention, and this—mucin—is important only in so far as it may be confounded with albumen by the ordinary methods of testing. It is precipitated by the addition of acetic acid or citric acid to the urine, and the precipitate is not removed by heat; indeed, there is some probability that one form of mucin may be precipitated by heat, and then is very liable to be confused with albumen. It may also be detected by adding nitric acid to the urine by the contact method. A rim of albumen is seen just at the junction of the acid with the urine. A deposit of urates may occur at the top of the urine, but at about the middle of the column a dim rim is often seen, which is believed to be significant of mucin.[23] The mucin may be rendered still more evident by employing the magnesium nitric test. If the test-solution is poured into the tube first, the mucin comes down very close to the albumen, but it may be distinguished from it by its greater haziness, and by the ease with which it is dispersed by a slight shake. If the test solution is allowed to trickle through the urine, the mucin ring comes down much higher in the tube.[24] At present no significance can be attached to the reaction.

[*Errata.*—Page 1062, 2nd column, line 23 from top, instead of "on the top of" read "diffused in." Page 1063, 2nd column, line 18 from top, instead of "0·02125" read "0·0212"; line 20 from top, instead of "2125 to 850" read "212 to 85"; line 5 from bottom, instead of "0·01407" read "0·1407."]

[19] Pflüger's Archiv, vol. xxxix., p. 35.
[20] Zeitschrift f. Phys. Chemie, 1882, p. 537.
[21] Zeitschr. f. Physiol. Chemie, vol. v., p. 67. Also Med. Chronicle, vol. i., p. 415.
[22] Zeitschr. f. Klin. Med., vol. viii., p. 284, 1884.
[23] See Sir W. Roberts, Med. Chronicle, vol. i., p. 1.
[24] It is not yet certain, however, that this reaction is really due to the presence of mucin. I have never yet found it without albumen being present, and I have seen it in urines which gave no mucin reaction with acetic acid or citric acid alone.

CASE OF REVOLVER WOUND; COMPLETE PERFORATION OF THE STOMACH, WITH RECOVERY.

BY A. H. CLEMOW, M.B.,
LATE SENIOR RESIDENT MEDICAL OFFICER TO THE ROYAL FREE HOSPITAL.

A. H——, a Frenchman, aged twenty-seven years, was admitted into the Royal Free Hospital, under the care of Mr. Boyce Barrow, about 11.30 P.M., on the 24th June, 1885. He was suffering from the effects of a bullet wound (suicidal), whose point of entrance through the skin was marked by a small circular wound, with charred edges, situated about two inches below the left nipple, and a little to the outside of the nipple line. The patient, who was a stout, healthy-looking man, appeared to be suffering from considerable mental depression, and only expressed regret that his attempt had not proved more successful.

Mr. Barrow, the assistant-surgeon, having been sent for, the patient was anæsthetised, and the track of the bullet sought. This was attended at first with some difficulty, but after the external wound had been enlarged, the course of the bullet was traced by the discolouration of the tissues directly downwards for about an inch and a half beneath the skin and through the subcutaneous tissue. Now it was found that the bullet had passed directly between the costal cartilages (corresponding probably to the sixth and seventh ribs), and a probe being passed through the opening and backwards towards the spine in the direction which it was natural to suppose the projectile had taken without encountering anything, it was thought advisable to abandon all further attempts to recover the bullet. The patient was therefore removed to bed, the wound having been freely dusted with iodoform and covered with wet boracic lint. After recovering from the anæsthetic, the patient became very restless, throwing himself about, and crying. A quarter of a grain of morphia was administered hypodermically, shortly after which he slept for an hour. About 2 A.M. there was some coffee-ground vomiting, followed by frequent retching, which continued at intervals throughout the morning of the 25th, the vomiting being repeated at noon. During the afternoon a purgative enema was administered, which, being returned without result, was repeated in the evening, the desired effect, however, not being produced. Twenty minims of the tincture of opium were given at 10 A.M. and 5 P.M., and ten minims at 10 P.M. The patient now seemed to experience a good deal of pain over the lower part of the chest and in the epigastric region. Pulse 100; temperature 99·2°.

June 26th: The patient has passed a very restless night, sleeping but little. The tincture of opium (ten minims) was repeated at 8 A.M. There is some tympanites, and very considerable tenderness over the abdomen, while the pain over the lower part of the chest has increased. A distinct friction rub can be heard to the left of the wound. He was ordered ten minims of tincture of opium every four hours, and poultices over the lower part of the chest and abdomen. Pulse 106; temperature from 99·2° to 100°.—27th: At 9 P.M. last night he took ten minims of antimonial wine in addition to the opium, the two drugs being repeated at 1, 4, and 7 A.M. As, however, vomiting now recurred and was rather troublesome, the antimony was stopped, and three-grain dose of oxalate of cerium administered with each dose of opium. This alteration was followed by diminution of the vomiting, though it did not entirely cease. The vomited matter consisted of a dark greenish fluid, which might have been altered blood mixed with the gastric secretions. Since admission the patient has been allowed nothing by the mouth with the exception of small lumps of ice to suck. To-day nutrient enemata has been administered, each composed of one egg, one ounce of brandy, and four ounces of strong beef-tea, repeated every four hours. As these now seemed to cause a little irritation, the beef-tea was diminished to three ounces and one drachm of the liquor pancreations (Benger), with ten minims of tincture of opium added, the opium by the mouth being diminished to five-minim doses. There having been no action of the bowels since admission, another copious enema was ordered, with the result of a very satisfactory evacuation, the bowels being moved again naturally during the course of the evening.—28th: Patient

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again passed a restless night, and to-day appears much the same as yesterday. Vomiting of the same character continues and is very troublesome, but the pain is considerably less, and the friction sound has disappeared. He complains much of thirst, and is very restless. Pulse full, 112, and of good tension. Temperature subnormal, 97° to 97·8°. Ordered a small mustard poultice over the epigastrium and linseed poultices over the abdomen, which gave much relief; to be continued.—29th: The patient passed a better night. As he was very restless during the earlier part of the night, the vomiting also being persistent, he was allowed occasional doses of one drachm of brandy in a little soda-water. This was repeated four times during the course of the night, and one dose only was returned, the vomiting becoming much less frequent and ceasing entirely at 6 o'clock. The tongue, which has kept a good appearance throughout, is a little drier this morning and somewhat brown in the centre. Pulse 114, and of good tension. Complains much of thirst, but the pain is considerably diminished. At 10 A.M. he was ordered a drachm each of brandy, of milk, and of Brand's essence; the brandy every alternate hour, and the other two alternating with it. At 1.30 P.M. he vomited about five ounces of bright blood, partially clotted. All feeding by stomach was at once stopped. In the afternoon the vomiting was repeated in smaller quantities two or three times, and in the evening he was ordered a powder containing twelve grains of the subnitrate of bismuth with a sixth of a grain of muriate of morphia, one grain of ergotine being at the same time injected subcutaneously. About 11.30 P.M., more blood having been vomited, the hypodermic injection of ergotine was repeated.—30th: The patient seems much better this morning, and expresses himself as feeling so. He was much quieter during the night, and had two hours' good sleep. Since the last hypodermic injection there has been no vomiting. Pulse 123, regular, and of fair tension: temperature 98°. This afternoon, about 1 o'clock, he vomited a tablespoonful of bright-red blood. The grain of ergotine was at once repeated, but there was a slight recurrence of the hæmorrhage shortly afterwards. The ergotine was therefore administered again at 3 and 7 P.M. At 10 P.M. there was a free action of the bowels, the motion consisting chiefly of very dark blood. During the day the bismuth and morphia powders were repeated every four hours.

July 1st.—At 1.30 A.M., after another motion composed of dark blood, the ergotine injection was repeated. Twice afterwards during the night the bowels were moved, the motions each time being of the same character and smelling intensely fetid. In the early morning he slept about two hours and a half. The vomiting ceased after 3 o'clock yesterday afternoon, and has not returned. He appears very much better this morning, and says he is in no pain. Another very dark motion having been passed at 2 o'clock, the ergotine was again injected. The enemata which have been administered every four hours were now supplemented by the addition of a peptone suppository.—2nd: Slept two hours during the night. The bowels were moved three times, each stool containing blood. Two-thirds of a grain of ergotine were administered at 12 o'clock. During the past twenty-four hours he has been allowed two bottles of soda-water, which he has retained and seemed to enjoy.—3rd: Passed a very good night, and seems much better this morning. Bowels were moved once, but there was no hæmorrhage, neither has he had any pain or vomiting. Allowed Brand's essence in small quantities by the mouth, in addition to the soda-water. Enemata and suppositories continued as before. During the day was more quiet and contented than since admission. Temperature normal; pulse 108.—4th: After another very good night the patient appears much better this morning. Bowels moved once, with no blood. Ordered a drachm of brandy by the mouth every hour, in addition to the Brand's essence and soda-water. Poultices to the abdomen were to-day discontinued, and the wound, which has a perfectly healthy appearance, was dressed with iodoform and boracic lint. Temperature has risen a little this evening (100·6°).—5th: Does not seem so well to-day; was rather more restless during the night. Temperature at 1 A.M. 99°, and at 6 P.M. 102·2°. As there was some abdominal pain, poultices were ordered to be reapplied. There is, however, no tympanites, and he bears palpation well. He looks more pinched and blanched than he did, but there [illegible] any-[illegible]—6th: Very [illegible] very [illegible] this morning. [illegible] given [illegible] mouth.

Feeding by the mouth and by enemata as before. Bowels moved at 2 P.M., the motion being natural. Temperature risen from 101·4° to 102°; pulse 130, tense and full.—7th: The patient passed a much better night, sleeping well. At 6 P.M. he had thirty minims of solution of muriate of morphia, as he was very restless and seemed to bein much pain. The bowels were moved three times during the night, without any sign of hæmorrhage. Pulse 130, but less bounding; temperature 100·6°. The abdominal pain has disappeared, and he merely complains of a little pain around the wound, which, however, has a perfectly healthy appearance.—8th: The patient again passed a good night. The bowels were moved three times, the motions being formed, and containing no blood, pus, or foreign element. As he has now no pain whatever, he was allowed a few mouthfuls of a boiled sole for dinner to-day. Morphia continued in seven-minim doses every four hours.—9th: Passed another good night. Bowels moved at 12.15 and again at 4 A.M., each stool containing a considerable quantity of blood. After each motion a hypodermic injection of one grain of ergotine was administered. A third stool at 9 o'clock contained very little blood. All food by mouth except Brand's essence and soda-water stopped. Bismuth and morphia powders every four hours as before. Temperature varying from 99·4° to 101·6°.—10th: Patient slept from 12 till 4 without waking, and seems much brighter to-day, complaining only of hunger. Bowels were moved once during the night and twice this morning, the motions containing no blood, but smelling very offensive. He looks very anæmic and has emaciated considerably. Allowed a little custard for dinner to-day.—11th: After another good night, patient again looks better. Bowels moved at 6.30 and 10 this morning, each stool containing a small quantity of blood. One grain of ergotine was administered hypodermically at 7 A.M. As the enemata now seemed to irritate him, and he offered considerable resistance to their administrations, they were diminished to three within the twenty-four hours. The bismuth and morphia powders were reduced to one every six hours. Custard for dinner repeated.—13th: Does not seem quite so well to-day. Temperature yesterday afternoon, 102·6°. Since early yesterday morning his bowels have been moved three times, but there has been no return of the hæmorrhage. He complains somewhat of pain in the back, and yesterday it was discovered that gentle pressure in the lower dorsal region a little to the left of the vertebral column elicited pain. To-day there appears to be an indistinct sense of deep-seated fluctuation at this part. The poultices to the abdomen have now been discontinued.—15th: The patient seems much better in himself and is in no pain, though a slight fulness in the back is now perceptible. Temperature fluctuates between 98·4° and 102·4°; pulse 122. All enemata have to-day been stopped, and he was again allowed some sole for dinner.—20th: He now sleeps very well at night and has no pain. Bowels not moved since the 17th. He eats well and is now given a little chicken for dinner. Tongue clean and healthy-looking. Temperature coming down, varying from 98·4° to 100°.

The patient made uninterrupted progress. The fulness in the back had almost entirely disappeared, and there seemed to be no pain on pressure. He was allowed to get up on Aug. 5th for the first time. The temperature had gradually steadied down and had become normal. He was getting stronger every day. Had no pain or discomfort anywhere, and ate, drank, and slept well. On the 14th he left the hospital apparently perfectly well. He was seen again on Aug. 28th; and, though not much stouter, doubtless owing to certain formalities connected with Bow-street through which he had had to pass, told me he was perfectly free from pain or discomfort and felt quite well.

Remarks.—The foregoing case presents many points of extreme interest. That the projectile had passed completely through the stomach there can, I think, scarcely be any doubt. As evidence of this the following points are almost conclusive:—1. There was coffee-ground vomiting within three hours of the infliction of the wound, and this again was repeated a few hours afterwards. 2. There was evidence of localised peritonitis as well as pleurisy, as shown by the tympanites, epigastric pain, and slight rise of temperature within thirty hours of admission. 3. On the ninth day after admission (June 29th), after the administration for the first time of nourishment by the mouth, bright blood was vomited, showing a fresh hæmorrhage from the gastric vessels. Much blood also evidently passed from the [illegible] into the intestine, as shown by the [illegible]

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of blood, very dark in colour and considerable in quantity, in the motions. This hæmorrhage continued more or less for two or three days. 4. On July 9th, fifteen days after admission, blood again appeared in the stools, giving evidence of secondary hæmorrhage. 5. On July 12th some fulness in the back was noticed over the situation in which the projectile was presumably lying—i.e., on a level posteriorly with the point of entrance anteriorly. This was evidently an indication of the irritation to which the foreign body was there giving rise. The course taken by the projectile must have been somewhat as follows: The point of entrance being between the sixth and seventh ribs, about the junction of the cartilages with the bones, it must have traversed the thoracic cavity just above the attachment of the diaphragm anteriorly. The lung probably escaped being wounded altogether, as there were no symptoms pointing to its injury. The pericardium was also not touched, as at no time were there any symptoms of pericarditis or interference with the heart's action. The diaphragm must then have been perforated, and the bullet have passed completely through the stomach and lodged somewhere in the back, presumably posterior to the parietal peritoneum. The dorsal position which the patient was made to assume throughout would favour the foreign body becoming embedded in the extra-peritoneal tissue, and subsequently becoming encysted.

The patient's recovery is, I think, attributable to the rest given to the stomach in the first instance, allowing the wounds in its walls to become closed in by adhesion, secondary to the peritonitis which ensued. It was to secure this end that opium was at first administered. The vomiting which occurred was evidently due to the trickling of blood into the stomach, as was shown by its becoming allayed as soon as the hæmorrhage was arrested by the ergotine and other means employed. The bismuth was administered with the morphia for a twofold purpose, firstly, as a local styptic, and secondly, with a view to forming a protecting layer over the wounded mucous membrane. It would have been desirable to have withheld all nutriment by the mouth for a longer period than was done in this case. The patient, however, was the most troublesome and restless one imaginable, and it was considered advisable to give way to him to some degree, and in so far as was consistent with his safety, in order to quiet him. The weapon used was a small six-chambered pocket revolver.

Lynton.

PNEUMONIA FOLLOWED BY ABSCESS OF LUNG, TREATED BY TAPPING AND DRAINAGE; DEATH.

BY J. O. BROOKHOUSE, M.D., M.R.C.P.,
PHYSICIAN TO THE GENERAL HOSPITAL, NOTTINGHAM.

J. L——, aged thirty-six, labourer, was admitted on Feb. 11th, 1886. About three months before admission into the Nottingham General Hospital he was attacked with shivering and pain in the left side, cough, and shortness of breath. He was laid up in bed for three weeks, and spat up reddish sputum "like blood." He has never been well since, but made a feeble recovery, and tried to work, but could not. The pain in the side returned, with cough and dyspnœa. Six weeks before admission he noticed that the sputum smelt badly.

On admission, the patient complained of cough and shortness of breath. The cough came on in violent paroxysms, and he expectorated a dark-coloured purulent fluid, having a horrible and indescribable fetor, so as to pervade not only the ward in which he lay but also the neighbouring parts of the hospital. Physical examination of the chest revealed a large cavity at the base of the left lung, with liquid contents. The upper lobe was free from disease. Treatment in the first instance consisted in the use of terebene as an inhalant, and the oil of santal wood internally. No relief or improvement, however, in any way resulted from these remedies, nor was the fetor in any degree lessened. It was decided therefore to tap and drain the lung cavity, and the operation was performed, at 8 P.M., on February 19th, by Mr. A. R. Anderson, by thrusting a large trocar between the seventh and eighth ribs, about an inch to the inner side of the inferior angle of the scapula. Violent explosion of air followed the withdrawal of the trocar with about three drachms of horribly fetid pus. A large rubber drainage-tube was passed through the cannula into the lung, and three ounces of 1 in 80 carbolic lotion injected with a syringe. Considerable coughing followed, and a large quantity of offensive purulent fluid was immediately brought up, but no fluid returned through the tube. The tube was fastened to the skin by a horsehair stitch, and cotton-wool with bandage applied round the chest. Pulse 108; temperature 102·4°; respiration 34.—20th: Has not slept at all; coughed very much through the night; taken food fairly well—milk and eggs; ordered six ounces of wine. Pulse 112; temperature 100°; respiration 34. Dressed this morning; cavity syringed out through the tube with one drachm of Condy's solution to a pint of tepid water, the whole being thrown in gradually; violent coughing accompanied the procedure, during which some passed back through the tube, but five-sixths were brought up by the mouth. The fluid was completely decolourised, being dirty brown and smelling horribly; towards the end of the injection the fluid coughed up became much less offensive.—21st: Has passed a good night and seems generally relieved. Dressed as before; Condy lotion of the same strength to the amount of nearly two pints injected. Five-sixths, as on the previous occasion, returned by the mouth, accompanied with violent cough, but the returned fluid is much less offensive; a small quantity only came back through the tube. Says he gets great relief from the syringing, and from an inhalation of terebene, which he uses four times a day. Has had diarrhœa, the motions being exceedingly offensive; but the bowel looseness is now passing off. Pulse 100; temperature 101°; respiration 28.—22nd: Has passed a bad night; very little sleep, cough being troublesome. Removed during the afternoon to a separate ward in the fever house. Syringed and dressed the same as before. The coughing continued for about two hours after dressing, but considerable relief followed inhalation of terebene. Pulse 104; temperature 99·2°; respiration 28.—23rd: Has passed a fairly good night, and taken food well. Cough not so troublesome, and has expectorated only about two drachms of muco-pus during the night. Dressed this morning, and the cavity syringed out with a pint of the Condy lotion; nearly all returned by the mouth, and a large quantity of purulent fluid, but much less offensive. Coughed violently during the operation and for an hour after, but says he afterwards experiences great relief. During the afternoon slept quietly for two hours, after which he shivered for nearly twenty minutes, but there was no attendant rise of temperature. Bowels freely moved twice, stools semi-solid and very offensive; kidneys are acting well. Pulse 104; temperature 100·8°; respiration 36.—24th: Has passed a sleepless night, coughing the whole time; breathing hurried and noisy, with râles; seems weaker. Cavity syringed out with a pint of the Condy lotion; about half returned by the mouth and an eighth by the tube, so that a portion is retained; the fluid returned much less offensive. The man coughed the whole time, although less violently, but urgent dyspnœa continued for about six hours afterwards. Pulse 90; temperature 100°; respiration 32.—25th: Again passed a restless night, chiefly due to dyspnœa; cough less and little expectoration; seems generally weaker, and cyanosis is marked; there is an anxious facial expression. Temperature 97·6°; pulse 106; respiration 48. On examination of the chest, the percussion note over the upper lobe of left lung is more resonant, and râles are universal. The cavernous breathing posteriorly is over a large area, chiefly upwards. On inspiration there is observed a sinking and drawing in of the intercostal spaces on both sides, but chiefly the left. During the night he has had four ounces of brandy and the same quantity of wine, also a pint of milk and an egg. The cavity to-day has not been syringed out, but there is much less fetor from the breath and wound. There has been no cough or expectoration through the day, but the breathing is laboured and gasping; slight delirium during the evening, and perspiration about the head and face. Breathing became more difficult about midnight, and the patient died at 3 A.M., Feb. 26th.

Necropsy, thirteen hours after death.—On opening the thorax, both lungs filled their respective cavities. The right lung was adherent throughout to the chest wall. The upper lobe of the left lung was free from adhesion. The lower lobe was adherent throughout, and so firmly that the lung was torn in removal. A cavity the size of a breakfast-cup occupied the whole of the base of the left lung; the wall was

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smooth, and the cavity contained no pus; the surrounding lung tissue being almost black and solid. A bronchus of the second dimension communicated by two openings with the cavity. The drainage-tube had passed into the cavity at a spot rather below its centre. The right lung was engorged and œdematous, and on incising its base pus could be pressed out, showing the passage of this fluid from one lung to the other. Heart normal.

Remarks.—This case, although unfortunately fatal, is published not only for its clinical interest, but as a contribution to the literature of a mode of practice unusual in this country, and also in the hope that it may serve as some guide in the treatment of similar cases in the future. In the first place, it may be observed, whilst no untoward symptom occurred from the operative interference, the man experienced marked and early relief from the cleansing and disinfection of the putrid lung cavity. It is true, cough and dyspnœa were both greatly increased on each occasion during the time the washing-out was being done, but the distress was not continued, and a comparatively long period of quiet followed. Again, the risks of sepsis were immediately greatly diminished, and the patient rendered less offensive to himself and others. It will be noted in connexion with this point that at the post-mortem examination pus was found in the right lung, having been carried there mechanically, and it seems reasonable to me to conclude that the pathological condition was, at least in part, due to its presence. The only healthy portion of lung was the left upper lobe, and the man's death appeared immediately due to the implication of the right lung in the pneumonic process, supervening as it did upon pre-existent grave constitutional disturbance. Cases of abscess and gangrene of lung are at all times of the most serious character, but in spite of the fatal issue in the present instance, the bias of my mind, as the result of the method adopted here, is in favour of further investigation and treatment upon similar lines.

Nottingham.

THE MICROBE OF RABIES.

PRELIMINARY NOTICE.

BY G. F. DOWDESWELL, M.A., F.L.S., &c.

IN view of the great interest now taken in this subject in consequence of the brilliant investigations of Pasteur, I think it desirable to take an early opportunity of stating that I have found the microbe which appears clearly to constitute the virus of this disease. It is a micrococcus, not very minute, and of the usual form. It stains, however, with some difficulty; and this accounts for its having hitherto escaped observation. In the cases of dogs which I have as yet examined, its principal seat is evidently the central canal of the spinal cord and medulla oblongata; thence it pervades the other tissues of the central nervous system, occurring (sometimes in vast masses) around the walls of the bloodvessels, and in some cases within the vessels amongst the red blood-corpuscles. In the cortex of the hemispheres I have found it, but in very small numbers, and, so far, only in the perivascular and peri-cellular lymph spaces. In the cerebellum I have not found it at all, neither have I as yet succeeded in finding it in the salivary glands. I shall shortly publish the methods by which it may be stained with certainty. I must, however, state that it does not stain by hæmatoxylin, either with or without a mordant, as asserted by Fol.[1] I have repeated his methods carefully. Neither does it occur within the nerve fibres, as he states; and, lastly, it is fully three times the dimensions which he gives. I may add that it does not occur in the same situation, treated by the same methods, in normal animals. In the one case of a rabid dog, which I had examined to control my previous observations, the tissues were placed in alcohol so shortly after death as to preclude the possibility of the occurrence of septic organisms. In addition to which, all saprophytes, as far as yet observed, stain very readily with the usual aniline dyes, which this microbe does not. I must point out, in justice to the genius of Pasteur, that these observations on the occurrence of the microbe go far to confirm his statement of the seat of the virus; it may further afford a means of diagnosis in any doubtful case.

Preparations of the microbe were shown at the meeting of the Royal Microscopical Society on the 9th inst.

The Brown Institution.

[1] Comptes Rendus, Dec/14th, 1885, vol. ci., p. 1276.

TRAUMATIC TETANUS, TREATED WITH CHLORAL HYDRATE IN CONJUNCTION WITH URETHAN; RECOVERY.

BY WILLIAM THOMAS JACKMAN, M.R.C.S., &c.

THE following brief notes of a case of tetanus which recovered under the influence of the new hypnotic, urethan, in conjunction with chloral hydrate, are of interest as suggesting a new use for this valuable drug.

J. C——, a lad aged fifteen years, came under my care on March 15th, 1886. The patient presented well-marked symptoms of tetanus, which were evidently the result of an injured finger on his right hand. This had been crushed by cogged wheels five weeks previously, and had healed up slowly under simple local treatment. The lockjaw was complete, and the opisthotonus well marked; severe paroxysms of pain were complained of, which were greatly exaggerated at night. The patient had noticed his neck and jaw muscles gradually becoming stiff for the past few days, but attributed this to a chill. Chloral hydrate in 20-grain doses every three hours was ordered. This relieved the paroxysms of pain slightly during the day, but the lockjaw, opisthotonus, and rigidity of the muscles of the legs remained the same, and the pains were just as severe and frequent during the night. Fluid nourishment was administered and the chloral treatment continued until March 25th, when, as no abatement of the symptoms was apparent, after consultation with my partner Mr. T. Simpson, it was decided to discontinue the chloral during the night, and in its place give the patient four grains of urethan every two hours, from 6 P.M. to 6 A.M. The first night of this treatment showed a marked decrease in the severity of the symptoms, and the patient made gradual and uninterrupted progress until April 20th, when his recovery was established. The failure of the chloral hydrate to relieve the severe symptoms during the nights, and the well-marked improvement under the influence of the urethan, seem to point to the latter being likely to prove a very valuable drug in the treatment of tetanus, either prescribed alone or as above in conjunction with chloral hydrate.

Coggeshall.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. GEORGE'S HOSPITAL.

A CASE OF EXPLORATION OF THE KIDNEY FOR SUSPECTED CALCULUS.

(Under the care of Mr. WARRINGTON HAWARD.)

THE question of operation in cases of suspected renal calculus is one which not unfrequently presents itself to surgeons connected with large hospitals. If the patient, in good health otherwise, has symptoms of the presence of a calculus, which symptoms from their severity prevent him from following his employment, and medical treatment has done no more than to produce temporary alleviation, most surgeons would follow the course adopted in the following case, and explore the kidney. This case is an example of the difficulty sometimes met with in discovering the stone, even when present, its small size preventing its being felt by the finger or struck by the exploring-needle. We have seen more than one instance of this difficulty in finding the stone, and in one case it was only found after the removal of the kidney, this severe measure being justified by the severity of the symptoms occasioned by the presence of this small calculus. For the following account we are indebted to Mr. R. Margerison, late surgical registrar.

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John S——, aged twenty-four, a healthy-looking man, was admitted on March 11th, 1885, after having been under observation for some time as an out-patient. Three years previously he began to suffer from occasional attacks of pain in the left lumbar region, accompanied by vomiting, retraction of the testicle, and pain shooting down the inner side of the left thigh. The urine was occasionally turbid, and often contained a deposit, which from the description was probably uric acid. Lately these attacks had grown more frequent, occurring at intervals of about a month, and often lasting for six hours. Active exercise had no influence on the pain, and did not cause any apparent difference in the character of the urine. A year before admission his medical man outside had detected blood in the urine.

When admitted, pressure in the left loin caused no pain, and palpation discovered no abnormality there. No pus or blood existed in the urine.

Three weeks after admission he had a severe attack of his old symptoms, vomiting, retraction of the testicle, &c.—in fact, well-marked symptoms of renal calculus; wanting, however, in the presence of hæmaturia. The urine became highly lithatic. Ten days later a similar attack recurred. It was then thought proper to expose and explore the kidney. This was accordingly done by means of a transverse lumbar incision on April 16th. The kidney and its pelvis were carefully examined by the finger, and a long needle was thrust into the kidney substance in as many places as was thought proper. No stone was found, and much natural disappointment was felt. The man made a good recovery and left the hospital on June 3rd. He has since been to report himself on several occasions. In October he came to say that in September, after one of his old attacks of pain, while at stool he felt a peculiar sensation in the urethra, and heard a distinct click as of a stone striking the earthenware vessel. He has been quite well ever since.

MANCHESTER ROYAL INFIRMARY.

RUPTURED FEMORAL ANEURYSM IN HUNTER'S CANAL; LIGATURE OF THE FEMORAL ARTERY; CURE; SUBSEQUENT DEATH FROM HEART DISEASE; NECROPSY; REMARKS.

(Under the care of Mr. WRIGHT.)

THE notes of the following case have been furnished by Dr. W. Thorburn and Mr. G. Barlow.

William S——, aged sixty-three, a labourer, formerly a soldier, was admitted on January 5th, 1886. There was a history of "brain fever" and of "bowel and liver complaint" while serving in India more than twenty years ago, and of "rheumatism in the hip," lasting a few days, two or three years before admission. There was no history of syphilis recorded. The aneurysm was first noticed about six months before admission, but gave no pain or trouble at first; it, however, increased gradually in size and became somewhat painful later on, though it never prevented him from walking about. On Jan. 4th it had reached somewhat the size of a goose's egg, and in the evening of that day he felt something give way with a crack; he fell down, and at once noticed that the swelling was much larger and very painful. He was admitted the following evening.

On admission the man complained of severe pain in the right knee, running up the inner side of the thigh, where there was a large, flat, obviously pulsating swelling, occupying nearly the lower half of the thigh. The aneurysm was firm, except at about its centre, where there was evidently fluid blood. Pulsation was expansile. There was a distinct thrill and a rasping bruit. There was no tenderness. The veins over it were distended. Pressure on the femoral stopped the pulsation, but scarcely lessened the size of the swelling. The calf of the leg and the foot were somewhat swollen, and there was no pulsation to be felt below the aneurysm. Urine: specific gravity 1020, neutral, free from albumen or sugar. The man's arteries everywhere were obviously atheromatous. He had well-marked arcus senilis, early cataract in both eyes, and chronic bronchitis, with profuse expectoration. Pulse 68 and normal. On the morning of the 6th, when Mr. Wright first saw the patient, the aneurysm was said to be considerably larger than on the previous evening. The foot was not cold. Immediate operation was decided upon. The femoral (superficial) artery was ligatured in the usual way, rather above the apex of Scarpa's triangle. As there was little subcutaneous fat, the vessel was very easily secured with a single chromic gut ligature. The coats were not markedly diseased at this spot. The ligature was tied tightly and the wound closed, no drainage-tube being used. Full antiseptic (Listerian) details were carried out, iodoform and wood-wool dressings being applied. The limb was entirely enveloped in soft wool, and surrounded by hot bottles. Though it was not obvious externally, it was found that blood extravasated from the aneurysm had travelled up the sheath of the sartorius as far as the seat of ligature. Pulsation ceased immediately upon tightening the ligature, but the tumour otherwise was but little altered.

The after-history of the case is absolutely uneventful. There was a little dull aching pain at first, but the foot was never cold, and gangrene never even threatened. The highest temperature reached was 99·4°. The cough improved with a stimulating mixture. Sensation in the foot was never impaired. The size of the swelling slowly but steadily diminished, and the wound healed up at once. On Jan. 28th it was noticed that pulsation could be felt in the femoral to within about two inches of the point of the ligature; below this the vessel was felt firm, cord-like, and evidently plugged. On Feb. 9th there was no pulsation in the tibial vessels; the circumference of the thigh was two inches less than it had been four days after the operation, but there was evidently still some fluid blood in the centre of the swelling. The patient was sent to the Convalescent Hospital on Feb. 13th. He remained well, and the swelling had almost disappeared by the beginning of April, at which time he was allowed to get up, and was practically well as far as the limb was concerned, when he was suddenly seized one afternoon with pain in the chest, and died very shortly after.

Necropsy.—An aneurysm of the ascending part of the arch of the aorta of the size of an orange was found; this had not ruptured, but the heart muscle was very flabby and the vessels atheromatous. The femoral vessels and the aneurysm were removed, and an examination showed that the external iliac, common femoral, and profunda arteries were much dilated and atheromatous. About half an inch below the profunda the upper tapering end of an adherent clot was found. Just above its highest point two small uneven branches were given off. Below this the artery was entirely occluded by clot down to the aneurysm. The ligature had disappeared, but its site, about an inch and a half below the profunda, was marked by a dense white line running round the artery and in the clot; the line was about twice the breadth of the ligature. Below the aneurysm the artery was filled with coagulum as far as the popliteal, where it had been divided; this clot was less firmly adherent than that above the aneurysm, and was perforated at the lower end by two minute orifices. The aneurysm was about the size of a small hen's egg, and was filled with firm laminated clot, except at its most superficial part, where there was a cavity containing about a drachm of fluid blood; this was quite shut off from the artery by a thick wall of coagulum. The walls of the aneurysm were thick, white, firm, and well defined; the sac projected from the interior face of the artery, but no distinct orifice could be made out, nor any sign as to where the sac had given way. The muscles around the sac and also the femoral vein were firmly matted to the sac, but elsewhere there was only a faint discolouration and slight toughening of the cellular tissue to mark the previous extravasation. The course of the collateral circulation could not, unfortunately, be made out, as there was no opportunity for injection or dissection. The aneurysm lay in the centre of Hunter's canal.

Remarks by Mr. WRIGHT.—Cases of ruptured femoral aneurysm in Hunter's canal appear to be very rare, and for this and other reasons I have thought this case worth recording. It illustrates well most of the points discussed in Mr. Poland's paper in Guy's Hospital Reports, series 3, vol. vi., which gives probably the best account of ruptured external aneurysm, and to this I must refer. The sensation of bursting was present in only three of Mr. Poland's forty-two cases; here it was distinct. There was no loss of sensation or fall of temperature of the limb below in any case, though this is nearly universal; and yet in this instance the escape of blood was large and fairly rapid; in other ways the case followed pretty much the general rules laid down by Mr. Poland. As to the treatment of the case, the man was in many respects a most unfavourable subject for operation; he was, however, thin, and of placid disposition.

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Three possible courses were open to us—amputation, ligature, and pressure. The first was rejected on the ground of the good condition of the limb below; the last on the ground that the damaged vessels and the man's bronchitis made him a bad subject for any prolonged treatment. Mr. Poland's paper clearly makes out that immediate ligature gives the best results. The aneurysm was practically perfectly cured, and the man's death was due to the aortic disease and his flabby heart muscle. The preparation is in the museum of Owens College.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Multiple Neuromata.—Pneumonia.

AT the last ordinary meeting of the session of this Society, held on Tuesday last, Mr. G. D. Pollock, F.R.C.S., President, in the chair, Mr. C. L. Hudson, Dr. L. E. Shaw, and Mr. C. J. Symonds were elected Fellows.

Mr. CHAVASSE read a case of Multiple Neuromata. An apparently healthy woman, aged thirty, who had been treated at intervals for four years for supposed enlargement of the glands on the right side of the neck, submitted to removal of the mass on July 24th, 1885. On dissection, the tumour was found to be intimately connected with the cords of the brachial plexus, and during manipulation the pedicle attaching it to the spinal column was torn across. Death took place from spinal meningitis on the seventh day after the operation. At the post-mortem general neuromata were revealed. These enlargements were mostly fusiform, firm, semi-translucent on section, and microscopically were fibromata. The phrenic, the pneumogastric, and the sympathetic nerves were all affected. The tumour removed was connected with the sixth cervical nerve, the trunk of which formed the pedicle. Microscopically, numerous variously shaped nuclei were seen, but the fibrous tissue development was not excessive. From forty-one cases of multiple neuromata already published, deductions were made regarding the age, sex, nerves affected, clinical history, tolerance of operation, and the malignancy of such tumours. The tumour removed, microscopic sections of the same, and of other neuromata, were exhibited; also a life-sized photograph of the spinal cord and its nerves attached.—Mr. HOWARD MARSH supposed that the free hæmorrhage came from vessels in the interior of the spinal column.—Dr. BUZZARD asked whether the tendon reflexes had been investigated; if they were present it would not signify very much, but it might throw some light on their physiology if absent.—Mr. GANT remarked on the absence of clinical symptoms.—Mr. CHAVASSE said that the bleeding occurred when the pedicle of the tumour came away from the spinal cord; the case was thought to be one of enlarged glands and was so operated on; there were no symptoms except some pain down the arm.

Dr. ANGEL MONEY read a paper on some Statistics of Pneumonia, with especial reference to the Relations of Delirium and Temperature. The paper had been drawn up from the records of the past twelve years of the cases of pneumonia occurring in University College Hospital. Table I. showed the age and sex of all the 199 available cases:—139 were males, 60 females; 27 per cent. occurred under the age of ten years, 20 under the age of twenty, 23 under thirty, 13 under forty, 10 under fifty, 4 under sixty, and 1 under seventy. Table II. gave the lung affected, with the sex. The right alone was affected in 96 cases, or a percentage of about 48; Bleuler's percentage for the right lung was 52. The left alone was affected 70 times, or 35 per cent.; Bleuler gave 32 per cent. There was double pneumonia 33 times, or 16 per cent., which agreed with Bleuler. Table III. showed the number of cases, according to age, sex, and site of pneumonia. All the cases were of lobar pneumonia, the majority of simple lobar pneumonia. Seventeen were complicated with some other lesion; 8 of these had delirium. In 182 cases of primary pneumonia delirium was present fifty-six times, or a percentage of 30. Heinze arrived at the conclusion that mere pyrexia had little to do in the production of delirium. The author's investigations pointed in the same direction. But it cannot be lost sight of that prolonged pyrexia and high transitory fever must exercise some direct and indirect deteriorating influence on the grey matter of the brain and spinal cord, and must therefore predispose to delirium and other signs of exhaustion of nervous matter. Of 17 available cases, sometimes (4) the delirium coincided with the greatest rise in temperature, rarely (2) it preceded the acme of fever, and most frequently (11) the delirium came on with the fall of temperature. Heinze drew attention to the much greater frequency of delirium or marked mental change in pneumonia of the upper lobe. Taking additional precautions by employing only those cases in which the pneumonia was limited to the upper lobes, Dr. Money's observations confirm this statement, and he suggested that the influence of a local inflammation on the cervical sympathetic which controlled the calibre of the cephalic and cerebral vessels might possibly have something to say in the matter. Whether the cause of pneumonia had special deliriant properties should probably be answered in the negative; the suggestion that an alkaloid having a deliriant action was developed during the pneumonic process in some cases must remain as a mere notion. Tables IV. and V. gave the number of cases with and without delirium at different temperatures. A comparison of these tables appeared to show that the number of cases with delirium was largest in those in which the highest temperature recorded was 104° and 105°. This contrast was rendered more apparent by the next table, which contrasted nearly equal numbers of cases with and without delirium. The death-rate in the 199 cases was 20 per cent. From an examination of other tables it seemed clear that the presence or absence of delirium exerted no influence on the mortality. Another table showed the age, highest temperature, and number of cases of delirium. From this it appeared that the third decade of life, when the temperature went beyond 104°, seemed to be the most fertile in the production of delirium, but it was pointed out that this age and this degree of fever yielded the largest number of cases of pneumonia.—Dr. WILSON FOX thought that Dr. Money's paper filled a gap in the literature of pneumonia, since it gave the percentage of cases with and without delirium at different temperatures. Heinze had only given the delirious cases. Liebermeister had advocated the treatment of febrile states by cold, for he believed that the degree of delirium was proportional to the temperature, though this appeared to be more than doubtful. It was interesting to note that the bulk of all temperatures in pneumonia ranged about 104°. From a series of cases collected by himself, Dr. Fox said that in 40 per cent. the temperature ranged from 104° to 105°, 23 per cent. exceeded 105°, and 25 per cent. ranged from 103° to 104°, so that 89 per cent. exceeded 103°. Dr. Fox remarked on the occurrence of delirium at temperatures below 103°, and said it was important to recognise that delirium often set in with a falling temperature. It had been shown by Hermann Weber that acute mania sometimes developed during the resolution of pneumonia. Delirium was in many cases a phenomenon of weakness; sometimes the result of direct poisoning. Some individuals were prone to high fever in pneumonia, and Dr. Fox suggested that it was these who were more likely to develop delirium. The therapeutical indications to be gained by a study of the statistics of pneumonia was not the least interesting part of such work; the application of cold to the treatment of pneumonia, on which Jürgenssen had written, was a very important one; the occurrence of delirium, however, it would seem, was no indication for the use of cold, for it was probable that, as statistics showed, the mortality of delirious cases was not greater than the non-delirious ones. Without entering into reasons, Dr. Fox considered that there were very weighty arguments against the wholesale adoption of the cold treatment of pneumonia.—Dr. STURGES considered that unless the temperatures were taken frequently, say at least every four hours, statistics would be utterly useless and misleading. [Dr. MONEY here explained that it was the custom at University College Hospital to take temperatures every four hours at least in cases of acute pneumonia.] It would be highly important if such work as Dr. Money had done threw any light on the prognosis of cases of pneumonia. It was almost impossible to say which was the case that would recover. Delirium occurred in such varied relations with the other phenomena of pneumonia; he had seen hyperpyrexia without delirium; there was no rule as to its occurrence; the character of the patient doubtless largely determined it. In alcoholic pneumonia the temperature varied considerably, and some

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of these cases looked almost like delirium tremens in their clinical aspect. Those who over-worked or over-strained mentally were very prone to become delirious; the circumstances in which the pneumonia found the patient were determining factors in the etiology of delirium. As to Dr. Money's anatomical explanation, he thought it proved too much. In young children pneumonia of the upper lobe was common, but there was no special incidence of delirium in them as compared with cases of pneumonia of the lower lobe. He thought the statistics threw light on a very dark place in the study of pneumonia. The strong tendency of pneumonia was to end in recovery, and drugs had but little influence in promoting this.—Dr. NORMAN MOORE discussed chiefly the causes of death in pneumonia. He had made statistics of the last twenty-one fatal cases that had occurred at St. Bartholomew's Hospital; in four of these the pneumonia attacked both lungs, and in two there was pleurisy of the other side; two died from septicæmia after parturition; two had parenchymatous nephritis, three interstitial nephritis, and no less than eight well-marked emphysema. He considered that emphysema was the determining cause of death in many cases, and was often overlooked. The state of the unaffected lung ought to be inquired into; its weight taken, if necessary, after inflation, should œdema be present, to ascertain what amount of destruction of elastic tissue and capillaries and lung tissue generally had taken place by the emphysematous process. Another point of importance in relation to prognosis was the amount of exudation, which doubtless varied much in different cases. Generally, when rather more than half a lung was affected, the weight was 45 oz., but he had known the pneumonic lung to weigh from 67 oz. to 77 oz. This amount of exudation might be determined to a large extent by careful physical examination.—Dr. MOXON remarked on the intense investigation and scrutiny that would be required to establish the physical signs to the extent required by Dr. Moore, and considered that the necessary examination might have something to say in the causation of a fatal issue. He could not concur in Dr. Moore's views as regards emphysema. In his experience overwhelming prostration was the chief danger, and patients did not chiefly die in the way that emphysema chiefly killed. Pneumonia was not peculiarly fatal to advanced life. The question of prognosis in an individual case was dependent on factors belonging rather to physiology than anatomy. He congratulated Dr. Money on his valuable paper.—Dr. SQUIRE said that he had been under the impression that high prolonged fever did have an influence in the development of delirium, and asked how it was that the cases with a low temperature in Dr. Money's statistics appeared to show the opposite.—Dr. A. MONEY, in reply, said that his attempted explanation of the frequency with which delirium occurred in pneumonia in the upper lobe was not meant to prove too much, as Dr. Sturges argued; he regarded the explanation as offering a predisposing cause for delirium, not as actually and of necessity causing delirium by itself, else all pneumonias of the apex should present delirium. He agreed with Dr. Sturges on the frequency of apex pneumonia in children, but, in his experience, he could not concur that delirium such as occurred in adults was to be met with in young children. Rather in the latter there was a tendency to paralysis of the speech centres, which were but little developed in young children and easily overthrown—an illustration of the principle of dissolution as propounded by Hughlings Jackson. Other signs of cerebral disturbance no doubt occurred in children, and might be regarded as their delirium; reference was made to these. He was much interested in Dr. Moore's speculations on emphysema, but agreed with the views of Dr. Moxon. Taking the whole of the arguments in his paper, Dr. Squire would find that there was really no issue between them.

THE ARMY MEDICAL STAFF DINNER.—A very pleasant gathering of the medical officers of the army was held last week at the Holborn Restaurant. A large number attended, and Sir Thomas Crawford, K.C.B., was in the chair. After the usual loyal toasts had been given and heartily responded to, "The Health of Sir Thomas Longmore" was proposed by the chairman, who called attention to his long and arduous work. It was drank with great enthusiasm. The President of the College of Surgeons responded for "The Visitors." The *réunion* was exceptionally agreeable.

THE GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

THURSDAY, JUNE 3RD.

SIR HENRY ACLAND, PRESIDENT, IN THE CHAIR.

THE Council went into committee for the further consideration of the proposals relating to elementary mechanics.

Mr. MACNAMARA said that, though there were some schools in county Dublin at which hydrostatics was taught, those who were acquainted with the geography of the district would know that it would be impossible for students to travel to and from them. Most of the schools which efficiently taught the subjects were Roman Catholic, while the majority of the medical students were Protestants, and the *odium theologicum* was so prevalent in Ireland at the present time that Protestant parents would not send their sons to the Roman Catholic schools. Six Irish gentlemen, representing different places, had told twelve English and six Scotch gentlemen that it was impossible and impracticable to do what was proposed, but in their great superior wisdom the English and Scotch gentlemen said, "Go home, and do that which is impossible." If ever there was a thing in the world that would change his political convictions, which had been strongly against Home Rule, it was this conduct of the Medical Council. (Laughter.)

Dr. HERON WATSON said that Mr. Macnamara's speech apparently meant that the condition of education in Ireland was in a very bad way, and that it was physically impossible for the young men there who wished to study medicine to get to the places where they could be taught. It appeared to him that all the mechanics required could be obtained from text-books, though of course the subjects could be far more thoroughly studied at schools where there were proper appliances. He was extremely grieved to notice that the representatives of the great old English universities were apparently diligently set against the inclusion of so simple and humble an amount of preliminary knowledge in physics as his amendment implied. It would lead the profession at large to imagine that the universities did not wish the students to enter upon those subjects a knowledge of which would render the study of medicine easier.

Dr. BANKS said that the requirements of the University of Dublin were in reality higher than those of the Council, and he did not think it was likely to alter them.

Dr. PETTIGREW said that if the Council affirmed its regulation all difficulties in teaching would soon disappear. The universities, no doubt, had a higher standard than the Council required, but that higher standard ought not to be allowed to stand in the way of the lower standard of the Council.

Dr. QUAIN protested against the interminable discussion on the question of preliminary education, which ought to be left entirely to the educational bodies of the country. The everlasting changes were most perplexing to the students and teachers, and he hoped they would now cease.

Mr. MARSHALL said that the Council had lightened the preliminary curriculum in regard to certain subjects, such as history and geography, in order that physics, which was regarded as more important, might be included; and he hoped that the Council would adhere to its former resolution. If the Council had adopted a motion which he had proposed, giving an intermediate scientific year, the present difficulty would not have arisen; but as that could not be, they were anxious to have a provisional measure. They had to consider a large number of ordinary students, rather than a small number of more highly educated students. Even if, as had been suggested, university students would not register, that would be a less evil than altering the present regulation of the Council.

Dr. HAUGHTON said it was impossible to compel the students of his university to go upon the Register. The university would never have an examination in arts for any particular profession, but would provide such an examination as would be best for all professions. He entirely agreed that students who were not going to take the higher university training in chemistry and natural philosophy should be compelled to show some elementary knowledge of those subjects before entering upon professional practice.

Dr. HERON WATSON asked Dr. Haughton what would

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become of the mechanics of a student who, after being registered as a medical student at a university without passing in mechanics, gave up his study there and went in for examination at one of the corporations. If he were a registered medical student the corporation would be bound to examine him, and so he might obtain his diploma without any knowledge whatever of elementary mechanics.

Dr. HAUGHTON said he entirely agreed with Dr. Watson as to the desirability of the subjects being studied, and therefore he had not proposed an amendment. This matter had been carefully considered in Dublin, and they wished to have it known that they retired from the Medical Register without any offence. They would not cease to register because they were recalcitrant against the proposals of the Council, but because they would be no parties to a fraud.

Mr. SIMON said that university students had a longer curriculum than four years, but the Council had to think mainly of men who had to do their work in four years, and the Council had put their foot down on the position that if four years were deemed sufficient it was only on the condition that certain kinds of knowledge were first cleared off the ground. He hoped that they would not shilly-shally and make exceptions because of the pleadings of any institutions. Whether Trinity College students registered in the first year or not was absolutely unimportant. Whenever they registered they would be passed in the preliminary subjects. He hoped, therefore, that the Council would see their way to maintain their former resolution unchanged.

Dr. HUMPHRY suggested that perhaps the amendment might be accepted if words were added to the effect that the university examinations would be accepted as heretofore, provided that at that or a subsequent examination the students passed in mechanics.

The amendment was ultimately agreed to in the following form: "That examination in the subject of elementary mechanics of solids and fluids—comprising the elements of statics, dynamics, and hydrostatics—should be required in the preliminary examination, and should be passed before registration in the Students' Register; but in universities with a prolonged curriculum, where the examination in mechanics required for their degree is taken at a more advanced period of study than before commencing medical education, the registration may be effected on having passed the examination in mechanics, and it shall be the duty of the Registrar to antedate the entry to the period at which the preliminary was passed."

Dr. HAUGHTON then moved: "That, in the opinion of the Council, it is highly important to visit and report upon the methods of teaching required by the licensing bodies." He said the good done by visitations of examinations had been of a moral kind. Abused as the Council had been for the little it had done, it had exerted an extraordinary amount of moral influence in improving the standards of examination and education, but he had come to the conclusion that the appliances and means of teaching were far more important than the mere examination. But since Lord Brougham's death the examination hobby had not been ridden so strongly as it was previously. The teachers were more important persons than the examiners, and that was why in Ireland the schools had been asked what machinery they possessed for teaching mechanics. The tendency of enlightened medical education was to reduce the formal lectures, and to increase the means of learning by the eye and by the hand. He disapproved of the Scotch system of requiring the unfortunate student to attend a hundred lectures in a course. A very brilliant man might make such a number of lectures attractive, but the majority of teachers did not do so, and the students might with great advantage be referred to the best text-books for one-half the lectures. There was a system in Dublin of requiring a student to attend, or at least pay for, three courses of lectures on the same subject, and that also needed alteration. If the Council agreed to his proposals, he had reason to believe that the cupboard which would be unlocked would be found to contain a very large number of skeletons. Some very pretentious schools would be seen to be very badly provided with the means of teaching, and it would be discovered that grinders often took the place of the brains, eyes, and hands of the learners. The inspection of the appliances at the schools could be carried out very cheaply by means of the Branch Councils; and, in fact, in Ireland, at present, the College of Surgeons, Trinity College, the Royal University, and College of Physicians had the right to send inspectors to all the schools before they recognised them; and schools had been taken off the list for imperfect means of teaching, and restored upon an improvement taking place. He asked some of the most distinguished visitors to the International Medical Congress what they thought of the medical schools in London, and they said nothing could be more perfect than the facilities for practical instruction for hospital work, but nothing could be more elementary and crude than some of the teaching of anatomy, chemistry, botany, and zoology. The College of Surgeons and the College of Physicians in London had not done their duty in inspecting the schools, and therefore the Council ought to take up the question. No doubt the red-tapeists on the Council, who were not few in number, but were very noisy and persistent, would say that there was no legal power to do what he proposed, but the only power the Council had hitherto exercised had been through moral influence. They had never called upon the Privy Council, and he hoped they never would. Good schools would be glad to be visited, and the bad schools would have to spend money to improve their premises, to get good teachers, and to work up to the level of the other schools. Many of the corporations were very lax as to the attendance on lectures.

Dr. DUNCAN, in seconding the motion, said he cordially supported the abstract resolution, though he did not agree with all the observations made by Dr. Haughton. He would rather have the country supplied with well-educated practitioners who had passed no examination, than with a set of men who had merely passed an examination but showed no length of time in education. The Council had the same power under the Act to interfere in regard to courses of study as in regard to examinations. Besides that, the Council many years ago entered upon a laborious inquiry, over which Mr. Syme presided, as to the courses of study, but for some reason or other the subject was dropped. He was quite sure that Dr. Haughton was wrong about the value of lectures in the Scotch system. As a proof of that, he might mention that all the best students attended most regularly, and when not required to attend they did so voluntarily. If there were any weight in Dr. Haughton's statements, lectures might be wholly given up and the students supplied only with books, laboratories, and practical education. The *vivâ voce* lectures of a good teacher would always be valuable, while a text-book or a written lecture would send a man to sleep. A man would learn midwifery better in three months by attending lectures than in two years from a book. It appeared to him that medical education, especially in England, was upon a wrong footing. A man must spend years to learn the Latin that was required of him, but he might pass in midwifery though his education had been a perfect farce. It was far more important for practitioners to have a high knowledge of medicine and midwifery than of Latin.

Dr. BANKS supported the resolution. The university that he represented had instituted an inspection of the schools whose certificates they received, and he quite agreed that an inquiry into the means of teaching at the schools was of more importance than reporting upon the examinations.

Mr. SIMON said that he entirely shared the sentiment of the resolution, but he did not think that the Council had power under the Act to institute an inspection of the means of teaching, though they had power to require the licensing bodies to inform them on the subject. It had always appeared to him that the Council had only an indirect relation to the schools, and he thought they should, in the first instance at all events, rather address the examining bodies and inquire what steps they took to satisfy themselves as to the means of teaching.

Dr. HAUGHTON said he only wanted the principle affirmed first.

Dr. HERON WATSON supported the motion. While a diploma was a *testamur* that a man had passed a certain form of examination, it would afford no real indication of how the instruction had been communicated to him. It might be said that attendance upon mere lectures was a misfortune, but what could be said of students who had merely gone through a system of cramming six hours a day, as though medicine could be taught by a series of Pinnock's Catechisms? It was most important that in all the schools the authenticated teachers should be persons who gave instruction in a way calculated to improve the thinking faculties of his pupils. In Edinburgh and Glasgow, no man external to the universities was accepted as qualified to lecture unless he proved that he had a proper museum to enable him to fulfil all the demands of the licensing bodies. Lectures in London and Dublin were also accepted,

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but over those the bodies in Edinburgh had no control whatever, and though he should desiderate for all teachers the widest possible latitude as to what they taught and how they taught, it was a matter of great importance that all the bodies should be well assured that the teaching in all the schools was, if not of a uniform standard, at all events of uniform quality. There were no means by which this result could be obtained except by the Medical Council taking the matter in hand. Allusion had been made to attendance at 100 lectures being required in Edinburgh, but the course included anatomy, physiology, surgery, and medicine. He believed that in some schools there was a great want of regularity on the part of teachers. Let them take the case of a lecturer on operative surgery affixing to the gate of the hospital a notice that at a certain hour on a certain day he would commence his class; the first day he turned up, but for a week after nothing was seen of him, while the corpse was going to corruption and the class was becoming demoralised. He mentioned this simply as one of the rumours current in the air, and it would be a great pity if the Council did not assure themselves whether or not there was any truth in these charges. No doubt it would be said that the student could protect himself, and might leave one school and go to another, but he might waste the whole of the four years in finding the right school.

Dr. QUAIN said he had no faith in lectures, believing that in half the cases it was a perfect waste of time to attend them, and that infinitely better information could be obtained by books and observation. The motion was to the effect that the Council had no confidence in either the examining bodies or the schools, but they had no power whatever to visit the schools. He hoped that they would simply call the attention of the various examining bodies to the necessity of careful supervision of the schools.

Mr. MARSHALL thought that the Council had power to send a visitor to a university to report both on the examination and the course of study, but could not do so at the medical schools. No doubt it would be highly desirable for them to know all about the teaching, but he must repudiate the imputation that there were teachers in London who did not perform their duties, even after they had advertised their lectures. Unless some proof were brought forward, such imputations should not be indulged in. The combined Colleges in London were composed of men who knew all about the character of the schools, and he was quite sure that the Colleges would soon learn if there were any serious defects in the schools. It must be admitted that there was a great difference in regard to the materials for teaching, but the means of the smaller schools must be measured against the requirements made upon them. A great deal might be said in favour of the spirit of the motion, and he saw no harm in passing it as an abstract resolution, trusting that good might come out of it.

Mr. MACNAMARA believed in the value of lectures if they were of an attractive character, but if they consisted merely of reading from a book the student would be very much better elsewhere. He agreed that the Council had no legal power to inspect the schools, but in self-defence no school in London would refuse to admit a gentleman sent by the Council, and a great deal of good would be done if the Branch Councils were requested to institute some inquiries. On the establishment of the Carmichael School, he was not ashamed to say that the College of Surgeons in Ireland found that their facilities for teaching some subjects were not so good as those in the school. The result was that the College improved their means, and he believed that a similar result would be attained in other cases.

Mr. TEALE said that the mere fact of the motion being discussed would be of value even if the Council went no further. He agreed that the Council had not the legal power to do what was sought, but the difficulty would be got over by a courteous request for permission to visit. One good result from such action would be that the members of the Council would be brought into contact with the junior teachers, and the eyes of the Council would be opened to the growing evil that examinations were doing in spoiling study. Teachers had told him that students had no time now for study, their whole time being occupied in working up for examinations.

Dr. HUMPHRY said that ten years ago he brought this subject forward, and he was therefore glad that the proposal was now renewed. The manner in which it had been received on the present occasion showed that there had been an advance in opinion on the subject. Teaching and examinations were complementary to one another. There would not be good effective teaching unless there were good effective examinations, and the examinations should not be regarded simply as tests, but as directions for teaching. Every question set by an examiner should be a guide to the teachers in the several schools. Some teachers undoubtedly taught a great deal by lectures, but others did not; but he thought that the very best mode of repletion in teaching was depletion, and students had asked him if he could not give them a whole course of teaching by examinations. Perhaps the tendency of education at the present day was to run rather too much into practical matters, without sufficiently considering the theory. There was nothing he more desired for his school of medicine than a visitation from the Medical Council, for it would give it a great impulse.

The Council then adjourned.

FRIDAY, JUNE 4TH.

SIR HENRY ACLAND, PRESIDENT, IN THE CHAIR.

The debate on Dr. Haughton's motion on the methods of teaching required by the licensing bodies, was resumed by

Dr. STRUTHERS, who said he should support the motion, but did not approve of what had been said about lectures. In Scotland and Germany the word meant demonstration blended with discussion. Medical education depended not only on the materials, but on the use made of them. It was not the carriage but the horse and the driver that were important. In a thorough medical school the fundamental sciences should be taught by men devoted to their special subjects. It would not do to have anatomy, for instance, taught by men in practice, but by those who, like Harrison, Christison, and Syme, stuck to their chairs and gave a character to the school and an inspiration to the students. Teachers should also be examiners. In Scotland the teacher was an *ex officio* examiner. But he had with him an outside examiner. No system of examination could be complete in which the teacher did not take part. If such were not the case it would be impossible to keep up the high tone in the school, and he would rather sell postage stamps in a post-office than be a teacher under those circumstances. The Scotch universities and schools would be delighted to have visitors, and would be happy if other parts of the kingdom copied the system; but there was something else that they should copy—namely, Scotch industry and Scotch contentment, with slight remuneration.

Mr. MACNAMARA.—And Scotch modesty. (Laughter.)

Dr. PETTIGREW maintained that good practical lectures are a valuable means of instruction. He supported the motion, and expressed his belief that if it were carried into effect a good work would be done by the Council.

Dr. HALDANE also supported the motion, but dissented from some of the remarks of Dr. Struthers. He believed that students were very much over-lectured, and he disapproved of the teachers taking part in the examination of their students. As to the moderate incomes of the professors, some of them were receiving salaries of as much as three or four thousand a year.

Dr. HAUGHTON, in reply, expressed his gratification at the amount of support accorded to his motion. He especially thanked his Scotch friends for their support. He had no idea that he should be raising such a storm by his reference to the heaven-inspired, divinely-descended hundred lectures per term. (Laughter.) But he thought that that number of lectures from the very best lecturer who ever lived, even in Scotland, was far too large.

The motion was put and agreed to *nem. con.*

Dr. HAUGHTON then moved: "That visitors be appointed by the General Medical Council to visit the several medical schools (with their permission) in each division of the kingdom, and to report upon their methods of teaching the subjects required by the licensing bodies." The motion, he said, was intended to give effect to the resolution just passed. As to the precise mode to be adopted, that he was willing to defer to the opinion of the Council. He did not think, however, that the proposed visitation should be conducted by the universities or corporations, which would be both unpleasant and invidious. Nor should the Branch Councils alone be entrusted with the work, though he thought they should take part in it. His idea was that each Branch Council should conduct the inquiry in its own division, with the aid of a representative from each of the

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two other divisions. In that way the moral weight of the visitation would be greatly increased, and all delicacy and difficulty in conducting it would disappear.

Dr. HERON WATSON, in seconding the motion, said he hoped that the visitation would be carried out in a much more economical way than in the case of some of the recent visitations. He had no doubt that members of the Council in Scotland, for example, would undertake a complete inspection in their own division, without reference to cost, but they could hardly expect that a member should attend from England or Ireland without being paid. He thought the best way would be to refer the subject to a committee to consider and report upon the best method of carrying out the visitation.

Dr. A. SMITH supported the motion, but suggested the addition of the word "appliances."

Dr. Haughton and Dr. Heron Watson accepted the suggestion, and permission was granted to add to the resolution the words "and upon the appliances possessed by them for such purposes."

Dr. QUAIN, as the treasurer, said he did not believe the scheme could be carried out for less than 1500 or 2000 guineas. He therefore protested against making regulations which they might not have funds to carry out.

Dr. STRUTHERS also thought the expense would be very serious. A long time would have to be occupied in carrying out the inspection, and it would probably be sufficient at first to apply to the licensing bodies. He would therefore move as an amendment, "That the Council, having had under consideration the subject of visiting and reporting on the methods of teaching, resolves to communicate with the several licensing bodies, and to ask for information as to the means taken by them to secure the best methods of teaching."

Dr. QUAIN seconded the amendment.

Dr. DUNCAN said he regarded it as quite unworthy of the Council to raise the question of expense. They had £33,000, and he did not know what was the use of all that amount.

Dr. QUAIN.—That money belongs to the English Branch Council.

Mr. MARSHALL considered the amendment more acceptable than the motion. If any inspection were carried out, it must be a very prolonged one. The method of electing teachers, their mode of teaching, the regularity or otherwise of their attendance, would all have to be inquired into. A great deal of invidious inquiry would have to be undertaken, and unless it were done thoroughly it would be of no value. The Council had expressed an opinion that at some time or other it would be desirable to visit and report. The very vagueness of the proposition recommended it to him, and even if a committee were appointed to draw up a scheme it would be a long time before the inspection could begin. He therefore thought it would be better in the meantime to apply to the licensing bodies.

Dr. CHAMBERS said that examiners easily ascertained for themselves the value of the teaching of the different schools, but they never made the information public. If the Council asked for information of that kind from the licensing bodies some good might come of it.

Mr. TEALE supported the amendment.

Dr. HAUGHTON said he would never consent to sending back the question to corporations and universities who, with very few exceptions, had never done their duty. That course would be simply evading the responsibility of the Council. Many bodies accepted in the most slovenly manner certificates of lectures and teaching without any inquiry as to their real value. In Ireland, at any rate, he knew that certificates were often granted of lecture and hospital attendances without any guarantee that such attendances had ever been given.

Mr. SIMON, in supporting the amendment, said that the real check on a school was to be found in its own commercial interests. Where there was a proper system of examination, a school that did not properly educate its students would not pay. He wished to refer the Council to a report (in which he had taken some part) made many years ago by the Council of the London Medical Teachers' Association. To the principles embodied in that report he still adhered. He considered that at present the schools were greatly over-regulated.

Dr. PETTIGREW thought that if an intimation were given to the schools that at a certain date the visitations would commence, that note of warning would lead the schools to prepare themselves and make good any deficiencies in teaching or appliances.

Dr. HUMPHRY said he should strongly object to any inquiry into the manner of teaching adopted by individual teachers. He should protest against any visitor attending one of his own lectures with a view to reporting upon it to the Council. He should not object to an inquiry into the general plan of education and the means and appliances, which would be a work of no great difficulty or expense.

Dr. HAUGHTON said that nothing was further from his intention than to suggest an examination of the manner in which individual teachers taught their pupils; his object was to secure an inquiry as to methods and appliances.

Dr. QUAIN considered that a lecture was part of the method adopted, and should therefore be the subject of inquiry. It would be better to get information from the corporation than to appoint visitors at once.

Dr. HALDANE supported the motion as a sequence to the previous resolution.

The amendment was then put and lost, ten voting for it and eleven against it.

The PRESIDENT, before putting the original motion, mentioned that many years ago a committee, presided over by Mr. Syme, drew up an elaborate report on the same subject, but the object of the committee was purely to seek information from the best authorities, and not to criticise. Ever since he became a student of medicine it had been to him a matter of great personal interest to obtain information in the same direction. Until within the last few years, he never went into a town where there was an important hospital without going through that institution in order to learn what were the appliances and arrangements there. One point that he always inquired into was the state of cleanliness. In some places the disorder in the dissecting rooms and the student's rooms was a disgrace to a civilised country. The state of things, however, had immensely improved during the last thirty years. He knew many instances where, from sheer ignorance, the managers of institutions would not provide the necessary funds for proper appliances. It was for the Council to decide whether they thought it desirable to carry out the proposed inquiry in a critical spirit, or simply wished to obtain information from the best sources.

Dr. Haughton's motion was then put, and carried by thirteen against four.

On the motion of Dr. HERON WATSON a committee was appointed "to consider and report upon the best system by which the visitation of the several medical schools, as now determined upon, may be carried out." The committee consisted of Dr. Haughton, Dr. Humphry, Dr. Chambers, Dr. Struthers, and Mr. Marshall.

On the motion of Mr. MARSHALL, seconded by Dr. A. SMITH, it was resolved: "That the Registrar be empowered, under the sanction of the President and the Treasurers, to collect, by purchase or otherwise, the various Acts of Parliament, Parliamentary Reports, and Parliamentary Bills which relate to the medical profession, the similar Acts passed by Colonial Legislatures, the charters, statutes, and bye-laws and regulations of the several universities and medical corporations of the United Kingdom and the colonies, the regulations of the more important foreign universities or other medical authorities, certain selected returns of the Registrar-General, special statistical reports, foreign pharmacopœias or codices, and any other documents or books on subjects connected with the work of the General Medical Council, in relation to medical education, examinations, and qualifications. That the Registrar be further authorised to provide suitable book-cases or other accommodation for the safe custody of the above-named collection or library of reference, and to prepare a suitable catalogue of the same. That the library so formed be available to members of the Council and to such other persons as may receive the permission of the Registrar to make use of it."

Mr. MACNAMARA moved pursuant to notice: "(*a*) That the invested funds of the several Branch Councils should be consolidated into one capital fund, vested in trustees on behalf of the General Medical Council. (*b*) That the local registrars should continue, as at present, to register and receive registration fees in their respective localities, but should, without loss of time, transmit such fees to the medical registrar when they amount to ( ). (*c*) That the treasurers of the General Medical Council should transmit from time to time to the registrar for Scotland or Ireland such sums as may be necessary to defray the current expenses of the local offices. (*d*) That the salaries of the registrars of the Branch Councils for Scotland and Ireland should be paid by the treasurers of the General

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Medical Council. (*e*) That fees for attendance on Branch Councils should also be paid by the treasurers of the General Council at the end of each current year." He said that the profession generally knew very well about the financial position of the Council. It was generally believed to be a wealthy body, but in truth it was wretchedly poor, having scarcely any funds at its disposal. The income of the General Council in 1883 was only £221 14*s.* 8*d.*, and in 1884 £165 11*s.* 2*d.*; in 1885 it was larger owing to the exceptional receipts from the sale of the new Pharmacopœia. By Clause 13 of the Medical Act all moneys payable to the Branch Councils were to be paid to the treasurers of such Councils respectively, and to be applied to defray the expenses of carrying out the Act. Separate accounts were to be kept of the expenses of the General Council and of the Branch Councils, but the expenses of the General Council were to be defrayed by means of an equal percentage upon all moneys received by the Branch Conncils. A return was to be made by the treasurers of the Branch Councils of all moneys received by them, and the percentage having been computed the contributions were to be paid to the treasurers of the General Council. The expenses of the Branch Councils were to be defrayed by those Councils out of the residue of the moneys so received. The percentage was calculated upon the income of the Branch Councils. It appeared that there was now a sum of £33,000 in Consols standing to the credit of the English Branch Council, of the Scotch Branch Council £3800, and of the Irish Branch Council £1869. What was the meaning of that disparity? Two years ago he went over the Register and found that 3223 names had been recorded on it as having been registered by the English Branch Council in virtue of qualifications obtained exclusively in Scotland or in Ireland. He had also ascertained from the Registrar that during the last year Scotland had suffered in that way to the extent of 120 practitioners and Ireland to the extent of fifty-two, the reason being that the English Branch Council had enriched itself at the expense of the Scotch Branch Council by £600, and at the expense of the Irish Branch Council by £260. At the time he made the investigation he found that there stood to the credit of the English Branch Council £10,000, which of right belonged to Scotland, and £9869 belonging to Ireland. The explanation was simple enough. After the students had completed their education they sought assistantships in England, and as registration was required for that purpose they went to the English Branch Council and paid them £5, which ought to have been given to the Scotch or Irish Branch Council. In 1860 a committee appointed to report on the subject called attention to the fact that by the present arrangement it was possible that so large a proportion of the registration fees might be paid into the fund of any one Branch Council as to leave the others without sufficient funds to carry out the purposes of the Act, and they recommended that all the moneys should be paid into one common fund, from which all the expenses of the General and Branch Councils should be defrayed, subject to the supervision and approval of the General Council. In 1878 another committee was appointed, in consequence of a letter received from Mr. Peel, and upon the recommendations of that committee his present motion was founded. If the Bill now before Parliament became law, the visitations contemplated under it would involve great expense, and the funds of the Irish and Scotch Branch Councils would soon disappear unless some special means were provided in the Bill, and the work would therefore collapse. When they became bankrupt they could not of course contribute the required percentage. Three courses were open to them—to disgorge the money due to Scotland and Ireland (laughter), which was perhaps impracticable; to have a common fund, as proposed in the resolution; or to have an arrangement by which the registration fees of Scotch and Irish practitioners received by the English Branch Council should be sent to the particular division to which the practitioners belonged. If the Council accepted his resolution, he was authorised to state that an amendment would be introduced into Sir L. Playfair's Bill to that effect.

Dr. HERON WATSON seconded the motion.

Mr. SIMON asked if it was proposed that the General Council should regulate the actions of the Branch Councils?

Mr. MACNAMARA said the autonomy of the Branch Councils was preserved intact.

Mr. SIMON said it appeared that the autonomy of expenditure was preserved, but the General Council had no control over the Branch Council. Of course every Englishman would wish to have these things on a perfectly equitable ground, but it would not be right for the Branch Councils to be allowed to dip their hands in the common purse unless the common body had some regulation over them.

Mr. TEALE said the fees received by the Branch Councils might be retained by them; out of that they might pay their expenses, and at the end of the year hand over the balance to the common fund.

Mr. SIMON.—But Mr. Macnamara expects a bankruptcy.

Mr. TEALE said that before there was a percentage rate the current expenses might be paid.

Dr. QUAIN said the £33,000 belonged to the English Branch Council, and the other Branch Councils had no more right to touch that sum than his own private income. Men went to Scotland and Ireland on purpose to pass, but came to England to practise. There was a sufficient explanation why the funds of the Irish Branch Council were very low. In Ireland in 1860 the funds invested amounted to £3120; in 1886 they were only £1870. In Scotland, on the other hand, in 1860 the funds were £2000, and in 1886 £3300. That showed that the Irish had been very extravagant, and no doubt it would be delightful for them to have the English fund to draw upon. What on earth induced them to hold six meetings and spend £76 in considering the Medical Bill? Was that the way in which the funds were to be wasted? If Irishmen would be more economical and induce more of their students to register in Ireland such an application as the present would not have been necessary.

Dr. A. SMITH supported the motion, as he thought the three funds ought to be amalgamated and in the custody of the General Medical Council. The large sum possessed by the English Branch Council arose from the fact that the first annual account showed that their total receipts then were £26,000, while in Ireland they were £4400, and in Scotland £3700.

Dr. HAUGHTON said that if the English representatives thought there was something inequitable in the present condition of things, they would surely help to remedy it, and Mr. Macnamara had told them that Sir Lyon Playfair was prepared to follow up a vote of the Council in favour of the motion by a clause in the Amendment Act.

Dr. QUAIN.—You cannot rob the English Branch Council.

Dr. HAUGHTON.—You can rob anybody by Act of Parliament.

Dr. HERON WATSON said that the expectation of the framers of the original Act was that where a man took his diploma there he would register, and he thought the Council should avail itself of the hint which Sir Lyon Playfair had given, and enable that gentleman to go to Parliament with the decision of the Council to back him.

The motion was then put and lost, nine voting for it and ten against it.

The PRESIDENT said that if any serious impediment to the Amendment Bill occurred at the present time, it would necessarily not pass this session, and it was fortunate that the Council was not pressing him to make alterations.

The Council then adjourned.

SATURDAY, JUNE 5TH.

SIR HENRY ACLAND, PRESIDENT, IN THE CHAIR.

Dr. QUAIN proposed the adoption of the Pharmacopœia Committee's Report. He said the sale of the Pharmacopœia had already resulted in a considerable profit, amounting to £321. If such a rapid sale and so large a profit could have been anticipated the Council would have been justified in charging a smaller sum for it. An honorarium of £500 was voted to the committee when the previous Pharmacopœia was published, but he hoped that nothing of the kind would occur on this occasion.

Dr. A. SMITH seconded the motion, which was agreed to.

Report by the Pharmacopœia Committee.

Dr. ATTFIELD attended the committee.

"The committee report that a statement laid before them shows that of the edition of 20,000 copies of the Pharmacopœia of 1885 about 19,000 copies have been disposed of. It will therefore be necessary to prepare for a re-issue of the work, and they recommend that the Executive Committee be authorised to take the necessary steps for the purpose.

"The committee recommend that the *errata* contained on

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the slip issued with the first reprint of the Pharmacopœia be inserted in the text of the work, together with some further *errata* now submitted to and approved of by the committee. They further recommend that the slips of *errata* be kept in stock for distribution to former purchasers of the work, and for insertion in the still unsold copies.

"With reference to the proposed annual report on such changes or additions as may be required in future publications connected with the Pharmacopœia, the committee report that so short an interval has elapsed since the publication of the work that it will be undesirable to submit a report until next year. The committee have remitted to the sub-committee the duty of making the necessary arrangements for this purpose.

"Finally, the committee report that the sum of £2713 8*s.* 5*d.* has been expended on the production of the present edition of the British Pharmacopœia, and that the sum of £3534 13*s.* 7*d.* has been received from the sale of the same, leaving a balance in favour of the work of £821 5*s.* 2*d.*

"June 2nd, 1886." "RICHARD QUAIN, M.D.

On the motion of Dr. QUAIN, seconded by Mr. SIMON, the following report by the Finance Committee was adopted:—

"The Finance Committee report that the income of the General and Branch Councils for the year 1885 (ending Dec. 31, 1885) has been £11,113 8*s.* 9*d.*, an amount which exceeds by £2689 6*s.* 6*d.* the income for the year 1884. The expenditure during the year 1885 has been £12,083 16*s.* 4*d.* The committee has, therefore, to report to the Council that the expenditure during the past year has been in excess of the income by £970 7*s.* 7*d.*

"As regards expenditure, the largest item of increase has been that caused by the publication of the new edition of the British Pharmacopœia. This excess amounted to £2279 18*s.* 3*d.*, which has been, or is now, in process of being recouped. The expenditure involved by the visitation of the final examinations of the universities represents an increase of £2207 14*s.* 4*d.* An increase in expenditure has also been incurred to the amount of £198 7*s.* 6*d.* on account of the investigations of the Statistical Committee. In law expenses there has been an increase of £159 10*s.* 11*d.* In general printing there has been an increase of £54 6*s.* 7*d.* The only items which show a diminished expenditure for the year 1885, as compared with 1884, are a decrease of £110 1*s.* 8*d.* in fees to members of the Executive Committee in consequence of fewer meetings having been held, and a decrease of £62 in the fees paid to members of the General Council. While, therefore, the increase of expenditure is £5152 0*s.* 3*d.*, the decrease amounts to only £262 13*s.* 5*d.*, leaving an actual increase in expenditure of £4889 6*s.* 10*d.*

"The average yearly income of the General and Branch Councils during the last seven years exceeds the average yearly expenditure by £1494.

"*Dental Finance.*—In the receipts (£507 13*s.* 2*d.*) of the Dental Registration Fund for the year ending December 31st, 1885, there is a decrease of £78 4*s.* 9*d.* over those of the previous year. On the other hand, the expenditure (£713 15*s.* 10*d.*) has been less by the sum of £182 6*s.* 11*d.* The deficiency of income for the year amounts to £206 2*s.* 8*d.*, as compared with a deficiency of £310 4*s.* 10*d.* in 1884.

"June 3rd, 1886." "RICHARD QUAIN, M.D., Chairman.

Sir Dyce Duckworth was appointed a member of the Pharmacopœia Committee.

The following report by the Statistical Committee was adopted:—

"The Statistical Committee are enabled to report that, by the continued labours of the Registrar, assisted by the accurate statist whose services were engaged last year, tables corresponding with those already published for the year 1871 have now been prepared for the years 1872, 1873, 1874, and 1875. These tables, it is recommended, should be published in the form of an appendix to this year's volume of the Minutes of the Council. In the further prosecution of this inquiry, it has been found desirable, for the sake of accuracy, to make some slight additions to, and corrections in, the data and the summary given for the year 1871. These do not invalidate any of the general conclusions hitherto arrived at, but care has been, and will be, taken to keep the returns for the succeeding years in conformity with those now corrected for 1871. It is proposed, in the interval between the present and the next meeting of the Council, to prepare, on the lines of the summary for the year 1871, a review of the statistical results of the several years of the entire quinquennium, and also a comparison between those of the first and the fifth year. This will complete the task of the committee, so far as it has been at present planned; for it will be at once understood that, if the inquiry were now pursued into the ensuing quinquennium, sufficient time would not have been allowed to develop the ultimate stages in the destiny of the students registered in those years respectively; and, what is of more moment, the defect in question would affect the later years in gradually increasing ratios. The committee will, however, be prepared, on presenting their next report, to make, for future investigations, such suggestions as may then seem to be desirable. In conclusion, the committee are glad to learn from the Registrar that the 250 copies printed of their first report have nearly all been distributed (or sold), a fact which attests the general interest taken in the inquiry which has been entrusted to them.

"June 3rd, 1886." "JOHN MARSHALL.

Dr. STRUTHERS moved: "That it is desirable that the Council should have information, so far as possible, as to the standard of attainment required in the several subjects included in the various preliminary examinations recognised by the Council as qualifying for admission to the Medical Students' Register—as by the inspection of the examination-papers and of a selection of the answers of candidates; and that it be delegated to the Executive Committee to make the necessary arrangements for carrying out this resolution."

The motion found no seconder, and the Council then adjourned.

MONDAY, JUNE 7TH.

SIR HENRY ACLAND, PRESIDENT, IN THE CHAIR.

Mr. MARSHALL brought up an *interim* report of the Visitation of Examinations Committee. It referred only to some of the more important questions raised by the visitations, a full analysis being deferred to the next meeting of the Council.

The Council resolved itself into Committee, in order to take the report into consideration.

Dr. CHAMBERS said the Visitors, in order to determine on the general efficiency of an examination, merely took one sample, and he had heard it said on good authority that in many cases the sample was not a fair one. It was an important argument that the number of those graduates who afterwards became men of mark was evidence of the thorough efficiency or otherwise of the examination. There could be no question in an educational body like the Council as to who were men of mark. The term would include the teachers at the various medical schools, those who were cited as authorities, those who had received honours from the State for their services to science, and the members of the Medical Council. He had made out from the Medical Register and the Medical Directory a list of the men of mark, and divided them according to the universities from which they came. The percentage of men of mark among the graduates of all the universities was 5·2, while among the general body of practitioners the percentage was 3. The universities differed greatly among themselves, varying from 1·1 per cent. to 32·4 per cent., which was the percentage of the University of Oxford. The most industrious and intelligent pupils would always choose the examination where there was the least element of chance.

Dr. DUNCAN said he thought the Council had nothing to do with the universities except so far as they were licensing bodies. Their only concern was whether the university examinations were sufficient to test a man's sufficiency to be entered on the Register.

Dr. STRUTHERS said he was not in a position to discuss the report, which had only just been placed in the hands of the Council.

Sir DYCE DUCKWORTH hoped that the representatives of all the universities would express their views on the subject in order to assist the Council in the consideration of the report.

Dr. CHAMBERS said a reference had been made by the Visitors to the fact that at the Oxford examination a classical paper had been set—a translation from Hippocrates and some Latin author. That, he thought, was not really necessary, the candidates having been previously examined in Latin and Greek; but it was a survival from past times, and would probably soon disappear, as would also, he hoped, the custom of requiring candidates to write prescriptions in full instead of by contractions.

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Dr. HERON WATSON asked if Dr. Chambers had directed his attention to the remarks of the Visitors with reference to the Oxford surgical examination.

Dr. CHAMBERS said that a surgical examination had only been recently introduced at Oxford, and they had not fully got into working order. They thought they had better begin by having an examination sufficient to meet the requirements of the Medical Act, but it certainly was not yet sufficient for a university degree in surgery. There was some difficulty at the University in getting an adequate knowledge of midwifery, the examiners not being allowed, by the bye-laws, to take the testimonials of other bodies.

Mr. MACNAMARA said the Visitors had been given to understand that it was under the consideration of the University authorities to pass a statute to establish a higher degree in surgery, for which there would be a special examination.

Mr. TEALE said the Oxford degree was originally only a medical one. When he was appointed surgical examiner there, in deference to the wish of the Medical Council that every person going on the Register should be examined in medicine, surgery, and midwifery, he considered it his duty to examine only in that part of surgery which was in contact with medicine. When the Council recommended that no examination should put anyone on the Register who had not been completely examined on the three subjects, the University was to a certain extent in a period of transition, which had not ceased, and it had been determined not only to fully examine in surgery, but to have more than one surgical examiner, and to give a degree in surgery, so that the criticisms of the Visitors, as far as they pointed to improvements, were answered by the fact that these alterations were about to be made. It so happened that at the last examination all the candidates were members of the College of Surgeons, and the University authorities had seriously mooted the point whether they should not require all their graduates to pass the conjoint examination of the Colleges of Physicians and Surgeons. He was personally strongly impressed with the necessity of economising the examining powers. Why could not the mere routine matters be taken for granted? Why could not the University, for instance, take the midwifery and surgery at the hands of another board?

Dr. DUNCAN.—Why not take everything at the hands of everybody else?

Mr. SIMON said the general sense of the medical profession as to the necessity of not having lopsided qualifications had been operative at the universities as well as at other places.

Dr. HUMPHRY said he had very few remarks to make with reference to the Cambridge examinations. The Visitors had remarked upon the absence of any examination in clinical surgery for the M.B. degree, and on the insufficiency of the study of midwifery. Since the report of the Visitors the University authorities had decided that in future clinical surgery should form a subject in the examination for the M.B. degree, and that the professor of surgery should be one of the examiners for that degree; also that the attendance on twenty (instead of ten) midwifery cases should henceforth be required.

Mr. MACNAMARA said there was no obligation on the part of the Bachelor of Medicine to pass on to the examination for the degree of Bachelor of Surgery, and the first of those examinations was not in itself sufficiently exhaustive, surgery being a minimum quantity.

Dr. HUMPHRY said that the greater number of the candidates did not pass on to the degree of Bachelor of Surgery, but he hoped that, as surgery became more and more developed, a larger number would do so.

Dr. HERON WATSON referred to the remark of the Visitors in regard to the hesitation of the Cambridge authorities to sanction examinations in midwifery and gynæcology, and to the reply of the University: "The Board think it impracticable, if only out of consideration to the female patients, to require the candidates to make gynæcological examinations in the presence of the examiners." He was thankful to find such a reluctance on the part of the authorities to sanction such a proposal.

Dr. HUMPHRY, in reply to a question by Dr. Struthers, said that the Cambridge University did not require that its graduates should obtain all their instruction at the University, but it required residence for a given period.

Dr. PYLE said he had no remarks to make with regard to the Durham examinations, the report of the Visitors having been of so favourable a character.

Sir DYCE DUCKWORTH said he thought that the Durham examination of fifteen-year practitioners was the least satisfactory part of the examination.

Dr. HERON WATSON thought that the examinations alluded to by Sir Dyce Duckworth, being for a higher qualification, did not come within the scope of the Visitors' functions. He should be glad if the letter of instruction to the Visitors could be laid before the Council.

Mr. MACNAMARA said Dr. Watson's contention would seem to be that if a gentleman had his name on the Medical Register no notice should be taken of his seeking an additional qualification. Clearly the Council were entitled to know under what conditions the higher qualifications were conferred, and under the directions they received from the President the Visitors were bound to inquire into the examinations for degrees, no matter how old the candidates were.

Dr. HERON WATSON said if the Council intended to visit all the examinations for so-called higher qualifications, it would be necessary in future to send to the examinations for fellowship of the College of Surgeons and membership of the College of Physicians. That would be a serious matter to contemplate, especially now that they knew the cost of the last visitations.

Mr. MACNAMARA said that the Council was entitled to know on what terms every qualification was given which entitled a man to be on the Register. At the College of Surgeons in Ireland not only was a fellowship given by examination, but a fee was charged for it, and the Council was bound to see that they were not entirely influenced by their pocket in granting a higher qualification.

Mr. SIMON said the Council was entitled to inquire into all examinations, but the question was whether, on a special occasion, the Visitors were requested to examine into certain matters.

The PRESIDENT, on behalf of the Council, expressed their thanks to the Visitors for the courtesy, kindness, and cheerfulness with which they undertook the work.

Mr. MARSHALL said the committee had, in their report, called attention to the fact that some of the Visitors had exceeded their instructions.

The letter of instruction having been read,

Dr. STRUTHERS said that the School of Medicine of the Durham University was at Newcastle, and it did not appear necessary for the students to reside at Durham. His own idea of university education was founded on residence as a primary condition.

Dr. QUAIN said that the students might reside in Durham and yet attend the school in Newcastle, the journey only occupying twenty minutes. After all, the great thing to trust to was a thoroughly good examination.

Dr. A. SMITH thought that Mr. Macnamara was fully entitled to visit the examinations for higher qualifications.

Dr. HERON WATSON called attention to the remark of the Visitors of the Durham examinations: "In our opinion, the power of stopping a candidate after his written examination, on the adjudication of his case by the whole court of examiners, is both wise and advisable." A consideration of that question, he thought, was most desirable.

Dr. QUAIN (in the absence of Sir Wm. Gull) said he had but few remarks to make on the visitation of the examinations of the University of London. One criticism of the Visitors was that the examiner was not present to criticise the mode in which the candidate conducted his clinical examination. The rule was, and he thought it was a good one, that the candidate should be left to make an independent examination, and to furnish a report on the diagnosis and the proposed treatment. He had no one at his elbow to harass and disturb him. It was further said that insufficient time was given in certain cases, and that the answers were mere guesses. That, he thought, was an idle piece of criticism, the cases being perfectly plain and obvious. The Senate had, however, accepted the suggestion of the Visitors that there should be a more complete examination in surgery for the M.B. degree.

Mr. MACNAMARA said that with regard to the points mentioned by Dr. Quain the Visitors were of opinion that their remarks were justified. They were especially struck with the entire want of supervision on the part of the examiners, and also with the absence of curricula, which they regarded as a great defect. Further, there was no *viva voce* clinical examination in clinical medicine; nor was the candidate asked the grounds on which he had arrived at his diagnosis; nor was there any test in regard to the use of instruments and appliances.

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Mr. TEALE said that the great variety of methods in which clinical examinations were carried out would form the basis of a very important report, and a subject for careful consideration by the Council at some future time. The selection of cases for examination was a very serious matter. It was, therefore, very important that some common decision should be arrived at as to the general lines on which clinical examinations in surgery and medicine should be conducted.

Dr. QUAIN said that, though the candidates were left to themselves when conducting clinical examinations, personal supervision was exercised, as the examiners usually went round the wards three times each half-hour. The oral examination was based on the clinical as well as on the written examinations. Mr. Macnamara had said that the examination in surgery was insufficient, but the reply was that all who passed at the last examination would have passed at the College of Surgeons, and that statement was signed by Sir James Paget and two Fellows of the College of Surgeons, who surely knew more about it than the three strangers who visited there.

Dr. HERON WATSON.—What opportunity had Sir James Paget of knowing what was done?

Dr. QUAIN said he had the papers before him and questioned the examiners. Five years' medical study was required, but it was left optional to the students to find out where they could get the best lectures. They must, however, attend lectures on six subjects, and that system was preferred to any dogmas laid down by those who had an interest in the fees paid for lectures. No doubt it was to be regretted that the men were backward in Latin; but he believed that not 50 per cent. of the students who obtained qualifications could write a decent prescription in Latin. Still, a man might be a very good doctor without being a proficient in Latin.

Mr. SIMON said the London University had been looked up to as a superfine one, and the men who went there for the medical qualification must have previously matriculated there.

Dr. HUMPHRY was extremely surprised to find that there was no *vivâ voce* clinical examination in medicine. He was certain no man could pass the College of Surgeons unless he were able to pass a clinical examination on patients.

Mr. MACNAMARA said that it was impossible to examine clinically and in a thorough manner thirty-six candidates in three hours. The Visitors were forced to the conclusion that the surgical part of the examination was insufficient as a test of fitness for practice. There was no clinical examination whatever in surgery. To put a man in the first class who was reported as "decidedly weak" in surgery was, to say the least, open to animadversion; whilst to give a registrable qualification to a candidate pronounced by competent authority "bad" in surgery must be highly objectionable.

Dr. QUAIN asked Dr. Humphry how long it was since surgery was first required for a degree of M.B. at Cambridge.

Dr. HUMPHRY said it had been a special subject of examination for ten or more years.

Dr. QUAIN reminded the Council that they were not sitting to judge of the competency of the examiners. The question was what were the results of the examinations, and were those who passed them qualified to practise.

Sir DYCE DUCKWORTH said the examiners themselves confessed to a blot having been hit by the Visitors, and allowed that oral examination might, within reasonable limits, be increased with advantage. He himself attached much importance to *vivâ voce* examination at the bedside, and clinical investigation was very much assisted by the examiner supervising the candidate at the bedside.

Dr. QUAIN said it had been freely admitted that oral examination might be extended, and that more surgery might be included in the M.B.; but was it worth £370 to secure that, for that was the sum it cost?

Dr. STRUTHERS said it was worth £300 to find the University of London out. (Laughter). They had all been told to look up to the University of London as a model institution. Some of them, however, had taken the liberty of saying that it was not a university at all, but only an examining board.

Dr. QUAIN.—That is what it was intended for.

Dr. STRUTHERS.—A university means a teaching place. People coming from abroad sometimes ask who is the professor of anatomy at the University of London, and they have to be told "no one."

Dr. QUAIN.—You are one of the professors of anatomy in the University of London, for we examine your pupils.

Dr. STRUTHERS said he did not mean to contend that it was not useful to have one institution on the footing of the University of London to meet cases of hardship, but there ought not to be more than one. The examinations, however, in such an institution should be thorough. For himself, he would not undertake to give an opinion with reference to a candidate unless he had him a long time under examination, or had him before as his teacher. Large sums of money were given to the university to pay its examiners handsomely in order that they might do their work thoroughly, and it was believed that the examination was as perfect as it could be. When, however, he read the report of the committee, he was amazed at some portions of it. He wished to call attention to the reference in the report to the subject of compensation, simply premising that it was one of the recommendations of the Council that deficiency in one department could not be compensated by excellence in another. The Visitors stated, with reference to the University of London, that the principle of compensation was in some cases freely admitted, as in the case of a candidate who was marked in medicine as "very doubtful," who had received nothing in his *vivâ voce* examination, and whose mark in obstetrics was "doubtful," but who passed in the first division. Another candidate whose medicine was "rather doubtful," and surgery "bad," passed in the second division; and a third candidate whose obstetrics was marked "reject," passed in the first division. With reference to the clinical examination, the Visitors reported that they were "unsatisfactory as a reliable test of practical capacity, and quite inferior to similar examinations elsewhere." After making certain recommendations they added—"This could not be done save at considerable expenditure of time, trouble, and money, but until it is done the Visitors are of opinion that it is impossible to look upon these examinations as thoroughly satisfactory." With regard to the oral examination the Visitors were of opinion that it would be better to have more prominence and value given to it. The longer he lived the more he valued oral examination; indeed, he considered it of twice as much value as the written examination. He would undertake to get more out of a man as to his knowledge of anatomy in twenty minutes than could be obtained by three or four hours working at a paper. He supposed that the explanation was that the time of gentlemen living in London was particularly valuable, so that they were not able to devote so much of it to the work as was done in the north. The Visitors also reported that there was no clinical examination in surgery for the M.B. degree. He could not believe in any examination in surgery that had nothing clinical in it. The University authorities, however, stated that their surgical examination for the M.B. degree related to "surgery on the medical side," an expression which he confessed he could not understand. In Scotland they never had a Bachelor of Medicine examination without a surgical examination in connexion with it.

Dr. QUAIN asked how long that had been the case.

Dr. STRUTHERS said that he himself was examined by Syme and Miller.

Dr. QUAIN.—As a general practitioner.

Dr. STRUTHERS said that Dr. Quain had been the head and front of the conjoint boards that had been endeavoured to be thrust upon them and that were to heal all the sores of England, and Scotchmen had been represented as standing in the way of progress. Another point upon which the Visitors had reported was that there was no *vivâ voce* interrogation or test in regard to manual dexterity as to bandages, splints, &c., which was certainly a great deficiency. The subject of midwifery was also commented upon, and the Visitors stated: "It may be noticed that all that the University requires in the matter of obstetric examination is evidence of having conducted at least twenty labours. This does not involve hospital attendance or clinical instruction, inasmuch as certificates are received from any legally qualified practitioner of medicine, nor is it compulsory for a candidate to have attended a course of lectures on obstetrics or gynæcology." Speaking of the midwifery examinations, the Visitor said: "These examinations gave me a fair opportunity of judging of the average quality of the candidates, and in this I must say I was much disappointed." He also stated that the examinations were not more than of average severity. The general inference was that the examination in midwifery was weak, and that the average was not good. Scotch universities had been visited and criticised from London; and now the turn of the London University had come, and

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with what a result! As to the statement of the authorities about the evil effects of compulsory attendance at lectures, that was merely platitudinal. It was painful that such a university should not come up to the average of the despised corporations. They had hitherto looked up to the University on the principle of "*Omne ignotum pro magnifico.*" It was now discredited in the house of its friends, and was not regarded, even in London, as a satisfactory institution.

Dr. QUAIN.—Why?

Dr. STRUTHERS.—I leave the London schools to reply to that question.

Dr. QUAIN said he would appeal to Dr. Duncan to reply to the strictures of Dr. Struthers on the subject of midwifery and obstetrics. He had been an examiner at the University for four years, and if he had had anything to correct or suggest his advice would have been followed. The great complaint made of the University was that its examination was too strict, and the students said if it were not reduced they would have to go to Scotland to pass. They had tried to found a university in London that would give degrees more easily than the present one. It was the old story of the battle of the shops. The Visitors had found fault with nothing that did not admit of a satisfactory answer, except with regard to two points, as to which the Senate was ready to follow their recommendation. The reports consisted mainly of opinions; but he would appeal to facts. It appeared from the statement of Dr. Chambers that there were more men of mark going from the London University than from Scotland. It was also the fact that many students went to Scotland in order to get their degrees more easily. The London University had the best examiners in the world, and it was a matter of regret that they were obliged to reject so many candidates. Happily the University was only an examining body. In Scotland the teacher actually examined his own pupils and gave them a licence to practise. What confidence could be placed in a system like that? He considered it a great scandal.

Dr. WATSON moved the adjournment of the debate.

The PRESIDENT, before putting the motion for adjournment, said he had noticed with great satisfaction the good-humoured and frank criticism on both sides. The Council had deliberately resolved that the different divisions should report on each other. That course had been adopted, not with the slightest wish that fault should be found unreasonably, but with the desire of bringing to bear on the subject the experience of the three divisions. He hoped that that spirit would prevail during the remainder of the discussion.

The debate was then adjourned.

TUESDAY, JUNE 8TH.

SIR HENRY ACLAND, PRESIDENT, IN THE CHAIR.

The PRESIDENT desired to call attention to the position of the Medical Bill. It was impossible to say what its fate might be, but under any circumstances the important educational work of the Council, on which it was at present engaged, would not be interfered with. He presumed it would be the desire of the members to meet again in the autumn. By that time the mass of information before the Council would be still further increased, and there would be ample work to be undertaken.

The Council having resolved itself into committee for the further consideration of the report by the Visitors of the final examinations of the University of London,

The PRESIDENT said they all regretted very much the absence of Sir William Gull through illness, and especially so in view of the discussion that had taken place with reference to the University of London, of which Sir William Gull was the representative at that Council. He had visited Sir William on the previous evening, and during their conversation he made a short statement, not directly relevant to what had taken place at the Council, but extremely relevant to the whole educational question, to the relation of the universities and corporations generally, and especially of the University of London, to the corporations of London. Sir William said he would much like to see the universities so associated with the practical bodies in London as one of the great clinical centres, that those who passed the matriculation examinations and the preliminary scientific examination, specially arranged for the purpose, should, with the co-operation of the Colleges of Physicians and Surgeons, obtain their degree. This would help to associate the professional education with the higher general scientific education of the country, and he hoped and expected that by such fusion and co-operation they might raise both the scientific and practical mind of the whole of the profession. He referred especially to the University of London, separated, as was so often said, from the general wants of the profession. On this account it would certainly be hereafter suggested to the University of London to make some such proposals to the Colleges of Physicians and Surgeons as might seem to be a real help to promote scientific and practical education and examination throughout the country. The President added that he understood Sir Wm. Gull to make those remarks because he was well aware that the visitors had found much fault with the system of clinical examination, and in consequence had been carefully considering in what way the practical and scientific systems could be best combined.

Dr. WATSON, in resuming the debate on the visitation of examinations, said he had always thought that the University of London was a most perfect institution, but that idea had been dispelled by the report of the Visitors. It was nothing more than an examining board, and had not so real an existence as the College of Physicians or the College of Surgeons. He wished to emphasise the criticisms of other speakers, and to refer to one point to which they had not alluded in connexion with the arrangements for conferring the Bachelorship of Medicine. It would be seen that the student might go up for examination without having attended a course of lectures on descriptive and surgical anatomy, or any course upon surgery and medicine. It was remarkable that the regulations of the University should be so lax as not to ensure the requisite attendance upon lectures on subjects that were absolutely essential to the practitioner.

Mr. MACNAMARA, in replying to the remarks of Dr. Quain that the reports of the Visitors contained nothing but opinions, called attention to the statements of fact in the reports with reference to compensation, and challenged Dr. Quain to contradict them. He also referred to the statement of the Visitors that the examiners were not responsible for the shortcomings pointed out, which were simply the outcome of the university regulations, the duties of the examiners being discharged in a most conscientious manner. It was for the Senate to ponder on the report, and see if it could not improve its arrangements. The purely scientific examinations were fully up to the mark, but the important thing was to secure a good sound professional education. The present contest was not so much a battle of shops as a contest between lecturers and authors. Dr. Quain had written a big book, and no doubt thought that everything was to be found in it.

Dr. QUAIN.—I have not had a farthing of profit from it.

Mr. MACNAMARA.—But £200,000 worth of reputation.

Mr. MARSHALL asked whether it was the case that the Senate of the London University contemplated introducing clinical examinations in surgery.

Dr. QUAIN said it was a suggestion of the Medical Council, and he had no doubt it would be adopted.

Mr. SIMON drew attention to the statement in the report that a candidate was passed and classed in the first division whose mark in obstetrics was "reject," as being in contravention of the recommendation of the Council that knowledge in one subject should not be allowed to compensate for ignorance in another, and also as being an apparent breach of the regulations of the University itself, which said that candidates should not be approved by the examiners unless they had shown a competent knowledge in all the subjects of examination. With reference to compulsory attendance at lectures, his sympathies were with the London University. No doubt lectures were useful, but he doubted the wisdom of enforcing compulsory attendance.

Dr. DUNCAN said the Council had of late years been dominated by the spirit of the University of London to a very prejudicial degree, and he was very glad to see a great change in the direction of the efforts of the Council. That medical education could be carried on without lectures he entirely disbelieved, and in spite of the *doctrinaire* remarks of Dr. Quain and Mr. Simon he would defy them to produce a single man who had passed the London examination who had not been educated by lectures. They had been told that there was no such desire in London for lectures as there was in Scotland, but that was because the appetite had not been stimulated by satisfaction. He was quite sure that if good lectures were given students would attend them diligently, the best men being the most regular in their attendance. Speaking as an examiner of considerable experience, it seemed to him that the representations in the

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Visitors' reports showed that there must have been a great change since he had fulfilled that office. It used to be the case that a student who was rejected in midwifery was rejected altogether. He asked whether that system had been changed in the University of London.

Dr. QUAIN said it had not been changed.

Dr. DUNCAN said he had never heard of anything like "compensation" when he was an examiner. Compensation was the result, and the necessary result, of the arrangement of students in classes. There was a very grave fault in this respect in the management of the University of London, where the necessary result of this bad system was this, that in a year of bad men a bad man got easily into the first class; whereas in a year of good men a good man was put down into the second class. This arose from their taking the ten or a dozen students who had attained the highest marks and making them into a first class, no matter whether their percentage of marks was high or low as compared with the total possible number.

Dr. QUAIN defended the University of London from the strictures passed upon it, and appealed to the improvement which had taken place in medical education since its establishment as a proof of the beneficial influence that it had exerted. It was the first body to establish the degree of Bachelor in Surgery.

Dr. HAUGHTON said that it had been established in Dublin ages ago.

Dr. QUAIN said that the University of London gave its first Surgical Scholarship in 1866. After referring in detail to some of the criticisms of the Visitors, he said that the best test of the efficiency of the University of London was to be found in actual results. There was no higher class of men than the Fellows of the College of Physicians of London. He had gone through the list to see how many had come from the different universities, and the numbers were — London 70, Cambridge 30, Edinburgh 28, St. Andrews 24, Oxford 22, Aberdeen 11, Dublin 6, Glasgow 5, Durham 1, foreign (mixed) 17. The following eminent surgeons, holding appointments in London, belonged to the London University—Mr. Rivington, Mr. Marcus Beck, Mr. J. Rickman Godlee, Mr. Pearce Gould, Mr. Howse, Mr. Pepper, Mr. Lane, Mr. Stanley Boyd, Mr. Victor Horsley, and Mr. Clement Lucas. Baronetcies had been conferred upon several distinguished members of the London University. Indeed, no institution had sent out a more distinguished body of men.

Dr. HAUGHTON admired Dr. Quain's defence of the London University, and the more so as the University was certainly in the wrong. The state of the law, however, was to blame, and when that was changed all the universities and bodies would be compelled to apply a severe practical test in medicine, surgery, and midwifery before registration.

Report on the University of Edinburgh.

Dr. STRUTHERS said the Visitors had spoken of the University and of its examinations in the very highest terms, but in one sentence in the body of the report they said that the surgical appliances used in anatomy were behind the times and rather old-fashioned. That was a mistake on the part of the Visitors, and the University, in their reply, had given a complete answer to that statement, and had shown that they had ample surgical splints and other appliances, and of the most modern kind.

Dr. QUAIN pointed out, as bearing upon the subject which the Council had just been considering, that three of the most distinguished professors of the University of Edinburgh—Professor Crum Brown, Professor Greenfield, and Professor Turner—were found in the ranks of the University of London.

Dr. HERON WATSON pointed out that the report opened up a wide question—namely, the principle which existed in the Scotch universities of the teachers examining their own pupils. This had always appeared to him to be a serious blot. However complete and satisfactory the system might be in other respects, and however absolutely careful the professor might be to avoid being swayed by any personal feeling, he was sure that this must exercise an injurious influence on the minds of the students, because it practically compelled them to attend the courses of lectures given by their teachers in order that, with a view to the examination, they might become acquainted with their peculiar methods and ideas. If the teacher were present he should certainly take no active part in the examination of [illegible]

[illegible] phatically been brought before the Council, and hoped that it would insist that no examiner should be the examiner of the students in the subjects in which he taught. He suggested that the Council should refuse to register any qualification granted where the students had been so examined.

Dr. PETTIGREW thought that, if examiners were appointed to examine apart from the teachers, the teaching would be injuriously affected. The teacher would be "cribb'd, cabin'd, and confin'd" in his endeavours to satisfy the examiner. The number of examinations was too great, and the tendency was to increase them. The plan of having an equal number of professorial and non-professorial examiners was, he thought, the best way of meeting the difficulties of the case.

Sir DYCE DUCKWORTH, giving his experience as an examiner for five years in the University of Edinburgh, stated that he considered the work was there carried out in the most satisfactory manner. The examinations were carried out by an independent examiner in conjunction with a professor. He believed that to be the best examination system for medical students—to have the professor alongside of another independent examiner, and both of them to examine each candidate. He believed in the supreme value of the candidate coming before the man who had taught him his subject, and in an independent examiner being present to witness the examinations; the system was found to work most admirably; but in order that it might be thoroughly fair the extra examiner should never under any conditions become the creature of the professor. He must be a perfectly independent man, to whom consideration should always be shown and to whom the professor must defer. In his own experience he never had any occasion to make any remonstrance in any matter that was not immediately deferred to. He pointed out what was now becoming a most serious question—viz., that Edinburgh was now drawing so many students from all parts of the world within her walls that she was slowly asphyxiating and choking herself. The crowds were so enormous that the difficulties of teaching and examination were becoming stupendous, because of the utter impossibility of finding clinical material, medical, surgical, or obstetrical, properly to educate these enormous masses of intelligent students.

Dr. DUNCAN thought that a great deal of the success at Edinburgh depended on the excellence of its teaching. There was no doubt a want of clinical material, but the obstetrical material was abundant. The theoretical teaching of midwifery was perfect. The students were required to pass through the Maternity Hospital, where the cases were managed in a manner approaching perfection. It was a great advantage to all concerned for the teacher to have a great share in the examination, but the independence of the assessor was not always sufficiently assured. The practice of using the uterine sound in the examination, referred to by the Visitors, he could not approve. There was nothing to show that the same woman might not be subjected to the same operation by a succession of students.

Mr. TEALE expressed his concurrence in the remarks of Dr. Duncan in regard to the use of the speculum.

Dr. HALDANE thought that non-professorial examiners should be elected by totally independent bodies. They were sometimes younger than the professors, and many of them had been assistants to the professors, and therefore unduly deferred to them. A professor, when examining, could often tell whether a particular candidate had attended his class, and might be influenced by the consideration. That had great effect upon the students. He thought that all the fees should go into one fund, out of which the professors should be paid a fixed salary.

Dr. PETTIGREW had never as a non-professorial examiner experienced any difficulty. He agreed, however, with Dr. Haldane, that it would be better that such examiners should be appointed by an independent body.

Dr. STRUTHERS, in reply, said he would not care to be a teacher unless he was also one of the examiners. The professors were examiners in the great German universities and the other universities of the continent. The object of a university was to try to get the best man in professorship, and that man of course must be an examiner. They could not keep up the style and tone of the teaching if it were not so. He should be most happy to see examinerships additional to the professors, appointed by an outside authority, and thought that if the Crown or the Medical Council should appoint such examiners it would be an improvement [illegible] these system that could be devised [illegible]

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being one of the examiners with an outside examiner, one man who knew the student well and was his teacher, and another man who knew nothing about him. That was the ideal that he had long fought for, and which was very well worked out in the Scotch universities at present. If he was to be a mere grinder for another man's examination he would not care to teach—he would rather be in a shop.

Mr. MACNAMARA called attention to the statement of the Visitors at Edinburgh that the competency of the candidate in practical surgery was not sufficiently tested, the student not being asked to do the simplest operation on the dead subject. That, he thought, was a grave defect in an examination for M.B. in a large and leading university like that of Edinburgh. It also appeared that there was no living body present on which the student could, when required, compress one of the large arteries. There was only one living patient who was brought in for a student to apply a splint in a case of fracture of the lower jaw. The student could not do it, but his mark was *satis*. Another point mentioned was the absence of any ophthalmoscope or laryngoscope.

Dr. STRUTHERS explained that the Visitors were only present at the examination of eleven candidates out of 230. The fact was that the live model was waiting in an adjoining room, and was used in one of the very few cases which the inspectors saw. He contended that it was the teaching, after all, that was of importance, and no student came up for examination who had not carefully dissected a whole body under his (Dr. Struthers') eye. As to the laryngoscope or the ophthalmoscope, the use of these things was systematically taught in their schools, and there was abundant opportunity for becoming acquainted with their use.

Mr. SIMON took exception to the idea that all that a university had to do was to teach. If so, then let the University decline to examine, and that would entirely meet the view of some of the members of the Council.

Dr. MC VAIL said that the custom of making teachers examiners was, in Glasgow, greatly hindering the utilisation of the material available there.

Dr. HERON WATSON reminded Mr. Macnamara that a report had some years ago been prepared with reference to the supply of dead bodies, but under the circumstances it was not thought desirable to make it public. That might, perhaps, explain the absence of examinations on the dead subject at some of the universities.

Dr. PETTIGREW, referring to the report of the Visitors to Glasgow, said he had no remarks to make upon it, the authorities there being satisfied with the answers they had already given.

Dr. STRUTHERS said, having gone through the report very carefully, it was impossible not to see that the way in which the examinations were conducted was an admirable one. He had read no report with greater satisfaction.

Mr. MACNAMARA, as one of the Visitors, spoke of the admirable way in which the examinations were conducted. As Visitor in surgery he could affirm that nothing could have been better than the manner in which the examinations in that branch were carried out. One part that was somewhat open to criticism was that the student's examination should be proceeded with long after it was clearly proved that he could not pass. The examiners themselves did not approve of this course, but they were helpless in the matter. The result, of course, was a great waste of time.

Dr. PETTIGREW thought that if a student failed in obstetrics, but passed well in the other subjects, he should be permitted to come up again in obstetrics. He hoped that the Committee on the Visitation of Schools would formulate some scheme by which examiners and students might be saved the necessity of again going over subjects that had been already sufficiently well passed.

Dr. BANKS said that in the University of Dublin, if a man passed well in other subjects, but failed in one, he was put back, but not re-examined upon the subjects upon which he answered well. It was a very hard thing for a man who answered well in clinical medicine and surgery, and who might fail upon some less important subject, to have to keep up his knowledge of minute anatomy, and be re-examined upon it at the end of another six or twelve months.

Mr. TEALE thought that the Council would have to face the question of reducing the labour of the examination to candidates, and avoid the waste of examining power.

Dr. HERON WATSON said he had always supported the principle of allowing students to take their examinations as they chose. If the *imprimatur* of the Council were given to that principle, they would probably find the examining boards throughout the kingdom willing to accept it, and to come to such a mode of arrangement as to secure its being carried out with an economy of time.

Dr. HAUGHTON said he thought that a candidate might be allowed to take the larger subjects of medicine, surgery, and midwifery one by one, but that it should not apply to the smaller subjects.

Mr. MARSHALL said that at the joint examination of the Colleges of Physicians and Surgeons a candidate could choose any two out of the three subjects in which to be examined.

The debate was again adjourned.

WEDNESDAY, JUNE 9TH.

At the meeting on the 9th inst. the President informed the Council of the intention of Government to pass, if possible, the Medical Bill before the session closed. The Council then resolved itself into Committee to consider the reports by the Visitors of the final examinations. The discussion on the Glasgow examinations was resumed, after which the report on the University of Aberdeen was considered, the healthy tone of which school and of the examinations in connexion with it being earnestly testified to by Dr. Struthers. Dr. Pettigrew afterwards referred to the visitation of St. Andrews, and pointed out certain statements of the Visitors which he thought were not in accordance with facts. After some remarks from Dr. Chambers, Dr. Duncan, and Mr. Macnamara, the Council adjourned.

THURSDAY, JUNE 10TH.

This afternoon the Council considered the reports by the Visitors of the final examinations of the University of Dublin and the Royal University in Ireland. During the interval for tea, Dr. Haughton and Mr. Macnamara, on behalf of the Royal College of Surgeons in Ireland, presented Mr. Marshall with the Honorary Fellowship of that College in recognition of his valuable contributions to surgical science.

A PENAL CLAUSE TO THE MEDICAL BILL.

To the Editor of THE LANCET.

SIR,—Allow me to thank those numerous gentlemen who so kindly responded to my appeal in support of the penal clause in the Medical Amendment Act. I shall be glad if you will allow me a little space to show the present position of the matter. Sir Lyon Playfair's Bill has passed into the Committee stage, and, so far as the Bill itself is concerned, may be considered as past. This Bill deals chiefly with educational matters. Sir Lyon Playfair says that the reason the Titles Penal Clause was not inserted arose from the fact that no representation in the matter was made to him by any of the heads of universities, colleges, &c. We must hope that this grave omission on their part was purely an oversight. This omission it was intended to supply by Mr. Morgan Howard's Bill, which effectually deals with this clause, though somewhat differently worded, and also with another matter—keeping dispensaries by unqualified persons, &c. But unfortunately this Bill is pertinaciously blocked by Mr. Bradlaugh, and independent M.P.'s inform me that there is no possible chance of its passing. Further parliamentary law prohibits a new clause being moved if another Bill before the House deals with the same subject. Hence the clause brought before the profession cannot be moved for in Committee. If, however, those in charge of the second Bill will consult with Sir L. Playfair and consent to withdraw their Bill and move the insertion of the Titles Penal Clause only, there is no reason to doubt it will be carried. All the M.P.'s whom I have consulted readily admit the reasonableness of the clause and will vote for its admission, and as the Bill is now in Committee stage and cannot be blocked, a little pressure will effect what is so urgently needed. This seems to me to be the only way out of the difficulty, and I earnestly trust in the interests of the profession at large that it may be adopted, otherwise we must appeal to the House of Lords.

I am, Sir, yours truly,

Liverpool, June 7th, 1886. ARTHUR WIGLESWORTH.

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THE LANCET.

LONDON: SATURDAY, JUNE 12, 1886.

THE approaching election of councillors at the Royal College of Surgeons brings us once more face to face with the important subjects at issue as between the Council and the body corporate. We sincerely hope that Fellows, when voting, will bear in mind what these issues are, their great importance to the well-being of the College and its constituents, and the desirability of voting only for those candidates whose views are known and whose status and strength of character are such as will ensure the carrying out, *after* election, of professions made before.

Our readers are already familiar with the views we hold concerning the present constitution of the Council, and with the great need, as we think, of some radical changes, such as will place the College in more direct *rapport* with the Fellows and Members at large. Among the most desirable changes is that of voting by papers instead of by personal attendance. This, though tardily conceded by the Council, is still in abeyance, and Fellows who wish to vote will have to travel to London in order to do so. For a large number of provincial Fellows this is simply a prohibitory requirement, and they are thus deprived of about the only privilege which is practically open to them. A seat on the Council is of course possible, but can hardly be attained until life is well advanced, and then even only by a very few. At the present time there are three provincial Fellows on the Council, one of whom retires, but will present himself for re-election. There will also be at least one other provincial candidate in the person of a surgeon who has already sought the suffrages of the Fellows on a former occasion. If both these gentlemen should be elected, there will be four provincial Fellows out of a total Council of twenty-four. The principal argument used against the presence of many provincial Fellows on the Council is the impossibility of their taking an adequate share in the work. It must, however, be allowed that the present as well as the former provincial representatives have discharged their duties regularly and punctually. On the other hand, would it not be well for the Council proper to occupy themselves with the larger questions of College policy, and call in for the sub-committees (museum, library, general purposes, auditors, &c., of which the President and Vice-Presidents are *ex officio* members) the assistance of Fellows outside the Council? This would meet many of the difficulties which the acceptance of office imposes on the provincial councillors, and, by utilising the brains of a large number of Fellows in the conduct of College matters, would secure better results than at present. Moreover, it would be a little training for the higher office, and bring out, for the benefit of electors, the aptitudes of those who profess themselves anxious to serve the College.

Of great moment are the questions of granting corporate rights to the Members, and their direct representation in or on the Council. As to the propriety of granting the right to vote to all Members of the College of a certain standing there can be no reasonable doubt. We feel very strongly that, instead of lowering the status of the Fellowship or the Council, or the reputation of the College, its realisation would be a source of strength and advantage in every way. Then, as to the direct representation of the Members on the Council. Shall Members act, or be represented by Fellows chosen by themselves? The former plan will certainly recommend itself to the Members at large, and leave them greater latitude. With the proviso that Members must have twenty years' standing to qualify them for office, the question may well be left optional with them. Experience will soon prove which is the better plan, and which one best realises the object for which direct representation of the general practitioner on the Council is regarded as desirable. The radical changes concerning the granting of the diploma, which the Council have recently initiated in conjunction with the College of Physicians, but without the slightest reference to the Fellows and Members, raise the question how far it is desirable to give the Council such unlimited and autocratic power. The fact that these changes are on the whole wise and good in no way affects the question as one of general policy, but rather emphasises it. Finally, the granting a degree of Doctor to London medical students cannot much longer be delayed; in justice to the men, and not less so to the English schools of medicine, some slight modification of the present curriculum for the double diploma ought to secure this *desideratum*. Elsewhere the title of Doctor is obtainable by an average student after an average examination; in London alone this is not possible.

The settlement of these and many other pending questions can only be obtained by the election of broad-minded councillors, possessing, over and above their surgical qualification, business habits and the moral courage of their opinions. In going over the list of candidates, Fellows will do well to ask themselves which of them, irrespective of school and of personal considerations, are most likely and able to promote the settlement of the issues at stake in the most satisfactory manner, and in the only way which will find acceptance among the constituents of the College, and to vote accordingly. How far have the candidates committed themselves to an expression of the views they hold on these matters, and how far can they be relied upon to carry out after election to the Council the professions made before election? We trust the time is not far distant when candidates for the Council will be expected to give public expression to their views on all current College politics, as do candidates for the House of Commons. We see nothing derogatory to the dignity even of a Fellow of the College in being asked for an exposition of his views, and in being called up occasionally to meet his constituents and render some account of the stewardship they have entrusted to him.

Two very important resolutions have been carried by the Medical Council; and if we could believe that the Council had the determination necessary to carry out the resolutions to their legitimate results, we should be disposed to think that for once it had done something to justify its existence. Let us indulge in the pleasant hope that the Council will show an unwonted thoroughness in its work. It is not enough to spend the best part of a day in

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passing even good resolutions. The only consequence of this is the expenditure of £100 or more over members' fees. What is wanted is effective investigation into the work which it is the main function of the Council to supervise. The resolutions referred to are as follows:—

"I. That in the opinion of the Council it is highly important to visit and report upon the methods of teaching required by the licensing bodies. II. That visitors be appointed by the General Medical Council to visit the several medical schools (with their permission) in each division of the kingdom, and to report upon their methods of teaching the subjects required by the licensing bodies, and upon the appliances possessed by them for such purpose."

It is not unimportant to notice that both resolutions were moved by Professor HAUGHTON. The first was seconded by Dr. MATTHEWS DUNCAN, the second by Dr. HERON WATSON. He would be a bold man who would venture to challenge the grammatical accuracy of anything proceeding from Dr. HAUGHTON, but we may question the practicability of "visiting the methods of teaching," which, by the first resolution, seems to be contemplated. The plain work to which the Council seems to be committed by the above resolutions is the visitation of the medical schools with a view to reporting on their efficiency as schools—that is to say, their mode of teaching, their plant, their apparatus, the proportion between the number of their pupils and their staff of teachers. It is probable that if this work is well done we shall have matter of much interest to the profession and to students. Nothing has been more obvious in all discussions of medical education, whether in the Medical Council or in Parliament, than the absence of any expression of interest in the state of the schools. The interest of the student is entirely lost sight of in the solicitude for the state of the Bodies. He may have no straw, but the tale of bricks must be delivered. The process of "ploughing" is come to be regarded as almost the normal thing in some Bodies, and the whole discredit is summarily heaped upon the unfortunate student. We have often tried to excite pity, or at least consideration, for him, but so far without much success. The Medical Council now proposes to examine the schools. Of course some members—over-cautious as to the functions of the Council, or fearful of the effect of criticism on their own schools—have endeavoured to shirk this obvious duty of the Council, or to show that it should devolve on the examining bodies. Fortunately they were in a minority, and we may hope that the Council of Medical Education will really acquaint itself with the state of the schools, and let us know how many of them have the appliances, the methods, and the teachers necessary to prepare students for the examining bodies.

Next in importance to a resolution to visit and report on the schools was the consideration by the Council of the reports of Visitors of examinations held in 1885. The examinations were those of all the universities, ten in number. The cost of this work was £2256 9*s.* 4*d.* The cost for each individual university was as follows:—Oxford, £163 16*s.*; Cambridge, £145 19*s.*; Durham, £124 19*s.*; London, £370 1*s.*; Edinburgh, £241 10*s.*; Glasgow, £285 12*s.*; Aberdeen, £137 11*s.*; St. Andrews, £168 3*s.*; Dublin University, £200 11*s.*; Royal University of Ireland, £252. Whether universities are higher bodies than corporations, or whether their examinations are higher or not, may be a question, though it certainly ought not to be a question. But it is noticeable that the cost of visiting the examinations of universities is just about double that of visiting the examinations of corporations. Roughly, the visitation of a corporation in 1881 and 1882 cost £100; that of a university in 1885 cost £200. The Visitors in the case of the universities were Dr. BALFOUR, Professor RAWDON MACNAMARA, Dr. LEISHMAN, Dr. FINNEY, Dr. BUCHANAN, Dr. KIDD, Dr. BRISTOWE, Mr. HOLDEN, and Dr. BARNES. Our readers will be interested in the reports of the discussion in the Council on the main points of these reports, so far as they have been threshed out by it. We confess to great disappointment in regard to the scope of the visit to the examinations of the universities, and we think the profession will have the same feeling. In the first place, the Visitors were limited to visiting the *final* examinations. In the second place, the Medical Council desired them to ascertain that "the courses of study and of examinations are such as to secure the possession by persons obtaining qualifications of the requisite knowledge and skill for the efficient practice of their profession." Surely nine less distinguished men would have sufficed to ascertain if the university examinations were sufficient as tests of mere competence for practice; and surely such men might have been asked to say whether the examinations were really higher—as the titles they carry are higher—than the final examinations of corporations. It is unfortunate for the universities that they are content with a mere certificate of being good *pass* bodies, and that the committee of the Council appointed to consider these reports finds them "decidedly favourable," because they show that the requirements of the universities are such as to secure an *adequate* knowledge for the practice of the profession, as if this were the object of a university degree. One of the liveliest afternoons in the session of the Council was that of Monday, when the critics of the London University were severe in their comments. It will be well for the friends and admirers of each university to study the discussion by the Council of the reports on the examinations of all the universities, and to draw their own conclusions.

ON Thursday, the 3rd inst., Dr. ALFRED CARPENTER delivered an address to the Croydon Farmers' Club, which was important for the nation as well as the district. It is well known that the sewage of Croydon flows by gravitation to the two sewage farms of Beddington and Norwood. The Beddington farm of 600 acres disposes of the sewage of 66,000 persons; it has been in operation for more than twenty years; it has never given rise to any nuisance or any disease in the neighbourhood; the land has risen from £1 to £9 per acre in value, and is still as capable of doing its work as it was when it was first used. This is a most important tribute to the value of sewage irrigation, and proves that the oft-repeated statement that land soon gets "sick" of sewage is, at any rate, not universally true. The whole address was full of matter for thought, and should be reprinted as one of the most valuable of the recent contributions to the solution of the hardest of sanitary problems.

Some years ago we reported on the two Croydon farms,

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and we gather from the above address that they have undergone no important alteration since that time. There is a great natural fall to help the irrigation, and the sewage can easily be carried to the growing crop of rye-grass before putrefaction has advanced. This Dr. CARPENTER claims as a great advantage, as he has satisfied himself by experiments that rye-grass is almost carnivorous in its power of assimilating crude sewage. We are inclined to agree in this view, although the evidence adduced is scarcely conclusive. The sewage flows, or did flow at the time of our inspection, over the soil, and not through it, the system being correctly described as surface, as distinguished from downward, filtration. It is wonderful how effective, when properly managed, such filtration is in removing organic matter from sewage, and the long-continued success of the Croydon experiment seems to indicate that it is in some cases, if not in all, the best mode of working. The soil in the Norwood farm is stiff clay, and would be ill adapted for under-drainage, whereas, even in wet weather, a satisfactory effluent can be obtained from the surface.

Dr. CARPENTER insists with great sense on the necessity of making the sewage irrigation intermittent. There is no doubt that the occasional failure of what is certainly, when practicable, the best method of sewage disposal has often been due to the neglect of this precaution. Even Italian rye-grass, which, as the Rugby Commission long ago proved, is the only crop suited for the continuous assimilation of sewage, requires some time for the digestion of its food; and it is above all desirable that a week or more should elapse between the last application of sewage and the cutting of the grass. The economical disposal of the crops is a distinct and almost equally important question. The grass should be cut frequently before flowering; and the suggestion that a stock and dairy farm should be associated with the sewage farm is well worthy of consideration; it would probably pay in a good many places.

Altogether it would seem that at Croydon sewage farming has been a distinct success, which is certainly good news for the community. But, unfortunately, it is not every town that is as favourably situated as Croydon. London itself is the most remarkable example. Dr. CARPENTER argues with reason that the sewage should be applied to the soil before important putrefactive change has taken place. The nitrogen of the sewage, derived mainly from urine, is its most valuable constituent, and the researches of Dr. ANGUS SMITH have shown how easily this nitrogen may be returned in the free state to the air. But when it is urged that the sewage of London should be utilised in sewage irrigation, it is necessary to remember that the London sewage must necessarily travel a great way before it can reach the soil. Finally, when the throwing of the sewage into the sea is stigmatised as a ridiculous waste, the arguments of Sir J. B. LAWES as to the cultivation of the fish supply must not be left out of consideration. According to that distinguished authority, the sea-harvest derived from the discharge of sewage into an estuary may sometimes be more valuable than any possible land-harvest.

A BILL which bears the names of Drs. CAMERON and FARQUHARSON, of Sir GUYER HUNTER and Sir HENRY ROSCOE, is deserving of much consideration, but we are compelled to doubt if that which they have brought in for the improvement of dwelling-houses will be permitted to pass into law. The Bill proposes an advance in sanitary legislation much beyond its present position. Existing law does not give power to local authorities to inspect every house within their district, even if they are minded to undertake this duty. They can only claim rights of entry into houses already occupied where there is reasonable ground for believing that a nuisance exists upon the premises. There is no right on their part to inspect a house presumably in proper sanitary condition. But the Bill which is now introduced not only requires that every house shall be inspected, but imposes the expense incurred by such inspection upon the owner. Now every house not suspected of being in an insanitary condition is assumed to be in proper order. The Bill would reverse this position, so that every house not shown by professional certificate to be in proper sanitary condition would be deemed to be unfit for human habitation. We have no hesitation in saying that the passing of such measure would effect a very distinct gain in health in all districts for which it would become law, but the cost would be considerable, and could not be held to be final. Even assuming that a reasonably high standard of excellence were insisted upon by the surveyors upon whom the duty of examining and certifying were to devolve, it is obvious that the certificates which would be granted would not be of value for all time. Houses constructed with faulty foundations and indifferent material would within a short period have lapsed into defective condition, and the possession of a certificate for such structures would then be dangerously misleading unless it were of recent date. An examination of houses, to be of real value, must be periodic; and even then the value of the certificate as a guarantee of healthy conditions would depend largely upon the conscientiousness of the certifier and the method he adopted to test the drainage. A very different degree of excellence would be considered requisite by one surveyor to entitle a house to a certificate from that which would be required by another, and the provision which would enable so large a variety of persons to grant such certificates would lead, we are afraid, to the intentions of the supporters of the Bill being disappointed. Assuming for one moment that the house-owning interest in the Legislature could be induced to sanction a measure which would make considerable demands upon their resources, it would be very desirable that the duty of inspecting and certifying should devolve only upon those who might be trusted to insist upon a reasonably high standard of proficiency. We are afraid that among the great variety of professional men enumerated in the Bill there would be many who would not recognise as essential conditions which the educated health officer knows to have material effect upon the health of the inmates of a house. That such knowledge is wanting is especially shown in the metropolis, where it may be said that the construction of house drainage is fully a quarter of a century behind that of some other English towns. We believe there are few, if any, district authorities which insist upon the ventilation of house drainage; and, further, we think there are few, if any, such authorities that make the least reliable effort

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to test the drainage after it has been laid and before the defects are hidden from sight. We have recently pointed out the full powers possessed by local authorities to insist upon the drainage of new houses being constructed in the form, and with the materials and workmanship, which they may require; yet apparatus is daily introduced into houses, and methods adopted, which offend against the most elementary laws of proper drain construction. The effects of passing such a Bill as that proposed would be considerable if a higher standard could be adopted than that recognised by local authorities as satisfactory; but some attempt at uniformity must be made in respect of this standard, and we must admit we see grave difficulties in the way of leaving this in the hands of every surveyor. On the other side, it must be recollected that the incompetency of local authorities has been amply shown, and it may not unfairly be argued that little good would come of the measure if it were left entirely for them to administer. We cannot now expect the Bill to come before Parliament this session, but we presume it will be introduced at a later date, when we hope the health requirements of the country will have a better chance of consideration.

Annotations.

"Ne quid nimis."

CANDIDATES FOR THE COUNCIL OF THE COLLEGE OF SURGEONS.

FOR the four vacancies there are eight candidates. Mr. Lund and Mr. Berkeley Hill are offering themselves for re-election. The other two vacancies are those caused by the death of Mr. Cooper Forster and the retirement of Mr. Allingham. There are, exclusive of the two gentlemen who seek re-election, six candidates, arranged in their order of seniority as follows:—Mr. Sibley (Fellowship 1857, Membership 1852), Mr. Couper (F. 1861, M. 1859), Mr. Willett (F. 1862, M. 1859), Mr. Rouse (F. 1863, M. 1851), Mr. Brudenell Carter (F. 1864, M. 1851), Mr. Reginald Harrison (F. 1866, M. 1859). Mr. Sibley's election, as representative of general practice, would be a decided gain to the Council. Moreover, as a business man there are few better Fellows on the College roll. The election of Mr. Couper would secure a sound Radical, and one in whose hands all questions of College reform would be quite safe. Mr. Willett, hailing from the largest of the metropolitan schools, where he is very popular, is sure of a good share of votes; while the active part he has taken in the proceedings of the Association of Fellows, and his well-known sympathy with the efforts which are now being made to secure certain reforms at the College, ought to secure for him the unanimous vote of that body. Mr. Rouse has not, in our judgment, any special claims on the electorate. Mr. Harrison must not feel disappointed if he prove unsuccessful in the presence of Mr. Couper and Mr. Willett, his seniors by some few years, especially while personal voting is still *de rigueur*.

SCIENTIFIC TEACHING AT THE MEDICAL SCHOOLS.

A NEW departure in the arrangements for the teaching of science in the medical schools has recently taken place by the transfer of those students who require a preliminary scientific course for the University of London from some of the London medical schools—viz., Charing-cross, Middlesex, St. George's, and Westminster—to the Normal School of Science at South Kensington. These schools will thus be relieved from the necessity of providing teachers in biology, physics, and advanced chemistry; and as botany is no longer insisted on as a compulsory course by the Conjoint Examining Board, these schools will now be almost entirely clinical, and not hampered with the task of having to provide an expensive scientific education for a very small class of students. The number of candidates at the University of London coming from these schools has always been small, and yet the machinery for a complete scientific training had to be found by each of them. We think that the school authorities are to be congratulated on this first step towards the consolidation of such teaching in London. It does not in the slightest degree interfere with the freedom of the other medical schools, and as the fees at South Kensington are not lower than those charged in the Faculties of Science at University and King's Colleges, it cannot be said to have introduced an unfair competition. A good course of scientific work under a single set of teachers has been substituted for what, we think, must often have been very unsatisfactory lectures and demonstrations at schools whose function and destination should be purely clinical.

THE MICROBES OF PNEUMONIA.

THE subject of acute pneumonia is one of those which of late has excited a considerable amount of attention, and yet, common as the disease is, it is one which is surrounded by many unsolved problems. Professor Weichselbaum has recently contributed to the Vienna Medical Society a paper, in which, after stating the prevalent opinions upon the nature of the affection, and dwelling especially upon the different opinions held by Friedländer on the one hand and Fränkel on the other as to the precise characters and properties of the supposed bacterial agent, he relates his own experiences. He points out that clinicians are divided into two camps upon the etiological question, some regarding pneumonia as solely an infective disorder, others considering that the infective forms are different from those caused by exposure to cold. Weichselbaum, distinguishing between primary and secondary forms, divides them into: (1) lobar; (2) disseminated; (3) passive pneumonia—hypostatic &c.,—and (4) lobular. He has examined 127 cases and instituted eighty-seven cultivation experiments, the material for the cultures being obtained one or two hours after death, as well as from the living subject, by means of a Pravaz syringe introduced into the lung and pleura. He distinguishes four kinds of micro-organisms. The diplococcus pneumoniæ is the most common, consisting of oval, elliptical, and round cocci, which occur in chains as well as in pairs. The chains are composed of from six to eight or as many as twenty to thirty cocci, are straight or slightly curved, and the cocci are enveloped in a capsule of varying thickness in proportion to their vitality. The second variety resembles the first, but distinguished by a greater uniformity in spherical shape, and in forming long and sinuous chains. The third is known as the Staphylococcus aureus s. albus. The fourth he terms the bacillus pneumoniæ, consisting of rods of different lengths, the smallest and apparently youngest being oval. They have a capsule, and correspond to Friedländer's pneumococcus. The first variety was found in ninety-one cases, mostly of croupous pneumonia, also in the secondary forms. The second, or streptococcus, was found twenty times—namely, in fifteen cases of primary and five of secondary pneumonia. The staphylococcus only occurred in secondary cases, and mostly where the primary disease was due to this micro-organism. The fourth kind was met with nine times, four times unmixed with other forms. All these organisms were most abundant in the earlier stages of the disease, being scanty or absent in grey hepatisation, and, if present, staining badly or unencapsuled. At the margins of the

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pneumonic focus in the œdematous tissue micrococci were numerous, pointing to the œdema being not a passive process but a precursory stage of pneumonic infiltration, and resembling the invasion of cutaneous tissue in erysipelas. Moreover, inflammatory changes accompanied by these micro-organisms were found in the respiratory tract above the lungs. Secondary meningitis in pneumonia was shown to be due to the presence of the same micro-organisms, which were also found in the serous exudations of pleurisy and pericarditis, which might complicate the lung affection. The bacterial origin of the disease was therefore held to be demonstrated.

WHAT IS PRECOCITY?

THE question whether precocity is or is not a sign of disease ought to be prefaced by the inquiry, What is precocity? If we may venture to suggest an answer to this last query, it would be that precocity is really nothing more than early perhaps premature, use of the higher cerebral centres, particularly those which have for their function the more active processes of ideation, and therefore generally stand in near relation to the avenues of communication with the outer world—namely, the senses. In short, precocity nearly always shows itself in one or other of the arts, much less often the sciences. Even if the higher intellectual, and in a sense inner, centres are early energised, the excitation may be traced through channels which originate in the senses. For example, the calculating boy is a being gifted with a specially acute perception of sight or sound-phantoms, more commonly the former, which are so clearly apparent to his consciousness that he works out sums mentally with the ease of an expert using slate and pencil, and adds, subtracts, multiplies, &c., with the mechanical expertness of a bank clerk. In like manner the expert with sound-phantoms may compose music or make verses. There is, indeed, no reason why the higher centres should not be brought into play at any age after the completion of the first—or is it the second?—developmental period, somewhere about two years after birth. Of course there cannot be an instant packing of the brain with records of observation or experience, but there may be almost instant brain-work of the manipulative sort—if we may so call it—after independent life has commenced. This is the point to recognise.

THE ORIGIN OF MOUNTAINEERING.

SEA-BATHING, as we have already shown, owes its origin to an English physician; and no less true is it that another autumnal recreation—Alpine climbing—originated with a Swiss one. Classical antiquity lent no countenance to either practice. It is, indeed, a striking fact, noticed by M. Gaston Boissier in his "Promenades Archéologiques," that of all the Roman generals, many of them highly gifted, not one who crossed the Alps brought back any other impression than those of repulsion and horror from the passes, and snowfields, and peaks, "pinnacled dim in the intense inane," which attract modern tourists by the thousand. The sentiment of the sublime and beautiful in nature, thinks M. Boissier, arose in France with the "Confessions" of Jean Jacques Rousseau; but not to mention our English poet Gray, whose Alcaic ode on the 'Grande Chartreuse" is as un-Latin in inspiration as it is exquisitely Latin in rhythm and idiom, Milton and Addison on their classical tours have recorded impressions of the lovely and the grand in scenery unequalled by any of M. Boissier's compatriots. But before either of these, the palm of appreciation of the sublime and beautiful in nature rests with Conrad Gessner, the physician and scholar of Zurich, whose treatise "De Admiratione Montium," published in his twenty-sixth year, may be regarded as the embodiment of the Alpine tourist's creed. "So long as God keeps me alive," he says, "I am resolved to ascend one or more mountains every year at that season when the floral world is in full bloom, partly to extend my botanical studies, partly to invigorate my body and give my mind the noblest recreation. What pleasure, what ecstasy does it not yield the soul to gaze upon the giant mountain-masses and to turn one's eyes in wonder to the clouds! I know not how it is that one is rapt by the survey of soaring peaks and riveted in marvel at their Master Builder. Man was sent into the world to develop his admiration, to infer therefrom the existence of something greater, and so to rise to the conception of God Himself." Again, he asks, "Can there be within the bounds of Nature a more honourable, in all respects a more perfect kind of enjoyment?" For Conrad Gessner's mountaineering was of no vulgar kind. While denied the comforts and appliances of his latter-day successors, he was not content with merely clambering up to great altitudes. Many-sided *savant* as he was (the German Pliny was a title given him), he made these excursions subservient to science, particularly to botany; and it is to his familiarity with the mountaineers and their occupations that we owe his famous treatise, "De Lacte et Operibus Lactariis" ("On Milk and the Milk Industry"), published in 1541. The first, and to this day the best, narrative of an Alpine ascent is his "Descriptio Montis Fracti" ("Description of the Fracmünd," as Mont Pilate was then called). Nothing can be more picturesque than his account of the adventures he shared with his four *compagnons de voyage*: Huber, the physician of Lucerne; Boutin, the apothecary of Avignon; the sculptor, Petrus Figulus; and the painter, Johannes Thomas, the splendid illustrator of his botanical works. The energy that carried him over so many obstacles, physical and intellectual, wore itself out from sheer lack of rest, for when struck down at forty-nine by the plague, and feeling the approach of death, he rose from his couch, not to arrange his family concerns, but to put certain of his writings in such order that they might be ready for the printer, and thereby for the benefit of mankind. It was when so employed that he suddenly passed away, to the heavy loss of science, and of medical science in particular. His three books of "Epistles on Medicine," and his treatise on the "Mineral Waters of Germany and Switzerland," were but the earnest of what might have been achieved by his maturer life; while, such as they are, they were greatly in advance of the professional knowledge of their time, and amply merit for their author the niche he occupies in the gallery of medical worthies.

NITRO-GLYCERINE IN BRIGHT'S DISEASE.

THE employment of nitro-glycerine in chronic renal disease, for the valuable service it renders in dispelling or moderating uræmic symptoms, is based upon the fact that high arterial tension is the constant concomitant of uræmia. How far it is desirable to habitually employ a remedy having so pronounced an action upon the circulation as nitro-glycerine is yet undetermined; but experience of its value in the diseases which are marked by abnormal arterial tension is accumulating. The latest contribution is by Dr. Kinnicutt of New York (*Med. Record*, April 17th, 1886), who has studied the effects of the drug in several cases, with results which harmonise with those obtained by Rossbach and Burzbinski, to which allusion is made. The continued employment of the drug in slightly increasing quantity does not only relieve headache, dyspnœa, palpitation, and other symptoms referable to the uræmic state, but is marked by an increase in the diurnal excretion of urine, together with a notable diminution in the amount of albumen in it. Cases are given where the albumen was estimated quantitatively, and they show that in some the drug has a marked effect in its reduction. At the same time, as one case shows, there is often great variability in the albuminuria of chronic

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nephritis, which renders it important that similar observations should be made on a large scale before trustworthy conclusions can be arrived at. The amount of nitroglycerine administered should be just within the limit of producing any subjective symptoms. Dr. Kinnicutt's conclusions may be given in his own words. "1. That in nitroglycerine, given in small doses and frequently repeated, we possess a powerful agent for lowering the increased blood-pressure which is very constantly associated with the development of uræmic symptoms. 2. That it has the power to control or relieve many of the paroxysmal disturbances of the nervous system which are included under the general term of uræmia; of these, headache and asthma are especially benefited by its use, the relief being more marked and continuous than that obtainable either by opium or chloral. 3. That its influence upon the daily excretion of urine and serum-albumen in parenchymatous and interstitial nephritis is apparently to increase the former and diminish the latter. 4. That in the systematic and prolonged use of nitro-glycerine in appropriate doses, in chronic nephritis, we possess a means of maintaining more or less continuously a lowered blood-pressure, of often averting or relieving critical conditions, and thereby prolonging life."

NOTES ON THE PARIS SANITARY EXHIBITION.

THE Paris Exhibition of Hygiene is now quite completed, and attracts a fair number of visitors. Nearly every day there are popular lectures, and members of the Society of Public Medicine and Professional Hygiene are constantly on the spot, ready to accompany small parties of visitors and give them the explanations necessary to render the exhibits intelligible to the uninitiated. The details concerning house drainage are what the French most require to know. The importance of the subject is not appreciated; but, as a first step in the right direction, French manufacturers have come to thoroughly understand the advantage of imitating English closets. Messrs. Rogier Mothes, who won the silver medal at the English Health Exhibition for their French closets, have now a number of closets on the English model which fulfil all the prescribed sanitary conditions. Messrs. Doulton and Co., on the other hand, imitate the French by providing a closet without a seat, which is best adapted for use in the poor quarters of foreign towns. The sides and flooring are all in strong enamelled hardware, which affords the best security for cleanliness. Some French closets have walls and floors of glass, and automatic flush tanks that cleanse not only the pan but the walls and floor. This is most advantageous in districts where the cleanliness of the inhabitants is not to be relied upon. The principle of a two-gallon flush is now fully accepted, though it will be difficult to persuade French householders to employ so much water for such a purpose. Where cesspools are used this is of course quite impossible, and there are not more than eighty houses in Paris that drain direct into the sewer. The tinnette filtre, however, by allowing the liquids to escape to the sewer, admits the introduction of an English closet, and these are applied to many of the better-class and newer houses. The principle of automatic flush tanks, both for house drains and public sewers, is also widely adopted. Large apparatus of this description are shown by the French as well as the English exhibitors. M. Aimond, notably, has a flush tank discharging at its lowest level, and therefore none of the force is lost by the necessity of drawing the water up and over a syphon placed below the reservoir. In sanitary engineering, Messrs. Genest and Herscher hold the first place. They display a disinfecting stove, where the best results are attained by the combined action of heat and steam under pressure. The highly scientific experiments which demonstrate the efficiency of this method will supply the subject of a separate study, and, for the moment, we can only call attention to what seems to be one of the safest disinfecting stoves constructed. The same firm have also an ingenious method for purifying cattle vans. A small boiler on wheels, which can be drawn along the platform of a railway station, supplies a hose enveloped in asbestos with superheated steam. This can be discharged against the sides of the cattle van, thus destroying all germs by damp heat. The ventilation and warming of houses, the diffusion of light within apartments, the methods for analysing air or filtering water, the culture of microbes, the attenuation of virus, and health statistics are all questions embraced in the general scope of the Exhibition. These and many other problems can be studied at the Caserne Lebau, where, we trust, the exhibitors will meet with ample reward at the hands of an appreciative public.

TUBERCLE BACILLI IN ADDISON'S DISEASE.

IT has long been held by some writers that the fibro-caseous change which characterises the suprarenal bodies in Addison's disease is of tubercular nature, and the histological characters upon which this opinion rests have been strengthened by the detection of the bacillus tuberculosis in the morbid material. For this observation pathology is indebted to Herr Goldenblum, of Dorpat, in a well-marked case of the disease which he examined in 1884. The subject was a man twenty-four years of age; there was well-marked bronzing of the skin and mucous membranes, caseation of both suprarenals, general wasting, pulmonary emphysema cloudy swelling of the heart fibres, liver, and kidneys, and swelling of the intestinal solitary glands and the portal lymphatic glands. At Professor Thoma's suggestion the diseased capsules were examined by Ehrlich's method, and large quantities of tubercle bacilli found in the caseous masses (Virchow's *Archiv*, Bd. 104, s. 393). Although Guttmann in 1885, and Rauschenbach in the present year, have reported cases of suprarenal bacillary tuberculosis, yet in neither case were symptoms of Addison's disease prominent, and both these cases must yield priority to Goldenblum's. He remarks that on the bacillary test his case goes to prove that in Addison's disease, in which the capsules are the only organs that exhibit caseation, the lesion must be regarded as a local tuberculosis, unless it can be proved that the occurrence of the bacilli is a secondary event.

INSANITARY VENICE.

WITH rather more than her proper share of the unhealthy conditions that seem inseparable from Mediterranean seaports, Venice has refrained from sanitary reform until three years of epidemic disease, with its consequent scaring off of visitors and of the advantages they bring, has aroused her to a sense of duty. Instead of reassuring proclamations by prefects or protests of injured hotel-keepers, it is edifying to read such a letter as that which Signor C. Castellani addresses to the Italian Government through the columns of the *Venezia*. "We must frankly confront the fact," he says in effect, "that Venice invites epidemic disease, and that Italy must interpose to save her most picturesque city from ruin. We must subject to the most vigilant surveillance the water-supply, the drainage, the canals, the dwellings of the poor, the food markets, the hospital service, the subsoil, the lagoons, the streets, the whole *ensemble* of Venetian life. Cleanliness, public and private, must be the order of the day, and until it is practically observed our economic kitchens and free dormitories do little more than parley with the enemy instead of expelling it. Money, however, is wanted, and the Italian nation must do for Venice what she has done on so grand a scale for Naples and other cities.

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The Government which obtained from Parliament so many millions for Neapolitan rehabilitation, could it not spare a few for Venice, which has hitherto asked nothing? What Italian city has stronger claims on the national benevolence than the "pearl of the Adriatic"? Like her sisters of the seaboard, in fact, Venice is now the scene of something like an explosion of cholera, and having ignored the admonitions given her to stamp out the malady during its early insidious stage, she is making tardy amends for past remissness by an impassioned appeal for help from without. The Home Office, whom she now solicits for aid, warned her last winter to put no trust in quarantine, but to attack the disease when hibernating, so to speak, within her gates, and tread it out before its dimensions became unmanageable. Of course, the aid will be forthcoming, while the outlay it will exact from an already overtaxed country may prove a real economy if it disabuses Italy, once for all, of her faith in sanitary cordons, and converts her to the practice of sound hygiene, public and private.

HOSPITAL SUNDAY FUND AND THE THEATRES.

A *matinée* in aid of the Mansion House Hospital Sunday Fund will be given at the Gaiety Theatre on Wednesday, June 16th, under the patronage of the Lord Mayor and Sheriffs, who will be present on the occasion. The play to be represented is an adaptation of Sardou's "Vieux Garçons," entitled "Old Sinners," by Mr. J. Mortimer. It would be a graceful act on the part of London managers generally, if, at a time when a special effort is being made on behalf of the Fund, they would follow this excellent example, and each one of them devote the proceeds of a special "Hospital *Matinée*" to a form of charity which has relieved, and will continue to relieve, many members of their remarkably generous and charitable profession. Mrs. Langtry has also recently set a good example in a similar direction, and we are sure that managers will not be slow to take this hint.

THE ORIGIN OF THE BLOOD FROM A MEDICO-LEGAL POINT OF VIEW.

DR. MASSON, Pharmacien-Major in the French Army, has recently published an essay on the Origin of the Blood from a Medico-Legal Point of View. The difficulties attending this class of research are very great, and Dr. Masson has in his little work endeavoured to so far remove them that the expert may always be ready with a definite reply as to whether a blood stain was produced by the blood of a man or of an animal. After giving the different modes of procedure to ascertain this fact, the author states that the great cause of the alteration of fresh blood-corpuscles resides in the dampness of the medium or vehicle in which they are contained, the effect of which is to prevent the evaporation of the water of the plasma. In dried blood the corpuscle resists for a much longer time the causes of alteration; no liquid can regenerate the altered corpuscles. In the mensuration of the corpuscles by the microscope an approximation of one-fifth of a micro-millimetre may be obtained, but in reality a variation of this infinitesimal quantity does not admit of any differentiation. Moreover, in consequence of the great variability of the corpuscular dimensions in the same species in a physiological state (Hayem), and particularly in a pathological state (Kelsch found them augmented in volume in impaludism and Malassez in chlorosis; according to this last author the dimensions are reduced in cancer), a great number of mensurations must be made and an average struck. The following conclusions are arrived at after a course of experiments on dried blood operated upon with Virchow's solution:—The mean diameter of the hæmatics being superior to the $\frac{1}{130}$th part of a millimetre, the blood may belong to a man, a guinea-pig, a dog, or a rabbit; below the $\frac{1}{130}$th part of a millimetre the blood does not very probably belong to a man, but to one of the animals which, after him and the guinea-pig, possess the greatest number of corpuscles; below the $\frac{1}{130}$th part of a millimetre the blood does not certainly belong to a man.

THE VALUE OF SANITARY PROGRESS IN LIVERPOOL.

IN his annual report on the City of Liverpool Dr. Stopford Taylor gives some interesting information bearing on the gradual improvements which are there being effected in securing an improvement of the public health. We have recently adverted to some of these in connexion with the report of the city engineer on the sewers; and it is not less important to note the steps that are being taken to get rid of the bad house-property, which has for so long a time been one of the greatest evils which the Corporation have had to contend with. The "insanitary property" purchased in 1885 included 411 houses, and during the same period 631 houses were demolished. This may be taken as a type of the work which is steadily in progress; and Dr. Stopford Taylor points to the results of these and other labours by showing that whereas the average death-rate for the city was in the ten years 1841-50 as high as 36 per 1000, it has almost uniformly diminished during each subsequent period, until it now stands at 23·7 per 1000. He then goes on to point out that the application of the sanitary sciences to the improvement of public health is necessarily a work of an aggressive character, and hence, though its development is certain, yet the securing of its full advantages is a slow process. The aggressive action is also fully justified by the results obtained. Thus if during 1885 the same death-rate had prevailed as was in existence during the decennium 1851-60, the lives of no less than 3917 persons who were living at the end of last year would have been sacrificed. And, assuming that there are ten cases of sickness for each death, there was a saving of 39,170 cases of disease, with all the attendant cost of nursing, medical attendance, &c. And not only so, but every life has its value so far as the State is concerned. Taking a series of observations on the wages of the agricultural labourer, and making the necessary deductions for the mean value of his subsistence during the various periods of his life, the mean net value of life in that class at all ages and in both sexes is not less than £110 per individual; whereas amongst the population of all grades the value would amount to a net profit of £159 per head. Now, applying this estimate, which is that determined by the late Dr. Farr, to the 3917 persons whose lives were saved in Liverpool in 1885, there is a monetary saving of £622,803. And when to this is added the saving in the cost of sickness, funerals, loss of work, and increased pauperism, Dr. Stopford Taylor has the right to assume that there is enough to encourage the labours of the department over which he presides, and to inspire them with a hope of obtaining still greater benefits in the future.

BREAKING THE FACTORY ACT AT THE EAST-END.

ANOTHER meeting has been held at the East-end to protest against the "sweating system." Again a number of journeyman tailors came forward to testify that in their own workshops boys and girls, as well as adult males, were sometimes kept at work for sixteen and even seventeen hours a day. The victims of this system are too weak and too helpless to resist such oppression. Many of them even ignore that the law would protect them if it could only be set in motion. As this grievance continues we are compelled to repeat over and over again that the number of inspectors appointed to carry out the Factory Act is altogether insufficient. Mr.

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Lakeman has accomplished his duty as inspector of factories in the East-end with much zeal and energy. Consequently he is thoroughly well known. There is a regular system of signalling established by which the "sweaters" are warned the moment the inspector approaches. They then have time to hide the young girls they employ in those parts of the house where the inspector has no legal right to claim admission. To cope with the evil a body of detectives is necessary. To rob a young helpless girl of her health by compelling her to work in an unwholesome overcrowded room for sixteen hours should be treated as any other criminal offence, and the full powers of the police engaged in its suppression. Short of this, one of the best means of defeating the stratagems employed by the "sweaters" would be to condemn the miserable tumble-down private houses where the worst of the "sweating work" is done. Public workshops, like public washhouses, should be organised. These could be properly ventilated, drained, controlled, and let out, like stalls in a market, to the jobbing tailors who at present work in their private and most unsuitable dwellings. Is it not possible to condemn rooms in private houses which have been converted into the workshops known as "sweaters' dens"? With the heat of summer approaching, and cholera still prevalent in Europe, this question is a matter that should not be neglected.

HOT BATHS, HOT PACKS, AND PILOCARPINE COMPARED.

DR. ZELENETSKI of St. Petersburg, in order to examine the comparative effects of hot baths, pilocarpine, and hot wet-sheet packing on nephritis, treated the same patients on different days by means of each of these methods, observing the effects on the temperature, pulse, &c. Fifty-seven observations were made on seven patients, who were as nearly as possible under identical conditions. Twenty-three baths, eighteen hypodermic injections of pilocarpine, and fifteen hot packs were given. The hot baths produced the greatest loss of weight, averaging 801 grammes, and the packing the least, averaging 94 grammes, pilocarpine producing effects of an intermediate character. Here the mean loss of weight was 514 grammes—306 by perspiration, and 208 by salivation. The temperature rose considerably after the baths, and even at the end of three hours was always above normal. The packing caused it to fall at first; but after an hour it rose, and returned to its original height within three hours. With pilocarpine it was reduced for two hours, and then rose to normal. The pulse corresponded to the temperature with the baths, but became slower with both packs and pilocarpine. The patients expressed themselves as feeling the most improvement after the baths; the pilocarpine causing complications, such as headache and nausea, and in one case vomiting and collapse.

REFORMS IN SPANISH MEDICAL STUDY.

SOME much-needed reforms are in contemplation by the Ministry of the Interior regarding the regulations affecting medical study in Spanish universities. Though no addition will be made to the duration of study, the course for the licence will be better arranged, so that preliminary subjects will be necessarily studied during the earlier portion of the student career—e.g., Histology, which at present is considered an advanced subject, is to be divided into Normal Histology for first-year's men, and Pathological Histology for third-year's men. Besides this, elementary clinical study will be included in Pathology, and a new subject—viz., the Diseases of Children—will be added. The Doctorate will consist of three subjects—the History of Medical Sciences, Chemical Analysis, and Public Hygiene, including the geographical and historical study of Epidemics. Probably also a voluntary additional subject will be permitted to be offered, such as Dermatology or Ophthalmology. Perhaps however, the most important reform of all is the arrangement for allowing students to take out hospital practice in provincial hospitals whose medical officers are willing to conform to certain regulations. It is to be hoped that, as *El Siglo Médico* says, there will now be an end of the sad spectacle so often seen of "wards empty of patients but full of students," and that the future practitioners of Spain will be better and more practically educated than those who have been hitherto sent forth to practise, many of them after a most inadequate clinical training.

PERMANGANATE OF POTASH IN AMENORRHŒA.

A RECENT number of the *Therapeutic Gazette* contains an able article on the value of permanganate of potash in the treatment of amenorrhœa. It appears that Dr. Fordyce Barker had long been incredulous as to the power of any article known to materia medica to act as a direct emmenagogue. He, in common with other physicians, has had ample experience of the use of iron, aloes, myrrh, savine, and rue, and had seen menstruation return apparently as a consequence of their administration, but he had never been convinced that this result was due to the direct influence of the drug on the uterus. For four years, however, he had used the permanganate of potassium exclusively when an emmenagogue was indicated, except in a limited class of cases of sudden suppression. Dr. Fordyce Barker, as the result of his experience, has never known the permanganate fail in any of the following groups of cases:—1. Girls between the ages of fourteen and nineteen, who come from the country to finish their education. Home sickness, entire change of their habits of life and associations, over-tax of their brain-power from their own or their teacher's ambition to accomplish more in a given time than they ought to attempt, not infrequently lead to an arrest of menstruation. 2. Patients, both young and married, who suffer severely from sea-sickness from leaving some European port within a few days of the menstrual period; with such amenorrhœa is almost sure to follow. 3. Patients between thirty and forty, generally married, some of whom have borne children, who rapidly begin to gain flesh, while at the same time menstruation decreases in both duration and quantity, until at last it is only a mere pretence. This is generally attended with annoying nerve disturbances, pelvic weight, piles, and often mental depression from the apprehension of growing old prematurely. In all these cases permanganate of potash is said to effect a speedy cure. These results have been in a great measure confirmed by Dr. W. H. Thomson, Dr. C. C. Lee, and Dr. Bellington, all of whom have used the drug since the appearance of the article by Drs. Ringer and Murrell in THE LANCET.

MODE OF PAYMENT OF FEES IN VIENNA.

IN Vienna it is usual to give medical men their fees at the end of the attendance, so that when honoraria are offered the hint is understood and no more visits are paid without further request. Some time since a practitioner was sent for to see the child of a certain tailor, whom he found suffering from fever, but with no signs enabling a diagnosis to be made. The fee was given, and the doctor hearing nothing further, did not consider his services were required again. However, it was discovered by the police, shortly afterwards, that some of the children in the tailor's house were suffering from small-pox. The tailor and the doctor were both summoned, the latter being acquitted, while the former, who was shown not only to have concealed the existence of the disease, but to have taken in work at the time, was sentenced to ten days' imprisonment.

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SANITARY CONDITION OF THE ISTHMUS OF PANAMA.

SOME time ago Dr. A. Nicolas was sent by the Paris Public Works and Constructions Company to examine the hygienic conditions along the route of the Panama Canal, with a view to the organisation of an efficient medical service to combat the evils of which so much has been heard. His report, which confirms in many respects the unfavourable accounts previously published, was read before the Paris Academy of Medicine at the last meeting, and so much value was attached to it that the Academy decided to print it *in extenso*. The entire region through which the canal is to be cut is particularly insalubrious, the unhealthiness being at its maximum in the two towns of Colon and Panama, situated respectively at the opposite extremities. Panama, surrounded by marshy plains from which every breeze bears deleterious effluvia, is the more unhealthy of the two, and Dr. Nicolas considers that it would be useless to attempt to purify it—the town must be entirely rebuilt on another site if any good is to be done. Colon, on the other hand, is in process of rebuilding, after its recent destruction by insurgents; but it will be extremely difficult to improve its sanitary character unless a lagoon which penetrates to the heart of the town is destroyed. The temperature on the isthmus is not extraordinarily high, but the hygrometric condition of the air is peculiar, being always near the saturation point from 7 A.M. until 7 P.M., and the whole region is covered with mist, which prevents radiation, and probably modifies the electric condition of both air and soil. The heat on the isthmus has peculiarities not met with either in Mexico, on the Congo, on the Gaboon, or in Guiana; but it is not without analogy to that of the Tonquin delta. The enervation which it produces is characterised by loss of memory, persistent sleeplessness, and peculiarly passive and profuse perspiration. Dr. Nicolas concludes his report with various recommendations with a view to diminishing the mortality, amongst which drainage and attention to the water-supply naturally occupy a prominent place. It is evident that sanitary conditions are not by any means the least of the difficulties which M. de Lesseps and his colleagues have to contend against in carrying out the gigantic work they have undertaken.

SEGMENTAL NEURITIS.

THERE appear to be good grounds for the division of neuritis into "interstitial" and "parenchymatous" varieties. The latter form has many causes, but the pathological anatomy, consisting in a series of modifications ending in atrophy of the nerve, presents but little variety in its characters, and has a close resemblance to the series of changes such as occur in the Wallerian degeneration of divided nerves. Apart from this form there is another, described first by Gombault, under the name of "névrite segmentaire periaxile." Guinea-pigs submitted to a process of slow poisoning by lead, without presenting any sign of localised or diffuse paralysis, yet became the subjects of a scattered neuritis of such a kind that one part of the length of a nerve fibre was inflamed, whilst the parts above and below it were in a normal condition; these disseminated patches sometimes occurred in more places than one on the same nerve fibre. Generally the alteration involves a single nerve segment, but it may transcend these limits or even be restricted to a portion of one segment. The process is of a genuine parenchymatous character, but affects only the myelin sheath and the protoplasm of the sheath, not the axis cylinder, which is never interrupted, and remains in relation with its centres; the nuclei multiply and the myelin undergoes segmentation. This form of neuritis is not special to guinea-pigs or to cases of chronic saturnism. It occurs also in man, and Gombault has observed it in the subjects of protopathic muscular atrophy, amyotrophic lateral sclerosis, and traumatic neuritis. He has also described it in a case of diphtheritic palsy, and in one which clinically resembled acute ascending paralysis. However, this periaxial segmental neuritis has not been frequently observed in further researches on the pathological anatomy of peripheral nerves, and since 1880 P. Meyer alone has given a description of its existence in a case of diphtheritic paralysis. In the *Archives de Neurologie*, No. 33, MM. Pitres and Vaillard—already well known for their researches, especially on parenchymatous neuritis—have described an interesting case of pulmonary tuberculosis on which cutaneous diphtheria became grafted, and was followed by amblyopia, paralysis of the soft palate and limbs, with disorders of sensation, paresis of the diaphragm, irregularity of the heart's action, and death from pulmonary hæmorrhage; the brain and spinal cord were found to be healthy, but the peripheral nerves and spinal roots exhibited the changes indicative of the segmental form of neuritis. It has been shown by the same observers that peripheral neuritis occurs in tuberculosis, and they discuss the question of the dependence of the changes spoken of above on diphtheria or tuberculosis. For fuller information reference should be made to the valuable paper, which is illustrated by well-executed plates.

CONVICTION UNDER THE POISONS ACT.

A TRADESMAN has been fined twenty shillings with costs for unlawfully selling an ounce of cyanide of potassium, contrary to the provisions of the Pharmacy Act of 1868. The Act requires that the person to whom any poison is supplied should be known to the seller, or should be introduced by someone known to him. It is also necessary that the name and address of the purchaser should be entered in a book kept for the purpose, with the name and quantity of the poison sold, and the object for which it is stated to be required. From the evidence it appeared that the drug was sold in the photographic department of the establishment, that no questions were asked by the assistant, and that no entry was made in any book. For the defence it was urged that the manager of the department had come with excellent credentials from large and well-known London firms, but was unfortunately ignorant of the requirements of the Act of Parliament. Mr. Cook, in giving his decision, said that cyanide of potassium was a most deadly poison, and when sold, even to photographers, it should be under strict supervision. In his opinion the present restrictions were very mild indeed. The prosecution was not vindictive, for the poison was being sold just in the same way as would be a yard of ribbon. With this expression of opinion we concur.

RICE-THROWING AT WEDDINGS.

THOSE who assist in a wedding ceremony may usually be excused if they forget that, even at such a time, there are bounds to merriment; but the sport may sometimes be too serious for excuse, as in an instance lately reported. A bridal couple were leaving the Church of St. James-the-Less, Bethnal Green, and, according to custom, were greeted with a liberal shower of rice. The bride, fortunately, found her veil a sufficient protection, but the bridegroom's eyes have suffered so severely that he is now under treatment in a hospital ward. The practice of pelting with rice, we are given to understand, is even more prevalent at St. James's than elsewhere, from the frequency of marriages among the poor of the parish; and it is said that the accident above described is no singular example. Without at all wishing to mar the good humour of such occasions, we would point to the obvious moral of this occurrence. We should like to know

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why and by whom this use of rice at weddings was introduced. It seems to us, and has doubtless often before this appeared to others, to be a singularly inconvenient and uncomfortable means of practical raillery. Perhaps economy has found other uses for the old slippers which followed the retreating steps of our parents and grandparents. Perhaps, also, a careless hand might do some damage, even with these time-honoured symbols. Anyhow, it must be owned that the rice-throwing custom is more than a harmless pastime. Inflammation induced in an eye by such an accident might easily lead to grave mischief before it could be checked—might result in permanent weakness of the organ or even in loss of vision. These facts we venture to press upon public consideration.

THE CHOLERA IN ITALY.

THE news as to cholera in Europe is still confined to Italy, and even from that country it is very intermittent. But, putting together the intelligence which reaches us from several sources, it is evident that the disease is still very fatally prevalent in Venice and at Bari. Since cholera was first officially announced to have caused deaths in Venice at the beginning of May, the fatal attacks have amounted to 266 in number; and during the past week they have ranged from 10 to 26 a day. This condition of things shows that the disease has a firm hold on the city, and if the circumstances which are usually favourable to an epidemic should supervene this season, it is to be feared that Venice will suffer heavily. As regards Bari, the news is not so serious; but there is still a steady continuance of cases and deaths, and few days, if any, pass without one or more fatal attacks. The disease has now prevailed in Bari ever since the end of the first week in May, and 78 fatal attacks have already occurred there. The outbreak was most severe during the second week of May; but although it diminished in intensity as the month progressed, that diminution has not been sustained, and a sufficient number of fatal attacks still occur to show that the disease is maintaining itself with some tenacity in the place. No further news of a trustworthy character as to the disease in other parts of Italy is forthcoming.

APPARENT INTOXICATION.

THERE is reason to fear that mistakes are not unfrequently made, even by skilled observers, in the recognition of drunkenness, by what may be called "apparent intoxication." The unsteady gait, the congested face and neck, the vacant eye, with drooping lid, and even the spirituous breath of apparent intoxication, may one and all be the effects of disease or disturbance of function, which has no necessary connexion with the abuse of alcohol in any form. A melancholy instance of blundering in respect to this matter may be cited from the life of the late Colonel Herbinger, who, as our Paris correspondent mentioned last week, was accused of intemperance during his field service at Tonquin, but happily acquitted. Professor Peter, who had opportunities of studying the case of this recently deceased officer shortly before his death, elicited that he was suffering from a malady of some years' standing, which produced cerebral anæmia with such giddiness that he could scarcely sit on his horse. Similar cases are by no means uncommon, and while it is more than ever necessary to denounce the practice of permitting police officers to determine whether a man or woman is drunk or the victim of disease, it is requisite to go much further than this, and to call the special attention of skilled practitioners in medicine to the possibility of being mistaken by erroneous impressions on this subject. Not only will anæmia of the brain, however induced, cause giddiness, but certain forms of defective assimilation will bring about the same results, together with symptoms still more deceptive. We need to study more closely the effects of an excess of oxalic acid in the blood, of accumulated uric acid, or urate of ammonium, of acetone, &c. Something has been done in this direction; but, so far as we are aware, the precise cause of a peculiarly offensive odour of the breath expelled from the mouth, seemingly distinctly alcoholic, has not been satisfactorily made out, although several good clinical observers with a fair knowledge of the chemistry of digestion and elimination have undertaken to solve the problem. It would be useful to investigate the subject further; more light is desirable, and even necessary.

SUGAR AND CORROSIVE SUBLIMATE AS A FIRST DRESSING IN WAR.

DR. HEIDENREICH, in a paper published in the *Vrach* (Nos. 19 and 20), strongly recommends as a first dressing on the field of battle a mixture of corrosive sublimate with powdered sugar in the proportion of 1 to 1000. It is important that when this is prepared the sublimate should be evenly distributed, and this is easily effected by first dissolving the mercurial salt in a little spirit and then carefully rubbing up the sugar with it. The spirit ultimately evaporates and leaves a powdered mass of uniform composition. A little packet is supplied to each soldier, containing a capsule in which is five grammes of the mixed powder—i.e., $\frac{2}{100}$ of a gramme of sublimate—for the purpose of sprinkling on the wound; also a good-sized piece of gauze impregnated with $\frac{1}{4}$ per cent. of its own weight of sublimate by means of Bergmann's process, which consists of dipping it in a solution containing 10 parts sublimate to 500 glycerine 1000 alcohol, and 1500 water. Some hygroscopic wadding is also supplied, and this, when enclosed between two folds of the gauze, forms a dressing measuring 650 sq. centim., which is large enough to cover a somewhat extensive wound. The whole is enclosed by means of a layer of varnished paper and a triangular bandage, which is fastened with two safety pins. The author claims for this mixtnre of sugar and sublimate the advantage of being a particularly powerful antiseptic and quite innocuous. Sugar, he says, is the best substance for diluting the sublimate, being itself somewhat antiseptic. This dressing has also the additional advantage of being suitable for use wherever water may be procurable. This, of course, is not always the case, and where it is the source is frequently in a marsh or pool of anything but hygienic appearance. Under these circumstances he advises that filtration should be resorted to, and consequently proposes that a kind of filter consisting of flannel impregnated with sublimate should be included in the packets supplied to the men. The whole contents of the packet weigh only seventy-five grammes, and are exceedingly portable and inexpensive.

A CHEMIST CENSURED FOR MEDICAL PRACTICE.

A CHEMIST in Harpurhey, near Manchester, has been censured by a jury for attending a man for a fortnight with hæmorrhage from the nose and mouth, a subject of the hæmorrhagic diathesis. Matters were made worse by the extraction of a tooth, though the report does not say that the tooth was drawn by the chemist. The hæmorrhage persisting, and he thinking that no local doctor would consult with him since his last "unpleasantness"—he has been repeatedly cautioned or censured in regard to similar conduct before,—he called in a young qualified man. Thereafter the chemist resumed his attendance. But the bleeding recurring, Mr. Armstrong was called in—only, however, to find the patient hopelessly bloodless.

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died in a few days, and Dr. Harris, pathologist of the Royal Infirmary, found very little blood left in the body, and hæmorrhage into both pleural cavities. Mr. Wilkinson, Mr. Armstrong's partner, thought that proper treatment might have saved the case. Mr. Jackson seems one of those bold chemists who are not affected by the death of patients or the censure of juries. But it is truly lamentable to see a man's life squandered away without proper help, and a respectable chemist a party to the tragedy. Young members of the profession should not put themselves into such an undignified and unsatisfactory position as that of covering or protecting a chemist in medical practice in the gravest of cases.

THE MEDICAL BILL.

"HOPE springs eternal in the human breast." Sir Lyon Playfair still has hope of being able to pass his Medical Bill. We confess to being less sanguine. But nothing seems to happen now in politics but the unlikely. We look to him to concede the greatest possible representation of the profession and the perfect independence of the Medical Council from pressure by the Privy Council in the matter of recognising foreign degrees. And we look to Dr. Foster to help Sir Lyon to be faithful in these respects. No meeting of the Medical Council more than the present one has exhibited the faulty constitution of this body. Its discussions are marred by the obvious jealousy of rival bodies and the absence of independent members. And the highest examinations are only treated by the Council as guarantees of competence.

M. PASTEUR'S PATIENTS.

THE last fatal case under M. Pasteur's treatment appears to have been peculiar, and can hardly be placed in the balance against his method of prevention. It is true that the patient came under treatment fourteen days after the infliction of the wounds. But the wounds themselves made about the head, which were of an unusually severe nature, may fairly be regarded as possibly of a fatal character in themselves apart from the introduction of the virus of rabies. The maniacal symptoms that the man presented were certainly out of the run of ordinary cases of hydrophobia, and the post-mortem examination appears to have revealed alterations in the lungs not ordinarily met with after death from that disease.

ALCOHOL IN HOSPITALS.

THE *Irish Temperance League Journal* is perplexed by the diversity of practice as regards the amount of alcohol used in hospitals. If it be admitted that the question of its use is a scientific one, our contemporary claims that there should be some approach to uniformity. He cannot understand why London hospitals should cost for alcohol 4*s.* 8½*d.* per patient while 2*s.* 5½*d.* suffices in the country. Does the same difference hold of the doses of opium, digitalis, and other *drugs?* This is rather a superficial question, ignoring the dietetic use by the people of some alcohol. It is more reasonable to be embarrassed by the different practice of hospitals in the metropolis; so that while, for example, University College Hospital spends only 2*s.* 7*d.* per patient on alcohol, St. George's spends 4*s.* 9*d.* Perhaps a still greater difficulty, on the scientific theory, is the difference in practice between physicians of the same hospital. We demand for our professional brethren full liberty of action in regard to this question, but we would remind them of the gravity of it. It is grave in this sense, that if a man goes into a hospital and is plied with stimulants by eminent physicians, he is very apt to continue the treatment himself when he comes out. Another point made by critics is the impossibility of apportioning the expenditure on stimulants to officials and patients. The secretary of the Middlesex Hospital has calculated that 66 per cent. of the expenditure on alcohol is for its consumption by officials.

SIR WILLIAM GULL.

OUR readers will note with regret that Sir William Gull was unable to take his seat in the Council as the representative of the University of London. We are glad to be able to say that Sir William is not absolutely confined to his room, and is improving.

THE FIRST RUSSIAN PROFESSOR OF PSYCHIATRY.

THE death is announced in Moscow of Dr. Grigori Sokolski, formerly Professor of Therapeutics and Psychiatry there. He was a contemporary of Pirogoff, and, like him, when he had completed his obligatory medical course, went to Dorpat to attend the "Professoren Institut." After that he spent two years in Berlin and Vienna, and subsequently was appointed to professorships in his own country, first at Kazan and afterwards at Moscow. He was the first professor who lectured on mental diseases in Russia. He resigned in 1848, since which time he has been living in complete seclusion from the outer world. He was in his eightieth year.

QUINTUPLE BIRTH.

Il Morgagni (May 29th) mentions the following case recorded by Polyakoff in the *Meditsinskæ Obozpénye*, No. 10, 1885. A robust peasant, aged twenty-seven, of Syarai, Russia, after nine years' married life, became pregnant for the seventh time in June. In the latter period of pregnancy the abdomen assumed vast proportions, and on the 1st of March the woman gave birth to five female fœtuses at short intervals; three presented by the occiput, two by the feet. Each had a sac with separate amnion, but the chorion was common to all. The first fœtus was deformed and stillborn; the others lived some minutes after birth. The single placenta weighed a pound and a half, and the umbilical cords were attached to its extremity. Four of the fœtuses were well formed; but the first born was microcephalic, and had not the full number of fingers or toes. The umbilical cord attached to this fœtus had an artery and a vein, but each of the others had three vessels.

INFANTICIDE BY PERAMBULATORS.

DR. MACLAGAN, the medical officer of the Hexham Rural Sanitary District, while calling attention to the fact that in his district 124 children out of 1000 die during their first year, attributes much of the mortality to "inflammatory diseases, cerebral and pulmonary," caused by exposure in perambulators. This is a startling but not, we fear, unreasonable opinion. There cannot be any question that young children are placed at a very great disadvantage as regards the risks attendant on exposure when they are lying inactive in a vehicle of this description, either in the sun or pushed against the wind. The old-fashioned child's cart, which was drawn behind the nurse, was open to the objection that the child might be taken out, and a weight substituted, the nurse being unaware of her loss. Those who read the newspapers forty years ago will remember several cases of this class in which infants were purloined in the manner indicated. The perambulator, or *pre*ambulator as it used to be called, being pushed before the nurse, has not this disadvantage; but it certainly exposes the child severely to the wind-pressure, and, if Dr. Taylor of Scarborough is right, as we believe he is, in laying much stress on the matter of wind-

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pressure in reference to the causation of throat and chest complaints, it is well worth considering whether Dr. Maclagan is not justified in the assertion that "the use of perambulators should be strongly condemned." The matter is clearly one that deserves attention.

AT the Clerkenwell County Court on the 4th inst., an action was brought against Mr. H. D'Arcy Power, a medical practitioner residing at Peckham, for misrepresentation and malpraxis. It was alleged that by the improper use of instruments he had caused a miscarriage which resulted in serious illness After a protracted hearing and an exhaustive summing up, the jury returned a verdict for the defendant, and judgment was entered in his favour, with costs on the highest scale.

UNDER the title "Il Clima di Roma: Conferenze fatte nella Primavera del 1885," Dr. Tommasi-Crudeli has published a revised version of the eight lectures with which he inaugurated the Institute of Experimental Hygiene in the University of Rome in the spring of last year. The volume is accompanied by a new and carefully executed topographical and geological map of the Agro Romano, and by five illustrative charts. The publishers are Lœscher and Co.

DR. CROOKSHANK has in preparation a new work illustrating the value of photography in delineating preparations of bacteria. The work will be illustrated with upwards of fifty permanent autotypes and numerous wood engravings. The negatives have been for some time in the hands of the Autotype Company, and are being produced in special colours under the supervision of the author. The work will be published by Mr. H. K. Lewis.

BY the lamented death of Professor Auspitz, the chair of Dermatology and Syphilis has been rendered vacant. His place in the editorship of the "Archiv für Dermatologie und Syphilis" will be taken by Professor Kaposi, in conjunction with the former co-editor, Professor Pick of Prague.

A BACTERIOLOGICAL department will be opened in connexion with the Pathological Institute at Berlin, presided over by Professor Virchow. It is probable that Dr. Israel will be nominated director of the department.

DR. JOSEPH RODIER, of Montreal, is, we understand accredited by the Provincial Government of Quebec on a mission to Paris to gain an insight into M. Pasteur's method of inoculation as a preventive of hydrophobia.

IT is understood that Dr. Oliver Wendell Holmes will be one of the recipients of the honorary degree of Doctor of Civil Law at the forthcoming Commemoration at Oxford.

THE late Professor Haeser, whose work on the History of Medicine is classical, bequeathed his valuable library to the Breslau University.

PROFESSOR WEIL, of Heidelberg, has been invited to fill the office of Director of the Medical Clinic at Dorpat.

His Royal Highness the Prince of Wales has consented to open at an early date the new out-patient department and nursing home attached to the Victoria Hospital for Children, Queen's-road, Chelsea, the foundation-stone of which was laid on June 23rd, 1885, by Her Royal Highness the Princess Louise, Marchioness of Lorne.

DR. RICHARDSON'S LECTURES ON ANIMAL OR VITAL MECHANICS.

LECTURE IV.

MECHANICS OF THE CIRCULATION.

IN the fourth lecture of the course the subject of the Mechanics of the Circulation was chosen as one which permitted of richest illustration of mechanical plans and workings from Nature as the designer and worker. The tube, the valve, the elastic structures, the contractile structures, the pump, the river, the surface, would all come under observation, and to the mere mechanical instruments would be added the details of the work done as the result of the mechanical skill and operation.

The description of the circulating apparatus was commenced from the venous side of the circulation. A fine drawing, of life size, from Vesalius, was projected on the screen in order to illustrate the entire venous system as in a transparency. The faithfulness of this work of the great anatomist was wonderfully exhibited in this figure, and was followed by another in which the main trunks of the veins were indicated as the receiving trunks of what Dr. Richardson designated the true river of life. The circulation of blood, in its primary movement, begins, he contended, in the veins, in a venous current which does not depend in the first instance on the stroke of the heart, but which has its origin in the digestive tract, and which supplies the heart, as from a vast surface of absorption with fluid, from food and drink, and from the lymph formed in the drainage surface of the body. The great venous channels, the rivers of life, thus supplied, run, guided by the valvular arrangements, into the right side of the heart and form the primary force of the circulation. The rivers charged, the right auricle of the heart needs but a moderate pumping power to deliver the blood it receives to the right ventricle for distribution to the lungs, and, by comparatively easy stroke over the lesser or pulmonic circuit, to the left auricle, and so on to the left ventricle for arterial pulsating circulation. The part which pulsation plays in the arterial system was made matter of comment, in which it was suggested that the pulsating motion is necessary for all secreting, excreting, and nutritive functions, since by it a period of rest from propulsion is secured after each systole, during which period of rest the required changes can be carried out. Quicken the pulsations until the current is exalted into an almost continuous course, as in fever, and then with the generation of heat there is reduced secretion, excretion, and nutrition. Reduce the pulsation, so as to leave long periods between each stroke, and then with a reduction of temperature there is obstruction, accumulation, and impaired restoration of function. From this description of the course of the circulation the lecturer passed to that minute circulation of the blood, in the capillary system, in which the chemical part of the vital actions is carried out. From two of Rudinger's photographic plates of dissected structures he showed the centres of the nerves of organic life, and having indicated how these and their ramifications differ from the centres and nerves of the cerebro-spinal system, he traced the organic nerves through their distribution along the course of the arteries to the capillaries, and explained how, by their controlling influence, the supply of blood to different organs is modified. The influence of emotion, through the organic nervous system, upon the vascular system, and upon the colour of some parts of the body, such as the cheeks, was indicated in the acts of blushing and the paling of the cheeks under excitements from joy, surprise, or fear—an exposition which led to an original suggestion by Dr. Richardson, that the absorption of the vibration incident to arterial pulsation is probably effected by and through this nervous arrangement. The picture of the arterial system as a whole, from Vesalius, was thrown on the screen, and the mechanism of the arterial tubes was shown, as in transparency, of life-size. This vast series of tubes from root to minute branch up to the commencement of the capillary tubes is all through life, in waking and in sleeping, in one continued swing of balancing pulsation; and yet in health we are unaware, by any sensation of so strange a fact, and of the part which the central heart, or pump, itself plays in it. There must therefore be an absorption of the vibration some-

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where, and the lecturer thought it most probable that this was by and through the organic nervous fibres. The vibrations are conducted back to the nervous centres, and transmitted from them to other organic parts to be disposed of in work, physical and mental. So when the heart is beating very strongly we feel the reflex back into the great ganglionic centres of the stomach in sensations varying from a pleasant glow to spasm or acute pain. The lecture was brought to a close by a demonstration of the action of the valves of the veins and heart and of their respective parts in directing the currents of the blood.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

THE fifty-sixth annual meeting of this Association, appointed to be held in Birmingham from Sept. 1st to the 9th inclusive, promises to be one of the most brilliant and largely attended scientific congresses ever assembled. The President is Sir William Dawson, C.M.G., F.R.S.; and amongst the chief officers of sections are—Professor G. H. Darwin, M.A., F.R.S.; Mr. W. Crookes, F.C.S., F.R.S.; Professor T. G. Bonney, D.Sc., F.R.S; and others equally distinguished. The Biological work of the Association continues to grow in importance, and the comparatively new section of Anthropology cannot fail this year to present many features of exceptional interest for the medical profession, under the joint secretaryship of Dr. Garson and Dr. Robert Saundby.

The many distinguished Canadian as well as European men of science who are expected at the Congress may rely on hospitable welcome to the homes of the most prominent inhabitants of the midland metropolis, the central position of which may be made the best use of by all visitors, through the exceptional facilities which the converging railway companies are offering. The educational institutions which adjoin the Birmingham Town Hall and Council House have been placed at the disposal of the Association; and members and associates are assured of free access to the numerous local literary and scientific institutions and social clubs. For the archæologist, the botanist, and the geologist Midland England is a rich field; and with such guides as Mr. Sam. Timmins and Professor Lapworth, Mr. W. B. Hughes, F.L.S., and Mr. William Mathews, M.A., visitors cannot fail to gather an abundant harvest.

Birmingham justly prides itself on having projected the movement out of which the School Board system has been evolved, and no one could have been deputed to set forth the educational resources of the town more ably and worthily than Mr. Osmund Airy, M.A. The best opinions are equally concordant on the choice of Mr. Thackray Bunce, the Birmingham historian, to present a report on local governing bodies.

A special sub-committee, of which Mr. Councillor Lawley Parker is chairman, is organising an extensive exhibition of the products of local industries and of local manufacturing processes. This exhibition will be, in some respects, unique, since it will be exclusively confined to exhibitors whose manufactories are situated within a range of fifteen miles from Birmingham, and will thus represent the special characteristics of the industries of the town and district. A collection of the Flora and Fauna, together with the rocks and fossils of the neighbourhood, will be shown in connexion with the exhibition. The Mayor will invite members and associates to a conversazione in the Council House; and on Wednesday, September 1st, Mendelssohn's "Elijah," which was first produced at the Birmingham Festival of 1846, will be performed in the Town Hall with a full band and the renowned chorus of the Birmingham Festivals. Many able and zealous persons will have to be credited with a large share of merit for having taken part in the scheme of which we have briefly traced the outline; but it is quite safe to say at once that success was practically assured when the following gentlemen were chosen the leading officials of the executive:—Alderman Martineau, the Mayor, chairman; Mr. J. D. Goodman, honorary treasurer; the Rev. Dr. Crosskey, Mr. J. Barham Carslake, and Mr. Councillor C. J. Hart, honorary secretaries.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Basford Rural District.—Dr. Boobbyer in reporting on this district shows how the vital statistics for certain divisions bear out the view, originally expressed by Dr. Buchanan, as to the influence of damp and low-lying sites on the mortality from phthisis. The general death-rate for the whole district in 1885 was 15·0 per 1000, and that for the so-called zymotic diseases 2·48 per 1000, scarlet fever and diarrhœa being mainly responsible for the latter. In the course of the systematic inspections which have been made, numerous instances of overcrowding, improper dwelling accommodation, bad water-supply, &c., have been dealt with; but the extensive parish of Selston is referred to as still notoriously ill-supplied with drinking-water. As regards drainage, it is stated that new systems are to be provided for Codnor, Nuncar Gate, and West Bridgeford. Scarlet fever has been very rife in some parts of the district, and an opinion is expressed in the report to the effect that the decomposition of simple organic matter, in certain states of health and especially amongst infants, is capable of playing a very important part in the autogenesis of the disease. Efficient means of isolation and disinfection not being available, but little could be done by a medical officer of health in the direction of the proper control of this disease.

Glanford Brigg Rural District.—The mortality for this district on a population of nearly 30,000 was at the rate of 15·5 per 1000 for 1885, this rate being the smallest registered for many years past. No single death from small-pox has been recorded in any of Mr. Moxon's reports, and it is satisfactory to notice that 98 per cent. of the births are accounted for as regards vaccination. There has also for some time past been an absence of any fatality from scarlet fever, but as there are no trustworthy means by which to protect a population against the risk of this infection if once exposed to it, Mr. Moxon wisely reminds his authority that hundreds of children have been growing up who may at any time be infected, and that it behoves them to be ready in advance to apply measures of isolation and disinfection. Diphtheria, unfortunately, was rife in the district, causing twenty-one deaths during the year, in addition to four from so-called "croup." In some parts of the district urban powers are much needed to secure control under bye-laws as to the stability and wholesomeness of dwelling-houses. These should be applied for to the Local Government Board, who never offer objection where a need for them really exists. Some substantial progress has been made in the matter of the water-supply and drainage of several villages, and systematic inspection of the district has been carried out.

Buxton Urban District.—Sanitary progress is stated to be continuously maintained year by year in this district. During 1885 the sewage works were brought into permanent operation; the process being one of precipitation, after which the effluent passes into the river in a state which is declared to be within the limits of impurity allowed by the River Commissioners. The residual sludge is now to be manufactured into a manure. The water-supply, though wholesome, is at times muddy, and, pending improved means of storage, the population are advised to resort to domestic filtration. The annual death-rate for 1885 was low—namely, 9·09 per 1000 on a population of 6707; but this does not take account of deaths amongst visitors, who, to the number of 100,000, visit the place annually. It is also satisfactory to note that the deaths due to zymotic diseases were fewer in number than during any year in the previous decade.

Romford Rural District.—In a tabular form a good deal of information is given as to the proceedings taken on the occurrence of infectious diseases. In the case of small-pox the sanitary authority evidently trust to the chance of there being available accommodation at Highgate Hospital, but this sometimes fails, and then the cases become centres from which the disease spreads. So also as regards scarlet fever, which occurred in several parts of the district, the need for a local isolation hospital has been much felt. Some parts of the rural area still call for many remedial measures. At Dagenham and other neighbouring places, foul privies, lack of decent meansof drainage, and similar defects,

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bring about conditions which are dangerous to health, but fortunately wells containing polluted water-supplies have been done away with. This is a scattered district containing a population exceeding 22,000, and the careful records of its sanitary state show how much it stands in need of measures of improvement. During 1885 the birth-rate and death-rate were respectively 32·8 and 14·6 per 1000. The highest death-rate—namely, 18·3 per 1000—prevailed in Hornchurch.

Whitechapel District.—Mr. Sloane commences his report by a kindly reference to the valuable labours of his predecessor, Mr. Liddle, who was a pioneer in public health work, and who was devoted to his duties almost up to the date of his death. On a population of 65,550 the death-rate for Whitechapel was 22·2 in 1885. It is shown, amongst other things, that the district has been favourably circumstanced as to small-pox, and it should be remembered that in Whitechapel vaccination has accounted for all but 1·6 per cent. of children born. The need for action under the Artisans and Labourers' Dwellings Acts for the Bell-lane district is prominently brought forward, and a hope is expressed that, though the matter has more than once been deferred, it will before long be dealt with.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5837 births and 2957 deaths were registered during the week ending June 5th. The annual death-rate in these towns, which had declined in the preceding ten weeks from 26·4 to 17·4, further fell last week to 17·0, and was lower than the rate recorded in any week since September last. During the first nine weeks of the current quarter the death-rate in these towns averaged 19·2 per 1000, and was 3·0 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 13·0 in Bristol and in Norwich, 13·4 in Hull, and 13·9 in Brighton. The rates in the other towns ranged upwards to 22·2 in Portsmouth, 23·3 in Cardiff, 23·8 in Bolton, and 31·9 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had declined in the preceding eleven weeks from 430 to 278, were last week 279; they included 95 from measles, 74 from whooping-cough, 42 from diarrhœa, 29 from scarlet fever, 20 from diphtheria, 19 from "fever" (principally enteric), and not one from small-pox. No death from any of these zymotic diseases was recorded last week in Norwich, Derby, or Halifax; whereas they caused the highest death-rates in Bolton, Portsmouth, and Preston. The greatest mortality from measles occurred in Portsmouth, Blackburn, Bolton, and Preston; from whooping-cough in Cardiff and Portsmouth; and from scarlet fever in Salford. The 20 deaths from diphtheria in the twenty-eight towns included 13 in London, 3 in Portsmouth, and 2 in Manchester. Small-pox caused no death among the residents of London and its outer ring, or in any of the twenty-seven large provincial towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had been 35 on each of the preceding two Saturdays, had declined to 25 at the end of last week; 4 new cases were admitted to these hospitals during the week, against 10 and 6 in the preceding two weeks. The deaths referred to diseases of the respiratory organs in London, which had declined in the preceding eleven weeks from 917 to 225, further fell last week to 179, and were 97 below the corrected average. The causes of 88, or 3·0 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Sunderland, Cardiff, and in three other smaller towns. The largest proportions of uncertified deaths were registered in Halifax, Hull, Bristol, and Salford.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had slowly declined in the preceding five weeks from 23·1, to 21·3 per 1000 further declined to 20·9 in the week ending June 5th; this rate, however, exceeded by 3·9 the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 16·0 and 16·2 in Greenock and Aberdeen to 21·7 in Paisley and 25·2 in Glasgow. The 515 deaths in the eight towns showed a further decline of 11 from the numbers in recent weeks, and included 21 which were referred to whooping-cough, 19 to measles, 14 to diarrhœa, 6 to scarlet fever, 5 to "fever" (typhus, enteric, or simple), 3 to diphtheria, and not one to small-pox; in all, 68 deaths resulted from these principal zymotic diseases, against 44 and 60 in the preceding two weeks. These 68 deaths were equal to an annual rate of 2·8 per 1000, which exceeded the mean rate from the same diseases in the twenty-eight English towns by 1·2. The fatal cases of whooping-cough, which had been 11 and 17 in the preceding two weeks, further rose last week to 21, of which 16 occurred in Glasgow and 3 in Aberdeen. The 19 deaths from measles also showed an increase upon recent weekly numbers, and included 11 in Edinburgh, 5 in Leith, and 3 in Glasgow. No fewer than 119 deaths from measles have been recorded in Edinburgh since the middle of February. The 14 deaths attributed to diarrhœa in the eight towns last week, although showing an increase upon the numbers in recent weeks, were 2 below the number in the corresponding week of last year. All the 6 deaths from scarlet fever, and 2 of the 5 deaths referred to "fever," occurred in Glasgow; while 2 of the 3 deaths from diphtheria were returned in Edinburgh. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 119 and 86 in the previous two weeks, rose again to 90 last week, but were 36 below the number in the corresponding week of last year. The causes of 84, or 16 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 28·7 and 26·0 per 1000 in the preceding two weeks, was 26·2 in the week ending June 5th. During the first nine weeks of the current quarter the death-rate in the city averaged 26·9 per 1000; the mean rate during the same period did not exceed 17·9 in London and 19·2 in Edinburgh. The 177 deaths in Dublin last week showed an increase of 1 upon the number in the previous week, and included 9 which were referred to the principal zymotic diseases, against 6 in each of the previous two weeks; 3 resulted from scarlet fever, 3 from whooping-cough, 2 from diarrhœa, 1 from "fever" (typhus, enteric, or simple), and not one either from small-pox, measles, or diphtheria. These 9 deaths were equal to an annual rate of 1·3 per 1000, the rates from the same diseases being 1·7 in London and 3·5 in Edinburgh. The 3 fatal cases of scarlet fever and of whooping-cough showed an increase upon recent weekly numbers, as did the 2 deaths from diarrhœa. Ten inquest cases and 3 deaths from violence were registered; and 59, or a third of the deaths, were recorded in public institutions. The deaths of infants showed a considerable decline, while those of elderly persons exceeded the numbers in recent weeks. The causes of 27, or 15 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

ADMIRALTY.—Staff Surgeon Fleetwood Buckle, M.D., has been promoted to the rank of Fleet Surgeon in Her Majesty's Fleet; Fleet Surgeon Rinso Robert Siccama has been promoted to the rank of Deputy Inspector-General of Hospitals and Fleets in Her Majesty's Fleet.

The following appointments have been made: Fleet Surgeon Henry Hadlow, to Haulbowline Hospital; Staff Surgeon William E. Bennett, to the *Rupert;* and Mr. G. Newell to be Surgeon and Agent at Moville.

ROYAL NAVAL ARTILLERY VOLUNTEERS (Clyde Brigade).—Pierce Adolphus Simpson, M.A., M.D., and James Cowan Woodburn, M.D., to be Surgeons.

ARTILLERY VOLUNTEERS.—1st Inverness-shire: Hugh William Mann, Gent., M.D., to be Acting Surgeon.—1st Norfolk: Surgeon T. H. Moxon is granted the honorary rank of Surgeon-Major.—1st East Riding of Yorkshire: Edward Clarkson, Gent., to be Acting Surgeon.

RIFLE VOLUNTEERS.—1st Hertfordshire: Surgeon D. B. Balding is granted the honorary rank of Surgeon-Major.—6th Lanarkshire: John Edmund Fairlie, Gent., to be Acting Surgeon.—2nd Perthshire (the Perthshire Highland): Wm. Gibb, Gent., to be Acting Surgeon.—2nd Volunteer Battalion, the Royal Warwickshire Regiment: Surgeon T. W. Thursfield is granted the honorary rank of Surgeon-Major.

THE VOLUNTEER MEDICAL STAFF CORPS.—London Companies: Eustace Augustus Burnside, Gent., to be Surgeon.

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Correspondence.

"Audi alteram partem."

THE NEW SYDENHAM SOCIETY.

To the Editor of THE LANCET.

SIR,—I have been requested by the Council of the New Sydenham Society to seek your aid in bringing under the notice of those of your readers who are not its members a few facts as to our past history, present condition, and future prospects.

We are now in the middle of our twenty-eighth financial year (our financial year dating from January to December, subscriptions being due in advance, and our year of issue being from June to June). Our twenty-eighth year of issue of books begins this month, and the first volume of the year is in course of distribution to our members. It consists of a volume of short essays and papers, chiefly from German sources, on the "Relations of Micro-parasites to Disease," and it will be followed in the course of a month by the twelfth part of our "Lexicon of Medical Terms." We commence this year several new works, and the present is therefore an excellent opportunity for new members to join us. The hope of inducing a large number to do so is, let me say at once, my motive in asking insertion for this letter.

During our twenty-eight years of work we have enjoyed an income varying from £2000 to £3500, and have had a members' list which has averaged 3000. Of some of our more important works — such, for instance, as Trousseau's Clinical Medicine—we have been the means of sending abroad amongst the profession, in all parts of the world, not fewer than 4000 copies. The volume which is now going out counts as our 115th, which gives an average of considerably more than four volumes to each year. I must explain that in this calculation the parts of our Lexicon, and the fasciculi of our two Atlases, count as volumes. In each of the three years, 1880, 1881, and 1882, we issued six volumes; whilst on three occasions, one of which was last year, we have been obliged, by the state of our funds, to be content with only three. The two other years when this happened were 1863 and 1865. When I add that we have but seldom issued thin volumes, that we have been liberal in woodcuts and lithographs, and that we have had constantly in hand a very expensive Atlas (first of "Dermatology," and now of "General Pathology"), and more recently a yet more expensive "Lexicon of Medical Terms," I think I shall have justified the claim that we have achieved a very considerable amount of success. The maintenance of such a members' list through so long a series of years proves that our efforts to provide sound medical literature have been appreciated, and that in the main our publications have been approved.

Beginning with Dr. C. J. B. Williams, our first president, we have had in Sir Thomas Watson, Sir James Paget, Sir George Burrows, Mr. Cæsar Hawkins, Sir Prescott Hewett, Mr. Hilton, Dr. Peacock, Dr. Stokes, Sir W. Gull, Sir W. Bowman, and Sir Andrew Clark, a series of presidents who have all taken a vigorous interest in the Society's welfare. They have been constantly aided by members of the Council equally willing to devote time and labour to its interests. Of treasurers we have had but two. Up to the time of his death the duties of this post were discharged by the late Dr. Barlow: and for the last twenty years the Society has owed more than I can say to the alike able and indefatigable services of our present treasurer, Dr. Sedgwick Saunders. In its management, the Society has always aimed carefully at economy. Its expenses under the head of "Depôt," including agents' salary, distribution of books, and advertisements, have seldom been so much as a fifth part of the income, and often not a sixth. Our local secretaries have always given their valuable services gratuitously; and those services have, I know, often been very laborious.

I now come to the point to which I am especially desirous to ask general attention. It is this: that the Society is an organisation for the mutual advantage of its members; and that not only is its scope enlarged by increase of members, but that it gains directly in its capabilities of usefulness. With a small members' list, only a small number of books for the year can be issued; and with a larger one, that annual number is at once increased. It is, therefore, the direct interest of all members to endeavour to enlist others. When once the type for a book is set up, or the stone prepared for the plate, it costs very little to print off an extra thousand. If our members' list could be kept permanently at about four thousand, we could issue six volumes regularly every year with ease. I feel sure that this number might without difficulty be kept up if once its desirability were widely recognised. In the hope of offering attractions to those who have not joined us, permit me to enter into a little detail as to the works which we have now in preparation.

Our "Lexicon of Medical Terms," under the editorship of Mr. Power and Dr. Sedgwick, has now advanced fully half-way to completion, and its editors promise us to finish it in four years. I hesitate not to assert that, when finished, it will be, for completness and conciseness, without its equal in any language. The two large volumes to which it has already attained extend to the letter H, and constitute, even as they are, a most valuable addition to the practitioner's library. New subscribers will be allowed to procure these two volumes as the equivalents of two years' subscription.

Of our "Atlas of Pathology," a sixth fasciculus is now nearly ready, and, should our funds permit of it, others which are in preparation, will be regularly issued.

The "Atlas of Skin Disease" we regard as complete, and no more fasciculi of it will be brought out. It is out of print, and most of the stones have been destroyed.

The Council has come to the conclusion that, for the present at least, it will consider the issue of reprints of English authors concluded. It believes that the great activity of research which characterises the present day renders, as regards the larger number of its members, translations of recent publications more acceptable, and perhaps more useful, than reprints of the classics of the past. The same statement applies to collections of the scattered publications of recently deceased British writers. Our New Sydenham library, under these two classes, contains reprints from the works of Gooch, Bright, Addison, Latham, Smellie, Colles, Stokes, Graves, and Warburton Begbie. Although I believe that all of these were well worthy the Society's adoption, and were very acceptable when issued, yet I also quite think that the Council has acted wisely in deciding to devote all available funds in future to translations of recent books, and to the completion of our "Pathological Atlas" and "Medical Lexicon."

In reference to the observation sometimes made that it is better to read foreign works in their original tongue, I may ask attention to the fact that some of the Society's books are by no means mere translations. The volume of Billroth's "Clinical Surgery," prepared for us under the editorship of Mr. Clinton Dent, comprises the cream of many separate books and reports, not very easy of access. It would be a boon to the German profession if, in its present form, our book were translated back into that language. The same remark applies to Dr. Vivian Poore's single-volume edition of the very able, but very diffuse, publications of the late Dr. Duchenne of Boulogne. Every member of our Society possesses a far better compendium of Duchenne's works than any which the author's fellow-countrymen can possibly procure in their own tongue. A volume of the same class is in preparation, to comprise the most valuable parts of Alfred Fournier's works, and the work on Micro-parasites, just edited for us by Mr. Watson Cheyne, may claim something of the same character. Our two volumes of German "Clinical Lectures" were also carefully selected, and gave to our readers the best of the voluminous series which appeared in the original.

Of the works on which translators for the Society are now actually engaged, I may mention the following:—Hirsch's "Manual of Geographical Pathology" (Dr. Creighton); a third volume will conclude this work. Cohnheim's "General Pathology" (Dr. McKee). Spiegelman's "Midwifery" (Dr. Hurry), undertaken on the strong recommendation of Dr. Matthews Duncan, Dr. Barnes, Dr. Herman, and others. This work is a large and freely illustrated manual of the subject, which has attained great popularity abroad. Dr. Barlow has in hand for us the original essays of Dr. Raynaud on the disease which is likely in the future to bear his name, and Dr. Fancourt Barnes has translated Neugebauer's monographs. Another volume of Charcot's "Clinical Lectures" (not as yet quite complete in the original) has been adopted, as have also the works of Flugge on Micro-parasites, Litzmann on Contracted Pelvis, and Band's two short monographs on special subjects in connexion with pregnancy and labour. A third volume of German "Clinical

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Lectures" is contemplated, and many other works have only been put aside by the Council because it cannot see its way to the probability of being able to afford to issue them within a reasonable period. There is no lack of works in foreign languages, the reproduction of which in English would be a direct and great boon to professional knowledge amongst ourselves. No machinery can possibly be devised better fitted for the production of such works than a mutual translation company, such as is our Society. The works which we publish cost our members certainly less than half of what they would do if purchased through the trade. The recent remarkable cheapening of medical works has, I have no doubt, to some extent conflicted with our interests. It is, however, a fact on which we congratulate ourselves, partly because we believe that what we have done has had a share in bringing about the reformation, and in part because it helps to attain the end which the Society seeks. When, however, medical publishers have done the utmost that enterprise can attempt, we still feel that there will be abundant room for our Society's special function. In that belief, on behalf of the Council, I now appeal to the English-speaking profession all over the world to come forward and recruit our ranks. We have no formalities of election, and all who send their names and subscriptions are enrolled at once. Those who may possibly feel, respecting some of our works, that they do not personally wish to possess them, may yet have the satisfaction of knowing that they are helping the success of a Society which has in the past done much honest work in the cause of medicine, and which trusts to be enabled in the future to do much more.

I am, Sir, yours truly,

JONATHAN HUTCHINSON,
Hon. Secretary, New Sydenham Society.

Cavendish-square, W., June, 1886.

LEICESTER AND ITS IMMUNITY FROM SMALL-POX.

To the Editor of THE LANCET.

SIR,—Your Special Commissioner has visited Leicester and discovered that the immunity we have enjoyed from outbreaks of small-pox is due to our "sanitary and disinfecting appliances," *plus* vaccination and revaccination of medical officer of health, hospital nurses, inspectors, &c. His statements in regard to the extent of the revaccination are somewhat exaggerated, but that is of little consequence; what I do complain of, however, is that your Commissioner should assume that the plan adopted by us as a sanitary authority has anything whatever to do with opposition to vaccination, or has any reference to the opinion of the people for or against that article of the medical faith. If vaccination were unknown our "sanitary and disinfecting appliances" would be necessary: if vaccination and revaccination were universal our methods would still be invaluable. Your Special Commissioner says, speaking of the vaccination of officials, "Without this protection of vaccination the perfect sanitary arrangements of Leicester would break down in a month"; and he adds, "If her sanitary authorities really believe in their sanitary and disinfecting appliances *per se*, let them put our statements to the test; let them remove the *cordon* of protected persons about the cases, and their boasted arrangements will prove a delusion." I am at a loss to understand why such a proposition should be put before us. I explicitly stated to your Commissioner that the sanitary authorities here did not pursue their methods of treating small-pox cases, when they arose, with any idea of setting up a theory as against vaccination. The sanitary authority is not connected with the anti-vaccination movement, and it has nothing to do with enforcing the law of vaccination—that duty being cast upon boards of guardians. If we discontinued our "sanitary and disinfecting appliances" I have no doubt we should soon have the terrible scourge so often promised us by medical men—but we do not intend to discontinue them; and as to the "*cordon* of protected persons," that is a matter for the officer of health, with whom we do not wish to interfere.

This conclusion, however, is apparent to all who study the subject: in Leicester, with vaccination largely neglected, small-pox does not spread; in many other towns where vaccination is religiously observed the epidemics of small-pox are constantly recurring. Surely it is this fact which should attract the attention of the profession, for if they agree with us, as they now say, that sanitation *plus* vaccination and revaccination is *the* cure and remedy for small-pox, how it is they cannot point us to towns where they have had equal immunity with Leicester from the dread scourge?

Would it not have been wiser if your Special Commissioner had impressed upon other authorities the desirability of adopting the sanitary arrangements carried out here, which he admits are "perfect," instead of bringing a railing accusation against us, and submitting to us an extraordinary proposal as to withdrawing the *cordon* of protected persons from the infected cases, as though we set up our sanitary appliances to prove the worthlessness of vaccination? I venture to submit that the sanitary authorities in this town have adopted a plan of dealing with this horrible disease, when it is imported into our midst, which deserves the highest commendation; and personally I feel that we are under the deepest obligation to the late medical officer of health, Dr. Johnston, by whom the method was first introduced. A great amount of human suffering, misery, and pecuniary loss, and in all probability many deaths, have been prevented by the course we have pursued; and I see no reason why these blessed results should not follow the carrying out of the same methods in other towns.

I am, Sir, yours truly,

THOS. WINDLEY,
June 7th, 1886. Chairman, Sanitary Committee, Leicester.

*** We are glad that the chairman of the Sanitary Committee has so little to find fault with in our Commissioner's demonstration that Leicester is protected from small-pox by vaccination and revaccination. It is also satisfactory to find that the sanitary authorities have evidently no intention of trying the experiment of perfect sanitary arrangements *minus* vaccination. No sanitary arrangements will save those exposed to small-pox from taking it, though such arrangements ought to be enforced in all towns. Our Special Commissioner cannot admit any exaggeration in his statement of the extent of revaccination of exposed persons. He has rather to confess to a great under-statement which we may now supplement—though it is part of what should not be told in Gath—that the chairman of the Sanitary Committee himself is *revaccinated!*—ED. L.

BURIAL REFORM.

To the Editor of THE LANCET.

SIR,—Referring to your annotation in last week's LANCET, it appears to me that the reforms needed now in our present burial system have been narrowed to within a very small compass, and comprise simply (*a*) the construction of the coffin, (*b*) the mode of conveying it to the grave, and (*c*) the formation of the grave itself. Having within the last seventeen years witnessed the removal of five burial-grounds, and the exhumation of hundreds of bodies therefrom, as well as of others for medico-legal purposes, I am perfectly satisfied that if burial is to continue as the more general method of disposal of the dead, it must be in accordance with the "earth-to-earth" system so ably advocated by Mr. Seymour Haden. Admitting, which I freely do, all the advantages of cremation, I see many objections to and difficulties in the way of its general adoption. Hence it appears to me wiser that we should concentrate all our efforts in improving the present mode of burial.

In three cases of poisoning by arsenic, in which the deceased were just above the level of paupers, and had been buried in common graves, the coffins, all of pine deal, were intact after ten months, fifteen months, and even three and a quarter years' burial. I have seen, in a damp soil, coffin boards preserved after thirty or forty years' burial. On the other hand, in a dry, suitable soil, I have seen everything absorbed into the earth except the skeleton, coffin plate, and the handles. Even the skeleton will, I believe, in time disappear and mingle with the earth. These facts of the past ought to guide us in our regulations for the future. The leaden coffins, with vault or bricked grave burials, are slowly becoming things of the past. But the wooden coffins still used are too massive and heavy, as well as much too imperishable. It is evident that even pine deal, which is said to be the most perishable of all woods, is not perishable enough

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It is therefore unsuitable, and some other material is desirable. The "earth-to-earth" coffins appear to supply what is required, being constructed of material sufficiently strong to convey the body to the grave, but not to retard the resolution of the body to the earth; on the contrary, they are said to facilitate disintegration and absorption. Their use, therefore, ought to be promoted in every way.

It is greatly to be regretted that undertaking monopoly should have been successful in retarding the use of the "hand bier," or bier on wheels. Their superiority to the practice of carrying the body on the shoulders of bearers is obvious, and requires no arguments in their favour, being more economical, safer, and more wholesome.

The arguments in favour of burial in the earth, pure and simple, are overwhelming. They have the sanction of religion, of law, and of sanitation. It is with the latter aspect that we have to deal. In advocating cremation, Sir Spencer Wells wrote just twelve months ago a letter, of which the following is an extract.

"In this metropolitan district, in the twenty-five years 1859 to 1883, the deaths registered number 1,896,314. Of course the dead have been buried, and, with scarcely an exception, in and around London. Grant that in ten years a body may become harmless—although I do not at all believe that it does so within twenty years in our soil and climate,—can any imagination conceive the enormous mass of decaying animal matter by which we are surrounded? Could anyone be surprised at the outbreak of some devastating pestilence a hundredfold more destructive than the plague or black death of the middle ages?"

These remarks apply rather to the manner than the number of burials. Were all these bodies buried in suitable coffins, and in a sufficiency of dry soil, no harm could possibly result to the living. With proper burial our cemeteries might be made to serve not only the present but future generations. In all that relates to the actual burial of the body, medical practitioners are strictly within their province in advising such mode of burial of the dead as is least hurtful to the living, as well as most effective of its purpose; and the work of the Church of England Funeral and Mourning Reform Association deserves in these matters the hearty support of all members of the profession.

I am, Sir, yours faithfully,

Liverpool, May 31st, 1886. FRED. W. LOWNDES.

DEGREES FOR LONDON MEDICAL STUDENTS.

To the Editor of THE LANCET.

SIR,—In the discussion on the subject of degrees in medicine, nothing has been said about the important fact that without a degree a man cannot obtain the post of physician to any good hospital. It is no wonder that the public attaches so much value to the title of M.D. when the profession itself has always thus made such a point of doing so. How, then, can we expect a young colonist and others to forego the acquisition of a Scotch M.D. after he has been shown that a medical degree is the passport to the post of physician at a hospital in this or in his own country. The degree, therefore, which is to be given in London must not rank in a title only, but it must confer privileges similar to those implied by the possession of a University degree.

I am, Sir, yours truly,

June, 1886. Z.

EDINBURGH.

(*From our own Correspondent.*)

EDINBURGH UNIVERSITY.

IT has been decided to institute a new degree in connexion with the University Faculty of Science, as a goal attainable by students of agriculture who have till now received no university recognition at the end of their studies. The course of study will extend over three years, commencing from the completion by candidates of the usual preliminary examination in general knowledge. There is to be an intermediate examination upon the general applications of the various sciences to that of agriculture, after passing which the student may proceed to the final examination when he has completed an additional session, the final examination dealing chiefly with more purely technical matters. The practical departments in connexion with this new curriculum have been thoroughly elaborated, the surrounding districts of the Lothians having been put under requisition to supply the necessary opportunities of personal training in various practical details. Candidates who successfully pass the final examination will receive the degree of B.Sc. in Agriculture, and will bear with it a recognition as thoroughly trained agricultural scientists.

POST-GRADUATE HOLIDAY COURSES.

An attempt is at present being made in Edinburgh to arrange for a series of clinical demonstrations, to be held during October, for the sake of medical graduates of this school who might find it convenient to revisit Edinburgh for a short time at that season, and by means of which they might have personal opportunities of observing the most recent advances made in the school in the methods of treating various diseases. It is not proposed, in the meantime at least, to set on foot distinct courses for medical men upon the various branches of clinical work; but it is hoped that an arrangement may be made by which facilities for clinical instruction under our ablest teachers may be afforded to all such as may attend. A meeting of all the clinical teachers in the school has been summoned to meet in the board-room of the Royal Infirmary, under the presidency of Sir Douglas Maclagan, to discuss the subject. Should their deliberations prove satisfactory, it may be confidently hoped that a most important branch in the work of this school as a teaching centre will have been established. Experience elsewhere has shown that such arrangements afford a golden opportunity to the practitioner of which he is not slow to avail himself; and there can be little doubt that, if the preliminary difficulties in the way of concerting arrangements and concentrating the whole force of the teaching fraternity can be surmounted, the proposal will lead to a most successful result.

MEDICO-CHIRURGICAL SOCIETY.

At the last meeting of this Society an interesting case of atrophy of the whole upper extremity following diffuse cellulitis was exhibited by Mr. A. G. Miller. The atrophic process was not confined to the soft parts, but involved also the bones. Ankylosis had taken place at all the joints. Dr. Jamieson communicated some interesting results of new methods of treatment in diseases of the skin; he demonstrated the methods of application of several remedial agents introduced by Dr. Unna of Hamburg, and showed the results of treatment in the case of several patients. Perhaps the most important of these remedies is that employed as a varnish in intractable eczema in the moist stage—a glycerin-jelly, containing as its most active ingredient the sulphoichthyolate of soda, combined with extract of cannabis indica, to allay the irritation. This rapidly accelerates the progress of the condition from its moist to its dry retrogressive stage. Dr. J. S. McLaren read an interesting communication upon the effects of the inhalation of flame. The paper was illustrated with specimens and drawings, which demonstrated very clearly the lesions produced. A point of considerable interest was that in the case upon which the communication was based, marked duodenal lesions were found after death, which occurred in less than nine hours from the time of the accident.

THE MELBOURNE CHAIR OF CHEMISTRY.

The Chair of Chemistry in the University of Melbourne has been filled by the appointment of Dr. Orme Masson, a graduate of, and Research Fellow in, the University of Edinburgh. Dr. Masson is a son of Professor Masson, of the Chair of English Literature and Rhetoric in the University. He is a Doctor in Science of this University, and a Fellow of the Royal Society of Edinburgh and of other learned societies. In chemistry, to which he has devoted his undivided energies, he has had a career marked by success, both in his original investigations and in recent contributions to the literature of the subject in certain branches. His appointment will be a great gain to the University of Melbourne, for he has shown himself no less successful as an organiser and administrator than as a specialist in his own department of science.

Edinburgh, June 8th.

AT a meeting of Volunteer officers, held on the 8th inst. at the Bristol Medical School, it was resolved to establish a branch of the Volunteer Medical Association for the City, and to call a public meeting in reference to the formation of a medical staff corps.

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GLASGOW.

(From our own Correspondent.)

THE FACULTY'S REPRESENTATIVE AT THE GENERAL MEDICAL COUNCIL.

THE vacancy in the General Medical Council, caused by the lamented death of Dr. Scott Orr, has been filled up by the appointment of Dr. D. C. M'Vail as the representative of the Faculty of Physicians and Surgeons. Dr. M'Vail was largely supported by those who look for some result from the infusion of new blood (and younger blood into the Council. He will be the youngest member of that body; and if he manifests the same energy and exercises the influence at its meetings that he does at meetings of the Faculty, the venerable brethren of the Council may look out for stirring times.

ROYAL INFIRMARY MEDICAL SCHOOL AND THE UNIVERSITY.

A few weks ago reference was made in THE LANCET to the movement for the erection of the above-named school into a College of the University. Since then the directors of the infirmary have not been idle. They have had a deputation in London interviewing the Lord Advocate, the Scotch Secretary, and other influential persons, for the purpose of furthering their object. This deputation has returned highly pleased with the favourable impression they have made. They profess to have secured promises of support from many parliamentary men, and to have so advanced their cause as to render ultimate success pretty well assured. So far the University side of the question has not been heard. The projected change is one which profoundly affects the future position of our universities, and of the extra-mural schools, not only in Glasgow, but elsewhere. The public press, moreover, has taken the question up, urging strongly the adoption of the changes proposed. The University, therefore, if it wishes to influence public opinion on the subject, should lose no time in making some statement of the case from its own point of view.

GLASGOW PHILOSOPHICAL SOCIETY AND M. CHEVREUL.

This Society has done honour to M. Chevreul (and to itself) in preparing and forwarding to that distinguished scientist a neat little address, congratulating him on the near approach of his hundredth birthday. M. Chevreul has been an honorary member of the Society since 1860.

HIGH DEATH-RATE AT IRVINE.

During the month of May the death-rate for the whole of Irvine was 34·78, but in one district, the Half-way district, with a population of over 4000, it reached the alarming average of 50·85 per 1000; this high mortality being due to an epidemic of scarlet fever. In what is called the "old burgh" the rate was 20·58.

Glasgow, June 8th.

IRELAND.

(From our own Correspondent.)

ROYAL COLLEGE OF SURGEONS.

A MEETING of the Fellows was held on Saturday, the 5th inst., to receive the Annual Report of the Council, and discuss any matters affecting the interests of the College which might be brought under their notice. The following notice of motion by Mr. J. Kellock Barton was, in his absence, proposed by Mr. Edward Hamilton:—"That the incoming Council be recommended to do their utmost to obtain such satisfactory union between the existing corporations as will result in the formation of one examining body qualifying in medicine, surgery, and midwifery; and further that the Council be specially recommended to prevent by every means in their power legislation which would result in any of the existing corporations being entitled to issue a complete and registrable title to practise." Mr. Hamilton urged that if a conjoint scheme should be adopted, the Apothecaries' Hall should not be excluded from the arrangement. Mr. Whistler seconded the resolution. Dr. Kidd believed that the Bill now before Parliament was a good one, although it had a weak point, but it would settle the agitation about medical reform. He thought the recommendation to the Council unwise, it should be left an open matter, as they were perfectly aware of the importance of the subject, and they should use their own discretion. They should be very careful not to jeopardise the Bill. Mr. Jacob supported the resolution, and pointed out that if the College of Physicians objected to the Apothecaries' Hall joining in the proposed scheme, the latter body could claim the right of obtaining coadjutor examiners from the Medical Council, and could issue licences in medicine, surgery, and midwifery, in accordance with the clause adopted by Sir Lyon Playfair. Should this arise, their licence would be issued for a nominal sum. The resolution was adopted. On last Monday, the 7th inst., the annual election of office-bearers for the ensuing year took place. Mr. Stokes was returned unopposed as President, and in the contest for the vice-presidency between Mr. Corley and Mr. Fraser, the former was successful, having obtained a majority of votes. Mr. William Colles was also elected secretary without opposition. No change took place in the election for Council, except that Mr. H. Gray Croly succeeded to the vacancy due to the resignation of Mr. Wharton. One hundred and ninety-eight Fellows voted, an unusually large number. The President having left the chair, Dr. Kidd, the senior member of Council present, moved a vote of thanks to Sir Charles Cameron for the dignity with which he had occupied the chair and the efficient manner in which he attended to the duties of his office while acting as president. This was seconded by Mr. W. A. Elliott, and passed with acclamation. During the unavoidable absence of the new President (Mr. William Stokes) Sir C. Cameron will perform the necessary duties appertaining to the office. I shall probably refer next week to the annual report of the Council for the past year.

BELFAST HOSPITAL SATURDAY.

On Saturday week street collections were made in aid of the funds of the Belfast Royal Hospital, and a sum of £320 obtained. This is the third year these collections have been organised, and each year shows a considerable falling off in the amount received. The organisation for collecting subscriptions from the charitable public was complete, and the various ladies and gentlemen worked with all possible zeal and energy, but the result must be regarded as discouraging.

ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

The forty-fourth annual meeting was held last Monday, and from the report adopted by the meeting it appears that a sum of £1203 has been awarded, of which £157 had already been distributed in anticipation of the general meeting. Of the amount distributed during the year, £185 was to medical men, £932 to widows, and £86 to orphans. In accordance with an order of the Master of the Rolls for a readministration of the will of the late Mr. Carmichael, a sum of nearly £100 will shortly be handed to the Society by the Council of the Royal College of Surgeons. The contributions from India for the past year were much below the average.

Dr. Murphy, late assistant-physician to the Mater Misericordiæ Hospital, has been appointed physician to that institution; and Mr. C. B. Gaffney has been elected assistant-surgeon to Vincent's Hospital, in the vacancy caused by the promotion of Mr. Tobin.

Steevens's Hospital will receive a legacy of £2000 under the will of the late Mr. R. N. Moore, of Southern New Mexico.

Dublin, June 8th.

PARIS.

(From our own Correspondent.)

A CASE OF HEREDITARY INSANITY.

ABOUT the middle of last year three Frenchwomen, sisters, and spinsters, were implicated in the murder of an old lady, who was also a spinster, and in whose service one of the former was employed as housekeeper. The murder had been committed some time previously by poisoning, the body cut to pieces, which were steeped in lime and buried in the garden of the old lady at Villemomble, a small suburban town near Paris. They were tried for the crime, one as the murderess, and the other two as accomplices, but judgment was suspended on the recommendation of the late Dr. Legrand du Saulle, medical expert to the judicial courts of Paris, on the grounds of irresponsibility, as they were of

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unsound mind. This shrewd observer's diagnosis has been confirmed by Professor Ball, the eminent alienist and physician to the Sainte-Anne Asylum, where the three accused women were kept under observation. About a week ago Professor Ball delivered a very interesting clinical lecture at the asylum, to prove the irresponsibility of these women with regard to the crime with which they are accused. He also presented them to the audience one after another, and pronounced them to be hereditarily insane. They are all three the subjects of mystic insanity ("folie mystique"), which, the lecturer observed, differed physiologically from persecution mania ("délire des persécutions") in the sense that in the first case it is the sight which perceives, whereas in the second it is principally the hearing. The first that was introduced was Honorine Mercier, aged fifty-five. The Professor then asked her to give an account of one of her visions, which she did without any hesitation; it was as follows:—"I had the first vision at the age of eleven years. It was the night of my first communion. On awaking, I saw, to my great astonishment, that the candle was lighted. Whilst looking at it, I felt myself all at once lifted up in the air. I arrived in the midst of a delicious atmosphere, very respirable and altogether perfumed. I was in heaven. I felt nothing in me of matter, and yet there flowed in my veins something like the waters of felicity. Then followed the most exquisite music. It was the angels who were singing to God. This lasted four hours, after which I found myself in my bed." While citing the above, her features, which were very mobile, appeared to reflect each of the ecstatic sensations which her dream might have caused. During her recital she mixed up with her phrases extracts from sermons, biblical citations, sometimes pleasantry of rather doubtful propriety. After this, Honorine related how, in one of these visions, she believed herself to be the victim of an *enlèvement*, or being carried off forcibly. Sidonie Mercier is less disposed to speak than Honorine; she is of a passive nature, and one has to draw words from her. As for Euphrasie, the convicted, she has all the mysticism of her sister Honorine. Like her, she has visions, she hears voices, she obeys the orders given by God, &c. Professor Ball affirms that Euphrasie is a lunatic. The object of the murder was to appropriate to herself the property of her mistress, consisting of the house they lived in, and a large sum of money in banknotes, coupons, railway shares, &c., the changing of which excited suspicion and the ultimate discovery of the crime.

THE SCHOOL OF PHARMACY.

The reopening of the School of Pharmacy took place yesterday, and nothing unusual occurred, as, at Professor Chatin's request, M. Gérard, his botanical assistant, has been appointed *pro tem.* He is very popular with the pupils. Professor Chatin adopted this step to prevent a renewal of the scandal which took place at the opening of the Botanical Lectures, which has been reported in THE LANCET. Meanwhile, an inquiry is being held, as the students, in a letter to the Minister of Public Instruction, have formulated certain charges against Professor Chatin, the result of which has not as yet been made known.

M. PASTEUR.

M. Pasteur is winning more laurels. He and M. de Lesseps, who has also distinguished himself, have been awarded medals by the French Humane Society, in recognition of the services rendered by them to humanity, though in different ways. M. Pasteur has just presided over a new branch of the Philanthropical Society of Paris, which is intended for the reception and care of women and their infants leaving the Lying-in Hospital, which they are obliged to do on the ninth day after confinement, unless the mother is too ill to be removed. The subscriptions to the Pasteur Institute, according to the last report, just published in the Official Journal, amount to 1,194,182 fr., which sum includes 300,000 fr. lately voted by the Senate, and as much by the Chamber of Deputies.

Paris, June 8th.

YELLOW FEVER AT CARACAS.—The following communication has been issued from the Foreign Office:—"Her Majesty's Minister at Caracas reports great mortality among British subjects resident there, and states that many English mechanics are induced to emigrate to Venezuela under false impressions as to the climate, a better knowledge of which would enable those who thus risk their lives to obtain better terms."

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT an ordinary meeting of the Council of the College, held on Thursday last, the following Examiners were appointed:—Medicine: Dr. Moxon and Dr. Payne; Dr. Gee and Dr. F. T. Roberts were re-elected. Midwifery: Dr. Williams and Dr. Herman were re-elected. Dental Surgery: Mr. J. S. Turner (in the place of Mr. Moon, resigned); Mr. C. Tomes was re-elected.

The following report from the committee on the question of the conferring of degrees in Medicine and Surgery by the two Colleges in combination was approved, adopted, and entered in the minutes:—

"The Committee have further considered the question referred to them by the Council, together with the communication, dated February, 1886, from the Executive Committee of the Association for promoting a Teaching University in London, and the letter of the 27th ult. from Sir Henry Pitman, M.D, and accompanying Report from the Council of the Royal College of Physicians relating to the subject, also referred to the Committee by the Council on the 11th of March last and 13th ult. respectively, and submit for the approval of the Council the following recommendations—viz.: 1. That it is desirable that degrees in Medicine be conferred on candidates who have passed the examinations of the Examining Board in England by the Royal Colleges of Physicians and Surgeons. 2. That the terms upon which titles shall be conferred be referred to the Committee of Delegates of the two Colleges to consider the same and report thereon."

It was agreed that three additional delegates be appointed, provided a similar number be appointed by the Royal College of Physicians.

Sixteen delegates were selected to confer with a similar number already appointed by the Royal College of Physicians, as to the disposal of the portion of the site not occupied by the Examination Hall.

There will be an extraordinary meeting of the Council on the 24th inst., for special business.

Obituary.

FRANCIS MASON, F.R.C.S. ENG.

IT is with deep regret that we have to announce the great loss sustained by the profession through the death of Mr. Francis Mason, of 5, Brook-street, Grosvenor-square, in his forty-ninth year. The deceased was the youngest son of the late Mr. Nicholas Mason, of Wood-street, Cheapside. His early education was conducted at the Islington Proprietary School, the late Bishop Jackson being then head master, and at the King's School, Canterbury. He matriculated at the London University, and afterwards received his professional education at King's College, London, of which he was an Honorary Fellow. In the progress of his studies it was early observed that his aim was particularly directed towards cultivating the art and practice of surgery, and there are many who may remember his marked zeal and interest when performing the duties of dresser in the surgical wards of his hospital. He was prizeman in Surgery of his year, and at that time was present at many of the private operations of the late Sir William Fergusson, by whom he was highly esteemed, and whose intimacy and friendship he retained till the time of Sir William's death in 1877. He became Fellow of the Royal College of Surgeons in 1862, and at the date of examination he was the youngest on the roll of Fellows. His first public hospital appointment was that of surgeon to the St. Pancras and Northern Dispensary. He then became consecutively assistant-surgeon to King's College Hospital and surgeon and lecturer on anatomy at the Westminster Hospital. When the new St. Thomas's Hospital was opened in 1871, Mr. Mason was among the distinguished men, hitherto connected with other hospitals, who were invited by the governors to join the medical staff. He was appointed assistant-surgeon, and also joint-lecturer on anatomy. In both departments he won general regard and esteem by the thoroughness of his work. In 1876, on the retirement of Mr. John Simon, he became

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surgeon to the hospital, and when he resigned the lectureship in anatomy, he was made lecturer on practical surgery. This chair was eminently suited to the display of his remarkable technical skill and ingennity. His teaching was most attractive, and his classes were much valued and abundantly attended. In his teaching in the wards, Mr. Mason was careful to train his class in the details of minor, as well as put before them the principles and practice of major, surgery. He thus gave them just the kind of training which would be useful in ordinary practice. Many a man now in practice remembers gratefully the excellent instruction which he received from him.

He was a fellow and member of several of the learned Medical and Surgical Societies in London, and was honorary member of the South Hants Medical Society. He delivered the oration at the Medical Society of London in 1870, and was president in 1882, during which year of office he exhibited great interest in the work and success of the Society, which efforts were rewarded by a largely increased number of members. He was Lettsomian Lecturer in 1878, the subject of the lecture being "The Surgery of the Face," and he was the author of a work entitled "Hare-lip and Cleft Palate," in which operations he acquired a large reputation both at home and abroad. He was also the author of several other papers and cases of surgical interest, which have been published.

The subject of this memoir was a thorough gentleman, with refined tastes, and possessed a large connexion and circle of friends. He was, through the kindliness of his disposition, delicacy of his feelings, and uprightness of conduct, endeared to all who knew him. It was always in accordance with his inclination, both in the practice of his profession and in private life, to be painstaking, chivalric, accurate, systematic, and genial to a remarkable degree. His generosity of disposition and hospitality are well known, and these, combined with his great social powers, musical attainments, and bright humour, rendered him distinguished in society.

The suddenness of his decease has caused to the profession and his friends feelings of the greatest pain and consternation. His illness was erysipelas of the upper larynx, with diffuse inflammation of the tissues of the neck. Swelling was observed on the right side of the neck at the level of the thyroid cartilage, and at the same time there were swelling and redness in the fauces just below the right tonsil. In a few hours the whole of the upper larynx was swollen, with an intensely congested œdema, while the neck had become deeply infiltrated on both sides. Inhalations gave little relief, and at 7.30 P.M. on Thursday (the illness having commenced only in the morning of that day) Dr. Semon scarified the swollen epiglottis. For some hours after this the patient was easier, but about 2.30 A.M. on Friday he suddenly ceased to breathe. Mr. Pitts, who was watching him, at once performed tracheotomy, under circumstances of great difficulty, only Mr. Mason's wife at the time being present. After the tube had been inserted, there followed an attack of epileptiform convulsions. These presently passed off, and the patient, recovering his consciousness, was evidently greatly relieved; but it was apparent, even then, that the constitutional aspect of the illness was as serious as the local condition: the pulse was very quick, ranging above 160, and the respiration was irregular and, so to speak, ataxic. It was one of the forms of the so-called Cheyne-Stokes' respiration. The pulse fell in quickness and rose in strength during the morning of Friday, but the breathing never became quite natural in rhythm. The improvement ceased on Friday evening, when delirium set in. Early on Saturday morning Mr. Mason appeared again to revive, having been able to take liquid food and stimulants; but the revival was transient; his strength gradually failed, and he died at the moment when his medical attendants had met for consultation. The nature of the illness was to all appearance septic. The urine examined in the night of Thursday was loaded with albumen, and also contained much sugar; chlorides were suppressed. Under the microscope there were seen granular and hyaline casts, and later on some blood-corpuscles. It is possible that there may have been some antecedent interstitial change in the kidney, but probably the greater part of the albumen and all the sugar were present only as the result of the intensely acute attack. On Saturday morning the albumen had diminished very greatly, and the sugar reaction could hardly be obtained.

Dr. Ord (from whom, and by Dr. Buzzard, the above medical details have been obtained) had entire charge of the case from the commencement of the illness. Dr. Ord was quickly joined in his attendance by Dr. Semon, Mr. McKellar, Mr. Pitts, Mr. Clutton, and by Dr. Buzzard, who were unremitting in their attention, but, notwithstanding their combined efforts and skill, could not combat the disease, and the patient succumbed at 1.50 on Saturday afternoon. It is remarkable that Mr. Mason at the onset of his illness ordered his tracheotomy instruments to be placed in his bedroom in readiness. He leaves a widow, daughter of the late Benjamin Stephenson, Esq., of 25, Tavistock-square, to lament her loss. The funeral, which was attended by nearly the whole of the medical staff of St. Thomas's, as well as a large company of the private friends of the deceased surgeon, took place at Highgate Cemetery on Wednesay last.

JAMES APJOHN, M.D., F.R.S.

THIS well-known gentleman died last week at his residence, South Hill, Blackrock, at the advanced age of ninety-one years. Dr. Apjohn was born in 1794 in the county Limerick, and was educated at the Diocesan School, Tipperary, and afterwards entered Trinity College, Dublin, where he obtained, among other honours, a scholarship in 1816. In 1821 he obtained the degree of Bachelor in Medicine, and four years afterwards was connected as lecturer in Chemistry—a subject to which he early devoted his attention—to the Park-street School of Medicine. His fame as a chemist soon spread, and in 1828 he was elected Professor of Chemistry in the Royal College of Surgeons, Ireland, and in 1850 to the chair of Chemistry in the University of Dublin. In 1853 he was elected a Fellow of the Royal Society. He was the author of various papers on subjects connected with chemistry, and in 1837 was the recipient of the Cunningham Gold Medal of the Royal Irish Academy for his treatise on a "New Method of Investigating the Gaseous Bodies." About twelve years since he resigned his chair in Trinity College, and subsequently the post of representative of the University on the General Medical Council. He enjoyed extremely good health until a short time before his decease.

JOHN GAVARON TREACHER, M.R.C.S., L.S.A.

BY the death of John Gavaron Treacher on May 14th, at his residence at Kew, an interesting link with the past has been severed. He was born in 1814, and entered at St. Bartholomew's Hospital in 1833, a contemporary of Paget and Burrows. He passed his M.R.C.S. examination in 1836, and his diploma bears the names of Astley Cooper and Brodie. His life for the next few years was full of singular adventure. Having relinquished an assistancy in Bloomsbury, he embarked in 1838 as surgeon on board Sir James Brooke's man-of-war on the expedition to Sarawak. Subsequently he accompanied the Rajah, with whom he formed an intimate and abiding friendship, in many of his perilous encounters with the pirates of the Eastern Archipelago, on one occasion suffering shipwreck and losing everything. Mr. Treacher was subsequently appointed colonial surgeon and member of the Legislature of the island of Labuan; here he suffered severely from an attack of the so-called Labuan fever, to which he attributed much of his later ailments. He returned to England, and received a warm welcome from his friends at home; but his roving nature would not allow him to remain long in England, and he returned to the East, where he acquired an island named Pulo Dea, and there occupied his leisure with cocoa-nut plantations. Failing health caused him to settle down in England, but he paid several visits to his old haunts, and even talked of starting again. Mr. Treacher suffered latterly from painful attacks of asthma and angina pectoris, and shortly after one of these he rather suddenly passed away; he had been successfully operated on for cataract in both eyes some years before his death. Mr. Treacher did not practise after his return to this country, having become independent of his profession. His genial, kind, and courageous spirit endeared him to his many relatives and friends. He was never married, but was nursed with devotion during his last illness by his two sisters. His cousin, the Hon. W. H. Treacher, is now Governor of British North Borneo.

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MEDICAL NOTES IN PARLIAMENT.

Purification of the Lea.

IN the House of Lords, on the 8th inst., the River Lea Purification Bill was read a second time.

The Science and Art Department and Medical Schools.

In the House of Commons, on the 7th inst., in reply to Mr. Cozens-Hardy and Dr. Farquharson, Sir Lyon Playfair stated that, acceding to a request made and initated by a joint-committee of the four unendowed hospitals—viz., Charing-cross, Middlesex, St. George's, and Westminster—an arrangement has been made by the secretary of the Science and Art Department for the admission of certain students from their medical schools to that part of the courses which is limited to elementary instruction in biology, physics, and chemistry at the Normal School of Science at South Kensington. The only thing special in regard to the fees was that they were slightly raised; for whereas for the elementary instruction in those sciences the annual fee is £50, the medical students will have to pay not £33, but £35, with about £3 in addition for apparatus. Medical students have attended science classes in the Government school for the last twenty years, and care has always been taken that the fees charged should not be so low as to compete with private schools.

The Insanitary State of the House.

In reply to Mr. Isaacs, Mr. Leveson-Gower stated that orders were given last week for carrying out the works proposed by the committee for the improvement of the ventilation of the kitchen. It will be impossible to complete them during the period of an ordinary recess, but they will be so completed in a short time after the House reassembles.

Medical News.

ROYAL UNIVERSITY OF IRELAND. — The following Honours and Exhibitions have been awarded in connexion with the recent medical examinations;—

SECOND EXAMINATION IN MEDICINE.—First Honours: D. J. Coffey (First Class Exhibition, £40). Second Honours: David C. Smiley (Second Class Exhibition, £20); Henry Smith.
M.B. DEGREE EXAMINATION.—First Honours: James Bradley. Second Honours: John L. Livingston, James Donelan.
DEGREE OF M.CH.—First Honours: John F. Eagleton. Second Honours: Samuel Moore, James Donelan.
DEGREE OF M.A.O.—First Honours: Cornelius Bradley. Second Honours: John L. Livingston.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—The under-mentioned has been admitted a Fellow of the College:—

John Lentaigne.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on the 3rd inst.:—

Boyton, Edward Thomas Augustus, Wathington, Oxfordshire.
Brazil, Walter Henry, Highview, Sharples, Bolton-le-Moors.
Davis, William, Bank House, Ashford, Kent.

THE Library of the Royal Medical and Chirurgical Society will be closed on Whit Monday, (June 14th).

SANITARY PROSECUTION.—At West Ham on the 4th inst., an architect was fined £20 and costs for neglecting to connect the drains from two houses with the main sewer.

THE festival dinner in aid of the funds of the North London Consumption Hospital is to be held on the 23rd inst., Sir Henry Holland, M.P., presiding.

ON the 9th inst. Mr. Jessop, the well-known Leeds surgeon, was thrown from his carriage, receiving a severe shock and injuries to the head from broken glass.

ON the 2nd inst. portraits of its former presidents were formally presented to the Ulster Medical Society in the presence of a large assembly.

A MEETING of the Association of Municipal and Sanitary Engineers and Surveyors was held at Great Yarmouth on the 5th inst., when papers on the recent extensive sewerage improvement at Market Harborough were read.

Two hundred boys from Dr. Barnardo's Institutions will leave on Tuesday, June 15th, for Canada, under the personal care of Mr. A. B. Owen, of Peterborough, Ontario, and two experienced assistants.

WE are requested by the Committee of the Central London Throat and Ear Hospital, Gray's-inn-road (President, the Archbishop of Canterbury), to state that they gratefully acknowledge the receipt of a donation of £20 in aid of the "Llewellyn Thomas Memorial Fund" from Mr. Henry Foster Burnes, a former clinical assistant of the institution.

POPLAR HOSPITAL FOR ACCIDENTS.—The thirty-first anniversary festival of this institution was held on the 4th inst., when Sir Thomas Brassey, K.C.B., M.P., who presided, reported that the number of out-patients who had received relief during 1885 amounted to 7700, an increase of 500 as compared with the preceding year. The total receipts for the year amounted to £4810, and after payment of all expenses a balance of £1902 was left, a considerable portion of which sum has been devoted to the purchase of the freehold of the hospital. During the evening donations amounting to £1792 were announced by the secretary.

FOREIGN UNIVERSITY INTELLIGENCE.—The Austrian Government has appointed Dr. E. Neusser, assistant to Professor Bamberger, Dr. Paltauf, assistant in the Vienna Pathological Anatomy Institute, and Dr. Lustig, of the Cholera Hospital, Trieste, to study the Pellagra, which is now rife at Görtz.—The candidates for the Obstetric Chair, vacated by Professor Spaeth, in Vienna, are up to the present time limited to one—Professor Breisky of Prague.——Dr. Manuel Carmona of Valle has been appointed to the post of Director of the National School of Medicine, Mexico, vacant by the death of Dr. Ortega.——Señor Gomez Ocaña has been appointed to the Professorship of Human Physiology in the Faculty of Medicine in the University of Cadiz.——Don Maximo Tejeiro, professor in the Faculty of Medicine, Santiago, has been appointed by the Spanish Ministry of the Interior to report upon M. Pasteur's system of inoculation for hydrophobia. The Minister of War has nominated Señores Alabern and Espala on the same commission.

THE NIGHTINGALE FUND.—From the report for 1885 recently issued by the committee of this fund, it appears that the number of probation nurses admitted during the year was 45, and the number of those remaining from the preceding year was 32, making a total of 77 who received instruction. Of these, 19 resigned or were discharged, 27 completed their year's training, and 13 lady probationers and 18 nurse probationers remained in the school on Dec. 31st. The annual gratuity of £2, allowed by the regulations for the term of three years, to the certified nurses who have completed a year's service satisfactorily in some approved hospital or other institution for the benefit of the sick poor, was awarded to 71 nurses—viz., 21 for their third year, 20 for their second year, and 30 for their first year. From the opening of the school in June, 1860, to the end of 1885, a total of 833 candidates have been admitted, and 494 have left the school after completing a year's training as certified nurses. The receipts amounted to £3942, and a balance of £1829 remains in the hands of the treasurer, as against one of £2092 in 1884.

CHARING-CROSS HOSPITAL MEDICAL SCHOOL.—The distribution of prizes to the students of this school took place on the 9th inst., the ceremony being preceded by the reading of a highly satisfactory report by Dr. Bruce, the Dean. The Llewellyn Scholarship of £25 was obtained by J. G. V. Sapp, who also carried off the silver medal for medicine, the silver medal for practical medicine, the silver medal for surgery, and the silver medal for practical surgery. The Golding Scholarship of £15 was awarded to P. J. Duncan, who also took the silver medal for senior physiology, the silver medal for botany, and the silver medal for materia medica. The Governor's clinical gold medal fell to E. A. Snape; the Pereira prize of £5 was divided between G. O. Richards and E. A. Snape. A. E. Baker obtained the senior silver medal in anatomy, and Charles Gibbs the bronze medal in junior anatomy, the latter also securing the silver medal for chemistry and the silver medal for practical chemistry. The silver medal in physiology was awarded to J. F. Colyer, and the silver medal in practical physiology to B. F. Jackson. For practical surgery G. O. Richards was awarded a minor surgery operating case. The silver medal in midwifery was obtained by J. S. W.

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Chitty, who also carried off a similar honour in forensic medicine. J. G. H. Carter gained the silver medal in pathology, and F. M. Ludbrook and J. F. Colyer prizes in dental surgery.

MANCHESTER HOSPITAL SUNDAY AND SATURDAY FUND.—At a recent meeting of the committee of this fund it was resolved that £7000 should be distributed *pro ratâ* amongst the medical charities of Manchester and Salford. The following amounts amongst others have been paid in pursuance of this resolution:—Manchester Royal Infirmary and Branches, £2853 6*s.*; Children's Hospital, £907 4*s.*; St. Mary's Hospital, £604 5*s.* 6*d.*; Hospital for Incurables, £516 16*s.* 6*d.*; Clinical Hospital, £344 8*s.*; Salford Hospital, £372 15*s.*; Eye Hospital, £366 10*s.* 6*d.*; Sick Poor and Private Nursing Institution, £202 4*s.*; Ardwick and Ancoats Hospital, £234 18*s.*; Southern Hospital, £231 18*s.*; Lock and Skin Disease Hospital, £157 8*s.* 6*d.*; Hulme Dispensary, £99 6*s.*; Chorlton-on-Medlock Dispensary, £54 19*d.* 6*s.*; Hospital for Consumption, &c., £121 1*s.*; Ear Institution, £38 6*s.* 6*d.*; Well House Convalescent Home, £49 10*s.* In addition to the above, special contributions have also been paid as follow: Royal Infirmary, £42 6*s.* 9*d.*; Eccles and Patricroft Hospital, £26 19*s.* 10*d.*; Ardwick and Ancoats Dispensary, £24 0*s.* 9*d.*; Salford Hospital, £16 3*s.* 6*d.*; Clinical Hospital, £6 17*s.* 10*d.*; Dr. Meacham's Medical Mission, £5 0*s.* 4*d.*; St. Mary's Hospital, £5; Children's Hospital, £1 6*s.* 10*d.*; Eye Hospital, £1 1*s.*

ST. ANDREWS GRADUATES' ASSOCIATION. — The dinner of this Association was held on Tuesday evening last, when Professor J. Bell Pettigrew, M.D., was entertained in the Queen's Room of the Holborn Restaurant, Dr. Benjamin Ward Richardson occupying the chair. The company was numerous and distinguished. In proposing "Our Honoured Guest," the chairman commented on Dr. Pettigrew's excellence in various departments of medicine and science. The toast was eloquently acknowleged by the Professor, who, in the course of his speech, spoke of his work in early life, and said that his first incentive to labour came from his sister, that he went to work with a will, and won a gold medal, but that his sunshine was overcast by shadow, for in the week of his success the sister who had encouraged him to the exertion died. He briefly recounted the story of his life, and said he had kept his scientific studies free from any thought of politics. Professor Pettigrew urged upon his friends the duty of extending the reputation of the ancient University of St. Andrews, especially in a medical direction. Principal Donaldson returned thanks for *alma mater*, and a delightful evening was closed with "Auld Lang Syne," the company generally joining heartily in the chorus in the old Scottish fashion. A selection of vocal music, under the able direction of Mr. Hirwen Jones, varied the proceedings of the evening.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BUTLER-SMYTHE, A. C., F.R.C.S.Ed., has been appointed Surgeon to St. George's, Hanover-square, Dispensary.

CALEB, CLEMENT C., M.B., M.S.Dur., A.K.C.Lond., has been appointed Professor of Physiology and Pathology in the Medical College, Lahore, Punjaub.

CREGAN, WILLIAM J., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Assistant Surgeon to the Liverpool Dispensaries.

DALRELL, W. R., M.A., M.B., C.M.Ed., has been appointed Head Surgeon to the Liverpool Dispensaries.

DIXON, J. R. L., M.R.C.S., L.R.C.P.Ed., has been appointed Second House-Surgeon to the Royal Southern Hospital, Liverpool, vice Dr. Knight, resigned.

FOX, W. PERCY, L.R.C.S., L.R.C.P.Ed., has been appointed Surgeon to the Warehousemen, Travellers, and Clerks' Association, Cheapside, for Clapham; and also Attending-Surgeon to the South London Medical Aid Institute.

HELME, W. CROFT, M.B., C.M.Edin., has been appointed Junior House-Surgeon to the Royal Southern Hospital, Liverpool, vice Mr. Dixon, promoted.

MITCHELL, JAMES, M.D.Roy.Univ.Irel.&L.M.K.Q.C.P.I., has been appointed Assistant Surgeon to the Liverpool Dispensaries.

MITCHELL, ROBERT, M.A., M.B., C.M.Ed., has been appointed House-Surgeon to the Dewsbury and District General Infirmary.

MORTON, EDWIN, M.B., C.M.Ed., has been appointed Resident Medical Officer to the Newark-on-Trent Infirmary, vice W. H. Bailey, M.R.C.S., L.S.A., resigned.

POPE, F. M., M.B.Cantab., M.R.C.S., has been appointed Honorary Physician to the Leicester Infirmary, vice Buck, resigned.

RODLEY, JOHN, L.R.C.P.Ed., M.R.C.S., has been appointed Head Surgeon to the Liverpool Dispensaries.

SILCOCK, ARTHUR QUARRY, M.D., B.S.Lond., F.R.C.S., has been appointed Surgeon-in-Charge of Out-Patients to St. Mary's Hospital; and Assistant Surgeon to the Royal London Ophthalmic Hospital, Moorfields.

STEVENSON, JOHN, M.R.C.S., L.R.C.P.Lond., has been appointed Assistant Surgeon to the Liverpool Dispensaries.

STOOKES, ALEX., M.B., C.M.Ed., L.R.C.S.Ed., has been appointed Head Surgeon to the Liverpool Dispensaries.

WALKER, A. C., L.R.C.P., and L.M.Edin., has been appointed Assistant Surgeon to the Liverpool Dispensaries.

WHITE, ERNEST, L.R.C.P.Lond., M.R.C.S., L.S.A., has been appointed Medical Officer to No. 5 District of the Leeds Union.

WIGMORE, F. H., M.B.Cantab., M.R.C.S., has been appointed Senior House-Surgeon to the Royal Southern Hospital, Liverpool, vice Mr. A. H. Gordon, resigned.

WILDE, R. P., L.R.C.P.Ed., has been appointed Assistant Surgeon to the Liverpool Dispensaries.

WITHERS, J. SHELDON, L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer for the Sale and Ashton District of the Altrincham Union.

Births, Marriages, and Deaths.

BIRTHS.

BAKER.—On the 23rd ult., at Moulmein, Burma, the wife of Surgeon-Major Oswald Baker, of a daughter.

DAVISON.—On the 31st ult., at Langton House, Battle, Sussex, the wife of Rashell Davison, M.D., of a son.

DUKE.—On the 8th inst., at the Royal Military College, Sandhurst, the wife of Surgeon-Major Alex. Duke, of a son.

IRVINE.—On the 7th inst., at Royal-parade, Cheltenham, the wife of Staff-Surgeon Gerard J. Irvine, Royal Navy, H.M.S. *Volage*, of a son.

LONG.—On the 4th ult., at Agra, the wife of Surgeon J. W. F. Long, of a daughter.

MOORE.—On the 25th ult., at Naini Tal, Bengal, the wife of Surgeon-Major J. H. Moore, of a son.

MORISON.—On the 4th inst., at Victoria-street, St. Albans, the wife of J. Morison, M.D., of a daughter.

MOTT.—On the 3rd inst., at Meadowlead, Harrow, the wife of Frederick W. Mott, M.B., B.S.Lond., of a daughter.

STORRY.—On the 8th inst., at Lansdown, Stroud, Gloucestershire, the wife of Fred. W. Storry, M.R.C.S., of a daughter.

TOWNSEND.—On the 31st ult., at Benares, the wife of Surgeon-Major Townsend, Medical Staff, of a son.

UPPLEBY.—On the 4th ult., at Port Elizabeth, South Africa, the wife of J. G. Uppleby, L.R.C.P., L.R.C.S., of a son.

WHITELEGGE.—On the 1st inst., at 13, Belgrave-square, Nottingham, the wife of B. Arthur Whitelegge, M.D., of a son.

MARRIAGES.

GUTTERIDGE—PENNEY.—On the 4th inst., at Culross, N.B., Wilkins Gutteridge, M.B., M.R.C.S., of Bradford, to Mary Kate, daughter of J. Penney, of School House, Culross.

HAIRSINE—BEESTON.—On the 3rd inst., at St. Mary's, Lewisham, Hudson Hairsine, L.K.Q.C.P.I., of Roos, Yorkshire, to Cecelia Elizabeth, only child of the late W. F. Beeston, of Maida-vale.

JONES—SIMPSON.—On the 8th inst., at St. Paul's, Wilton-place, James Thoresby Jones, M.R.C.S., L.R.C.P., son of the late Rev. James Jones, and Rector of Llanfwrog, to Janet, eldest daughter of James Simpson, of Inverboyndie, Banff, N.B.

LEWIS—SHARMAN.—On the 8th inst., at St. Asaph, Christopher John Lewis, M.D., of Birmingham, to Irene Bessie, only daughter of the late Malim Sharman, Surgeon, of Birmingham.

MAC KERN—GIBSON.—On the 5th ult., at St. John's Church, Buenos Ayres, by the Rev. Austin West, M.A., assisted by the Rev. A. S. Lennox Robertson, M.A., George Mac Kern, M.D.Lond., M.R.C.S., late of Guy's Hospital, eldest son of William Mac Kern, Esq., of Buenos Ayres, to May, elder daughter of Thomas Gibson, Esq., of 1, Eglinton-crescent, Edinburgh.

PRIEST—WOOD.—On the 2nd inst., at St. Marylebone Parish Church, James Damer Priest, M.R.C.S., L.S.A., of Waltham Abbey, Essex, to Beatrice Amy, second daughter of the late John H. Wood.

STOCK—YEELES.—On the 5th inst., at St. George's, Campden-hill, John Nugent Stock, Surgeon-Major, Medical Staff, to Caroline Louisa, younger daughter of the late W. B. Yeeles, Esq., of Bathford, near Bath.

SYRÉE—WEST.—On April 28th, at St. George's, Hanover-square, W., by the Rev. P. J. Syrée, father of the bridegroom, Anton Hugh Syrée, M.R.C.S., L.S.A., of Northallerton, Yorks, to Florence Mary, youngest daughter of James Firth West, of Bonchurch, Isle of Wight.

WELLS—SAUNDERS.—On the 10th inst., at the Church of the Holy Trinity, Cuckfield, Sussex, by the Rev. T. J. Mount, M.A., Vicar, A. E. Wells, M.D., of Cuckfield, eldest son of A. J. Wells, Esq., of Cardiff, to Edith Harriette (Dingle), eldest daughter of C. E. Saunders, M.D., of 21, Lower Seymour-street, Portman-square, W.

DEATHS.

APJOHN.—On the 2nd inst., at his residence, South-hill, Blackrock, co. Dublin, James Apjohn, M.D., F.R.S., formerly University Professor of Chemistry, Trinity College, Dublin, aged 91.

FINLAY.—On the 8th inst., at St. Colm's, Trinity, Edinburgh, William Finlay, M.D., F.R.C.P.E., aged 72.

MASON.—On the 5th inst., at Brook-street, Grosvenor-square, Francis Mason, F.R.C.S., Surgeon to St. Thomas's Hospital, aged 48.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, June 10th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
June 4	30·18	N.E.	52	47	105	66	44	...	Fine
,, 5	30·14	E.	55	47	102	65	43	...	Cloudy
,, 6	29·95	E.	61	58	106	73	48	...	Hazy
,, 7	29·92	N.E.	62	55	110	74	52	...	Fine
,, 8	29·93	S.E.	61	54	110	73	52	...	Fine
,, 9	29·85	E.	58	54	10	73	54	...	Overcast
,, 10	29·79	S.E.	57	55	...	...	54	...	Overcast

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

THE ILLICIT SALE OF ERGOT.

How far it is fair to connect Rome's abnormally heavy infantile mortality with her large celibate population is a question we leave to others; but there is no doubt that coincidently with this mortality within her gates attempts to procure abortion have been frequent enough to call, from time to time, for the interference of Government. Under cover of an admonition to certificated pharmacists and midwives the Prefecture has issued a circular to the syndics of the City and Province to see to the strictest enforcement of the regulations as to the sale of ergot of rye. The drug, it seems, is in such request that, according to the *Opinions*, one and the same medical prescription is unlawfully used for its purchase over and over again, and this in spite of the pontifical regulation of Nov. 15th, 1836 (still in force), which requires, under heavy penalties, all chemists and druggists to retain the prescription once it has been made up, and only give to the purchaser a receipt for the money he has paid. "The Prefect has, therefore," says our contemporary, "with his circular of May 27th invited the syndics to caution all pharmacists and midwives that if they violate the above regulation they will be denounced to the judiciary authorities for criminal proceedings, and that, if convicted, they will incur the severest penalty of the law."

P. A. S. had better communicate with the author mentioned.

"IODOFORM SPRAY."

To the Editor of THE LANCET.

SIR,—It is a common saying, "There is nothing new under the sun," and the employment of iodoform in the form of spray is by no means new. If Mr. Mundie will kindly refer to my work, "On the Inhalation Treatment of Diseases of the Organs of Respiration," he will find that the use of an ethereal solution of iodoform in the form of spray is specially referred to, and some of the diseases of the throat and lungs enumerated in which the employment of iodoform is indicated.

I remain, Sir, yours faithfully,

Lucerne, June 7th, 1886. ARTHUR H. HASSALL, M.D.

To the Editor of THE LANCET.

SIR,—In your last issue Mr. Mundie recommends the use of the iodoform spray in throat and other cases, being struck with its superiority to other preparations. I was led to the same conclusions by my own observations (*vide* THE LANCET for the year 1884). Mr. Mundie will find the method of preparing the spray as there described worth a trial. When ether is objected to the following is good:—℞ Iodoformi præcipt., 3ss.; tr. senegæ, 3j.; terebene et adde aquam ad 3j. This furnishes a serviceable lotion or spray, and the odour is rather pleasant.

I am, Sir, yours faithfully,

Charlwood-street, S.W., June 7th, 1886. ALFRED LEACH.

A MEDICAL MISSIONARY FOR QUEBEC.

THE editor of the *Edinburgh Medical Missionary Quarterly Magazine* (the Rev. J. Lowe, F.R.C.S.E., George-square, Edinburgh) publishes the following extract from a letter from Quebec. He has written for further particulars, and will supply information when it arrives to anyone desiring it. A stamped and addressed envelope should be enclosed.

"In writing you at present one of my objects is to try and interest you in a work which we have in hand here, and I am sure when I state it you will grant my request. My predecessor, the Rev. D. Marsh, is the president of a cottage hospital, founded twenty years ago, for the use of the Protestant poor, for which we may soon require the services of a young medical man of good parts to work as a medical missionary. He would have rooms and board and a small salary, and would also be free to take outside practice. If my memory be true to me, you are, I believe interested in the Edinburgh Medical Missionary Society, and might be able to help us in getting a suitable man for Quebec. Of course, he must be fully qualified, and have practised for a time. We need also a Christian woman at once as matron and nurse. She would receive a fair salary, and have a comfortable home. She must not be over forty, self-possessed, sympathetic, and an active Christian worker. For such a person we ask God. I am asked to ascertain what prospect there is of getting help from your city. The cottage hospital is the only Protestant one in the place, and is endowed."

Stand Sure.—If the case progresses satisfactorily, the patient may return to work in about a month.

An Old Army Surgeon has not enclosed his card.

COCAINE IN PARTURITION.

To the Editor of THE LANCET.

SIR,—I have lately been using cocaine in parturition with such, to me, surprisingly excellent results that I think it would be a good thing for parturient women if, by means of your valuable journal, it could be brought into more general use in midwifery practice. The manner in which I use it is by applying a combination of the alkaloid with vaseline and glycerine, as follows:—Of cocaine six parts, of vaseline twenty-four, and of glycerine twenty, introduced into the vagina with an ordinary glass female syringe, passed as high up behind the cervix as possible (the glycerine is used to make the application by means of the syringe more easy). The pain due to pressure, the dilatation of the cervix, and the expansion of the perineum are so markedly relieved that the ordinary labour is robbed of half its agony. The relief from pain afforded by cocaine saves the strength of the mother, and so enables and encourages her to bring more voluntary power into play, which, with the lubricating effect of the vaseline, materially shortens the duration of the labour. Cocaine was, I find, used in midwifery two years ago, though, I believe, a solution was then applied per speculum, and I am not under the impression that I have made a new application of this valuable drug. But I claim for this compound the following advantages: it is easy of application, and can be used without the patient's knowledge, if wished; by mixing with vaseline it is applied more thoroughly to all parts of the vaginal canal, and also kept in contact therewith, ensuring a more lasting effect than when applied in solution.

I must ask you to let the great benefit of the application of cocaine in this so universally practised branch of our profession be my excuse for again bringing this subject forward.—I am, Sir, yours truly,

Chiswick, W., May 26th, 1886. BERNARD F. HARTZHORNE.

THE "PENDJEH SORE."

To the Editor of THE LANCET.

SIR,—In your issue of April 10th, p. 703, there is a description of what is called the "Pendjeh sore," from the *Vrach*, by Dr. Suski. His description exactly coincides with the characteristics of a sore very common in this part of the world, and which is, I believe, well known all along the north-west frontier of India under different names. At any rate, it seems undesirable to adopt the Russian doctor's name for it when it is so well known to most of the doctors in the Indian Medical Service who have served on the frontier of Afghanistan. Dr. Suski has some faith in applications such as corrosive sublimate and mercurial ointments; but I have never found these of the slightest benefit. So far as I have been able to make out, the sore appears to be due to a low organism, which, after getting into the skin and causing a sore, attacks the healthy skin around, advancing very slowly and forming small nests, like lupus non exedens, around the margin. The only treatment which did any good in my cases was the free application of nitric acid to the infecting sore until a healthy surface was formed, at the same time opening the small surrounding nests with the point of a lancet, and putting a tiny drop of the concentrated acid into the wound. Nitrate of silver was quite ineffectual. Dr. Suski, I think, misses an important point when he omits to mention that when these sores have existed a long time they have a permanent dull brown stain, which, together with the cicatrisation, the cachexia produced by residence in an unhealthy country, and the irregularity of the distribution of the sores might perhaps be mistaken for syphilis, especially among soldiers.

I remain, Sir, yours obediently,

A. PIERSON,
Surgeon, Indian Medical Service.

Bolan Pass, Beloochistan, May 12th, 1886.

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"DIET FOR GOUTY SUBJECTS."

To the Editor of THE LANCET.

SIR,—Kindly allow me to offer the following suggestions to a brother subscriber, who, in your issue of May 29th, p. 1055, describes himself as "a martyr to gout and corpulency," and who has tried "Banting" and a vegetarian diet, and failed in each to obtain the desired relief.

I may premise what I have to say by first stating that I believe gout, rheumatism, obesity, and dyspepsia, with all their consequent ills, depend not so much on the quality of the food taken as upon the amount consumed in relation to the amount of exercise performed. The majority of the English upper and middle classes no doubt eat and drink more than is required for the perfect nutrition of the body, which in consequence becomes too plethoric; its assimilating powers are overtaxed, and there is a strain upon the excretory organs to get rid of the surplus materials which tend to accumulate in the system, leading to biliousness, gout, rheumatism, gravel, piles, &c. The obvious remedy for this consists in limiting the amount of food and drink taken, so as to strike a balance between the bodily wants and the demands upon them. Supposing, however, that, owing to the nature of a man's vocation, to his bodily or cardiac weakness, or to many other causes which might be mentioned, he is unable to maintain this balance, the question arises, in what way may he be helped with the least inconvenience to himself to get rid of the surplus matter, and thus relieve the system from what must, if allowed to remain, prove a source of disease. The remedy for this is to be found, in my opinion, most effectively in the *natural* aperient mineral waters, which, if judiciously taken, seldom fail to bring about the desired effect. The method of taking them will, of course, depend upon the individual case. An acute disease, as a rule, requires a quick remedy. Thus, after an aldermanic dinner a purgative dose, with the addition of an equal quantity of soda water, taken before breakfast the following morning, will soon set matters right. But, I presume, this is not what is required by your correspondent, and I should advise him to take every second or third morning a dose of mineral water just sufficient to act as a slight aperient. This will relieve the whole intestinal and portal systems, correct the acidity so apt to exist with gout, get rid of the tendency to corpulency, make exercise a pleasure instead of a labour, and so directly and indirectly get the whole system into such a state that life may be said to be enjoyable. At the same time, only such diet should be taken as is found to be best digested, and, as a rule, unless taking more exercise than usual (as during a walking tour) malt liquors and wines should be avoided, or indulged in very moderately, the best stimulant in such cases being undoubtedly old whisky freely diluted. Trusting these few remarks may be of value, I remain, Sir, yours very truly,

June 2nd, 1886. M.D. LOND.

Mr. A. Dix.—We regret we cannot comply with the request, as there appears to be no special novelty in the arrangement.

"A MODIFIED MIDWIFERY FORCEPS."

To the Editor of THE LANCET.

SIR,—I read with much satisfaction Mr. James McMunn's account of his modified midwifery forceps in THE LANCET of May 29th, p. 1024, and have no hesitation in saying that in one particular the idea there enunciated is a step in the way of meeting a felt want. I refer to the hinge whereby during application the handle of the upper blade is turned upwards, and so does not come in contact with the bed. In proof of my statement I may mention that it was my intention when next in Edinburgh to consult with an instrument-maker as to how this very modification could be applied to Simpson's long forceps. It is easy to say, "Get your patient's hips well over the edge of the bed, and you will have no difficulty in introducing the upper blade." Of course not; but to do so some assistance is required. Such assistance is not always easily got, as those only know who have had experience of difficult labours in country places. If the woman happen to be in that abomination, often found in Scotland, called a "box bed," the difficulty is increased. Having in view such possible contingencies, it is more than probable that the modification in question, should it turn out that by means of it the forceps can be used with ease in the ordinary position, will be hailed with delight.

I am not quite sure that I agree with Mr. McMunn in his remarks about axis traction. I have always found that Simpson's long forceps can be made to effect traction in the proper direction. Then, again, I am not sure that it is any advantage to have the blades separated at their proximal extremity. For where is it that undue pressure is generally found to have been exerted on the child's head? Undoubtedly over the forehead, and perhaps the eye. By separating the blades at their proximal extremities, unless the handles be well tied together, there is more danger of undue pressure distally. I shall conclude by saying that though Mr. McMunn has anticipated me in this matter, I bear him no grudge in consequence.

I am, Sir, yours faithfully,

Crieff, N.B., June 4th, 1886. ALEX. THOM, M.D. Edin.

"A ROUGH-AND-READY MEDICAMENT."

To the Editor of THE LANCET.

SIR,—After reading Dr. Charles H. Ralfe's letter in your last issue, I have no doubt that I quoted Druitt's Surgery inaccurately, and that the shock from which Marshal Lannes suffered was the result of a fall, and not of exposure to cold. I was writing from memory, having no edition of the above work by me.—I am, Sir, yours obediently,

June 8th, 1886. A SURGEON.

A CASE OF ANGINA PECTORIS.

To the Editor of THE LANCET.

SIR,—Angina pectoris is a symptom which so rarely occurs in the ordinary routine of a general practitioner's work that I venture to report the following case *in terrorem*.

A short time ago I was summoned to see a gentleman, aged sixty-five, who looked perfectly healthy. The history of the case was as follows:—At 4 A.M. the patient had been aroused by a severe pain in the chest. He took whisky, which relieved him, and he slept again. A second time the pain awoke him, when he again resorted to the whisky, which acted as before. At 12.15 A.M., when I saw him, he complained of a diffused pain over the chest, the idea conveyed to my mind by his manner being that it was indigestion, nothing more. He mentioned that he had never had it before, was not affected by food or exercise, had no cough, breathlessness, palpitation, &c. The impulse of the heart was regular and soft, the sounds faint; the rate was normal, as was also the condition of the radial and temporal arteries. There was no œdema of the legs, and the patient had never spat blood. I ordered a mixture for dyspepsia, and left. At 5 P.M. I was suddenly recalled, and I found that the patient had been dead half an hour. He had died quite tranquilly, while reading a newspaper. The post-mortem examination showed the heart to be large, friable, flabby, and pale, with masses of fat on its surface. Both cavities were empty; there was no valvular disease, and no evidence of atheroma anywhere. I should have mentioned that the face, neck, chest, and the arms down to the elbow were deeply stained with venous congestion.

I do not cite this as a remarkable case; but the question arises, How many of the innumerable cases of pain in the chest are due to angina? The patient in this case had consulted numerous physicians, and they had all told him that the heart was all right, and that the pain was due to indigestion. It must be remembered that I had no time for watching, and that this (so far as I know, though it was contradicted at the inquest) was his first attack. I will not go into the question of differential diagnosis, as that is well known—at least, theoretically. I can only say that in future I shall be cautious in giving a definite opinion within a few days in cases of pain in the chest.

I am, Sir, yours obediently,

June 7th, 1886. J. RUSSELL HARRIS, M.D.

T. C. M.—The employment of artificial heat would appear to be of great service in the treatment of myxœdema. The temperature of the apartment should not fall below 66° F. Turkish baths prove beneficial sometimes, and also the use of infusion of jaborandi.

An Old Assistant.—A society of the kind referred to by our correspondent was founded a few years ago, of which Mr. Radley, Wynne-road, Brixton, is the secretary.

THE POISONOUS EFFECTS OF COCAINE TAKEN INTERNALLY.

To the Editor of THE LANCET.

SIR,—I should be glad if you could allow me space in your journal to relate a case which I have met with lately in my practice, in the hope that it may lead to an expression of opinion on the subject by anyone who has met with a case of poisoning by this new and useful medicine.

A patient of mine who was suffering from toothache, resulting from a hollow tooth, applied some of the 4 per cent. solution of hydrochlorate of cocaine to the tooth and gums. He did not spit it out, but, according to his statement, he swallowed from twenty to thirty drops. Within half an hour he was seized with a feeling of faintness and giddiness; then an attack of palpitation of the heart came on, and he complained of tingling and numbness, dryness at the back of the throat, and a sensation of heat and flushings moving over the body, but especially over the spine; suddenly a rash-like scarlatina made its appearance over the body, but was more marked on the neck; the pupils were natural, and responded to light, but vision was somewhat dimmed. I immediately gave him a strong dose of mustard and warm water, which did not cause emesis. I then administered twenty grains of sulphate of zinc, but without effect; it was only by frequently repeating the dose that vomiting took place. The patient was relieved for a few minutes, and seemed brighter; but the symptoms soon returned, and he felt so weak that he thought he was dying. I held some strong ammonia to his nostrils, but he said he could not smell it. I kept walking him about, but his legs tottered so much that I had to support him. He constantly felt a desire to have the use of his bowels and bladder. The mind remained clear, and the pulse became fast, weak, and intermittent.

From the above case it would appear that the symptoms of cocaine poisoning are a feeling of faintness and giddiness, palpitation of the heart, dimness of vision, diminution of the sense of smell, difficulty in producing vomiting, relaxation of the sphincters, scarlet rash, numbness and tingling, dryness of the throat, with sensations of heat up the back.

I am, Sir, yours faithfully,

June 1st, 1886. JAS. LESLIE CALLAGHAN, L.R.C.S.I., &c.

Mr. W. B. Wallis.—The correspondence does not show that Dr. Hunt intended any neglect of the patient. His own letter indicates that he did not. It would have been better, judging from the actual event, if he had acted for the absent medical attendant; but we are satisfied he intended what was right and kind.

L. L.—Certainly, though it is not usually advisable to do so.

Mr. Kersey.—We are unable to advise our correspondent.

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COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir James Paget, London; Mr. Frederick Treves, London; Mr. J. W. Hulke, London; Dr. Hassall, Lucerne; Mr. Hutchinson, London; Mr. Bruce Clarke, London; Dr. Danford Thomas, London; Mr. Bilton Pollard, London; Mr. Dowdeswell, London; Mr. Ralph Browne, King's Lynn; Surgeon-Major Platt; Mr. Wiglesworth, Liverpool; Mr. V. Richards, Goalundo; Dr. Campbell, Garlands; Dr. Gowers, London; Dr. Taylor, Hoddesden; Dr. Huggard, Davos; Mr. Trindall, London; Mr. E. Roberts, Manchester; Mr. Padley, Swansea; Mr. Pierson, Bholan Pass; Mr. G. A. Wright, Manchester; Mr. Udale; Messrs. Hertz and Collingwood, London; Mr. Oliver, London; Mr. C. S. Jeaffreson, Newcastle-on-Tyne; Dr. Swann, Batley; Mr. G. R. Kerbey; Dr. J. R. Harris; Dr. Maguire, London; Mr. Rodwell, Loddon; Dr. Coupland, London; Mr. Bott, London; Mr. Loch, London; Dr. Thom, jun., Crieff; Dr. Wade, Birmingham; Mr. Mitra, Medrapore; Mr. Leach, London; Dr. Griffiths, London; Mr. Wright, Finedon; Messrs. Lofts and Co., London; Mr. R. B. Horsley, Edinburgh; Messrs. Woolley and Sons, Manchester; Mr. Brockelhurst, Matlock; Mr. Webb, Stroud Green; Mr. Marrett, London; Mr. Baker, London; Dr. Needham, Barnwood; Messrs. Squire & Co., London; Dr. Russell; Dr. Pinger, Kreuznach; Mr. Fuge, Taunton; Mr. Hunt, Chertsey; Messrs. Beal and Sons, Brighton; Mr. Windle, Leicester; Mr. Lewis, Portsmouth; Dr. A. Martin, London; Mrs. Ainsworth, Southport; Dr. Duckett, Crosshills; Mr. Burdett, London; Mr. Yeates, Peckham; Dr. Reid, Stafford; Mr. White, Wolverhampton; Mr. Newsholme, Sheffield; Mr. Patterson, Leeds; Mr. Fowler, Hereford; Dr. McLentak, Church Stretton; Mr. St. Dalmas, Leicester; Lieut.-General Bourchier, Brighton; Mr. Pepper; Mrs. Smith, Stratford-on-Aven; Mr. Oliver, Pendlebury; Mrs. Pratt, Cardiff; Mr. Mackenzie; Messrs. Algar and Co.; Mr. Armstrong, Newcastle-on-Tyne; Mr. Ogden; Messrs. Christy and Co., London; Mr. Harris, Bristol; Mr. Storey, Stroud; Mr. Lacy, Wandsworth; Mr. Hunt, Scarboro'; Mr. Maitland; Messrs. Haller and Co., London; Mr. Warburton, Brynfedwan; Messrs. Butterfield and Son, Northampton; Mr. Lyle, Shacklewell; Messrs. Bates and Co., London; Mr. Whitford, London; Mr. Page, Bristol; Mr. Jones, Battersea; Mr. Scott, Manchester; Mr. Gilbert, London; Mr. Milne, Ladywell; Miss Thomas, Fulham; Messrs. Bates, Hendy, & Co., London; Graduate; Telegram, Anerley; Secretary, Liverpool; L.L.; Buchu; A Highlander; Stand Sure; Z.; M.S.S.; An Old Army Surgeon; An Old Assistant; F. W., Horsham.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Brown, Yeovil; Mr. Geale, Brighton; Mr. Hakeman; Mr. Hearder, Newton Abbot; Mr. Howard, Littleport; Dr. Eberle, Thirsk; Mr. Andrew, Stockport; Mr. Rideal, London; Mr. Nutall, Bury; Mr. Cockerill, Porthleven; Mr. White, Bayswater; Mr. Green, Ripon; Mr. Gretrix, Wrexham; Mr. Robson, Bushey; Miss Meyer, Holloway; Mr. Gibbs, Birmingham; Mr. Barron, Manchester; Messrs. Riddle and Co., London; Mr. Birchall, Liverpool; Mr. Hayward, Corby; Messrs. Lee and Nightingale; Mr. Fletcher, Northwich; Messrs. Bullock and Co., London; Mr. Mayhew, Ipswich; Mr. Jones, Dowlais; Mr. Fox, Birmingham; Mr. Densham, Wareham; Dr. Stuart; Dr. Whitelegge, Notts; Dr. Horder, Cardiff; Mr. Tomson, St. Neots; Dr. Sandwith, Cairo; Dr. Orridge, Wokingham; Dr. Hepburn, Coxhoe; Mr. Hyron, Shipston-on-Stour; Mr. Syrée, Northallerton; Mr. Paterson, Spennymoor; Mr. Gravatt, London; Mr. Keeting, Manchester; Messrs. Lofts and Co.; Dr. Smith, Stockport; Medical; C. O.; W. W. R.; Medicus; Anglia; Medicus, Pimlico; W. A., Edinburgh; North Due, Liverpool; Mrs. P., Ashford; P. B. E., Newcastle; Delta, Seacombe; D., Mistley; Sister; Medicus, Torquay; Secretary, Pendlebury; Medicus, Manchester; Venator, Bursley; M.D.; Tact, Coventry Park; Delta, Edinburgh; Omega; C. B. G., Tunstall; Chemist, Upper Clapton.

Worthing Intelligencer, Northern Whig, Croydon Chronicle, Western Morning News, Zoophilist, Advocate of India, Sanitary Engineering, Bosphore Egyptien, Northern Echo, North Star, North-Eastern Daily Gazette, Glasgow Herald, &c., have been received.

Medical Diary for the ensuing Week.

Monday, June 14.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

Tuesday, June 15.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, June 16.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.

Thursday, June 17.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, June 18.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, June 19.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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Ingleby Lectures
ON
SOME FUNCTIONAL DISORDERS OF FEMALES.

By WILLOUGHBY F. WADE, F.R.C.P.,
SENIOR PHYSICIAN TO THE GENERAL HOSPITAL, BIRMINGHAM.

LECTURE II.

(*Concluded from page 1106.*)

BEFORE proceeding to consider some of the details of this subject, let me ask your assent to certain postulates of a general character. These will serve the useful purpose of helping in the differentiation of hysterical cases one from another. Let it be granted, then—1. That any nerve-centre (that is, any collection of grey nerve-matter) may have its excitability exalted, so that it becomes unusually responsive to its accustomed stimulus. 2. That any nerve-centre may have its excitability lessened, so that it becomes less than usually responsive to its accustomed stimulus. 3. That the permeability of any part of the nervous system may be increased. 4. That the permeability of any part of the nervous system may be diminished. 5. That increased permeability may cause ganglia to co-operate which do not usually do so; that is, that excitement of one ganglion may excite the action of other ganglia which under other circumstances it would not excite. 6. That diminished permeability may have the contrary effect, so that ganglia which usually act consentaneously may cease to do so. 7. That any one or more of the cerebral ganglia which usually co-operate may be thrown out of gear, so that it, or they, cease to co-operate with the rest. 8. That the ganglia not thrown out of gear continue to co-operate as usual. It may be that nerve trunks have their sensitiveness or excitability increased or diminished. I do not propose either to deny or to affirm that this is so. The result would be the same as if the centre with which they are connected were affected.

Let us turn now to the consideration of some diseases commonly termed hysterical; and, first, to a common form of hysterical paralysis. The patient has lost almost completely the power of moving one or more limbs—almost but rarely quite completely, for I can recollect only one case in which no power of movement remained. The motions which do remain are, although extremely limited in area, yet often of considerable complexity. Such a paralysis, though remaining constant for weeks or months, or even years may yet disappear in an instant under the influence of sudden and violent mental emotion—such as, for example, an alarm of fire. Hence it has very properly been termed functional, as distinguished from organic. How are we to interpret this curious phenomenon? It was long ago suggested that we should look upon it as a paralysis of "the will," and this view is still pretty generally current. Without raising abstruse metaphysical questions, I fancy that, in speaking of the "will," we commonly include two separate and distinct ideas—one, the idea of a wish to do something, and the other, of our power to give effect to that wish. If we consider "paralysis of the will" by the light of this analysis, we come to this result: firstly, that in regard to the second idea, it is a mere clothing, in pseudo-scientific phraseology, of the fact that the patient has lost the power of voluntarily moving her arm or her leg. It contains no explanation of this fact, and therefore conveys none. It is, in short, a meaningless phrase. Secondly, as regards the first idea, it is untrue in fact. These patients, so far as I have been able to understand them, have a very strong wish to be able, and are deeply distressed by their inability, to move the limb. They are also extremely grateful to us when we have cured them. To arrive at a more adequate interpretation of these cases we must go some way round and consider subjects which may at first sight appear remote. Nature is in some cases not content to leave the activity of a nerve to be regulated by the greater or less amount of force emitted by its ganglionic centre. A second nerve, arising from a different centre, is told off to diminish or even arrest its action. Such superior nerves are called, as you know, "inhibitory" nerves; and the control which they exercise is called "inhibition." It is not difficult to perceive that this method is employed in the highest departments of the nervous system as well as in the lower ones. We find evidence of this operation in connexion with the high cerebral ganglia, the organ of the mind as we call it. In the passage, "Thou shalt renounce, thou shalt renounce, thou shalt renounce—this is what the whole world is hoarsely crying to thee," "inhibit" might be substituted for "renounce" without any alteration of the meaning. An inhibition of this kind, which at first requires a voluntary effort, acquires by frequent repetition an involuntary or automatic character. Most of us can see a desirable object in the possession of another without any nearer approximation to an intention of annexing it than is contained in "I wish I had one like it." In the child this inhibitory power is at best but latent, and requires for its development moral and social education. In some children it is difficult to develop it, even when the reasoning powers are indirectly stimulated by irritating applications to the peripheral nerves distributed to the skin covering the gluteal muscles. In some few it appears to be absolutely non-existent; we hear of individuals in whom the reflex act of taking is, all their lives through, the inevitable result of the act of seeing a desirable object. Some little mass of grey or some slender thread of white nerve-tissue is awanting. The same thing is seen in some savage races, who are incurable pilferers. We find in another set of circumstances something even more directly bearing upon our subject. We have most of us, at some, now probably remote, period of our lives, ran up to a hedge with the intention of jumping over it, but, "not liking the look of it," stopped short, without making a spring. This is a rational and intelligent act, though it may afterwards be evident that it was a mistaken one. We have, also, similarly ran up and made a spring, but, at the same moment, allowed the principle inelegantly called "funk" to intervene, with the result of inhibiting our muscular action, and thereby "bringing us to grief"; while a second, more confident—that is, an uninhibited effort—has carried us safely over. The secret of what is called "Dutch courage" lies, partly at all events, in the fact that one great effect of alcohol is to relax or paralyse inhibition. To this, mainly, is to be attributed the loquacity of intoxication; and so is the proclivity to the committal of crimes by persons under the influence of alcohol. Examples of the higher forms of inhibitions are common among animals; most of the tricks taught to dogs depend upon it. The exertions of a horse who has on some previous occasion been severely flogged are, in some cases, inhibited by his hearing the sound of a whip raised to strike him.

Let us now turn to an entirely different class of phenomena. Under certain circumstances, those parts of the nervous system which usually, and for useful purposes must, act in concert, cease to co-operate, one portion remaining active, while another portion is in a state of suspended animation. This is what happens spontaneously in sleep-walkers. A similar condition is producible artificially by means of mesmerism, hypnotism, and the like. In some instances there has, no doubt, been fraud and imposition practised by unscrupulous performers; but the most liberal abatement having been made on this score, there remains a series of facts of the most interesting description. If you or I were told that we could not lift from the table a pocket-handkerchief because it was so heavy, we should at once confidently proceed to show that we could. Why? Well, to put it shortly, because we should believe our experience and disbelieve what we were told. But if a hypnotised person were told the same thing, he would be unable to lift it. Why? Well, again, to put it shortly, because he would believe what he was told, and would be unable to correct the statement by reference to his experience, in consequence of some portion of his brain being out of gear. And something like this, I submit, happens in hysterical paralysis, in which, on this theory, the primary cause would be, not deficient, but excessive nerve-action. Muscular action is inhibited by the belief that it is impossible. A principle element of cure, then, is to convince the patient that her belief is erroneous. It is not easy to do this directly, for it is notoriously difficult to remove any belief by the mere assertion that it is erroneous, or even by argument. Such a course, indeed, is likely rather to strengthen than to weaken a belief. In

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these cases a little benevolent trickery, or pious fraud, is often successful, as in the following case.

A young girl was brought by several friends to the General Hospital when I was house-physician. The whole party was in a state of great lamentation and woe. It appeared that the girl had lost the use of her left arm an hour or two before; the same thing had happened on two previous occasions, and the medical man who had attended her had, so they stated, told her and her friends that a third attack would be certainly fatal. Feeling, after examination, pretty certain of the real nature of the case, I pacified her by saying that, although it was no doubt a serious matter, there was every probability that she would not die, and even good hopes that she might recover the use of her arm. She was taken in and sent to bed. It does not do to pooh-pooh these cases; you may succeed, but if not you lose all control over the patient, and then good-bye to any prospect of usefulness. The next morning she moved her arm a little, as she had done the night before. She was comforted by my telling her that it was a good sign that the paralysis had not increased. The following morning she again raised it to the same extent as previously. I put my finger a couple or three inches higher, and said, "Oh, but you moved it up to here yesterday"; she immediately moved it up to my finger. On the fourth day the same manœuvre was repeated. On the fifth, the same trick being repeated, she got the tips of her fingers to her lips. I said, "How much further do you want to get them?" She laughed and the case was at an end.

Another girl was brought to the hospital who had been lying in bed for eleven months with a paralysed leg. On admission, she could, by moving the foot, rotate the end of the great toe through a circle of about an inch in diameter. I need not say that even such limited motion required the action of a number of muscles, and so facilitated diagnosis. By a judicious admixture of trickery, coaxing, and firmness, she was cured, though not so quickly as the former case.

I saw, some years ago, a fasting girl. The amount of food or even water that she was able to take was incredibly small. She was never exhibited; her emaciation was amazing, and there was no ground for reasonable doubt as to her veracity. She dwindled, and died some time after I saw her.

It is difficult to resolve the problem presented to us by these cases, but I am inclined to associate them with the preceding class, and to think that they may depend upon a belief that eating is impossible. And this belief may have had originally a substantial basis. From the dangerous extreme above mentioned, we can, without any distinct break, see all degrees of inappetence up to slight anorexia or indifferent appetite. The slighter cases are undoubtedly often due to gastric catarrh, not necessarily of great severity. In saying this it is perhaps right also to say that, in my opinion, there is little difference in point of frequency of occurrence between gastric and bronchial catarrhs. Gastric catarrh, though sometimes provocative of ravenous, is more commonly associated with diminished appetite. The view here suggested seems to me to receive support from the success of the method of treatment originated by Dr. Weir Mitchell. Take such a girl from her home, place her in the midst of new surroundings, of fresh faces, inspire her by confident assurance of her recovery, tell her you are going to restore her appetite by a new treatment, insist upon her taking food, subject her to massage, shampooing, rubbing, or whatever you like to call it. The effect is speedy, the result surprising. The quantity of food consumed soon becomes as remarkable for its largeness as it had before been for its exiguity.

Cases of hysteria may be usefully, if not scientifically, divided into three classes: first, the simple, genuine, or involuntary cases; second, those in which there is unconscious exaggeration; third, those in which there is conscious fraud or deception. These classes might, perhaps, be as properly described as stages, for there is no doubt the first may glide into the second, and afterwards into the third; or, in other words, there has probably been a time when a case of the third class has belonged to the first. We meet, especially in the third class, with some very curious cases; and oftentimes they are not only curious, but puzzling. For example, a middle-aged unmarried lady's-maid, precise and respectful, and quiet in manner and demeanour, as became the long and highly-valued domestic of two or three decorous and not over youthful gentlewomen, came to the General Hospital. She had been living in London, but had been obliged to leave her place in consequence of feeble health, caused by repeated attacks of "inflammation of the bowels, with sloughing of the mucous coat." Oh no! not dysentery, but inflammation of the small bowels. So she had been told by several medical men in London, whom she named, who had been called in by her mistresses from time to time. Such were her statements; and, though I cannot vouch for their truth, I saw no reason to discredit them. Her reason for coming into the hospital was that she feared that another attack was impending. After a few days, during which she insisted that she was suffering from gradually increasing pain in the abdomen, but no objective phenomena presented themselves, she said she had diarrhœa, and a few days after that she produced a liquid stool, containing some smooth-edged, flat, whitish pieces of something. We found by experiment that these sloughs could not be distinguished, microscopically or otherwise, from pieces of chamois-leather or kid-glove, macerated in water for twenty-four hours. I told her that what she had passed was not mucous membrane, but something she had eaten; and a few days after she found herself so much better that she would like to go home, and she went.

It is not much use arguing or quarrelling with these persons. What you want to do is to take the romance out of their cases—to show that so far from your thinking them remarkable, and therefore interesting, you know them to be commonplace and uninteresting. Thus I entirely checkmated a girl who pretended that her bowels had not been open for weeks. I told the mother the truth (which was that I knew it to be untrue), and got her to tell the patient that we did not think anything of it; that some people had evacuations and others had not; that there was no rule about such things. With this somewhat audacious statement—which she, of course, knew to be untrue, but could not well repudiate without spoiling her case—the patient's renewed attempts to excite interest in her case were consistently met, and she was ultimately beaten out of the field. Instead of denying her statement we accepted it as gospel, but in a way that took all the interest out of it. She kept up the pretence for a very long time; and, curious to say, although frequently watched, it was never discovered where or when the bowels were moved. I have seen other like cases. In another very curious case, an abandoned thief imposed upon the gaol authorities, and obtained a free pardon on the ground of ill-health, and so escaped a long term of imprisonment. On her discharge she was brought to the hospital, and the only thing that was real about her case was that her periods were very profuse. In the gaol, she was supposed to have copious hæmatemesis, and had been seen by the matron in the act of vomiting blood, the possible source of which I refrain from even suggesting.

On hysterical retention of urine I have only two words to say. It is very commonly the initial phenomenon, and is most useful, therefore, as furnishing the key to subsequent manifestations; and, secondly, that it is not often repeated when its treatment is left in the hands of the nurse, instead of being undertaken by the medical man.

Of hysterical vomiting I have seen several cases, and have not found much difficulty in dealing with them; but a particular course must be followed, which presents no difficulties in hospital practice, in which only have I met with these cases. In private practice it might be less easy to pursue. These cases begin with occasional vomiting two or three times a day only, or even less. As soon as you know what it is (which at first you may not) treat it with indifference. It soon becomes more frequent. In a few days the nurse will tell you that everything taken is immediately rejected. You order a teaspoonful of water to be given at intervals and nothing else, saying you are quite sure that will stay down. You will hear the next day that even that is immediately thrown up. Then you have got her. Place her flat on her back with the head well thrown back on the pillow, the neck and upper part of the chest being fully exposed. Let her swallow a teaspoonful of water, and keep your eyes steadily fixed on the throat; in a short time you will see a slight movement in the muscles of the throat. Say at once, "Don't do that again; anyone can make himself sick in that way." The attempt may be repeated, and must instantly be checked. You watch her for a quarter of an hour, and then point out to her that she is wrong in supposing that nothing can be retained. You will not be bothered by any recurrence of this symptom.

We do not see a great deal of emotional hysteria in our practice; and what we do see is rather in the middle-aged than in the young; and is, in fact, if I may be allowed the Hibernicism, not hysteria, but drunkenness. Judging from

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my experience in Parisian hospitals, I should say that this phase of hysteria is more common in the Latin races than in the Anglo-Saxon. "Attacks of the nerves" seem to me also of more frequent occurrence in French than in Anglo-saxon works of fiction. In slight attacks a simple expedient is often successful, probably by diverting the patient's attention; cause her to make a deep inspiration and a full expiration; a few repetitions are followed by complete calm. Hysterical coma is a very curious condition, and is commonly in some degree connected with alcohol. It is most quickly relieved by an enema of assafœtida.

Reverting for a moment to the cases in which we are wont to recognise the existence of fraud and imposition, it is questionable whether in many of them we are not using a term not strictly accurate. Whether we should not rather regard them as examples of partial mental aberration, the result of a dominant idea, the desire for sympathy, than of intelligent, intentional, and conscious deception. It is, perhaps, a fine distinction, and, if sometimes a just one, we must admit that, in the words of the cynical Heine:

> "In case of women,
> One knows never where the angel
> Ceases, and the deuce commences."

These words are, also, apposite to another question. To what extent is there commonly in hysteria an erotic element? The answer to this turns largely on the meaning which we attach to "erotic." Amongst men of the world the interpretation would be of the grossest and most carnal character; and too many of us would, and do, accept this view, thoughtlessly, I think, and erroneously, in respect to the virginal sex in general, and no less erroneously as regards cases of hysteria. But the word has another sense not less classical, for it rests on the authority of Plato, and one which, in my judgment, is more in accord with the passive or receptive *rôle* of women in the processes of reproduction. In this sense it refers not so much to the lower animal passions—though these are not altogether excluded—but to the higher sentiments, from which spring all the graces and most of the charms which adorn the sex, and which do, as there is a physiological reason—indeed, necessity—for their doing, attract our own. In this sense there is, I believe, commonly, and in the other but rarely, an erotic element in hysteria.

The time at my disposal, and possibly your patience, are alike exhausted. Yet, even within the narrow limits I have fixed for myself, there are left many interesting and important topics at which we have not even glanced. For, indeed, to quote a brilliant writer, "La femme, vois-tu, c'est un thème inépuisable; on a beau l'étudier, on rencontre toujours de nouveau." I have desired on this, as on other analogous occasions, to remember that I am speaking, as one of themselves, to those whose duty and honour it is to apply in practice the art of medicine. But, you may object, such professions are but little consistent with the scheme and tenour of my lectures. You may think that there has been but a pitiful proportion of the bread of clinical facts to an intolerable quantity of the sack of speculation and opinion. It is true that this is so. But this has arisen, not from my forgetting, but from my remembering that we are all practitioners of medicine. Our predecessors have had, our successors will have, general conceptions, views, opinions, speculations, hypotheses, theories—choose which term you will—which did, and will, exercise an influence upon their acts. We ourselves, all of us, have them, and they influence our acts. None amongst us, indeed, are greater slaves to them than many of those who, in good faith, lay special claim to the title of practical men. Nor is this subjection to speculative views peculiar to the medical profession. The conceptions of mankind are compounded in varying proportions of truth—that is to say, knowledge; of error—that is to say, ignorance; of prejudice, of imagination, fancy, faith, wishes, hopes, fears. This strange medley produces forces which, intense and far-reaching in their operations, do indeed govern the world. Take a quite recent example of practical results from such a cause. The Arab conception of paradise, and of the means of getting there, has cost us many lives and much treasure, and may yet cost us more. But we have no need to go so far afield for an illustration. There is a prevalent conception of disease, which is not explicitly stated in books, and of which in its nakedness there is perhaps no one who would not be ashamed. It embodies the unquestionable fact that there are relations between disease and that which we vaguely call debility. It is true, also, that these relations are often so intimate and direct that it is of the utmost practical importance to recognise their existence. But when this conception obtains such a preponderance in the mind that it almost effaces the distinction between disease and debility, its evil consequences are most serious. It renders therapeutical efforts injudicious, confused, timid, and irresolute. It may, indeed, inhibit them altogether. It certainly does appear to me that such an undue preponderance is, at the present day, but too widely spread, and that the practice of many is thereby unfavourably influenced. This may be so, or it may not. What I really want you to admit is that an abstract conception, difficult to formulate, except perhaps, if that can be called formulation, in the shape of a truism, does actually and largely influence practice. To put the question in a concrete form: Given a case in which we correctly recognise the existence of disease, and also the existence of debility, in what measure is our treatment of the disease to be biased by our recognition of the debility, or our treatment of the debility to be biased by our recognition of the disease? That is a reasonable question, which it is incumbent upon us to put to ourselves, and to answer. Now, in my firm opinion, the answer given, too often even in the present day, results in treatment unduly recognising the debility and unduly neglecting the disease; and there is very much in female disorders to bring them within the possibility of being affected by such views. It is unsound to think that conceptions which contain an element of truth cannot be noxious. On the contrary, it is that very fact which renders them dangerous; for it is that which makes them seductive, which gives them currency, and secures to them continued existence. The element of truth is an antiseptic which protects them against the forces of decay. It has, then, appeared to me that current conceptions of the relations between their periodical functions and the general health of women have been inadequate; that some facts have been unduly exalted, whilst others have been unduly debased; and I have endeavoured to bring this before you, in order that, in your own minds, the balance might be readjusted. In like manner has it appeared to me that there are inadequacies and imperfections in current conceptions of the female nervous system and its aberrations. And I have endeavoured to lay before you some considerations on this subject which seem to me to be of importance. At all events, what I have done, however halting the argument or deficient in coherence, I have done in good faith. I ask you to take the trouble to think about it; and then I should be the last to quarrel with anyone who arrived at conclusions different from my own. For I have been all my life an unswerving advocate of free thought, accustomed to swear by the words of no master, unless they commended themselves to my own independent judgment.

NOTES ON DISEASES OF THE NERVOUS SYSTEM.

BY W. R. GOWERS, M.D., F.R.C.P.

II.

ON THE ANTERO-LATERAL ASCENDING TRACT OF THE SPINAL CORD.

SINCE I pointed out, in the first edition of my "Diagnosis of Diseases of the Spinal Cord," that there exists in the lateral columns in front of the pyramidal and cerebellar tracts a tract of fibres which degenerates upwards through a considerable extent of the cord, several other corroborative observations have been published.[1] The tract has, moreover, been rediscovered in the developing cord by Betcherew. I have traced its degeneration in several other cases of ascending degeneration of the cord, and also in locomotor ataxy. These observations have revealed some additional facts regarding its relations and position.

The tract extends across the lateral column about two-thirds of the distance from the surface to the intermediate grey substance. (Fig. I.) It dips into the angle formed by the rounded anterior extremities of the pyramidal and direct cerebellar tracts, and it extends along the surface of the cord almost to the anterior median fissure, stopping at the anterior pyramidal tract. Betcherew could not trace it beyond the

[1] An interesting paper on the subject by Dr. Howard Tooth is contained in the current volume of the St. Bartholomew's Hospital Reports.

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outermost of the anterior nerve roots, perhaps because it lessens in width and other fibres are mingled with those of

FIG. 1.

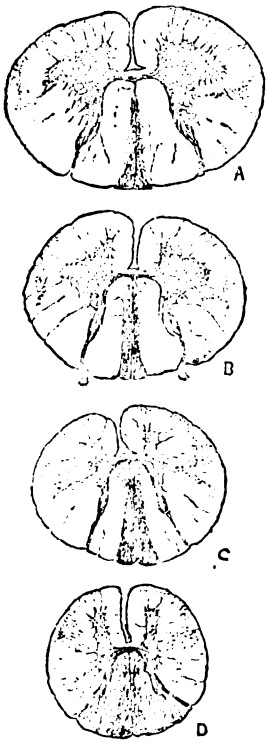
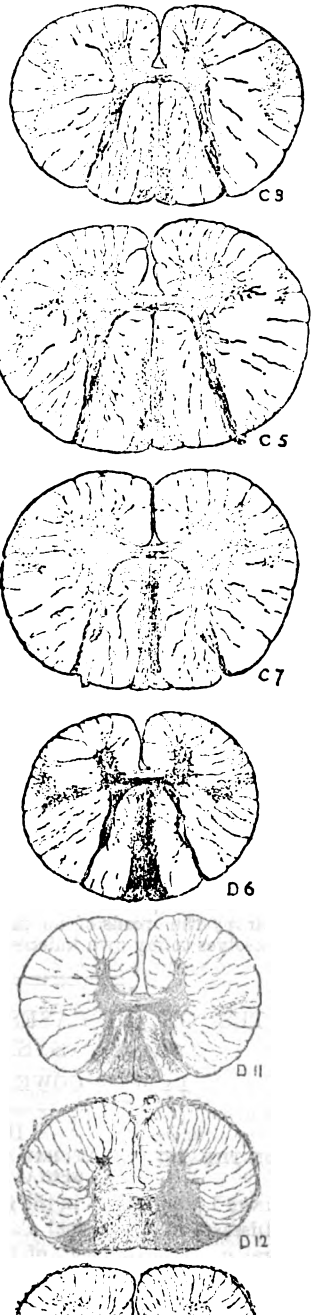


FIG. 2.



Ascending degeneration in spinal cord crushed by a fracture at the 11th dorsal. A, B, cervical, C, upper, and D, lower dorsal sections. Degeneration of the posterior median columns and of the antero-lateral ascending tracts.

this tract. I have traced it, in several cases, as far as the anterior pyramidal tract, where the sudden termination of the degeneration is sometimes very marked.[2] In the upper part of the cervical region, where the direct cerebellar tract moves forward and the pyramidal tract again comes up to the surface of the cord, a process of the ascending tract extends between the pyramidal and cerebellar tracts, and may be traced almost to the surface of the lateral column. (Fig. 2, C 3.) About the middle of the dorsal region the tract does not extend so far forwards at the surface of the cord, and in the lower part of this region the tract seems to lie only across the middle of the lateral column, opposite the posterior commissure. This arrangement corresponds with the probable course of its fibres from the opposite half of the cord through the commissure.

Sections of the spinal cord, from a case of locomotor ataxy, showing degeneration of the whole posterior columns in the lumbar region, but, higher up, only the ascending degeneration of the posterior median columns. In the dorsal and cervical region there is also degeneration of the antero-lateral ascending tracts.

It is doubtless the degeneration of this tract that has given rise to the erroneous idea that the direct pyramidal tract extends further forwards than the limit assigned to it by Flechsig from his developmental researches, and further forwards than it appears to do in other cases in which it is certainly degenerated alone. If the ascending antero-lateral tract is also degenerated, the resulting areas of sclerosis are continuous, and it is thus easy to understand how the erroneous impression has arisen. The double degeneration produces a band of peripheral sclerosis, widest opposite the middle of the cord. It is probable that this is the origin of some forms of so-called "annular sclerosis" of the cord, and also that the superficial layer of degeneration thus resulting has been sometimes thought to be caused by meningitis, an extension of the inflammation from the pia mater to the substance of the cord.

As far as we at present know, the direction in which the fibres of the central nervous system degenerate is that in which they habitually conduct. Hence the antero-lateral ascending tract conducts upwards, and there can be little doubt that in it we have the path for sensations of pain. It seems certain that these are conducted in the lateral column. The experiments of Woroschiloff have proved that the lateral column conducts the impressions that can raise the blood-pressure, and the impressions that have this effect are for the most part, if not altogether, those that, through the agency of the sensorium, are perceived as pain. The only fibres of the lateral columns that degenerate upwards through any long course are these and the fibres of the direct cerebellar tract. The latter go exclusively to the cerebellum, and it is in the highest degree improbable that they conduct any form of sensation from the skin. Hence we must identify the antero-lateral ascending tract with the sensory path in the lateral columns.[3]

I have recently had an opportunity (by the courtesy of Dr. Mott) of examining a series of sections of the spinal cord in a case in which the nerve roots of the cauda equina were extensively damaged. It is well known that where these roots are interrupted the posterior median column degenerates through the cord, just as it does if there is a transverse lesion in the lumbar enlargement. Continuity of degeneration must be taken as proof of continuity of fibre. Where fibres are interrupted by nerve cells, degeneration ceases. Hence the degeneration of the posterior median columns is proof that these fibres are continuous with some of the fibres of the posterior roots. But in the cord mentioned, in which the cauda equina was diseased, while the posterior median columns presented the usual degeneration, no trace of degeneration could be found in the ascending antero-lateral tract. Hence we must assume that the sensory root fibres, from which this tract continues the sensory path, end in nerve cells, probably in the posterior cornua of the cord. The antero-lateral ascending tract seems to be formed only in the lower part of the dorsal region. It appears therefore that the sensory path from the legs only decussates above the lumbar enlargement. I have long been of opinion, from clinical evidence, that this is so. It is not until nearly the middle of the dorsal lesion is reached that a unilateral lesion causes crossed sensory and motor paralysis. In the lowest part of this region, and in the upper part of the lumbar enlargement, a lesion on one side impairs sensation on the same side as the motor. In the medulla oblongata of a patient with locomotor ataxy, Dr. Hadden found a patch of sclerosis in such a position that it may have been the continuation upwards of the degenerated antero-lateral tract. He had not the spinal cord to examine. I am not aware that the degeneration of this tract in the spinal cord has been hitherto described in tabes. In three cases, however, I have found it distinctly degenerated. One of these is shown in Fig. 2. The fact is of interest in connexion with the frequent loss of sensibility to pain. If the above reasoning is valid, its degeneration is proof of degeneration of the sensory cells in which terminate the nerve fibres that conduct sensations of pain. It has long been known that degeneration of the cells of the posterior cornua is common in tabes; the fact was pointed out many years ago by Lockhart Clarke.

Queen Anne-street, W.

[2] The denseness of the sclerosis in degeneration of this tract may vary in adjacent parts of the same cord, probably because the short fibres ("ground bundles") of the antero-lateral column are mingled with those of the tract in a varying degree in different parts of the cord. As these fibres do not degenerate through any considerable extent, they dilute, so to speak, the degeneration of the tract, and lessen its apparent intensity in different degrees in different parts. This is probably one reason why its continuous degeneration was so long overlooked.

[3] In a case of gunshot injury to the cord which I recorded some years ago (Clin. Trans., vol. xi.) there was loss of sensation of pain, and none of touch, and the chief damage was in the position of this tract.

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ON THE NATURE OF SCROFULOUS GLANDS IN THE NECK AND THEIR SURGICAL TREATMENT.[1]

BY KENDAL FRANKS, F.R.C.S.I.,
SURGEON TO THE ADELAIDE HOSPITAL, DUBLIN.

I SHOULD scarcely be justified in discussing the methods of dealing with that condition of the glands of the neck which centuries have agreed in calling *scrofulous*, were I not in the first place to attempt to explain what is meant in the present day by scrofula. According to the views which we hold on this subject will our treatment depend. If we look upon scrofula in all its stages as a *diathetic* disease, then our treatment will be directed to correct this tendency; in other words, we shall have recourse to constitutional measures as the most rational—as those which promise the greatest success. If we, on the other hand, hold that scrofula is *infective*, that it owes its origin to a virus making its way into the system from without, then our treatment should in the first place be directed against the virus, to keep it out of the system or to eliminate it. Between these two modes of estimating the nature of the disease we have a third, which combines them both—namely, that scrofula is an infective disease due to a definite poison, which can only find its development, however, when planted in a suitable soil; that is to say, when it gains an entrance into the tissues of a person presenting a peculiar constitutional habit, "the greater vulnerability of parts and the greater pertinacity of disturbances," as Virchow has defined it.[2] If we accept this latter view—and recent investigations, I believe, have fully established its truth—scrofula must cease to exist as a distinctive disease, and the neutral zone between scrofula and tubercle, which has been the battle-ground of pathologists in years past, must disappear. We shall never, I suppose, eliminate the term scrofulosis, but we shall use it in a different sense from that to which we have been accustomed. In the light of the pathology of to-day we cannot accept as a definition of scrofula that it is "a tendency in the individual to inflammations of a peculiar type, the distinctive features of such inflammations being as follows: they are usually chronic, apt to be induced by very slight irritation, and to persist after the irritation that induced them has disappeared."[3] In spite of the attempts of pathologists to give a definite meaning to the term, no one will deny that the word scrofula has been used to designate most of those diseases whose pathology was a chaos of confusion, and that Henle's description of it was well merited, that "scrofula is the receptacle into which one vaguely casts all the ailments which afflict children under fourteen years, and of which we do not know the cause."[4] In discussing, then, the true nature of scrofula, it will be interesting to review shortly its history, and to trace the lines which have led to our present state of knowledge concerning it.

The term was originally given to the disease by the Romans in order "to give prominence to the similarity presented by the thickened neck, the diminished prominence of the chin, and the swelled upper lip—all consequences of the swellings of the glands—with the physiognomy of the hog."[5] In the sixteenth and seventeenth centuries the resemblance between the caseous masses found in the lungs in phthisis and in scrofulous lymphatic glands in the neck was observed, and Cullen, amongst others, began to range phthisis in the list of scrofulous diseases. "The views generally held at that period on this question," says Birch-Hirschfeld, "may be summed up in the sentence that scrofulosis reigned supreme over the domain of tuberculosis, tubercular phthisis itself being looked upon as a scrofulous disease." Laennec heralded a new epoch. Tubercle now became the chief factor, and all processes in which cheesy substance was found were classified with tuberculosis, scrofulous glands being considered only as a small subdivision of tubercular disease. But at this time little was known as to the nature of tubercle itself. The term was applied to nodules, but it had little other significance. Laennec pointed out that these nodules, originally grey and clear, had a tendency to become opaque and yellow, or, in other words, to caseate. Thus, in the lung two distinct conditions were found, the grey tubercle and the yellow, the latter being, however, the result of certain changes in the former—that is to say, the grey tubercle had a tendency to caseate in its centre, and by the fusion of several of these, larger caseous masses were formed, which went by the name of yellow tubercles. The identity of scrofulosis in the glands in the neck and of tuberculosis in the lung was then again called in question, when Virchow came forward and demonstrated that this cheesy substance was not necessarily due to decay of the grey nodules, but might occur in the most heterogeneous tissues. Tubercle was now restricted to the grey semi-transparent nodules, the size of a millet-seed, hard and firm, which have since been known as miliary tubercles; although these, from their want of bloodvessels and their low organisation, frequently tended to cheesy metamorphosis. Virchow accordingly laid down that no cheesy product was to be accepted as tuberculous unless sufficient evidence had been given of its origin from miliary tubercle. Such evidence was not at that time forthcoming in respect to the cheesy masses found in scrofulous glands; hence scrofulosis was not to be considered as a form of tuberculosis. Virchow went even further, and the cheesy infiltration of the lung, called "tuberculous" by Laennec, was not tubercular at all, but should be termed "scrofulous broncho-pneumonia." But even this position of the question was not destined to remain long unassailed. Microscopists turned their attention to the study of the so-called grey or miliary tubercle. That it was the ultimate specific cause of tuberculosis began to be doubted, as certain tissue changes, which were acknowledged to be due to tuberculosis, were found to occur sometimes, in which these distinct grey tubercles could not be discovered. In such instances the microscope revealed certain minute bodies, to which the name "submiliary tubercles" was given, and it was then shown that the millet-seed bodies, termed miliary tubercles, were made up of a collection of these microscopic nodules. This submiliary tubercle, called by Köster "primitive or elementary tubercle," is composed mainly of cells. In the centre of a typical specimen we find one or more giant cells. Forming a zone around this are many so-called epithelioid cells, and around these again is a zone of leucocytes. "All these cell elements are supported by a fine reticulum, which is generally concentrically arranged at the periphery, and towards the centre is observed to be continuous with the processes that commonly come off from the giant cells. The affected district is non-vascular."[6] This is the description of "primitive tubercle" as we understand it to-day; but it must not be supposed that this accurate histological account of it was received without much opposition. Indeed, it would seem that in its earlier days pathologists were so engaged in their conflicts concerning it that the fight over the identity or non-identity of scrofulosis and tuberculosis remained for many years in the position in which it was left by Virchow. During this period of dormancy caseous or cheesy nodules were looked upon as the products of the degenerative changes which followed on scrofulous inflammation. There was nothing specific in them. But this controversy on scrofulosis was only dormant, and it broke out with renewed vigour in the years 1865–69. A new method of attacking the question was instituted by M. Villemin. Anatomical and microscopical methods gave way to the method of inoculation, and Virchow's ground was cut from beneath his feet. These inoculation experiments showed two things, firstly, that if the cheesy matter from scrofulous glands were injected into an animal, it produced general tuberculosis as readily as tuberculous matter; and secondly, as shown by Wilson Fox, that if tuberculous matter were introduced beneath the skin, it gave rise to enlarged caseous and suppurating glands—in fact, to all the symptoms of a localised scrofula. The conclusion to be drawn from these experiments seems obvious—namely, that these local manifestations of what was termed scrofula were in reality tubercular, and that if any difference could be made out between these terms, it could only be one of degree. Such a wholesale subversion of Virchow's views, which had taken possession of pathologists for several years, could not naturally be accepted without dispute. The experiments themselves were largely discounted, and it

[1] Read before the Surgical Section of the Academy of Medicine of Ireland, April 16th, 1886.
[2] Krankhaften Geschwülste, Vorles. xxi.
[3] Treves: Scrofula and its Gland Diseases, p. 37. 1882.
[4] Handbuch der Rationellen Pathologie. 1846-53.
[5] Birch-Hirschfeld, Ziemssen's Cycloped., vol. xvi., p. 744.
[6] Treves, op. cit., p. 9.

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was maintained that, as the so-called acute general tuberculosis, which was described as following on inoculation, occurred in "animals," it was not the same as general tuberculosis in man. It now became apparent that it was more necessary than ever to understand the histological characters of true tubercle, to distinguish it from simple inflammatory neoplasms, and to determine whether the giant cell, with its external zones of epithelioid cells and leucocytes, was pathognomonic of tubercular diseases. In 1870 Wagner prepared the ground for a more accurate knowledge of the microscopical characters of these primitive tubercles, and the more complete elucidation of their differences from simple inflammatory neoplasms, made almost immediately afterwards by Schüppel, established their distinctive character. With this definite idea as to the true characteristics of tubercle itself, he proceeded to combat Virchow's views, taking for his text Virchow's own dictum that no cheesy product was to be accepted as tuberculous unless sufficient evidence had been given of its origin from miliary tubercle. This missing link was now supplied. "This demonstration," says Birch-Hirschfeld, "has been furnished by Schüppel's numerous and searching investigations to such an extent that no further doubt is left as to the frequent occurrence of well-characterised tubercles in the lymphatic glands, partly in the form of secondary development with pre-existing tubercles of other organs; partly, however, as primary tuberculosis, to which latter category belong those very conditions which have been regarded heretofore as the most characteristic products of scrofulous disease.[7] Friedländer goes a step further when he states that "all the more important scrofulous affections are intimately associated with the formation of tubercles."[8] From this period the number of diseases in which tubercle was discovered went on increasing year by year. Köster in 1869 found them in the so-called granulations in "white swelling." In 1879 Volkmann demonstrated that "white swellings" were nothing but tubercular osteo-arthritis, and that they owed their origin most frequently to a focus of tubercle in the epiphysis. In 1881 Lannelongue showed in his work on cold abscesses that the walls of the sac were studded with tubercles; and in 1883 Kiener demonstrated the identity between caries and tubercular osteitis, and showed that this specific osteitis may assume either the encysted or diffused form. The advocates of the identity between scrofula and tuberculosis seemed thus to be triumphing along the whole line, when a new difficulty arose. The giant cell, with its peculiar arrangement of cells around it, was declared not to be pathognomonic of tuberculosis. In 1875 Ziegler showed that it was found in inflammation artificially produced by inserting two little glass discs beneath the skin or in some of the cavities of the body in dogs and rabbits, and M. Martin obtained them around other irritating particles, or by introducing micro-organisms into the circulation. The question was thus again an open one, and stood thus: inoculation experiments had crowned the proof, afforded by anatomical and clinical observations, that scrofulosis and tuberculosis could not be separated, but hitherto there was no peculiarity of the structures which was pathognomonic of tubercle as a specific element. The infective nature of tuberculous and scrofulous matter alike was established, but the *materies morbi*, the virus itself, had not been recognised. Such, briefly, may be said to have been the point reached up to the spring of 1882. We all remember the sensation which was caused, not only among scientists, but in the world at large, by the announcement of Koch in March of that year, that he had discovered the bacillus of tubercle; that he had succeeded by the method of double staining with aniline dyes in demonstrating the existence of the microbe; that by cultivations on solid media he had isolated it; and that by inoculations of the pure cultivations in animals he had proved its virulence. Whatever doubts may have been at first thrown upon the discovery, whatever scepticism may have been at work to detract from it or to prove it false, all have disappeared, and there are few who to-day will deny that Koch's bacillus is the active agent in the production of tubercular diseases, wherever they are found or in whatever guise they appear. Virchow's statement that no cheesy product was to be accepted as tuberculous unless sufficient evidence had been given of its origin from miliary tubercle must now be modified and enlarged. In place of it we may assert that all inflammatory products, whether in the stage of cheesy degeneration or not, in which the bacillus of tubercle can be demonstrated, are to be accepted as tuberculous. At the same time we must remember that their absence is not conclusive evidence against the tuberculous nature of a diseased part, as in certain stages of a tuberculous mass the bacilli may disappear. What assistance this discovery has afforded to the physician, or what influence it has had upon his art, is not my object to discuss. For the surgeon it has opened up new fields of labour, and has had a most powerful influence on his work. "The sphere of tubercular diseases," writes Volkmann recently,[9] "with which the surgeon has to do has increased so enormously during the last fifteen years, insomuch as a great number of diseases with which he has to deal day by day are recognised to belong to tuberculosis, that, I say, the surgeon has now almost more to do with this disease than the physician."

Addressing as I am the surgical section of this Academy, let me call your attention to the enormous advantage which the surgeon possesses over the physician in the treatment of tubercular diseases. The diseased tissues are, or can be, exposed to view; frequently it is in the surgeon's power to remove the whole tuberculous patch, and with it the tissues in the immediate neighbourhood, while the patient still lives, and his opportunities for doing so, and the organs that are accessible to him, are increasing year by year. Now, in order to establish a disease in any organ as being undoubtedly tubercular, Volkmann[10] enumerates three conditions as coexisting. Firstly, the well-known structural condition, which has been styled "true tubercle"; secondly, the presence of the tubercle bacillus; and, thirdly, the positive results yielded by inoculation experiments. When these three conditions are verified in any diseased part, it cannot be questioned that the affection is one of true tuberculosis. This criterion has been applied to a large number of diseases, and has given positive results. I cannot now do more than enumerate a few of those diseases with which we are familiar under other names, but which henceforth must be classed as tubercular. On the skin we find lupus and certain ulcers, which have commonly been classed as scrofulous; similar conditions of the mucous membranes, and frequently fistula in ano; in the deeper structures, most forms of chronic abscesses, especially those associated with scrofulous glands, diseased bone, &c.; and in diagnosing these abscesses the so-called pyogenic membrane is of great use. "The characteristic abscess membrane," says Volkmann, "occurs only in connexion with tubercular abscesses, and it must be looked upon therefore as an absolutely safe criterion for diagnosis." All those forms of disease of the bones and joints which have hitherto been described as caries, Pott's caries, white swelling, strumous or scrofulous disease of the joints, fungous degeneration and so forth, belong also undoubtedly to tubercular infection, and the same is true whether the disease originate in the epiphyses of the bones or in the synovial membrane. Lastly, of all parts of the body in which positive proof of the existence of tubercle has been given, the lymphatic glands are most frequently engaged, because their very function exposes them to infection. Under the head of tubercle we must range all those affections of the glands which have hitherto been termed scrofulous enlargement, strumous disease, and caseous degeneration—in fact, by far the larger number of cases in which we find the glands of the neck enlarged.

(To be continued.)

[7] Op. cit., p. 751. [8] Volkmann's Samml. Klin. Vorträge, No. 64.

[9] Langenbeck's Archiv fur Klin. Chirurg., 1886, p. 109.
[10] Op. cit., p. 125.

LEEDS AND WEST-RIDING MEDICO-CHIRURGICAL SOCIETY.—At the general meeting of the members of this Society on the 21st ult., it was reported that during the past year the list of members has been increased by twenty-five elections, and that eight ordinary and two extraordinary meetings had been held. The following gentlemen were elected office-bearers for the ensuing year:—President: Dr. S. C. Smith. Vice-Presidents: Mr. Ed. Atkinson and Dr. Cameron. Treasurer: Dr. Clifford Allbutt. Honorary Secretaries: Mr. A. W. Mayo Robson and Dr. Jacob. Librarian: Dr. Barrs. Auditor: Dr. Braithwaite. Committee: Dr. Churton, Dr. Dobson, Mr. Wm. Hall, Dr. Hutchinson, Mr. Jessop, Dr. Fletcher Little, Mr. W. N. Price, Mr. Fredk. Shann, Dr. Swann, Mr. Wiseman, Mr. C. J. Wright, and Dr. Young.

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HÆMOPTYSIS AS A SYMPTOM OF PNEUMONIA, WITH SPECIAL REFERENCE TO PNEUMONIA OF THE APEX.

BY DONALD W. CHARLES HOOD, M.D. CANTAB.,
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ON the morning of April 6th, 1881, I was asked to see a gentleman staying at the Langham Hotel. I found an Italian lying on his bed, and beside him a basin in which was about half a pint of blood, which he informed me he had expectorated within the past hour. He told me that he had not been feeling well for the last day or so, and had in fact consulted Sir William Gull a few days previously. Sir William attributed his indisposition to cold. He had passed an uncomfortable, restless night, being feverish and shivery, but, feeling somewhat better in the morning, had risen as usual, with the intention of going to his business in the City. While sitting at breakfast he was seized with a fit of coughing, and found blood rising into his mouth. His handkerchief was soon thoroughly soaked with blood, and he went into the lavatory adjoining the coffee-room, and there spat up a large quantity. From the account given to me, and from the amount of blood I saw myself, he must have had severe hæmorrhage. I looked upon the case as one of ordinary hæmoptysis, prescribed some opium, and gave strict injunctions with regard to rest and quiet. I did not like to disturb my patient for the purpose of making an accurate examination, so that I cannot speak with any exactness as to the state of the chest, beyond the fact that there were a few subcrepitant râles to be heard over the subclavicular region of the left side. I was, however much struck by the temperature being high; it reached 101°; the pulse being 100. The same afternoon Sir William Gull saw the patient with me, and expressed his opinion that the case was not one of ordinary hæmoptysis, but of apex pneumonia complicated with hæmorrhage, a condition he was well acquainted with, having seen several such cases.

On examining the chest posteriorly on the left side, there was evident loss of resonance over the entire supra-spinous region; the dulness extended down to a little below the spine of the scapula, the breath sounds over this area being loud and harsh, scarcely bronchial, but abnormally distinct; vocal resonance was also increased. The following day all the physical symptoms were more pronounced, the temperature ranging between 100° and 102°. There was less blood in the expectoration, which was now more of the prune juice character. Day by day the expectoration was less coloured, and on April 12th—that is, on the seventh day of attack—there was no expectoration, and the temperature was normal. At this date, the principal, I may say the only, physical symptom was slight dulness over the upper part of the right lung, this dulness being much more marked at the posterior aspect. Within a few days the patient was well enough to leave town for the seaside, and subsequently went to the south of France.

In the spring of last year I was asked by my colleague, Mr. Frederick Durham, to see a patient upon whom he had operated for disease of bone. My opinion was asked in consequence of the patient's fever, cough, and hæmoptysis. I found a fine, strong, well-grown, healthy-looking man, an old soldier, who for ten days had been suffering from what was supposed to be catarrh. Within a few hours of my seeing him, while coughing he had expectorated blood, and I saw a spitting-cup nearly full of blood and mucus. The temperature was 102°. On examining the chest, there were marked symptoms of pneumonia, which, however, was limited to the right apex. Moreover, the physical signs of the pneumonia were more easily traced at the posterior aspect. In this case the urgent symptoms subsided within a few days, and the patient was rapidly getting well, when another attack of pleuro-pneumonia supervened, implicating both lungs, and the patient sank from exhaustion. A post-mortem examination being refused, I cannot speak with authority as to the state of the lungs. I quote the case with reference to the initial pneumonia of the apex being concurrent with severe hæmoptysis and elevation of temperature.

E. H——, aged forty-eight, was admitted under my care into the West London Hospital on Oct. 29th, 1885, for hæmoptysis. The patient was a labourer, and stated that he had been quite strong until about eighteen months ago, when he caught a severe cold, being laid up at home for six weeks. He had had a cough more or less since this attack, but had never before spat blood. On the day of admission, while walking, he had an attack of coughing, and found that there was blood in the expectoration. He lost a large quantity, and was brought into the hospital in consequence. The hæmoptysis continued after admission. He was treated by the resident house-physician in the usual manner, and, following the ordinary course in such cases, his chest was not submitted to a rigorous examination. The temperature was noted to be over 100°. Two days after admission this patient was seen by me, and I was immediately struck by the character of the expectoration, the height of the temperature, and the general aspect of the patient. On making an examination, symptoms of pneumonia were easily demonstrated. They were entirely limited to the right apex, and more especially marked at the posterior region. I made the following note at the bedside: "Right apex, front: some moist subcrepitant râles; breathing harsh. Back: decided dulness, extending to below spine of scapula; bronchial breathing above spine of scapula; a few coarse rhonchi to be heard all over the right lung." The temperature at the time of my visit was 103°, the pulse 120, the skin being hot and pungent. The patient remained in hospital for about two months, being discharged on Jan. 2nd. His right lung was not in a satisfactory condition; some dulness remained, but there were no moist sounds to be heard, and he had but little cough and expectoration.

M. P——, aged forty-eight, was admitted under my care into the West London Hospital on Dec. 4th, 1885, for hæmoptysis. He had been attending in the out-patient department for one month, suffering from cough. He had expectorated blood on two former occasions, the amount each time being small. On admission the temperature was noted as being over 100·2°, and on the following day it reached 102°. At the right apex were symptoms of pneumonia. These symptoms were much the same as in the other cases; they were limited to the region lying above and a little below the spine of the scapula. The hæmoptysis was profuse, and was seen by me. Seven days after admission the temperature was normal, and I then made the following note of the state of the chest: "At the right apex, posterior region, there is decided dulness, with increased tactile vibration, and vocal resonance. There are moist sounds, large and small, and the breathing is bronchial in character. Examining the chest in front, these physical symptoms were but slightly marked. The patient still suffers from cough, but the expectoration has decreased and is no longer blood-stained." On Jan. 28th this patient was discharged in good general health, some slight loss of resonance being the only physical symptom which was noted as evidence of the attack he had undergone.

P. Q——, aged twenty-eight, was admitted under my care into the West London Hospital on April 29th, 1885, for severe hæmoptysis. From the statements of the patient he must have lost a large quantity of blood. After admission the hæmoptysis was very profuse, and was seen by me. The temperature was 103°. The following day there were found to be marked physical symptoms of apex pneumonia. As in the other cases, these symptoms were more marked at the posterior aspect, and were limited to the upper part of the lung. The expectoration was deeply blood-stained; in fact, it was almost pure blood. Within a few days the colour gradually altered, and the expectoration assumed more the colour of that found in ordinary pneumonia, being tenacious and rusty. This patient was discharged on June 21st, about seven weeks having been spent in hospital. At the date of discharge there were signs of grave lung changes, and the pneumonic attack was evidently but the prelude to phthisis.

My desire in this paper is to emphasise the fact that in certain pneumonic conditions a sharp hæmorrhage at the initial stage is symptomatic of the attack, and is, as I believe, directly caused by the inflammatory hyperæmia. In such cases, where a severe hæmorrhage ushers in the attack, we shall find the inflammatory focus very frequently at one or other apex, and the physical symptoms of such a pneumonia are often more easily demonstrated at the posterior than at the anterior region of the chest. Such pneumonia, complicated with severe hæmorrhage, is peculiarly connected with lung tissue already the seat of chronic change, whether such change be due to deposition of tubercle or to chronic

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inflammatory changes. In each of the cases quoted above there was a history of lung trouble, though in each case this trouble, as far as could be gauged by physical examination, was but small. It is a point of interest and of importance that four of the five cases were actually under observation at the time of the initial hæmorrhage. The first was under the care of Sir William Gull, who informs me that he had not detected consolidation of the apex previous to the attack of hæmorrhage; the second case was in hospital at the time of attack; and the other two patients were in attendance as out-patients. In one of these cases dulness at the apex had been noted before the attack of hæmorrhage. In each case the hæmorrhage was concomitant with a marked rise of temperature, which, I need hardly say, is not usually the case in simple hæmoptysis. In each case the rise of temperature lasted seven, eight, or nine days, and in each case, after the first day of illness, physical signs of pneumonia were easily demonstrated at the lung apex. If, as I believe to be the case, pneumonia of the apex, occurring in a lung predisposed to disease by either tubercle or chronic inflammatory changes, is liable to be complicated with sharp hæmoptysis, it will largely explain those cases of phthisis ab hæmoptæ the etiology of which appears as yet unsettled. In these cases the inflammatory disturbance which has given rise to the hæmorrhage is overlooked, and the hæmorrhage consequently regarded as the main factor in the expression. Looking at the later writers on this subject, I find that Hilton Fagge has noted the occurrence of hæmoptysis, followed by rise of temperature and subsequent consolidation of the apex, but he does not appear to have appreciated the real significance of the hæmorrhage, for he writes: "There is no doubt a *difficulty* in saying how the bleeding is brought about, but it seems very likely that the growth of tubercle in the walls of the alveoli may be attended with an invasion and softening of the coats of many of their capillaries, while at the same time the blood-pressure in them is augmented in consequence of compression of other capillaries."[1] When we think how often a lung is studded with tubercles, and how often in such cases there is no hæmoptysis worthy of the name, we must look for another cause than mere softening of the coats of the capillaries by a growth of tubercles in the walls of the alveoli. But, on the other hand, when we take into consideration the enormous hyperæmia which attends inflammation of lung tissue, a ready explanation of the hæmorrhage at once presents itself, a hæmorrhage which is concomitant with the well-known initial stage of pneumonia, the stage of engorgement. Paradoxical as it may appear, I believe that, within certain limits, the smaller the focus of inflammatory mischief the greater the liability to hæmorrhage, and this may possibly explain the fact that we find hæmoptysis a not uncommon symptom with pneumonia of the apex. Doubtless, deep-seated, concealed (as regards all physical symptoms) pneumonia is more common than is usually supposed. Clinically, I have met with several cases in which a sharp hæmorrhage has occurred concomitant with rise of temperature, and in which no physical symptoms could be discovered, at least by me. One such case I remember well. A strong, active, healthy gentleman was seized with sharp hæmoptysis after exposure to cold; there was slight fever and cough. I could discover nothing whatever in the chest. The attack gave but little real inconvenience. At the time now fourteen years ago, I looked upon the seizure as one of very grave portent. However, since then there has been no return of hæmorrhage symptoms pointing to delicacy of the chest. Another case was that of a young man aged nineteen, who was seized with a cough, fever, and hæmoptysis. I could detect no physical symptoms to account for the attack, but about seven days after the illness commenced I detected some large râles over the base of the right lung —râles, I believe, of crepitatio redux,—and I interpreted them as indicative of a small patch of deep-seated pneumonia which was undergoing resolution. This case occurred to me twelve years ago, and the subject of the attack has had good health since that date, and has no symptoms of chest weakness. Such symptoms may be explained by recognising that in connexion with a small focus of inflammation, surrounded, as indeed it must be, by a zone of intense hyperæmia, some of the gorged vessels give way, hæmorrhage results, and, as I believe frequently is the case, the patient gets rapidly well. Certainly, in the cases of apex pneumonia which I have referred to the progress was rapid as compared with an ordinary lobar pneumonia the patients were not so severely ill. May not the severity of the attack have been mitigated by the local blood-letting? It is not difficult to understand how many of these cases are overlooked as regards their true pathology. Given hæmoptysis as the marked symptom, with physician as well as laity, one of the fundamental principles of treatment is complete rest and quiet. The chest is but rarely examined beyond placing a stethoscope over its anterior surface, at most a few râles may be heard, which are explained by the presence of blood. If the temperature be high, it is accounted for by an inflammation set up by this blood. In these cases the posterior portions of the lung are but rarely examined, and I need hardly say that the apical portion covered with scapula and its muscles requires some care in examination. The dulness on percussion does not come out readily to a light tap; it requires a firm, decided stroke from the wrist; personally I find great use from a percussion hammer, and with it have found no difficulty in demonstrating the marked difference in note of the two apices when compared the one with the other.

Green-street, Park-lane, W.

[1] Fagge: Principles and Practice of Medicine, vol. i., p. 960.

A CASE OF

PUNCTURED WOUND OF THE LEFT ORBIT, FOLLOWED BY APHASIA; RECOVERY.

BY H. CAMPBELL POPE, M.D.,
AND
RICKMAN J. GODLEE, M.S.

THE following case is of interest, not only because the patient recovered spontaneously from a condition of apparently imminent danger, but also from the point of view of diagnosis, although the fact of his recovery leaves the actual lesion altogether a matter of uncertainty.

At 11.30 P.M. on Jan. 1st, 1886, about twenty minutes after the occurrence of the accident, Dr. Pope was called to see a man aged twenty-seven, who had received a stab with the point of an umbrella in the left orbit during a quarrel. He was of intemperate habits, having suffered from delirium tremens a year before, and had recently been eating very little and drinking considerably. When first seen he was suffering from shock, though he could be roused to a certain extent; he was vomiting at the time and had vomited previously; he had also involuntarily evacuated both the bowel and the bladder directly after the accident. There was a superficial incised wound along the whole length of the left upper eyelid, terminating just above the inner canthus in a circular puncture, from which a little blood was oozing. The finger was passed into this for an inch, and a probe cautiously introduced for an inch and a half in a direction upwards and slightly outwards, without striking against bone or detecting any loose fragments or perforation of the roof of the orbit. The wound was washed with water, and a pad of lint soaked in lead and opium lotion was placed over it. He was then taken home in a cab, a distance of half a mile, and on his arrival he had sufficiently recovered from the shock to be able to walk upstairs to bed, where he lay throughout the night in a drowsy condition, but vomiting at times. A little blood escaped from the nose. No paralysis of any kind was observed. On the following morning and throughout the day (January 2nd) he was perfectly sensible. The vomiting had ceased. There was considerable ecchymosis of the orbit. The pulse was 100. Three grains of calomel and five grains of powdered rhubarb were administered. But at about 8 P.M. he began rather gradually to talk incoherently, and did not recognise those around him, and this condition became more marked during the night, which was a very restless one. On the morning of the 3rd he was in a semi-conscious state, and could apparently only utter the word "Don't," and this he did only when the neighbourhood of the wound—which was now dry, swollen, and tender—was touched. The pulse was 80. A poultice was placed over the eye. He refused to take nourishment of any kind. In the course of the day the bowels acted once, and another dose of calomel (three grains) was given. By the evening the pulse was 100, and the temperature 101°. He was able to say "Don't" and "Go

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away," thus having apparently gained one more phrase—that is, supposing, as we think is indicated by the sequel, his lack of words depended from the first upon true aphasia. He passed no urine, and resisted attempts to pass the catheter, so that the urine was not examined, but when obtained afterwards it was found to contain no albumen or sugar. On the 4th he regained consciousness considerably, and took nourishment for the first time since the evening of the 2nd. The following phrases were used: "Don't," "No," "Yes," "Oh no," "Go away," "I know that," "Water," "Food," "I should like." The pulse was 90 in the morning and 110 in the evening, but owing to his restlessness the temperature was not taken. Between this time and the afternoon of the 6th his mental condition improved, and he acquired several new words, but he became very irritable in temper. He slept fairly, and took the mild food which was allowed him well. At 6.10 P.M., however, he had a severe convulsion, followed by another at 6.30, and three more during the next two hours. Those which were noted began with a drawing downwards and somewhat to the right of the lower jaw, accompanied by a chuckling noise in the throat. This was followed by violent spasms, at first clonic and then tonic, of the right arm (flexors of fingers, wrist, and elbow) and leg, the left arm and leg being subsequently similarly affected. There was also twitching of the eyelids and of the muscles of the chin, but there seems to have been no marked spasm of the facial muscles generally. The respiration was hurried and groaning, and a short period of unconsciousness followed each fit. We saw him together at 9.30 P.M., when the following note was made:—The pulse was 80, soft and regular; the temperature normal. The wound was covered with a scab, and there was some swelling of the orbit, and also subconjunctival ecchymosis. The eye was in normal position, and its movements appeared to be perfect. The pupil was, like that of the other side, of normal size; it was useless to question him as to his powers of vision. There was no paralysis of the face, limbs, or trunk. The tongue was protruded straight. Sensation was apparently everywhere normal. No reflexes, superficial or deep, could be obtained; but it was not easy to test them. He apparently did not understand readily what was said to him; but he put out his tongue when told to do so, and moved to the opposite side of the bed and grasped the hand after having been asked to do so several times. He often, in trying to speak, said nothing at all, mumbling in an awkward way with the tongue. His general answer was "Yes," with a slight lisp, often repeated; or "No," uttered in the same way. He occasionally stammered out a short and meaningless sentence. He was quite unable to write. A probe passed very cautiously into the wound revealed nothing new; it passed, as far as could be judged, directly towards the position of Broca's convolution.

The question of the advisability and justifiability of any surgical interference now arose. It seemed clear, from the hæmorrhage from the nose, that some injury to bone had taken place, and most probable that the point of the umbrella had actually penetrated the left frontal lobe. It was equally evident that the aphasia depended, not on an injury to Broca's convolution or the fibres underlying it at the time of the accident, but upon some subsequent changes either arising from hæmorrhage or inflammation, and of the two the latter was thought to be the most likely cause. We considered it probable, indeed, that it depended upon some septic inflammation in the neighbourhood of the island of Reil, and that therefore trephining over the temple would not afford any chance of relief, even if the symptoms had at the time been sufficiently severe to justify such a proceeding. The wound was probed, in order to see if any loose pieces of bone could be discovered which might have been removed. It must be added that it was impossible to avoid considering the very serious medico-legal aspect of the case, though the argument derived from this view told with almost equal force both in favour of and against an operation. Ultimately it was decided to place a horsehair drain in the wound, and apply lint steeped in boracic acid solution over the eye, but to do nothing more.

On Jan. 7th the patient was more sensible. He had had four fits since the previous night, the last one being very slight. He understood better what was said to him, though still obviously muddled and very drowsy. He was less irritable, and there was slight improvement in the power of speech, the following new phrases being gained: "Fred," "Soup," "Paper," "I have no pain." In the morning he was asked to write down what he would like to eat, and apparently made an effort to write the name of a person he wished to see. In the evening, on being asked to write his own name, he wrote twice over "Mcikk." We asked him to point out the "C's" in a large advertisement of Cadbury's cocoa, when he merely tapped all the letters one after the other, muttering "Yes, yes." There was no paralysis or alteration in the size of the pupil, and no vomiting. The horsehair drain was replaced by a small drainage-tube, but there had been hardly any discharge from the wound. The œdema of the eye had slightly increased. He often put his hand to his head as if in pain, but did not complain. The temperature was 98·2°, and the pulse 80 and soft. He was given a drop of croton oil, which produced eight free evacuations, and began to take ten grains of bromide of potassium every four hours. He would not keep an ice-bag on his head. On the 8th he had five convulsions, some more severe than others—at 7 A.M., 9 A.M., 11.10 A.M., 11.45 A.M., and 2.10 P.M. After the last he was unconscious for ten or twelve minutes. The pulse was 78 in the morning and 64 in the evening; the temperature 99° in the morning and 100° in the evening. He said "Please" as a new word.—9th: After a restless night, during which the ice-bag had been applied, he became completely unconscious from 8.30 A.M. to 10 A.M., on recovery from which he was much more rational than before. At 11.30 A.M. he had a convulsion almost limited to the jaw, and followed by a very short period of unconsciousness. Four other fits occurred during the evening, and now, for the first time, marked paralysis was noticed of the right side of the face and tongue, but none elsewhere. The temperature did not rise above 99·6°. The pulse was 64, and somewhat irregular. He had acquired a new phrase, "Thank you."—10th: Two convulsions of less severity. The paralysis of the face and tongue was marked in the morning, but by the evening that of the tongue had disappeared, and that of the face was scarcely visible. The temperature rose to 101·4° in the morning, but was lower in the afternoon. The breath was very offensive. The tube, which he had pulled out, was reinserted.—11th: In the morning the temperature rose to 102°, but it fell again in the afternoon, and he became much more intelligent, saying at 3 P.M., "Is he in the house?" (alluding to his friend Dr. Patterson, who had seen him the day before); also, "Are you going to bed?" "Thank you," "Better," "I feel see" (probably meaning "seedy"), "Quinine," and "Pearson" (probably meaning Patterson). In the evening he was quite intelligent, and said he could see with the left eye. The eyelids were now less swollen. He had no convulsions.—12th: The temperature rose to 102·4° in the morning and there was some delirium, but he recognised Dr. Pope. The pulse was 80; the tongue brown and dry; but this was followed by a most marked and sudden improvement, so that at 9 P.M. the following note was taken: No paralysis of face, tongue, or limbs; answers questions quickly and for the most part intelligibly, but is sometimes at a loss for a word, when he repeats "No" several times and shakes his head as if irritated; occasionally misunderstands a question—e.g., when asked to shut his eyes he shuts his mouth; says he remembers seeing Mr. Godlee four or five times; sees with both eyes and hears with both ears; movements of the left eye perfect, but the ball is somewhat prominent; pupils small, equal, and act well to light; swelling of orbit not greater, but still considerable; drainage-tube shortened to about an inch, as there is almost no discharge; says he has no headache now, but remembers having had severe pain. Can write his name rapidly; when he attempted to do so the first time he fell back in a slight convulsion; now he falls back as if exhausted, but no convulsion follows.—13th: He is now quite intelligent and speaks well, though occasionally making slight mistakes, which he laughs at; says he has known what words he wanted to use throughout his illness, but could not pronounce them; can count fingers at three feet with the left eye. The temperature was 100·2° in the evening of this day, but afterwards did not rise above the normal; the pulse from this date was always about 70.

It is needless to specify the daily condition from this time. He remained perfectly rational and talked well, with only an occasional stumble over a long word, which gradually became less and less frequent, and at last ceased to occur. He was kept in bed till the end of January, on a low diet, and continued to take the bromide for some time. Since then he has been up and going about the house and walking outside.

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He has occasional frontal headache, but principally on the right side. He talks well and reads a little, and he feeds like other people, except that he takes no alcohol. The wound has quite healed, and there is slight retraction of the eyeball.

It is useless in a case such as this, where the symptoms did not last more than a few days, to attempt to dogmatise as to the exact nature of the lesion; but it may be interesting to enter into a few speculations upon the subject. In the first place, though there is reason to believe, from the direction of the wound and the fact that there was hæmorrhage from the nose, that there was a fracture of the upper and inner parts of the wall of the orbit, there is no actual proof that there was a puncture of the brain. It is much more likely than not, however, that such was the case. In the second place, it is pretty clear that if the brain was penetrated, the loss of function did not depend upon the actual injury inflicted at the time, for the specific symptoms did not make their appearance until twenty-four hours afterwards. If we summarise the symptoms, it may be said that he presented almost complete "motor aphasia" (to borrow a definition from Dr. Gowers' excellent work on Diseases of the Brain), and that he was quite unable to write, while apparently throughout understanding, though in a sluggish way, all that was said to him. At a later period he had marked though transitory paralysis of the right side of the tongue and face, and also convulsive movements, principally involving the right side of the body, commencing with the muscles of the jaws and the upper extremity, and extending afterwards to those of the lower extremity and the other side of the body. If, then, we exclude the convulsive symptoms, about which nothing definite can be said, we may assume that those parts whose functions were interfered with were the third left frontal convolution and the lower parts of the ascending frontal and perhaps the ascending parietal convolutions, with possibly some part of the island of Reil, or else that the lesion was somewhere in the course of the fibres leading from these grey centres to the internal capsule. Now, as these parts do not appear to have been rendered functionless at the time of the accident, it is probable that this was effected either by hæmorrhage or by the extension of inflammatory mischief, and of the two the latter seems the most likely hypothesis; but whether the inflammation was of the nature of a cerebritis or a meningitis, or both, we are unable to say. It is not a little remarkable that this inflammation, though it must almost certainly have been septic, should have subsided so rapidly—indeed, that it should have subsided at all. A criticism may be made on the fact that the wound was twice investigated; but we think that this was good practice, as on either occasion it might have been possible, by removing a sharp projecting fragment of bone, to diminish subsequent risk; and on the second occasion the investigation might have led to the evacuation of some inflammatory effusion situated above the orbital plate of the frontal. When this proved impossible there was a considerable temptation to trephine the patient over the supposed seat of the lesion, and for this reason, as much as for any other, we think the case is worthy of record. Had an opening been made in the skull and some inflammatory lymph evacuated, or even merely exposed, as would most likely have been the case, and had the patient recovered, we should have no doubt ascribed to the operation a successful result which nature itself was able unaided to effect. If, however, the symptoms, instead of clearing up, had become intensified, and if the patient had become comatose, we should not have hesitated to apply the trephine, and, if no pus had presented itself beneath the dura mater, to have searched for an abscess beneath the cortex.

ANOTHER DEATH FROM WOOLSORTERS' DISEASE.—On the 7th inst., an inquest was opened at Bradford relative to the death of a man who had recently been engaged as a woolsorter, and who had just previously to his death been working at Cape mohair, which was, as he only too truly told his wife, "the wool they die on." Dr. McKenzie stated, as the result of a post-mortem examination, that deceased's death was due to anthrax, locally known as woolsorters' disease; and Dr. Hime, the medical officer of health, corroborated this evidence, and said that he considered it was of importance that fans should be fixed in the sorting rooms for the collection of the dust. The inquiry was ultimately adjourned.

A MAN'S LEG COMPLETELY BITTEN OFF BY A SHARK WHILE BATHING IN THE SEA.

RESCUE, AND IMMEDIATE AMPUTATION ABOVE THE CONDYLES; RECOVERY.

BY F. ENSOR, M.R.C.S. ENG.,
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THINKING that the following record will be of interest to the readers of THE LANCET, I send the details while fresh in my memory.

On January 28th of this year Mr. R——, of this town, engaged in mercantile pursuits, went with a friend to have a dip in the sea at about 7 A.M. Visitors to South Africa may remember that there are two jetties projecting from the shore into deep water, A and B; the jetty B has been only a few months in use, and, being in close proximity to the Malay quarter, offal of fish has been constantly thrown into the sea here, and hence the appearance of sharks—those monsters of the deep,—which up to this time have not been common and no cause of fear or hindrance to sea-bathers. Mr. R—— and his friend having disported themselves in their usual way, Mr. R——, who was an expert, came out of the water, and resolved to have one more glorious plunge from the deck of the jetty; on rising to the surface he felt a sharp pain in the thigh, and before he could cry out received another horrid crunch, and down he went in the jaws of a huge shark. He struggled for a moment, and felt twisted about and shaken, then free, and with an instinctive effort, as he rose to the surface, made a supreme attempt to reach the landing stairs, which were close by. There were some lads on the jetty who saw the terrible scene, and one of them stretching out his hand fortunately grasped that of the unfortunate man, and brought him to the dressing-room; those present did what they could to staunch the bleeding by ligatures of towels, &c., and a doctor and a cab were sent for. My friend, Dr. Edwards, was very quickly in attendance, and in the hurry of the moment had snatched up from his table one of, I think, Martin's elastic rubber bandages and a piece of wadding; with this appliance he quickly and effectually stopped all hæmorrhage. Poor R—— was at once conveyed to the Provincial Hospital, and when I arrived, which was in less than an hour, he was on the operating table. Pale of course, but wonderfully collected, and with a fair pulse, he consented to an immediate amputation, which was performed by the surgeon of the day, Dr. Leslie; Dr. Uppleby, the assistant-surgeon, administering the chloroform in a careful and watchful manner. The circular operation was performed above the condyles, as near to the extremity as the lacerated tissues would allow; strict antiseptic measures were adopted, excepting the spray, and a good-sized drainage-tube was inserted, not transversely, but perpendicularly, by making two incisions in the skin. This method, I think, commands better drainage. The patient bore the operation well, and on waking up asked if it was all over. A quarter of a grain of morphia was injected, and later on at night half a grain.

Next day (the 29th) the report was as follows:—The patient had slept fairly, but complained of starting and tearing in the leg; reaction had set in; the gauze was stained through; no bleeding. The dressings were renewed at 12 o'clock. Diet: barley-water, milk, and beef-tea. He was very thirsty. His mental condition was hopeful and plucky. Two silk ligatures were used to tie two large arteries, a few smaller ones were secured by carbolic gut, and the edge of the wound closed by silver wire. A minimum of blood was lost only at the time of the operation. On the 31st the dressings were renewed; temperature 99°; stump looked well; drainage good; no pus or ill odour. On Feb. 1st he slept well without morphia; temperature normal, never above 100°. From this time recovery was uninterrupted, the wound remaining quite clean and free from ill odour. The chief trouble was the irrepressible agitation of the stump while being dressed, and considerable acute pain towards evening, which the mind referred to the foot which had been torn away.

It is very rarely, I imagine, that a human being who has once been in the terrible jaws of a shark has been saved, and more rarely still saved by surgical aid. I would venture to remark that the method by which my friend, Dr. Edwards, restrained hæmorrhage is worthy of notice—the covering of

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wadding and Martin's rubber bandage over the lacerated end of the femur; and the arrest of hæmorrhage was very complete. A few ounces more blood lost would have turned the scale. Would not this method be of use in cases where extremities have been torn off or crushed by machinery or by a heavy waggon? You save all blood between the ligature and the end, and avoid bruising skin, muscles, and nerves by a ligature too often applied with unnecessary force. On examination of the part removed, there were the distinct marks of the serrated edge of the shark's teeth on the outer condyle of the femur, two-thirds of which had been, as it were, sawn through; the monster must have caught the poor fellow's leg obliquely, crushed through the condyle, and wrenched the leg off, going obliquely across the joint. There were also three wounds of the skin on the same side just below the rim of the pelvis, where the shark first caught him. These healed kindly, being dressed antiseptically at the time of the operation.

March 1st.—Met Mr. R—— this morning near his house making his first essay with the crutches; he was looking well, but still troubled with pain in the absent foot. I advised him to try to do without morphia. The brain, by-and-by would cease to remember, and find it "wiser to forget."

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum allorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

LONDON HOSPITAL.

SEVERE URETHRAL STRICTURE TREATED BY PERMANENT SUPRA-PUBIC DRAINAGE OF THE BLADDER; REMARKS.

(Under the care of Mr. FREDERICK TREVES.)

THE following case is a very unusual one. That a patient should have had a traumatic stricture of the urethra causing difficulty in micturition for nineteen years, and for seven years dribbling of urine, and at the end of that time, when an operation is required for complete retention, no evidence of either cystitis or renal disease, is extraordinary. The treatment adopted in the case appears to have been completely successful, and the patient is now in a condition far more comfortable than that which preceded the retention. The method of treatment adopted is not by any means a usual one in traumatic stricture, and we would refer our readers to the remarks made by Mr. Treves on the case.

A man, aged fifty-five, was admitted on August 23rd, 1885, suffering from complete retention of urine of thirty hours' duration. The patient was a bricklayer, and had worked regularly till within twenty-four hours of his admission. He was thin, appeared to be in feeble health, and for a long time had felt too weak to follow his employment. He gave the following history. He had never had any form of venereal disease. Twenty years ago he fell from a scaffold and alighted upon a beam in a sitting posture, striking his perineum. A great deal of blood escaped from the urethra, and the perineum and scrotum were much ecchymosed. There can be no doubt that he ruptured his urethra. He received no local treatment. He appears to have then presented some symptoms of cystitis, which soon subsided, leaving him apparently well. Within a year of the accident, however, he began to experience some difficulty in micturition. This trouble slowly increased, and at last he was unable to pass any urine voluntarily, and it constantly dribbled away in drops. He could not keep himself dry either by night or day. For the last seven years he has worn a urinal, and has never passed urine voluntarily. For seven years his bladder has been so distended as to be visible as a tumour above the pubes. This extraordinary statement is fully confirmed by the patient's wife. He never had to discontinue his work, and he has never had any instrument passed into his urethra. He often had sharp pain in the abdomen and about the perineum. During the last eight years his wife has ceased to have children.

On admission the bladder appeared as a conspicuous tumour that reached the umbilicus. The abdominal walls were flaccid. There was no enlargement of the prostate, but there was a considerable bulging of the bladder into the rectum. A stricture could be felt through the perineum just in front of the triangular ligament, as a dense cartilage-like cord about an inch and a half long. The urine was alkaline and a trifle ammoniacal. On standing, an inconsiderable deposit of muco-pus mixed with phosphates formed. There was no more albumen than the organic deposit would account for. There was no evidence of any renal disease nor of any distension of the kidney. An examination of the other viscera gave negative results. The man's clothes were wet with urine. He stated that in spite of the urinal he had difficulty in keeping himself dry, and when in bed the urine was allowed to drip upon clothes placed to receive it. The skin about the perineum was excoriated in places, and was the seat of a slight form of eczema. No instrument of any kind could be passed, although patient trial was made. Opium and croton oil were administered and a hip-bath ordered. The result was that the urine again began to dribble away, although only in very small amount.

Aug. 27th.—Relief has only been obtained by the continued use of opium and warm baths. All attempts at passing instruments have failed. The urine dribbles away in diminishing amount, and during the last two days only when the patient is in the bath. The bladder reaches the umbilicus. The patient is much prostrated, is unable to sleep, and has lost his appetite. The temperature is normal. The bladder was punctured to-day by Mr. Treves above the pubes. A rectum trocar was used and the cannula tied in. Three pints of urine were removed.

The patient did well, with the exception that between Sept. 6th and 9th he experienced a sharp febrile attack, due apparently to hospital sore-throat. Apart from this the temperature never rose above normal. Within a few days the metal cannula was replaced by a soft rubber catheter. In the case of both these instruments a tube was attached to the free end and carried to a receiver beneath the bed, so that the bladder could be kept always empty. On Sept. 12th a soft rubber empyema tube was introduced after having been cut down to about three inches in length. This was retained by a simple contrivance of bands and elastic cords and closed with a wooden plug. The patient got up, and was discharged on Sept. 19th. At the time of his discharge the urine was acid, perfectly healthy, and free from all deposit. The patient emptied the bladder four times daily by removing the plug. He retained his urine all night. He had remained quite dry both at night and during the day. After two days' rest at home he returned to his work.

May 25th, 1886.—The patient came to the hospital to report himself. He has gained a stone in weight since September, and enjoys better health than he has known for some years past. He has followed his employment without interruption. He has passed no urine by the penis since he left the hospital. The same tube is retained, and gives rise to no inconvenience. No urine has ever escaped from the fistula, and he can now keep himself quite dry. He empties the bladder about four times daily. The urine is perfectly normal.

Remarks by Mr. TREVES.—One very conspicuous feature in this case is the fact that the bladder remained fully distended for seven years, and during that time was only relieved by the overflow attending distension. The absence of any obvious kidney trouble is worthy of note. It has been many times pointed out that in cases of chronic partial retention—as, for example, in that associated with hypertrophied prostate—the urine will remain healthy until a catheter is introduced. Every surgeon must have met with cases of enlarged prostate with persistent unemptied bladder, where the viscus has remained distended for many months and relief has been afforded only by overflow, but where no catheter has been used, and the urine passed has remained perfectly normal. With the commencement of catheterism commences the cycle of troubles that depend upon decomposed alkaline urine. In THE LANCET of April 10th, 1886, p. 722, Dr. Robinson describes a case of enlarged prostate that I saw in consultation with him. In this case the bladder had been sufficiently distended to reach the umbilicus, and that degree of distension it had maintained for at least eight or nine months. Yet no inconvenience was experienced, and the urine was quite normal. A catheter was introduced into the bladder for the first time, and since then I understand t

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urine has become alkaline and mixed with muco-pus, and symptoms of cystitis have arisen. In the present patient the distension caused trouble mainly from overflow, but the urine had become unhealthy, although no instrument had been introduced, yet so slight was the modification in the composition of that fluid that it rapidly became normal without specific treatment. It would appear therefore that there is still much to learn in connexion with chronically unemptied bladder. In severe and extensive forms of stricture it can hardly be claimed that perineal section is a successful method of treatment; in hospital patients, at least, it does not commend itself. Even cases that do well for a time are practically certain to relapse, owing to the patients' neglect of the after-treatment. In the present case perineal section was the only alternative left. The state of the patient's health, the extent of the stricture, and the improbability that the man would be an intelligent party to any prolonged measures for cure, were all obstacles to that operation. As events proved, the man was not kept from his work for more than four weeks—a circumstance that could not have been contemplated had an external urethrotomy been performed. It is worthy of note that the tube has never caused the least disturbance, and that no urine has leaked out by its side, although the patient follows a laborious employment.

ST. OLAVE'S UNION INFIRMARY.

A CASE OF RECURRENT PROLIFEROUS CYST IN A WOMAN OF SIXTY-THREE; OVARIOTOMY TWICE WITHIN NINE MONTHS; RECOVERY.

(Under the care of Dr. R. J. SHEPHERD.)

ELIZABETH B——, aged sixty-three, was admitted on June 26th, 1885, suffering from tumour of the abdomen, with a history of between two and three years' duration. She was otherwise in good health. Dr. W. Beech Johnston, having been called in, confirmed the diagnosis, and also the prognosis that the case would be likely to do well. On Aug. 7th, bichloride of methylene was given by Mr. V. A. Jaynes, and Dr. Shepherd, assisted by Dr. W. Beech Johnston' Dr. Malpas, and Mr. W. Steer, performed ovariotomy with strict antiseptic precautions. The tumour consisted of two large cysts, each about the size of a cocoa-nut, and of a prodigious number of smaller cysts from the size of a pea to that of a goose's egg. The pedicle, of a good length, was tied with carbolised silk and dropped back. The operation was a very simple one; there was no difficulty, and no ligatures were required. The sutures were removed on the eighth day, and when next the dressings were removed the wound was healed. Severe tympanites occurred on the third day and gave rise to some anxiety, but the temperature did not rise. It was probably caused by reflex irritation from a tight suture, of which some misgivings had been felt, and it subsided on its removal. Otherwise convalescence was uninterrupted and the patient grew quite fat.

Early this year it was plain that the woman was again the subject of ovarian tumour. She was urged to submit to its early removal, but refused till April 19th, when she again underwent the operation of ovariotomy. The tumour was the counterpart of its predecessor, only smaller. The pedicle was longer and had become twisted on itself, so that it had to be untwisted four or five times before the ligature was placed around it. The operation was even easier than before. She never had a bad symptom, and is now well.

INGHAM INFIRMARY, SOUTH SHIELDS.

COMPOUND COMMINUTED FRACTURE OF THE PATELLA; RECOVERY WITHOUT OPERATION.

(Reported by Mr. H. BRAMWELL.)

IN his remarks Mr. Bramwell said that, having read an account of a case of this nature given in THE LANCET of May 8th, treated by suture of the patella, he was led to report the following case. It shows how little constitutional disturbance may follow such a serious injury of the parts be rendered aseptic.

[illegible] from a scaffold, the right knee [illegible] while in the flexed position. [illegible] 1885, at 5.30 A.M., there was an irregular wound over the front of the right patella, bleeding freely. The finger could be passed directly into the joint through the patella, which was divided into three portions—an upper (largest) and two unequal lower ones, that on the outer side being the larger of the two. The limb was immediately placed in a long back splint, reaching up to the gluteal fold, and the tissues of the thigh drawn downwards by two strips of strapping placed on the sides, fastening to the splint below. The limb was firmly bandaged to the splint, leaving the knee exposed, and the whole raised so as to flex the thigh on the pelvis. The knee-joint was now thoroughly washed out with 1 in 2000 perchloride solution, covered with a thick layer of salicylic wool, and bandaged with a convergent spika of elastic webbing.

March 18th.—Has passed a good night; temperature 99·8°; pulse 76; a little discharge through the dressing. Some 1 to 20 carbolic oil was poured over the part and more wool placed outside. Joint a good deal swollen.

19th.—Morning temperature 98·4°; evening 99·9°; pulse 86. Leg quite easy.

22nd.—Has been fairly comfortable; had a little pain; temperature and pulse normal; the swelling in the joint still continues. Superficial dressings removed under spray; that immediately in contact with the wound not removed, being caked with blood into a firm clot. The joint was aspirated, and about two ounces of blood-stained fluid withdrawn.

25th.—Temperature and pulse normal. Fluid has again accumulated. One ounce of fluid containing blood and a few pus cells drawn off with the aspirator.

31st.—All dressings removed; wound quite superficial; fragments are lying in good position. A little fluid in the joint.

April 6th.—Wound quite healed; the fragments of the patella brought firmly together by a spika of elastic bandage.

17th.—Complains of a "pulling pain in the knee."

May 1st.—Splint removed. The fragments of the patella are firmly consolidated together; no interval can be detected between them, and it is universally hard all over. The right patella is half an inch longer than the left. Patient can move the joint freely; much flexion not attempted for fear of breaking down the union. A stiff bandage applied.

June 16th.—Patient presented himself after being at his work a fortnight. He uses the leg freely, there being slight stiffness in the knee, only inconveniencing him when he wishes to kneel. The two larger fragments are still firmly united; an interval can be detected between the lesser and the remainder.

Medical Societies.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

Hereditary Syphilis in Infants.

AT the meeting on May 7th,

Drs. COLCOTT FOX and J. B. BALL read a paper on some cases of Hereditary Syphilis in Infants in which the Bones were affected. The paper was illustrated by drawings and a number of pathological and living specimens. The latter included six infants with typical Parrot's natiform bossing of the cranial bones. The following cases, mentioned by the authors, in which the phalanges were involved, are worthy of record. Case 1: William S——, aged ten weeks; fed at the breast only; the first child; born at full time and not preceded by any miscarriage. Snuffles almost from birth; dirty pallor of skin; hoarseness; noted papular syphilides; pseudo-paralysis of right arm, which remained hanging and pronated against the side of the body. Thickening of the upper part of the right radius and ulna, causing evident swelling. Hard swelling of the proximal segment of the index-finger. Rapid improvement and ultimate cure under powdered mercury and chalk. Case 2: Albert Y——, aged eight weeks and a half; brought up at the breast only; the fifth child. Two immediately previous children died at six weeks of age with an eruption, and another was stillborn. A——, had snuffles and hoarseness from birth, and [illegible] thematous syphilide about the buttock from a [illegible] When he came under observation he had [illegible] of feet, *café-au-lait* tint of skin, and a [illegible] fingers' breadth below ribs. He was [illegible]

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a great deal when touched or moved, and could only move the arms very feebly indeed, and the left leg only very little. The mother had noticed this for some time. There was swelling of the hands, chiefly visible on the dorsal aspect, and enlargement of the metacarpal bones. The digits were also swollen, and each separate phalanx on both hands was felt to be thickened, and presented to the eye a distinct fusiform enlargement. Nails normal. The left humerus and the left radius and ulna were decidedly enlarged in their lower fourths, with crepitus at lower end of left humerus. The right radius and ulna were thickened at their upper portion. Both feet were swollen, especially on the dorsum, with thickening of the metatarsal bones. The lower end of the right tibia, the left femur, and the upper end of the left fibula were thickened, and also the whole of the left tibia, especially at the lower part. A soft spot was noted at the outer and back part of the left parietal bone, and a week later a similar very distinct spot in the frontal bone, and subsequently some more cranio-tabes in the frontal about the outer angle of the orbit, which disappeared in three or four weeks. The lesions steadily subsided and the general health improved under powdered mercury and chalk, and in three months all traces of swellings and the pseudo-paralysis were gone. In the first case recorded of infantile syphilitic dactylitis—viz., Archambault's case in 1869—all the distal phalanges were involved; but in others by Bulkley, Curtis, Smith, Taylor, and Cripps Lawrence, the distal phalanges were more or less affected. The authors, whilst fully alive to Taylor's note of caution concerning the middle phalanges, determined that every one was involved in Albert Y——, so that the case is quite unique.

ACADEMY OF MEDICINE IN IRELAND.

Extroversion of the Bladder.

A MEETING of the Surgical Section was held on Feb. 19th, Dr. E. H. BENNETT submitted to the section casts of the original deformity and of its modification by Wood's operation in a case of Extroversion of the Bladder. The patient was a female, on whom the first operation was performed three years ago, when the child was a year old. Previous to the operation the urine was frequently observed to flow *guttatim* from the orifices of the ureters, the deformity being of the ordinary variety. The first operation effected the complete covering of the exposed bladder surface, but as the wounds healed a considerable shrinking of the flaps took place, and the orifices of the ureters were again exposed. After some months the urinary flow was seen to take place in irregular squirts, not *guttatim*—a condition which could only be explained by assuming the existence of dilatation of the ureters. Two operations, which consisted in the paring of the edges of the flaps, converging in the middle line, served to close the opening in which the vesical membrane was exposed as far down as the cleft clitoris. Nothing now remained but to adjust an apparatus for conducting the urine into a proper receptacle. Attempts in this direction were commenced in June, 1885, when the child was four years old, and when an interval of many months had elapsed after the last operation. At this time the child did not appear in as good health as previously, and this failure increased slowly until her illness became extreme. Her death was brought about by constant vomiting and wasting. The examination of the pelvic viscera and site of the operation proved that the cause of death was purulent inflammation of the ureters and pelves of the kidneys, with great dilatation of the ureters.—Mr. WHEELER said he had two cases eight years ago, which were of interest on the subject—one of external eversion of the bladder, and the other of ectopia vesicæ with fissure. The external eversion of the bladder occurred in a young woman aged nineteen. Her anus was put forward. She had a short narrow vagina, and the uterus could be easily felt on pushing up the finger into it. On looking at the bladder, the two ureters could be seen, which dropped urine sometimes together and sometimes alternately; while occasionally, the urine being held, there would be a squirt. He turned down a long umbilical flap, and then two pyriform flaps at each side. The flaps came nicely together. The umbilical flap fitted in by the side of those which overlapped and were brought together by hare-lip pins. For some time the case progressed favourably, but the urine trickled down underneath the flaps, and there did not seem to be retention. The side flap and portion of the anterior flap sloughed. Besides having the abdominal wall open, the anterior wall of the bladder was absent. The girl would not be operated upon again unless she was promised a cure. The second case was that of a young gentleman who had got ectopia vesicæ with a hypospadias. He made an excellent recovery following the operation, and he had a certain power of retention, though obliged to wear an artificial apparatus to catch the urine.—Dr. MILES thought the most interesting point was the dilatation of the ureters from the pressure of the flaps, and suggested that it might be overcome by the contraction of the fibres of the ureter.—Mr. STOKES said he was not disposed to adopt Wood's operation, there being such a redundancy of tissues on each side of the opening, and under the circumstances he considered two square-shaped flaps brought together over the mesial line would be sufficient. Another objection to Wood's operation in the case of adults was that the turning back, and having a hairy surface on, the lining of the membrane of the bladder might lead to troublesome consequences by the formation of phosphatic deposits, unless steps were taken first to destroy the hair.—Dr. BENNETT having replied, the section adjourned.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

A MEETING of the Society was held on April 22nd, Mr. R. J. Pye-Smith, President, in the chair

Congenital Tumours of Orbit.—Mr. SNELL related this case, which occurred in a young woman. The tumours were subconjunctival at the outer side of each orbit. Both have been removed. The patient had also partial coloboma of one eyelid, and absence of the greater part of the external ear on one side. Mr. Atkin examined the tumours with the microscope, and described them as "mixed" tumours.

Salivary Calculus.—Dr. HARGREAVES exhibited a calculus from a man aged forty-five. It measured half an inch long and one-sixth of an inch wide. It was in connexion with the submaxillary gland, but instead of coming by the duct it ulcerated through the mucous membrane posterior to it.

Dentigerous Cyst.—Mr. GARRARD related this case. It occurred in the lower jaw.

Communication between the Stomach and Transverse Colon.—Mr. JEFFREYS (Chesterfield) showed the specimen from a man aged fifty-four, a retired publican. Pain over and enlargement of the liver were first noticed in May, 1884. Later there had been several attacks of profuse offensive expectoration, and they lasted a considerable period. Emaciation steadily increased. On Feb. 16th last he had a severe syncopal attack, and shortly after stercoraceous vomiting set in; this was preceded by severe diffused abdominal pain. He suffered a great deal from constipation, and enemata were used. On Feb. 27th he passed a large piece of necrosed tissue, accompanied by hæmorrhage. He died on March 2nd from exhaustion. At the post-mortem a large cavity was found containing pus, and extending from the lower part of the transverse colon to the under side of the diaphragm; the spleen formed the outer, and the posterior wall of the stomach the inner, boundary. The stomach, through an opening in its posterior wall, communicated with this cavity, as did also the posterior part of the transverse colon; there was also an opening (from the abscess cavity) through the diaphragm, and at this point the left lung was adherent.

Contamination of Drinking-water with Lead.—Mr. PYE-SMITH referred to the large field at present open in Sheffield for observation of the effects of the contamination of drinking-water with lead, and after quoting the opinions of various authorities as to the probable frequency of unrecognised cases of chronic plumbism in the absence of the usual pronounced symptoms, he mentioned several classes of cases he had met with where he suspected lead to have been the cause of the symptoms—namely, cases of severe functional derangement of the circulation and digestion without signs of organic disease, cases of arthralgia and myalgia, of nerve disturbance, and of abortion. All the cases referred to occurred within the area supplied by the Redmeres water, and the majority of the patients showed evidence of the presence of lead in the body by a blue line on the gums.—Remarks were made by Dr. Martin, Dr. Porter, Mr. Garrard, and Dr. Keeling.

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Reviews and Notices of Books.

A Manual of Practical Therapeutics, considered with reference to Articles of the Materia Medica. By EDWARD JOHN WARING, C.I.E., M.D., Fellow of the Royal College of Physicians of London. Edited by DUDLEY W. BUXTON, M.D., B.S., Administrator of Anæsthetics at University College Hospital and the Dental Hospital of London. Fourth Edition. London: J. and A. Churchill. 1886.

Materia Medica and Therapeutics: Vegetable Kingdom; Organic Compounds; Animal Kingdom. By CHARLES D. F. PHILLIPS, M.D., late Lecturer on Materia Medica and Therapeutics at the Westminster Hospital. London: J. and A. Churchill. 1886.

A Guide to Therapeutics. By ROBERT FARQUHARSON, M.P., M.D., LL.D., late Lecturer on Materia Medica at St. Mary's Hospital. Fourth Edition. London: Smith, Elder, and Co. 1886.

Materia Medica and Therapeutics: an Introduction to the Rational Treatment of Disease. By J. MITCHELL BRUCE, M.A., M.D., Physician and Lecturer on Materia Medica and Therapeutics at the Charing-cross Hospital. Third Edition. London: Cassell and Co. 1886.

"OF making many books," saith the Preacher, "there is no end"; and this is undoubtedly true of the production of new editions of works on Materia Medica and Therapeutics. We are not sure that we might not add that such study is a "weariness to the flesh," but this might perhaps savour of ungraciousness, especially as the four works before us are all excellent in their respective ways and deserving of detailed criticism. The place of honour must be assigned, on the ground of seniority, to Dr. Waring's excellent "Manual of Practical Therapeutics," the first edition of which, if we mistake not, appeared in 1865, and the last in 1871. The present issue is the joint production of Dr. Waring and Dr. Dudley Buxton. The text has in many places been judiciously curtailed, and it is now not only a thoroughly practical work, but a capital text-book for students. The introduction, which is apparently new, is charmingly written, and is a type of all that such an essay should be. The book is from beginning to end well up to the times, and we find in it abundant information on all that relates to picrotoxine, pilocarpine, agaricin, hamamelis, piscidia, casca, cascara sagrada, tonga, extract of malt, Warburg's tincture, and a host of other drugs and preparations concerning the uses and properties of which examiners in these progressive times are apt to be inquisitive. The chapter on Coca—which we are glad to see is not spelt "cuca"—is thoroughly practical, and contains brief references, admirably digested, to nearly all that has been written on the subject. The notes on Ethidene and other anæsthetics—a word which, by the way, was introduced by Oliver Wendell Holmes—are to the point, and show the trace of a master-hand. An attempt has been made to classify the various extracts of malt according to their activity. A very able account is given of the therapeutic uses of the various oleates, frequent reference being made to the valuable observations of Shoemaker of Philadelphia. The influence of Dr. Waring's long Indian experience and extensive reading is everywhere noticeable, the work being as scholarly as it is practical. We can only repeat that in its present form it is essentially a book for students, and that its production reflects the greatest credit both on the author and the editor. The veteran therapeutist who gave us the "Bibliotheca Therapeutica" has added another leaf to his laurels, and we trust that his excellent "Manual of Therapeutics" will pass through many more editions under his care, and long maintain the high reputation to which it is deservedly held.

Dr. Phillips's bulky volume is a [illegible] and almost entirely rewritten edition of the "[illegible]," which appeared in 1874. Taken in conjunction with the "Inorganic Substances," by the same author, it constitutes a complete work on Materia Medica. It is a wonderful compilation, and is almost encyclopædic in character. If there is a fault to be found with it, it is that in places it is a little too conventional in character. Dr. Phillips, in his desire to be just to others, is too apt to sink his own individuality and to leave us in doubt as to his opinion on the subject under discussion. Such modesty would be commendable in a novice, but is uncalled-for in one who, like Dr. Phillips, has attained a high reputation as an authority on therapeutics. The whole work is divided up in a manner which greatly facilitates reference, the materials being admirably classified and arranged. The author gives such a good account of the uses of pulsatilla that we are at a loss to understand why it should again have failed to obtain a place in the Pharmacopœia. The remarks on Apomorphia—or Apomorphina, as it is now called—are practical, and indicate a thorough acquaintance with the literature of the subject. Sanguinaria canadensis receives more attention than is usually devoted to it in English works on Materia Medica, and the article will be perused with pleasure. An excellent *resumé* is given of our knowledge of Quebracho, respecting the value of which in the treatment of various forms of asthma there is still much difference of opinion. The chapter on Belladonna is excellent, and deserves careful study. The observations on Pepsin are perhaps a little unsatisfactory, and we are surprised to find that not only has no attempt been made to classify the various preparations according to their activity, but that, curiously enough, Dowdeswell's classical paper is not even mentioned. In the article on Nitro-glycerine there are several misprints, one of the most noticeable being that which assigns 1868 as the date of Mr. Field's well-known article on the physiological action of this remarkable drug. These, however, are but trivial errors, in no way affecting the general value of the work, the production of which reflects the highest credit on the author. The magnitude of such an undertaking, extending over so many years, cannot be over-estimated, and we heartily congratulate Dr. Phillips on the completion of his task. The book will have its value recognised both here and on the Continent.

It is always a pleasure to turn to Dr. Farquharson's "Guide to Therapeutics." He writes clearly and forcibly, and in a manner which commands our attention and respect. He is evidently an uncompromising opponent of the new Pharmacopœia; and, after giving a list of the seventeen omitted articles, says: "I would gladly have seen the list much more extended and made to include a large number of utterly useless articles which still linger on in our text-books, and whose reputation depends on a mysterious and unscientific catalogue of supposed virtues handed down from one generation of authorities to another. I should like to have seen a clean sweep of many of these, and must express some disappointment that official sanction has not been given to lightening the pages of our manuals of materia medica and the memory of our over-taxed student of many drugs which no one ever dreams of prescribing, and which in some instances probably could not be found if they were wanted." The arrangement Dr. Farquharson adopts is very popular with students, who find it of the greatest assistance in preparing for examinations. It might be supposed that the author, with his numerous engagements, political and otherwise, would experience some difficulty in keeping abreast of the progress of an advancing and exacting science such as pharmacology; but there is no sign of falling off, and the book is as accurate and as tersely written as of yore. The author acknowledges in graceful terms his indebtedness to his friend Mr. Carteighe, the President of the Pharmaceutical Society.

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Dr. Mitchell Bruce's "Materia Medica and Therapeutics," has rapidly attained the dignity of a third edition. It contains a great deal of useful information in a condensed and practical form. We are afraid we must object to the definition given of pharmacology, which certainly does not "include the whole subject of materia medica and therapeutics," and has, in fact, very little to do with either. The account of sulphide of calcium—or calx sulphurata, as it is now called—is curiously imperfect, and no indication is given as to the best mode of administration. The definition of extract of malt and its preparation are both open to criticism, and objection might be taken to the statement that it should not be administered "less than two hours after a meal." The dose of tincture of aconite is said to be from five to fifteen minims, but no warning is given as to the necessity for caution in the employment of these massive quantities. It is stated that the hypodermic injection of apomorphina "should be prepared as required," but we are not told that this is wholly unnecessary, and that it acts equally well and promptly however long it may have been made. These are but small matters perhaps, but they are of importance. The work on the whole has been carefully prepared, and the author very properly does not confine himself within the narrow limits of the British Pharmacopœia, but gives short notes on homatropine, duboisine, strophanthus, agaricus, pyridine, and other remedies. We are glad to find that he refers to the fact that atropin can be resolved into tropin and tropic acid, and reconstructed by the synthesis of these bodies. The book is clearly written, and is sure to be popular with students preparing for the various pass examinations in materia medica.

Food and Feeding. By Sir HENRY THOMPSON, F.R.C.S. Fourth Edition, Revised and Enlarged. London and New York: Frederick Warne and Co. 1885.

Diet in relation to Age and Activity. By Sir HENRY THOMPSON, F.R.C.S. London: Kegan Paul, Trench and Co. 1886.

WE are very glad to find the publications of Sir Henry Thompson on Food questions so much appreciated and in such demand as is implied in a fourth edition of "Food and Feeding," and the separate publication of his article on "Diet in relation to Age," which appeared originally in the *Nineteenth Century*. It may seem incongruous for one of the foremost surgeons of the world to concern himself about questions of food and cookery. A man of less authority, it might seem, would have done better than to descant on the advantages of braising as compared with roasting, or to supply a few pages of *menus* for those who want to construct their dinners in a way that meets at once the demands of fashion and the requirements of physiology. But only a superficial reader of Sir Henry Thompson's writings will thus judge. For ourselves, we accept entirely his main principles, and much admire his lucid enunciation of them. We can see nothing but the most practical benevolence in Sir Henry Thompson's expositions on this subject, which, we can well believe, have originated in the peculiar experience which he has in the department of practice of which he is *facile princeps*. The main points of Sir Henry Thompson's teaching are that as a nation we are heavy in our feeding and in our ideas about it. Our notions of weakness, and the cure of it by huge quantities of meat, are as coarse as the uric acid crystals to which they lead, and which compel many men to seek the professional services of Sir Henry and his colleagues. For ourselves, we are not learned enough in culinary science to criticise the details of Sir Henry's *menus*, but on medical grounds we entirely and very earnestly endorse his teaching that we require less meat and more vegetables in our diet; that our alcohol should be greatly reduced; that the large substitution of fish for meat would be an unmixed benefit; and that as age increases and the activity of life diminishes, our food, and especially our animal food, should be correspondingly diminished. It would be difficult to over-estimate the good Sir Henry Thompson has done as a surgeon; but we are disposed to say that it is not greater than the good he is doing by his publications on the principles of diet and good cooking; and those whose duty it is to undergo the slow process of martyrdom by public dinners ought to be specially grateful to him for trying to lighten the fare both of the *menu* and the toast-list, which are seriously threatening to drive all reasonable men from public dinners.

New Inventions.

A NEW INSTRUMENT FOR CASES OF EMPYEMA.

IT is admitted at the present day that a suppurating pleural cavity should be treated on the same principles as an abscess in the cellular tissues or in the substance of an organ—viz., by free incision and subsequent free drainage. The tubes here shown were designed especially for cases of empyema. The instrument consists of a couple of short tubes, 1 in. to 1½ in. long, and ⅜ in. in diameter, welded together side by side, at one end of which is a narrow flexible plate. The length of this double tube is made to vary so as to adapt the instrument to the varying thickness of the chest wall in different cases. The method of using it is as follows:—A free incision having been made, so that the opening in the parietal pleura as well as that in the skin shall be about 1½ in. in length, and the distended cavity relieved, the instrument is inserted, and then fastened to the chest wall either by strapping or tapes attached to the flexible plate, which acts as a flange. This plate lies close to the chest wall, and prevents the tubes either slipping in or being forced out. The cavity can then and at subsequent dressings be irrigated by the "syphon" rubber tubing which accompanies the instrument, being passed through one of the openings. The discharges and injected fluid have an equally free exit through the other tube. By this method the suppurating cavity can be completely washed out without fear of distending the cavity, and thus breaking down delicate newly formed adhesions. There is no occasion to pass the rubber tubing more than one inch within the chest wall. Two large-sized rubber tubes were successfully used on this principle in a recent case; but the instrument shown in the engraving is intended to reduce many little inconveniences and some slight disadvantages attending their use. It is made in either rubber or metal, the latter being used where there is trouble or danger from approximation of the ribs. I am indebted to Messrs. Arnold and Sons for so well carrying out my design. T. FREDERICK PEARSE, M.D.



AT the annual meeting of the supporters of the Paddington-green Children's Hospital on the 11th inst., it was stated that the work of the institution continues to expand, and it is proposed by means of new buildings to increase the accommodation.

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THE GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

WEDNESDAY, JUNE 9TH.

SIR HENRY ACLAND, PRESIDENT, IN THE CHAIR.

THE PRESIDENT stated that he could now inform the Council that it was the intention of the Government to endeavour to pass the Medical Bill before the session closed, if they could get any Bill at all through.

The Council again resolved itself into committee to consider the reports by the Visitors of the final examinations.

Dr. MCVAIL, referring to the criticisms passed on the Glasgow examinations with regard to students acting as clinical clerks and obstetricians, said if the students were properly distributed throughout the hospitals of Glasgow, there would be ample material for everyone. Each teacher would have only twenty-eight students, and each student would have throughout his course the entire charge of two beds. That would be the result if the teachers were not also examiners. The result of the present state of things was that the larger of the two hospitals in Glasgow (the Royal Infirmary) had not at present a single university student attending it. The average number of such students attending was about one per annum, the highest number having been four. In the Western Infirmary some of the non-professorial teachers had extremely small classes, while the professorial classes were crowded. The question was one of great importance in Scotland, and it could not be settled so long as the examination was limited to teachers. It was true that there were assessors, but only in the proportion of nine to eleven. Until the present system was changed the great clinical field of Glasgow would not be utilised.

Dr. PETTIGREW said that in Edinburgh many of the extra-mural lecturers were examiners.

Dr. MCVAIL said there was not a single case of an extra-mural lecturer being an examiner in Glasgow, except in the case of pathology.

Dr. PETTIGREW said there was no doubt a difficulty with regard to coadjutor examiners, but it might be got over by their being appointed by the Council or some other competent body.

Dr. CHAMBERS said that, according to the list he had made out, it was almost impossible for the University of Glasgow to elect as examiners those who had not been teachers there. Of the graduates only thirty-three had attained eminence in their profession, and of these twenty-four were teachers. If, therefore, the examiners were not to be teachers there, they must be men who had no connexion with Glasgow at all.

Dr. MCVAIL said he would not restrict the examiners to Glasgow men.

Sir DYCE DUCKWORTH quite agreed that there was a great loss of clinical material in Glasgow, but the difficulty arose from the fact that the Western Infirmary was closely adjacent to the University buildings, and the students had a very short distance to go from their theoretical to their clinical work. It was of very great importance to have men as examiners who were absolutely above suspicion, and if the mass of the profession of the three kingdoms were not satisfied with the way in which the examiners were appointed, it behoved the Council to consider whether some alteration might not be made in the method by which they were chosen.

Dr. STRUTHERS agreed that outside examiners should not be local men, and it might be well that they should be appointed by some independent body—say the Crown or the Medical Council. The Scotch universities would be happy to accept such outside examiners. England would certainly be better for a number of universities like the Scotch and the German in its large cities.

Dr. PETTIGREW felt strongly that the system of teaching would be degraded if the Scotch professors were not allowed to take part in the examination. The whole difficulty was about the appointment of the coadjutor examiners, and he had no doubt that the Scotch universities would soon concede that point.

Dr. HERON WATSON said that until the University Court was reformed nobody in Scotland would have the least confidence in its appointing extra-mural examiners. In the coming days of the democracy these antiquated institutions would be swept away altogether, and their funds applied in a more reasonable manner.

Dr. HUMPHRY considered that the deficiency in clinical examination in Edinburgh was due to the deficiency in the number of examiners. It was not quite creditable to that university that there should be only two examiners to conduct the whole of the long examination in each of the clinical subjects; but if it were proposed to exclude the professors from the Scotch university examinations, he hoped that those universities would fight, for he believed they would be right, and being right would win.

The next report considered was that on the University of Aberdeen.

Dr. STRUTHERS informed the Council that there were two periods of graduation at Aberdeen, but the Visitors only attended at the end of the summer term, when the rejected men come up again. That might explain perhaps, why the Visitors had not indulged in such enthusiastic terms as they otherwise might have used. There was one unjustifiable remark in the report. Fault was found with the partial passes, and the system was spoken of as "lax." That was a censure that he could not submit to. The Visitors ought to be censured, and not the university. Mr. Holden, who wrote that report, ought to have known that the Council had already sanctioned the system which permitted a rejected candidate to be examined again in the subject in which he had failed.

Dr. QUAIN called the attention of Dr. Struthers and the Council to the following statements of the Aberdeen Visitors: "While we thus note the insufficiency of the practical element in the curriculum, it appears to us an open question if the student be not altogether over-weighted by the number of the lectures which he has to attend, inasmuch as the winter courses are defined to include not less than a hundred lectures, and the summer not less than fifty." "Our opinion of this examination was in the direction of its being too superficial and the judgments too lenient. At the same time we gathered that many of the candidates, from the readiness and peculiarities of their answers, were evidently familiar with the teaching of the Professor of Surgery (laughter); and we felt sure that, while they were theoretically conversant with the history and general main features of diseased conditions, the majority of those whose examinations we witnessed were decidedly deficient in practical training." Mr. Holden also reported: "According to present regulations at final examinations, it is obvious that surgery in its wide sense plays no prominent part. Rather is it left in the background. Candidates are not required to do any operations on the dead body. They are not asked to show their knowledge of surgical anatomy. They are very inadequately tested on bandaging and surgical appliances. For these reasons I cannot avoid the conclusion that at the final examinations the candidates for the double degrees of the University of Aberdeen are not sufficiently required to prove their competency in surgery, and that some of them are admitted to the degree of Master in Surgery on rather too easy terms."

Dr. HERON WATSON said there was some inconsistency in the report of the Visitors with reference to the insufficiency of the surgical examination, as contrasted with the statement that the surgical examination was "carefully conducted, and the adjudication of the candidates' merits equitable."

Dr. STRUTHERS said that on the subject of the students being over-weighted with lectures, the Visitors only reported that it was "an open question," and even from that statement Dr. Kidd, one of the Visitors, had dissented. The reason for his dissent probably was that he had been educated in Scotland and knew the value of a good lecture system. The Visitors in their report had spoken on the whole very favourably of the examinations. There could be no doubt that the school was *par excellence* a hard-working one. The students were being constantly and carefully examined, and he (Dr. Struthers) knew his students as well as he knew his own boys.

Dr. PETTIGREW, referring to the visitation of St. Andrews, said that the Visitors had made certain statements which he thought were not in accordance with the facts. Perhaps the proper explanation was that the authorities there were too good to them, and as the report was not written at the time, they had drawn a little on their imagination. It was incorrect to say that the examiners were appointed annually by the Medical Faculty, for they were appointed by the University Court. Dr. Pettigrew also gave explanations from the remarks by the body visited on some other [illegible]

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in the reports, and claimed that St. Andrews had a higher percentage of eminent men as medical graduates than any other university.

Dr. CHAMBERS said that St. Andrews, according to the Medical Register, produced 2·3 per cent. of distinguished men, while the mean number of the ten universities was 5·2. The percentage of Cambridge was 25·7, of Dublin nearly 11, of the London University 13·1, so that it could hardly be said that St. Andrews beat all the others.

Dr. DUNCAN said that the Universities of St. Andrews and London really produced no men at all, but merely graduated them. Other universities and bodies educated them.

Mr. MACNAMARA said that the returns furnished to the Medical Council by St. Andrews showed that in seven years sixty-eight candidates had passed and only two had been rejected. There was a plentiful supply of reagents and specimens at the examination, but, as a matter of fact, not one of them was used, while the microscope was only employed by one examiner. The difficulty in St. Andrews was that there was no hospital, but he thought the students might call at Edinburgh on their way down, and there be clinically examined.

The Council then adjourned.

THURSDAY, JUNE 10TH.

SIR HENRY ACLAND, PRESIDENT, IN THE CHAIR.

The Council again resolved itself into committee for consideration of the reports by the Visitors of the final examinations.

Dr. HAUGHTON, referring to the University of Dublin, said that the statement of opinion on the part of the Visitors and the answers of the Examining Court must be received with discount on both sides. The object of the Visitors, as far as he could see, had been to bury Cæsar, and the object of the examiners to praise Cæsar, and he had no desire to do either the one or the other. He was the last person in the world who would wish to assist at the funeral of the college founded by the right royal lion-hearted Queen Elizabeth, and he certainly would not be guilty of the bad taste of simply being present to praise that college; but he should like to point out that a number of serious charges had been made against it by the Visitors, founded upon supposed facts which, like certain German metaphysicians, they must have evolved out of their inner consciousness. Those misconceptions, however, had been so fully answered in the reply of the examiners that he need not go into them. The University had accepted two of the recommendations of the Visitors—that the examination for degrees should be more extended than that for licences, and that the extern examiners ought to give more marks for the medical degree examination; but with regard to their silence upon all the other recommendations in the Visitors' report, it meant a fixed determination not to adopt them. (Laughter.) They could never accept the proposal to introduce clinical and operative surgery into a medical degree examination, any more than they would acquiesce in the introduction of clinical medicine into a surgery degree because their examinations in medicine, surgery, and obstetrics were conducted quite separately. The principle, that excellence in one important branch should not compensate for failure in another, was carried out in its entirety at the University with regard to medicine, surgery, and midwifery.

Dr. BANKS also criticised the report of the Visitors, remarking that if they had not fallen into the misconception referred to by Dr. Haughton they might have saved themselves the necessity of making the rather severe criticisms upon the examination which appeared in their report. They had stated that the examination undergone in the University of Dublin by a candidate for the degree of Bachelor of Medicine did not entitle him to registration. It had never been claimed that it did, but when the curriculum for that degree was formulated it was never intended that physicians should be general practitioners, but it was now the practice in Ireland to obtain a surgical as well as a medical qualification. Dr. Banks then pointed out what he considered a contradiction in the report, the Visitor in one place stating, "I may also unreservedly praise the *vivâ voce* examination in materia medica and therapeutics"; and in another speaking of the "incomplete character" of the examination in "practice of medicine and materia medica and therapeutics." The report also stated that the candidate in each case had been examined by his own teachers, but that was incorrect, for neither he nor his colleague (the Regius Professor of Surgery) was a teacher, and they knew nothing of the candidates until they came up for examination. Another mistake—and a grievous one—was the statement that there was only required a minimum of six attendances in cases of labour, which was too low; whereas the University was not satisfied with less than six months' practical acquaintance with midwifery on the part of its students; and, as a matter of fact, candidates for the Bachelor of Medicine degree had to prove that they had attended from twenty to thirty cases. There was also a complaint that some of the candidates were allowed to be present during the examination of their fellows, but the fact was that no man was present at the examination of another candidate in a subject upon which he also would be examined.

Dr. CHAMBERS said that the University of Dublin was evidently attractive to the more industrious and diligent students, for no less than 10·8 per 1000 of school teachers had taken degrees there.

Dr. BANKS, dealing with the report on the Royal University of Ireland, said that the Visitors expressed in strong terms their approbation not only of the curriculum, but also of the conduct of the examinations. Their words were: "All the above examinations appear to us to be well and conscientiously conducted, and the marks awarded, as far as the plans generally adopted allow, to be just." "It is obvious that in the clinical examinations great care is taken to prevent the candidates from knowing where the examinations were to be held, and therefore on what cases they were to be examined." It was true that they remarked upon the unpreparedness of the candidates, and that the examiners fully concurred in that was proved by the fact that 50 per cent. of the candidates, were rejected. With respect to putting back candidates, it had not been found by experience that there was any inconvenience. It was in clinical medicine or surgery that they were generally sent back. The absence of pathological preparations and drawings was referred to in the report, but the fact was that the University buildings were not yet completed. He considered that such a young university had good reason to be proud of the report, especially when the Visitors were men of such eminence as Dr. Bristowe, Mr. Holden, and Dr. Leishman.

Sir DYCE DUCKWORTH drew attention to the statement that for the most part the candidates were examined by only one examiner. The opinion of the Council was that there should always be at least two examiners. One peculiar point in connexion with the Royal University was that anatomy and physiology were taken at the final examination. To compel candidates to keep up a knowledge of those subjects so as to pass another examination on them must have a very distracting effect on men who had to take up practical subjects at the end of their curriculum.

Mr. MACNAMARA said that the question as to when the study of anatomy should end was formerly earnestly discussed by the Council, and he took a leading part in opposing the view that it should be at the close of the second year. In that he had the support of Sir James Paget, and the result was a recommendation by the Council. Under the provisions of the Anatomy Act, no man could pursue his anatomical studies elsewhere than in a school licensed for the purpose. In Ireland everything in medicine and surgery was regarded as having its basis in anatomy, and it was remembered that after obtaining his qualification the student had no facilities for studying anatomy, though he had for every other branch of the profession. In any part of the globe he might study medical chemistry and materia medica, but not anatomy, and therefore it was necessary that he should utilise every opportunity at his disposal in the years when he could work upon that subject. The result was that Irishmen were vain enough to think that Ireland produced anatomists that could favourably compare with any from Scotland.

Mr. SIMON said it was very important that men should not be allowed to forget their anatomy; and when they were examined in surgery, if they betrayed ignorance of anatomy they should be plucked. The view of the Council was that a student carried his anatomy into practice, and examination in surgery and medicine involved reference to it; but they objected to its being taken as a separate subject in the final examination.

Mr. MACNAMARA said the Visitors acknowledged that the students were efficient in anatomy, because they said they

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had already passed a stringent examination in it at the second medical examination.

Mr. SIMON asked if it were not possible that they would come out fresh in anatomy at the cost of being flabby in physic. The Visitors spoke of the lamentable ignorance displayed in medicine and midwifery on the part of a large number of students. That showed that they had been distracted from the study of those subjects, and gave their time to cramming for the anatomical examination.

Dr. STRUTHERS also thought it an injudicious thing to require anatomy and physiology at the final, especially after the students had passed a stringent examination in those subjects previously.

Dr. HAUGHTON said that the first act of the Royal University was to raise the standard of the arts examination preliminary to the study of medicine far above the level of the recommendations of the Council. They did this in the face of great difficulties, for there were vested interests of a serious kind involved in keeping down the standard of arts, and encouraging a minimum.

Dr. LYONS, M.P., thought that the Royal University, as a young university, might well be congratulated on having so successfully passed the ordeal of visitation. The Senate would be very happy, indeed, to apply themselves, as far as they could, to remedy any deficiencies that had been pointed out. The University had already raised to twenty the number of cases of labour which the students must attend, and he hoped that the Council would be able to secure that as a minimum in all schools. They had also made a special rule that at least ten fever cases should be attended, and, considering the great importance of the subject, not only in private practice but in connexion with the public service of the State, it could not be said that the minimum was too high. Attendance was also enforced on a limited number of cases in lunatic asylums.

Dr. BANKS, replying to an observation by Sir Dyce Duckworth, said the rule of the University was that there should be two examiners in clinical subjects, although there might have been some laxity in that respect on the occasion of the visit. The authorities were quite prepared to say that there should be no anatomy at the final examination.

Mr. MARSHALL moved the adoption of the committee's report. He said the discussion on the whole question showed how prudent those were who wanted to postpone the real report to the next meeting, and to present only a provisional report on this occasion. Almost every speaker had desired more information, and he concluded that the committee would be called upon to make a further report. In regard to the future, he could promise that the committee would endeavour to eliminate from their report everything that could be called personal to institutions, and devote themselves to the sole point of their consideration—the sufficiency of a registrable qualification. On that point a great deal could be learned from the valuable discussions that had taken place.

Dr. HERON WATSON seconded the motion, which was agreed to.

The Council then resumed, and Mr. Marshall again moved the adoption of the report, but on the suggestion of Dr. Quain and Mr. Simon the motion was withdrawn, the final acceptance by the Council being deferred until the entire report is presented.

The PRESIDENT said that, looking back on the various discussions of an educational kind that had taken place in the Council, he felt quite convinced that none had ever occurred which was more likely to be truly fruitful for the work they had in hand than that which had just terminated. It was quite clear that masters would be brought to a practical point with regard to the real requisites for education and examination in such a manner as they had never been before. If the new Bill passed, there would be a certain number of new members who had never taken part in the deliberations of the Council, and those gentlemen would have the advantage or disadvantage, as the case might be, of plunging into the middle of this intricate work. He felt that, whether the Bill were or were not the best possible solution, nothing could be so bad as the continuance of the suspense, and he hoped that, whether or not he lived and was able to join in the deliberations of the Council, there would be no jar in their proceedings. There were, however, pitfalls in the Bill which might almost compel them again to discuss the constitution of the Council, and for that reason, among others, he was thankful to see that these educational questions had been brought to such a point that, thanks to Mr. Marshall and his committee, it would be possible to continue the careful discussion of the details without any interruption. The new members would be welcomed as an addition to the Council, and would, no doubt, assist in bringing to a conclusion the long and anxious deliberations in which they had been engaged. He again thanked the members for the extreme kindness with which they had accepted what he had been able to do, assisted by the chairman of the Business Committee. He had had occasion several times to say that it was the happiest work he now had in life, and he should be sorry when the day arrived (which could not be far distant) when he would have to leave it.

The session then terminated.

PRESENTATION OF THE FELLOWSHIP OF THE ROYAL COLLEGE OF SURGEONS OF IRELAND TO MR. MARSHALL.

On the adjournment of the Council for tea, the Rev. Dr. Haughton, Honorary Fellow of the College of Surgeons in Ireland, and Professor Rawdon Macnamara, the representative of the College on the Medical Council, on behalf of the College, presented to Mr. Marshall the Honorary Fellowship of the College of Surgeons in Ireland, a distinction recently conferred upon him by that body in recognition of his valuable contributions to surgical science. Prof. Macnamara in a few well-chosen sentences conveyed to Mr. Marshall the sense of his College for his important services, and regretted the cause of his absence (illness) upon the public occasion when a similar distinction was conferred on Sir James Paget, who had then attended in person to receive the honour. Mr. Marshall, in accepting the diploma, which was engrossed on vellum, the seal of the College being enclosed in a handsome silver box, richly chased, expressed his high sense of the honour conferred upon him, acknowledged the important manner in which the Irish College of Surgeons had from its foundation laboured to promote surgical progress, and frankly admitted that personally he himself had derived no small amount of information from the writings and labours of Irish surgeons.

THE JUBILEE BANQUET OF THE BRITISH MEDICAL BENEVOLENT FUND.

To the Editor of THE LANCET.

SIR,—I shall be glad to be allowed again to remind your readers of the jubilee celebration of the British Medical Benevolent Fund, on Thursday, July 8th. Already so many prominent members of the profession have intimated their intention to be present, that the gathering will be one of the most important which has taken place for many years. It was, indeed, to be expected that a desire to do honour to Sir James Paget would be a powerful influence in bringing together a distinguished assemblage, and this anticipation is being fully realised. Among those who may be expected to attend are Sir William Jenner, K.C.B., President; Sir Dyce Duckworth, Treasurer and Representative in the Medical Council; Dr. Habershon, Senior Censor of the Royal College of Physicians; Mr. John Wood and Mr. Henry Power, Vice-Presidents of the College of Surgeons; Sir Henry Acland, K.C.B., President of the Medical Council; Dr. Edwards, President, Dr. Withers Moore, President-elect, Dr. Balthazar Foster, President of Council, of the British Medical Association; Mr. George Pollock, President of the Medico-Chirurgical Society; Sir Andrew Clark, Bart.; Sir Prescott Hewett, Bart.; Sir Joseph Lister, Bart.; Sir Edwin Saunders, Sir Ed. Sieveking, Dr. Clifford Allbutt, Dr. Chadwick, Dr. Costes (Bath), Mr. Crosby (Manchester), Dr. Hare, Dr. Holman (Reigate), Dr. Langdon Down, Dr. Ord, and Mr. Winter (Brighton).—I am, Sir, yours faithfully,

June, 1886. W. H. BROADBENT.

CAMBRIDGE MEDICAL GRADUATES' CLUB.—The annual dinner of the Cambridge Medical Graduates' Club will be held this year at Cambridge on Saturday, July 17th. The Master and Fellows of Caius College have promised the use of the college hall for the occasion. The chair will be taken by Sir George E. Paget, M.D., K.C.B., and a large gathering of graduates is expected, as this is the first time the Club has met in Cambridge since its formation.

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THE LANCET.

LONDON: SATURDAY, JUNE 19, 1886.

THE attention of our readers is directed to the Special Supplement which is published with our present issue. To-day we make an effort in the cause of all the hospitals, and urge their claims upon the liberality of everyone in the vast population which collectively constitutes London. It will be seen at once that the graphic account entitled "Within the Hospital Walls" has been written by a layman for laymen and others who have no means of realising what the inner life of the hospitals really represents. The writer had, as a matter of fact, never been in a hospital until he was commissioned to do this special work. It is therefore satisfactory to know that his visit to most of the chief hospitals have led him, as an experienced journalist, to form a conscientious conviction as to the reason for the present lack of funds. He declares that ignorance of the work is the cause of the indifference in the public mind which has led to diminished hospital supplies and impaired usefulness. We have often felt that there was a missing link in the whole of our hospital system which ought to be found and restored without delay. Whether a hospital is State-aided, rate-supported, endowed, or voluntary, the more the objects for which it is founded, the system upon which it is managed, the kind of accommodation it provides, the advantages it offers to its inmates, and the whole of its interior economy and working, are made familiar to the people, and the more the public are induced to inquire, examine, and understand every one of these points, the better it must be for all concerned. It would be a matter for congratulation if the managers of the various groups of hospitals, as well as those of individual charities, would make a practice of throwing open these establishments during a few days in each year, taking care at the same time to induce representatives of every class of their supporters and the public, as well as the wealthy, to visit them at such times. A reference to the Special Supplement of to-day's date will show how many hospitals are labouring under financial difficulties, and we cannot but hope and believe that the more intelligent of the managers will issue invitations during the next few days on the lines we have indicated, as well as to the speakers at the meetings and to the clergy, in anticipation of Hospital Sunday, June 27th. On a liberal estimate, not more than forty thousand persons give anything appreciable to the metropolitan hospitals, and it is stated by those who can speak with authority that at the outside only one Londoner out of every hundred contributes even a penny a year to the hospitals' exchequer. This fact is not more the fault of the non-givers than of the hospital managers, whose business it should be to press home upon the public conscience their claims to substantial recognition, and the imperative necessity for the efficient maintenance of the hospitals for the better preservation of the life and health of every individual inhabitant. It is of no use in these days sitting at home with folded hands, self-confident in the pressing claims of one particular charity; men must work now as ever for the triumph of their principles and the enforcement of the claims of the charities for the support of which they are responsible. In these circumstances all who can rightly appeal for support should throw open their hospital and invite the public during the next few days to enter and convince themselves that a liberal gift on Hospital Sunday is not only called for by charity, but that it is likewise a matter of self-interest.

We have said that the Special Supplement has been written for laymen chiefly and in pursuance of a plan we commenced last year, in the hope that a sum more worthy of the vast wealth of London may be raised annually on Hospital Sunday. The Supplement is necessarily popular rather than professional, and our readers may therefore like to hear an additional reason why we have been led to take this new departure. It is self-evident that the medical profession must have hospitals, just as the hospitals must be dependent upon the medical profession. Anything which tends to injure the one must prove inimical to the best interests of the other. Now the financial condition of more than one of the London hospitals to-day has created a feeling of alarm, and threatens the efficiency, if it does not indeed imperil the existence, of at least one of the medical schools. In such circumstances THE LANCET, as the representative of the medical profession, cannot remain a passive spectator of these threatened disasters, and so it has determined to co-operate in the most strenuous efforts to dispel the impending evils, and to secure the adequate support of all the hospitals. The six meetings which will be held during the Hospitals Week will commence on Monday, June 21st, at Lambeth Palace Library, where Sir ANDREW CLARK will urge the claims of the hospitals upon the people. The meeting will be addressed also by Lord SANDHURST, Under Secretary for War. On Tuesday the Earl of DARTMOUTH and Barons ROTHSCHILD and DE WORMS will address a large meeting at Blackheath. On Wednesday the Marquis of HARTINGTON, the Right Hon. W. H. SMITH, M.P., and Sir ALGERNON BORTHWICK, M.P., with Sir WM. MAC CORMAC, will speak at Kensington Town Hall. On Thursday Lord NORTHBROOK and Lord CHARLES BERESFORD, V.C., M.P., will address an audience at St. Andrew's Hall, Newman-street. On Friday the Duke of WESTMINSTER, Dr. BUCHANAN, Sir DYCE DUCKWORTH, with several metropolitan members of Parliament, will attend a meeting at the Highbury Athenæum; and on Saturday afternoon the 26th inst., H.R.H. the Duke of CAMBRIDGE and the Marquis of SALISBURY will address the working-men and others at the Stratford Town Hall. Nothing is wanted to make these meetings a success except that full report of the speeches of these eminent men which the editors of the daily metropolitan press will doubtless gladly give as their contribution to this united effort to arouse London to the needs of all the hospitals. In such a case the results achieved are well calculated to prove memorable, and a deep debt of gratitude will be due to the members of Parliament who have recognised the pressing claims of this great social question by turning aside from the pressure of politics for a brief space, in order to pay their donation to the hospitals in meal, notwithstanding the fact that most of them have not once, but often, paid already in malt—

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i.e., by subscriptions to the hospitals' exchequer. We hope the people as well as the profession will attend the several meetings in great numbers, and that this year the interest aroused will cause the churches to be crowded and the collecting-bags to be filled to repletion at every service on Hospital Sunday, June 27th.

The cause represented by the work of all the hospitals and medical charities of London is one of the grandest that any speaker or preacher has ever had to plead. More than one million patients have been relieved in the course of a single year (1885), at a cost of something like half a million pounds sterling, or ten shillings per head. Of the ten shillings per head, about six have been supplied by the voluntary offerings of the people, three shillings represent the income derived mainly from the sums received from deceased benefactors, and the shilling per head per patient represents the actual deficiency which has to be made good if such a disaster as the closing of one or two of the largest hospitals is to be obviated. It comes to this, therefore, that one million—that is to say, more than one in four of the inhabitants of London—annually receive relief at the hospitals and medical charities. To meet the cost of this relief, one in every four Londoners is required to give one shilling a year to the Hospital Sunday Fund. If they do this, providing the forty thousand who at present charge themselves with the entire burden of contributing at least six of every ten shillings a year subscribed to the hospitals give as much on the 27th inst. as they gave in former years, then adequate funds will at length be subscribed to maintain the London hospitals in full working and efficiency. It is hard to believe that the three million Londoners who neither use nor support hospitals can always continue to be indifferent to this important matter.

This year a greater responsibility than ever rests upon the clergy and ministers of all the churches to specially charge themselves with the duty of rousing their congregations and the wealthier residents in their parishes to a sense of the duty of giving liberally to the Hospital Sunday Fund. The Council of the Fund send to each minister a bundle of letters, which have only to be signed and addressed to each person who is fairly well-to-do with the view of securing in this way many gifts which will otherwise not be procured. Canon FLEMING and the Rev. Dr. FORREST have made their collections the largest in London by the use of these circulars; and we call upon the clergy and ministers to respond to the special efforts of the laity throughout the Hospitals Week by charging themselves with the duty of preparing a list of the members of their congregations whom they believe can spare a special gift, and of sending to every name on that list one of those "golden pheasant" letters, as Canon MILLER used to call them. We propose to address the clergy in our next issue, and have only alluded to this point to-day because it will take time to carry out what is here proposed, and the work must be done in the course of next week. We hope also that every minister and clergyman will announce the day, place, and hour of the public meeting to be held in the district in which his church is situated during the Hospitals Week at each of the services on Sunday next (20th inst.), and urge his congregation to attend. In this way the £80,000 will soon be raised. But the duty of helping the hospitals is imperative upon all. Press and people, peers, peasants, and politicians, believers and unbelievers, young and old, rich and poor—all sorts and conditions of men and women, in fact, can combine, and ought to combine, to give, and to give liberally, in proportion to their means; not only as a great pleasure and privilege, not merely from gratitude for blessings enjoyed and still possessed, not solely from love to GOD and man, but also in self-defence, and because none know how soon they individually may have reason to bless the hospitals for good service rendered to themselves or their friends in the hour of their greatest need.

THE Medical Council concluded its session on the 10th inst. Sir HENRY ACLAND, in his concluding remarks, seemed to anticipate the passing of the Medical Bill and the probability that the Medical Council would shortly receive an accession of direct representatives to its ranks, whom, he was pleased to say, would be welcomed by the Council. The same night the Bill passed through Committee in the House of Commons, and soon after was read a third time; and, as we write, bids fair to meet with very little opposition in the House of Lords.

By far the most important business transacted by the Council was the discussion of the reports of the Visitors of the Examinations of the Universities. These reports have raised questions which it is desirable should be discussed from time to time. The universities need to justify their standards. It would be an unreasonable thing for them to persist in granting higher titles than the corporations if they cannot show that their examinations are higher. In very few of the reports or of the answers of the particular universities to the criticisms of the Visitors is this distinction clearly recognised. In the letter of instructions to the Visitors of the Medical Council, the Council did not go beyond requiring its Visitors to testify as to the fitness of the university examinations as tests of competence, justifying men being placed on the Register. But we are glad to see that one university at least recognises that something more is expected of it. The examiners of the University of London boldly speak of their standard, both in medicine and surgery, as being an academic standard, higher than a merely professional one. This is the proper estimate of university tests. If they fall below it, if they are merely equal in severity or in extent to those of a corporation, they must expect to be treated with much less reverence than heretofore. It is an excellent thing to have English examiners reporting on the system of Scotch and Irish university examinations, and Scotch and Irish teachers exercising their ingenuity in criticising the system of examinations pursued in the English universities. We cannot pretend to give the details of these reports; but we may indicate the questions they raise and the general drift of the opinion of the reporters. Our readers will gather from the debates in the Medical Council how candid was the international expression of opinion on the different methods of education and examination. The report on the London University is somewhat severe, considering the great importance of its examinations and the extent to which they have affected the standard of similar institutions. The criticisms on other English uni-

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versities do not require much notice. The Visitors to Oxford cannot regard the examination for the M.B. of Oxford as an examination altogether of a higher grade; the tests are not more exhaustive or of a higher standard than are to be found elsewhere. In the case of Cambridge, though complaint is properly made that the candidates for the M.B. are not examined in clinical surgery, yet the examinations as a whole are pronounced to be high class. These for the Durham degrees, both for young candidates and those of some professional standing, passed with some credit, though the Visitors go out of their way to express their views on the gift of degrees to practitioners of standing. The Scotch professors were put upon their defence for inflicting long courses of lectures; for not requiring evidence of experience as clinical clerks and dressers; for not, excepting Glasgow, demanding operations on the dead body; for not requiring in practical midwifery more than attendance on six cases; for defective attention to clinical and operative tests of practical surgery in their examinations. It must be admitted that the examiners hit the weak part of the Scottish university system here—the disproportion between their clinical material and the great number of students whom they have to supply and teach. In Glasgow there is indeed no excuse for this, as was shown the other day by a deputation to Lord DALHOUSIE and the Lord Advocate, urging that the Royal Infirmary of Glasgow, with its splendid clinical field, should be organised into a college of the University. A larger number of patients are treated in this hospital than in any other in the country, and we cannot understand the policy of not making it available for university purposes. In Edinburgh and Aberdeen the difficulty of meeting the demand for large clinical material is much greater; but it must be faced. The regulations as to attendance on six cases of midwifery are ridiculous, the more so as, as Dr. BARNES points out in one of his reports as a Visitor, they have not necessarily been watched throughout or under the guidance of a skilled teacher. How can six cases fit a student for the common accidents of midwifery? Barring the points we have alluded to, the Scotch universities have no reason to be dissatisfied with the reports. Dr. BRISTOWE'S testimony to the quality of the medical examinations in Edinburgh and Glasgow is highly flattering, and enough to stimulate these great centres of medical light to eliminate every fault and supply every defect. His words, too, on another knotty point of the Scotch system of examination ought to be recorded: "I may add that I was especially struck at both universities (Edinburgh and Glasgow) with the general pre-eminence as oral and clinical examiners of those men who had long experience of teaching and examining, and were still teachers, in patience, in tact, and in power of eliciting from candidates the knowledge that is in them." The Irish universities did not come through the ordeal so satisfactorily. The reports of the visit to Dublin University especially disappoint us. Stress has always been laid by this university on its requirement from its graduates of a preliminary degree in Arts. The professional examinations for the Degrees in Medicine are merely those for the licence; and, strange to relate, the display of bad Latin in this university, which boasts of its Arts qualification, was exceptional. As Dr. GEORGE W. BALFOUR says, "For a B.A. to write 'Uncias sextos,' 'Drachmas quattuor,' 'Tussu urgente,' 'Aquæ laurocaceæ,' and 'Syrupi ammoniatis aromatus grana tirginta,' and other similar absurdities, is surely intolerable." And we must add that even Professor HAUGHTON was not effective in his defence, though supported, too, by Dr. BANKS. The report of the Visitors in the case of the Royal University of Ireland is also unsatisfactory. The Visitors remark with earnestness on the lamentably insufficient knowledge of practical subjects and the imperfect clinical training displayed by a large proportion of the candidates. The conscientious strictness of the examiners is emphasised and the proportion of rejections was large. The surgical Visitor thought the average quality of the candidates exceedingly low.

OF the valuable researches by M. BOUCHARD on the poisonousness of the urine we have already treated (*vide* THE LANCET, p. 750). This physiologist has continued his investigation, and has ascertained the influence of various conditions on the toxicity of the urine, thereby greatly enhancing the value of his former observations. The urine of healthy men varies in toxicity at different periods of the day and night, both in quality and degree. The variations are independent of the ingestion of food and the times of meals, and have no relation to the quantity of potassium eliminated. A new series of fresh experiments were made, which allowed the variations in the toxicity to be studied for different hours of the day in such a manner that they could not be ascribed to alimentation. The twenty-four hours was divided into three periods of eight hours each, one devoted to sleep; at the commencement of each period an identical quantity of food and drink of precisely similar material was taken by the individual experimented on. In ordinary life, the amount of toxic matter excreted by the urine in the three periods of sleep, morning waking and evening waking, is respectively represented by the numbers 3, 7, 5. When the above method of feeding was employed, the amounts in the three periods respectively were found to be 3, 7·5, 5·5, or practically the same as in ordinary living. The increase in the production and elimination of the poison begins at the time that sleep is commencing; the diminution in the discharge of poison commences in the middle of the waking period.

If feeding does not influence the variations in the urinary toxicity during sleep and awaking, it would be interesting to know what the results are during abstention from food. M. BOUCHARD, experimenting on the same individual, suppressed the meal given at the commencement of sleep, and then compared the total poisonousness of the urine secreted during the same period. He arrived at the seemingly paradoxical conclusion that leaving off food increases the toxicity by one-half; the amount being represented by 4·5 instead of 3 for the sleeping period. This increase in poisonousness cannot be ascribed to an augmentation of the mineral substances discharged, for these are, on the contrary, diminished. It appeared to M. BOUCHARD that it was rather to be explained by a superabundance of organic matters, incompletely oxidised, that characterises the urine of fasting—a fact that admits of an easy interpretation: man reduced to live at the expense of his own tissues, disintegration occurs with difficulty and incompletely; whilst in a normal

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state of alimentation, descending metabolism occurs more readily and completely in the circulating nutritive material.

If the greater toxicity of urine secreted during fasting can be explained by a hindrance to complete oxidisation, the same interpretation should be applicable to the augmentation of the poison that happens during sleep, which is accompanied by a diminution in the consumption of oxygen. Conversely, we ought to be able to explain diminution of toxicity in waking hours by the increased activity of the waking state, in which more oxygen is consumed. This hypothesis was tested by experiment. In a man whose urinary toxicity had been several times estimated, both during sleep and waking, under his habitual sedentary mode of life in the city, M. BOUCHARD determined the alterations that followed the enjoyment of a day of great bodily activity in the open air of the country. From this kind of experiment it was discovered that muscular work in the open air suppressed 30 per cent. of the total urinary toxicity in the twenty-four hours. It suppressed 27 per cent. of that of waking, and 40 per cent. of that of sleep. The causes that influence the urinary toxicity may therefore act, not only during their application, but even for a long time after they have ceased to exist. No doubt this is the reason why the morning urine is more poisonous than that of sleep, and that of sleep less noxious than the evening urine. For during the night less oxygen is taken up, and so less destruction of toxic matters takes place, as sleep is continued; whereas at the commencement of sleep the influence of the day's oxygen has not worn off, and destruction of the poison proceeds comparatively quickly. It seemed to M. BOUCHARD that in the physiological conditions of normal alimentation, fasting, sleeping, resting, waking, and working, the variations in toxicity depend especially on the greater or less degree of oxidation. This view was confirmed by another experiment in which the organism had a large quantity of oxygen placed artificially at its disposal. A healthy man, whose toxic data had been ascertained over several days for periods of four hours, and whose food was uniformly repeated six times a day at regular intervals so as to eliminate any influence thereby exercised, was placed in an atmosphere of compressed air at a pressure of 116 centimetres for four hours; the toxicity of the urine was diminished by 43 per cent. Further, for the twelve hours following the toxicity still remained below normal, and was, in fact, 66 per cent. less than that of the corresponding period of the preceding day. After the twelve hours the poisonousness augmented, and in the eight hours ensuing it surpassed by 33 per cent. the normal of the preceding day.

IN a recent article on the Contagious Diseases (Animals) Bill we expressed the hope that all the necessary powers are being conferred upon the Local Government Board for the prevention of milk infection which can now be perceived to be necessary, and which may be more fully required as additional knowledge is gained. The powers we indicated were those which would enable the Central Board to prescribe regulations dealing not only with contamination of milk by infection communicated through contact with a human being suffering from specific disease or some fault in what is usually understood as the sanitary condition of the farm, but also conditions relating to the cow herself as a possible cause of infection of milk either before or at the moment of the milk leaving her body.

An analysis of all the circumstances of a number of milk epidemics has frequently failed to show that disease has been caused in any of the usually accepted ways; and although no special condition of the cow has been associated with its production, a strong suspicion has been created that some unrecognised ailment of this animal might be responsible for the occurrence. This suspicion is now amply confirmed by Mr. POWER'S investigation into the recent outbreaks of scarlet fever in North and West London, and we are led to examine more critically the Bill which has now passed its third reading in the House of Lords and its second reading in the House of Commons, and for which there is much probability that it may, as an unopposed measure, become the only law upon which we shall have to rely for the prevention of the serious loss of life which from time to time results from the distribution of infected milk.

We are now informed, on competent legal authority, that the transference to the Local Government Board of the powers vested in the Privy Council of making general or special orders under Section 34 of the Contagious Diseases (Animals) Act of 1878, for prescribing precautions to be taken for protecting milk against infection or contamination, does not enable the Central Board to prescribe other regulations than those which relate to infection of milk after it has left the animal. Under these circumstances, we are compelled to regard the Bill now before Parliament as wanting in the very provisions which recent additions to medical knowledge have shown to be essentially necessary, if the Bill is to serve the purpose for which we presume it is being enacted.

Mr. POWER'S report has indeed seriously raised the question whether the prevention of milk infection would not, in the interest of the milk-consumer, be far better in the hands of the Privy Council, which possesses a veterinary department having some of the most trusted members of that profession for its guidance, than in those of the Local Government Board, which is altogether without such aid. If this course were adopted, it would certainly be necessary to amend the section to which we have referred, in such a manner as to confer upon the Privy Council the increased powers which we are convinced are required; but if it should be held that the whole duty of guarding the milk-consumer against the risks to which he is liable can be better administered by a Board having for its object the preservation of the public health, it becomes an absolute necessity that that Board shall not be wanting in the opportunity of fulfilling to the extent required the serious duties which would devolve upon it. It would, indeed, be lamentable if the Local Government Board should be unable, through faulty legislation, to take the very steps which a recent report of one of its officers has shown to be essential to the safeguarding of the public health.

A WORK on the Use of Photography in Illustrating Bacteria, by Dr. E. M. Crookshank, is in course of preparation for publication by Mr. H. K. Lewis. It will be illustrated by fifty permanent plates produced in special colours by the Autotype Company from the author's negatives.

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Annotations.

"Ne quid nimis."

THE "INSANITY" OF KING LOUIS OF BAVARIA.

A MORE regrettable ending to what was either an ill-reported or a very obscure case than the suicide of King Louis of Bavaria it would be difficult to instance. What precisely the commissioners mean by "paranoia," as used in their report, we cannot pretend to determine. Vaguely, of course, παράνοια may be applied to any state of mind in which νοῦς is wanting or defective; but when it was said of the late King, as reported, that he was "suffering from that kind of mental disease which is well known from experience to medical men, and which is called paranoia," a suggestion of particular diagnosis was given for which the term employed offers no sufficient justification, at least none that we can recognise. And when it was further explained that "in view of the kind of disease, and its gradual and continual development, which has been going on for years, his Majesty must be deemed to be incurable, and a further loss of mental power may be expected with certainty," a prognosis was made to depend on premisses which were either inadequate or were simply not stated. We must confess ourselves inclined to agree with the personal physician of his late Majesty rather than with his more recent medical attendants, and to believe that Louis II. of Bavaria was eccentric instead of being actually insane, notwithstanding the presumptive evidence of his neurotic inheritance and bad family history; and it seems highly probable that, whereas during his ill-ordered life his eccentricities were rather encouraged than discouraged by the mismanagement of those around him, his suicide was the result of a determined and conscious purpose to put an end to a life which was cruelly blighted, instead of being an act of pure insanity, as now represented. If the King had been insane, with suicidal tendencies, measures would certainly have been taken to secure his safety. It is inconceivable that immediately after the creation of a sense of grievance so great as that to which his late Majesty gave expression—however needful it may have been to take the step which gave rise to the feeling—physicians experienced in the treatment of the insane would have permitted him to be alone with only one person. Of all persons, Dr. Gudden was the very last with whom the king should have been left in solitude. There was not wanting a clear intimation that his Majesty regarded the declaration of his insanity as a wrong which he could not outlive. In short, it was known that the King contemplated suicide. The precise truth about King Louis's vagaries will never, probably, be known. His public proceedings do not accord in spirit with the private acts attributed to him. That he was surrounded by a class of persons not able to understand his peculiarities is beyond question. We can only hope that the personal physician of his late Majesty, who knew him better than anyone else, will furnish, at least for the medical profession at large, a full report of the case, and that this will be considered together with the statement of the experts, and with the report also of the post-mortem appearances. As the case now stands, we cannot but think it is chiefly notable for the extreme mystery which enshrouds it.

CONTAGION OR INFECTION?

THE imperfection of language is responsible for no slight amount of confusion and indefiniteness in the nomenclature of morbid processes. Perhaps the most striking instance of such difficulties is to be found in the use of the terms "infection," "infective," "contagion," and "contagious." According to the idea most prominent in the mind of a person who employs one or other of these phrases is the significance which he attaches to it. Thus we often hear of such a malady being contagious, but not infectious; of a morbid process being infective quite apart from any notion of contagiousness. Perhaps the most common kind of distinction is that which would limit the term "contagion" to such disorders as are only communicable by direct contact, and would employ "infectious" to denote those which are communicable through such media as the air, water, or soil. The distinctions thus created are, however, wholly artificial; for if we separate from the two groups such affections as cholera and typhoid, by following Pettenkofer in placing them apart as miasmatic-contagious disorders, we shall practically find that the limits between mere contagion and infection are reduced to a vanishing point. For practically even the most locally contagious disorders may be communicated indirectly, but of course far less frequently or certainly than the highly infectious diseases are. The word "contagion," then, covers them all, and the question becomes one simply of degree. The term 'infective" is, however, receiving a wider significance by being used in another direction—as, for instance, in its application to such diseases as septicæmia and pyæmia, to which the word "contagious" is inappropriate. When, however as, recently occurred—the occasion giving rise to some rather cynical remarks in a lay contemporary,—the notion is expressed, or rather implied, that diphtheria is not an infectious disease, we are brought face to face with the practical inconvenience of the term. Compared with scarlet fever, the virus of diphtheria is no doubt far less easily disseminated, and, in the majority of instances, it is communicable only by direct contact. But all authorities are forced to admit that the diphtheritic poison can be conveyed aerially or by fomites, and that therefore it is an infectious as well as a contagious disease. The College of Physicians has done much to place the nomenclature of diseases upon a scientific basis; it might go further and seek to define the proper use of terms such as those to which we have alluded.

LORD WOLSELEY ON LARGE HEADS AND NARROW CHESTS.

"How often had they seen a young stripling leave a school—at least, he himself had seen it—and join the army, one who ought to have had spectacles, for he could barely see, with a large head and very narrow chest. That was not the sort of young man they wanted in the army." So spoke Lord Wolseley at the Oxford Military College, a public school founded in 1876 in rivalry with Wellington College, for the education of sons of officers in the army. In addressing himself to the students, Lord Wolseley further remarked that "he was quite certain that when they left the college, they would leave it with an enormous number of chances in their favour over those young men who would leave many of the great schools, where the physical training of youth was not so equally or so sufficiently attended to." Of young officers under the strain of actual warfare, Lord Wolseley's experience is probably the largest of any living officer of high repute, and for degrees of physical fitness to be so apparent, as his speech at the Oxford Military College appears to imply, is a grave matter. We have long had serious doubt as to the fitness of the physical and intellectual training at some of our public schools. There should be no preponderance of one over the other, but a judicious balance

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of the two essentials for an active intellectual life, blended with the strain on the physical such as most occupations necessitate. To a successful military career in these days, physical fitness, as well as high intellectual attainments, are essential. It would be interesting and instructive to have statistics of the number of young officers who have succumbed to disease while on active military service, and the public schools at which they were educated. We hope Lord Wolseley will direct attention to this subject, and that military surgeons may be required to make note of the relative mortality from disease among officers from the different public schools.

FORESTS AND ROMAN MALARIA.

THIS subject has been treated with characteristic clearness and power by Professor Corrado Tommasi-Crudeli in the *Nuova Antologia* of last February. Without attempting a literal translation of the memoir, it is yet possible to convey its teaching. The idea prevails very generally that malaria is produced by forests, independently of the nature of the soil which they cover. Many forests may be met with in which the production of malaria is very abundant; and vast tracts of land exist which were uninhabitable for malaria so long as they remained wooded, and which, when cleared, became more or less completely healthy. These facts are attributed by some to the putrefaction of dead leaves and insects slowly decomposing on the soil. But this explanation is inconsistent with the fact that many forests are free from malaria, although an enormous mass of animal and vegetable detritus accumulates and putrefies on the soil. By parity of reasoning another explanation of the same facts breaks down. It has been said that forests generate malaria because persons entering them from sunny parts catch cold. But there are woods which are very cool in summer, in which no one ever contracts fever; whereas some forests in the plain, without any ventilation, in which the temperature is often higher than in the surrounding country, are nevertheless eminently malarious. Forests are only factors of malaria in an indirect manner; they do not themselves produce it, but they favour its development, *when they cover malarious soil.* They intercept the solar rays, and thus check evaporation and retain moisture in summer, even in the strata which are in direct contact with the atmosphere. If these superficial strata do not contain the malarious ferment, the wood is innocuous; but if they contain it, the forest favours the production of malaria by maintaining moisture. When from land so infected is removed the obstacle to the direct action of the solar rays, the summer drying lessens the malarious generation, and in some favourable circumstances may even arrest it. While this experience has been very generally recognised and acted upon, the idea prevails in Rome that in malarious districts woods should not only be retained but extended. Ill-informed persons speak of sirocco (due south) winds which carry malaria from African marshes; and hence the necessity of opposing to these winds a barrier of littoral forests, which may arrest in their foliage the maleficent effluvia of exotic origin. They do not reflect that if Roman malaria had such an origin, Marsala, which is the Italian city most directly exposed to the current of the true African sirocco, should be plagued, instead of being healthy, as it is. Others speak of malaria produced by the marshes of the Roman littoral being carried into Rome by the sirocco winds, and hence they advocate, between Rome and the littoral marshes, the filtering woods. This doctrine was first advanced by Lancisi, physician to Pope Clement XI. in 1714. He believed in the transmission of malaria from the Pontine marshes to Rome, and in its arrest by the filtering action of the forest foliage. But at [illegible] it has been proved that the destruction of [illegible] forests has not led to an increase of malaria, but frequently to its mitigation in consequence of better drainage and improved cultivation. The production of fevers in the Agro Romano and in Rome is the result of a complexity of meteorological and physiological conditions. An abundant development of malaria is verified only when the malarious soil (*terreno malarico*) is damp and warm. The malarious charge of the atmosphere may vary greatly, according to the different proportion of the two indispensable factors of malaria—heat and moisture. If both are at their maximum, so is malaria, especially when the sky is clear. When the malarious charge of the atmosphere has been great for many days in succession, and the bodies of the inhabitants have become more or less impregnated with the malarious germs, a fall of temperature may be very injurious, by causing an arrest of the germs within the organism and preventing their rapid elimination by the secretions. Hence it is that northern winds often exercise an unfavourable influence during the fever seasons. On the other hand, it often happens that southern winds, and even the warmest of them—the true sirocco,—blow without doing any harm, because they are not of themselves carriers of malaria, or at any rate they convey it so diffused as not to determine infection in human organisms; while they cannot produce it by raising, as they do, the temperature of the Agro and of Rome when they find the malarious soil of the district dry.

DEATH AFTER VACCINATION.

AN inquest was held on June 11th on the body of a twin child which had died six days after vaccination by the public vaccinator. A medical witness is reported to have deposed that he was called to see the deceased, who had been dead for upwards of an hour, that he had made an external examination of the body, and found three distinct scratches on the left arm, with a little swelling; the deceased's countenance was very pale, and her fingers and thumbs were drawn together towards the palm of the hand. Witness, it is said, attributed the death to blood-poisoning arising on vaccination, brought on by an unwholesome vaccine matter being inserted in the deceased's arm, and the jury returned a verdict of "Death from blood-poisoning arising on vaccination." In the interests of justice, it is much to be hoped that further inquiry will be made into the cause of death. It is not easy to understand how an external examination of the body should have sufficed for the opinion which is reported. The other twin was vaccinated at the same time and remained in good health, and inasmuch as the operation was performed at a public station, it may be anticipated that more children were inoculated with the same lymph. The statement that unwholesome vaccine matter had been used clearly demands inquiry.

LECTURES TO MEDICAL PRACTITIONERS IN GLASGOW.

A PROPOSED course of lectures to practitioners is, we believe, being arranged for in Glasgow. The proposal is to have practical lectures on certain branches to which the lecturers have paid special attention, and to make them illustrative as much as possible. Dr. Gairdner is expected to lecture on the Abdominal Diseases associated with the name Tabes mesenterica in the Registrar-General's returns; Dr. Joseph Coats on the Pathology of Phthisis Pulmonalis, especially in regard to its causes and associated lesions in other organs; and Dr. Newman on Affections of the Kidneys to which surgical treatment is applicable. The course will extend over the first three weeks in October, there being two meetings weekly, at each of which two lectures will be given. Each lecturer will therefore give four lectures, and the entire course will include twelve lectures.

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EFFECTS OF VARIOUS DRUGS ON PEPTONISATION.

DR. KLIKOVICH has examined the effect of various drugs on artificial digestion, publishing an account of his observations in the Russian *Weekly Clinical Gazette*. His method was to determine the quantity of peptone after the action of artificial gastric juice for from four to six hours on dry egg-albumen and inspissated blood-serum. This estimation was made by the polarisation instrument of Soleil and Wentzke and by an instrument of Lorant's. For the preparation of the artificial gastric fluid, from 0·5 to 1·0 gramme of pepsine was added to a litre of water containing 10 cubic centimetres of officinal hydrochloric acid. For each observation from 20 to 40 grammes of albumen and 450 grammes of the digestive fluid were employed, 50 cubic centimetres of a solution of the drug whose action was to be examined being added, and a control experiment without the addition of the drug being arranged at the same time. In this way the following results were obtained:—Alcohol, when less than 5 per cent. of the whole mixture, exercised no deterrent effect on the peptonisation, 10 per cent. decidedly retarded it, and a still larger proportion arrested the process entirely. Antipyrin, in quantities up to 2·5 grammes, had no effect; larger quantities had only a slight retarding action. Iodide and bromide of potassium, only when in considerable quantities, interfered with peptonisation; thus 0·5 gramme of the bromide had no effect, but 1 or 2 grammes showed a tendency to prevent it, the iodide acting rather more energetically in the same way. Organic salts of iron had no effect, but reduced iron and its inorganic salts exercised a decidedly adverse action on the process. Calomel, in quantities of from 0·3 to 1 gramme hindered peptonisation, but not to a very great degree. Arsenite of sodium, when in quantities of from 0·05 to 0·1 gramme, did not appear to affect the process in any adverse manner; but from 2·5 to 5 grammes of salicylate of sodium produced a marked retarding effect. The sulphates of sodium and magnesium, even in small quantities, hindered peptonisation. Chloral hydrate, in quantities below a gramme, had no decided effect; but when from 1 to 5 grammes were present a very marked effect was produced, and when more than 5 grammes were introduced the process was absolutely arrested. Chloride of sodium, in quantities of a gramme, had little or no influence. Acceleration of the process did not occur even with very small quantities, but with large ones a retarding effect was observed. Chloride of potassium gave similar results.

NIGHT-SCAVENGING.

WE have on numerous occasions referred to the grave objections which attach to the old-fashioned system of scavenging by night, which is in operation under a considerable number of somewhat antiquated bye-laws, and which the Local Government Board now invariably refuse to sanction. If the construction of privies and ashpits is such as to prevent decomposition of contents, and hence offensiveness during the process of scavenging, the sooner the matter is brought to the light of day the better. But to do the work under cover of darkness goes far to prevent the needed improvements, and any specially offensive methods of carrying out the removal cannot be properly supervised and checked. For these and many other reasons the system of night-scavenging should be abandoned; and if in the interests of the community it be thought well to restrict the period during which the process may be carried out, this can easily be done by arranging that it shall commence with the beginning of daylight and be discontinued early during the forenoon. Dr. Scott, in reporting on the sanitary condition of Ilkley, informs his readers that up to the begining of the year the emptying of ashpits and the removal of refuse were satisfactorily carried out, but at that date the contractor refused to comply with the request of the authority to do the work under cover of darkness, and hence the duty of scavenging fell into other hands. In a very short time it became evident that the change had become "disastrous," and the sanitary authority were compelled to undertake the work themselves. If the Ilkley Local Board of Health have conditions in connexion with this work which need to be kept from the eyes of their visitors, they had better amend the defects, and not try to get over the difficulty by ordering the scavenging to be done when neither the workman nor the officials who should supervise him can see what they are about.

"CAN IMAGINATION KILL?"

THIS is, perhaps, hardly the correct form of question that the *British and Colonial Druggist* puts to itself in discussing the death of the young woman at Hackney under circumstances in which Keating's insect powder largely figured. As the powder appears by Dr. Tidy's experiments to be perfectly harmless the suggestion is not unnaturally made that the deceased, who was possibly of a hysterical, highly imaginative turn of mind, took the powder in the full belief that by its means her death might be accomplished? The writer of the article in our contemporary, we think wrongly, brings forward two remarkable instances of what may be regarded as practical jokes with melancholy terminations. In the case of the convict delivered up to the scientist for the purpose of a psychological experiment (the man was strapped to a table and blindfolded, ostensibly to be bled to death; a syphon containing water was placed near his head, and the fluid was allowed to trickle audibly into a vessel below it, at the same time that a trifling scratch with a needle was inflicted on the culprit's neck; it is said that death occurred at the end of six minutes) fear must have played no inconsiderable share in the fatal result, and we do not know whether all the vital organs were in a sound condition, though they were presumably so. The old story of the case of a college porter is also one in point. The students entrapped him into a room at night, a mock inquiry was held, and the punishment of death by decapitation decreed for his want of consideration to the students. It is small wonder that, under the dominion of fear and belief in the earnestness of his tormenters, the sight of an axe and block, with subsequent blindfolding and necessary genuflexion, a smart wrap with a wet towel on the back of his neck should have been followed by the picking up of a corpse.

MOORE'S TREATMENT OF ANEURYSM.

AT the recent meeting of the American Medical Association Dr. J. Ransokoff related a case of aortic aneurysm, in which he had practised the introduction of wire into the sac. The patient was a coloured man, thirty-five years of age, and the symptoms which had lasted nearly ten months had dated from a sudden and severe effort. The aneursym sprang from the ascending aorta and formed a considerable prominence on the chest. Treatment by rest, restricted diet, iodide of potassium, and ergotine injections failed to produce any amelioration of the condition; and accordingly, in June of last year, Dr. Ransokoff introduced eight feet of silver wire into the aneurysm, passing it in through a tubular needle. When half this quantity had been passed in, the man became alarmingly faint, and was only revived by injections of whisky. For a fortnight the patient improved, the cough and dyspnœa were less, the œdema of the neck and face subsided, the tumour was firmer, and the pulsation not so marked. Then the prominence and pulsation of the inner part of the tumour increased, and the

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operation was repeated, ninety-eight inches of wire being inserted this time. Again the tumour became firmer, but the symptoms were not relieved, and the man was found to be dead in his bed eight days after the second operation. At the necropsy the aneurysm was found to measure 7 in. by 4 in. In the upper and outer third of the sac a thick, firm, adherent, laminated clot was found, and the rest of the sac was lined with a thinner layer of clot. In the clots were found the coils of silver wire. The cause of death was rupture of the sac into the right pleura. The result of the treatment in this case was less successful than that obtained in Dr. Cayley's case, where life was prolonged for several weeks; but it shows that the operation is not beset with difficulty or grave danger, and that it is successful in exciting coagulation in an aneurysm. Dr. Ransokoff used silver wire. Small steel wire is better adapted for the purpose, being less liable to pass from the aneurysm into the artery. The liability to this was shown in Dr. Ransokoff's case, for at the necropsy a coil of wire was found lying just above and close to one of the aortic cusps. There are now some fifteen recorded cases in which Moore's treatment has been practised; more or less distinct improvement has been noticed in at least three cases, but at present we cannot refer to one of complete cure. Considering the desperate nature of the cases in which such a treatment is indicated, such a result is not discouraging.

"WORK AND WARM WEATHER."

UNDER this heading a contemporary asks, "Ought anything whatever to be done in hot weather?" As yet the season through which we are passing has not afforded any great need or occasion for the inquiry; but we agree that 'the subject is well worth considering." After it has been proved to demonstration that nothing whatever should be done, in schools particularly, during hot weather, we shall be quite prepared to making common cause with the school children in the endeavour to demonstrate that it is undesirable to do anything in cold weather either. In short, let us give up eating, drinking, working, playing, sleeping, and living in the last issue, lest some harm should befall. It is rank nonsense to write and speak as too many who ought to be better informed are writing and speaking just now, as though every act of existence were beset with peril. It would be better for all of us and the world at large if less ingenuity were expended on the invention of "scares," and in the pitiful task of working on the fears of the public. There is a broad line of truth and prudence between the avoidance of obvious follies in self-management and the care of the mind and body, and that crazy dread of disease which makes men and women for fear of death pass their whole lives in bondage.

AN EPIDEMIC OF ANCHYLOSTOMA IN HOLLAND.

SINCE the epidemic amongst the workers in the St. Gothard tunnel, attention has been directed to the occurrence of the comparatively rare parasite Anchylostomum duodenale amongst miners and brickmakers, and cases have been described by Meusche of Bonn, Leichtenstein of Cologne, Masius of Liege, and Mayer of Aix-la-Chapelle. Recently, too, Dr. Victor Dubois has communicated to an Amsterdam medical journal an account of a series of fourteen cases occurring amongst brickmakers in some villages near Maestricht. All the patients were extremely anæmic, and complained of pain in the epigastrium. At the commencement of the disease they all suffered more or less severely from diarrhœa; palpitation was complained of by all, and most of them were greatly debilitated. Three presented some œdema of the eyelids and anasarca of the lower extr[illegible] All had increased appetites, but no craving for special kinds of food. Vomiting occurred only once, and a slight rise of temperature once. The urine was always normal. The fæces usually presented a very dark brown appearance. The moist clay, with which the patients had to work, was found to contain in the middle of the summer the ova of anchylostoma. When fæces containing the ova were mixed with the clay and kept in a room at a temperature of 20° C. for four days, larvæ developed in the mass. The anchylostoma did not always exist alone, as in some cases oxyuris or trichocephalus were found in conjunction with them. With regard to treatment, iron was given for the anæmia in some cases, and appeared to cure it and to destroy the parasites as well. Santonine was given to some, and others were treated on Lutz's system with large doses of thymol, after a previous clearing out with calomel and senna, and this brought away large numbers of the entozoa, even in cases where the male fern had been previously administered.

MANIA CONCIONABUNDA.

Is it quite healthy, all this feverish struggle for prominence in affairs, this pushing and elbowing to the front, this passion for hearing one's own voice in public? Celsus describes epilepsy as a "morbus comitialis," so-called from its occasioning comitia to be prerogued if a case of the disease occurred during the proceedings; but had that sensible writer lived in the last quarter of the nineteenth century, he might have modified his classification so as to make the comitia themselves the malady and welcomed the epileptoid seizure as a more or less heroic remedy. M. Regnard, at a recent conference, drew the attention of the Scientific Association of France to a form of derangement which he calls "monomanie grandiose," a mania comparatively new, either because in ancient times it gave to those affected by it a peculiar aureole which imposed on their fellows, or because the conditions under which it is engendered are essentially modern, chief among them being the high-pressure education which inures young ambition to shrink from no task however impossible, and to attempt every aspiration however transcendental. Over and above the struggle for existence there is the struggle for success, in which the weaker, who are often the more ardent, are apt to prove the readier victims; for besides the causes that favour the "monomanie grandiose"—causes inherent in the moral atmosphere around us,—there are others peculiar to the individual; causes often, indeed, hereditary, which the alienist statistician finds more pronounced among the male sex than the female, among bachelors than among the married. Of this mania there is one form in which its subject flatters himself that the world is conspiring against him, lying in wait to circumvent him and achieve his destruction. There is another—and victims to this form are rather in force at present,—in which the subject is persuaded that mankind are dying for want of him panting to put themselves under his guidance, and anxious, above all things, to hear him speak. M. Regnard cites the case of a young ecclesiastic who, having gone through every stage of "monomanie grandiose," ended by becoming completely mad and calling himself the "complementary supplement to Pope Leo XIII." M. Regnard might easily have swelled the list with specimens drawn not from divinity, but from politics. "Complementary supplements" to Mr. Gladstone or Lord Salisbury (for "monomanie grandiose" has no party distinctions), who have convinced themselves they are "patres patriæ," saviours of society, whose departure-point is the public platform, and whose hoped-for terminus is the House of Parliament. Science gives to their disease the specific name of "mania concionabunda," a mania, that is, which addicts itself to popular meetings and harangues, to placarded manifestoes and controversial encounters before

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the multitude. True, the terminus is not always reached; there is a burst-up or a collision, and the victim is lost sight of, only, however, to be replaced by others not less eager. M. Regnard, having defined the malady, its symptoms, and its course, next applies himself rather despondingly to its cure. Copious "bleedings"—in the pecuniary sense—have been partially successful, but removal from the moral contagium is his wisest suggestion. This, accompanied with a steady course of inductive science, beginning with its originators, "Novum Organum," and pausing over Aphorism 77, where we are admonished that "when the populace applauds us we should ask ourselves what fault we have committed," may with some confidence in the result be put in practice. For humbler cases, M. Regnard is reminded of the two Quaker brothers whose joint vocation was commerce. One of them, afflicted with "mania concionabunda," was unsuccessful in his political venture, and thereupon received the fraternal prescription: "I have heard of thy defeat, William, nor do I greatly grieve at it; for now thou wilt drop other people's business, and attend to thine own."

CHOLERA INTELLIGENCE.

THE cholera news which has reached this country during the past week has been somewhat disconnected. It is, however, evident that the disease still prevails in several portions of Italy. Thus, in Venice, an increase in the daily number of attacks has taken place, and, according to a correspondent of the public press, as many as thirty-nine fresh cases have been notified in one day. Other returns are to the effect that during the week ending mid-day of the 14th instant the daily attacks have varied between five and twenty-one, and that the total cholera deaths for the week have been fifty-seven. Venice is, in fact, deserted by all visitors and pleasure-seekers, and the authorities are endeavouring, by placing military guards over the houses affected, to keep the disease from extending further. These measures, however, appear to be comparatively useless. Some attacks have taken place in Florence, but they seem to be the result of importation from Venice, and this notwithstanding the attempts that are made strictly to isolate the households attacked. Bari and Brindisi also continue infected. As regards Bari, eleven deaths have taken place during the week ending the 14th inst.; but as to Brindisi, no records of cholera deaths find their way out of the country. Oria, an inland town in railway communication with Brindisi, has also been affected. The latest news of the extension of cholera comes from Trieste, where, on June 12th and 13th, two fatal attacks occurred in different parts of the town. The disease is therefore prevalent in various parts of the kingdom, and its maintained persistence in one or two places at the two extremes of the peninsula must still be regarded as giving ample grounds for anxiety as to the future.

SMOKING TOBACCO.

THE use of tobacco, as distinguished from its abuse, ought to be a matter of intelligent observation and experience. We should incline to the opinion that any particular individual who can say, "I always know when I have smoked enough—if I go beyond the just limit I lose my power of prompt decision," had better not smoke at all. It is clearly unwise for a man who cannot swim to persist in dabbling in deep waters. There are currents and under-draughts which may at any moment destroy his balance. The very reverse of the complaint made by this person is the experience of most smokers. A moderate use of tobacco soothes the senses, and leaves the mental faculties free from irritation and ready for calmly clear intellectual processes. When this is not the effect produced by smoking, the "weed" had better be eschewed.

THE SIGNIFICANCE OF COLLAPSED BOWEL IN OPERATIONS FOR INTESTINAL OBSTRUCTION.

IT is generally held that in intestinal obstruction the bowel above the obstruction is dilated, and that below it is collapsed. And of this fact practical use has been made, for in case of doubt as to the seat of obstruction when operating for its relief, collapsed bowel has been sought for and followed up to the lesion. Dr. Michael, of Baltimore, has published a short note in the *Medical News* of May 29th, to show that this rule is not without exceptions. He mentions two cases which occurred in his practice this year. In the first case, on opening the abdomen he at once saw collapsed small intestine; but he subsequently found the transverse colon so distended that the peritoneal coat was ruptured in several places, and the seat of obstruction was a stricture of the sigmoid flexure. In the second case, also, coils of collapsed small intestine were at first seen, and then the cæcum and sigmoid flexure were found distended above a stricture in the latter portion of the bowel. The "note" is very short, and no explanation of the fact is given. Such cases are notable exceptions to the general rule, and as such they are well worthy of regard; but, after all, they are exceptions, and surgeons must look for guidance to the rule. There must be some explanation of such an unusual occurrence, and we wish Dr. Michael had been able to give it.

A GALLANT ACT.

WE have great pleasure in recording an act of bravery and prompt action on the part of one of the junior members of the profession. On June 9th Mr. Frank Edward Nichol, assistant house-surgeon at St. Thomas's Hospital, was about to cross Westminster-bridge when his attention was attracted to a crowd on the Embankment and the presence of an old man in the river who was evidently drowning. Without hesitation Mr. Nichol ran down the steps, divested himself of his coat, and plunged from the parapet into the water. He had great difficulty in getting hold of the man, but managed to keep him above the surface until a boat arrived. Mr. Nichol's labours did not end here, for the man was pulseless and had ceased to breathe. It was necessary, therefore, to perform artificial respiration, in which Mr. Nichol was also successful. The man was admitted into the hospital, from which he was discharged quite well two days later. Such a deed is worthy of the highest praise, and we hope that Mr. Nichol will receive that recognition which it is in the power of the Royal Humane Society to bestow. We are pleased to add that no ill consequences have been suffered by the rescuer.

HOLIDAYS FOR THE OVERWORKED.

IN this hard-working age—and such it still is for very many, notwithstanding the long-continued depression of trade—the annual holiday has a continual interest, alike while it is expected or enjoyed and when it is remembered. That it is also in point of refreshment for mind and body an undoubted boon it is needless to assert. Almost everyone whose means permit now leaves town for a week or two of purer air than the rest of the year gives him. Each has his own ideal of what is recreation for him, but rest and variety are the components of every such ideal. In former articles upon this subject we have discussed its merits with our medical brethren and others in professional life, whose necessities in the matter of timely relaxation are well known. Now, we are happy to find that circumstances are so shaping themselves as to bring like holiday facilities within the reach of the labouring classes. These have not hitherto, for the most part, had either opportunity or means of arriving at what is to them a restorative at least equally

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needful, but there is reason to expect that the former at all events will soon be obtainable. An article in the *Banner* suggests that rural clergymen should try to induce some of their wealthy parishioners to set apart one or two cottages for the use of shop *employés* released for a time from their duties in town. The idea is a good one, and if heartily taken up would meet an urgent want at no great cost to anyone concerned. Meanwhile, some employers of labour have taken a step in the right direction by arranging that each workman on their premises shall have in turn a week in each year for recreation without loss of wages. An extension of this custom is very desirable, and the week thus gained might, by a little self-help or by combination with the system of cottage-residence, be converted into a week in the country for artisans and their families. Even prudence teaches us that such measures, by invigorating those who form the backbone of our commerce and manufactures, must increase the contentment and prosperity of the whole population.

THE ELASTIC TISSUE TEST IN PHTHISIS.

THE plan of searching the sputum of phthisical patients for elastic tissue is so troublesome and disagreeable that it is not employed by practitioners in doubtful cases so often perhaps as it should be. A Russian observer, Dr. Opatski, has recently published the results of observations on more than a hundred phthisical cases in Professor Manassein's clinic, carried out with a view of determining the applicability of this method for diagnosing the disease. He divides the cases into three groups. The first, consisting of fifteen patients, comprised all those in whom the signs of phthisis were somewhat doubtful, six presenting no dulness; while in nine others, though flatness of the percussion note was detected, there was a lack either of bronchial breathing or of increased vocal fremitus, but not of both. In all fifteen elastic fibres were found, but the appearance was characteristic in twelve only, in the other three separate fibres merely being discovered. It is, however, remarkable that in all the six cases with the least phthisical signs characteristic elastic fibres were found. The second group contained twenty-nine cases, all of them presenting indubitable signs of phthisis—that is to say, dulness, bronchial breathing, and increased fremitus, or two of these signs at least; besides, in half of them there were moist râles. Here, again, elastic tissue was found in all, though in three there were only separate fibres. The third group of fifty-seven cases consisted of those in which there was more or less distinct evidence of cavities. Elastic fibres were found in fifty-five, all but one forming characteristic specimens, while in the exceptional case some separate fibres only were seen. In two cases no traces of fibres could be discovered. The sputum in these two cases was particularly foul, and the author throws out the suggestion that some ferment of the nature of trypsin may perhaps have been present in sufficient quantity to produce destruction of any elastic tissue which may have existed. In addition to the 101 cases included in the foregoing groups, there were two others undoubtedly phthisical, the sputum also containing elastic fibres, but intentionally omitted by the author because he was unable to detect any Koch's bacilli in them, and he had determined to include in his list only such cases as presented these micro-organisms. With regard to the question of correspondence between the number of bacilli and the quantity of elastic tissue, he was unable to find such close agreement as was described by Dettweiler and Meissen; still, in the majority of cases an abundance of elastic tissue was accompanied by a large number of bacilli. Thus a considerable quantity of elastic tissue was found in seventy-one cases, and in forty-nine of these the number of bacilli was also great, though in the rest it was not so, being described as "moderate" in fourteen, and "small" or "very small" in eight. In the two cases where there were no bacilli a fair quantity of elastic tissue was found. Ehrlich's method was used for bacilli, and the ordinary plan of boiling with potash as described by Bizzozero and Firket for the elastic tissue.

THE GAIT IN DISEASE.

FOR purposes of exact registration there is nothing to equal an automatic representation of the desired facts. The wetted foot in progression leaves a certain imprint on the ground of characteristic outlines; if this imprint has a particular shape for normal gait, we may naturally suppose that abnormal gaits will furnish varieties. This is the idea on which M. Gilles de la Tourette has worked in producing his "Études cliniques et physiologiques sur la Marche."[1] It is chiefly in diseases of the nervous system that he has employed this principle of registration, and some very curious figures testify to the peculiarities in the gait of individuals suffering from nervous affections. The bare soles of the feet were rubbed well with English red oxide of iron, and the patient walked on a long narrow strip of paper, in M. de la Tourette's experiments. As the hand in writing, so the foot in walking, leaves its trace; and we doubt not that the method employed by M. de la Tourette will prove useful in medical science

THE SEWERAGE OF RAMSGATE.

A PETITION to the President of the Local Government Board is in course of preparation in connexion with the sewerage of the borough of Ramsgate. In March, 1885, an inquiry was held, which led the Local Government Board to authorise the Town Council to borrow £20,000 to carry out a scheme designed by Mr. Baldwin Latham; and the petitioners declare that since then, the Corporation having in the meantime appointed their own surveyor to act as their "engineer" in the matter, serious departures have been made from the original scheme. These departures, it is contended, go to render the system much less efficient than it would have been under the original scheme, and in some respects very serious drawbacks are expected to ensue upon their adoption. It is also stated that Mr. Baldwin Latham has disclaimed all responsibility for the action which has been taken.

THE NATIONAL PHYSICAL RECREATION SOCIETY.

THERE can be no hesitation in admitting the advantage to the working classes which is likely to follow the formation of the National Physical Recreation Society. It is therefore satisfactory to observe that the aims of the Society are as extensive as they can well be. They will be directed to encourage athletic exercises among Board School children on the one hand and working men and boys on the other. The need of the Society's efforts is chiefly felt in the large towns, and these will therefore form the sphere of its operations. Town life has of late years undergone, or is undergoing, changes for the better which will fortunately promote the objects aimed at. Building is less close than formerly, open spaces have been laid out, even in the most crowded districts, and there is now a definite prospect that working hours will be subject to such limitations as will allow the worker a sufficient period of rest with some chance of morning or evening leisure for his own pursuits. The Society will do well to avail itself of the assistance which circumstances thus afford it in fixing the times and places for exercise. For example, gymnasia might be planted near the larger open spaces and a part of the

[1] Paris: A. Delahaye and Lecrosnier, 14, Rue des Carmes. 1886.

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latter utilised for the erection of apparatus. Some time ago we advised that swimming should form a regular part of physical education. The young Society must, we fear, have considerable difficulty in assisting learners of this useful art. At the same time, if it did no more than advertise the locality of any baths adjacent to the various gymnasia, the convenience of members would be materially served. This organisation, we understand, will be as far as possible self-supporting, as it is most desirable that it should be. The sum of £1000 is necessary, however, in order to start the undertaking, and subscriptions towards this amount may be sent to the Society's offices, Northumberland Chambers, Northumberland-avenue, London.

INFLUENZA AT ST. PETERSBURG.

IN a discussion at a session of the St. Petersburg Medical Society on a severe epidemic of influenza which has this year affected the population of the city, it was stated by Dr. Petersen that towards the end of the attack many children had developed a kind of spurious whooping-cough, which, however, had terminated much more quickly than true whooping-cough generally does. Other complications of a bronchitic, pneumonic, ophthalmic, and dysenteric nature were described by different practitioners. Dr. Poehl mentioned that, having examined the urine in the cases of six of his own sons by means of Ehrlich's test a negative result only was obtained. Dr. Petersen had examined the thin nasal mucus in several cases, and had found multitudes of minute micro-organisms, frequently in chains; and though no cultures were made, he thought it more than probable that in influenza the active agent is of an organic nature. The treatment adopted was very various. In the cavalry school emetics and local applications of aqua laurocerasi, cocaine, &c., were adopted, while in the engineer school insufflations of bismuth and morphia were said to have produced satisfactory results.

THE PANIC ON THE HASTINGS PIER.

THE morals of the panic on the Hastings pier are two. First, it is supremely silly to allow oneself to be scared by what is almost known to be a false alarm, as was the case in this instance, the fact of a gun being fired being perfectly well known to everybody; and second, the officials in charge of any building have no sort of right to refuse or neglect to open the extra doors provided for exit in case of need, whenever and however a panic occurs. In the fright at the Pavilion on the Hastings pier the extra doors are said to have been purposely kept closed, and if this be the fact, a great mistake was made.

LITTER AND STRETCHER STATIONS.

THE Committee of the Ninth District of the St. John Ambulance Association has, on the recommendation of Surgeon-Major Platt, of the Volunteer Medical Staff Corps, established in the Kilburn District eight litter and stretcher stations, at all of which stretchers are kept in readiness for immediate use, in case of accidents, for the removal of injured persons to their homes or to the nearest hospital. In addition to the stretcher at the central station, a Furley litter, an invalid chair, and an ambulance hamper containing splints and other requisites for first aid, are kept, and at No. 2 a St. John Ambulance wheeled litter is stationed. These will all be available gratuitously in cases of accident; in other cases, when the use of a stretcher or litter is required, we presume a moderate charge will be made, and, on application to the superintendent, skilled bearers will be provided. The Committee has printed and distributed through the district a plan showing the position of the various stations at which the stretchers and litters are kept. The establishment of these ambulance stations cannot fail to be a great boon to the public, and we trust the example thus set may soon be followed in other districts of London and the suburbs.

REFUSAL OF A PROFESSORSHIP.

DR. L. KIRN, extraordinary professor in Freiburg, who had been elected by the medical faculty of Dorpat to the professorship of Psychiatry with charge of the clinic for mental diseases, has declined the invitation, preferring to remain in Freiburg. This can hardly be considered surprising if the rule which exists in Russian universities compelling professors to submit their lectures in manuscript to a police official several months before delivery is enforced in Dorpat, or at least in the medical faculty. There is, however, no doubt that professorships in Russian universities are not very comfortable posts at present, and that is the secret of the numerous resignations which are so constantly being announced. Resignations of chairs in our own universities are almost unknown, except on account of promotion or very advanced age.

BACTERIOLOGY.

THE great and increasing interest taken in the subject of bacteriology is well exemplified by the fact that a second edition of the work of MM. Cornil and Babès ("Les Bactéries," Paris: F. Alcan) has just appeared within twelve months of the publication of the first edition. Even in this short space of time much has been added to existing knowledge upon pathogenic micro-organisms, so that the authors of this work have found it necessary to make many additions to the text. We note also a decided improvement in the introduction of coloured illustrations into the text—there are no fewer than 348—instead of collecting them in a series of plates at the end of the volume. This mode of illustration—which was first adopted, at least on a large scale, in Dr. Woodhead's "Practical Pathology"—will, we hope, grow in favour; for there is no question as to its advantages for the reader.

NERVES FOR COLD AND HEAT.

PHYSIOLOGY is fertile ground for paradox. Menthol, a remedy for neuralgia, imparts a sensation of coldness to the skin on which it is rubbed. The part that has been rubbed with the menthol is, as a matter of fact, as ascertained by Dr. Goldscheider, hotter than the surrounding skin. This observation adds one more to the reasons already advanced, showing that the nerves which convey impressions of cold are at all events physiologically separated from those that conduct sensations of heat. Menthol is a powerful stimulant of the nerves conveying sensations of cold.

NEPHRECTOMY AND RESECTION OF LUNG.

A MAN, aged forty-nine, received a wound in the left side of the chest between the ninth and tenth ribs on August 30th, 1885. There was a hernial protrusion of the lung of the size of half a fist. Urine and blood flowed from the wound from the very first. Peritonitis developed and gradually became localised to the left flank. Inflammation of the protruded lung and phlegmon of the tissues around caused M. Demons to resect the pulmonary hernia by means of the thermo-cautery and écraseur eight days after the accident. Profuse offensive discharge, however, continuing, and the phlegmon not subsiding, M. Demons performed nephrectomy on September 26th, twenty-seven days after the accident. A vertical incision being made in the lumbar region gave vent to a large quantity of offensive matter, when the fascia of the quadratus lumborum had been incised. Considerable hæmorrhage followed the removal of the kidney;

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suppuration continued for five months, and did not cease till a large sphacelus of connective tissue had been expelled. The case is interesting from a practical surgical point of view; unusual complications no doubt presented themselves, but the question remains whether the entire removal of the kidney was called for.

HIGH NURSING AND HYPODERMIC INJECTIONS.

THE lay press is happily, though alas that it should be necessary, calling attention to the inexpediency of allowing hypodermic needle apparatus to pass out of professional hands. It is one of the drawbacks of high nursing that trained attendants on the sick are not content to limit their ministrations to the simpler duties of preparing and administering food, giving medicine, &c., as specifically directed, dressing wounds, and generally tending the sick with gentleness and intelligence. We have again and again protested against the folly and, as we believe, danger of permitting nurses to carry and use hypodermic injectors. The use of the hypodermic syringe by non-medical hands ought, we are convinced, to be peremptorily and formally interdicted.

THE BRITISH MEDICAL ASSOCIATION.

THE fifty-fourth annual meeting of the British Medical Association will be held at Brighton on Aug. 10th and three following days. An address in Medicine will be read by J. G. Billings, M.D., of Washington; an address in Surgery by Mr. F. A. Humphry, surgeon to the Sussex County Hospital; and an address in Public Health by Dr. E. D. Mapother, consulting medical officer to the city of Dublin.

TWO NEW BURSÆ AT THE KNEE-JOINT.

M. POIRIER demonstrated, at a recent session of the Paris Anatomical Society, the existence of two new serous bursæ at the knee. They are situated, the one between the internal lateral ligament and the femur, the other between this same ligament and the tibia, and are separated from each other by the insertion of the internal ligament into the inter-articular cartilage. There is generally considered to be a prolongation of the articular synovial membrane at this point.

INDIAN HEMP IN DENTAL OPERATIONS.

INDIAN HEMP is recommended by Dr. Aarousin as an anæsthetic during dental operations. The tincture is diluted with from three to five times its volume, and applied by means of a plug of cotton-wool to the cavity of the tooth, and, in addition, is painted on the gum in the neighbourhood of the diseased tooth with a brush. The top of the tooth, too, may be similarly treated.

MR. JESSOP, whose injury by a carriage accident we noted in our last issue, is, we are glad to learn, recovering. The brougham in which Mr. Jessop was seated was broken up, and the injuries he sustained were undoubtedly reduced to a minimum by his presence of mind in retaining his seat instead of obeying the first impulse to leap out when the horses escaped from the control of the coachman.

A COMMITTEE of twenty-five members has been appointed in Vienna for the purpose of making arrangements for the forthcoming International Congress to be held there in 1887.

A COURSE of Bacteriology is announced to be given in Madrid by Don Santiago Garcia Fernandez, who has studied in Berlin and Munich.

DURING the remainder of the Summer Session, lectures on Diseases of Children will be delivered at the Children's Hospital, Great Ormond-street. A prospectus of these lectures can be obtained by application to Dr. Sturges or the Secretary at the hospital. The lectures are not intended for students only, but also for practitioners. The practice of the hospital is likewise open free to practitioners and senior students. Two lectures by Mr. Cartwright will be delivered on "Lesions of Dentition, their Surgical and Mechanical Treatment," on June 16th and 23rd, at 9.30. Dr. Lubbock will deliver two lectures on "Diseases of the Respiratory Organs in Children" on June 25th and July 2nd, at 3.30 P.M. Dr. Sturges will lecture on July 7th, at 3.30 P.M., on "Body Heat in certain Diseases of Childhood and its Significance." The Children's Hospital thus bids fair to become a centre for teaching on diseases of childhood. Already the hospital has been well attended by both practitioners, including medical men from the colonies, and students. The development of a school for teaching diseases of children systematically is a need in London, and the effort made by the staff of Great Ormond-street Hospital deserves every encouragement.

THE success which attended the action of the Council of the Sanitary Institute of Great Britain in publishing an abstract of the late Dr. Farr's works, and the approval which that volume has obtained from workers in hygiene, have led the Council to undertake the publication of the writings of Mr. John Simon, C.B., F.R.S., formerly medical officer to the Privy Council and Local Government Board. Many of Mr. Simon's papers are of immense importance at this juncture, when various social questions connected with the housing, occupations, and feeding of the poor are coming into the field of practical politics, and we heartily wish the Council success in the execution of their design. Dr. Edward Seaton has been chosen as editor, and the work will be revised by the author.

ON June 16th, Dr. Acland gave a demonstration at the Brompton Consumption Hospital of the micro-organisms found in diseases of the lungs. He exhibited a large number of cultivations as types of various species of organisms, as well as microscopical specimens of aspergillus mycosis, woolsorters' disease (anthrax), septic pneumonia, pus from empyema, diphtheritic membrane, and actinomycosis of the lung in man and animals. The next demonstration will be on June 26th, at 4 P.M., when the organisms found in pneumonia and tubercle will be shown, and the subject will be illustrated by many of Dr. Crookshank's micro-photographs.

THE *Journal of Reconstructives* is the title given to a quarterly publication dealing entirely with dietetics, the only paper in the world devoted to this subject. The current number contains an article by Dr. Milner Fothergill on "The Dietary in Digestion," and one by Dr. W. S. Playfair on "Constitutional Treatment in certain forms of Disease in Women."

THE health of the British troops quartered at Assouan and at other stations up the Nile is very unsatisfactory. No less than 150 deaths are stated to have occurred lately from enteric fever and heat apoplexy, while 710 invalids were under orders to leave for Cairo on the 17th inst.

THE Paris Academy of Sciences having to appoint a successor to M. Desseignes, late corresponding member in the chemical section, has shown its large-heartedness in nominating in the place of the deceased French *savant* a German, Dr. von Baerger, Professor of Chemistry in Munich.

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IT is reported that "black fever" is raging in the upper part of Rhondda Vach Valley. During the last fortnight there have been 160 cases, and 21 patients have already died. Scarlet fever is also stated to be extremely prevalent in the same locality.

DURING a stay of eight weeks in Meran, Duke Theodor of Bavaria is stated to have attended more than a thousand ophthalmic patients, and to have performed 132 major eye operations.

BY the capsizing of a yacht on the Severn on the 15th inst., Dr. Davey, surgeon of the Severn Tunnel works, was drowned.

PROFESSOR BIRCH HIRSCHFELD, of Leipsic, has been obliged by severe illness to leave the university, and is gone to Reichenhall.

PROFESSOR VON LANGENBECK, who has been nearly blind from cataract, has been operated on successfully by Dr. Pagenstecher in Wiesbaden.

THE French Senate have agreed unanimously to the vote of 200,000 francs for the Pasteur Institution.

IRISH MEDICAL ASSOCIATION.

THE annual meeting was held on the 7th inst., presided over by Dr. Edward Hamilton. The report of the Council referred to the Medical Bills now before Parliament, and stated that their principles and provisions, so far as they went, were in complete accord with the views of the Association. The Bill introduced by Mr. Mayne to amend the Labourers' Act made no provision for remunerating medical officers for inspecting cottages and reporting on the same; but the Association obtained the addition to the Bill of a new clause giving remuneration to medical officers of health under its provisions. The Government Bill to allow compensation to Poor-law officers upon abolition of office was merely permissive, not mandatory, and the Council were therefore thoroughly dissatisfied with its provisions. In the House of Lords an amendment to have the desired effect was passed, but when sent back to the Commons for approval the word "salary" was struck out, the clause being thereby greatly reduced in value to all Poor-law officers. The report also drew attention to the question of revaccination, and to substitutes for prison surgeons under certain conditions.

The following resolutions were adopted:—

"That the Medical Acts Amendment Bill recently introduced to Parliament, though it fails to deal with the unqualified practice of medicine and is deficient in other respects, is yet in conformity with the declared policy of the Association, and is therefore, so far as it goes, deserving of its approval and support."

"That this Association strenuously protests against the injustice done to union medical officers by depriving them of their means of livelihood upon abolition of office consequent upon the amalgamation of unions, without securing to them provision for their compensation. That such method of dealing with these officers is at variance with the custom of the public service, and a great hardship upon them."

"That it is indispensable to the efficiency of the Poor-law Medical Service that the issue of medical relief tickets shall be limited to deserving cases, and that, with this object, some means of cancelling improperly issued tickets should be provided more effective than that which the existing system offers. That the Council be directed to promote an amendment of the law on the earliest favourable opportunity."

Dr. Hamilton having left the chair, and Dr. Kinkead, the new President, having been called thereto, a vote of thanks was passed to the outgoing President for his services during the past year. The annual dinner took place in the evening in the Albert Hall of the College of Surgeons.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5699 births and 3927 deaths were registered during the week ending June 12th. The annual death-rate in these towns, which had steadily declined in the preceding twelve weeks from 29·3 to 17·0 per 1000, was last week 17·4. During the first ten weeks of the current quarter the death-rate in these towns averaged 19·1 per 1000, and was 3·1 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 9·0 in Brighton, 12·4 in Cardiff, 13·1 in Birkenhead, and 13·6 in Derby. The rates in the other towns ranged upwards to 24·8 in Manchester, 25·4 in Wolverhampton, 26·4 in Blackburn, and 34·5 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 278 and 279 in the preceding two weeks, declined last week to 265, a lower number than in any previous week of this year; they included 89 from measles, 60 from whooping-cough, 47 from diarrhœa, 28 from "fever" (principally enteric), 23 from scarlet fever, 18 from diphtheria, and not one from small-pox. No death from any of these zymotic diseases was recorded last week in Norwich or in Plymouth; whereas they caused the highest death-rates in Portsmouth, Bolton, Blackburn, and Preston. The greatest mortality from measles occurred in Bolton, Blackburn, and Preston; from whooping-cough in Portsmouth and Derby; from "fever" in Preston, Portsmouth, and Huddersfield; and from diarrhœa in Preston, Cardiff, and Blackburn. The 18 deaths from diphtheria in the twenty-eight towns included 11 in London and 3 in Portsmouth. Small-pox caused no death in London and its outer ring, or in any of the twenty-seven large provincial towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had been 35 and 25 on each of the preceding two Saturdays, had risen again to 29 at the end of last week; 9 new cases were admitted to these hospitals during the week, against 10, 6, and 4 in the preceding three weeks. The Highgate Small-pox Hospital contained 2 patients on Saturday last, no case having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had declined in the preceding twelve weeks from 917 to 179, rose again last week to 216, but were 48 below the corrected average. The causes of 72, or 2·4 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Leeds, Nottingham, Portsmouth, Salford, and in five other smaller towns. The largest proportions of uncertified deaths were registered in Sunderland, Huddersfield, Halifax, and Preston.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had steadily declined in the preceding six weeks from 23·1 to 20·9 per 1000, was again 20·9 in the week ending June 12th; this rate, however, exceeded by 3·5 the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 14·8 in Leith and in Perth to 22·5 in Edinburgh and 22·9 in Glasgow. The 516 deaths in the eight towns showed an increase of but one upon the number in the previous week, and included 19 which were referred to whooping-cough, 10 to measles, 7 to diarrhœa, 6 to scarlet fever, 4 to "fever" (typhus, enteric, or simple), 3 to diphtheria, and not one to small-pox; in all, 49 deaths resulted from these principal zymotic diseases, against 60 and 68 in the preceding two weeks. These 49 deaths were equal to an annual rate of 2·0 per 1000, which exceeded by 0·5 the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 11, 17, and 21 in the preceding three weeks, fell last week to 19, of which 6 occurred in Edinburgh. The 10 deaths from measles showed a decline of 9 from the number in the previous week, and included 8 in Edinburgh and 2 in Leith. The 7 deaths attributed to diarrhœa were fewer than those in recent weeks, and were 6 below the number in the corresponding week of last year. The 6 fatal cases of scarlet fever corresponded with the number in the previous week; 4 were returned in Glasgow

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The deaths referred to "fever," of which 2 occurred in Edinburgh, showed a decline from recent weekly numbers. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 86 and 90 in the previous two weeks, rose again to 90 last week, and were 4 below the number in the corresponding week of last year. The causes of 80, or 16 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 28·7, 26·0, and 26·2 per 1000 in the preceding three weeks, declined to 20·8 in the week ending June 12th. During the first ten weeks of the current quarter the death-rate in the city averaged 26·3 per 1000; the mean rate during the same period did not exceed 17·7 in London and 19·5 in Edinburgh. The 141 deaths in Dublin last week showed a decline of 36 from the number in the previous week, and included 5 which were referred to the principal zymotic diseases, against 6 and 9 in the previous two weeks; 4 resulted from whooping-cough, 1 from diarrhœa, and not one either from small-pox, measles, scarlet fever, diphtheria, or "fever." These 5 deaths were equal to an annual rate of 0·7 per 1000, the rates from the same diseases being 1·5 in London and 4·1 in Edinburgh. The fatal cases of whooping-cough, which had been 2 and 3 in the preceding two weeks, further rose last week to 4. Five inquest cases and 6 deaths from violence were registered; and 41, or more than a quarter of the deaths, were recorded in public institutions. The deaths of infants were more numerous, while those of elderly persons were fewer, than in any previous week of this year. The causes of 15, or nearly 11 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

INDIA OFFICE.— THE Queen has approved of the following, amongst other promotions made by the Governments in India:—Brigade Surgeon William Frederick de Fabeck, M.D., of the Madras Medical Establishment, to be Deputy Surgeon-General; Surgeon-Major Joseph Francis Barter and Surgeon-Major Hugh Griffith, of the Madras Medical Establishment, to be Brigade Surgeons; Surgeons John Lane Corbett, M.D., Samuel Haslett Browne, M.D., Edward Mair, James Armstrong, Louis Richard Dawson, M.D., Horace Parr Yeld, John Campbell Fullerton, and Charles James Hislop Warden, of the Bengal Medical Establishment, and Surgeons David Aikman Patterson, M.D., James Sutherland Wilkins, and William Alexander Barren, of the Bombay Medical Establishment, to be Surgeons-Major.

ADMIRALTY.—The under-mentioned Staff Surgeons have been promoted to the rank of Fleet Surgeon in Her Majesty's Fleet:—Edward William Doyle and George Kell.

The following appointments have been made:—Surgeon James Porter, to the *Impregnable;* Surgeon Henry E. Beatty, to the *Calypso;* and Henry Gramshaw, to be Surgeon and Agent at Walton-on-the-Naze.

YEOMANRY CAVALRY.—North Somerset: Surgeon John J. Saville is granted the honorary rank of Surgeon-Major.

ARTILLERY VOLUNTEERS.—1st Worcestershire: Charles Horace Barkley, Gent., to be Acting Surgeon.—1st Cumberland: Charles Maculloch, Gent., to be Acting Surgeon.

RIFLE VOLUNTEERS. — 4th Volunteer Battalion, the Essex Regiment: Surgeon John Vance, M.D., is granted the honorary rank of Surgeon-Major.—2nd London: Surgeon E. Sandwell is granted the honorary rank of Surgeon-Major.—2nd Volunteer Battalion, the South Staffordshire Regiment: Acting Surgeon E. T. Collins resigns his appointment.—1st Cadet Battalion, the Royal Warwickshire Regiment: Francis William Underhill, Gent., to be Acting Surgeon.

AT a meeting on behalf of the Convalescent work of the Charity Organisation Society, held recently, it was reported that there are now 110 homes working in co-operation with the Society, and that in the past year 2116 cases had been dealt with. The average cost of a bed for a year, *plus* 10 per cent. for working expenses, is £28 10*s.*; of a "summer" bed, £15.

Correspondence.

"Audi alteram partem."

WHOOPING-COUGH.

To the Editor of THE LANCET.

SIR,—I ask for space to refer shortly to the paper on whooping-cough (by Dr. W. H. Barlow of Manchester) which appeared in your impression of May 8th. A case reported by me is there quoted from Dr. Sturges' recent lectures on "Disease in Early Life" (*Medical Times and Gazette*, July, 1885); and as Dr. Barlow alludes to me as a competent observer, I desire to try to show myself somewhat more worthy of that name than I should be if my case were to be read in the light of Dr. Barlow's comment thereon.

The case was meant to illustrate the important and moot question—Does pertussis ever arise directly out of catarrh? Two children developed pertussis five weeks after the onset of scarlatina, during *isolation* (of which I gave the details that appear in Dr. Barlow's quotation). The point of the case is that the children fall ill with scarlatina, are immediately isolated and surrounded with the regulation antiseptic appliances, develop bronchitis, and five weeks after the beginning of the isolation develop typical pertussis. This point is of course lost if the isolation can be shown to be as fictitious as is suggested by Dr. Barlow, who says (1) there was a nurse there; (2) the strange medical man and the father *may* have visited cases of pertussis; (3) a neighbour's child *may* have been admitted into the room. I would repeat that *no one else* saw the children except those mentioned in my report; neither of the doctors (the father and myself) had seen a case of pertussis during the time alluded to; and the nurse who had been with the children from the beginning of the fever had sole charge of them night and day, and was perfectly well the whole time. Had these facts not been established the case would not have deserved notice at all. With regard to the "carbolic acid sheet" and vapour, I merely mentioned these to show that the usual precautions were taken which are believed in by those who practise according to the creed of microzymosis. For myself, I agree with Dr. Barlow in thinking them of no probable value. Of more importance is the fact that the two rooms (at the top of the house) were regularly ventilated by open windows.

What, I think, my case shows is that convulsive cough may develop out of a catarrh where the absence of a specific contagium is as demonstrable as any negative evidence can make it, and in the presence of the recognised clinical antiseptics which the profession has taught the public to trust in. I would add to the report of this case that the pertussis developed from ten to twelve days after the symptoms and signs of bronchitis; so that Dr. Barlow's belief in the definite fourteen days' incubation of pertussis would exclude the possible objection that the infection may have been received before the scarlet fever was recognised. In my opinion, however, such an objection would be stronger than all Dr. Barlow's suppositions, for it could not be so easily traversed. I believe that there are many cases which *must* be called pertussis (if we read them from symptoms alone) that do not spread. I have repeatedly observed this, especially in hospital practice, and in cases in families where there are presumably unprotected children obnoxious to the hypothetical contagium. This, however, is too large a subject to touch upon in a letter. Dr. Barlow admits that whooping-cough does not spread at Pendlebury, but says it is because the cases are soon sent out, and the contagium is less virulent in the early stage. But Dr. Bristowe, a strict contagionist (and with him here are most clinical observers, whatever their creed), teaches that the contagium, whatever it is, is most active in the early stage, and before the characteristic cough is developed. The number of cases of pertussis, or convulsive cough, following immediately on measles—the pre-eminently catarrhal malady—is certainly overwhelming; and I feel sure that, whatever this connexion may mean, clinical statistics taken on this point would show a close sequence unparalleled by any other pair of zymotic diseases.

I am, Sir, yours truly,

London, June 1st, 1886. H. B. DONKIN.

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TUBERCLE BACILLI IN ADDISON'S DISEASE.

To the Editor of THE LANCET.

SIR,—In your last week's number there is an interesting note on the discovery of tubercle bacilli in the supra-renal capsules in Addison's disease. I should be obliged if you will permit me to point out that in a clinical lecture at King's College Hospital last month I showed the enlarged and caseated capsules in a well-marked and fatal case of Addison's disease, and told my class, that after repeated and most careful examinations for the special object of detecting tubercle bacilli, one of our best modern microscopists and bacteriologists had failed to find any bacilli. It is therefore clear that in this respect, as in some others, cases of Addison's disease differ, and that we must not too hastily assume that it is always a strictly tubercular affection.

I am, Sir, yours, truly,

George-st. Hanover-sq., June 14th, 1886. JOHN CURNOW.

ELECTROLYSIS IN STRICTURE OF THE URETHRA.

To the Editor of THE LANCET.

SIR,—There are one or two points raised by Mr. Hurry Fenwick in THE LANCET of June 5th to which I must venture to take some exception. He implies in his first paragraph that the currents I was using were strong currents, and in his second speaks of their burning the cicatrix. With regard to the first point, I can only say that the currents I used were very weak, and they caused no pain. I could very easily bear them on my own skin; and with regard to the second, I can positively assert that they do not burn. I have always been careful to point out that the object to be attained was softening of the tissues and gradual chemical change, not cauterisation. That a caustic alkali is liberated in the urethra is quite true; but it is only in small amount, and I do not believe this represents by any means all that takes place. Of the value of electricity in certain cases of stricture I have no doubt, but what we now require to know is what is the nature of the changes that take place in certain tissues under varying current strengths, a point which I am at present engaged in investigating. This question could never be answered till we had some ready means of measuring current strengths; this means we now possess in the voltmeter. With regard to "reflex shock," excepting in the first case in which I used electricity, when of course my experience was *nil*, I have never had a rise of temperature or any constitutional disturbance, and I am confident that in the electric current we have a safe and certain therapeutic agent.

I remain, Sir, yours faithfully,

Harley-street, June, 1886. W. BRUCE CLARKE.

UNIVERSITY OF DURHAM COLLEGE OF MEDICINE.

To the Editor of THE LANCET.

SIR,—The Council of the University of Durham College of Medicine desire me to draw your attention to the following statement in answer to certain observations made by Sir John Lubbock and Professor Sir Henry Roscoe during the discussion on the Medical Acts Amendment Bill in the Committee of the House of Commons on Monday, the 31st ult. Sir John Lubbock is reported to have stated that "he should say there were not more than twenty or thirty medical undergraduates at the Durham University." As a matter of fact the medical undergraduates in attendance at the University during the last year (1885) numbered 234 (see the University Calendar, 1886), of whom many were already qualified to practise; and the number of individual entries for the examinations for the degrees in medicine (excluding those for the special arts examinations for the degrees in medicine) during the period from May 1st, 1885, to April 30th, 1886, was 245. Of this number, 186 passed the various examinations for the degrees, of whom 63 graduated, 42 passed the first examination (old regs.), 54 the first examination (new regs.), and 27 the second examination (new regs.).

I am, Sir, yours faithfully,

LUKE ARMSTRONG, M.D.,

June 14th, 1886. Regist. Univ. of Durh. Col. of Med.

THE POISONOUS EFFECTS OF COCAINE.

To the Editor of THE LANCET.

SIR,—Under the above heading there appears a letter in THE LANCET of June 12th, in which a case is related with symptoms of poisoning after the free application of from twenty to thirty drops of a 4 per cent. solution of hydrochlorate of cocaine to the teeth and gums. It may be interesting to your readers to mention a case of ulceration at the back of the tongue of so painful a nature that it has necessitated the frequent application of a 20 per cent. solution of cocaine, so that for the past month about two drachms of the 20 per cent. solution, that is twenty-four grains, have been applied to the back of the mouth and throat in every twenty-four hours without any untoward constitutional symptoms. The pain of swallowing has been so great that the cocaine has had to be freely used to deaden sensibility previously to taking nourishment. The only untoward effect I have noticed is some interference for a short time with the act of deglutition when the cocaine is brought too freely in contact with the palate. The sensitiveness of the palate is interfered with, and reflex action, a necessity of deglutition, destroyed for a brief period. Power is soon regained, but insensitiveness to pain continues for some time afterwards. Cocaine solutions are known to have an exceptional disposition to favour the development of germ life, and should always be freshly prepared for use, or some unexpected action may be produced.—I am Sir, yours obediently,

Wokingham, June 16th, 1886. J. G. BARFORD.

BIRMINGHAM.

(From our own Correspondent.)

THE BOARD OF GUARDIANS AND THEIR MEDICAL OFFICER.

THE relations between the guardians and their medical officer have been strained for some months past, as already noted in THE LANCET. An inquiry was held by the Local Government Board, and at a meeting of the guardians held on March 31st a letter was read from the central authority calling upon the medical officer to resign his appointment. Since this time an endeavour has been made to prevent the resignation taking effect, and to create a reaction in favour of the official. On the principle that the punishment was greater than demanded by the alleged error, a memorial was signed by a number of influential members of the Board of Guardians, asking for the question to be reconsidered on the ground of the long period of sixteen years' service on the part of the medical officer, with singularly few complaints and a faithful discharge of duty. A special meeting of the guardians was held on the 16th inst., and the majority affirmed the resolution of the Local Government Board. Thus, after much criticism and discussion, a valuable officer is forced to take his departure under circumstances which considerably mar his chances in the future, and at a time of life when it is difficult to make a fresh start in practice, after a long period of routine work to which he devoted his best years and abilities in the performance of an ungrateful task.

HEALTH OF THE BOROUGH.

The able report of the medical officer of health for the year 1885 gives a very favourable account of the sanitary condition of this large town, and points out that the absolute number of deaths is less, with two exceptions, than in any year since 1870. This is rendered much more gratifying by the facts elicited, that there is a diminished mortality in infants under one year of age, and in children under five years of age; and also a lessened mortality from zymotic or preventable disease. A higher death age, too, than has been observed in previous years is worthy of comment. Comparison shows that whilst the density of Birmingham is exceeded by only four of the large towns, and is considerably greater than the other seven taken for the estimate, its death-rate is least of all. At the present rate of improvement, the inhabitants may take comfort in the knowledge that smoke and dirt were not the essential elements of the mortality of manufacturing towns.

REMARKABLE CASE OF POISONING.

The coroner for Central Warwickshire held an inquest touching the death of a child aged five years on June 15th.

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It appears that one day the child ate largely of green sorrel without apparent harm. The following morning, awakening early with a strong feeling of thirst, he drank freely from a jug containing soap-and-water, with the immediate accession of alarming symptoms, unconsciousness, and death on the next day. The post-mortem examination revealed the fact that the alkali of the soap-and-water had set free the oxalic acid contained in the green sorrel, and that death had resulted from this cause. If this theory be correct, it indicates a singular and exceptional form of poisoning; it would have been interesting also to have had some definite opinion as to the injurious qualities contained in the soap-and-water mixture, and a separate analysis of this might have thrown additional light on this somewhat obscure and startling case.

Birmingham, June 16th.

LIVERPOOL.

(From our own Correspondent.)

MORTALITY OF INFANTS IN THE LIVERPOOL WORKHOUSE.

AT the last meeting of the Workhouse Committee of the Select Vestry, a return was handed in by the master of the infant mortality for two years. This showed that in the year ending February, 1884, there were 257 deaths of infants; of these, 167 were under two years of age, 48 between two and seven years, 8 between seven and ten, and 14 between ten and fourteen. In the year ending March last, there were 230 deaths of juveniles, of whom 194 were under three years of age, 23 between three and seven, 6 between seven and ten, and 7 between ten and fourteen. It was resolved that Fulwood Lodge, a large country house, most healthily situated, should be taken, and appropriated for the infants in the workhouse, with a view of seeing whether the infant mortality might be reduced. It was estimated that the cost of the house would be about £250 a year. This decision of the committee must be considered extremely satisfactory, indicating the most humane interest in the welfare of the class committed to their charge, it being too much the fashion now to underrate such questions as the mortality of pauper infants.

HOSPITAL SATURDAY.

The returns up to the 11th show a total of £2704, which it is hoped will be increased to a large sum when all the returns have come in. At many of the places where large numbers of men are employed it has been the practice lately for the men to contribute to the fund periodically throughout the year.

THE HEALTH OF THE CITY.

The rate of mortality was stated at the last meeting of the Health Committee to be 19·8 per 1000. The following cases of infectious disease were reported—fever, 11, of which 10 were removed to hospital; small-pox, 3, all of which were removed; scarlatina, 18, of which 6 were removed; measles, 22, of which 1 was removed. In the City Small-pox Hospital 5 patients were admitted during the week, 4 were discharged, and there are now 20 in-patients.

DEATH OF MR. BENJAMIN BLOWER, M.R.C.S.

Another veteran practitioner of Liverpool has passed away in the person of Mr. Blower, who died on the 12th inst., at the advanced age of seventy-three. He was the first house-surgeon of the Northern Hospital, holding that office from its opening in 1835 until 1838, several years before the erection of the present building. Subsequently he became surgeon to the Ladies' Charity and Lying-in Hospital, to which he was consulting surgeon at the time of his death. He was the inventor of the "slipper bedpan" in 1836, and of the portable leg-cradle in 1870; he was also the author of an interesting account of the "Mersey, Ancient and Modern." Advantage has been taken of the occasion of his decease and burial to inaugurate a most sensible reform, the obituary announcement having, in addition to the usual intimation to friends, the very significant addition, "No wreaths."

THE ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH.

In addition to the work done by the medical officer of health in the improvement of insanitary property alluded to in THE LANCET of last week, his annual report gives many other very interesting details. There were 938 persons removed to hospitals, the greater number being taken to the parish infirmary at Brownlow-hill, the Fever Hospital in Netherfield-road, and the City Hospital for Infectious Diseases at Park-hill. There were 61 bodies removed to mortuaries, 11 of these being taken to the Toxteth cemetery, and 50 to the parish mortuary of St. Martin. Under the Adulteration Act there were 175 prosecutions, the result being that 8 cases were dismissed with a caution or withdrawn, and in 167 cases penalties were inflicted varying from 5*s.* and costs to £5 and costs, amounting in all to £301 14*s.* 1*d.* Four informations were laid for refusing to sell samples of milk, 2 were fined 10*s.* and costs and 2 acquitted. The unwholesome meat seized and destroyed amounted to nearly 70 tons, and of fish to 71½ tons. The number of articles disinfected at the apparatus during the year was 39,149, while 1099 articles were destroyed.

THE LOCK HOSPITAL.

Referring to a paragraph which recently appeared in THE LANCET respecting this hospital, it is gratifying to be able to report that Mr. F. W. Lowndes received from various friends a sum not only sufficient to frame and glaze all the engravings so kindly given by the proprietors of the *Graphic*, but also to leave a balance in hand. On the suggestion of Dr. Bernard, this was devoted to the purchase of a bagatelle-board, he having remarked how very popular that game was at the Sailors' Home. This kindly and generous feeling towards patients for whom so little sympathy is generally displayed is worthy of all praise.

Liverpool, June 15th.

MANCHESTER.

(From our own Correspondent.)

HEALTH OF MANCHESTER.

THE biennial report of the medical officer of health for the city has just been presented to the Council, and contains much matter for reflection by all sanitarians. Our infantile mortality is still highly unsatisfactory, and the deaths of children during 1885 under five years of age was 40 per cent. of the total, whilst in some of the subdistricts it was considerably over 50 per cent. Our death-rate for the past year, according to the officer of health's calculations, was 24·7 per 1000, but on the Registrar-General's figures it was 25·3; so that our death-rate still has an unenviable pre-eminence among the large towns. The deaths from the chief zymotics during the past year—viz., small-pox, measles, whooping-cough, fever, and scarlet fever—was equal to a rate of 2·2 per 1000.

COUNTRY TRIPS FOR TOWN-BRED CHILDREN.

As a practical step in endeavouring to give our town-bred children a little more life and vitality, none deserves more encouragement than the work undertaken by voluntary workers to send as many as possible for a three weeks' holiday into the country. This year another branch of this same work is hoped to be put in operation, and to reach the very lowest of our waifs and strays; these it is proposed not to send into the homes of country people, but to take in batches to the seaside, and there keep them a week or two under canvas in tents.

THE VICTORIA UNIVERSITY.

The deputation that recently waited on Earl Spencer, the Lord President of the Council, to support a memorial asking for an annual grant of money from the national exchequer, in aid of the funds of the Victoria University, was of a most influential and representative character, consisting of members of Parliament of this and the adjoining county of every shade of politics, the heads of Owens College, University College, Liverpool, and the Yorkshire College, Leeds, the Bishop of Chester, Earl Derby, the Duke of Devonshire, and other noblemen. Earl Spencer, as was to be expected, gave a very guarded reply. Alluding to the fact of the Government having granted funds to other universities, he admitted that the plea of poverty had always had great weight, but he did not think that Manchester and its district could plead that it was very poor. He promised that when the case came before the Government he would give it all the support he could.

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AID TO HOSPITALS.

The Hospital Sunday and Saturday Fund has recently been allotted to the various hospitals, and, as is usual, one hears a little murmuring that the wealthy charities should receive in the same proportion as the poorer and struggling ones.

NOTIFICATION OF INFECTIOUS DISEASES.

The last meeting of the North-Western Association of Medical Officers of Health was spent in a visit to the Fever Hospital, disinfecting station, sewage works, &c., of the adjoining borough of Salford. In the course of an address delivered by Dr. Tatham, the officer of health, he spoke in unqualified terms of the system of notification of infectious disease, and suggested that the time had come when it ought to be made compulsory throughout the country. As an additional argument in support of this proposition might be cited the fact that many of our surrounding districts have endeavoured to put in action the same system without compulsory powers, the local board of Moss Side being the last to offer a fee of 2*s.* 6*d.* for each certificate received from medical practitioners.

THE BRITISH ASSOCIATION MEETING.

Preliminary steps have been taken in connexion with the meeting of the British Association that is to be held here in 1887, over which Sir Henry Roscoe is to preside. Unfortunately, a note of discord has been heard in complaints from certain members of the Association that these preliminary proceedings have been kept too exclusively in the hands of those connected with Owens College, and that those outside its pale have been quietly ignored. It is to be hoped that this will all be set right, and that nothing will be done which shall in any way interfere with the harmony and successful issue of the Manchester meeting.

OUR NEW BISHOP.

The Bishop has produced a very favourable impression in his new diocese, and, like his predecessor, has shown his interest in practical schemes for the amelioration of the condition of the masses of our people. One of the first offices he accepted was the presidency of the Manchester and Salford Sanitary Association, formerly held by Dr. Fraser.

Manchester, June 7th.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

UNIVERSITY OF DURHAM.

THE entries for examinations for degrees in the Faculty of Medicine, which commence in Newcastle on the 21st inst., are unusually large, and will give some work to the examiners. The number of candidates for the degree of Doctor of Medicine for practitioners of fifteen years' standing is 12; for the degree of Doctor in Medicine (Essay), 8; for the degree of Master in Surgery, 7; for the final examination for the degree of Bachelor in Medicine, 50. The Arts examination will be held by the Rev. H. J. Richmond, M.A., and the Rev. J. T. Fowler, M.A. The extra examiners are Professor Buchanan and Dr. Ralfe.

OPENING OF PUBLIC BATHS.

The Mayor of Newcastle opened the new baths in Scotswood-road, in the neighbourhood of Sir William Armstrong's works, last week. This completes the set of very fine buildings erected for the public by our corporation, and about which I gave you some information a few weeks ago; but the Elswick Baths, as they are called, have been delayed owing to difficulties in finding proper foundations for the structure. They have cost about £10,000. The mayor stated that though the other baths have been opened but a few weeks, they had been used by nearly 22,000 persons.

PHOSPHORUS POISONING.

At Ovingham, a village a few miles from Newcastle, an inquest has been held on the body of a woman, aged thirty, who died from the effects of poisoning by phosphorus. It appears she had been in a depressed state of mind for some time, and fancied herself *enceinte*. Dr. Bulleid, of Ovingham, who attended the deceased, deposed to her having suffered from the usual symptoms of phosphorus poisoning. She had confessed to her mother to having taken the phosphorus of three boxes of lucifer-matches. The post-mortem proved that the deceased was labouring under a delusion in thinking herself *enceinte*.

A NORTHERN GIANT.

A man named Allender died last week at the South Shields Workhouse, who was known as the "Irish Giant." The deceased was a native of Londonderry, Ireland. He was 7 ft. 6 in. in height, and weighed 27 st.

MEASLES AT WALKER.

A serious epidemic of measles is reported at Walker-on-Tyne. No less than 159 children attending the Walker schools are laid up. It is the third year that a similar outbreak has taken place. On Friday last 182 children were absent from school, mainly on account of the disease.

Newcastle-on-Tyne, June 14th.

EDINBURGH.

(From our own Correspondent.)

DR. OLIVER WENDELL HOLMES.

DR. HOLMES, the genial author of "The Autocrat" and other volumes of the "Breakfast-table" series, is about to visit Edinburgh, where his reception will, to all appearance, be not one whit less cordial than it has been in the English academic centres he has visited. Not only is he to be *fêted* and lionised by the social world in Edinburgh, but he has signified his acceptance of the honorary degree of LL.D. which has been proffered him by the Senatus Academicus of the University of Edinburgh, and which it is intended formally to confer upon him on the 25th inst. The Students' Representative Council have under consideration how they may most suitably accord a hearty welcome to the distinguished Professor, and it has been suggested that a symposium should be held in his honour, supported by the whole body of the students. If this plan should prove acceptable to Dr. Holmes, it will be immediately promoted with a zeal which, as former occasions have amply proved, will ensure the complete success of the project. It is anticipated that Dr. Holmes's arrangements will permit of his paying an extended visit to the Scottish capital, in connexion with which a widely-felt interest has been manifested, and an equally extended desire to catch a glimpse of him while he is here.

EDINBURGH UNIVERSITY BUILDING FUND.

There has been considerable interest during the last few days attaching to a rumour that has been widely circulated, and that has found its way into print in several of the public journals, to the effect that a large sum of money, sufficient to cover the total expense involved, had been placed at the disposal of the Building Committee for the completion of the new University medical buildings on the plans originally drawn up. This rumour has as yet received no official confirmation; but it has the greater semblance to fact on account of the name of the generous donor being that of an Edinburgh citizen to whom the University is already largely indebted for sums of money applied to similar purposes. The sum now required for the purpose in question exceeds £50,000. The present uncertainty as to this rumoured donation will probably be cleared up within the next few days.

SIR DOUGLAS MACLAGAN, M.D.

An influential committee of Edinburgh gentlemen, representing a very wide circle of interests, professional and otherwise, have undertaken arrangements by which Sir Douglas Maclagan's numerous friends and admirers may have the opportunity of conveying to him, in a tangible form, a suitable expression of the high esteem in which he is held. It is proposed that the veteran professor, scientist, and jurist shall be presented with a marble bust of himself, accompanied with an address embodying the sentiment which has called forth this manifestation of respect, and conveying the cordial congratulations of those whose names it bears upon the recent recognition on the part of Her Majesty of his eminence in the varied fields in which he is a worker, an eminence fittingly recognised by the bestowal of

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knighthood upon him. A printed notice, emanating from the executive committee appointed for the purpose, is in process of circulation amongst medical and other professional men trained in the Edinburgh school. In this notice exact particulars of the proposed procedure will be found. The name of Dr. George A. Gibson, Sec., R.C.P.Ed., is mentioned in the notice as treasurer for the presentation fund.

A ROYAL MEDICAL STUDENT.

The University of Edinburgh numbers amongst the names of its matriculated students that of one of the native Indian princes who rule over the independent territories in Hindustan. His Highness the Thakoor Sahib of Gondal, one of these independent rulers, is at present engaged in the study of medicine and natural science, being impressed with the importance of such studies in relation to the wise government and development of the resources of his country. He will probably not complete the course of studies requisite for obtaining a degree in medicine, but several of the more important of these will claim his attention during the two years which he thinks of spending in Edinburgh.

Edinburgh, June 15th.

BELFAST.

(From our own Correspondent.)

THE ULSTER MEDICAL SOCIETY.

A VERY interesting meeting in connexion with the Ulster Medical Society took place on June 2nd, on the occasion of the presentation to the Society of the portraits of its former presidents. The invitations sent out by the President and Council were restricted to the medical gentlemen of Belfast and neighbourhood, and between fifty and sixty members of the profession were present in the large room of the Museum, College-square North. The portraits, which are carbonated enlargements of photographs, are admirable likenesses, and bear the autographs of the various presidents. The President of the Society (Mr. John Fagan, F.R.C.S.), who occupied the chair, after bidding all those present a hearty welcome, said they had come together to take part in the pleasing ceremony of the presentation to the Society of the portraits of its former presidents. He said it was not his intention to do more than very briefly introduce the main feature of the evening—viz., the uncovering of the portraits, accompanied by a short notice of the salient points of interest in the lives of each president by the worthy treasurer of the Society, Dr. Esler, to whom the entire credit of initiating this project was due, and who by his unflagging zeal and energy had brought it to its present successful completion. Dr. Esler (whose admirable "Guide to Belfast" was so much valued at the time of the meeting of the British Medical Association) said that in a previous paper he had given some account of the progress of medical matters in Belfast during a period of two centuries; that paper concluded with a hope that on a future occasion he should be enabled to ask this Society to accept the custody of the portraits of its former presidents. It was for this object, he said, they were now met. Dr. Esler then gave an interesting account of the various presidents, their portraits being uncovered as he proceeded. These pictures having been handed over to the custody of the President, who expressed pleasure in receiving them on behalf of the Society, a hearty vote of thanks was passed to Dr. Esler, and those present adjourned to an adjoining room for supper.

THE LUNATIC ASYLUM.

Through the death of Dr. Mac Cormac, who was Visiting Physician to the Asylum, a valuable appointment has became vacant, and a vigorous canvass is being made by a number of medical men who are candidates for the post. The governors make the appointment.

THE CORONERSHIP OF SOUTH ANTRIM.

Dr. Adams (Ashville) has been elected coroner for South Antrim. There were originally five candidates, all members of the medical profession, but eventually only two went to the poll, the others having retired. These were Dr. Adams and Dr. Spearing, the former being elected by a large majority.

Belfast, June 14th.

PARIS.

(From our own Correspondent.)

DR. JAVAL ON GLAUCOMA.

DR. JAVAL, the well-known ophthalmologist and director of the Ophthalmological Laboratory of the Sorbonne, recently delivered a very interesting lecture on Glaucoma, which he considers to be one of the most difficult subjects in ophthalmology. The lecturer chose this subject to demonstrate the fallacies that prevail even among specialists concerning the etiology and pathology of this affection. He remarked that the premonitory signs and symptoms are of little or no value as a means of diagnosis, as the same may be found in other affections of the eye. Even the ophthalmoscope does not render much assistance, as the excavation of the optic nerve is only produced at a later stage, and the pulsation of the central artery of the retina may be missing in glaucoma, and it has been seen in healthy eyes. And yet it is of importance that glaucoma should be early recognised and properly treated, as any error in diagnosis or treatment will inevitably lead to the most disastrous results. It is now known that expectant treatment is not permitted in glaucoma, and it is also known that the instillation of a single drop of atropine might produce irremediable mischief in an eye affected with glaucomatous prodroma. Even cocaine, notwithstanding the diminution of the compression which habitually follows its employment, might produce, in glaucomatous eyes, effects as baneful as those produced by atropine. When an eye feels hard to the touch and is accompanied with perikeratic injection, an immobile pupil and a rough and painful cornea, the diagnosis is easy enough; but it must be remembered that, in general, glaucoma sets in by alterations so fugitive that no ophthalmoscopic sign reveals its existence. If, however, a patient complains of weakness of vision, and the surgeon observes the least inequality of the pupils, or the least paresis of the sphincter of the iris, Dr. Javal cautions against the instillation of atropine or cocaine, adding that an eye affected with glaucomatous prodroma is not always hard and may not present any abnormal appearance. The halo, however, observed by the patient is a sign by which a glaucoma may be known at its onset; but, as other affections may produce these halos, Dr. Javal recommends the instillation of eserine, and if the halos disappear under its influence the diagnosis is no more doubtful. As regards the treatment of glaucoma, Dr. Javal states that the same eserine will serve to combat the accidents of the commencement of the malady, and recommends it to be used in the form of gelatine tablets, instead of collyria, as being more convenient than the latter. If, after the application for a few days of the eserine the symptoms are not completely arrested, surgical interference becomes absolutely necessary. But should an oculist not be within reach, and as every moment of delay is of importance, any medical man might afford temporary relief by making a slight incision of a few millimetres into the globe of the eye near its equator, between the internal recti and inferior recti muscles, as recommended by M. Parinaud. This little operation will permit the patient to proceed to an oculist, who ought to perform iridectomy without delay, and set aside sclerotomy, which is a useless and dangerous operation in such cases.

Dr. Pozzi, agrégé of the Paris Faculty of Medicine and hospital surgeon, is charged with a mission to Germany and Austria to examine the programme and arrangements for the study of gynæcology in those countries.

Paris, June 15th.

POLLUTION OF THE RIVER LEA.—At the last meeting of the Select Committee appointed by the House of Commons to inquire into the pollution of the Lea, after Mr. Armstrong Smith, C.E., had given evidence, Dr. Meymott Tidy explained the results of various examinations of the River Lea which he had made since 1882. He was perfectly certain that the Hertford sewage did not pollute the river. He had made between 5000 and 6000 analyses of the water supplied by the East London Company, and he could say without hesitation that that water was improving year by year.

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METROPOLITAN HOSPITAL SUNDAY FUND.

A LARGE and influential meeting was held on Thursday afternoon at the Mansion House, under the presidency of the Right Hon. the Lord Mayor, to inaugurate the series of meetings to be held next week in various parts of the metropolis in support of the Hospital Sunday Fund. His Lordship was supported by the Duke of Norfolk, Cardinal Manning, Capt. Palliser, the Rev. Dr. Rigg, Mr. Brudenell Carter, Mr. Henry C. Burdett, and other friends of the movement. The Lord Mayor having briefly opened the proceedings, Cardinal Manning moved a resolution calling for a greater feeling of sympathy and co-operation in support of the hospitals and medical charities of the metropolis. The resolution was seconded by Mr. Burdett, and agreed to. Mr. Brudenell Carter, F.R.C.S., President of the Medical Society of London, having delivered an address on the importance not only to the poor, but also to the wealthy, of the efficient maintenance of hospitals, it was resolved, on the motion of the Rev. Dr. Rigg, seconded by Capt. Palliser, that a cordial vote of thanks be accorded to Dr. Wakley, the Editor of THE LANCET, who had started this movement of the Hospitals Week, and, at the same time, promised a further contribution of £1000, on condition that four other similar contributions were promised before July 1st. A vote of thanks to the Lord Mayor, proposed by the Duke of Norfolk, brought the proceedings to a close. A fuller report of this meeting will appear in our next issue.

Obituary.

WILLIAM WHITE COOPER, F.R.C.S., F.R.S.

WILLIAM WHITE COOPER was descended from an old Wiltshire family. He was born at Holt, in Wiltshire, on Nov. 17th, 1816. His grandfather was rector of Hambledon, in Surrey, and vicar of Yelminster. White Cooper came to London about 1834, and entered as a student at St. Bartholomew's Hospital. He also became a private pupil of the late Mr. Stanley, surgeon to that hospital, and used to relate that he paid £1000 for that privilege. He became a Member of the College of Surgeons in December, 1838, and a Fellow by examination in 1845. After leaving St. Bartholomew's Hospital he took a voyage to Madeira, and on his return published a Guide for future visitors seeking a winter home in that island. A year or two was then passed in travel, and then he settled in London. He did not intend originally to practise as an ophthalmic surgeon, but, becoming associated with the late Mr. Dalrymple, he decided to devote himself entirely to ophthalmic practice. While at St. Bartholomew's Hospital he gained the only prize Sir Richard Owen gave for Comparative Anatomy. Sir Richard writes to us that "Cooper, then a student, gained my prize for his diligent attendance and the fulness and accuracy of his notes. These, after revision, I consented to his publishing, and they appeared in successive numbers, making an eighth volume, on the 'Anatomy and Physiology of the Invertebrate Animals,' issued by Longmans in 1843." It was this early introduction to Richard Owen that led subsequently to a friendship which was only terminated by death, for Sir Richard writes of Cooper as his "dear and deeply regretted friend."

White Cooper was selected by the late Sir James Clark (we believe at the recommendation of Sir Benjamin Brodie) for the post of surgeon-oculist to the Queen in 1859. He was one of the original staff and senior surgeon of the North London Eye Institution in Charlotte-street, Portland-place, and was connected with it until appointed ophthalmic surgeon to St. Mary's Hospital. He was a careful, steady, and neat operator, and judicious and painstaking in all that related to treatment. He had great facility in illustrating with his brush any cases of interest of which he wished to keep a record. Brought up in the school of Tyrrell and Dalrymple, he was content rather to rest on the principles of their teaching and practice than follow the more modern improvements and treatment which have done so much for ophthalmic practice; but he was ever generous and ready to yield to the opinions of his juniors when satisfied of the advantages to be gained by their adoption. White Cooper published his "Practical Remarks on Near Sight, Aged Sight, and Impaired Vision" in 1847, and in 1850 "Observations on Conical Cornea"; also a small work "On Wounds and Injuries of the Eye" in 1859.

The subject of this memoir had long been ailing. In the autumn of 1884 he suffered from blocked veins of the left leg, associated with a general gouty condition. He was advised to leave London for his residence in the country, and there, within a few days of his arrival, the chronic inflammatory state of the veins assumed a more serious character. The veins of the thigh became acutely implicated, and considerable œdema of the whole limb was the immediate result. He now suffered much from constitutional disturbance. Not long after this, and apparently dependent on some exertion in movement, the right limb became suddenly implicated, and for some days his condition appeared somewhat critical. Under the judicious care of his old friend, Mr. Buée, of Slough, he gradually recovered, and was able to return to work in town in the early summer of 1885. Still, it was apparent to those who watched him that he was not in a condition for much work, and so continued during the autumn and winter, content with the slow improvement which enabled him to receive patients at his house. He had made much progress in health and strength when, unfortunately, like many others during this last fatal spring, he became suddenly the subject of an acute attack of pneumonia. Late on the Saturday night, the 29th ult., he was first seen by Dr. Wilson Fox, and on the following day by Sir William Jenner in consultation. But, notwithstanding their constant attention, he succumbed on the following Tuesday. From the commencement of the attack there did not appear to be any rallying power. The announcement of his death came as a shock to many who had seen him in apparent good health but a few days previously, while those who knew what he had undergone in his previous illness were not taken by surprise at the severity of the attack, or at the rapidly fatal result which so soon terminated his sufferings. He had long been failing, and the system so sapped was ready to yield to any urgent call upon its resources.

Of the private character of White Cooper, all that can be said in his favour would be accepted as truth by those who knew him, and who alone would appreciate his worth. Kindness, gentleness, and true sincerity, combined with a certain simplicity of character; much energy, without the least approach to ostentation or display,—these were the leading traits of his character and conduct. A former colleague writes of him: "How true a friend he was, how kind, yet how unostentatious, memory bears witness. I met him a few times in consultation in practice, and saw in him always the courteous English gentleman and the trusted adviser." In his professional work the deceased gentleman was for many years fully occupied; while he was the trusted adviser of Her Majesty the Queen in all matters connected with his department of practice. It was after many years of faithful service—service fully appreciated and publicly acknowledged—that Her Majesty graciously intimated her intention of conferring a knighthood upon him. The very same day that poor White Cooper's name appeared in the public papers as participating with others in the intended honour, he was seized by his fatal illness. Nor did he live to have the knighthood conferred upon him. He died on the 1st of June. On the 2nd there appeared in the *Court Circular* the following touching allusion to his death: "The Queen has received this morning, with great regret, the news of the death of Mr. White Cooper, who attended Her Majesty for upwards of thirty years as oculist, and for whom Her Majesty had a sincere regard." When White Cooper was confined to his bed at his country residence, near Slough, the Queen drove over from Windsor to see him, and condescended to pay him a visit in his room, such was her regard for him, and such the interest Her Majesty evinced in his recovery and welfare. The public are familiar with the many acts of kindness and sympathy shown by the Queen to those whom Her Majesty knows and esteems, when sorrow and sickness visit their homes; but it is almost exceptional that the trusted medical advisers of Royalty have been ever visited by their Sovereign in the sick chamber. It is, therefore, with great pleasure that we record this pleasing act of courtesy and sympathy on the part of Her Majesty to a member of our profession. White

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Cooper married, in 1845, the eldest daughter of Samuel Poyser, Esq., of Derby, who survives him. His eldest son is at present resident house-physician at St. George's Hospital. White Cooper was connected by marriage with the families of Sir Benjamin Brodie and the late Sir George Staunton.

H. ROYES BELL, F.R.C.S.

A GREAT shock was sustained by the medical staff and pupils of King's College Hospital when it was announced that this estimable gentleman and excellent surgeon had been suddenly called away in the prime of life and in the midst of usefulness. Born in Australia, he was brought over to Jersey, where his general education was commenced, and was subsequently completed at King's College. He entered the medical department in 1859, and was attached as a private pupil to Mr. Henry Smith, at that period surgeon to the Westminster General Dispensary, and diligently attended the practice of that institution until Mr. Smith was appointed assistant-surgeon to King's College Hospital. Mr. Royes Bell was conspicuous for his devotion to his studies, and, directing his attention more especially to surgery, was elected house-surgeon to the hospital. Having completed his tenure of this office, he paid a lengthened visit to the hospitals of Paris and Vienna. Returning to London, he was appointed surgical registrar to his old hospital. Having passed the fellowship of the College of Surgeons, he was appointed assistant-surgeon to the hospital in 1870, and having served the usual period in that capacity, was made full surgeon, and subsequently demonstrator of practical surgery. Sir William Fergusson was especially attracted by Mr. Bell's devotion to his work, and for some years before his death employed him largely in his private practice, and Mr. Bell repaid the confidence thus shown by always entertaining and expressing the utmost reverence for his old teacher, admiring him not only for his brilliant qualities as an operator, but for that consummate skill in the detection of surgical disease which, to those who knew Sir W. Fergusson well, was, after all, the main element in his character.

During the many years that Mr. Bell was attached to King's College Hospital he signalised himself by a thorough devotion to his work and to the training of those placed under his charge, with the result of gaining the esteem and affection of all who came in contact with him, and it may be with truth averred that no one connected with the place was more popular in the true sense of the word. The secret of his great influence and of the love he inspired lay in the fact of his utter unselfishness and his thorough consideration for others, combined with a sweetness of disposition which was evinced in his daily intercourse with all around him, and which gave such a bright colouring to his life. Retiring and modest in manner, and constitutionally not strong, he never pushed himself forward or made himself prominent in anything but doing good and performing his duty. He was an admirable teacher in the out-patient room, in the wards of the hospital, and in the demonstration room, and it was a great delight to him to feel that his pupils appreciated his efforts to further their interests. His loss will be severely felt both by them and his colleagues.

As a surgeon, Mr. Bell was thoroughly well informed. He was always a student, neglecting no opportunity of improving himself in the art to which he had devoted his life. Although not endowed with some of the more striking qualities which belong to some surgeons, and somewhat hesitating in manner, he was remarkably painstaking, and the results of his operations, especially in cases of hare-lip, cleft palate, and plastic surgery, were excellent. His main contribution to surgery consisted of the Lettsomian Lectures on Diseases of the Testis, and he was chosen as one of the contributors on the same subject to Ashhurst's Encyclopædia.

JAMES C. L. CARSON, M.D.

THE death of this well-known and much-respected practitioner took place on Wednesday, June 2nd, at his son's residence, Coleraine, where for some time he had been in failing health. Dr. Carson, who at the time of his death was in his seventy-first year, was the son of the Rev. Dr. Alex. Carson, Tobermon, county Derry. He entered Trinity College, Dublin in 1833, and subsequently attended a course of lectures at the Glasgow University, where he graduated M.D. in 1837. When very young he commenced practice in Ballymena; but his brother, Dr. George Carson, who was then practising in Coleraine, having died, he removed to that place to succeed him, and in 1851 he again went to Dublin, where his health gave way. Next year he returned to Coleraine, where he continued as the leading practitioner in that district until a few years ago, when he was obliged to retire owing to failing health. Dr. Carson was a man who wrote on a variety of subjects; he published a treatise on "The Form of the Horse"; a work on "Capital Punishment," in which he advocated the abolition of the punishment of death; and an interesting *brochure* on the "Fundamental Principles of Phrenology." He also contributed papers on controversial religious subjects. In 1875 he was made a Justice of the Peace. Dr. Carson, who in his life had many medical appointments in Coleraine, was a man held in the highest respect by the general public, who had full confidence in his skill, tact, and attention.

WILLIAM SOUTHALL, F.L.S.

A DISTINGUISHED botanist and pharmaceutist of the type of the late Daniel Hanbury, F.R.S., and like him a member of the Society of Friends, has just passed away, aged sixty-one, at Edgbaston, near Birmingham. William Southall was for twenty-one years one of the examiners of the Pharmaceutical Society, and was chosen President of the British Pharmaceutical Conference in 1879. He was also a Fellow of the Linnæan Society, and one of the founders of the Birmingham Natural History and Microscopical Society. One who knew both well bears strong testimony to the close resemblance in manner and person of the late Mr. William Southall to the lamented Mr. Joseph T. Clover. Both were most kindly men, full of love and knowledge of their respective professions, and deeply yet unobtrusively religious. Strangely enough, both succumbed to the same pulmonary complaint, after having suffered from it for many years.

MEDICAL NOTES IN PARLIAMENT.

Burgh Police and Health (Scotland) Bill.

IN the House of Commons, on the 11th inst., the order relating to this Bill was read and discharged and the Bill withdrawn.

The Lunacy Acts Amendment Bill.

The order of the day for the second reading of this Bill was read and discharged.

The Medical Acts Amendment Bill.

This Bill was read a third time.

The Sanitary State of the House.

In reply to a question by Mr. R. Cooke, Mr. Leveson-Gower stated that orders have been given for the carrying out of those recommendations of the Committee on the Ventilation of the House, which it was possible to undertake immediately. These works cannot of course be completed, as had been intended, during the Whitsuntide recess, but they can be carried on when the House is not actually sitting, and will be finished without delay. The First Commissioner has requested Mr. Shone, the inventor of the system recommended by the Committee, to furnish him with a report on the question of costs, and as to how the system, if adopted, could be most speedily and effectually brought into operation.

Contagious Diseases (Animals) Bill.

On the 16th inst. this Bill was read a second time.

METROPOLITAN PROVIDENT MEDICAL ASSOCIATION.—On the 9th instant, a meeting of this Association took place at the residence of Mr. Hollond, 1, Upper Berkeley-street, Portman-square. Of the eleven dispensaries, five are now entirely self-supporting. The sum of £500 is required to meet the requirements of those not yet self-supporting. The subscription is 6*d.* a month for single persons, 10*d.* a month for married people, and 6*d.* for a family of children. The Dean of Westminster and Sir Spencer Wells spoke in support of the institution.

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Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following Members, having passed the Final Examination for the Fellowship on the 26th, 27th, 28th, and 29th ult., were, at a meeting of the Council on the 10th inst., admitted Fellows of the College:—

Trott, Dudley Cox, L.R.C.P.L., Longton-grove, Sydenham; Membership dated Nov. 17th, 1880.
Sinclair, T., M.D.Q.U.I., Howard-street, Belfast; April 18th, 1882.
Buckell, William R., L.R.C.P.L., Romsey; May 16th, 1882.
Horrocks, William Henry, L.S.A., Shoreham, near Liverpool; Nov. 14th, 1882.
Thorburn, Wm., M.D. Lond., Rusholme, Manchester; July 24th, 1883.
Blaxland, Walter, L.R.C.P.L., Torrington-square; Nov. 13th, 1883.
Bowes, William Henry, M.D. Lond., Marine-terrace, Herne Bay; April 24th, 1884.
Heath, Charles Joseph, L.S.A., Guilford-street; July 31st, 1884.
Pearson, Charles Yelverton, M.D.Q.U.I., King-street, Cork.

Four other candidates passed the examination, but not having attained the legal age (twenty-five) will receive their diplomas at a future meeting of the Council when qualified. Fourteen candidates failed to reach the required standard, and were referred to their professional studies for one year.

UNIVETSITY OF CAMBRIDGE.—At a congregation held on the 10th inst. in the Senate House, Dr. Swainson, Vice-Chancellor, presiding, the following degrees were conferred:—

M.D.—W. R. Parker, Caius; W. L. Penney, Caius; F. W. Hewitt, Christ's.
M.B.—E. C. Perry, King's; C. W. Daniels, Trinity; C. Yeoman, Pembroke; W. H. Smart, Caius; A. C. Ingle, non-coll.
B.C.—C. Yeoman, Pembroke; A. C. Ingle, non-coll.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on the 10th inst.:—

Elliot, William Henry Wilson, Bremar-road, Denmark-hill.
Hallilay, Richard Percy, Burley-road, Leeds.
Hardwick, Arthur, Victoria Villas, Dorchester.
Rawnsley, Gerald Thomas, Royal Dockyard, Woolwich.

THE Hospital Sunday collection at Ripon was held on the 13th inst.

DR. ALEXANDER HARKIN, J.P., has been appointed to the Commission of the Peace for the county of Antrim.

THE Court of Common Council has voted £105 to the Hospital Sunday Fund.

BRITISH MEDICAL BENEVOLENT FUND JUBILEE CELEBRATION.—Her Majesty the Queen has, through Sir James Paget, sent a donation of £100 to this fund.

VACCINATION GRANT.—Mr. Henry Wickham, of Rufford, Ormskirk, has received the Government grant for efficient vaccination (second time).

AT a public meeting held on the 11th inst. at the Holborn Town Hall, it was decided to establish a Convalescent Home for the poorer classes at the Vale of Health, Hampstead.

PLEURO-PNEUMONIA appears to be prevalent amongst cattle in different parts of the country—to wit, Surrey and Dorsetshire. Slaughtering and inoculation are being resorted to, the latter seemingly with some success.

A SPECIAL meeting of the governors of the Bristol General Hospital was held on the 9th inst., for the purpose of considering a revision of the rules of the institution, which is to be brought forward at a forthcoming general meeting of the subscribers.

EPIDEMIC IN AN EGYPTIAN PRISON.—In a convict prison at Tantah, containing 1100 inmates, 200 prisoners have died within the last six weeks from an obscure epidemic. Dr. Green, principal medical officer of the Sanitary Department, has accordingly demanded an inquiry into the management of the prisons, and a commission, consisting of a colonel and three army surgeons, has been nominated for the investigation.

SANITARY INSTITUTE OF GREAT BRITAIN.—At an examination, held on June 3rd and 4th, 60 candidates presented themselves, 10 as local surveyors, of whom 5 obtained certificates of competency, and 50 as inspectors of nuisances, of whom 44 were successful.

AT an inquest held on the 11th inst. on the body of Mr. R. Drury Batt, late assistant medical officer at a private asylum at Barnwood near Gloucester, whose death had been caused by prussic acid, the jury returned a verdict of suicide while in an unsound state of mind.

SCARLET FEVER HOME.—The first annual meeting of the Mary Wardell Convalescent Home for Scarlet Fever, Stanmore, will be held to-day (Friday, June 18th), at 5 P.M., at 32, Sackville-street, Piccadilly. Sir Risdon Bennett, M.D., F.R.S., will preside.

SOCIETY OF MEDICAL MEN QUALIFIED IN SANITARY SCIENCE.—Professor R. Koch, M.D., of Berlin, has accepted the honorary membership of this Society. This Society, which has been but two months and a half in existence, already embraces 100 members who possess sanitary qualifications.

A UNIQUE COLLECTION.—A curious sale of skeletons is said to be about to take place in Paris. The collection belonged to a French doctor who devoted his existence to studying distorted human nature, and visited the hospitals to buy up the corpses of deformed persons. By this means he formed a unique museum of abnormal skeletons, for which his heirs now ask £1200.

DEATHS OF FOREIGN MEDICAL MEN.—The death is announced in Dresden of Eugen Burckhardt, editor of the *Correspondenzblatt der ärztlichen Kreis- und Bezirksvereine im Königreich Sachsen*.—Dr. Ingels, the well-known alienist, died at Ghent on the 22nd ult.—The death is announced of Dr. Don Joaquin Chillida y Meliá, late editor of the *Revista Médico Farmacéutica*, of Castellon, and author of an important Spanish work on the Hygiene of Schools.—Dr. Robert Falkson, privat docent in Surgery in Königsberg, has died at the age of thirty-one.

GIFTS AND BEQUESTS.—The Committee of the Southport Infirmary and Local Dispensary have recently received a cheque for £500 from Miss Cooper of Southport towards the endowment fund of the children's ward.—By the death of Mrs. Surtees of Harrogate the following legacies, amongst others, become payable:—Harrogate Cottage Hospital, £200; Royal Infirmary, Edinburgh, £200; Sunderland General Infirmary, £250; Sunderland Children's Hospital, £50.—Mrs. Booth, of Beechfield, Swinton, has given a donation of £500 to the Manchester Clinical Hospital for Women and Children.

FOREIGN APPOINTMENTS.—Don Manuel Alonso Sañudo has been nominated to the chair of Medical Pathology in the Faculty of Medicine of Valladolid. Don Enrique Gelabert, editor of *La Higiene para Todos*, has been appointed Sanitary Officer for the Port of Barcelona. Don Eduardo Luis, inspecting surgeon of the second grade, has been appointed President, and Surgeon-Major Don Ramo Alba y Lopez Secretary, of the Examining Committee for the selection of candidates for the Medical Service of the Spanish army. In Prague Dr. Huppert has been appointed to lecture on Chemistry this semester, in place of Dr. Linnemann, the recently deceased professor of that subject. Prof. Götte of Rostock has been appointed to the chair of Zoology in Strasburg, in succession to Prof. Oscar Schmidt.

DARENTH IMBECILE ASYLUM AND SCHOOLS.—On the 12th inst., the managers of the Metropolitan Asylums Board paid their annual visit to this institution, which is situated some three miles from Dartford. The estate, exclusive of land recently acquired for the purposes of a hospital for convalescent small-pox patients, comprises 173 acres, and of this about 130 acres are under cultivation. The buildings are erected upon the block principle, and at the adult asylum accommodation is at present provided for 800 harmless insane patients. This accommodation, however, has been found to be too small to meet the growing requirements, and it will shortly be increased by 550 beds. The schools for imbecile children contain certified accommodation for 500 children. The result of the inspection is reported to be satisfactory.

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Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ALLOTT, J. H. L., M.B., C.M.Ed., has been appointed Resident Assistant Medical Officer to the Crumpsall Workhouse of the Township of Manchester.

BROWNE, OSWALD, M.A., M.B.Cantab., M.R.C.P., has been appointed Casualty Physician to St. Bartholomew's Hospital.

CLAY, AUGUSTUS F., M.R.C.S., L.S.A., has been appointed Assistant Surgeon to the Birmingham and Midland Counties' Orthopædic Hospital.

CLIBBORN, WILLIAM, M.D.Dub., L.R.C.S.I., has been appointed District Medical Officer and Medical Officer to the Workhouse of the Bridport Union.

DAVIES, ARTHUR T., B.A., M.B.Cantab., M.R.C.P., has been appointed Assistant Physician to the Royal Hospital for Diseases of the Chest.

FLETCHER, RORY, M.R.C.S., has been appointed House-Surgeon to Charing-cross Hospital.

GRENFELL, H. O., M.R.C.S., L.R.C.P.Lond., has been appointed House-Surgeon to Charing-cross Hospital.

HABERSHON, S. HERBERT, M.A., M.B.Cantab., M.R.C.P., M.R.C.S., has been appointed Assistant Physician to the Royal Hospital for Diseases of the Chest.

HARDY, ALBERT E., M.R.C.S., L.S.A., has been appointed House-Physician to Charing-cross Hospital.

HODGSON, T. MOORE, M.B., C.M.Ed., has been appointed Assistant House-Surgeon to the Cumberland Infirmary, vice G. H. Henderson, M.R.C.S., resigned.

LEES, W., M.R.C.S., L.S.A. (late Visiting Surgeon to the Chester General Infirmary), has been appointed House-Surgeon to that Institution.

LIDDERDALE, JAMES, M.R.C.S., L.S.A., has been appointed Medical Officer for the Seventh District of the Bedminster Union.

MACKENZIE, A. L., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer for the First District of the Romford Union.

MORRIS, PRYCE J. L., L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer of Health for the Blything Union, vice A. B. Deck, deceased.

NOYES, A. W. FINCH, M.R.C.S., L.R.C.P.Lond., has been appointed House-Physician to Charing-cross Hospital.

OLIVER, F. H., L.S.A., has been appointed Resident Obstetrical Officer to Charing-cross Hospital.

PRINCE, HERBERT F., L.F.P.S.Glas., L.S.A., has been appointed Medical Officer for the Great Bedwyn District of the Hungerford Union.

STURROCK, W., M.B., C.M.Ed., has been appointed Assistant Medical Officer to the Workhouse of the Parish of St. Pancras.

TURNER, ARTHUR F., L.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Deerhurst District of the Tewkesbury Union.

WETHERED, FRANK J., M.R.C.S., L.S.A., has been appointed Assistant House-Physician to the Royal Hospital for Diseases of the Chest.

WILLIAMS, ROBERT R., L.R.C.P.Lond., M.R.C.S., has been appointed Assistant Medical Officer to the Workhouse and Infirmary of the Parish of St. Leonard, Shoreditch.

Births, Marriages, and Deaths.

BIRTHS.

BURGESS.—On the 12th inst., at Nicoll-road, Harlesden, the wife of W. Milner Burgess, M.R.C.S.E., of a daughter.

CHANING-PEARCE.—On the 9th inst., at Montague House, St. Lawrence-on-Sea, Kent, the wife of J. Chaning-Pearce, M.D., of a son and daughter.

SLAUGHTER.—On the 13th inst., at Dover, the wife of W. B. Slaughter, Surgeon-Major, Medical Staff, of a son.

WALLIS.—On the 16th inst., at Woolwich-common, the wife of Charles Wallis, M.R.C.S., of a son.

MARRIAGES.

BERRY—CURRIE.—On the 9th inst., at St. Alphege, Greenwich, Harry Poole Berry, M.B.Lond., M.R.C.S., of Grantham, to Rosina Jessie, eldest daughter of Alexander Currie, of Leslee, Westcombe-park, Blackheath.

MOSSE—HAMMERTON.—On the 10th inst., at St. Andrew's, Stockwell, Herbert Ryding Mosse, M.D., M.R.C.S., of Hobart House, Clapham-common, to Katharine, youngest daughter of C. Hammerton, Esq., of Stockwell, S.W.

WALLACE—MORDACQUE.—On the 10th inst., at the Parish Church of St. Peter's Port, Guernsey, Alfred Cyprian Wallace, L.R.C.P.Lond., M.R.C.S., to Theodora, youngest daughter of the late Rev. L. H. Mordacque, M.A., J.P., Vicar of Haslington, Lancashire.

DEATHS.

BELL.—On the 15th inst. (suddenly), Hutchinson Royes Bell, F.R.C.S., Honorary Fellow of King's College, and Surgeon to King's College Hospital, of 12, Queen Anne-street, Cavendish-square, aged 44.

POWER.—On the 9th inst., at 65, Ashburnham-road, Bedford (suddenly), of syncope, John Arthur Power, M.A., and L.M.Cantab., L.R.C.P.Lond., late Senior Fellow of Clare College, Cambridge, aged 76.

YULE.—On the 8th inst., at Fern Lea, Worthing, John Strelley Carslake Yule, M.R.C.S., aged 47.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, June 17th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
June 11	29·95	W.	61	57	115	71	54	·22	Cloudy
,, 12	29·77	W.	62	56	110	69	56	·02	Cloudy
,, 13	29·95	N.W.	62	59	107	68	52	...	Cloudy
,, 14	30·06	S.W.	62	55	106	69	50	...	Cloudy
,, 15	30·04	W.	59	55	106	65	55	·01	Cloudy
,, 16	30·10	N.W.	56	50	102	64	49	...	Cloudy
,, 17	30·06	N.W.	56	51	...	...	49	...	Overcast

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

THE TURKISH BATH.

Dr. Grant writes calling attention to a want in connexion with the various Turkish baths in London, which, judging from his own case, deters many persons from more frequently making use of them—viz., the absence of any hotel or of bedrooms under the same roof as the bath. Apart from the time taken in undressing and dressing, it is evident that the unavoidable exposure to weather and the fatigue involved in proceeding to the bathing establishment are injurious in many cases for which the Turkish bath is recommended, and in which it is beneficial. Our correspondent states that he has on several occasions thought it worth his while to proceed to Dublin, where there is an hotel in connexion with the baths, and where they can be taken in a comfortable manner, and expresses the opinion that the establishment of such conveniences in the West-end of London would prove profitable to the proprietors.

Dr. Fraser (Ashburton).—1. The best account will be found in the last edition of Waring's Handbook of Therapeutics.—2. We have no information respecting the publication to which our correspondent refers.

Students.—All the information will be found in our Students' Number, published in September last.

Graduate.—We doubt very much whether it would be possible.

"ALCOHOL IN HOSPITALS."

To the Editor of THE LANCET.

SIR,—In your last issue a paragraph entitled "Alcohol in Hospitals" concludes with the following words: "The Secretary of the Middlesex Hospital has calculated that 66 per cent. of the expenditure on alcohol is for its consumption by officials." This passage having been commented upon, will you allow me to observe, in the first place, that I have never made any calculation on the subject in question, and, secondly, that the figure quoted is inaccurate. Possibly the calculator has based his reasoning on data of which I am ignorant; but in 1884 this hospital spent £547 4*s.* 7*d.* on beverages containing alcohol, of which £328 10*s.* 9*d.* was for the amount consumed by patients and £218 13*s.* 10*d.* for that used by the resident officers, the nurses, and the servants. The percentage would therefore be about 60 for patients and 40 for officials. I trust your sense of fairness may allow me space enough in your next issue for the insertion of this correction.

I am, Sir, your obedient servant,

A. O'D. BARTHOLEYNS,
Secretary.

Middlesex Hospital, June 17th, 1886.

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TONSILLARY CALCULI.

To the Editor of THE LANCET.

SIR,—So rare is this affection, and so unusual the occurrence of two fairly large calculi being deposited in one tonsil, that it may be deemed of sufficient interest to be placed before your readers.

Recently Mrs. C—— consulted me with reference to an inflamed throat, with some slight difficulty in swallowing, and which had existed, more or less, for some months. The patient had occasionally sought advice, but had obtained only temporary relief. The mouth could be freely opened, and the tonsils well exposed by depressing the tongue and drawing back the cheeks by an elastic retractor. The right tonsil was seen projecting conically inwards behind the uvula, having a yellow speck on its apex. To the touch this was hard, and grated under the probe. While thus exploring it a violent spasmodic effort, partly coughing and partly vomiting, came on, forcibly expelling a calculus the size of a large horse-bean, the relief being immediate. However, a few days later the patient called again, saying there was another calculus. The tonsil looked red and felt hard. On passing a probe into the sulcus left by the previous calculus I came upon something hard. Slitting up the tonsil and manipulating with a bent probe and blunt hook, I was enabled after some little difficulty to extricate another calculus, larger than the previous one, round, but very nodular, and in appearance very much like a vesical mulberry calculus. It weighed nearly a drachm, and its composition was chiefly phosphatic.

The peculiarities of this case appear to be its rarity and the existence of two large bodies in one tonsil causing so little inconvenience in a part ordinarily so sensitive. Though some authorities look upon calculi as the resolution of some tuberculous deposits, in this case all physical and constitutional symptoms were perfectly healthy, while the family history was exceptionally good; nor could I trace that the patient had suffered from follicular catarrh, thereby causing vitiation of the ordinary tonsillar secretion. The only solution I can give is that the crypts or follicles were unusually patent, allowing the accumulation of the buccal or salivary mucus, from which a gradual deposit was thrown down, while the treatment could be no other than that followed by me.

I am, Sir, yours faithfully,

Leamington, June 15th, 1886. CHARLES MARRIOTT, M.D.

H. A. M. (Colchester).—Vitruvius, in his treatise on Architecture, written in the reign of the Emperor Augustus, B.C. 10, says (Book I., chapter i.) that the architect should have a knowledge of medicine (*medicinæ non sit ignarus*). Claude Perrault (1613-88), himself a physician, returned the compliment by a careful study of architecture, by an excellent translation of the work of Vitruvius, and by designing the entrance to the Louvre, which in Voltaire's time was pronounced by that connoisseur to be "one of the finest monuments of architecture in the world."

Dr. Milner Fothergill.—Yes.

Q. R. can obtain the information through any of the leading agents.

THERMOMETERS.

To the Editor of THE LANCET.

SIR,—I have read letters in praise of the circular clinical thermometers, and I think that those whose experience has not been so encouraging ought also to give their opinion. I was highly pleased at the thought of having a thermometer which would hook on to the swivel of my watch chain, and consequently would always be at hand, instead of being left behind in another pocket; but I have found it clinically useless. If placed in the mouth, it will certainly register up to 98·5° F. in a healthy subject; but it is not the sort of instrument to be passed from mouth to mouth, as a glass one may be. In the axilla, to whatever point it may reach, I have never secured a reading much above 90°, owing to the rapidity with which it runs down while the patient is fumbling for it, and while one is turning it round to the light. A friend has suggested to me that a ratchet arrangement might be contrived on the face of the dial, which would catch the pointer at each successive degree which it reached, and that the pointer could afterwards be released by pressing a spring.

I am, Sir, yours truly,

June 15th, 1886. M.D. DURH.

Dr. B. Walter Jones (Vulcan, Mich., U.S.A.).—The name was given in the description of the apparatus.

Mr. C. G. Jones.—The usual minimum fee paid by high-class offices is £1 1*s*.

A CAUTION.

To the Editor of THE LANCET.

SIR,—The following description of a thief who on Saturday morning last made a successful raid on my consulting-room by means of the usual request to be allowed to "wait a few minutes" may be of service in putting your readers on their guard, and might possibly lead to his apprehension:—He is a short man, about forty, with "sandy" hair and beard, dark brown eyes, and sunburnt complexion; he wears a blue serge suit, also a ring and a watch, which he takes care to show as evidence of respectability.

I am, Sir, your obedient servant,

June 15th, 1886. W. G. D.

O. O. O.—Our correspondent is not called on to disclose professional secrets, save in a court of law.

THE SPANISH MEDICAL PRESS.

IN Spain almost every town containing a medical faculty, of which there are some eleven, boasts several small weekly or monthly medical journals. A new candidate for professional favour is now announced from Barcelona, *La Vara de Esculapio* (*The Staff of Æsculapius*), which makes, if we are not mistaken, the third new medical journal emanating from the same provincial city which has come into existence during the last few months, there being nearly a dozen already published there.

G. H. W.—Dr. William Farr pointed out more than forty years ago the fallacy underlying any attempt to base conclusions as to the health condition of populations upon the observed "mean age at death" occurring therein.

T. L.—We have no knowledge of the institution named.

THE "PENDJEH SORE."

To the Editor of THE LANCET.

SIR,—With reference to the letter from Mr. Pierson of the Indian Medical Service in your last issue (p. 1148), and to previous communications regarding the "Pendjeh Sore," allow me to state that the disease is well known in Asiatic Turkey, from the Mediterranean to the Persian Gulf; but it is in the Baghdad district that it is most prevalent and most virulent. It is there known as "Nishan-al-Tamar," or date-mark, from the fact that it generally appears in autumn, when the dates are ripe. It is not a constitutional disease, and I have no doubt that Mr. Pierson's theory as to its nature is correct. His remark about the copper-colour of the cicatrices of these sores reminds me of an officer who suffered from them in Baghdad, and who went to England immediately afterwards. He consulted an eminent surgeon of the day, who delicately hinted at syphilis. This the patient indignantly denied, assuring the surgeon that the complaint was endemic in the country from which he had come; but he was listened to with evident disbelief, and he departed in disgust. The date-mark has been frequently described in the Indian medical journals. I am, Sir, yours truly,

J. M. HYSLOP, M.D.,

Edinburgh, June 14th, 1886. Surgeon-Major.

To the Editor of THE LANCET.

SIR,—I fully agree with Surgeon Pierson, I.M.D., in his letter of the 12th inst., that it would be wrong to give currency to the new title "Pendjeh" to what appears to be the "Mooltan" sore. The disease was doubtless new to the Russian surgeon on his coming for the first time to the habitat of the ailment. Such local titles are inevitable and unobjectionable if they do not obscure the identity of disease. "Peshawur fever," "Feral fever," and other local names of ague, have ceased to do harm in this way. I write, however, more especially in reference to the question of treatment. That of Dr. Suski will certainly be found inefficient. Still, there is a remedy, far short of total destruction by nitric acid, which it is surprising is not better known on the frontier—viz., dressing with diluted tincture of the sesquichloride of iron, on lint under waterproof. This is cleanly and painless, and heals the sore rapidly. These sores in former years caused much invaliding to the hills, and even to Europe. Situated, as they often were, on the face and forehead, they presented a most repulsive appearance. This state of things was promptly modified in Mooltan and the neighbouring stations some years ago by the adoption of the above treatment.

I am, Sir, yours faithfully,

June 15th, 1886. A. G. BARTLEY, M.A., M.D.

Forensic.—1. The latest edition of Taylor's Medical Jurisprudence.—2. Thomas or Barnes.

Mr. T. G. Parrott.—We have not space nor patience to notice the letter.

Aristarchus has not enclosed his card.

"INFANTICIDE BY PERAMBULATORS."

To the Editor of THE LANCET.

SIR,—While on a holiday tour in Holland some years ago, I noticed that the infants in their perambulators were much more silent and much happier in appearance than infants in a similar condition in England. I saw that in all cases the infant was lying with its face to the nurse, and was well protected by the hood at its back. If this proceeding were always the rule in England, the exposure, and consequent "danger of inflammatory disease, pulmonary and cerebral," would be reduced to a minimum, and the child, having always its nurse's face in view, would be less disposed to cry.

I am, Sir, yours faithfully,

June 15th, 1886. H. F. S.

Medicus.—No. Melbourne would certainly not be a suitable place of residence for such a patient. The extreme and sudden changes of temperature, the frequent dust-storms, and the defective drainage, which characterise that Australian town, would not operate favourably on a *poitrinaire*.

Jurisprudence.—Jervis on the Office and Duties of Coroner, fourth edition by Melsheimer, published by Stevens and Son, Chancery-lane

Dr. O'Neill.—The notes would be acceptable.

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COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Hyslop, Edinburgh; Dr. Armstrong, Newcastle-on-Tyne; Mr. G. D. Pollock, London; Mr. Charles Hawkins, London; Dr. Broadbent, London; Dr. Banham, Reading; Messrs. Blackwood, Edinburgh; Mr. St. Clair Buxton, London; Mr. Elstole, London; Dr. O'Neill, Lincoln; Mr. M. Wilks, Burnley; Mr. Bellamy, London; Mr. Jessop, Leeds; Mr. Mayo Robson, Leeds; Mr. G. E. Moffet, Gibraltar; Mr. Parrot, Bournemouth; Mr. Horsfall, Bedale; Mr. Rivington, London; Mr. Milner Fothergill, London; Dr. Newman, Glasgow; Mr. Teague; Mr. C. G. Jones, Cardigan; Dr. Marriott, Leamington; Messrs. Austin and Son, Clifton; Dr. Steavenson, London; Messrs. Zimmerman and Co., London; Dr. Barnasconi, Plymouth; Messrs. Debenham and Co., London; Dr. Curnow, London; Mr. Alcan, Paris; Messrs. Clark and Co., London; Mr. Keen, St. Leonards; Mr. Armstrong, South Shields; Mr. Clemow, Waterloo; Dr. Hilliard, Aylesbury; Dr. Jones, Michigan; Mr. Meadows, Hastings; Mr. Ostell, Carlisle; Dr. Russell, Glasgow; Mrs. Ashbrook, London; Dr. McLean, Carlisle; Mr. De Fraine, Aylesbury; Major Colwell, Plymouth; Messrs. Slinger and Son, York; Mr. Bingham, Grimsby; Mrs. Maitland; Messrs. Baiss and Co., London; Mr. Boyack, Portobello; Messrs. Christy and Co., London; Mr. Lancaster, Bootle; Dr. C. Grant, Lagos; Dr. McVail, Holmhead; Mr. Sweeting, Fulham; Dr. Bartley; Dr. Ward, Sutton Coldfield; Dr. Hood, London; Mr. Cant, Lincoln; Messrs. Alton and Co., Carlisle; Dr. Cook, London; Mr. Hunt, Hull; Messrs. Easson and Son, Dublin; Mr. Hodgson, Carlisle; Mr. Boustead, Hebden Bridge; Mr. Chapple, Cork; Mr. Gravatt, London; Mr. Eddy, Holloway; Mr. Burdett, London; Dr. McNab, Stornoway; Mr. F. Taylor, London; Mr. Low, Hornsey; Mr. Reed, London; Dr. Roulston, Wakefield; Mr. Brewster. Bootle; Mr. Johnson, Leicester; Mr. Burcombe, Lincoln; Dr. Diver. Kenley; Mr. Leoni, London; Miss Lytham, Norwich; Dr. E. D. McNicoll, Southport; Dr. Craster, Middlesbro'; Dr. T. D. Acland, London; Mr. R. F. Benham, London; Physician, Bath; H. H.; M.R.C.S., 1845; W. G. D.; Assistant, Kilburn; A. B.; M.D. Paris; H. A. S.; H. F. S.; O. O. O.; Forensic; Z.; M.D. Durh.; W. P. R., Liverpool; M.D., Bournemouth.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Barry, Castle Eden; Mr. Nunn, London; Mr. Wells, London; Mr. Hepburn, Coxhoe; Mr. Warburton, Brynfedwan; Mr. Dawson; Mr. Hastings, Sidmouth; Mr. Mills, Glasgow; Mr. Hebb, Alton; Messrs. Hill and Sons, London; Mr. Button, Halifax; Mr. Homfray; Mr. Bates, New York; Mr. Keay, Eastbourne; Mr. Turner, Finsbury; Mr. Hughes, Brompton; Dr. Prieger, Kreuznach; Mr. Kelsey, Margate; Mr. Derry, Leeds; Dr. Dows, London; Mr. Thomas, Llanelly; Messrs. Hewlett and Co., London; Mr. Hodgson, London; Mr. Martin; Messrs. Halton, Carlisle; Mr. Walsh, Bicester; Mr. Smith, Glasgow; Miss Baxter, Banebory; Mr. Laskey, Hambrook; Mr. Powell, Bedford; Mr. Kelvin, Manchester; Mrs. Theobald, Leicester; Mrs. Grattan; Dr. Clitherow, Peckham; Mr. Lee, Market Harboro'; Dr. Eberle, Thirsk; Dr. Rowe, Liverpool; Mr. Harley, London; Mr. Marsh, Hindley; Messrs. Eves and Sons, London; Mr. Morse, Appledurcombe; Mr. Ellis, Birmingham; Mr. Gravett, Horsham; Dr. Wright, Finedon; Miss Fryer, Horsham; Dr. Lawrence, Chepstow; H.; Draco; M. A. C., London; Delta, London; H. F. M.; Confidential; Bond, Hanley; Kumar Basu, Bombay; Zeta, Walsall; Sphenoid; A. B. C.; Z.; Theta; Lady Superintendent, Ramsgate; Alpha, Liverpool; B.A., Lambeth; Urbs in Rure; Medicus, Minchinhampton; F. R. D.; Medical; Medicus, Ashburton; Lochore, London.

Journal of Reconstructives, Sanitary Engineering, Grahamstown (Cape of Good Hope) Eastern Star, Macclesfield Courier, Shields Daily Gazette, Richmond Times, Derbyshire Courier, Northern Whig, Liverpool Daily Post, Govan Press, New Zealand Tablet, Birmingham Daily Mail, &c., have been received.

Medical Diary for the ensuing Week.

Monday, June 21.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

Tuesday, June 22.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, June 23.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.

BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens will be shown. Mr. Bland Sutton: Menstruation in Monkeys.—Mr. Lawson Tait: On Eleven Cases of Extra-peritoneal Cysts. Council at 8 P.M.

Thursday, June 24.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, June 25.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, June 26.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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"THE LANCET"

FIRST SPECIAL SUPPLEMENT,

IN SUPPORT OF THE

METROPOLITAN HOSPITAL SUNDAY FUND.

CONCERNING EVERYBODY.

THE Hospitals Week, commencing on Monday, June 21st, which is the prologue to Hospital Sunday, June 27th, is a movement which concerns and should interest all sorts and conditions of men and women in this vast city of London. From the monarch on the throne to the meanest subject in Her Majesty's Empire, from the peer to the pauper, all have need of, and are dependent in the hour of humanity's sorest trial upon, the efficiency of our hospital system for relief and succour. The recognition of this fact no doubt accounts for the presence of the names of the many illustrious and representative men on the imposing list of speakers who will take part in the meetings to be held in every district of London during the Hospitals Week. The list which will be found on p. 13 of this special supplement of THE LANCET, is eloquent, not only by virtue of the names which it contains but also from the absence of others which might reasonably have been expected to appear upon it. The neutral platform this movement affords to the political leaders, who have here an opportunity of turning aside for a brief interval from the turmoil of politics, will be ascended by the more thoughtful of them with feelings of thankfulness, because they will be able to prove once more by their action that one touch of nature makes the whole world kin. No great popular leader can deliberately allow the people to suspect, much less to believe, that he is unwilling to aid, or callous concerning the provision of adequate means for fully relieving the unavoidable illnesses and accidents to which the masses of his fellow-citizens are liable.

All must agree with Rabelais, that "without health life is not life; it is not living life. Without health life is only a state of languor and an image of death." This thought is brought home with greater force, perhaps, to the poor than to any other class. We cannot but believe that all who consent to aid this great crusade against the common enemy to all our race will certainly not miss their reward at the hands of their grateful countrymen. A movement like this arouses all the best feelings of our nature, and so surely as sickness and suffering are no respecters of persons, so surely will those who at some personal sacrifice devote a portion of their health and strength to secure the provision of abundant relief to their less fortunate and suffering neighbours, be better prepared to face the hour of trial when it is their turn to be struck down by an accident or to be overtaken by illness.

> Ah, what avail the largest gifts of Heaven
> When drooping health and spirits go amiss?
> How tasteless then whatever can be given!
> Health is the vital principle of bliss.

So true is it "he dies every day who lives in a languishing state," that none who think at all seriously of life's responsibilities can turn a deaf ear to an appeal for an adequate supply of funds to keep health's machinery, and all those agencies which may be broadly described as health preservers, in efficiency and order.

If this be so, then the diminution in the volume of support which has characterised the last few years' experience of the managers of the London hospitals would be difficult indeed to account for, except that neglect of duty is usually due rather to want of thought than to want of heart. It is, indeed, this experience of the commonest cause of most indifference and neglect which warrants a hopeful estimate of the results which will probably follow the awakening of the public conscience to the needs of the hospitals as one effect of the proceedings in the Hospitals Week. To secure this much, however, it is essential that everyone should put his shoulder to the wheel. Let everybody, therefore, give a hand to the movement. The orator by his eloquence; the leaders of public opinion and of fashion by their presence on the platform; the public by attending the meetings in large numbers; the press by devoting ample space to reports of the proceedings; those who earn their wealth in the City, but who reside outside its area, by sending a cheque to the Lord Mayor at the Mansion House; and all by making it their business to give, at any rate something, in support of the hospitals through the Hospital Sunday Fund. To those who have wealth, a generous and old supporter of the hospitals, Dr. Wakley, who last year gave a donation of £1000 to the Fund, has offered a challenge, by placing another £1000 in the hands of the Lord Mayor for the Hospital Sunday Fund providing four others send an equal sum before the end of July. It is the privilege, as well as the duty, of all classes to combine to make a long pull, a strong pull, and a pull altogether in aid of the hospitals during the Hospitals Week. Shall it be longer possible to say of us, the inhabitants of the wealthiest city in the world, that we give less in proportion to the hospitals than any other city in the British Empire?

Lavater has said there are but three classes of men: the retrograde, the stationary, and the progressive. Londoners, so far as the hospitals are concerned, putting the most favourable judgment on their actions, belong to the stationary, if they are not already entering the retrograde class. This lamentable position is due, in our belief, chiefly to the entire ignorance of the value and work of hospitals to be met with amongst the great majority of all classes of the people. Their knowledge of the subject is limited to the passing acquaintance which they may have of the outside appearance of the one particular hospital which happens oftenest to confront them in their walks abroad. Will they do us the favour, and themselves the justice, of going with us within the hospital walls? The inner life and work of these noble charities are brought by means of this Supplement within a measurable distance of all, and none need longer be content to survey the hospitals through a long vista.

At any rate, we have done our best in these pages, as the leading men of all classes will do their best at the various meetings throughout the Hospitals Week, and the ministers of all the churches will do theirs on Hospital Sunday, to cause Londoners to awake from their lethargy in this matter, and to prove once more that the people of the first city in the Empire have hearts as warm and purses as open as are to be found anywhere in the whole world. The fact that a man lives in the midst of a population of upwards of four millions does not absolve him from the calls of duty or the claims of humanity, and we are convinced that if the attention of the people can only be aroused, as it ought to be aroused, the £80,000 so urgently needed by the hospitals will be gladly suscribed by the combined contributions of all classes of Londoners.

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WITHIN THE HOSPITAL WALLS.

A MATTER-OF-FACT NARRATIVE.

(By a Special Commissioner.)

MOST Londoners are familiar with the outside characteristics of certain spacious three-storeyed buildings, to be found in most of the crowded districts of the metropolis. With but an exception or two, they lay claim to no architectural beauty, and attract attention more generally by their brooding ugliness. Most of them were built at a time when architectural taste had temporarily disappeared from this island; and the addition of wings, outbuildings, and unnatural excrescences, to meet the wishes of modern sanitary science, has invariably robbed them of the little beauty they started with. Then, as often as not, scantiness of funds has prevented the architect from stepping an inch beyond the limits of strict utility. Besides, having started plain or ugly, and maintained the traditions up to modern times, it has not been easy for the governing bodies of the day to seriously improve the outside appearance of their institutions. To add a handsome wing to a blackened and weather-frayed structure is, by the contrast occasioned, to increase rather than to diminish the prevailing dreariness. Moreover, it has always been, and still is, a principle with governors that funds available for architectural decoration are better expended in ministering to the comfort of patients, and curing them inside the building, than in offering up outside fresh victims in the shape of polished granite and carved stonework to that scarifying demon of our metropolitan streets—London soot. The heavy awkwardness of the pile is rendered more oppressive by the usual absence of blind and curtain, to soften the oppressive blackness of the windows. Occasionally the gloominess of the window is even enhanced by the lower panes being frosted, and by the black upper panes gaping open for purposes of ventilation in a chilly, dismal manner. No matter how grim and devoid of features to arrest the fancy the façade may be, the inscription "Supported by Voluntary Contributions" is, nevertheless, religiously kept clean and distinct. But the generality of mankind confine their gaze more to the earth than to heaven; and as in most cases this invocation to subscribe might be above the range of sight, the inscription is commonly repeated on the doors and the palings, accompanied by gaping money-boxes, and sometimes a staring fervent appeal for aid.

TROOPING TO THE HOSPITAL.

Every morning the streets converging upon these buildings are thronged by "the lame, the halt, and the blind." Black being the raiment of respectability among the lower middle classes, and those who gain their livelihood by working at various trades, this colour is the prevailing hue of the "out-patient" pilgrims. Light colours betoken a levity out of place in the waiting-rooms of a general hospital, and are only donned by the foolish and frivolous, or by those unfortunates who "went in" for gay apparel in the hour of health and good pay, and who have no other clothes to come in. These, however, try to conform to decency by bringing their bottles and gallipots in black bags, or by adopting a respectable mournfulness of behaviour. Thus the stranger, finding himself in the vicinity of a great hospital at certain hours of the morning, carries away a general impression of black clothes and white bandages, green bottles protruding from black bags, and crutches, eye-shades, and arms in slings, which is not at all calculated to inspire him with a vigorous appetite for luncheon. Should he travel third class on certain suburban lines, he will find that there are trains in the morning known as "hospital trains," when the larger proportion of the occupants of the third-class carriages are out-patients proceeding to town, who not only create a peculiar out-patient atmosphere of their own in the compartment they may be travelling in, but, being often known to one another, convert the said compartment into a sort of forum for the lugubrious discussion of diseases and the ills incidental to man.

WHAT THE HOSPITAL IS SUPPOSED TO BE LIKE.

Thus, everything tends to favour the popular impression that the hospital is a very dismal institution, hardly better than a prison; and few, we imagine, pay a first visit to one without making up their minds to be affected with a nightmare of sorrow and suffering for days to come. As for taking any interest in the hospital, to say nothing of feelings of pride, what average Englishman is there who considers himself under an obligation to concern himself in the least about it while in good health? Yet, as we shall directly show, a general hospital in our great metropolis is not merely an institution founded by the charitable rich for the suffering poor, and therefore, on purely moral and humanitarian grounds, to be commended, but is vitally associated with the personal well-being of every Londoner, no matter to what grade of society he may belong or how sound may be his health. Without exaggerating the case in any respect, it may be said that there is no individual who is not already indebted to the hospital, although he may have never personally applied for relief; and it will not be difficult in a brief account of life in a typical general hospital to demonstrate to the healthiest and most selfish Londoner the immense benefits conferred on him, as well as upon everybody else, by our metropolitan institutions for the alleviation of the sick.

HOW DYER, THE MECHANIC, CAME TO ENTER THE HOSPITAL.

It is not a twelvemonth ago that a mechanic was admitted into the General Hospital suffering from a punctured eyeball. He had been employed at the Dudgeon Engineering Works on the Thames, and was within one hour of taking his discharge, when, in striking almost a final blow at his last piece of work, a bit of metal flew up and entered the eye. A few months previously the works had passed into the hands of a limited liability company, and whatever kindly feeling had at one time existed between master and man had disappeared under the new *régime*. The business was placed "on an improved footing," which meant a general reorganisation and suppression of certain branches that did not pay, accompanied by a turn out of many of the old hands without any reference to the claims they had on the owners by reason of long and faithful service. Among those discharged was this hard-working mechanic, named Dyer, who had been employed most of his working life in the place, and who was of acknowledged respectability. Sickness in his large family at different times, and troubles occasioned through trying to buy his house from a bogus building society, had brought him down to the level of his actual wages, and he had but a poor prospect before him, when, on being helped to the nearest doctor's, the cashier's clerk put his last pay into his pocket. The man was recommended to go the next morning "to the hospital."

THE HOSPITAL IS ALWAYS READY FOR YOU.

Patients suffering from ordinary ailments or diseases commonly enter a general hospital through the "out-patient" department. Furnished with a governor's letter, which is always obtained readily enough, anybody can secure the advice of the physicians and surgeons on duty for the day, and if they decide that his or her illness is of such a character as to require treatment inside the hospital, the patient can enter at once, providing there be a vacant bed. Entrance may be also obtained on the special recommendation of the physicians and surgeons; but there is one essential difference between medical and surgical cases, between illnesses and hurts, that persons suffering from the latter can claim attention at any time. The hospital door is always

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open to accidents. Night and day, Sunday and week-day, the porter stands at the door ready to pass in and conduct to the house-surgeon anyone appearing with an accidental wound; and no matter how trivial the injury may be, and without any reference to the dress of the applicant, surgical attention is immediately given, and no demand pressed for a letter of recommendation or for payment. A general hospital makes no distinction between the thriftless and the thrifty in the hour of need. Hour after hour, day after day, year after year, it stands ready to bestow the best medical advice and the kindliest compassion on all who may cross its threshold. A man may pass a whole lifetime, and never think once seriously about the hospital, or bestow a sixpence upon it. Yet all this while the door has remained open night and day ready to receive him should bodily harm ever befall him, and the benevolence of the more thoughtful has kept in motion the machinery of medical talent and nursing skill, in spite of inadequate funds and lagging contributions.

IS YOUR CASE LIKE DYER'S?

Tom Dyer, the mechanic, confessed to himself, as he was jolted along in a cab to the General Hospital, that his contributions to the Hospital Sunday Fund had never gone beyond a copper or two, and not even that when he happened to stay away from church on the annual anniversary; but he thought he was not quite so bad as Jack Brown, who made it a joke that on Hospital Saturday he always rushed to a "pub" the moment he knocked off work, and stayed in the bar till dark, to avoid the solicitations of street collectors on his way home. Sometimes Brown got drunk before dark, and went home reeling, in which case he admitted that he might have given something to the Hospital Saturday people "unbeknown to himself," but he would take his oath he never had while sober. No such levity as this rested upon the conscience of Dyer, nor, in fact, did his reproaches go very deep, as he had a vague impression that the hospitals were more or less richly endowed by the wealthy classes, or were kept going by their annual contributions. He wished at one moment he had given a silver threepenny-piece at the collections instead of a copper; and then he thought that the Hospital Sunday collection taking place only once a year, he might have spared a shilling; but he was really too ill to go far into the *pros* and *cons* of the subject. For the moment his eye was more sensitive than his conscience.

ARRIVAL AT THE HOSPITAL.

Arrived at the hospital, one of the porters assisted him to alight and conducted him into the house-surgeon's receiving-room. At all general hospitals, in proportion to their size and wants, there are a number of house-surgeons and house-physicians, who take it in rotation night and day to receive and treat any cases admitted requiring immediate attention. In the General Hospital[1] there were five resident house-physicians and five resident house-surgeons, besides a couple of resident dressers. Being situated in the heart of a crowded manufacturing district, its staff was necessarily large. The house-surgeon had just disposed of a sprained wrist case as Dyer entered the room—a large, warm, and well-ventilated apartment, with a lavatory in one corner, cases of surgical instruments on the walls, tin boxes containing bandages and antiseptic dressings on the side tables, and a general litter of bottles of drugs and surgical appliances; everything handy and ready for use, and presided over by the house-surgeon, middle-aged, prompt, energetic, and swift in decision; the dresser, a budding student, assiduous and helpful; and a nurse, hovering quietly about, and anticipating every wish of the surgeon in preparing the patient for examination; retiring afterwards to the background to put in their place or clean any things used in dealing with previous patients, at the same time keeping on the *qui vive* to render fresh aid if necessary. "A severe punctured wound," said the house-surgeon, after examining the eye and eliciting particulars of the accident. "You will require immediate treatment as an in-patient, and will be taken to the Ophthalmic ward at once."

DYER EXAMINED BY THE DOCTOR.

The well-known ophthalmic surgeon and professor of ophthalmic medicine and surgery was going his rounds when Dyer entered the ward, and had him conveyed to a small darkened chamber, where at the close of a prolonged inspection he warned him that it would be necessary to remove the eye. "All the beds in the Eye ward are full, and you cannot be accommodated there; but they are taking on in the Roderick ward below, and as you will be out by the end of a week, we can put you among the surgical cases. Don't distress yourself about the eye; the other is sound and healthy, and you will be able to get on with only one eye as well as Nelson." Applying something to relieve the pain, he sent him into the Eye ward, telling him that he had better remain there for the present. The Eye ward of the General Hospital was not a "bandaged" one, but remarkably cheerful. It contained thirty beds, disposed in two rows, one row subdivided by the fireplace, the other by a large table decorated with flowers in vases or growing in pots, which took off one's attention from the dressing tins placed upon it. The dark green walls were relieved by coloured pictures from the *Graphic* and *Illustrated London News*, and the sweet singing of a linnet prevented the patients from being depressed by the monotony of sullen silence. Only a few of the patients were in bed. The rest were sitting or standing about, discussing the contents of a newspaper which a patient with eyes nearly cured was reading aloud to a group. Near the fire, two lads, each with an eye bandaged, were playing chess.

AMUSING THEMSELVES IN THE EYE WARD.

A nurse conducted Dyer to a seat near a window overlooking a crowded street, and next to a man lying on a bed with both eyes shaded. Asking Dyer what he was suffering from, he went on to talk about his own case, saying that he had been in the ward for a month owing to injuries received during an accidental explosion of gunpowder. For three weeks of this time both eyes had been bandaged, and he said that he should have been tormented out of his life by anxiety and "nothing to do," but for the amusement he derived and imparted to one or two others by keeping his mind employed with a celebrated system of memory. Having recently learnt it, he was able to repeat in rotation, after another patient had described all the articles in the room, the whole at a stroke; then he recited page after page of the books he heard being read, and by these and other exploits made himself quite a hero. He astonished Dyer by getting him to repeat the names of all the men and foremen at Dudgeon's he could remember. "When I'd done," related Dyer, describing the event afterwards, "he said, 'Now start again and repeat the lot in the same order.' Of course I couldn't, for I didn't know whether I'd put Brown first or Robinson, upon which I'm blest if he didn't gabble the whole lot off in a string, just as I'd said them, though there were more than two hundred, and I'd only said their names once."

THE RODERICK WARD.

About 6 o'clock Dyer was conducted below to the Roderick ward on the lower floor, and was informed that a bed would be at his disposal there till he left. The ward was double the size of the one he had quitted, and held in all sixty beds, separated into two sets of thirty apiece by a broad lobby, containing the kitchen, scullery, dispensary, lavatory, and other offices of the ward, which virtually rendered it two wards of equal dimensions, since, although the gangway ran straight through it from one end to the other without door or partition, the lobby compressed it a little and narrowed the view from each section. The bare boards of the floor were as white and as clean as any trencher in olden times, and were relieved in colour by the red counterpanes on the unvalanced beds, of which there were fourteen on the fireplace side and fifteen on the other. At the back of each bed were blue cotton curtains, so suspended on a half hoop bar as to move easily round and partly enclose the bed, affording the patient privacy if needed, and enabling him to screen himself from the rest of the ward if undesirous of looking out upon that little world of suffering. Suspended from this bar, also, was a sheet of blue paper, foolscap size, containing the name and disease of the patient below, and

[1] For the sake of giving greater weight to the facts in this narrative, the whole of the statistics of the General Hospital are taken from the latest data obtainable at the London Hospital, Whitechapel, the largest of the metropolitan hospitals, having over 700 beds. To have adopted fancy figures, worked out from the data of all the hospitals, would have been to vitiate the value of the statistics; hence, without any intention of invidiously treating the rest, the London Hospital has been selected, being the largest, as the one to furnish the statistics, while the general features of the General Hospital are taken from all the principal hospitals, strict attention being paid to keeping the description well within the mark, and rendering it a practical matter-of-fact account, rather than a picture of the ideal.

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particulars as to his treatment and diet. Behind the bed the buff-coloured wall was adorned by rows of beautiful engravings and chromo-lithographs, and at the end of Dyer's section there was a magnificent oil-painting, "Joseph revealing himself to his Brethren," the munificent gift of a benevolent R.A. Beneath this a set of suspending shelves contained a library of forty volumes, the lowest shelf partly hidden by a number of beautiful ferns on a table. A little to the side, singing in the window, was a mule canary, and not far from the warbler was an aquarium full of goldfish, placed in a window recess. Between each bed was a pretty white pine locker, on noiseless wheels, with a cupboard in front for any articles the patient might require to stow away, and a rack behind for his towel and medicine.

THE PATIENTS AND THEIR NURSES.

Expecting to hear groans and lamentations in a surgical ward, Dyer was surprised at the calmness prevailing. Doubtless pain existed in most of the beds, or else that discomfort arising from long lying in one position which is akin to pain; but, generally speaking, the bandaged heads and arms protruding outside the counterpane, and the legs in splints buried beneath it, were quiet enough, and the outward expression of bodily wretchedness was chiefly confined to a twitching of the face, or a slight movement of the bedclothes. There is as much manliness and fortitude displayed in bearing pain in the ward of a hospital as on the field of battle. Dyer soon discovered that the female attendants in the ward, in their cool print dresses and white aprons and dainty white caps, were divided into nurses and probationers—the latter apprentices to the noble craft of nursing; and that supervising both was a Sister, distinguishable from the rest only by long lappets to her cap and by an air of responsibility and authority. Above the probationers, nurses, and sister, was the matron, a buxom lady, with but a slight variation in dress to mark her rank, and who had such a broad bright face, and such a good-humoured smile, that the lowest felt at once at ease in her courteous presence. Her authority was maintained by just the faintest firmness of tone, which never varied, except to level a short, cutting, indignant reproach at any probationer or nurse unusually remiss in her duty. It was not often that this was the case, so firm and vigilant was the sister, and its rarity in the Roderick ward was a matter of frequent commendation on the part of the matron.

SISTER AGATHA.

The sister was young and of attractive appearance, and had entered the hospital as a probationer, working her way up to her present position. She was deeply spiritual, and with that happy unconsciousness of her piety which has so rare a charm in women who devote themselves heart and soul to any stirring sacred mission. In the whole hospital there was no hooded or black-robed devotee of any religious nursing order, and if the rest of the sisters were as devout as Sister Agatha there could have been no need for them. It was Sister Agatha who read the prayers in the ward night and morning, kneeling at a prayer-desk and reading two short prayers in a clear and sonorous voice, then singing, without referring to any music-book, two or three verses of a favourite hymn. The prayer services were obligatory in all the wards; but the singing was a specialty of the Roderick, and when the sun shone in upon the ward and Sister Agatha was singing "Jesus, lover of my soul," in the sweetest of voices, Tom Dyer, the mechanic, fancied that the mule canary listened in prayerful sympathy, and that the gold fish ceased their placid swimming till she had done.

THE WARD AT NIGHT.

At 8 o'clock the gas was turned down, and the ward subsided into quietness for the night. For Dyer there was very little sleep at first. He was in a fright, as you and I would have been, at the coming operation. Then there were thoughts about the future that were not of the brightest—"who would take on a one-eyed chap when even two-eyed mechanics were at a discount?" Afterwards the empty bed at the side worried him: had anybody just died in it? would he himself die? would he be awakened at night by tramping men bringing in, as an occupant, some victim, like himself, of an accident? When a night nurse hurried along the ward he imagined [illegible] body must be dying, and the moans of a poor fellow [illegible] of the ward—a bird-fancier, whose [illegible] by a cat—filled him with feelings of [illegible] when the house-surgeon [illegible] something to alleviate the man's sufferings. At last he fell asleep, and did not awake the next morning until the night nurses were gone, and the probationers were taking round the 7 o'clock breakfast of cocoa, and tea, and other nourishment, varying in individual cases, to the different patients. As he was to be chloroformed at 10 o'clock, the surgeon had left orders that he was to take no breakfast in the morning. While the rest of the patients were having theirs, the scrubbers came to wash the floor, and afterwards there was a general cleaning and tidying of the ward till half-past 9 o'clock, when he dressed, and a ward clerk—a very good-natured young fellow, although a regular "masher" in dress—conducted him upstairs to the Eye ward. He did his best to raise Dyer's spirits. Thanks to his friendly words, Dyer entered the waiting-room alongside the operating theatre with a firm and confident tread, and quietly bided the time for the operation.

DYER UNDER CHLOROFORM.

There were several minor operations before Dyer came in and stretched himself full length on the couch, while the assistant-surgeon promptly prepared him for the operation. With equal quickness the house-surgeon placed a square piece of lint in front of the patient's nose, about two inches from it, and began dropping chloroform from a small ounce bottle. This he increased, until the lint became quite saturated; then he removed it, and placed firmly over Dyer's nose a Clover's inhaler, from the bag attached to which the patient drew in deep inspirations of ether. At the outset Dyer manifested a deal of muscular excitement, but gradually it passed off, and he appeared to fall into an uneasy slumber. The house-surgeon on one side kept the inhaler fixed to his nose, watching his face intently, with his finger on his pulse; while the assistant on the other side held the electric light close to the wounded eye, from which the bandage had been removed. "Ready?" demanded the operator. "Ready," replied the house-surgeon. Deftly inserting an extender in the eyelid, which extended the size of the orifice, the operation commenced. At last, after careful dissection, he severed the eye from its connexions, and holding it out on the palm of his hand for the spectators to look at, observed, "The wound went right through; there was no hope for it."

3560 EYE OPERATIONS IN ONE YEAR.

"And so this is the patient who had his eye taken out," remarked, a few minutes later, an old clergyman visitor to the house-surgeon, as they both looked in the doorway of a dark room, where Dyer still lay stretched out on the couch, with a nurse sitting alongside him to watch his recovery from the chloroform. "Who are you looking at?" suddenly demanded Dyer, starting up. "I tell you I'm not going to have my eye out this morning." The nurse pressed him down quietly, and the house-surgeon, remarking that Dyer was "just coming to," led him into the operating theatre, where he showed him the electric light, and explained the uses of the various instruments. "What we do," he said, in course of conversation, "is on a small scale compared with a regular Eye hospital. I was at the London Ophthalmic Hospital, Moorfields, for several years. There they perform, on an average, nearly ten operations regularly every day—3560 in the course of a year. The attendances of out-patients amount to nearly 125,000 a year. The 100 beds there are always full, and they pass through the hospital every year over 2000 patients!" "Dear me!" exclaimed the clergyman. "Yes, and they not only cure poor people's eyes for nothing, but they give away spectacles to such as seamstresses, poor working men, and others, who cannot afford them. On an average, each pair of spectacles costs the hospital 7*s.* 6*d.*, and they gave away nearly £200 worth last year. Then, to those who *can* afford them, they try their eyes, and sell them the spectacles at almost cost price, so that a working man can be sure that he has got the right sort, and is not cheated with inferior spectacles. In a smaller way we do the same thing here, the Samaritan Fund providing for the gift of spectacles to very poor people." "What a very good idea," said the clergyman. "I was thinking of preaching a sermon on the case of the poor man who was married at my church, and I think I shall invite special donations on behalf of this fund." "I thank you, we shall be very grateful. A Samaritan fund appeals to every Christian."

THE EYE SURGEON WHO ENDURES MUCH.

"Now, tell me," demanded the clergyman, "don't you find it trying, having to pass 3560 operations through

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our hands every year?—there must have been a great train on the nervous system." Remembering that during Dyer's operation the house-surgeon was on his knees quarter of an hour, with his head and eyes within few inches of the operation, such intense application, continued day after day throughout the year, while ving all the while amidst the dejected sufferers of eye iseases, must involve a strain appalling to those whose ives are spent in more pleasant places. "There was a train," the surgeon admitted, and then he went on to escribe the case of a house-surgeon in a great London eye ospital, who, while working thus daily for others, was imself attacked by an incurable eye disease, which in ime—a year or two ago—made him blind. Still, in spite f this terrible affliction, he kept at his post to the last, elping cheerfully to save the sight of others while his own vas gradually perishing. What an example to those who would stay the course of the universe if they happen to ave a cold, or rail at Providence if afflicted for a couple of days ith a pimple! Working on, while growing blind, to the ast! The annals of every London hospital are full of imilar cases of heroism.

AFTER THE OPERATION.

As soon as he had recovered, a little nourishment was given o Dyer, and having received the congratulations of the man ith shaded eyes, who, to please him, recited afresh the names f the two hundred men at Dudgeon's, he was conveyed gain below to the Roderick ward. The pain arising from he wounded eye had departed with it, and, beyond a slight eeling of soreness, there was nothing now to trouble him. t the recommendation of Sister Agatha he had a nap in ed, and awoke about mid-day in a tolerable mood for his inner. This was served round to each patient by the probationers and nurses, who flitted right and left from the obby, and soon supplied each sufferer with his ordinary llowance of roast meat, vegetables, and milk pudding, ogether with such stimulants as had been specially ordered y the doctor. The ordinary diet was varied by fish, chops nd steaks, mutton-broth or beef-tea, and other articles; ut in every case it was served up hot and clean, and in a anner to please the most fastidious invalid. After dinner yer lay on his bed for hours in that happy, peaceful conition which commonly follows a severe operation if the atient knows that the whole of the worst is behind him, nd that in front lies swift and certain recovery. Peace fter pain—is there any other peace so beatific as this? yer felt as though he had had a fresh lease of happy life onferred upon him, and was encouraged to hope that his peedy recovery might be quickly followed by fresh emloyment. If Nelson had got on with only one eye, why night not he? At any rate, the wounded eye would trouble im no longer, and in two or three days he would be discharged from the ward, and in the meanwhile it was very leasant to lie there on his back, lazily watching what was oing on. At the worst, the bright, sunny ward was a leasant contrast to the black and gloomy workshop at udgeon's.

THE DEATH OF THE BIRD-FANCIER.

Among other things, he noticed in the afternoon a contant movement towards the bird-fancier's bed at the remote nd of the ward. In the morning a piece of felting had een unrolled along the length of the passage-way between he beds, to deaden the sound of the footsteps on the bare hite floor. The house-surgeon looked in several times; ister Agatha kept her gaze constantly in the direction of he bed. As the day wore on, and the sun shone brightly nto the ward, the flowers seemed to grow fresher and more eautiful, the pictures on the wall appeared full of animaion—one almost expected to hear the British soldiers at uatre Bras above Dyer's bed shout at the rushing enemy—hile the mule canary piped its song shrilly. Thinking the oise might worry the sufferer, Sister Agatha ordered it to e removed to another ward, but a feeble sign from the bed rrested the departure of the songster, and, apparently by equest, the cage was placed on a locker alongside the bed, rom which a hand was presently extended caressingly. Later on the nurse enfolded the bed with a couple of crimson creens, behind which afterwards disappeared the Chaplain nd a rough-headed middle-aged man in a coarse grey weed suit, who followed the former awkwardly, with a ubdued manner evidently foreign to his habitual bearing. 'It's the bird-fancier who was brought in last weak—run over by a van," said a probationer to Dyer, in reply to an inquiry he put while she was administering to him his medicine. "He is not so well to-day, and his mate is visiting him." "Not so well to-day" is a quiet hospital way of saying that a patient is sinking.

SISTER AGATHA SINGS "ROCK OF AGES."

Tea-time came and passed. The probationers tidied up the ward for the night. Sister Agatha said prayers in the usual course, and Dyer thought that he had never heard anyone sing with such tremulous sweetness "Rock of Ages, cleft for me." She sang softly that night, but every word could be heard in the remotest part of the ward. The nurses and probationers were moved to tears; the matron, who had entered the ward at the second verse, stood motionless and pale by the door; the "masher" ward clerk fidgeted into a shadowy part of the lobby to conceal his discomposure; while, altogether unconscious of the effect she was producing, and thinking only of the dying bird-fancier, Sister Agatha sang on, with a voice trembling with emotion, to the final verse—

> "While I draw my fleeting breath,
> When my eyelids close in death,
> When I soar through tracts unknown,
> See Thee on Thy Judgment Throne,—
> Rock of Ages, cleft for me,
> Let me hide myself in Thee."

As she finished, the mule canary, thrilled by the deep silence that followed, burst afresh into song.

THE BIRD-FANCIER'S BEQUEST.

While the hospital helpers were yet rolling the mortal remains of the bird-fancier along the dim and dismal basement passage to the mortuary, the matron, in passing Dyer's bed, whispered to a nurse, "What do you think the poor man did this afternoon? He bequeathed the whole of his birds to the hospital." The whole of his pets! They were as much to him, though he lived in a Whitechapel slum, as the choicest art treasures are to a connoisseur dwelling in the most sumptuous residence in Kensington. All he loved he gave to the hospital, to gladden and cheer the patients, and as a dying expression of gratitude. In its way, his bequest was as superb as the gift of a gallery of pictures by a dying millionaire.

VISITING DAY.

The next day was Sunday. In the afternoon the hospital was flooded by visitors. The moment 3 o'clock had struck they poured up the staircases and along the corridors to the various wards, carrying flowers, toys, and brown-paper packets for the patients. Before long, in every ward the brightness and lightness of the place was broken by black patches—groups of black-dressed people standing by or sitting on the beds; for black is not simply the hue of Sabbatarian decorum and respectability with the toiling masses, but is considered *de rigueur* to the uninitiated in visiting a hospital. Forming their impression of the inside of a hospital from what they see of the gloomy exterior, they prepare themselves for a sort of prison, supervised by sour-faced nurses, and officials ready to pounce upon and suppress any expression of light-heartedness in the shape of a laughing face or highly coloured clothing. It is quite a revelation to them to find gaiety encouraged, brightness made an art by the matron and nurses, and sombre respectability cuttingly disregarded.

THE PATIENTS' HOLIDAY.

Visiting day is the patients' holiday, and it is impossible to go through the wards while the friends are hanging about the beds without feeling that it is enjoyed far more thoroughly than many a holiday outside. The two hours allowed for the carnival are none too long for the eager and animated imparting of the latest family news, and for the discussion of the patient's particular disease or hurt, and the mode of life in the hospital. Here and there a bed may be passed, silent and unvisited. Perhaps the patient has no friends; perhaps they are too poor to visit the sufferer often. In some cases a patient will, if of a cheerful disposition, extract amusement from watching other patients' friends, some of whom, if they have been frequent visitors at the ward, may also, out of good nature and desire to cheer, come and pass a word or two. Other patients, rendered peevish by pain, and naturally of a lacrymose disposition, openly display their disappointment at being left deserted and solitary amidst so much animation; and it is here that a sister or a nurse, flitting about a ward, may render the service of a good angel in pausing for a few minutes to cheer the sufferer by a timely chat.

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VISITING THE UNVISITED.

In some of our London hospitals there is a touching tradition of a great-hearted man, who used to devote his time to visiting the unvisited patients. Unostentatiously he passed through the wards, and whenever he saw a solitary patient who seemed sad and forlorn, he would sit down and talk till he had brightened up the sufferer; and then, leaving a newspaper, or a magazine, or a book behind to continue his cheering influence after he was gone, he would pass on to someone else in want of consolation. He never "talked religion," although his conversation showed him to possess deep spiritual feeling, and he never gave away tracts; his equipment consisting of a kind tongue and a bundle of Sunday magazines, or, if on week-days, some evening newspapers, together with a reserve of a few new books, which he carried in his pockets. In many of the hospitals even his name was unknown. He called himself, jokingly, Mr. Jones, or Smith, or Robinson, when requested to give a name, and repressed further inquiries by a trifling contribution to the hospital funds. Who he really was, and where he came from, remained unknown to the end. The officials he rarely talked to if he could avoid it, and as soon as his mission was understood they allowed him to roam through the wards unmolested. For nearly two years his visits regularly lasted, and then suddenly ceased, probably through the death of this kind-hearted, unassuming Samaritan. His mission died with him, but may it not have been more glorious while it lasted than many a Press-puffed pretentious piece of charity?

A DEPUTATION FROM DUDGEON'S.

Dyer was not among the unlucky ones. He had not only his wife and daughter to cheer him, but also that good-for-nothing Jack Brown, who, with another man and a foreman, appeared as delegates from Dudgeon's to visit him on behalf of his fellow-workmen. These rough and sturdy fellows, who shouted lustily enough their workshop jokes, and had made their voices heard at many a political meeting at Poplar, fidgeted about by the bedside, and kept talking about subjects different from that they had come expressly about, until Mrs. Dyer, after many hints and nudges, goaded Jack Brown into saying, "Well, Dyer, old chap, we come to tell you——." Then suddenly stopping, he said, "Here, missis, you must tell him the rest." Stooping to kiss him, his wife ejaculated tearfully that the day before, hearing he had lost his eye, the men at the works had started a subscription, which had resulted in £9 12*s.* 4*d.* being collected on his behalf. "It is not much," said the foreman, apologetically, "but it will keep your mind easy for a few weeks, and then something else may turn up to help you along."

PRESENTS FOR THE WARDS.

After a little talk the men began admiring the ward. "Roderick" was quite brilliant that afternoon. Most of the visitors had brought bunches of flowers, and several of them flowers in pots. The gold fish maintained a constant chase after one another in the aquarium, stimulated by the fountain playing blithely overhead, while the mule canary trilled in the corner, provoking many a glance of admiration from the patients' friends. "If I had thought they'd been acceptable," said the foreman, "I would have invested in a flower or two for the ward. Yesterday, outside Dudgeon's gate, they were selling big flowering geraniums to the men at fourpence a pot, and some fuchsias, like a tree—as much as you could carry home—for ninepence or a shilling. One of those would have looked well in the ward, if one had known it." "If one had known it," repeated the Chaplain, who, in passing through "Roderick," had seen the men casting admiring glances along the ward and had overheard the words of the foreman. "You see now how much good remains undone through ignorance. The hospital is always thinking of you, and preparing for you; you may be struck down at any moment and be brought here. Now, how often do you think, in return, of the hospital?"

GOOD ADVICE FOR EVERYONE.

"To tell the truth," said the foreman, "I've never thought about it at all. I hope I never may have to attend one." "I hope so too," rejoined the chaplain, "for your sake; but you're not sure. An accident occurs only now and again, you may say, but the number soon mounts up. At this hospital alone we dealt with over 8000 last year. Here are the figures—1572 fractures, 3491 wounds, 1126 contusions, 185 sprains, 171 dislocations, 761 burns and scalds, 94 cases of hernia, 34 dog-bites, 107 cases of hæmorrhage, 7[illegible] cases of retention, 34 of foreign bodies in the throat [illegible] 860 cases of inflammation from injuries, and about 2[illegible] various, making a total of 8707. Of that number, 2000 all [illegible] 8 were brought into the hospital, and provided with [illegible] same comfort and care as your friend lying there. Is [illegible] that a tremendous number for a single hospital? Yet th[illegible] is the way the hospitals keep working for you throug[illegible] the year in every district in London—not all to the sa[illegible] extent as this, but invariably working to the full stretch [illegible] their powers."

£50,000 A YEAR TO MAKE UP.

"It must cost something to keep them all going," said t[illegible] foreman. "Yes, and being mainly dependent on voluntar[illegible] subscriptions, the hospitals have a hard struggle to r[illegible] along. Our fixed income is only £15,000 a year, and we ha[illegible] to make up nearly £50,000 a year." "I suppose you ge[illegible] good many legacies, sir," observed the foreman. "Not [illegible] many as the wealth of London might lead you to think; but you must know that it is not the £100 bequests that keep a hospital going—it is the sixpences, [illegible] shillings, and the half-crowns of the general publi[illegible] together with the guineas of annual subscribers. Fri[illegible] you who toil we look for an occasional subscription, not [illegible] a matter of charity, but out of common fairness. When yo[illegible] take a ticket for a long journey, the railway clerk often sa[illegible] to you, 'Will you insure yourself against accidents? For [illegible] penny or twopence you can insure so much a week in t[illegible] event of being hurt.' Now, each in-patient costs, on a[illegible] average, nearly 3*s.* 9*d.* a day, or 26*s.* a week, including the maintenance of the hospital. We're spending a[illegible] that rate on your friend lying there, and we may b[illegible] spending it on you to-morrow or some future time. Yo[illegible] are ready enough to spend twopence to insure the recei[illegible] of a few shillings a week in going on a single long journe[illegible] Now, here is a sum of 26*s.* a week which the hospi[illegible] stands committed to spend on you if you are brou[illegible] into its wards injured and helpless. Don't you think, therefore, that in common fairness you ought to pa[illegible] something in the shape of insurance money in return? A shilling a year on Hospital Sunday, is surely not too mu[illegible] for every working man to subscribe to keep up hospita[illegible] which are ready to spend nearly £70 a year to cure him if [illegible] is brought into their wards injured or ill. Why, my go[illegible] friends, if you were on a platform, and a man fell under t[illegible] carriages and was terribly mangled, and another man, burs[illegible] ing through the crowd as they bore him away, were t[illegible] exclaim, 'Here is a purse with £20; spend all on him t[illegible] cure him; and if he wants more, there is a blank cheque f[illegible] the remainder.' If a man did that, the crowd would che[illegible] him out of the station. Yet the hospital is doing that ever[illegible] day, and instead of cheering, the public, with sighs, fill [illegible] the bags on Hospital Sunday with coppers and threepenny pieces. Isn't that so? The hospital gives ungrudging a[illegible] all the year round—365 days; the public find it har[illegible] to give grudgingly only once—on Hospital Sunday."

NOT CHARITY, BUT SELF-INTEREST.

Observing that the group looked a little abashed, the chaplain placed his hand good-humouredly on the foreman's shoulder and exclaimed, "Well, if I go on at this rate, you will complain that I am preaching a sermon. You came here to cheer up your friend, not to be lectured; so don't let me spoil your chat any further. But remember this, when you are asked to subscribe to the Hospital Sunday Fund, don't say to yourself, 'I am giving a shilling out of charity,' but rather, 'I am giving a shilling to ensure that, if I get injured during the year, I shall find awaiting me a well-organised hospital, a comfortable ward, a soft bed, the kindest of nurses and doctors, and a managing staff determined to begrudge no expense, and to do the utmost in their power to make a whole man of me again, and restore me in good health to my family.' That's the view I want you to take of it—not charity, but self-interest, and common fairness between man and man. Good-bye!" Shaking hands with them, he passed on, but returned before he had gone many steps, and said to the foreman, "That was a very kind idea of yours wishing to bring a big fuchsia to the hospital. Now, some of these days, when you can spare a nice potted flower from your garden, and are passing this way, it would be in this case charity, not self-interest, to leave it at the lodge addressed to the house governor, to be placed in one of the wards. Look how bright the kindness of people has made this ward; the humblest can help, with a picture or a

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flower, to keep it bright and cheerful for our sufferers." "Ay, ay, sir, I'll bring a beauty next Sunday," exclaimed the foreman earnestly. "Tom won't be here, then," said Mrs. Dyer, as the Chaplain walked away. "He's to be out on Tuesday or Wednesday." "Then I tell you what, old man," declared the foreman, addressing Tom Dyer, "you and I will come together if the missis will let us, and we'll put on the table a couple of big fuchsias that will make it look like a flower-show."

HE WASN'T IN "LLOYD'S."

As the Chaplain proceeded along the ward, a patient in one of the beds angrily tore a newspaper in halves and threw it on the floor. Picking it up, he said to the man, "You seem annoyed with something in this paper?" "No, sir, it's not what's in it but what isn't in it that annoys me. I fell from a scaffold forty feet yesterday and broke a leg, and they haven't put it in 'yesterday's summary,' yet they've been and gone and put in another man who only fell twenty feet and only broke his collar-bone. I've taken in *Lloyd's* regular every Sunday for twenty years. Do you think that's fair?" "Well, I don't know," replied the Chaplain, good-humouredly, "but I don't think the paper's to blame. If you'll let me have it, I'll patch it up and send it back to the ward to-morrow—the other patients might like to read it. Good afternoon—I see I am wanted at the end." *Lloyd's* publishes every Sunday a column of horrors, detailing the accidents of the day before. It is not very agreeable reading, but the masses like it, and when a regular reader gets injured on a Saturday he is often, if sufficiently recovered, as impatient to see if his name is in "yesterday's summary" as a fashionable lady is to see the notice of her party or her grand dinner in the columns of the *Morning Post*.

SMUGGLING BRANDY INTO THE WARD.

The reason the Chaplain hurried away was because his roving eye had detected a visitor surreptitiously slipping a bottle under the counterpane of a bed at the end of the ward. The introduction of liquor into the wards of a hospital is strictly prohibited, and in the event of detection the visitor is immediately expelled, and the repetition of the offence leads to the expulsion of the patient if in a removable condition. In spite of this necessary rigour, patients' friends, from a mistaken feeling of kindness, persist in trying to evade the regulation, and it was to prevent any trouble occurring that the Chaplain himself took the present case in hand. Walking carelessly up to the bed, and placing himself between the visitor and the patient, he made a few commonplace remarks, and then, passing his hand casually across the counterpane as if to smooth it, exposed one end of the flask to the discomfited couple. Covering it over again, he said to the patient's friend, "What is it—brandy or whisky?" "Brandy. I——."

A DONATION IN KIND.

"Quite so, quite so; I don't want any explanation," interposed the Chaplain, fearing the man's excuses might result in a strain on the truth. "It was kindly feeling that made you bring that into the place, and there need be no disguise about the matter. The hospital prefers, if possible, to receive donations in cash, but it does not object to presents in kind; and if you will, as I know you will, present the flask of brandy to the Sister, she will be very glad to add it to the stores of the hospital. In this place we include brandy with the drugs, and the doctor stints no one spirits, wine, or beer, if he considers stimulants essential. Last year we spent over £400 on spirits, over £100 on wine, £350 on beer, and £2700 on milk. A part of the beer goes as 'diet,' the rest is issued as medicine; but the whole of the liquor is consumed by the patients only. So you see we are not stingy to the inmates. And having so much to buy, we are always grateful when a rich man bequeaths us his wine-cellar for the use of the patients, or when we get even what you might think the trifling donation of a flask of spirits. This, I suppose," removing the flask from its place and measuring its contents with a critical look, "cost a shilling. Now, tell me, why is it that people like you hesitate to give a shilling to hospitals once a year, and yet do not mind spending a shilling on a present of this kind when you visit a patient?"

CONVERTING AN EVIL-DOER INTO A BENEFACTOR.

Beckoning to Sister Agatha as she passed, he placed the flask in her hands, and said, "This kind person did not know what to bring to cheer his comrade in bed, and made a desperate guess at brandy, which is supplied by the hospital. He hopes you will kindly look on it as a donation, and I think I am correct in suggesting that if he wanted to bring anything another time, you would be very glad of an illustrated paper, or a book, or a set of draughts, to cheer up his friend during his stay in this place." "Most certainly," replied Sister Agatha, with a smile. "Many thanks for this." And as she went off to her room with the confiscated flask, the Chaplain continued, with a pleasant smile, "It is so easy to impart pleasure with a little thoughtfulness. Now your shilling, handed to the Sister, would have kept your friend regularly supplied with the daily paper for a fortnight, and when he had finished with it every day, it would have given pleasure in the afternoon and evening to the other patients in the ward. How much more pleasure that would have been than a few nips of brandy, which might have thrown your friend back, and perhaps killed him. But never mind, you meant well, and if you will take my advice, next time you wish to cheer a friend in hospital consult the Sister, and you will be astonished at her wonderful knowledge of the ways to do it, at a far less cost than your flask of brandy." Having thus put them at their ease, the Chaplain nodded a good-humoured farewell, and quitted the ward.

THE EMPTY BED IS FILLED.

Dyer fell asleep directly after supper, and he did not break clear of the doze until midnight. He then observed, while tossing about, trying to get asleep again, that the vacant bed by his side had at last found an occupant. Throughout the night the new-comer was constantly visited by the nurse on duty, and during one of the later inspections towards the morning, Dyer overheard her say to a probationer that the sleeping man had met with an accident on the Underground Railway the night before, having slipped between the train and the platform while alighting from the carriage, and sustained a fracture of the arm and some bruises. One of the latter had evidently been accompanied by a laceration or a cut, as the patient's right cheek was striped with a piece of plaster. Twisting himself round, in order to bring his remaining eye to bear more completely on his neighbour, Dyer started, stared, and ejaculated involuntarily, "Why, I'm blest if it isn't the old governor!" "Who?" demanded the nurse. "What's his name?" exclaimed Dyer, excitedly, in reply. "Dudgeon," answered the nurse, examining the invalid's passport, suspended over his head.

DIVES IN THE RODERICK WARD.

"I thought I wasn't mistaken," said Dyer; "that's my old master—Dudgeon—who used to own Dudgeon's Works and sold it to a company. What's he doing here? He was in Italy when we heard from him last. Well, I *am* blest, to think——" "Hush!" interposed the nurse; "you will wake him if you talk too loud. Just tell me quietly who he is, and we'll communicate with his friends. We knew he was a gentleman by his clothing when he was brought here last night, but he had no card-case in his pocket and we took his name from his linen." After that, you may be sure Dyer had very little sleep. It was a revelation to him to find that the rich found their way into hospitals as well as the poor. "I thought they only subscribed to them for us chaps, he said to himself; "but it seems that they want the hospital at times as much as we do." Then he tried to imagine what Dudgeon would say and do when he woke up, and found himself lying in bed a few yards from one of his old workmen, and whether the liveried butler and footmen would be allowed to come and wait upon him in the ward, and what the hospital generally would do when it found that it had such a distinguished man as Dudgeon within its walls. "Why, if he liked," whispered Dyer to the nurse, "he could keep this whole place going himself, and still have enough a year to live on in Mortgramit Square!"

NEARLY DECAPITATED ON THE RAILWAY.

When Sister Agatha put away the prayer-book after morning prayers on the library shelf, alongside "King's Solomon's Mines" and "Treasure Island," and returned in the direction of her room, Dudgeon beckoned to her, and said, "How very nice! Kindly thank the nurses who took charge of me last night; and accept my own thanks for the hymn you sang so sweetly. More than anyone, I should be grateful this morning for my marvellous escape last night." "Was it so remarkable as that?" asked Sister Agatha. "Quite astonishing. I thought the train had stopped, and fell as I alighted, first on the platform and then between

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a couple of carriages. Somehow my head got on the line and the wheel rolled on till it pinned the nape to the metal; then it stopped; an inch more and I must have been decapitated. As it was, I was jammed so tight between the wheel and the rail that they had some trouble in getting my head out. The suspense was awful, and I can just remember being placed on the platform, and then must have become insensible, for my arm was being put in a splint by your surgeon when I came to again." "God was very merciful!" "And man merciful too; for when I was brought here everything was lying ready to receive me, and I was examined, mended, and put to bed as promptly and with as much kindness and consideration as my own family could have shown me. I presume you treat all alike in this hospital—the patients in this ward were all treated like me?" "All of them. In the General Hospital no difference is made between rich and poor; and the coalheaver who is brought crushed and bleeding is treated just the same as any gentleman knocked down by a cab. We make no difference between master and man; but of that you can judge for yourself. In the next bed is one of your own workmen, who has been here several days. He will be the best authority in this matter. But you had better remain quiet until the surgeon comes round, and I would advise no more talking till then. Is there anything I can do for you in the meantime?" "Nothing, except to request the House-Governor to pay me a visit at his convenience."

ARE WE NOT ALL LIKE DUDGEON?

When the House-Governor came up later, Dudgeon said to him, "I am much obliged to you for your kindness in receiving me here last night, and putting this left arm of mine into gear. I certainly never thought I should some day spend a night in a hospital. That's an Irish way of putting it, but you know what I mean." "Most people say the same thing, but none the less I hope you are not disenchanted." "Disenchanted! My dear sir, it would be shocking ingratitude to find fault with anything in this place, especially as I can't remember ever contributing anything to its funds. Of course, that omission will have to be rectified now we can talk about that to-morrow. What I want you to be so good to do at present is, to send a messenger to 15, Mortgramit Square, and tell my valet to come here. Manage it so that no alarm is created, and nobody else comes with him. My wife and family do not arrive home till to-morrow night; and there is no need of acquainting anyone else with the accident." "Except that it is in the *Morning Post* this morning, and other daily papers." "Confound the *Morning Post*. Who put it in?" "I don't know; reporters are always prowling about, and picking up news." "Well, you'll have to bear the brunt. I am not going to see anyone to-day or to-morrow till I go home, so you must send them away. Confound the *Post*, to alarm my friends like that! I won't take it in any more." "People are hard to please," said Sister Agatha, smiling. "Here, yesterday, in this ward, a patient vowed he wouldn't take in *Lloyd's* any more, because his accident wasn't reported; and to-day another vows he won't take in the *Post* any more, because his accident is reported. It must be rather difficult for the Press to please everybody." They all laughed at this, and Dudgeon as good-humouredly as the rest. Observing then that Dyer was dressing, the surgeon having advised him to get up, Dudgeon asked Sister Agatha to tell him to come to him.

MASTER AND MAN.

"Well, my man," commenced Dudgeon, your face is familiar to me? Where were you employed in my works?" "In the fitting shop; my father, John Dyer, was there as leading hand, twenty years before me." "I remember him well. A thoroughly honest man, who did his work well down to the day of his death. And you are his son, eh? Well, and how did you meet with your accident?" At the end of Dyer's narrative, Dudgeon said, "I had heard they were upsetting the Works and discharging the old hands without mercy, and had come back to set masters to rights. I was to have paid the Works a first visit this morning. Being the largest shareholder, besides a director, I have still a voice in the concern, and when I get well I will see what can be done for you. A man who has worked all his life for a firm, as well as his father, has a claim for consideration which a master cannot ignore if a company can, particularly if he loses his eye at his work. So set your mind at rest, the future, and tell me how they have treated you in the hospital." "Me? They've treated me well enough. It's you, sir, I'm afraid they haven't treated with enough distinction. The fact is, they don't realise who you are." "Don't they?" said Dudgeon, good-humouredly, amused at the mechanic's anxiety on his behalf. "Considering the shabby way I treated them when I was well, I think they have heaped coals of fire upon my head sufficiently. To introduce distinctions would be to disorganise the ward. Observe how smoothly everything works in this place. All these poor fellows are more in want of attention than myself. I am leaving to-morrow. To me nothing is more pleasing than to see that social equality prevails in a ward, and that suffering is the only distinction that invites additional deference."

A REGULAR PIECE OF ENGINEERING.

Disabused of his idea that a slight had been cast upon Dudgeon, Dyer the mechanic launched out in praises of the institution. "Everything is clean and sweet, and seems to go like clockwork. They bring a man in dreadfully injured; the surgeon takes a sight at him, sir, as you or I would at a bit of iron, and then they all go to work washing and cleaning, coiling him up here, and padding him there, and then they fix his limbs in iron frames or wooden splints, and when at last they stow him under the sheets he's a regular piece of engineering. They take in, on an average, twenty-four accidents a day, Sunday and week-day, all the year round, and three of those are broken bones that need setting. Sometimes, the accidents mount up to sixty a day, and on a frosty night as many as nine broken legs will be brought into the place between midnight and six in the morning. Down below, I heard a man say, they've got a cellar chock-full of splints, and they order them in, sir, by the hundred."

DUDGEON AND DYER INSPECT THE WARD.

The next morning both Dudgeon and Dyer were up betimes, and, after the surgeon's inspection, prepared to leave the ward. While waiting for the House-Governor to arrive to show them over the building, he having willingly consented the night before, the two made a more thorough inspection of the ward, Sister Agatha acting as guide. There were the different kinds of beds for mitigating the rigour of lying long in one posture; the rests to ease the back or support the feet; the surgical apparatus for severe fractures; the mirrors at the back of the beds on the dark side of the ward to reflect the light on the patient's book or newspaper while reading; the surgical table on noiseless wheels, ready to be quietly rolled to any bedside while dressing or redressing a wound or a fracture; the stores of antiseptic appliances; and the special utensils devised for promoting the patient's comfort, and tiding him over periods of helplessness. Then there were the horizontal flues to point out, sucking away the vitiated atmosphere, and the ventilating apparatus drawing in and warming the fresh air; then the surgeon's druggery—like a miniature doctor's shop—to describe; then the lobby, with its blazing fire and steaming kettle, its huge white table for distributing the patients' food; its rows of plates and dishes, and cheerful array of crockery on the walls; the scullery at the side, with the scullery-maids hard at work; the lifts to bring the food from the kitchen to the ward, and the drugs to the surgeon; and outside the ward the shoot to carry away, at a stroke, all the dirty linen placed in it by the probationers. Finally, in a corner of the ward was the Sister's day-room—quite a little bower of elegance and beauty; no waste of hospital funds on grand and imposing furniture, but an individual lavishing of occasional leisure moments on a thousand and one trifles, which had converted the little square compartment composing the sister's room into a most charming retreat.

A TRIUMPH OF HOSPITAL PROGRESS.

Dudgeon was still making some complimentary remarks about Sister Agatha's sanctum, when the House-Governor appeared at the door. For forty years, he told Dudgeon and Dyer, as they walked away along the corridor, he had lived inside the hospital—first as assistant-secretary, then as secretary, and finally (for fifteen years) in charge of its present duties. He was a man of broad and enlightened views, and to improve his own organisation had directed so much attention to the arrangement and [illegible] of other hospitals that he was quite a mine of knowledge on the subject. While taking them through two or three more of the surgical wards, all more or less [illegible] plans as the Roderick, he had [illegible] saving of life in hospitals which had been brought [illegible]

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the antiseptic methods of a great Professor of Surgery. "When I came here first the average mortality from the amputation cases was 30 per cent.—in some hospitals it was 40,—in spite of all the care and skill we could command at that time. Things were no better when I became House-Governor fifteen years ago. Then came the Professor, with his wonderful ideas of the germ theory of disease, and his ingenious methods of securing the absolute purity of the surfaces of wounds. The moment we adopted his system the mortality began to decrease, and some of the hospitals brought it down last year to 3 per cent.

HEROES AT HOME AS WELL AS ABROAD.

"It seems to me," said Dudgeon, when the House-Governor had finished dilating on the revolution accomplished by this great Professor of Surgery, and the hundreds of thousands of lives saved throughout the world since the hospitals adopted the system, "that a little of the raving bestowed upon the French *savant* might be worthily bestowed at home." "Quite so, and without any prejudice to the Frenchman, whom we can all admire just the same. In 1884 the Queen made the Professor a baronet for the good his discoveries had done, but isn't it a proof of the general lack of appreciation of medical science in this country, that he should not have been elevated at a stroke to the peerage? If ever you come in contact with those who have anything to do with the bestowing of titles" (addressing Dudgeon), "I hope you may have an opportunity of asking this question—Oughtn't a man who by study and hard work saves a hundred thousand lives by a great discovery, to have as much claim to a peerage as a man who by a great campaign kills half as many more?"

THE MEDICAL WARDS.

"Well, now you've seen enough of the surgical wards," he continued, as they quitted the fourth. "Let me now show you the medical ones. There are no essential differences between the two; the arrangements are exactly the same, but you will at once detect the different aspect of the patients. In the surgical wards there is not so much deathly paleness, because, apart from their wounds, the patients are healthy enough when they are brought here." Beyond this Dudgeon and Dyer saw little to note, and having passed through a couple of the men's wards, they proceeded to visit the women's, which were arranged exactly the same, and possessed similar characteristics as to roominess, brightness, and cheerfulness. Everywhere they found the print-dressed, aproned nurses and probationers busily tending the patients, the Sister, scarcely differing from them in attire, directing everything unobtrusively; and everywhere the same easy-working system, indicating the smoothness that comes from constant practice, coupled with careful organisation of details—everywhere an utter absence of officialism, and yet the constant presence of a kindly discipline.

THE CANCER WARD.

"Before going downstairs to the basement, there is one special department I should like to show you," said the House-Governor, "it is specially devoted to cases of cancer. The disease, when it reaches a certain stage, is practically incurable, and for want of room the hospitals have to reject incurable cases. We, however, differ from the rest in having three wards set apart for the reception of these incurable cases, with beds for thirty-five female patients. Twenty years ago the sum of £4000 was given anonymously to fit up a ward, and two other persons have helped to establish two more since. We take the poor creatures in, and we keep them till they die."[2] "Is that usually long?" asked Dudgeon. "Roughly, a year or two; though some remain years in the refuge. Their diet is quite unlimited; anything the physician may order to tempt their appetite, or to alleviate their pain, is obtained at once without question. If we cannot cure, we do our utmost to reduce the pain to a minimum."

A SCENE OF HUMAN MISERY.

Dudgeon was painfully impressed by the refuge. The wards were bright, and arranged the same as the rest, but being small and connected with one another, and containing chairs and tables and couches, as well as the regulation bed, the place had more the aspect of a home. Some of the inmates were up, and reading or sewing; some were sitting in bed; some were buried in their pillows—bandaged arms, or breasts, or the puffy condition of the lower part of the counterpane indicating where the disease had attacked the body. But, except in one or two cases, there were traces of recent or present pain on the pale faces of the women, which Dudgeon could not drive from his memory for many a day; and one poor creature, the whole of whose head and face was bandaged, and who lay back in bed like a whitened mummy, so shocked his sensibilities that he hurried out of the place, and begged the House-Governor to kindly show him no more such sights. "It makes me ill to see such misery."

WILL YOU HELP TO MITIGATE IT?

"Ah," said the House-Governor. "But what about us, who have this anguish brought to our doors every day, and have to send it away unrelieved because our funds are so limited? That is far more shocking. These thirty-five patients are only a sample of the incurable cancer cases of the metropolis. Imagine hundreds of others unrelieved in squalid homes! We have not a single bed to spare for men with cancers." "It is dreadful—really too dreadful. Can't they find a cure for the disease?" "Medical research is doing its utmost, and in this refuge the physicians are always studying and striving to discover a cure. Here you will see the interest the rich have in generously supporting the hospital. Isolated cases in a West-end square cannot have the research brought to bear upon them that is possible in a cancer ward full of poor people, and it may be that in this poor people's ward the discovery may be gradually elaborated which shall save the life of the richest man, or sooth the anguish of his wife and daughter. I hope, sir, you won't think I am talking *at* you, who are rich, and that I mean to pounce on your purse directly; but I want you rich people, as well as this good man here, who represents the working masses, to take the hospital on its fair merits, and not make it merely a question of charity to give to its funds. I like our chaplain for that; when he gets into the pulpit to preach a hospital sermon, he always tells the people that it is not charity but self-interest that should impel them to be liberal subscribers."

IS THIS NOT TRUE?

"I begin to think," said Dudgeon, "that there exists a good deal of misconception about hospitals. The poor think the pounds of the rich keep them going, and the rich think the pence of the poor keep them going, and between the two the hospitals run short of funds and have a bad time of it." By this time they had reached a door with the inscription "Obstetric Ward." "This is the section," observed the House-Governor, stopping, "devoted to the diseases incidental to women. There was nothing very special to note in the Obstetric ward; and, having briefly pointed out the kitchen and lavatory and druggery attached, the House-Governor paused before a separate room containing a couple of beds. "Ovariotomy cases," he observed to Dudgeon, who laconically translated his meaning to Dyer in the plainer word "tumours." "Here is another triumph of surgery," he continued, as he led them along a short corridor to a large light room with an operating bed in the middle, extensive lavatory arrangements against the wall, and a variety of cases evidently containing surgical instruments and appliances.

THE TRIUMPHS OF OVARIOTOMY.

"This is the operating theatre," said the House-Governor. "We are having it thoroughly purified after an ovariotomy case. Now, when I first came here, and for many years after, ovariotomy almost invariably ended in death. Sometimes we succeeded, but we mostly failed; and the majority of women preferred to live a little longer and die of the disease, rather than to run the risk of an operation, with the odds against them." "My poor mother died of that," observed Dudgeon. "We had the advice of the most famous physicians of the day, but, as you say, the odds were so great that she preferred putting it off until the tumour killed her." "Then you know all about the work of a late President of the College of Surgeons?" said the House-Governor. "I've heard of him by name, and met him once at a dinner; but beyond that he is a great surgeon, I can't say I know anything particular about him." "Then you must listen to this, because it will show you how a great cure may come out of a poor little hospital."

A GREAT CURE OUT OF A POOR LITTLE HOSPITAL.

"Thirty years ago this surgeon became associated with two or three other doctors in developing a Woman's Free Hospital, an institution started in a small way for the treat-

[2] This Cancer Establishment is a special feature of the Middlesex Hospital.

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ment of the ordinary diseases of women and children, but which had broken down and was hardly worth any physician belonging to. Among the women who came were some with these huge internal tumours, and this gentleman, distressed at having to send them away, begged his colleagues to let him receive some ovarian cases. He was convinced that by improved methods the body could be opened, and the tumours removed with greater success than was conceived to be possible at the time. At first they would not hear of it. A few fatal cases would ruin the hospital. The consulting physician was so angry at the idea that he even denounced it in public. Then the coroner sent in word to say that if ovariotomy were practised he should hold an inquest on every fatal case. So the surgeon I have named, you see, was in a regular predicament. He was opposed in the hospital for once—it is not often that is the case,—he was opposed outside, and he would have been ruined professionally if he had failed. Still there were these poor women beseeching him for aid, or, like your poor mother, dying a lingering death after years of discomfort, and he decided to risk everything and save them."

HE DECIDES TO SAVE THEM.

"Bravo!" exclaimed Dyer, quite excited. "In 1858," continued the House-Governor, "they agreed to let him try his hand with three. He succeeded in all. Then he succeeded again and again, and that wretched little Woman's Hospital became for the moment the most famous in London, and the training school of all the world. Now, look at the operation. The patient has to be placed on this bed and chloroformed, and then, with the utmost tenderness and decency, the body is cut open, the tumour and ovary cut right out, and then the body is sewn up again. Working as hard as the operator can, the operation takes half an hour, sometimes almost an hour, and then the patient has to be very carefully conveyed back to the ward, and to receive the most assiduous nursing for a couple of months."

WHO WOULD NOT HELP TO PROMOTE SUCH TRIUMPHS?

"And is the cure perfect?" inquired Dudgeon. "Invariably. A patient arrives too unwieldy to walk, and miserably ill; she leaves so thoroughly cured that, except in rare cases, where there may be, say, cancer or some other disease tacked on to it, the probability is that she may never be attacked by a tumour any more. A very large number of cases come from the country. We had one the other day. A woman came from the north so bulky from a tumour that she could not sit during the railway journey, but had to remain on her knees. It was a very bad case, but we cured her. When she went back, her friends and neighbours, who never thought to see her again, and wouldn't believe she was cured, were indeed delighted." "And my poor mother," exclaimed Dudgeon, "with all her wealth, had to perish!" "Do you find them very grateful?" asked Dyer. "Grateful," said the House-Governor, with moistened eyes. "You can't estimate what gratitude is until you see some poor woman, the mother of a family she doesn't want to die and leave, come to this place thinking herself doomed, and leaving here with a long and happy life before her. Of course," he added, "success was not won at a stroke—few successes are. At the outset about one in four died, then one in five, then one in seven, ten, fifteen, and now they have reduced it to nearly one in twenty. One hospital is now devoted almost wholly to ovariotomy, and last year there were only six cases of death out of a hundred. They've done there thirty-eight consecutive cases without a single death. Isn't that grand?"

A MORAL FOR US ALL.

"So your moral is," remarked Dudgeon, "that out of that hospital, to which perhaps my poor mother may have given a trifling donation or two, there sprang a cure which might have saved her life had she lived a little longer?" "Quite so. The hospital cry is, 'Equip me with more funds, that I may be able to devise methods of curing others to-day, which may save your own life to-morrow.' Ovariotomy is a heavy drag on the hospital. Every case costs us at least £10. The usual private fee of a skilled ovariotomist of repute is 100 guineas. If reduced to meet a [illegible] to ten or twenty guineas, the cost of nursing [illegible], and good nursing is essential, that [illegible] people, the [illegible] as you [illegible] it, [illegible] ious. I have [illegible] a fashionable surgeon, after spending all day attending patients in the West-end, come down here at night, and spend the whole night in the ward, to watch, without a penny of payment, over the wife of a costermonger."

THE HOSPITAL KITCHEN.

"But," he exclaimed, springing to his feet, "I have talked enough about this operation, and we'll go down now to the kitchen. We shall just catch them serving the dinner up." Descending to the basement by a lift used for conveying the patients to the different stories, Dudgeon and Dyer followed the House-Governor along a passage to a huge room, with walls and ceiling covered with white tiles to admit of ready cleansing. "All the cooking is done by gas and steam," observed the House-Governor, "and it saves an immense amount of labour. The system is this. Every afternoon the sisters collect the diet sheets of each patient, and transmit them to the steward's office, where the clerks make out a gross list of the food required, and order it in. In the morning supplementary lists are made of any fresh diets ordered during the night, and then the cook goes to work. A few hands are drafted in, who get the food ready; and a few porters are now coming in to help transmit it to the wards; but, apart from this, all the work in the kitchen is done by one cook, and a kitchen and scullery maid. It is now half-past eleven, and the food is going up into the wards. We send it in the gross, and in each ward it is divided and distributed in the lobby. On this table are trays of fish, plaice, and soles beautifully brown; here is boiled plaice; and there are the hot water boxes to hold the food. The cook refers to his list: so many diets of plaice to Roderick ward; he puts them in the box, shuts down the lid, the porter puts it on a trolly, and off it goes with other boxes to the lift. In a minute or two it will reach the ward as hot as it left here, and the probationers and nurses will be ready to serve it out to the patients."

SERVING UP THE DINNERS.

"To-day is leg-of-mutton day. Forty or more legs of mutton are fixed inside the iron frame of this trolly, lowered by a lift into a safe, whence, after a couple of hours, they return baked a beautiful brown colour. On the table a porter places the lot, and the cook weighs so much for each ward, cutting up a leg now and again to make up the requisite quantity. Here are the trays of chops—we cook seventy or eighty every day. There in that steam chest are nets of potatoes, each containing the quantity ordered for each ward. Those ovens beyond are full of milk puddings—sago, tapioca, and so forth. The dishes are marked, so as to enable the pudding to be easily carved into diets. The coppers at the side are full of beef-tea. One sort consists of 8 oz. of beef to the pint, another 16 oz., and we have also some extract for special cases, 3 lb. to the pint. Every pint of the last costs half-a-crown." "You must consume a tremendous amount of food every year," said Dyer. "Surprising," answered the House-Governor. "We spent last year £1200 on bread, £2700 on milk, and £6000 on meat. We used about a quarter of a million of eggs, costing nearly £1000. Butter and cheese cost another £1000; vegetables £700, grocery £550, and fish £570. Altogether, including gas and firing, the kitchen cost us nearly £15,000." From the kitchen the party made their way into the laundry, where, amidst the steam, the House-Governor explained the process by which the linen arriving by the shoots from the wards was soaked, steamed, rinsed, and wrung by machinery, and then passed on to capacious drying ovens adjoining the ironing room. "Every week we wash from 5000 to 7000 sheets, and 300 or 400 blankets," he observed; "and from that coal-cellar there, at the end of the passage, about seven tons of coal have to be carried and distributed by porters in the various wards every winter's morning. It's a nasty job, taking them over two hours; but open fires are so wholesome and cheerful, that we're bound to have them in all the wards."

£5000 A YEAR ON MEDICINE.

Ascending to the ground floor, the House-Governor took them into the Dispensary, which seemed like a series of chemists' shops rolled into one, and every bottle and drug case proportionately amplified. "This dispensary costs us, without wages, over £5000 a year," said he. "Nearly £2000 is spent on drugs and chemicals, £760 on spirits of [illegible], £400 on glass and earthenware, £460 on scientific [illegible], £350 on ice, lemon-juice, soda-water, and similar [illegible]. We use a ton and a quarter of ice a day. And every [illegible] three trollies of drugs have to be issued from [illegible]

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the use of the patients. That doesn't include," he continued, while showing them a large room where a couple of men were making tinctures, "the money—£2700 a year—we spend on things for the surgeons. For instance, we spend over £10 a week on calico and flannel, another £10 a week on wool and tow, nearly another £10 on plaster, while surgical instruments cost us £500 a year, lint £270, antiseptic appliances £250, linseed-meal £100, and lard £50. The smallest item nowadays is leeches," he said, pointing to a large glass jar containing a hundred. "When I came here forty years ago we used to spend nearly £500 a year on leeches. Last year we spent only 50*s*."

WHERE REAL BENEVOLENCE COMES IN.

Outside the Dispensary were the waiting-halls for the out-patients, very many of whom, men, women, and children, were sitting on rows of seats like the pit audience of a theatre, waiting their turn to proceed in batches to a series of doors admitting them into the consulting-rooms. Passing on their way a large coffee bar, where a man was busy at work in a shrine of cups and saucers, and cakes and sweets, vending at a penny a cup coffee, tea, cocoa, or milk to exhausted patients, the House-Governor paused. "This is a new feature," he said, "now on its trial. Many patients come a great distance and have sometimes to wait a long while; they get fagged and tired, and a cup of tea not only refreshes them and keeps them in a good humour, but it prevents the dram bottle being brought into the place. The sweets are added to keep the youngsters quiet." A little further on he stopped again before a beautiful fountain, in Doulton's best style, inserted into the wall, where several patients were drinking. "If the Chaplain were here," he remarked to Dudgeon, "he would say, 'This is where real benevolence comes in.' It is a man's interest and duty to give regularly a money donation to the hospital, but he is not morally bound to put up a drinking-fountain in a waiting-hall to be a benefit to out-patients. This is a free gift from a gentleman in memory of a little child. It was he who fitted up the coffee bar for us. Considering that nearly 70,000 out-patients attend here every year, and that their attendances amount to hundreds of thousands of times, I think you will agree with me that it must be a boon to the people. The out-patients come in such shoals," he continued later on, "that we have had to adopt a sort of weeding process. We refuse no one ill who comes with a letter a first consultation, and we admit every surgical case whether the sufferer have a letter or not; but when we find that a patient really can pay for a good doctor, we are forced by the swarms of really destitute people to ask the applicant to do so.

A HOSPITAL CHEAT.

"A typical case occurred a short time ago. A man from the Transvaal appeared at an Ophthalmic Hospital in the City as an out-patient, and said he was very poor, having lost all his property in the war. On the strength of this he was admitted as an in-patient to undergo an operation, and after the operation fell ill with an internal disease, and was brought here and died. When his clothes were examined it was found he had £6000 in the bank, and his conscience having pricked him, he had sent, unknown to us, for a lawyer to make a will, and left £500 to the Eye Hospital. We exercise the greatest tact in weeding suspected cases, and the patients often benefit by the inquiry, as they get additional help from the Samaritan Fund." "What is that fund?" inquired Dyer; "I've often heard it mentioned since I came here." "It is a fund kept apart from the regular hospital funds, and is managed by a separate committee; it supplies artificial limbs and mechanical aids to poor people, sends patients to convalescent homes, and makes small grants of money to poor persons on leaving the hospital. We make it our boast that we never let anyone leave the hospital absolutely penniless if we can help it. A few shillings may be a god-send to a poor man, who on leaving the hospital may perhaps get nothing to eat till he earns it, and will tide him over starvation. As for the convalescent homes, most people know something about them. We send 800 patients a year to these homes, and support them while there; but the public don't know what the hospital does in giving away surgical appliances."

SURGICAL AID TO THE POOR.

"Two of the surgical societies give away each about 5000 appliances a year, and between them have distributed 100,000 artificial limbs, bands, trusses, elastic stockings, and other similar things since they were established. The Hospital Sunday Fund spent last year £1600 on this object. If you can only realise that one person out of every ten in the metropolis has to make use of some surgical appliance or other, you can appreciate the benefit conferred by the free distribution of these appliances. Poor persons, who would otherwise be a burden to the public, are enabled to earn a living and become useful members of society. Then the Samaritan Fund enables us to give free dinners to some of the out-patients who appear to be more in want of nourishment than medicine, and also milk to starving infants. The Samaritan Fund is thus one of the most useful branches of any hospital." Taking his watch then out of his pocket, he added, "You have been too long on your feet now to go over the nursing home in the next wing, and the medical college over yonder, which you can see from this window. Hundreds of students are educated in the college, and having obtained a regular training in the hospital, go forth to become family doctors or famous physicians. And not only does the hospital afford the best possible training to the family doctor, but it now supplies nearly all the nurses. Hundreds are trained in the hospital, and after acquiring experience in the ward, and systematic medical instruction, go forth with their certificate to assist the family doctor. Now for the Children's Ward, and we shall have seen most of the General Hospital.

IN THE CHILDREN'S WARD.

"My favourite ward," said the House-Governor, ushering in Dudgeon and Dyer on their arrival. "Here are forty beds full of little ones, all surgical cases. In some hospitals the children are stowed in cots among the adults, but we are able to keep them by themselves, which is much better. In an adults' ward they are apt to disturb the grown-up patients, and they are never so happy isolated as when put by themselves in a ward like this. Here are twenty cots on each side of the room, with stands fixed over them for the children to put their toys on, and beyond are other wards devoted to more surgical cases, and then medical wards—all in the same style." Evidently the House-Governor was a favourite, for lots of little heads peeped above the cots when his voice was heard, and a youngster shouted out lustily from the end of the ward—"Daddy—I say, daddy, look here!" "Keep quiet, you rogue, till I come," replied the House-Governor, good-naturedly. The boy continuing to beg him to come, the party walked down the ward to his cot. "A boy of nine," observed the House-Governor as they went along, "who has been here two months suffering from a stiff knee. He is nearly well, and we're going to send him to a convalescent home at Eastbourne next week." "Look here, look here!" shouted the boy, holding out a book—one of those gorgeously-bound volumes which Nelson and Sons issue for presents and prizes for two or three shillings. "Look here—'The Swiss Family Robinson,' full of pictures, which a kind lady has just given me. Look at all the gold upon the cover. You shall have it to read, daddy, when I have done." "Go on, you little rogue," said the House-Governor, poking him good-humouredly in the ribs, but evidently quite as well pleased as the boy.

THE KIND OF BOOK FOR A HOSPITAL.

Placing the book in Dudgeon's hands, he said, "That's the kind of book for a hospital. You would be astonished at the rubbish people send—old magazines, dirty and torn, and not in consecutive numbers, and then expect us to pay the carriage. We don't want rubbish, I tell them, but bright, cheerful books like these, lasting just long enough to be well read, and no longer. On sanitary grounds it doesn't do for a book to last too long in a hospital, and a bright cover excites the people's desire to read it far more than the strongest dull binding in calf." Passing then along the beds, he pointed out some of the cases to Dudgeon. "There's a new arrival," pointing to a stolid child who had been crying, but now was quiet. "Came in this morning. Fell off the kerb-stone and broke its leg. This one——ah, what, you've got a new drum; that *is* nice. This one broke his ankle in jumping off a chair. That one is a tracheotomy case. Swallowed poison, causing the throat to close, and we had to open the throat and insert a tube for him to breathe through. Nasty case; he has been here nearly a twelvemonth, but the worst is over, and the doctors think they'll save him. Hallo!" (taking up a little boy who had run up and clasped his knee). "This youngster has spent most of his life in the hospita'

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He has always got some serious illness, and the moment he recovers he breaks a leg or arm, and comes in again. There—off you go" (speaking to the child). "He's leaving us to-morrow" (addressing Dudgeon again).

A WORD FOR M.P.'S.

"This one," he continued "is a lamp explosion case. The mother was turning down the wick of a cheap paraffin lamp, when it exploded and burnt the child all over." "Those beastly paraffin lamps!" exclaimed Dyer. "You may well say that," continued the House-Governor. "Every week we have to admit several people suffering from burns and explosions, and they say that nearly every week an inquest is held in London on somebody killed by them. Parliament insists upon safe lamps for the mines, but, considering that hundreds of people throughout the country are annually burnt or killed by oil lamps, why does it not insist upon safe lamps for the masses? Most of the cheap lamps might be marked, 'Certain death, or the house on fire, if upset,' and the manufacturers know it. Do you know that one-fifth of the fires in London are caused by mineral oil lamps?"

A CHILDREN'S HOSPITAL SUNDAY.

As they returned through the boys' surgical ward, they heard the boy with the stiff knee crowing afresh, and, looking round, saw the Chaplain entering with his pockets bulging out in a manner most unbecoming for a trim ecclesiastic. From these he extracted several toys and distributed them to those of the youngsters who appeared to be at all in the dumps, while the House-Governor whispered to Dudgeon, "The Chaplain's favourite walk is to the Mansion House, to pick up the cheap penny novelties that are sold in Cheapside. He'll keep the ward quiet the whole afternoon when he brings home something new and out of the common. Look at him; he's just as pleased as they are. His latest idea is to get up among Sunday school teachers a regular annual Children's Hospital Sunday. Each child might bring a toy, or a book, or a penny to the collection, and the proceeds could be divided among the children's wards of the various London hospitals. It's a splendid idea, and he hopes to persuade all the clergy to take it up before long." "You're wanted outside," said the Chaplain, coming up—"I shall be with you to lunch almost directly." "We'll see what it is" replied the House-Governor, "and then we'll go upstairs through the hospital staff's quarters to the dining-room. We officials all feed together, and after your tiring inspection I am sure you must want some luncheon."

THE HOUSE-GOVERNOR WANTED.

When they reached the outside, where convalescent patients were walking about in the small but well-kept garden, or smoking in the pavilion in the centre set aside for that purpose, they saw a cart heaped up with bird-cages, in charge of a middle-aged man in a coarse grey tweed suit. He was the bird-fancier's executor, and the dead master of the little pets having been buried the day before, he had brought his bequest to the hospital. At the back of the cart was a splendid parrot, in a brand new cage, which, as the House-Governor went down the steps, startled him by exclaiming in the most natural voice in the world, "Mind how you fall, old fellow!" "Just the very thing for the Children's Ward," said the House-Governor, in a tone of delight. "I'll take it in to them at once. No, I won't, though; the Chaplain shall do it. He deserves the treat far more than myself—a really genuine, good-hearted fellow! Stop; he mustn't have it till after luncheon, or we shan't have him at table with us. Once he gets that parrot in the ward, there'll be no getting him out of it again." Finding the man could wait for a while with the canaries and larks and linnets, the House-Governor conducted Dudgeon and Dyer into the hospital again, followed by the farewell cry of the parrot—"Oh, you naughty boys; won't I tell your mother!"

THE LUNCHEON TOGETHER.

All three, delighted and amused, then traversed a corridor terminating in an extension of the hospital devoted to the staff. Each official had his own set of rooms, and in the basement was a kitchen devoted to the whole, communicating by a lift with a room on the ground floor overlooking the garden, where they lunched in common. Here assembled and already having luncheon were the Matron, the Secretary, and the Steward, several house-surgeons and physicians—one of the former of whom had attended both Dudgeon and Dyer,—and at the end of the table the Chaplain. Taking a seat at the top, the House-Governor placed Dudgeon and Dyer one on each side of him (in spite of the protests of the latter, who did not wish to thrust himself on "such great people"), and assisted them to the cold joint and the salad on the table, apologising for the simple character of the luncheon on the grounds that he wished them to see how they all lived every day. "In front of you are jugs of milk and table-beer, and if you care for cocoa and coffee the Chaplain will help you at the other end of the table." The conversation was at first about what they thought of the hospital, and by degrees it worked round to the question of Hospital Sunday. The Secretary was very indignant at the small results achieved hitherto by the Hospital Sunday Fund. "Bearing in mind the vast population of the metropolis, £30,000 or £40,000 is a paltry amount for the largest city in the world. Last year the collection amounted to only £36,000, and it costs £50,000 to keep the General Hospital alone going. The collection in London was less than in many of the provincial cities, notwithstanding its size and wealth; and yet the London people in a general way profess to be proud of their hospitals."

HARD KNOCKS FOR THE MIDDLE CLASSES.

This led to a discussion in which, perhaps out of delicacy for the representatives of capital and labour present, the Secretary directed his denunciations chiefly against the middle classes. "We train their doctors for them, we train their nurses, we spend our money in trying to find out cures for cancer, consumption, and other diseases they all suffer from, and yet they are as lumpy as lead to our appeals for contributions. Your £10,000-a-year-man gives large donations from benevolence, and other motives we need not discuss; and your £2-a-week-man gives a trifle because his wife and children, as well as himself, are liable to attend the hospital. But what can you do with the thousands of Londoners with incomes ranging from £300 a year upwards. They can't afford large donations, and out of pride won't have small ones published in the papers, and when the Hospital Sunday people take them in hand a threepenny-piece or sixpence mostly represents a year's contributions. The middle classes, fat and apathetic, want stirring up far more than the masses."

DYER HIMSELF PERFORMS AN OPERATION ON LEAVING.

After luncheon Dyer got up from his seat and said, "I hope you will excuse me now if I leave; I'm afraid the missis may be running about trying to find me. I thank you all from the bottom of my heart for your kindness. I'm not good at speechifying, but a man can feel gratitude if he can't find words to express it." "Well, Dyer," observed Dudgeon, wishing to avoid any scene, "you must have a few days' rest to get used to your one eye, and in the meantime your pay will run on from the day you left, as before. The office will tell you when to return to your work." "Thank you, sir, for your goodness. I believe you will find I shall always work as hard with one eye as with two." "There's a promise of the honest fulfilment in that," said the Chaplain, shaking his hand heartily, and, followed by the smiles of the Matron, the mechanic left the room with the House-Governor. A few minutes afterwards the latter returned, and in an excited voice exclaimed, "What do you think? When his missis met him, he took from her a purse, and, placing it in my hand, said, 'That's for the hospital. The mates collected £9 12*s.* 4*d.* to keep me while out of work, and as I haven't been out of work, because the governor's kept me on, I want you to spend it on the poor fellows inside. I asked him to reflect—the sum was so large for a working man; but he said, 'It's not mine; it's the mates'. We workmen are not so mean as they sometimes say; and if we haven't done more for the hospital in the past, it's not, because we're stingy, but, because we don't know till we're ill, and hard up the good it does to us chaps, and the kids, and the missis. If you'd only send among us a chap that's got the gift of the gab and tell us all you've shown me this morning, you wouldn't want much tugging to haul the shillings out of our pockets."

DUDGEON RESCUED BY HIS WIFE.

Dudgeon seemed delighted at the conduct of his workman, but before he could say anything the door opened afresh, and a lady rushing in threw herself upon his unwounded shoulder, exclaiming: "My poor dear husband, to think you should have been nearly killed [illegible] to this dreadful hospital. I took [illegible]

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the news was wired to us, and have come to arrange to carry you home immediately." "My dear," said Dudgeon, gravely, "consider who's here. Since I was brought here insensible on a stretcher, I have been treated with kindness I can never forget, and have seen so much goodness diffused by these dear people that I shall always take an interest in hospital work. Another day we must come together and go over the place. To-day I have tired myself enough, and I shall really be ill if I have any more excitement." Introducing then the House-Governor, the Matron, and the Chaplain to his wife, he made them promise to come and dine with him at his house in Mortgramit Square as soon as he was well, not forgetting to bring with them Sister Agatha.

A LESSON LEARNED BY CRŒSUS.

"You have shown me" he said as he quitted the room, that self-interest as well as benevolence should dictate a readier appreciation of hospital work, and you will find, I think, so far as I am concerned, without my making any rash promises, that the General Hospital has secured in me a Governor for Life." And so it had; for the same day the House-Governor received from him a cheque for £10,000, to be applied to various branches of the hospital as he thought fit, and there are rumours about now that he proposes spending ten times that sum in adding a Dudgeon Wing to it. If he does, his munificence will help to mitigate a little of the human misery of our great metropolis. Yet only a little, so vast is the misery in a city which counts its sick yearly by hundreds of thousands. The magnanimous behaviour of Dudgeon and Dyer consequently does not exhaust the good to be done, and plenty, alas, is left to be accomplished by kindly hearts and generous purses. What occurred to them may happen to you or I ere the year is out; and let us hope, therefore, that if we are carried helpless into an accident ward, we shall not have it on our conscience that, knowing what we now do of the good work the hospital does, we were shabby in our contributions at church on Hospital Sunday.

"GOD LOVETH A CHEERFUL GIVER."

THE HOSPITALS WEEK.

A PROLOGUE TO HOSPITAL SUNDAY.

The gospel to-day we would publish
Is the old one of brotherly love;
The crusade we once more would establish
Is the sympathy taught from above.
Whilst this gospel needeth no teaching
To prove that its precepts are pure,
This crusade will have cause for good preaching
To make its accomplishment sure.

In our midst there are many who rarely
(Nor even by chance nor by stealth)
May gaze on Hope's countenance fairly,
Or compass the hand-clasp of Health;
Whose eyes with much watching are aching,
And weary with weeping, and worn,
Whose hearts with long suffering are breaking,
Whose bodies with torture are torn.

Who long through the night for the morrow,
Then pine for the night-time again;
Who only find solace in sorrow,
Whose constant companion is Pain.
'Tis for these that in Health's name we greet you—
For these on whom Sickness doth frown;
'Tis for these we in Hope's name entreat you—
Whom Despair hath cast utterly down.

They are gathered and garnered together,
The weary, the weak, and the worn,
Secure from the stress of Life's weather,
And safe from its shame and its scorn.
From country, from coast, and from city,
Like sheep to a fold they have come,
In the Hospitals mercy and pity
Provide them a rest and a home.

From these Houses of Mercy and Pity
A desolate cry doth ascend,
That rings high o'er the roar of our city,
And resounds through the length of the land;
'Tis the voice of a great lamentation
From the thousands that sorrow to-day,
Whose appeal for your alms and oblations
You cannot but choose to obey.

THE HOSPITALS WEEK.

From Monday, June 21st, to Saturday, June 26th, 1886.

ITS OBJECTS ARE:—To extend the interest and support already given to the Hospitals and Medical Charities, by arousing and fixing public attention to the following facts:

(1) The pressing pecuniary necessities of these institutions; and

(2) The importance of their efficient maintenance to all classes of the community, from the highest to the lowest.

At the meetings, which will present many features of special interest, it is not proposed to make any collection, but to invite all intelligent citizens of every class to make a point of—

(*a*) Attending some place of worship on Hospital Sunday, June 27th, 1886;

(*b*) Sending a contribution direct to the Lord Mayor at the Mansion-house, or

(*c*) Placing a donation in the boxes which will be fixed outside the Mansion-house for the convenience of those who prefer to give in that way.

LIST OF THE MEETINGS.

INAUGURAL MEETING. THURSDAY, June 17th.
Mansion House, 3 P.M.

President—The Lord Mayor.
Mr. Brudenell Carter, F.R.C.S., President of the Medical Society, will deliver an oration.
Speakers—Cardinal Manning; Sir Edmund Hay Currie; Sir Spencer Wells, Bart., F.R.C.S.; Sir Risdon Bennett M.D., F.R.S.; and others.

MONDAY, 21st June.—*Lambeth Palace Library*, 3 P.M.
President—Sir Andrew Clark, Bart., M.D., F.R.S.
Speakers—Lord Sandhurst, Under-Secretary for War; Gen. Crawford Fraser, V.C., M.P.; Mr. O. V. Morgan, M.P.; Sir Hy. Peek, Bart.; Canon Erskine Clarke.

TUESDAY, 22nd June.—*The Rink Hall, Blackheath*, 8 P.M.
President—The Earl of Dartmouth.
Speakers—Baron F. de Rothschild, M.P.; Baron Henry de Worms, M.P.; Mr. Henry C. Burdett.

WEDNESDAY, 23rd June.—*Kensington Town Hall*, 3 P.M.
President—The Duke of Norfolk.
Speakers—Sir Algernon Borthwick, M.P.; The Right Hon. the Marquis of Hartington, M.P.; The Right Hon. W. H. Smith, M.P.; Sir Wm. Mac Cormac, F.R.C.S.

THURSDAY, 24th June.—*St. Andrew's Hall, Newman-street*, 8 P.M.
President—The Earl of Northbrook.
Speakers—Lord Charles Beresford, M.P.; Mr. Seager Hunt, M.P.; Mr. Bauman, M.P.; Rev. Canon Barker; Major Ross, M.P.

FRIDAY, 25th June.—*Highbury Athenæum*, 8 P.M.
President—The Duke of Westminster, K.G.
Speakers—Mr. R. Chamberlain, M.P.; Mr. Ince, Q.C.; Mr. Waddy, Q.C.; Mr. Bartley, M.P.; Mr. Cowley Lambert; Dr. Buchanan; Sir Dyce Duckworth, M.D.; Mr. Murdock, M.P.; Mr. Bigwood, M.P.

SATURDAY, 26th June—*Stratford Town Hall*, 4 P.M.
President—H.R.H. the Duke of Cambridge.
Speaker—The Marquis of Salisbury, K.G.

*** The meetings will all be free and open, and no tickets of admission will be required.

NOTICES TO THE CLERGY AND MINISTERS OF RELIGION.

The Proprietors of THE LANCET will send free copies of this Special Supplement on application to any clergyman or minister of religion who may require them for distribution amongst the more wealthy members of their congregations.

It is requested that an early notification may be sent to the Editor of THE LANCET, 423, Strand, W.C., of all special sermons to be preached in aid of the Hospitals at any of the services on Hospital Sunday, June 27th. All such notices should reach this Office not later than Wednesday, June 23rd, with the subject of each discourse, in time to appear in the second Special Supplement, which will be issued with THE LANCET of Saturday, June 26th.

A third Supplement, containing a report of the special sermons preached on Hospital Sunday, will be published with THE LANCET of July 3rd, and all extracts of sermons intended for publication should reach the Editor not later than Tuesday, June 29th.

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A YEAR'S WORK IN THE HOSPITALS AND MEDICAL CHARITIES OF LONDON.

The following tables and figures should be studied in conjunction with the remarks following the Summary on the last page, to make their bearing more intelligible and better understood.

No. I. DISTRICT:

COMPRISING BATTERSEA, WANDSWORTH, PUTNEY, ROEHAMPTON, WIMBLEDON, MERTON, TOOTING, BALHAM, CLAPHAM, STREATHAM, BRIXTON, LAMBETH, AND SOUTH LAMBETH.

No. of beds.	Name of hospital or dispensary.	In-patients.	Out-patients.	Ex-penditure.	Extra ex-penditure, buildings, &c.	Total expendi-ture.	Income. Charitable.	Income. Proprietary.	Total income.
				£	£	£	£	£	£
24	General Lying-in Hospital	395	800	3142	—	3142	958	1941	2899
51	Royal Hospital for Children and Women	479	7132	3113	340	3453	2487	883	3370
10	Hospital for Diseases of the Skin	26	6061	1209	—	1209	498	770	1268
500	Metropolitan Convalescent Hospital ...	3731	—	6327	955	7282	6989	410	6689
585		4631	13,993	13,791	1295	15,086	10,232	4004	14,236
—	Battersea Dispensary	—	5340	1729	—	1729	82	1647	1729
—	Brixton &c. Dispensary	—	3656	601	—	601	480	129	609
—	Clapham Dispensary	—	1500	378	—	378	298	—	298
—	Gipsy Hill Dispensary	—	801	328	—	328	115	254	369
—	Royal South London Dispensary	—	5263	849	—	829	701	97	798
—	South Lambeth Dispensary	—	2149	578	—	578	324	207	531
—	South London Medical Aid Institution ...	—	1809	737	—	737	129	413	542
—	Wandsworth Common Dispensary	—	1077	238	—	238	64	168	232
585		4631	37,588	19,209	1295	20,504	12,425	6919	19,344

No. II. DISTRICT:

COMPRISING SOUTHWARK, NEWINGTON, KENNINGTON, BERMONDSEY, CAMBERWELL, PECKHAM, DULWICH, ROTHERHITHE, DEPTFORD, GREENWICH, LEWISHAM, LEE, BLACKHEATH, CHARLTON, WOOLWICH, SYDENHAM, ANERLEY, PENGE, AND BECKENHAM.

No. of beds.	Name of hospital or dispensary.	In-patients.	Out-patients.	Ex-penditure.	Extra ex-penditure, buildings, &c.	Total expendi-ture.	Income. Charitable.	Income. Proprietary.	Total income.
				£	£	£	£	£	£
24	Miller Hospital	152	12,652	3138	363	3501	1601	300	1991
258	Seamen's Hospital	1551	5874	10,802	—	10,802	6981	4831	11,812
60	Evelina Hospital	328	12,010	5588	—	5588	3246	876	4122
32	Home for Sick Children...	195	780	1097	—	1097	866	184	1050
14	Royal South London Ophthal. Hospital ...	129	6501	1254	—	1254	1150	408	1558
388		2362	37,817	21,879	363	22,242	13,844	6599	20,443
—	Camberwell Provident Dispensary	—	11,600	1642	—	1642	432	1231	1663
—	Forest-hill Dispensary	—	6023	578	—	578	236	326	562
—	West Dulwich Dispensary	—	385	61	—	61	·16	36	52
388		2362	55,805	24,160	363	24,523	14,528	8192	22,720

No. III. DISTRICT:

COMPRISING KENSINGTON, WESTMINSTER CITY, PIMLICO, CHELSEA, MAYFAIR, FULHAM, HAMMERSMITH, CHISWICK, BRENTFORD, ACTON, EALING, AND THE WESTWARD.

No. of beds.	Name of hospital or dispensary.	In-patients.	Out-patients.	Ex-penditure.	Extra ex-penditure buildings, &c.	Total expendi-ture.	Income. Charitable.	Income. Proprietary.	Total income.
				£	£	£	£	£	£
351	St. George's Hospital	3669	16,644	20,742	3298	24,040	15,551	6880	22,431
101	West London Hospital	1197	14,933	5386	92	5478	4134	17	4151
200	Westminster Hospital	2113	23,440	11,304	—	11,304	7761	2052	10,813
321	Brompton Hospital for Consumption ...	1646	13,895	24,781	—	24,781	21,435	3909	25,344
22	Belgrave Hospital for Children	129	1537	1301	—	1301	1288	16	1304
38	Cheyne Hospital for Incurables	45	—	1533	—	1533	1889	404	2293
74	Victoria Hospital	696	8737	4476	—	4476	3930	868	4798
63	Chelsea Hospital for Women	339	3577	3043	—	3043	2453	954	3407
14	Grosvenor Hospital...	93	1756	910	—	910	681	304	985
105	Cancer Hospital...	622	996	8534	—	8534	7804	2743	10,547
1284		10,549	82,515	82,010	3390	85,400	66,630	19,157	85,986
—	Brompton Dispensary	—	824	408	—	408	184	245	429
—	Chelsea Dispensary	—	5317	488	—	488	370	113	483
—	[illegible]	—	5168	776	—	776	720	49	769
—	[illegible]	—	16,720	910	—	910	536	414	949
—	[illegible]	—	4545	567	—	567	535	15	550
—	[illegible]	—	2344	771	—	771	588	198	686
—	[illegible]	—	2739	517	—	517	491	491	982
—	[illegible]	—	8214	1056	—	1056	434	698	1132
[illegible]	[illegible]	[illegible]	[illegible],416	87,803	3390	90,893	70,907	[illegible]	[illegible]

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No. IV. DISTRICT:

COMPRISING PADDINGTON, BAYSWATER, NOTTING-HILL, MARYLEBONE, KILBURN, ST. JOHN'S-WOOD, HAMPSTEAD, FINCHLEY, HIGHGATE, KENTISH-TOWN, CAMDEN-TOWN, AND THE NORTH-WEST.

No. of beds.	Name of hospital or dispensary.	In-patients.	Out-patients.	Ex-penditure.	Extra expenditure, buildings, &c.	Total expenditure.	Income.		Total income.
							Charitable.	Proprietary.	
				£	£	£	£	£	£
46	North-West London Hospital	493	7935	3062	1482	3062	2720	226	2946
244	St. Mary's Hospital	2613	25,815	17,414	—	18,896	11,023	1493	12,516
249	Middlesex Hospital	2679	32,985	26,031	—	26,031	10,166	5393	15,559
37	North London Hospital for Consumption	301	4150	3797	—	3797	3355	81	3436
118	Ventnor Consumption Hospital	584	—	8829	—	8829	3506	4522	8028
30	Home for Incurable Children	85	—	1574	—	1574	722	415	1137
27	Paddington-green Hospital	332	12,342	2034	—	2034	3454	243	3697
40	Queen Charlotte's Hospital	857	998	3718	—	3718	2282	509	2791
26	New Hospital for Women	210	2797	2030	—	2030	1227	812	2039
52	Samaritan Free Hospital	497	4923	5192	—	5192	4630	115	4745
36	St. Saviour Cancer Hospital	91	310	2873	—	2873	983	783	1766
25	Hospital for Epilepsy, &c.	91	721	1718	—	1718	1256	572	1828
20	Western Ophthalmic Hospital	54	1813	588	—	588	345	259	604
37	National Orthopædic Hospital	106	699	1210	—	1210	630	696	1326
50	Royal Orthopædic Hospital	143	1160	1982	—	1982	1433	960	2393
54	London Temperance Hospital	584	3322	3492	—	3492	3013	520	3533
—	National Dental Hospital	—	20,367	703	—	703	305	344	649
25	Establishment for Gentlewomen	111	—	2299	—	2299	1102	1124	2226
16	Hampstead Home Hospital	71	—	1067	—	1067	402	690	1092
1132		9852	120,337	89,613	1482	91,095	52,554	19,757	72,311
—	Child's-hill Dispensary	—	112	288	—	288	48	230	278
—	Hampstead Dispensary	—	9246	813	—	813	293	534	827
—	Kilburn &c. Dispensary	—	2989	514	—	514	497	55	552
—	Kilburn Provident Dispensary	—	3276	1004	—	1004	88	927	1015
—	Margaret-street Infirmary	—	3000	320	—	320	360	150	510
—	Notting-hill Dispensary	—	4332	277	—	277	104	115	219
—	Paddington Dispensary	—	8818	635	—	635	261	425	686
—	Portland-town Dispensary	—	2283	152	—	152	129	17	146
—	Portobello-road Dispensary	—	145	56	—	56	29	34	63
—	St. John's-wood Dispensary	—	1424	538	—	538	228	323	551
—	St. Marylebone Dispensary	—	3469	759	—	759	836	405	1241
—	Westbourne Dispensary	—	3411	415	—	415	133	283	406
—	Western General Dispensary	—	16,716	1307	—	1307	1192	56	1248
1132		9852	179,558	96,691	1482	98,173	56,742	23,311	80,053

No. V. DISTRICT:

COMPRISING ST. PANCRAS, BLOOMSBURY, WESTMINSTER LIBERTIES, HOLBORN, ST. LUKE'S, CLERKENWELL, FINSBURY, SHOREDITCH, ISLINGTON, AND THE NORTH.

No. of beds.	Name of hospital or dispensary.	In-patients.	Out-patients.	Ex-penditure	Extra expenditure, buildings, &c.	Total expenditure.	Income.		Total income.
							Charitable.	Proprietary.	
				£	£	£	£	£	£
154	Charing-cross Hospital	1584	22,615	14,352	—	14,352	7787	3500	11,287
36	French Hospital	351	2420	2563	—	2563	3583	181	3764
33	Great Northern Central Hospital	313	10,054	3165	—	3165	3137	252	3389
206	King's College Hospital	2011	17,277	16,422	—	16,422	8948	3473	12,421
160	Royal Free Hospital	1728	21,853	11,375	—	11,275	6202	1355	7557
50	St. John and St. Elizabeth Hospital	79	—	1522	—	1522	1123	536	1659
209	University College Hospital	2860	35,170	20,456	1004	21,460	12,294	4737	17,031
26	Royal Hospital for Diseases of the Chest ...	122	5100	3009	—	3009	2879	1090	3969
80	Alexandra Hospital	167	121	2192	300	2492	1696	1480	3176
177	Hospital for Sick Children	1394	14,281	9883	856	10,739	11,303	658	11,961
22	British Lying-in Hospital	151	671	1551	—	1551	651	949	1600
30	City of London Lying-in Hospital	259	1118	2398	—	2398	565	2259	2824
66	Hospital for Women	560	5087	7036	809	7845	5972	2491	8463
190	London Fever Hospital	528	—	8346	568	8914	6671	2626	9197
34	St. Mark's Hospital	310	850	2237	—	2237	1519	2353	3872
25	National Hospital for Diseases of the Heart	100	2900	2028	—	2028	1625	350	1975
104	National Hospital for Paralysis, &c.	305	3312	4965	—	4965	2903	1724	4627
13	Central London Ophthalmic Hospital ...	133	7247	793	—	793	569	1565	2134
50	Westminster Hospital	286	7987	1594	—	1594	1592	1502	3094
25	City Orthopædic Hospital	109	2591	1137	—	1137	1210	103	1313
20	St. John's Hospital for Skin Diseases ...	134	3354	2638	—	2638	1755	850	2605
15	Central Throat and Ear Hospital	237	4946	1650	—	1650	737	1464	2201
80	London Homœopathic Hospital	658	9007	4688	1928	6616	2834	4194	7028
—	Dental Hospital	—	27,083	1319	—	1319	1294	360	1654
1503		14,377	205,244	127,219	5465	132,684	89,079	40,022	129,101
—	Bloomsbury Dispensary	—	3637	803	—	803	283	60	343
—	City Dispensary	—	4777	1317	—	1317	884	162	1046
—	City of London and E. London Dispensary	—	4915	651	—	651	158	650	808
—	Farringdon Dispensary	—	8306	631	—	631	217	399	616
—	Finsbury Dispensary	—	15,271	808	—	808	484	354	838
—	Holloway and N. Islington Dispensary ...	—	7157	1127	—	1127	555	424	979
—	Islington Dispensary	—	13,181	1003	—	1003	319	618	937
—	Metropolitan Dispensary	—	4697	568	—	568	419	304	723
—	Public Dispensary	—	3661	720	—	720	542	172	714
—	Royal Maternity Charity	—	3331	2132	—	2132	532	1143	1675
—	St. Pancras and Northern Dispensary ...	—	1865	472	—	472	326	169	495
—	Westminster General Dispensary	—	7314	533	—	533	382	225	607
1503		14,377	283,356	137,984	5465	143,449	94,180	44,702	138,882

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No. VI. DISTRICT:

COMPRISING BETHNAL-GREEN, TOWER HAMLETS, CLAPTON, TOTTENHAM, STRATFORD, STOKE NEWINGTON, HACKNEY STEPNEY, LIMEHOUSE, POPLAR, WEST HAM, AND THE EAST.

No. of beds.	Name of hospital or dispensary.	In-patients.	Out-patients.	Expenditure.	Extra expenditure, buildings, &c.	Total expenditure.	Income. Charitable.	Income. Proprietary.	Total income.
				£	£	£	£	£	£
125	German Hospital	1387	23,632	9162	—	9162	6623	2403	9026
790	London Hospital	8108	67,942	50,975	9351	60,326	25,770	16,994	42,764
20	Metropolitan Free Hospital	285	47,536	4370	—	4370	4360	843	5203
50	Poplar Hospital	569	7700	2842	—	2842	3887	301	4188
50	Tottenham Hospital	502	4326	2858	—	2858	2383	484	2867
164	City of London Chest Hospital	989	15,860	9534	—	9534	7141	972	8113
92	East London Children's Hospital	978	14,399	6741	—	6741	6945	376	6421
64	North-Eastern Hospital	653	13,801	5094	—	5094	6384	960	7344
100	Royal London Ophthalmic Hospital	2118	25,863	6800	—	6800	5230	1258	6488
28	Invalid Asylum	169	—	1087	—	1087	682	332	1014
90	Mrs. Gladstone's Home	1237	—	1741	—	1741	1408	374	1782
1573		16,993	221,059	101,204	9351	110,555	69,913	25,297	95,210
—	Eastern Dispensary	—	4660	574	—	574	191	336	527
—	London Dispensary	—	2787	581	—	581	196	278	474
—	Queen Adelaide Dispensary	—	4253	500	—	500	609	126	735
—	Stamford-hill Dispensary	—	4995	608	—	608	498	98	596
—	Tower Hamlets Dispensary	—	4208	412	—	412	229	166	395
—	West Ham Dispensary	—	17,829	862	—	862	859	129	988
1573		16,993	259,791	104,741	9351	114,092	72,495	26,430	98,925

SUMMARY.

It will be seen from the following summary that the hospitals and medical charities of London, during the twelve months ending Dec. 31st, 1885, relieved upwards of 1,000,000 patients at a total cost of £491,634. The total income from all sources was only a little over £451,000, so that there was an actual deficiency on the year's working of upwards of £40,000.

No. of beds.	No. of district.	In-patients.	Out-patients.	Expenditure.	Extra expenditure, buildings, &c.	Total expenditure.	Income. Charitable.	Income. Proprietary.	Total income.
				£	£	£	£	£	£
585	No. I. District	4631	37,585	19,200	1295	20,504	12,425	6919	19,344
388	No. II. ,, ...	2382	55,805	24,160	363	24,523	14,528	8192	22,720
1284	No. III. ,, ...	10,549	125,416	87,503	3390	90,893	70,237	21,138	91,375
1132	No. IV. ,, ...	9852	179,558	96,691	1482	98,173	56,742	23,311	80,053
1803	No. V. ,, ...	14,377	283,356	137,984	5465	143,449	94,180	44,702	138,882
1573	No. VI. ,, ...	16,993	259,791	104,741	9351	114,092	72,495	26,430	98,925
6765		58,964	941,511	470,288	21,346	491,634 451,299	320,607	130,692	451,299
				Deficit		40,335			

AN APPEAL ON THE FACTS.

OUT of four million inhabitants it will be seen that upwards of one million *directly* received relief from the hospitals during this year alone. Who shall estimate the amount of benefit which the hospitals have *indirectly* given to Londoners in addition, through the medical profession and skilled nurses, whom the hospitals have trained to minister to those who can afford to be treated at their own homes in the hour of sickness? Towards defraying the cost to the hospitals of directly relieving in a single year this grand total of human misery, the available funds were inadequate to the extent of £40,000, a deficiency which would have been nearly doubled except for the money at present subscribed on Hospital Sunday. We ask the wealthy, the thoughtful, and the generous to study the above figures. They will show to all how each charity does its work, and what is the principle upon which that work is carried on.

Some people hold, with Mr. Spurgeon, that the managers of a charity should never be waiters upon Providence, but that funds should be collected and placed in the bank before orders are given for the work to be undertaken. This list will be found to contain institutions which have managed to make both ends meet and a little over, so that Mr. Spurgeon's principles are well represented. Unfortunately, however, it is not always possible to conduct a hospital on such business-like principles, or many sick and suffering folk would fare badly indeed at times. To be of the greatest utility, a hospital has often to be placed in the midst of a dense and indigent population, who have not the means of supporting it adequately, and the managers have therefore to appeal to the charitable who live in the wealthier parts of the town. In such circumstances it necessarily happens that the hospital is in a chronic state of impecuniosity, and many such institutions will be found with the others given here. It is not too much to say the very varying condition of the hospitals of London revealed in these Tables must include every conceivable variety of circumstance, and so be calculated to meet the views of every group of philanthropists. This fact, coupled with the remembrance that the crusade to be conducted throughout the Hospitals Week, as a prologue to Hospital Sunday, is a united movement in favour of all the hospitals, should call forth an amount of enthusiasm worthy of so great a cause, and the pressing pecuniary needs of a class of charities the efficient maintenance of which is a matter of vital importance to all classes of the community. At least £80,000 is needed. Shall it not be forthcoming? Will the flowers of so fragrant a garden be neglected by men and women who have means? The receipts on Hospital Sunday will afford the best answer. In London to-day

> The charities which soothe, and heal, and bless,
> Lie scattered at the feet of men like flowers.

Who will not gather a button-hole at least, if a bouquet be indeed beyond their resources?

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Clinical Lectures ON DISEASES OF THE EYE.

Delivered at the Nottingham and Midland Eye Infirmary.

By CHARLES BELL TAYLOR, M.D., F.R.C.S.,
SURGEON TO THE INFIRMARY.

LECTURE III.

ON SQUINT.

GENTLEMEN,—A short time ago a gentleman holding an important official position in a neighbouring county consulted me on account of failing vision in the left eye. The eye of which he complained occupied its normal position in the orbit, but the right presented exactly the appearance depicted in Fig. 3. I said, "Why don't you have your right eye put straight?" "Because," he replied, "I have during the last twenty years on separate occasions consulted three eminent surgeons, and they each tell me that in order to restore the position of the eyeball it would be necessary to divide the external muscle, and that such division would not only aggravate the existing protrusion, but might even let the eye out of the socket altogether." I explained to him that it would not be necessary to interfere with the external muscle at all, and that so far from increasing the protrusion, the replacement of the eyeball would improve vision and restore his good looks.

FIG. 1.



Before operation.

You have often seen me perform this operation, which admits of rapid execution, and may be undertaken without anæsthetics. I hook up the tendon of the internal rectus muscle and divide all its connexions with the eyeball, pull it well forward, and by two horizontal incisions made with scissors convert it into a narrow strip. I then transfix the base of this strip as far back in the orbit as possible with a large curved needle connected with a thread armed at both ends. Before drawing the thread through I cut off as much of the tendon as may be considered necessary, and with the remaining needle pierce a small portion of the sclerotic about the site of the insertion of the inferior rectus tendon. Having thus obtained complete control of the eyeball, I turn it inwards to any required extent by simply tying the thread. This method of operation is quite as successful in result as any operation can be; it is scarcely more formidable than the ordinary tenotomy for internal squint; the external rectus is untouched, and only one suture is usually required. Here is a patient operated upon some years ago, who attends to-night in order that you may appreciate the permanence of the results attained. He is, as some of you may remember, one of the subjects whose photograph was reproduced in the *Practitioner* of December, 1883. (Figs. 1 and 2.)

Cases of external strabismus vary in degree from mere insufficiency of the internal recti muscles to such aggravated examples as those here depicted, and they all admit of relief by operation. Simple tenotomy of the external rectus will suffice to neutralise insufficiency of the internal recti, but such an operation ought never to be undertaken unless the external rectus is sufficiently strong to overcome a prism of 10°; slighter cases may be relieved by appropriate prisms worn with the base inwards, or by decentred glasses, which have a similar effect. Like myopia—a condition with which it is most frequently associated—the defect may be congenital, or merely a consequence of imperfect vision from any cause; the eye wandering outwards for want of visual guidance. The worst cases are observed in patients suffering from paralysis of the third nerve, or are caused by accident or unskilful operations for internal squint. If the deformity is slight, but still not such as would be relieved by simple tenotomy, I divide the external rectus subconjunctivally and insert a suture just over the tendon of the inferior rectus muscle; having thus secured control of the eyeball, I turn it inwards by attaching the suture to the internal canthus; this forced inversion is maintained for some days, and the external rectus, being compelled to attach itself further back on the eyeball, loses its power of abnormally diverting the globe. In medium cases I divide the internal and external recti muscles subconjunctivally, and secure inversion as before; in this way the internal rectus is brought forward and the external rectus thrown back. The advantage of these latter methods is that

FIG. 2.



After operation.

there is no open wound, no risk, and very little inconvenience to the patient. If the deformity is caused by paralysis of the third nerve, it will usually yield to medicine, volitional exercises, or the electric current; but after ordinary treatment the cure may often be expedited by advancement of the affected muscle, or tenotomy of the antagonist or associate muscle. One of the patients upon whom I am about to operate to-night is a collier suffering from slight squint, the remains of a paralytic affection of the third nerve, which six months ago caused extreme divergence of the right eye. Another who will also need attention is a railway official, whose left eye protrudes and diverges to a frightful extent, owing to laceration and separation of the internal rectus, the result of a malicious thrust with a stick. This is what happens when patients are unskilfully operated on for internal squint: the belly of the muscle is divided, the capsule of Tenon is lacerated, and,

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the rectus falls back so far in the orbit that it is unable to reattach itself to the globe. Here are two photographs of a patient, before and after treatment, on whom I operated some time ago for extreme divergence occasioned in this way. (Figs. 3 and 4).

To avoid such disastrous results as are depicted in Fig. 3 we must, in operating for internal squint, be careful to divide the tendon only, not to do too much at once, and depend upon tenotomy of the associate muscle for increased effect when necessary. Von Graefe, whose practice I had an opportunity of studying when in Berlin, used, with this end in view, to make an incision directly over the insertion of the internal rectus, expose the tendon, and divide it on a small hook, as shown in Fig. 5. This procedure involves either an open wound or a suture; and in order to obviate the inconvenience attending the insertion and subsequent removal of a thread, I have been in the habit of making an incision directly over the lower border of the internal rectus muscle, inserting a small hook beneath

FIG. 3.



the tendon, causing the extremity of the hook to project beyond its upper border, and cutting on the point, thus dividing the attachment of the tendon under the small bridge of conjunctiva which is allowed to remain; in this way we have a small puncture and counter-puncture, but no open wound, and the tendon, and the tendon only, is divided as readily as though it had been laid bare. If after operation, in spite of all our care, there should appear to be a tendency to eversion, I limit the effect by a suture, catching up the tendon and adjacent tissues, and stitching them to the conjunctiva and subconjunctival tissues at the inner edge of the cornea. When the squint is slight, not more than two lines, you may succeed by operating on one eye only; but the graver varieties, unless when one eye has become completely amblyopic, require the division of both tendons. The first effect of the operation is somewhat diminished when the tendon becomes reattached to the eyeball, and is afterwards, in the course of a few weeks or months, slightly increased, owing to the action of the opponent muscle, which is now enabled to exert a greater influence upon the globe, so that a slight residual convergence will often disappear. This desirable end is much more certainly attained by the use of spectacles, which correct any error of refraction. If, on the other hand, we find that the ultimate result is a tendency to eversion, this malposition may be corrected by withholding glasses, so that the necessity for convergence accompanying increased accommodation may help to restore parallelism of the globes. If in the course of time we find that, in spite of all that has been done, one or both eyes are turned slightly outwards, they may readily be put straight by simply dividing both external recti muscles subconjunctivally.

Here is a small boy, six years of age, on whom you shall see me operate by tenotomy of the internal rectus in the way to be presently described. He is suffering from the most common form of squint—strabismus convergens concomitans. His mother thinks he caught the affection from a playmate, but he really began to squint two years ago, because he then began to learn to read; such patients squint as soon as the eyes are used for near objects, and the more they are thus used the worse does the defect become. You will notice in this case that the child shows a slight tendency to turn the left eye inwards at times, but the right is much the worst; and we have ascertained that the sight of this eye is the weaker of the two, although he can still decipher large print with it. I have ascertained, by making a dot upon the lower lid exactly in the middle and another in continuation with a vertical line drawn through the centre of the right cornea in its abnormal position, that the extent of the deviation is exactly three and a half lines. If I now close the left eye and direct the patient to look straight with the squinting one, it assumes its normal position; but on raising my hand we find that the left eye has become the squinting one, and, moreover, that the extent of the deviation is exactly the same as that of the right eye. It is as though the two eyes were connected by a cord

FIG. 4.



that was too short to permit them both to look straight at once, and that whatever was taken on one side had to be given from the other. This is what is meant by "concomitant"—that is, the straightening of the squinting eye is accompanied by the squinting of the other; and the fact that the patient squints first with one eye and then with the other also brings the case under the definition of "alternating." The deviation of the right or squinting eye is

FIG. 5.



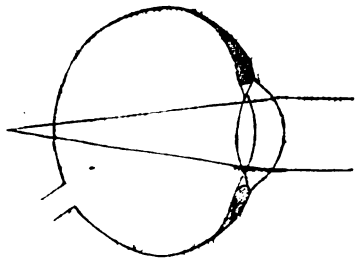
called the primary deviation; the deviation of the left or sound eye when covered, the secondary deviation. The primary and secondary deviations always correspond exactly in cases of concomitant squint; and it is essential to note this, because when the squint is due to paralysis the secondary deviation greatly exceeds the primary.

Here is a case of squint from paralysis of the external

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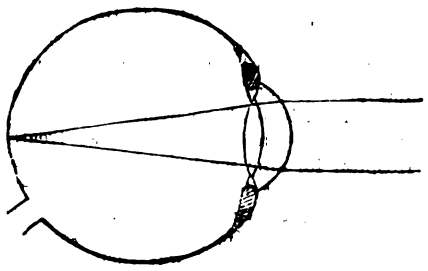
rectus muscle of the left eye; the patient is a gentleman's servant, who is terribly embarrassed when called upon to pour out wine, because he cannot distinguish the true from the false image of the glass. Note, now, if I direct him to follow my finger with the squinting eye he moves it slightly, but cannot force it outwards, while the great effort he makes in this direction causes him to squint inwards much more with the right eye than he did before with the left. To appreciate the value of this symptom, you must remember

FIG. 6.



that you cannot turn the left eye outwards without at the same time turning the right eye inwards—they are associated actions; and when this patient makes an effort to turn his paralysed eye outwards, although he cannot effect his object, he is at the same time doing his utmost to turn the right eye inwards; hence the effect, although *nil*, or nearly so, on the paralysed external rectus of the left eye is greatly in excess on the healthy internal rectus of the right. This distinguishes cases of paralysis from cases of concomitant

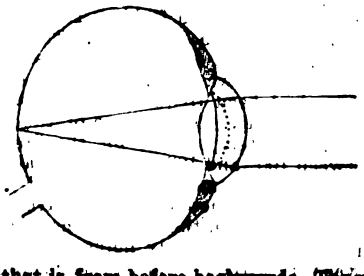
FIG. 7.



squint, and you will notice a similar association of symptoms in patients suffering from uncomplicated paralysis of the superior rectus, where, owing to the connexion of the central nerve ganglia of the superior rectus and levator palpebræ, the effort to look upwards raises the lid of the paralysed eye out of all proportion to its fellow.

Why should so many children begin to squint when they first begin to read, or write, or sew? Simply because they cannot see unless they do. Their eyes are too short in the

FIG. 8.



long axis—that is, from before backwards. The refraction is too low, and objects, instead of being focussed upon the retina, are depicted upon a spot a little beyond it; hence the patient makes extraordinary efforts to lengthen his eye, or increase its refraction, so as to bring the picture into its proper place. You will understand this at once if you compare the accompanying outline of the short eyeball (Fig. 6) with its fellow of the normal eye (Fig. 7). You may say, "What has this to do with squint? Squinting will not alter the shape of the eyeball." No, but it has a similar effect, as I will now explain. Patients whose eyeballs are too short are said to suffer from hypermetropia; they are obliged to exert a certain amount of accommodation—that is, render the lens optically stronger by increasing the curvature of its anterior surface by the active exercise of the ciliary muscle, even when looking at distant objects, an effort that is not at all required of the normal eye. Rays of light proceeding from objects twenty feet distant are parallel or nearly so, and, in an eyeball of ordinary dimensions, are brought to a focus on the retina by the power of refraction of the cornea and lens alone when the eye is at perfect rest, and without any exertion of the ciliary muscle. (See Fig. 7.) In hypermetropic persons it is necessary that the convexity of the lens should be increased before these parallel rays can be brought to a point as indicated by the dotted lines in Fig. 8, where the hypermetropic eyeball is seen successfully bringing parallel rays of light to a focus on the retina by increasing the curvature of the anterior surface of the lens, an effort which, in an eye of ordinary dimensions, is only required for the divergent rays which emanate from near objects. Now, if the hypermetrope is obliged to accommodate for distant objects, the rays from which are parallel, you can readily understand that considerable exertion is required in order to enable him to focus near objects, the rays from which are divergent; and this excessive effort of accommodation involves a squint, because the power of accommodation is greatly increased by convergence of the optic axes. Why, therefore, do we not cure squint by neutralising the hypermetropia with a suitable convex glass? A most rational suggestion; and no doubt great good may be effected in this way, as well as by paralysing accommodation with atropine. But, in point of fact, these patients do not come to us, as a rule, until they have squinted for some time; often they only do so because their lives have been rendered miserable by the scoffs and jeers of their schoolfellows and playmates. Prolonged treatment with spectacles constantly worn, and which only mitigate the defect, still subjects them to remark—indeed, tends to aggravate rather than diminish this serious evil, and consequently offers no attraction either to our patients or their friends. Moreover, it is dangerous for little children to wear spectacles out of doors or when at play; they are so apt to be injured by fracture of the glass, and, strange as it may appear, after they have squinted for some time they won't leave off, even though you give them glasses so strong that the squint, far from assisting, actually disturbs vision.

If a squint is neglected, as time goes on one eye becomes permanently the squinting one; it is definitely excluded from the act of vision, and from that moment sight begins to fail. First excentric portions of the retina lose their sensibility, then the yellow spot, and lastly the inner portion fails likewise. If you push one of your eyes ever so little on one side you immediately see double; there is a true image and a false image, and the deterioration of sight which takes place in squint-eyed persons is simply due to the constant negation of the pseudo image of the squinting eye by the brain. We only see what we look at; we only hear what we listen to; the brain has a horror of double images, and the persistent exercise of this mental act of suppression causes in time loss of function, amblyopia from exclusion, or exanopsia, as it is termed. As the patient ceases to see, so does the eye cease to be affected by efforts at convergence, but wanders to and fro in a purposeless sort of way, and is thus in occasional accord with its fellow; hence the friends, ignorant of the fact that growing out of a squint means growing blind in one eye, congratulate themselves, and become dubious as to the necessity for operation. When a squint alternates, sight may be restored and the deformity cured perfectly. When it has become monolateral the squint may be cured and the sight greatly improved if we see the patient within a reasonable time, but in advanced cases the chances of restoration to sight are greatly diminished; hence operation should not be unduly delayed, or if delayed from any unavoidable cause the eyes should be alternately exercised, so as to counteract loss of function from disuse. If the squint is very slight, it may be necessary only to operate on one eye; but in the great majority of cases, unless when one eye has become completely amblyopic, it will be necessary to divide the tendons of both internal recti. In the case of the boy patient on whom I am about to operate, we noticed that the eye, which was closed, whether right or left, became for the nonce the squinting one. Now, when both eyes are closed as in sleep, or, as you will be able to see, during anæsthesia, both squint, and the primary deviation, limited during

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waking moments to one eye, becomes equally divided between the two, as in Fig. 9. Here is clear evidence of the binocular nature of squint, and you can readily understand that in the majority of cases it will be necessary to operate upon both eyes. The exigencies of practice and the convenience of the patients frequently necessitate a double operation at one *séance*. It is well, however, when it can be so arranged, to operate upon one eye only at a time. Cases where the eyes are equally convergent when in use are extremely rare, but I can show you a patient who habitually squints inwards with both eyes, exactly as represented in the sketch. (Fig. 9.) In fact she is very myopic, and has never worn glasses; hence the externi, which produce approximate parallelism of the optic axis required for distant vision, have never been exercised, while the interni have been equally and abnormally developed by constant convergence for near objects.

Some patients squint simply because they have a scar upon the cornea; in these cases a shadow is thrown upon the retina by the interposition of an opaque film, and the patient turns his eye so as to reduce the annoyance thereby occasioned by throwing it upon the least sensitive portion of the retina. In such cases it is often necessary to shift the pupil and tattoo the cornea as well as divide the rectus tendon. As before remarked, cases of squint, whether external or internal, which are due to paralysis of the third or fourth nerves, usually yield to medicine and treatment adapted to remove the cause, which may be of rheumatic, syphilitic, or diphtheritic origin, or may depend upon defective nutrition of nerve centres arising from various causes. These cases usually occur suddenly in adults or persons past middle life, increase rapidly, and are accompanied by distressing giddiness, which disappears when the affected eye is closed, and is mitigated, but does not wholly disappear

FIG. 9.



when the healthy eye is closed. Contrary to what you would *a priori* expect, a slight squint of recent origin is much more embarrassing to the patient than the graver varieties of the same affection. This is due to the fact that the nearer to the yellow spot on the retina, the more definite does the image of the squinting eye become, and the more difficult it is for the patient to distinguish the true from the false image, thus leading, as in the case of the gentleman's servant we have just seen, to serious error with regard to the position of objects.

The cause of paralytic squint may be central, such as disease of the spinal cord or brain; or it may be peripheral, arising from inflammation of the nerve sheath or pressure from tumour, gumma, or periosteal thickening, or even shock from cold. Facial paralysis, as you know, is often due to the latter cause, and the ocular nerves are occasionally affected in the same way. If the disease is of central origin the loss of power is usually only partial, more than one nerve is affected, and you will find that it is impossible to fuse the true and false images by means of prisms. Complete failure of any one of the nerves supplying the orbital muscles, unaccompanied by other symptoms of paralysis, may be confidently ascribed to some lesion of the trunk of the nerve itself at the base of the skull or in the orbit, and may thus be distinguished from the graver varieties of central origin. In treating these cases, you will find large doses of iodide of potassium, with mild mercurials, most serviceable in one class of patients; change of air, tonics, and general hygiene in the other. Strychnine, internally and hypodermically, with the local application of the induced or voltaic electric currents, are applicable to both; and whenever the paralysed muscle responds to the stimulus, however slightly, you may confidently predict a successful issue to the case.

Practice and attention to the rules I have laid down will enable you to command brilliant results in cases of squint. We have operated upon thousands of patients at this institution. It is a rule that each shall return within a few months, so that we may note the ultimate result. One easily forgets faces in a large practice, and it frequently happens, as you know, that I fail to recognise my friends, so completely has the deformity been removed. I must warn you, however, that this desirable end cannot always be attained by one operation; indeed, the most strikingly successful immediate results in cases of convergence (the most common form of squint) are those most likely to be followed by divergence. We must, therefore, be careful not to do too much at once, and it is well to warn the patient or his friends that more than one operation may be necessary. At the next lecture I hope to show you some interesting cases of optic and ciliary neurotomy.

CASES OF ŒDEMA OF OBSCURE ORIGIN.[1]

BY W. B. HADDEN, M.D. LOND., M.R.C.P.,

DEMONSTRATOR OF MORBID ANATOMY AND MEDICAL REGISTRAR TO ST. THOMAS'S HOSPITAL, PHYSICIAN TO THE ROYAL HOSPITAL FOR CHILDREN AND WOMEN.

S. S——, aged twenty-four, a dressmaker, was admitted under my care into the Royal Hospital for Children and Women on Nov. 3rd, 1884. There was a very marked history of phthisis in the family. The patient stated that she had suffered from vomiting and headache occasionally since childhood, but during the last four years she had become much worse. In October, 1882, she was an in-patient of St. Mary's Hospital, under the care of Dr. Broadbent. She was stated to have suffered from gastric ulcer and peritonitis. At this time she began to have constant diarrhœa, and this has persisted ever since. Soon after leaving the hospital in January, 1883, she became very weak, and had swelling of the legs and feet. She was treated at the Reading Hospital for nine weeks, and remained quite well for two months after her departure. In June, 1883, she was again attacked with vomiting and pain, and in October she was admitted into Guy's Hospital, where she was seen by Dr. Wilks and Dr. Pavy. She was then thought to have acute peritonitis. In January, 1884, she was admitted into the Beckenham Hospital for another attack of supposed peritonitis, and since then she has had several short bouts of similar nature. A month before she came under my notice she caught cold, and has had a cough since. On admission she complained of pain in the epigastrium and right iliac region, and of extreme weakness. She was very thin, apparently emaciated. The skin everywhere was hot, dry, and very scurfy. Both legs were œdematous, the left more than the right. There were the signs of bronchitis all over the chest, but no evidence of consolidation. She had little cough, and did not expectorate. The heart was normal. The pulse was 92 and feeble. The urine was free from albumen, and normal in every way. The liver seemed natural. On Nov. 8th (five days after admission) she was much better. The pain was less, and there had been no vomiting. There had been frequent stools, sometimes as many as eight or ten daily. The œdema of the lower limbs had disappeared. The temperature for the first four days had varied between 100° and 103·8°, being usually higher in the evening than in the morning. She had sweated at night, and on one occasion there was said to have been a slight rigor. The physical signs in the chest remained as on admission. I need not give the daily notes of the case. The temperature was very variable, sometimes reaching only 100° at night, sometimes rising to 102° or 103°, and occasionally remaining normal. The night sweats continued, and at times she had slight shivering attacks. The tongue was very red. The stools were still frequent, but not so frequent as at first; they were pale, formed, and small. The tendency to frequent defecation was controlled by compound kino powder, ten grains twice a day. She had only

[1] Read before the West Kent Medico-Chirurgical Society, 1886.

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vomited twice during her stay in the hospital, once after a dose of cod-liver oil. The catamenia, which had been absent for more than a year, appeared once. In short, when she was discharged at the beginning of 1885 she was practically well.

And now I must give the patient's subsequent history. In May, 1885, she came under Dr. S. Coupland's care at the Middlesex Hospital. She again had the signs of bronchitis, the legs were œdematous, she vomited at intervals, usually after food, and the stools were frequent. The pulse was noted as being feeble and compressible. The urine was examined several times, and always found free from albumen. The temperature, again, showed an irregular tendency. She made considerable improvement; but I gather from the clinical notes which were kindly lent to me by Dr. Pasteur, the medical registrar, that there was still slight œdema of the legs and some bronchitis when she left the hospital. In October, 1885, I received a letter from my friend Mr. Lunn, the resident medical officer at the St. Marylebone Infirmary. He asked me to come to see a case which might possibly be one of myxœdema. I found that the woman was my old patient. Her aspect had undergone a very remarkable change. Both upper and lower eyelids were very much swollen, so swollen that she was unable to see me; otherwise there was no puffiness of the face. I must observe that Dr. Coupland's notes state that the patient had noticed swelling around the eyes in the morning for nine months. But there was certainly no puffiness when she was under my care, and I found no reference to its existence in the Middlesex notes. In addition to the swelling of the eyelids, the legs were œdematous, and there were the signs of bronchitis. I could detect nothing wrong with the thyroid gland. There was no evidence of obstruction of the veins of the lower limbs. On the whole, I thought that the case was not one of myxœdema, but, on the other hand, was not prepared to give anything like a positive opinion. She remained at the St. Marylebone Infirmary from June 17th until her death on Oct. 27th, 1885. During this time she suffered a good deal from abdominal pain, vomiting, and diarrhœa. The urine was repeatedly examined, but never contained albumen. The average daily quantity was said to have been only fourteen ounces, but probably a considerable quantity was passed in addition during her frequent defecations. On Oct. 20th the œdema had entirely disappeared, but the abdominal pain persisted, and the stools were passed at frequent intervals. She died rather suddenly on Oct. 27th.

I was unable to be present at the post-mortem examination, but Dr. Coupland attended. The heart, liver, spleen, kidneys, uterus, and brain were normal. The thyroid gland was said to be small, but apparently not otherwise affected. The lungs were large, emphysematous, and œdematous, but there was no sign of consolidation. The omentum was large and fatty. The mesenteric glands were enlarged, and several were suppurating. Three annular strictures were found in the jejunum at intervals of four inches, and one of these was plugged by a plum-stone. Unfortunately, I cannot report on the condition of the blood and vessels, the exact state of the thyroid body, and the precise nature of the intestinal strictures. I am, however, informed by Dr. Coupland that the real nature of the disease was not made clear to his mind by the post-mortem examination. I cannot connect in any reasonable way the œdema of the lower limbs and face with the state of things found after death. It is true that the œdema of the legs might be due to the bronchitis, although my own belief, after a careful study of the case, is that such an explanation is insufficient. The puzzling factor is in the later history of the patient. The swelling of the eyelids suggested renal disease; but, as I have already observed, neither clinical nor pathological evidence lend the slightest warrant to this hypothesis. It would be impossible, too, from the facts which I have given, to look upon the condition as one of myxœdema or the cretinoid state; indeed, I am prepared with no explanation. The enlargement and apparent inflammation of the mesenteric glands, and the strictures of the small intestine are, of course, a sufficient and reasonable cause for the abdominal pain and the frequent defecation. But it is difficult to connect the œdema with these lesions, and it is highly probable that there was no other relation between them than that of mere coexistence. The occurrence of transitory œdema is not unfrequent in the initial stages of myxœdema. The swelling may affect face, limbs, or trunk, and may supervene more than once before the characteristic features of the disease are exhibited. It is well, therefore, to bear in mind the possible significance of some of these fugitive œdemas of obscure origin.

In talking over this subject recently with Dr. Bristowe, he reminded me of the case of one of the present house-physicians at St. Thomas's Hospital. This gentleman, who gives me permission to allude to his case, informs me that about two years ago he suffered from œdema of the upper and lower eyelids on the right side. At this time he was in his usual condition of health, which, however, is never very robust in London. The urine was constantly examined for albumen, but none was ever found. He was seen by Mr. Nettleship, who suggested some periostitis as a possible cause. But this was abandoned as untenable, as there was an entire absence of pain, heat, or thickening of the surface of the bone. There was no sign of enlargement of the superficial veins. In fact, the case was one of passive œdema, and its cause still remains unascertained. In two weeks the swelling disappeared, much to the satisfaction of my friend, who was not unnaturally somewhat alarmed. He tells me that his eyelids have always been slightly full, and at the present time they are certainly a little puffy. During the last two years I remember a few cases of œdema of unusual distribution, the cause of which was not clear. One was a child, fifteen months old, the subject of slight rickets, who had œdema of the right foot and the left hand. Another was an infant of the same age, who had œdema of both legs; but the friends stated that during the four weeks preceding admission there had been occasional swelling of arms and hands. In both these instances the origin of the dropsy remained undiscovered.

The case which I shall now give proved fatal, but the post-mortem examination only partially explained the clinical facts. The patient was a woman aged twenty-eight, who came under my care at the Royal Hospital for Children and Women on Jan. 12th, 1886. The only point to note in the family history was that her mother died of phthisis. The patient had been married four years, but had never been pregnant. She had always been delicate, though she had suffered from no definite illness since measles in childhood. The catamenia had been absent for the three months preceding admission. She had been troubled with cough in the winter, and of late the cough had become more severe. During the last six months there had been pain and swelling of the legs, and she had become weak and thin. On admission she was seen to be fairly nourished, and the lips were of a good red colour. The cheeks were swollen and puffy, but the eyelids were not affected. The hands were cold and the skin on the dorsum mottled. The abdominal and thoracic walls were œdematous, and there was marked dropsy of the legs and feet. There were sonorous and sibilant rhonchi over both lungs. The left apex, both front and back, was dull, and crepitations were audible. The respiration was cavernous, the voice sounds increased, and pectoriloquy was present. In fact, the existence of a cavity was diagnosed, and the post-mortem examination showed that this was so. The heart was normal. The pulse was 128, regular, and very feeble. The liver was evidently enlarged, the edge being felt three inches below the ribs. No ascites was made out. The tongue was furred, the appetite bad, the bowels regular. The specific gravity of the urine was 1025; it was acid, and contained no albumen. No alteration in the size of the thyroid gland could be detected. The temperature varied between 99·6° and 101°. On Jan. 19th (one week after admission) I noted that the whole left upper extremity was œdematous, pitting on pressure. This had been noticed the day previously by the house-surgeon. The right forearm and the lower part of the arm were also œdematous, but were not so when the resident surgeon had made his morning visit two or three hours previously. There was no enlargement or tenderness of veins anywhere, and no sign of mediastinal growth or aneurysm. The feet and legs were now only slightly œdematous. During the night she had had diarrhœa, the stools being loose and offensive. During this first week the patient had been treated with stimulants, such as brandy and ammonia.

Jan. 21st: The œdema of the right arm has disappeared, but around the left elbow it is more marked. She has been slightly delirious during the night. No headache. Feet and legs remain as before, slightly œdematous.—23rd: The œdema of the right upper extremity has returned, the lower half of the arm and the upper half of the forearm being affected.

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The œdema in the left side has increased somewhat, and extended a little further down the forearm than on the opposite side. The backs of both hands are absolutely free from œdema. There is no fulness of veins, no tenderness, and no swelling of face; some œdema of lower half of back. The diarrhœa has been controlled by occasional doses of chalk mixture. The pulse is 112, and still very feeble. The urine, after repeated examinations, was found to be free from albumen.—25th: The œdema of the left upper extremity has extended to the dorsum of the hand. The right arm is now but slightly affected. There is some swelling and pitting of the right side of the neck.—26th: The œdema of the neck has nearly disappeared. She passes her evacuations into the bed. Is taking a tablespoonful of cod-liver oil twice daily, in addition to the ammonia mixture.—30th, 11.30 A.M.: No œdema of arms or legs, but some of back and abdominal walls. 1 P.M. (an hour and a half later): There is now moderate œdema of upper half of forearms.—Feb. 2nd: Slept fairly in the night, but was delirious in the morning. Suddenly became collapsed while having her bed made. She does not seem to understand when spoken to. She is very pale, and the eyes are half closed. Pulse 140, very feeble. Had a general convulsive fit shortly after midday. No œdema anywhere.—3rd: The coma has increased, and she cannot be roused. Had several convulsions during the night. She died at 9.45 P.M., after a series of epileptiform attacks.

Necropsy, seventeen hours after death.—No œdema of extremities. Hair in axillæ and on pubes very scanty. Thyroid gland healthy. Two pints of serous fluid in left pleura, and firm adhesions at apex. Right pleura healthy. Three or four ounces of serous fluid in pericardium, and two pints in abdomen. The upper lobe of the left lung showed rather extensive broncho-pneumonic and tubercular consolidation. There was only one cavity, and that was situated at the extreme apex close to the posterior border. It was well defined, measured an inch from above downwards (its long diameter), and contained pus. The lower lobe was quite collapsed, and there were a few caseous masses, averaging the size of a pea, scattered through it. There were some broncho-pneumonic patches at the extreme apex of the right lung, but no cavity. The bronchi contained pus. The bronchial glands on the left side were very caseous. The right side of the heart was dilated, but the organ was otherwise natural. The blood was everywhere fluid, except for a small amount of clot in the right side of the heart. The vessels, both arteries and veins, were healthy. The main veins of both upper and lower extemities contained fluid blood only. There was no obstruction. The liver was large and fatty. The spleen a little enlarged. The kidneys were somewhat increased in size, and heavier and firmer than natural. The capsule stripped readily, and the convex surface was smooth; the cortex was dull red, but otherwise natural. There was some early tubercular ulceration on the lower part of the ileum, and there were two or three calcareous mesenteric glands. The os uteri was small, and each Fallopian tube showed a constriction about its middle, the inner half being much narrower than the outer half. There was a moderate amount of fluid in the ventricles of the brain, otherwise the organ was healthy.

There are some points in the clinical history of this case which require special notice. The patient throughout was extremely feeble, and her weakness seemed to me to be quite out of proportion to the amount of lung mischief. The urine was frequently examined for albumen, and on only one occasion was it present, and then there was only a trace. The temperature exhibited as a rule an evening exacerbation, and, in fact, had the features so often seen in phthisis. I made careful inquiries as to whether the position of the patient had any influence over the curious distribution of the œdema, but the nurses were confident that such was not the case. The fluidity of the blood found after death may possibly explain some of the peculiarities of the dropsy in this patient; but I confess I cannot readily account for its occasional fugitive character; nor, indeed, is it easy to understand why the œdema should affect part of the arm and forearm—for example, leaving the back of the hand free. I am not aware that much has been written on the subject, which I have brought forward in rather a disconnected way. I have preferred to record facts, and to say little by way of explanation, for I trust that others may, from their ripe experience, be able to throw some light on this obscure class of cases.

ON THE NATURE OF SCROFULOUS GLANDS IN THE NECK AND THEIR SURGICAL TREATMENT.

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(*Concluded from page 1156.*)

MY excuse for having gone at some length, and yet as briefly as I could, into the pathological aspect of the subject, must be that upon our view of the question in this light the further question of surgical treatment is based; and also that in most of the works in our own language the tubercular nature of the disease is not recognised sufficiently. In support of this assertion I will quote a few passages from some of the more recent surgical works which deal specially with the subject of scrofula and tubercle. In the first volume of Ashhurst's "International Encyclopædia of Surgery," p. 242, in the article on Scrofula and Tubercle, written by Mr. Butlin, and published in 1882, he thus speaks of the morbid anatomy of scrofula: "There is not in scrofula, as in tubercle, a pathological body, either microscopical or of larger size, peculiar to the disease. All the changes are those of inflammation; but the products of scrofulous inflammations may be analysed, chemically and histologically, without the discovery of any substance or structure which may not equally occur in any, or indeed in every, inflammation." This was no doubt written immediately before Koch's address before the Physiological Society of Berlin, but it does not even represent the position of the question as it stood for several years prior to the discovery of the bacillus. The identity of the two diseases had been fully recognised by leading pathologists, as I have endeavoured to show; the only question waiting for solution being "What is tubercle?" Again, in Mr. Treves' work on "Scrofula and its Gland Diseases," published also in 1882, p. 20, after giving the evidence for and against the identity of these diseases, he proceeds to discuss the value of the inoculation experiments, especially with respect to the conclusions drawn from them by M. Villemin. He then makes almost a pathetic appeal in favour of scrofula and its future distinctive existence. He says: "But even now some pathologists still advance the opinion (which I give in the words of M. Villemin) that 'tubercle alone gives tubercle by inoculation.' Those who retain this view are compelled to exclude from scrofula all its classical features: the caseous gland, the cold abscess, osteitis, periostitis, and 'white swellings'; and all that they can leave for the disease are a few superficial lesions, the products of which will in time be probably found to be inoculable, and then, for M. Villemin and his followers, scrofula will be an extinct disease." Well, terrible as the alternative is, we must face it; and as we must now hold that "tubercle alone gives tubercle," and that, as the bacilli from scrofulous lymphatic glands, when inoculated, give rise to tubercle, we must also hold that scrofulous lymphatic glands are tubercular; Mr. Treves will have to accept his alternative and acknowledge that scrofula as a distinct disease has ceased to exist. Let me cite another extract, one from Dr. Clifford Allbutt's lecture on "Scrofulous Neck," as it illustrates the dawn of the tubercular aspect of the disease in these countries. He says in his lecture published last year, p. 12: "Our knowledge of the tubercle bacillus is as yet too young to tell us whether scrofulous neck always depends upon the introduction of the tubercle bacillus by way of the mucous membrane of the throat or otherwise—too young, indeed, even to tell us whether the tubercle bacillus is an essential part of scrofulous neck at all. We know that it may be found there, and that scrofulous neck has of late years been regarded as morphologically tubercle, so that we are safe at least on the broad postulate that inoculation from sources of corrupt or caseating pus does very commonly set up a more or less generalised tuberculosis." I do not wish to assert that every enlargement of the cervical lymphatic glands is tubercular. We eliminate in this discussion those forms of adenitis which are associated with various infectious and simple inflammatory processes; we omit the so-called rheumatic bubo which appears in otherwise perfectly healthy individuals, without discoverable cause, most frequently in the axillary and inguinal glands, and which often terminates in suppuration.

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In fact, only those affections of the gland are here discussed to which the term scrofulous is usually applied, and these, we assert, are due to the specific action in them of the tubercle bacillus. The diagnosis in the early stage is extremely difficult, indeed sometimes impossible, between the tubercularly infected gland and the simple form of adenitis which results from some local irritation. Thus the glands in the neck may enlarge from the irritation caused by a carious tooth, or an attack of tonsillitis, or a simple cold. But as the irritating cause disappears the swollen gland will subside, though sometimes it takes a long time to do so. But in the tubercular gland it is quite otherwise. The irritating cause may disappear or have been so slight as to escape notice, but the infected gland remains stationary for a time or continues to enlarge, and presently we find other glands following in its wake, and enlarging too. In the early stage our only means of diagnosis is to wait, and what was at first obscure will soon be cleared up by the future progress of the case.

Now, to understand the process of infection in the cases referred to, we must for a moment look at some of the characteristics of the bacillus itself. It cannot develop in a temperature below 86° or above 106°; therefore, outside an animal body it cannot grow in this climate. Inside the body it grows and multiplies. A bacillus takes a month to reach its fullest development. It multiplies by fission, and by the formation of spores. These speres are much more resistant than the bacillus itself. Drying the bacilli or the spores does not destroy them. It is not therefore difficult to understand how easily the infection may spread. The sputa of phthisical patients, for example, swarm with them. When these sputa dry, the bacilli and their spores, in a dry but active state, are scattered far and wide in the air, and may come in contact with a suitable soil whereon to develop. An ordinary healthy individual does not present this soil. The bacilli may be inhaled into his lungs, may be swallowed with his food or mixed up in his saliva, they may even lodge on some abraded mucous surface, and yet may do no harm. The antiseptic power of healthy living tissue is fully recognised. But there is undoubtedly some defect of constitution, some "vulnerability" of the tissues which we do not understand, which furnishes a fruitful soil. Call scrofula, if you will, the peculiarity of the soil on which the bacillus grows; but the seed itself and its growth, and the manifestations of its development, let us call tubercle. We shall thus have clear ideas, at least, as to what we mean; we shall not continue to confound together the soil, and the seed which grows on it. Now, look at the behaviour of the bacillus when once it finds a local habitation congenial to it. As I have said, a bacillus requires nearly a month for its full development, and shows hardly any signs of growth under a week or ten days. During this period they may be cast off in the bronchi by the action of the cilia; in other regions they may be expelled with the secretion of the part. But suppose they gain an entrance though some abraded part—they are taken up by the lymphatic vessels and carried to a neighbouring gland, or they may develop in the tissue where first they found a resting-place. In the case of the glands in the neck, we can generally trace the history back to some such local infection. Thus a child suffers from eczema of the head, and the child is of a delicate constitution; we are told it is scrofulous. Or the child has a purulent otorrhœa or ulcers in the mouth, or it suffers from a discharge from the nose. Later on, a gland in the neck, usually only on one side, enlarges. Or a young adult, and sometimes even one more advanced in life, suffers from a cold, from an attack of tonsillitis, or from enlarged, sometimes caseating, follicles in the pharynx (and I have not infrequently traced it to this cause); and even after this ailment has subsided, and is perhaps forgotten, a gland, or more, begins to swell. Long after the exciting cause has ceased to act, the gland either remains *in statu quo*, hard, nodulated, movable; or it may develop rapidly all the series of phenomena which are known as scrofulous. Other glands enlarge, and frequently we find all the glands on one or on both sides of the neck sharing in the process. This whole series of events are explained by what we know of the behaviour of the tubercle bacillus. By some such channel as I have mentioned the bacillus enters; it is taken up in the lymph streams, and is arrested by the first lymphatic gland it meets. In such cases too much importance cannot be attributed to the functions of the lymphatic glands. They act as defensive outposts, as filters to free the lymph of infective and deleterious matters which it may contain, but in doing so they themselves suffer. In process of time the bacillus grows within them, multiplies, and gives rise to the formation of true tubercle. These tubercles become yellow in the centre, they coalesce, and in process of time form a caseous mass. At this period one of three things may happen—in other words, the gland may follow one of the proverbial "three courses." First, it may get well, though this is not a frequent result. Secondly, it may suppurate,[1] make its way to the surface, and discharge its contents, and this may end in cure. Or, thirdly, it may extend, infecting gland after gland. Even here, too, nature may accomplish a cure by a slow process of successive suppuration, which may eventually eliminate the disease. But should nature fail to do so, the last gland between the bacilli and the general circulation may become infected, the last outwork of defence may be carried, and then the whole system is exposed to general infection, and a more or less acute general tuberculosis results. But what is to determine which of these three courses shall be followed? It seems to depend on one or other of two factors: firstly, on the number of the bacilli which have gained access to the gland; secondly, on the constitution of the patient. Koch has shown that it is of the greatest significance whether the infection be produced by a few bacilli or by a large number. In his inoculation experiments, he found that a large number of bacilli, after first producing a diffuse caseous infiltration, both at the site of injection and in the neighbouring glands, gave rise rapidly to general tuberculosis. If the number of bacilli introduced were smaller, the length of time which preceded general infection became longer; and when the bacilli were few, this period might be very long, or in some cases generalisation might not occur at all. In spontaneous tubercular infection in man the dose is usually small, though sometimes it is often repeated; and hence it is that in tuberculosis of the glands in the neck general infection of the system most frequently does not occur. The constitutional condition of the patient plays a part only second to the strength of the dose received. I have already alluded to the fact, recognised by all, that a certain state of the system, a certain constitutional susceptibility, is necessary, in order that an individual may contract tubercular disease—that is, that every person does not offer a suitable soil for the growth of the bacillus. What is equally true is that persons may possess this vulnerability in different degrees, and, moreover, that the same person does not afford at all times the same suitability of soil. Clinical experience has taught us this over and over again, and upon these axioms are based all our constitutional methods of treatment, the importance of which in every case cannot be over-estimated. In every case, whether we adopt surgical measures or not, we should aim at so improving the health of the patient by those means, which it is not within the scope of this paper to discuss, that to the best of our ability we shall put him into a condition to contest successfully with his unseen foes.

Taking, now, these two factors, we see that even when a gland has become infected we may hope for spontaneous resolution, provided that the infecting dose has been small, and provided that the patient's constitution has so improved that the gland tissue is healthy enough to cope with the bacillus. Now what do we observed in such a case? The bacilli gradually disappear from the caseous mass, and may not be finally found at all, and the broken-down tissue may be absorbed, or it may calcify, and recovery ensue. This is unfortunately a rare occurrence. But supposing these factors are not sufficiently strong to bring about such a desirable end, the patient may eliminate the disease by a process of suppuration. The caseous masses in the gland—and they are usually multiple—begin to show evidence in the centre of suppuration. This may go on to a considerable extent before any external symptoms of suppuration appear. So that because a gland is hard and movable, and is not tender to touch, we cannot assume that that gland does not contain many central abscesses of small size. Gradually these abscesses coalesce; the gland becomes tender; it enlarges more and more; inflammation extends to its capsule and to the neighbouring parts, and soon adhesions form. By slow degrees the skin over it becomes involved; it becomes firmly adherent; it thins; the abscess opens and discharges, and a sinus is left, which may, and generally does, keep open for weeks or months, discharging a thin pus

[1] This suppuration is not a necessary result of caseation, but is probably due to the entrance of some form of micrococcus by the same or some other channel as that by which the bacillus entered.

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with cheesy matter contained in it; and when it heals it leaves behind it an ugly and disfiguring and puckered scar. But, even so, the patient is well quit of his disease. More frequently, however, the bacillus has made its way into neighbouring glands. One by one these enlarge, and the same slow process of suppuration begins; another sinus forms through unhealthy purplish skin, and another scar is left; and the cycle is repeated till the whole neck is seamed and unsightly. Is not this a true picture of the disease, and one with which we are too commonly familiar? If more were needed to paint it in its true colours, let me give it in the eloquent words of Dr. Clifford Allbutt: "That the ugly finger of scrofula should be laid chiefly upon children, young men, and maidens, has this pathos in it, that it disfigures them at the spring-time of life—at that time when hope and promise make all life precious, and all death seem the loss of untold treasure; when beauty and gaiety have their fleeting day, and for the loss of them the world is poorer."

But even while this local process of decay is going on the general system is not safe from its ravages. As long as these caseous masses of tubercle exist in the body, so long must we ever bear in mind that the danger of generalisation is possible. But even if we were sure that by repeated and prolonged suppurations the danger of extension were removed and the bacilli expelled, the scarring of the neck is not the least consequence which may follow. Remember that this disease would never have originated but for a peculiar constitutional susceptibility. Will that susceptibility be diminished by months or years of suffering? Will it not rather be enormously increased? During this period "septic matters are absorbed into the blood, recurrent and variable hectics dissipate the appetite, flesh, and strength, so that the patient finds himself at the end of it all, if not unsound in his internal organs, at any rate a far worse man than he would have been had this trial been spared him."[2] Let him become again exposed to tubercular infection, let him breathe impure air impregnated with tubercular poison, and who shall say that he will escape with healthy lungs? It is believed by some that in subjects predisposed to scrofula the involvement of the glands in youth affords them some sort of protection against phthisis subsequently. But this view cannot be upheld. Only the other day a girl came into hospital with extensive disease of both lungs, and her neck was seamed with old scrofulous scars. The worst case of tuberculous glands in the neck I ever saw was in a girl who died of phthisis.

Such then, being the nature of these so-called scrofulous glands, and such the consequences which we have to face, I think I am justified in asserting that the time has come, when the treatment of this disease, except in its earliest stage perhaps, should pass from the domain of the physician, and should be entrusted to the surgeon. In the earlier stage, while still the diagnosis remains uncertain, the treatment is one of expectancy, tempered by constitutional measures. But when once the diagnosis is assured, and there is no evidence that resolution is likely to take place, bearing in mind the nature of the disease we have to deal with, and the consequences which may follow from waiting too long, I am strongly convinced that the surgeon's art should intervene to assist Nature, and to do that quickly, which unassisted she would do if she could, but often fails in accomplishing, or only succeeds when her victory has cost her dear. When as yet the poison has infected but one or two glands, we have good grounds to hope that by their removal we may eliminate from the system every focus of infection. Every case is not suitable for the same method of treatment, and in some cases we have little choice left to us as to what method we shall adopt. Of all the various surgical methods at different times suggested, there are three which I shall specially refer to as being the best. Each one is applicable to a different class of cases, and although they have been applied indiscriminately by their special advocates, I think there are well-marked lines which should divide those cases in which a special method is applicable from those in which it is not. These three methods are (1) scooping, (2) cautery puncture, and (3) excision.

Of the first method—scooping—I need say but little, as the subject has been very fully and ably discussed in a lecture by Mr. Teale, which was [illegible] last year.[3] I [illegible] with which I [illegible] healing in [illegible]

a few weeks of gland cavities and sinuses, even though they have existed for years, and of wounds resulting from the removal of caseous and suppurating glands." 2. "That in dealing with sinuses, gland abscesses, and decayed or semi-decayed lymphatic glands, the action of the surgeon must be vigorous and thorough." 7. "That in dealing with a sinus the channel should be enlarged by the knife or by Bigelow's dilator, and the whole of its granulating surface should be scraped off. Where a sinus is shallow and covered by thin blue skin, this imperfect covering should be rasped away by the scraper, and any cutaneous overhanging edges should be trimmed off by the scissors." 8. "That, in dealing with a sinus or an abscess, the surgeon should not rest content until he has discovered and eradicated the gland, always remembering that if it be not obvious there is sure to be a small track leading through the deep fascia to the missing gland. This opening should be enlarged so as to admit the spoon of Lister's scraper." These conclusions which I have quoted explain the classes of cases to which, I think, this method is suitable, and to which I believe it should be restricted. These classes embrace cases in which sinuses exist, or in which a superficial abscess communicates through an opening in the cervical fascia with a suppurating and caseous gland beneath. It is also sometimes a good treatment to adopt when the changes going on inside a gland have given rise to inflammation of its capsule and to the formation of firm adhesions between it and its surrounding tissues. For in these cases enucleation of the entire gland is extremely difficult. I have employed this method in many cases, and my experience of it has strongly impressed me with the belief that the classes of cases I have mentioned are those to which the method should be restricted. For in all of these cases the method of excision is fraught with too much difficulty to authorise us to adopt it in preference to this apparently simpler plan; but, on the other hand, it should not be extended to cases in which enucleation can be readily performed, and for this reason. In most of these tuberculous glands, the gland capsule shares in the disease, and in the scooping operation this is necessarily left behind; moreover, there may be, and there frequently are, enlarged and tuberculous glands in the neighbourhood, which have not yet softened. These escape the spoon, and later on become the foci from which fresh infection starts. Of much less importance is the fact that the incision after enucleation seldom takes more days to heal than that after scooping takes weeks. On these several grounds, I hold that the scooping operation should *only* be done in those cases in which excision is inapplicable.

The second method of treatment is that by cautery puncture. It has found its chief advocate in these countries in Mr. Treves,[4] and it has also found much favour in France. Mr. Treves expresses the opinion that it is "one of the very best operative measures at the disposal of the surgeon for the cure of scrofulous glands." He thus describes it:—"In this operation I make use of a thermo-cautery point about as thick round as a No. 7 catheter. This point, having been heated to a bright-red heat, is thrust through the skin into the substance of the gland, and passed in three or four directions in the body of the tumour before it is removed. ..... If no pus or cheesy matter follows the removal of the iron a simple zinc dressing may be applied, but if any such matters escape then a poultice should be ordered. ..... It is more adapted for adherent than for movable glands." This method I have lately employed, and in certain cases I think it should be productive of good. Its *modus operandi* would seem to be that the intense heat destroys the tubercle bacilli and their products, and it leaves a channel for their escape externally which does not allow of extravasation into the neighbouring cellular tissue. It seems to me that in softened adherent glands, it would probably be more effective than the method of scooping.

The third method of dealing in a radical manner with these tuberculous glands is by excision. It is specially suitable in those cases where the glands are not adherent. The operation is easier the harder the glands are—that is, the less advanced they are in the process of suppuration. The great advantages I claim for this method are that we can in most cases entirely remove all the affected parts, including the capsule of the gland. The wound is a clean [illegible], mostly through healthy skin, and therefore, with [illegible] sepsis, heals by first intention, and leaves a [illegible] becomes of time becomes white and often [illegible]

[illegible] Scrofula and its Glands [illegible]

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glands are non-adherent, they can be enucleated with great ease. On the 8th of this month, through an incision an inch and three-quarters long, I removed eight glands, three as large as walnuts, and all of them caseous. Seven days after, the wound was healed, and the scar even then scarcely noticeable. But when the tubercular process has been allowed to run its course for a long time, and adhesions have formed, then the real difficulty is experienced, and often a tedious dissection is required before the diseased glands can be removed. And here let me say that this difficulty is often of our own making. We meet a case in which two or three glands in the neck are swollen and hard. A careful inquiry into the history of the case will satisfy us that the glands are scrofulous. But instead of dealing with them at once, we allow the disease to spread, more glands to become infected, and adhesions to form, whilst we wait. Wait for what? To try the effects of this or that external application, painting with iodine, or a host of other remedies, which experience should have taught us in that stage are no remedies at all. Sometimes the delay is due to our unwillingness to make a cut which may leave a scar, and then nature takes the matter in hand, the gland softens, an abscess forms, and the end of it is that a far worse scar is left than would have resulted from timely intervention. Besides, all this time other glands are preparing to go through the same process. Such things ought not to be. What I maintain is, that the earlier we attack these glands the less we shall have to do, and the smaller and more insignificant the scar will be; and, what is more important still, the focus of the disease may be got rid of through quite a small opening. Often, however, we have at least this satisfaction, that we cannot blame ourselves if the disease has become extensive. It may be so when first we see the patient, but even in the most extensive cases of scrofulous glands we may hope for a cure by surgical art. I have notes of fifteen patients from whom I excised tuberculous glands. Two were operated on twice and two three times, making in all twenty-one operations. Some of these were comparatively simple cases, two or three glands only requiring removal. Some of the cases were most extensive, and of these three present points of special interest.

The first case was that of a boy aged seventeen, whose neck was enormously swollen on the right side, owing to the enlargement of the glandulæ concatinatæ and submaxillary glands. I operated on him twice. The first time was on June 12th, 1883. A curved incision, about four inches long, was made behind the sterno-mastoid muscle, and all the enlarged glands removed. They were all caseous, several presenting centres of suppuration in the middle of the cheesy masses. I mention his case because he was attacked with erysipelas three days after operation. The erysipelas began low down on his back, spread gradually over his whole body, with the exception of the parts underneath the antiseptic dressings. This part remained healthy throughout, and the wound healed well. Some months after I removed the submaxillary glands. A similar mishap occurred in a second case, but both made perfect recoveries.

The second case I wish to mention was that of a married woman, aged twenty-three, who presented a long chain of glands extending from behind the left ear to the clavicle. They were movable and hard in the upper two-thirds, but below they were soft and suppurating. I excised them all at one operation on April 3rd, 1884. The abscess cavity was scraped out, and a drainage-tube inserted through a counter opening close to the clavicle, the wound being itself completely closed. The dressings were not disturbed till the seventh day, when the wound was quite healed. The drainage-tube was removed, and the sinus was completely healed on the fifteenth day. She left hospital three days later. I saw her again a few months ago, a year and three quarters after operation. There were no more enlarged glands, and the incision was reduced to a fine white pliant scar.

The last case to which I shall refer is that of a girl aged eighteen, who was studying to become a schoolmistress, but was rejected on the ground of health, as the left side of her neck was bulged out with a large number of swollen glands. She was greatly disfigured. I operated on the 29th of April, 1884. The incision reached from the mastoid process to within an inch of the clavicle. All the superficial and deep glands were involved, those lying underneath the sterno-mastoid muscle being very difficult to enucleate. I removed in all forty-eight glands at this operation. She made a slow recovery, but a good one. I saw her the other day, nearly two years after operation. There is a long scar, but it is soft, white, and flexible; and she can so arrange her hair as to make it almost imperceptible. She is in excellent health, and has had no return of the disease; in fact, as we might expect, it is not possible to feel any glands in that side of the neck. I mention this case especially as showing that excision can be safely done, even in such an extreme case.

Before concluding this paper, there is an objection which I should like to answer—an objection which I have heard raised, especially in regard to these extensive operations; and it is this: Is it not a very serious matter to interfere to any great extent with the lymphatic system in the neck? That objection is entirely theoretical; I have not seen in any of the cases on which I have operated any evil consequence referable to this cause. Besides, we must bear in mind that caseous glands are, to all intents and purposes, functionally destroyed. If there is any reason in the objection at all, the blame must be left at the door, in the first instance, of the tuburcular affection; and, secondly, at the door of those, be they doctors or patients, who allow the disease to progress to such an extent—a disease which, I trust, I have shown can be arrested in its early stages by the timely and judicious intervention of surgical art.

NOTES ON A CASE OF EXTRA-UTERINE ABDOMINAL PREGNANCY.

BY T. W. J. ALLEN, L.R.C.P. LOND., &c.,
HONORARY SURGEON TO THE GRIMSBY AND DISTRICT HOSPITAL.

MRS. ——, aged thirty, fisherman's wife, consulted me on June 27th, 1885. She was of slight build, emaciated, and anæmic-looking. Had been twice married; ten years to second husband. Had two children by first husband, the second eleven years ago. For the last three or four years she had menstruated irregularly, sometimes missing three or four months, and last menstruated about Christmas, 1884. Since the end of February, 1885, she had been suffering from violent pains in the abdomen and back, with flatulence, morning retching, and vomiting. She had been attended for two months previously to seeing me for chronic inflammation of the womb, and had suffered from a purulent vaginal discharge for the last ten years, with pain over the sacrum, and dragging pains down the thighs. I found a smooth, rounded swelling occupying the hypogastric region, resembling about a fifth-month pregnancy. There were no intermittent contractions, and no movements to be felt on palpation. I could not hear any fœtal heart sounds, but there was a well-marked whizzing murmur heard all over the swelling, more distinctly over the left side. I found no marked vaginal changes or shortening or softening of the cervix uteri, and no abnormal bulging. I was unable to recognise the fundus uteri on bimanual examination. The breasts were slightly swollen and tender and the veins conspicuous, the areolæ being also darker than usual and somewhat swollen. I told the patient that she was probably pregnant and arranged to see her again in a month. Battley's opium solution in fifteen-minim doses greatly relieved the abdominal pains, and had to be continued in increasing doses, as she said that she could not exist without it. Three weeks afterwards she called to tell me that she had felt the child's movements. She had improved in her general health and appearance. The bladder and bowels continued normal. I did not examine her again until November. The movements had then ceased for about a month, though they had been very strong. She had slight metrorrhagia during the latter half of September. The abdomen was greatly distended and the superficial veins dilated. There was now marked fluctuation, and the usual physical signs of encysted fluid. No muscular contraction of the cyst-wall; no sound on auscultation. The cervix was not perceptibly altered, and the uterus appeared to be fixed by perimetritic adhesions. I indistinctly felt what I believed to be the limbs of a fœtus on gently manipulating the tender abdomen.

On Jan. 26th, 1886, I asked a friend to see the case, and he thought it was an ovarian tumour, with no fœtus inside or outside the uterus. I sent her next day to Dr. Frank

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Nicholson of Hull, who kindly examined the case. He also suspected that it was ovarian cystic disease, and suggested tapping at once, and removal by abdominal section in a month if it filled up again. On the 31st she was admitted into the Grimsby Hospital. After using the catheter, I tapped her on Feb. 1st, and withdrew 101 ounces of dark, opaque, brownish-green coloured fluid, sp. gr. 1020. Microscopically it showed numerous leucocytes, granular débris, and large granular masses resembling the so-called granular ovarian cells described by Drysdale, and a few oil-globules. For the next fortnight she suffered from acute peritonitis, the temperature varying from 100° to 103° F., and was too ill to permit further examination. A severe attack of vomiting and diarrhœa followed, which was relieved by starch and opium injections. She rallied for a few days; the temperature became normal; but a slough now began to form through the abdominal walls a little below and to the right of the umbilicus, and she gradually sank and died on March 15th.

Necropsy, six hours after death.—There was great emaciation and an absence of subcutaneous fat. About four ounces of fetid purulent fluid escaped on opening the abdominal cavity, and the tumour was found to consist of a full-term, well-developed male child, placed abdomino-anterior, breech downwards, and in an advanced state of decomposition. The placenta was detached, and mostly absorbed. The sac presented a black appearance, and had undergone secondary inflammation and suppuration. The uterus was small, firmly fixed, quite empty, and its cavity measured two inches.

Remarks.—This case is interesting as showing the difficulty of diagnosis in such cases. Playfair says that "the diagnosis of abdominal gestation is by no means so easy as might be thought, and the most experienced practitioners have been mistaken with regard to it." Barnes, in his last work, says that "almost all the cases in which this form of gestation was suspected which have come under our observation turned out to be ovarian cysts."

AN INTERESTING CASE OF GALL-STONES, WITH NECROPSY.

BY ALBERT WILSON, M.D.

THE following case is of interest at the present time, when abdominal surgery offers such relief to cases of obstructed gall-ducts.

Mrs. B ——, aged sixty-five, first consulted me four years ago. She had for a long while experienced pain in the region of the gall-bladder, which had been treated as indigestion. On examination, I found below the tenth costal cartilage a large movable pear-shaped lump about three inches long, which could easily be grasped; it was the dilated gall-bladder. The stools being of normal colour, the obstruction would be in the cystic duct, and the hepatic and common ducts would be free. I treated her with large doses of belladonna, fomentations, and purging with podophyllin and colocynth. The result was that two gall-stones were passed (or rather found in the stools), also a large quantity of biliary gravel. The swelling and pain entirely disappeared, and therefore a cure seemed effected. The patient enjoyed good health for three years, when another similar but slighter attack came on, with distension of the gall-bladder, but it yielded to the same treatment. This time, though symptoms of stones were present, none were found, but much gravel was passed. Again, in January, 1886, she became ill. There was pain over the gall-bladder, which yielded to belladonna; vomiting was also present, but it resisted all the medicines employed, and yielded only to pancreatised food. There were no symptoms of gall-stones, and the gall-bladder could not be felt. She recovered so far as to be able to get downstairs for a few days, but again became ill, and died on Jan. 29th. Her death was not connected with the liver disease. She was extremely weak, the vomiting had returned, and two days before death curious convulsive clonic spasms set in, which seemed to cause death by exhaustion. As the nervous symptoms form a rare and interesting case of themselves, I shall briefly narrate them, especially as the cause was obscure. On January 28th, at 6 P.M., a fainting fit, with unconsciousness for a short period, ushered in the attack, although there had been occasionally throughout the day twitchings of the face and hands. After the faint the twitching set in all over the body: first an arm, then a leg, then the head, then the chest, would be jerked off the bed. On careful examination certain groups of muscles appeared to be affected; those at the back of the neck jerking the head back. The temporals, masseters, and sterno-mastoids, the muscles of the hyoid bone, jaw and tongue, were all in constant activity, tending to bite and jerk the thermometer out of the mouth, the deltoid and pectorals jerking the arm inwards. The biceps, the flexors, pronators, and opponent muscles of the thumb kept the hands and arms in constant motion. The flexors of the legs pointed the toes. Swallowing and speech were affected. She could only speak, and then with an effort, after the administration of amyl had relieved the spasms. Sensation and tendon reflex were diminished; ankle-clonus was absent; volitional power over the limbs was normal. She was quite conscious. The respiration and temperature were normal; the pulse was 140. There was retention of urine in the early stage; later on, the urine and stools were passed involuntarily. On Jan. 29th, the clonic spasms continued, but were feebler, the muscles being exhausted; those of the jaw and neck were the most active. She died during the night. Only an examination of the abdomen was permitted, so that the seat of the nervous lesion must remain a matter of speculation.

Necropsy.—Abdomen: The stomach was empty. The mucous membrane, which was coated with dirty-brown slime, was very congested, and covered with minute pin-point ecchymoses. Repeated attacks of peritonitis had matted together the duodenum with all the adjacent parts. What seemed to be the gall-bladder, but really proved to be an enormously dilated cystic duct, projected half an inch below the liver. I removed the whole mass, with part of the liver, for more thorough examination, and the result was very instructive. On opening the duodenum, the orifice of the common duct was easily found. It was dilated, and would easily admit my forefinger. Passing the finger up, I could feel bare gall-stones. On opening up the common duct, the hepatic duct was found normal in size. Passing to the cystic duct, I was amazed to find it dilated into one large cavity. This duct was dilated into a thin-walled cavity, three inches long and two inches wide, and contained eight large gall-stones with smooth polished facets. On further dissection, a slightly thickened ring indicated the dilated orifice of the gall-bladder. The gall-bladder formed a smaller cavity than that of the cystic duct. Its walls were slightly thickened, and it only contained five stones, one of which was in a distinct pouch at the most distal part. The whole dissection revealed how completely disorganised these parts get when gall-stones accumulate; and it is of great interest that the presenting part, instead of being the gall-bladder, was the cystic duct—a fact worth remembering for cases of operation.

The treatment I employed was belladonna in large doses to relax muscular spasm, and purges to excite reflex contraction of the gall-bladder to expel the stones. Two or three stones and much gravel were passed after the different attacks. The treatment, however, was only partially successful, for although many stones had been expelled from the gall-bladder, for want of sufficient *vis a tergo* some were retained in the dilated cystic duct. By operation the stones could have been very easily removed, as they were all so loosely arranged. The gall-bladder, being provided with muscular fibres, must have a slight expulsive force, which is probably excited reflexly by purgation. This process can be aided by relaxing the neck of the bladder and cystic duct by belladonna, chloral, or opium. The cystic duct has no muscular fibres, while its mucous membrane has several folds; it is, therefore, passive, and has no expulsive power, which accounts in this case for its great dilatation, and for the greater number of the gall-stones lying in it.

Leytonstone.

FOREIGN MEDICAL APPOINTMENTS.—Dr. Kosturin, of St. Petersburg, has been appointed Extraordinary Professor of General Pathology in the University of Kharkoff. Dr. Hans Virchow is to succeed Dr Hofmann in the charge of the anatomical instruction in the Berlin Academy of Art. Dr. Joseph Schröter has qualified as privat docent in the University of Breslau, with the view of cultivating especially the science of Bacteriology. Dr. Friedrich Korányi, Clinical Professor in the University of Buda Pesth, has been appointed Rector for the ensuing academical year.

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A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. GEORGE'S HOSPITAL.

THREE CASES OF PYÆMIA, ENDING FATALLY; NECROPSIES; REMARKS.

(Under the care respectively of Drs. CAVAFY, WHIPHAM, and DICKINSON.)

THE following cases present some points of interest when grouped together. It is not very common to meet with three cases of pyæmia in which no cause for the disease can be found, either during life or post mortem, within six weeks, in the practice of one hospital. The disease appears to have been idiopathic, and it is difficult to say in what way the germs of the disease found entrance to the system. The diagnosis in no case appears to have been difficult, but in the second the occupation of the patient and the presence of the pustular eruption evidently caused inquiries to be instituted with the idea of carefully excluding glanders. We are indebted for the following notes to Dr. Griffiths, medical registrar.

CASE 1. Victor H——, admitted May 9th, 1885, under the care of Dr. Cavafy, was a healthy lad of fifteen, who had had no previous illness, and had no cut, abrasion, or sore within twelve months of the commencement of the illness. He had two cold swimming-baths within seven and ten days respectively of admission, but he felt no ill effects and had no rigors; but on May 5th he had acute pains in the legs, with rigors, and then "pains all over." When admitted he had a temperature of 101°, a coated tongue, quick pulse, and patchy redness round the right wrist and elbow, over the right leg and ankle-joint, and some effusion into the left knee. He had no cardiac murmur. There were some dulness and harsh breathing at the base of the right lung, and high-coloured urine, with one-fourth albumen. He became delirious on the third day, with much swelling round the great toe joints and in the third joint of the first finger. On the fifth day his temperature fell to normal, but rose steadily afterwards, remaining at 103° for two days, and rising to 105·4° just before death. He was noisy at night, his tongue became dry and brown, his respiration rate reached 50, and pus was found in the inflamed joints of the toes, with small collections of pus in the right forearm and in the inflamed joint on the right hand. He was unconscious for forty-eight hours before death. No diarrhœa or abdominal symptoms, and no pulmonary complications beyond those associated with high temperature and a recumbent position, were present. Salicylate of soda in large doses had no effect on the temperature. Death occurred on the thirteenth day.

Necropsy, sixteen hours after death.—The blood was very fluid, staining the endocardial lining. There was pus in the right wrist-joint, in the second joints of both great toes, and purulent fluid in the right hip-joint, with a small collection of pus in the substance of the left tibialis anticus muscle, and in the middle of the right forearm. There were numerous small deposits in the lungs of various sizes from a pea to a walnut, and in both kidneys very small deposits, but none in other viscera, which were apparently healthy. No erosion of bone surfaces or other lesions were found.

CASE 2.—Wm. F——, aged thirty-two, was admitted on April 3rd, 1886, under the care of Dr. Whipham. The patient was a stableman, a moderate beer-drinker, who had had no injury of any kind, nor were any of the horses under his charge ill in any way. Beyond the fact that he had had acute rheumatism five years previously, he had "enjoyed the best of health," and did his work up to the date of admission. He had been ailing for fourteen days in an obscure manner with headache; diarrhœa set in thirty-six hours before admission, but there were no signs or pains, and only an extremely slight dry cough. He was a powerfully built man, with a high temperature, but clean tongue; pulse small, 88, and no dyspnœa. He presented much tremor of the hands and tongue. His cardiac action was unimpaired and sounds free from murmur, and, with the exception of mucous râles at the base of the right lung, with rhonchi over both sides, there was nothing to be heard over the thorax. No abdominal symptoms and no enlargement of abdominal viscera. Urine, concentrated, specific gravity 1030, with a faint trace of albumen and some excess of urea. He sweated profusely, had no acid smell about him, and his expectoration was bronchitic. On the third day he presented breathing of a tubular character in the right midscapular region, and his expectoration became rusty-coloured. Diarrhœa set in again on the fifth day after admission, the stools being loose and light, but there were no spots on the abdomen. His pulse and respiration rate, however, increased from this point, though the former was usually 110 and the latter 30. He became delirious on the tenth day, with increased tremor of hands, distended abdomen, and ten loose motions; and on the eleventh day numerous small pustules came out on the thorax, face, and shoulders, a few on the thighs, but none on the abdomen. He had acute inflammation round the right ankle-joint and the third joint of the third right finger, with a sweet smell in the breath, a dry tongue, and pulse of 128, with respiration of 60. He passed into delirium with subsultus tendinum. Fresh crops of pustules made their appearance, running a rapid course, with two small collections of pus over the middle of each tibia on its outer aspect. He died on the thirteenth day after admission, and on the twenty-seventh day after his first feeling of illness. He was treated with expectorants, stimulants, and a grain each of calomel and opium at night. The temperature chart showed a gradual evening rise from April 3rd, when it was 102·6°, to April 13th, when it reached 105·8°, there being a morning remission of from one to three degrees.

Necropsy, sixteen and a half hours after death.—The blood was fluid. There was a small collection of pus over the outer aspect of the middle third of each leg. There was no other purulent material to be found, and no deposits in lungs, liver, spleen, or kidneys, and no intestinal lesions or lesions of bone.

CASE 3.—Charles H——, aged fifty-three, was an old soldier of thirty years' service, who had been employed in a draughty picture-gallery. He had had no previous illness, except an injury to the head some five years before. He had complained of malaise for one month, with no definite symptoms, but did his work up to twenty-three days before admission, when he left off work owing to a slight cough and a boil on the right hip, which yielded readily to poulticing. He became strange in manner, and for six days prior to admission had been delirious. There had been slight diarrhœa set up by purgatives for four days, but he had had no rigors, nor had he complained of sore-throat. Nor, with the exception of a corn which he was in the habit of cutting on Sundays, was there any abrasion, wound, or injury. He was admitted, under the care of Dr. Dickinson, on April 22nd, 1886, with a temperature of 103°, a dry, leathery tongue, pulse 112, slightly dicrotous, and with respirations of 48. He was in a state of semi-collapse, with tremors of hands and slight subsultus tendinum. There were several small boils on his legs, with one large-sized collection of pus on the forehead; patchy redness over the dorsum of the left foot, round the right ankle-joint, and outer side of knee-joint, with some effusion into both knee-joints. His urine was lithatic, sp. gr. 1025, with a cloud of albumen on boiling. Heart's sounds were weak, but free from murmur. Lungs: Wheezing rhonchi with coarse râles on both sides, and at the right base dulness with weak breathing, fine moist sounds, and diminished vocal resonance. Abdomen tumefied, but exhibiting no eruption and no enlargement of abdominal viscera. This was readily recognised as a case of pyæmia, and treated with stimulants (eight ounces of brandy and eighteen grains of quinine daily). He exhibited next day a number of small vesicles, which became pustular quickly, and the pulse rate and respiration rate quickened, while he became delirious—delirium of a low muttering kind, with subsultus and busy movements of the hands. He passed two black liquid stools and the albumen in his urine increased slightly in amount, the urea being 2·2 per cent. and the specific gravity 1025. He slept scarcely at all, and on the fourth day became profoundly delirious, while fresh successive crops of rapidly-forming pustules made their appearance on the body and face. Patchy redness spread over the

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third joint of the middle finger of each hand, and his temperature rose to 104·4°, the maximum during his illness. From this point he sank, his temperature remaining at 104°. There was floccitatio and busy delirium, ending in death on the fifth day after admission, successive pustules appearing and maturing within two hours. He passed only the two motions mentioned, took food fairly well up to the last twenty-four hours, and presented no additional symptoms.

Necropsy, twenty-nine hours after death.—The body was well nourished. Numerous small abscesses were found—one on the centre of the forehead, others on the outer side of the upper third of the legs and front of the right thigh. There was purulent fluid in both knee-joints; a small hard uninflamed corn on the right foot. The lungs exhibited patches of deep congestion freely scattered throughout, but mostly affecting the apex of the right and the base of the left lung, but showing no tendency to breaking down. There was nothing abnormal in the liver, spleen, kidneys, or intestines, or in any bones. Ulceration of the left tonsil, of a recent character, was shown to have existed.

Remarks.—These three cases belong to a large class, in which no apparent injury can be found after death; the ulceration of the tonsil in the last case being of very recent date, supervening in the course of the illness. That pyæmia is capable of arising idiopathically is denied by many; and in cases of recovery the cause is attributed to some superficial ulceration, or slight inflammation of bone or periosteum. But cases in which a careful post-mortem examination has been made, with negative results, seem to point to the possibility of such idiopathic origin.

ROYAL SOUTHERN HOSPITAL, LIVERPOOL.

TWO CASES OF ILEUS, OCCURRING IN BROTHERS; EMPLOYMENT OF TOBACCO; RECOVERY; REMARKS.

(Under the care of Dr. CAMERON.)

CASE 1.—J. D——, aged twenty-two, was admitted on Jan. 26th, 1885. His previous health had been unexceptional, and his present illness dated from the 19th, when, whilst working with an axe in a stooping position, he was seized with sudden pain in the abdomen, which necessitated his giving up his work—that of block-making—and going home. Vomiting commenced the next day, and continued at intervals up to admission. He thought he had kept down little or no food during the week, but the amount of pain had on the whole been inconsiderable. Purgatives and injections were, he said, freely administered to him before admission; but there had been total constipation since the date of his attack, with the slight exception that one injection given three days before coming to the hospital produced a very slight motion; and since the constipation began he thought he had passed no flatus. His bowels had previously been quite regular, acting daily, and no irregularity in his diet could be fixed upon, unless it was that he had eaten half a pound of pork for dinner on the 17th. He had been strictly temperate.

On admission, the signs were chiefly negative, and nothing was made out by examining the abdomen, except a little tenderness in the epigastric region. The rectum was empty. The temperature was subnormal, and the pulse 80; tongue clean and moist; and the patient did not seem at all ill. Shortly after admission he vomited some green bilious fluid. He was ordered five minims of tincture of belladonna every three hours, a mustard poultice to be applied to the abdomen, and to have a limited amount of food.

Jan. 27th.—Patient comfortable; pulse 72; rather hungry and very thirsty. Has had seven ounces of gruel and seven ounces of milk since admission. The belladonna was lessened.

28th.—Food given: seven ounces and a half of milk and an equal quantity of gruel. Vomited fourteen times in nineteen hours, always of the same character, green bilious fluid, and very little at a time. Urine contains bile; specific gravity 1034. His symptoms being so mild, the pulse 80, the temperature 97°, and the patient in no discomfort, it was determined to try the effect of purgatives, and he was ordered early in the day six grains of calomel in two pills, to be followed by one ounce of white mixture every two hours, and the two pills were repeated in the evening.

29th.—Food given: five ounces and a half of milk and four ounces and a half of gruel. Has had four pills and ten ounces of the white mixture. Abdomen more tense and uncomfortable; no tenderness; a little pain. Some hiccough. No action from bowels, and no flatus passed. Vomiting, which had been absent since the previous morning, returned during the afternoon, six times altogether; character as before. General condition much the same. Pulse 84; temperature 97°. In view of the urgent symptoms that might at any time arise, a consultation was held, at which it was decided that at present there was not sufficient reason for any operative interference. The purgative treatment, having been fairly tried, was discontinued, and he was ordered hypodermic injections of morphia, one-sixth of a grain to be given at intervals, according to circumstances. A simple enema was tried without result.

30th.—Food given: two ounces and a half of milk, three ounces and a half of gruel, and two ounces and a half of beef-tea. At a consultation the same opinion was again expressed. He was ordered a tobacco poultice to the abdomen; to have no more food, a little ice only. Vomited occasionally during the day, and in the evening was given an enema of tobacco—ten grains in half a pint. This was repeated during the night.

31st.—This morning he feels a great deal more comfortable. Pulse 84. Tongue rather dry. Abdominal signs quite negative; no pain. Has had no food and is very hungry. No action from the bowels. Passed flatus twice (?) The tobacco appears to have had a soporific effect; he has slept much more since it was employed. Another tobacco poultice was applied to the abdomen, and the tobacco enema repeated. All three injections were retained.

Feb. 1st.—Temperature subnormal. Pulse 100. Has had no food. Vomited once, with return of pain at the same time, more severe than before. No more flatus passed. Ordered another tobacco injection, which produced some faintness, though returned almost immediately. Patient does not smoke or chew. The morphia injections were continued, but in the evening he was "very uncomfortable," and the pulse was 100. He was ordered a little brandy, at the rate of an ounce and a half in twenty-four hours.

2nd.—Passing flatus freely since about 3 A.M. Bowels acted in the afternoon; motion semi-solid. Allowed a little liquid food once in two hours.

4th.—Bowels have acted four times since. Ordinary milk diet.

6th.—Bowels not open again. Given half an ounce of castor oil, after which they acted twice. Diet increased.

10th.—Bowels acting once a day; stools rather loose; never passed any scybalæ. Discharged well.

CASE 2.—T. D——, aged twenty-nine, who has been subject to attacks of constipation for about three years, and has frequently had to take purgatives, was admitted on March 27th, 1886. Eighteen months ago, having been then constipated twelve days in spite of purgatives and injections, the patient was admitted into this hospital, and was ordered a large enema of soap-and-water; after which the bowels immediately acted freely, and he was discharged after a day or two. He again became constipated a week afterwards, but was relieved by a purgative. He is very temperate, and does not smoke or chew tobacco; his occupation is that of scraping ships, often having to work in cramped and constrained positions and in a very small space. His bowels had been acting regularly up to the 18th, when he began to feel pain in the right iliac region. The bowels acted again on the 20th and on the 22nd, on which evening the pain became more severe, and he took a purgative. He vomited frequently next day, and subsequently at intervals up to admission. The bowels only acted once—very slightly—since the 22nd, though he took several doses of jalap, castor oil, &c.

When admitted he said he had severe pain in the left side of the abdomen and in the epigastrium. The general signs were all negative; pulse and temperature normal. He was ordered an enema with one ounce of turpentine, one ounce of white mixture three times a day, and low diet.

March 28th.—Pulse and temperature normal. The bowels acted very slightly after the injection. Has vomited once. Says he still has the pain, but that it is not so severe. Injection repeated with one ounce of castor oil.

29th.—Temperature morning and evening 99°; pulse 88. Has vomited once. Bowels not acted. The pain is said to be worse to-day, and the abdomen tender. Examination reveals nothing. To have nothing by the mouth except ice. A tobacco poultice to be applied to the abdomen.

March 30th.—Temperature 99·6°; pulse 92. No further vomiting. The poultice "took away the pain instantly."

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Passing flatus freely, which he had not done for some days. Allowed a teaspoonful of Brand's essence about once in three hours. The poultice to be repeated.

31st.—Pulse and temperature normal. Flatus still being passed, but the bowels have not acted. To get up for a little in the afternoon.

April 1st.—Feels quite well; fæces felt in rectum and a simple enema ordered, after which the bowels acted freely.

3rd.—Bowels have acted three times since. No scybalæ passed.

5th.—Discharged well.

Remarks by Dr. CAMERON.—The duration of the sudden and complete constipation in the first case—fourteen days—is worthy of notice, as during this time no very urgent, as distinct from anxious and serious, symptoms arose. The temperature was always subnormal; the pulse only once reached 100. The vomit never became stercoraceous, nor did the patient ever seem really and acutely ill. In both instances, the symptoms being so mild and the signs so negative, it was decided to try the effect of purgatives; but failing in their object they were stopped, as only likely to do harm, whilst the benefit derived from the subsequent employment of tobacco was very marked. It will be seen that the amount of food at first allowed in Case 1 was extremely limited; possibly the effect of afterwards withholding it altogether was beneficial. The difficulty of diagnosing with certainty the exact cause of an intestinal obstruction was here fully exemplified; in both cases, though symptoms were present, physical signs were conspicuous by their absence. Perhaps the attitude and occupation of the first patient at the time of his sudden seizure may have produced a temporary twist, which left for a time a complete paralysis of the bowel; and in the second case, the occupation may have been a factor in producing the attack under notice, and the previous minor attacks of apparently simple constipation to which he had been subject. The cases are also interesting as having occurred in brothers.

Medical Societies.

OPHTHALMOLOGICAL SOCIETY.

Foreign Bodies.—Cholesterine in Detached Retina.—Exophthalmic Goitre.—Detachment of Retina.—Embolism of Central Artery in Puerperal Septicæmia.—Cataract Extraction.

AN ordinary meeting of this Society was held on the 10th inst., Mr. Jonathan Hutchinson, President, in the chair.

Mr. BRUDENELL CARTER related a case in which a fragment of the edge of a steel chisel had been harmlessly embedded in the sclera of the right eye for fifty weeks; the chip had entered one line from the cornea on the outer and lower side, and had gone directly backward, and could be seen embedded in the choroid or sclera, and surrounded by a few small blood-clots. The eye was kept under the influence of atropine; the chip became coated with lymph; the blood-clots underwent absorption, and vision returned to the normal. All congestion had disappeared in three weeks, when the patient returned to his work as a carpenter. Central vision was unimpaired, and the blind spot, due to the fragment, could be found with difficulty.—The PRESIDENT had known of cases of foreign bodies about the eye in which no irritation had ensued.—Mr. SIMEON SNELL referred to three cases read before the Society last October, and also to another in which a piece of steel lying above the optic disc was detected, but there was no sign of its mode of entrance.—Mr. BRUDENELL CARTER spoke of a case of dark amber-coloured cataract in one eye which was extracted; in its centre a small dark fragment of iron was detected, but there was no sign of how it got there; the man had been present at the explosion of a boiler, but was unaware of any accident to his eye.

Mr. SIMEON SNELL (Sheffield) related the case of a boy, aged eleven, who had been blind with the right eye since about three years of age. When seen in the early part of 1886, the retina was detached, opaque, and thickened, but more so in some parts than in others. Cholesterine-plates were studded over the retina, chiefly on the inner side; these were visible to the naked eye, but much better with focal illumination or the mirror. The retina was nearly universally detached, and only at the periphery outwards was a slight glimpse of indistinct red reflex obtained. The character of the subretinal fluid could not be made out. The left eye had a high degree of hypermetropia (8 D), but was otherwise normal. Mr. Snell remarked on the presence of cholesterine, which had been observed in most parts of the interior of the globe.—Mr. NETTLESHIP did not know which Mr. Snell considered the more important, the presence of crystals of cholesterine or the detachment of the retina in so young a patient. Detachment of the retina in children was probably not of very rare occurrence, though it was difficult frequently to ascertain the cause. He remembered to have examined an eye, when curator at Moorfields, that showed a large detachment with patches of white appearance thereon, and also a kind of whitish sediment, probably of a fatty nature; scarlet fever was the probable cause in this case.—Dr. BRAILEY considered that detachment of the retina in children was not very uncommon; they constituted a form of pseudo-glioma; in cases where hæmorrhage had occurred the intra-ocular tension was increased, and this separated one form of pseudo-glioma from others. These cases, however, were not of quite the same kind as that referred to by Mr. Snell. In reply to Mr. Nettleship, he said that there was no evidence of iritis in the cases alluded to.

A paper on Exophthalmic Goitre, by Mr. W. O. MAHER of Melbourne, Australia, was read by the Honorary Secretary (Dr. W. A. BRAILEY). It related a case of exophthalmic goitre, with unilateral exophthalmos, occurring in a man aged thirty-four. Exophthalmos had been noticed by the patient a year before he applied for treatment; palpitation had been present for three years; the thyroid gland was found to be notably enlarged, especially on the right side, and the exophthalmos was present on the same side, the right cornea being 2·5 millimetres to 3 millimetres in advance of the left. Von Graefe's symptom was absent.

Mr. MAHER also contributed a case of Total Detachment of the Retina in a boy aged eight. The child had had a squint divergent for four years before he came under observation. The pupil did not react directly to light, and but slightly indirect; extending across the retina at the upper part was a thin band of organised lymph. Vision was so defective that there was not even perception of light. The mother was confident that the child had never received any blow on the eye, and that the only injury the eye could have received was at birth, when the forceps was used. The presence of the band of lymph in the retina was thought to point to the detachment being of traumatic origin; and, as complete congenital detachment of the retina was probably unknown, Mr. Maher was inclined to think that the detachment was probably due to injury inflicted by the forceps.

Mr. SIMEON SNELL related a case of Embolism of the Central Artery occurring in a young woman aged twenty-six. After the birth of her first child, on November 19th, 1885, she was much neglected by the midwife, and was not kept clean. Four days later rigors commenced and symptoms of septicæmia developed. The pulse was 120, and the temperature 103° F. The medical man called in thought the condition very grave at first. During the night of Nov. 27th sight was suddenly lost in the left eye. She gradually recovered from the septicæmic state, but vision remained lost, and when first seen by Mr. Snell in January, 1886 (two months after the attack), the appearances in the fundus were those of embolism of the arteria centralis retinæ in a late stage. There was no cardiac disease. The interest of the case lay in its association with puerperal septicæmia. In the puerperal state, and in the feeble condition of the patient, simple thrombosis of the heart or pulmonary vessels could easily have occurred, and might have been the source of embolism. The source of the embolus was doubtful, but he wished to record the fact of the occurrence of embolism of the central artery of the retina in septicæmia, and that its course was not attended with any unusual or inflammatory effects.—Mr. NETTLESHIP asked whether there was not more hæmorrhage and haziness of the retina than usually obtained in embolism.—Dr. S. MACKENZIE had not seen a case of embolism of the central artery of the retina in relation with pregnancy or the puerperal state.—Dr. J. ANDERSON thought that pregnancy was a predisposing cause of embolism of the left middle cerebral artery, which was very prone to occur when mitral stenosis and pregnancy were combined.

A paper by Dr. DYCE DAVIDSON (of Aberdeen), relating a

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case of Meningitis after Enucleation, was read by Dr. STEPHEN MACKENZIE. The patient, a woman aged forty-nine, had received an injury to the right eye four or five years before the enucleation was performed; the eye had been quiescent for three years until three weeks before she applied for treatment. She was impoverished, ill-nourished, and broken down in health, but presented no signs of any disease. The urine did not contain albumen. The eye, which was painful and tender in the ciliary region, was enucleated three days after admission, antiseptic precautions being used, and a salicylic pad applied. Twenty-four hours later she was in a high fever, had vertical headache and a foul tongue, but the wound was healthy. She died comatose on the third day. The wound looked œdematous at the time of death. At the necropsy meningeal inflammation with redness of the optic nerve and œdema of the orbit were observed. All the other organs were healthy except the uterus, which was in a condition of catarrhal inflammation. Dr. Davidson suggested that the case was one of pyæmia started by this condition of the uterus, and surmised that this suggestion might explain other cases.—Dr. BRAILEY wished for further information as to the salicylic pad, as he thought there were important variations in treatment with regard to the use of pads.—The PRESIDENT said he had enucleated over and over again during the acute stage of suppuration, but had never had a case of meningitis.—Mr. NETTLESHIP said that half the cases had occurred in males, and thought it was unnecessary to look to the uterus for a source of septic infection.—Mr. WAREN TAY considered that further information as to the nature of the meningitis and the state of the optic nerve (which was not usually affected) ought to be obtained.

Mr. BRUDENELL CARTER read a paper on some Practical Points connected with Cataract Extraction. He commenced by referring to a paper by Mr. Critchett, dealing with certain improvements of detail on which further progress in cataract extraction must chiefly depend. Mr. Carter expressed his concurrence in Mr. Critchett's remarks about the spring speculum, the entire abandonment of which he had himself advocated in a note added in the beginning of 1885 to the still unsold copies of his Lettsomian Lectures. He did not, however, approve of Mr. Critchett's suggestion to use the third finger of the fixing hand as a lid-elevator, preferring the elevator of Noyes in the hands of a careful assistant. He thought that Mr. Critchett's method unduly restricted both the choice of a fixing point and also the mobility of the fixing hand; and he condemned the oblique section which these restraints rendered necessary, on account of its tendency to expose the coloboma iridis, and to produce astigmatism along an oblique corneal meridian. He referred to the application of antiseptic surgery to operations on the eyes, and advocated the use of a solution of cocaine and of salicylic acid. Dr. Galezowski's dressing of specially prepared gelatine had not been successful in his hands; and he recommended a compress of wet cotton-wool, placed over a morsel of linen smeared with sanitas vaseline, and retained by a strip of knitted cotton, this being secured by three pairs of strings. As among trifles contributory to perfection, he attached much importance to this method of dressing.—Mr. ANDERSON CRITCHETT defended the use of the finger in the place of the speculum, because he found it best to make fixation just below the point of counter-puncture. The old French toothed forceps used to tear the conjunctiva; he had found the double fixation hook answer well in some cases; but the best instrument was a slight modification of the forceps used by Dr. Bell Taylor; with this instrument, a few fibres of the sclerotic could be pinched up, and a firm hold got upon the eye at any point. Holding the eye at the point where the counter-puncture was to be made, the section could be made of any size. It was impossible for the assistant to work in perfect harmony with the operator, and time might be lost. Where the operator depended entirely upon himself, the commencement of a spasm could be felt, and the finger relaxed. In completing the section, the finger was withdrawn, the lid closed gently, and there was thus less chance of the lids being squeezed together. With cocaine the patient had less control over the lid, and the danger of a squeeze was greater. With regard to the oblique incision, he was in the habit of making his puncture very little below the centre of the pupil, and it was not necessary, as a rule, to remove more than the central portion of the iris. He had not suggested that it was desirable to cut out with one push; three-fourths of the incision might be made with the push, and the remainder in withdrawing. The knife he used was curved, had a central point, and commenced to bulge immediately below, so that, with a steady onward push, it cut its way so far as to complete three-fourths of the section. He referred to the case of an old man, aged eighty-four, in whom he had operated on both eyes simultaneously. In the one eye he had made the incision entirely in the sclerotic; in the other he had made it entirely in the cornea. In this he had followed a dictum of his late father, who had always taught that, in operating on both eyes simultaneously, it was always right to give the patient every chance by choosing a different operation for each eye. M. Galezowski, who was present at the operation, provided some of his gelatine discs, which he stated he had used in 107 consecutive cases without a single case of suppuration. In this case, unfortunately, the eye in which the incision was confined to the cornea suppurated with remarkable rapidity; the other eye did very well, and sight was good. The case illustrated the wisdom of the late Mr. Crichett's dictum: if the incision had been made in the cornea in both eyes, probably both would have been lost.—Mr. NETTLESHIP commented on the very strong solutions of cocaine used by Mr. Carter. He agreed with those who believed such a custom to be dangerous, and used a 2 per cent. solution. He thought the exact direction of the incision was of small consequence; the incision directly upwards gave the best cosmetic results. Liebreich always made his section downwards entirely in the cornea, and never used a speculum; in his hands the results were good on the whole.—Mr. MCHARDY suggested that it was advisable to put a drop of cocaine in the eye not to be operated on; spasm was less liable to occur when this was done.—Mr. HODGES (of Leicester) had performed Mr. Critchett's operation in several cases, but only in one case without the speculum. He had been exceedingly pleased with the ease with which the operation could be performed and with the final result.—Mr. BRUDENELL CARTER, in reply, said that he had not met with the tendency to spasm with the frequency Mr. Critchett inferred. For fixing, he preferred a pair of forceps with a broad flat point, and with at least three or four teeth. The advantages of the meridional fixing point were considerable, and he thought it important to have freedom of movement in the fixing hand. The cocaine solution contained salicylic acid; it was thus antiseptic, and it had the advantage that in washing the eye the cocaine was not all washed away.

The following living and card specimens were exhibited:—Mr. W. P. Kiall (Bristol): A boy in whom Evisceration of the Eyeball was performed, and a hollow silver ball introduced; the boy had subsequently received a blow, followed by a "black eye," but without any other consequence. Mr. W. Lang: A young woman in whom Evisceration was performed, and a glass ball inserted in the manner recommended by Mr. Mules; a glass eye had been fitted, and the movements were fairly good. Mr. S. Snell: A Stamp for indicating Axes of Cylindrical Lens. Mr. J. B. Lawford: New Tissue formation in Choroid (and Retina?) following injury, probably rupture of choroid. Mr. Marcus Gunn: A woman who had presented for many years symptoms of Tabes Dorsalis and Exophthalmic Goitre, in whom marked pigmentation (? Addison's disease) had recently developed.

OBSTETRICAL SOCIETY OF LONDON.

Artificial production of so-called Lymphatic Varix.—Causes of Difficulty in Turning.—Spurious Hermaphroditism.

A MEETING of the above Society was held on June 2nd, Dr. Potter, President, in the chair.

The following specimens were shown:—Dr. John Phillips: Fibroids in Twin Pregnancy. Dr. Herman: Fœtus and Placenta from Extra-uterine Gestation, removed by Abdominal Section. Mr. Knowsley Thornton: Ovarian Tumour and Fibro-myoma Uteri removed at the same operation.

Dr. F. H. CHAMPNEYS read a paper on the Artificial Production of so-called Lymphatic Varix. The object of the author was to determine whether so-called lymphatic varices could not be produced at will by the simple expedient of cupping striæ in the skin which were not œdematous. If this produced appearances which could not be distinguished from so-called lymphatic varices, it would tend to prove that these are really due to general lymphatic œdema, showing most plainly over the least supported parts of the

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skin, and not to any peculiar arrangement of lymphatics or to obstruction of any particular lymphatic trunks. This was proved to be the case. The author concludes that lymphatic varix is a misleading expression.—Dr. HERMAN said that Dr. Champneys had spoken in his paper of lymphatic œdema and of œdema in his remarks. He asked whether this alternative mode of expression was simply for brevity, or whether it illustrated his view as to the nature of the fluid filling the cracks. He believed, with many others, that in phlegmasia dolens there was not simply œdema from venous obstruction, but there was obstruction in the lymphatic system of the limb. There was little direct proof of this, but there were strong arguments from analogy in its favour. Dr. M. Duncan's case was important, for if the fluid in the varicose skin cracks were lymph, it furnished some direct evidence that there was obstruction to the return of the lymph from the limb. Did Dr. Champneys consider that his experiments had any bearing on this question? When he spoke of œdema, did he mean the swelling that resulted from altered pressure-relations in the capillaries or did he mean by "lymphatic œdema" that the fluid had been exuded from the lymphatic vessels?—Dr. M. HANDFIELD-JONES called Dr. Champneys' attention to three cases of dilatation of lymphatic radicles which were in St. Mary's Hospital and were published in THE LANCET, Aug. 7th, 1875. They closely resembled that of Dr. M. Duncan. Mere œdema was not sufficient to produce the appearances described. Some active pathological condition attacked the small spaces from which the lymphatic vessels started and spread from thence along the larger canals. It was noteworthy that, considering the frequency of œdema of the lower limbs, the appearances described in the cases referred to were rare.—Dr. CHAMPNEYS said his paper was an argument that the so-called "lymphatic œdema" was not a special affection of lymphatic vessels, but was merely a general œdema showing most plainly at the weakest parts of the skin. In reply to Dr. Herman, Dr. Champneys said he meant ordinary œdema, and not any special affection of the lymphatic vessels.

Dr. G. ERNEST HERMAN read a note on one of the Causes of Difficulty in Turning, with remarks on the Practice of Amputating the Procident Arm. The author describes difficulty in turning due to impaction of the point of the shoulder below the imperfectly dilated internal os. In these cases there is no great difficulty in seizing the lower extremity, but when this has been done the condition described prevents the child from rotating. The proper way to overcome the difficulty is to press the point of the shoulder towards the middle line of the cervical canal, and thus disengage and raise the shoulder. When this is done the child is easily turned. The author then refers to the writings of those who have advocated amputation of the arm in cases of transverse presentation which cannot be turned, on the ground that turning becomes easy when this has been done. He believes that these cases were of the kind now described by him, and that the amputation of the arm was effective by removing the resistance offered by the impacted shoulder. But he did not think amputation of the arm was proper in such cases, for the child could be turned if the point of the shoulder was disengaged in the manner he had described, and if the child were dead, decapitation was better than amputation of the arm followed by turning.—Dr. GALABIN did not think that the internal os could prevent the shoulder being pushed upwards. It might, however, prevent its ascent when the attempt was made to turn as described by Dr. Herman, by acting on both poles of the fœtus at once, for this would move the shoulders not only upwards but also outwards, and it would be more likely to be resisted by the projecting ring. He had never had occasion either to cut off the arm or push the shoulder; and he had only once met with a case in which it was impossible to turn, and he had to decapitate. In this case a shoulder had been mistaken for a breech, and expectant treatment continued for two days. He believed that there was no case in the records of the Guy's Hospital charity in which turning was impossible and alternative embryotomy became necessary. Where it was necessary to act on both poles of the fœtus, he would make the action alternately, pulling down a leg and pushing up a shoulder. He asked if Dr. Herman had been always successful with his method, or whether embryotomy was still necessary sometimes.—Drs. Boxall, Champneys, Playfair, Cleveland, and the President also made remarks. — Dr. HERMAN, in reply, said that he did not assert that the condition described in his paper was the cause of difficulty in every case, but that, on the contrary, he thought it an occasional and rare source of difficulty. There was in these cases little difficulty in bringing down the foot, but much in turning the child; while where the uterus was contracted tonically round the child there was difficulty in seizing the foot. He agreed with Dr. Galabin, and had pointed out in his paper that the difficulty was augmented by pushing up the shoulder while pulling down the leg. The defined swelling of the shoulder which was present showed that it had been encircled for a long time. He had felt the contracted ring above the shoulder. He adopted in turning the plan advocated before the Society in a valuable paper by Dr. Galabin—i.e., he seized the most easily accessible foot. Attempts at turning had been made under anæsthesia in one of his cases for three-quarters of an hour; in the second anæsthesia was not employed; and he did not remember as to the third.

Dr. JOHN PHILLIPS read a paper on four cases of Spurious Hermaphroditism in one family. The author gave the family history. Out of nine pregnancies, the 3rd, 6th, 8th, and 9th were hermaphrodites. Fright during the third month of pregnancy in the mother's opinion caused the first. None of them survived more than a few days, and the author had an opportunity of post-mortem examination. He laid the results before the Society with all the more important parts dissected out. The family antecedents were very carefully gone into, many of them being personally examined. Several defects, such as hernia and the like, had been discovered. A genealogical tree was appended. The author gave a historical review of the whole subject. There appeared two causes at work on the mother's side in the production of this deformity: 1. The initial fright which she received when pregnant with the first. 2. The continued dread and mental distress which ensued on her bearing a deformed child. Conclusions: 1. A hernial or other weakness present in one parent acting as a predisposing cause, any deep maternal impression received about the third month might induce some impediment to the proper differentiation of the uro-genital system. 2. That a distinct tendency towards bearing hermaphrodites might be developed in a mother who had already borne one.—Dr. M. HANDFIELD-JONES asked as to the relative frequency of sterility in these spurious hermaphrodites. It was a law of evolution that in hermaphrodites one set of organs atrophied in proportion to the development of the other, and so in cases with a large clitoris imperfect uterus and ovaries might be expected.—Dr. CLEVELAND mentioned that he had a patient with only one testicle descended, who was the father of a large family, none of whom were deformed.—Drs. John Williams, Willcox, Champneys, and Galabin also made remarks.—Dr. JOHN PHILLIPS, in reply, said that he thought specimens of spurious male or female hermaphroditism were not uncommon, but that four in one family was unique. The father was the elder of the two parents, but his exact age he could not remember. He could not throw any light on Dr. Handfield-Jones's queries.

Reviews and Notices of Books.

Manual of Operative Surgery. By W. ARBUTHNOT LANE, M.B., M.S., F.R.C.S., Senior Demonstrator of Anatomy, Guy's Hospital; Assistant Surgeon to the Hospital for Sick Children. London: George Bell and Sons. 1886.

A Manual of Operative Surgery. By LEWIS A. STIMSON, B.A., M.D., Surgeon to the Presbyterian and Bellevue Hospitals, Professor of Clinical Surgery in the Medical Faculty of the University of the City of New York, &c. Second Edition. With 342 Illustrations. London: H. K. Lewis. 1886.

FROM the plan and scope of Mr. Lane's work we infer that the author has not aimed at teaching his readers how to operate, but rather how they may answer satisfactorily the routine questions on operations which are set at written examinations. The book is certainly convenient from this point of view. The conduct of an operation is divided into distinct steps, which are duly numbered, and the parts cut through in each incision are clearly and accurately stated. The operations are described after the plan generally adopted in manuals of dissection, and the book impresses us as being

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written from the anatomical teacher's point of view. We have noticed a few errors which have escaped the eye of Mr. Lane in revising the proofs. Thus, in the description of gastrostomy no mention is made of the side of the body on which the operation is to be performed. A few pages further on Mr. Golding Bird's case of jejunostomy is stated to have been the first performed in England, while in the very journal to which Mr. Lane refers his readers for an account of this case mention is made of an earlier case in London. The abdominal incision through the linea semilunaris is twice spoken of as "Langenbeck's," and nowhere do we find it correctly called Langenbuch's. On page 204 the reader is told that the second step of the operation for division of the tibialis posticus tendon is to "enter the point of a sharp-pointed tenotomy knife between the tibia and the tendo-Achilles." We notice that in his instructions for the operative treatment of empyema Mr. Lane lays considerable stress upon an opening being made into the lowest part of the cavity; in this he differs from several recent writers on this point, who are able to adduce cogent reasons in support of their view. There are cases, however, and we have seen such, where an opening at the most dependent part appears to be essential to cure. The book is illustrated with several copies in outline of the plates in Braune's Atlas, showing the position of parts in transverse sections of limbs. There are also other outline drawings, giving the position of incisions for various operations. A diagram of the transverse section of the lower parts of the rectum and anus, showing the position of the sphincters and of the openings in various forms of anal fistula, is not a very happy one. The "common form of complete fistula" is represented as coursing beneath the external sphincter muscle. We know that this has been somewhat commonly taught, but in our experience it has been anything but "common" to find that the sphincter muscle is divided in laying open an anal fistula. The common anal fistula is in the subcutaneous and submucous tissue.

The alterations that have been made in the second edition of Dr. Stimson's book are slight. For the most part the former descriptions of operations are unaltered, and we still read on page 346 that in placing a patient for left lumbar colotomy a hard cushion is to be placed "under the *left* side of the abdomen to raise and support it." The recent results of gastrostomy are not mentioned, and it is spoken of as a "very fatal operation." Amputation of the penis is described without mention of such important improvements as bringing the urethra out in the perineum or removal of the entire organ. Again, in the section on amputation at the hip-joint, the arrest of hæmorrhage by the use of Davy's rectal lever is not noticed. Some new operations, such as excision of the kidney, nephrorraphy, and removal of the uterine appendages are described; but we find no mention of nephro-lithotomy. Indeed, the book bears evident marks of too little care in preparation and revision.

Reconstruction of Central London. (Westgarth Prize Essays.)

IT is now more than two years since Mr. William Westgarth offered a sum of £1200 to be awarded in prizes for essays on the subject of the reconstruction of Central London. The proposal to benefit the vast community of four millions of persons by the removal of conditions which prejudice their being, and which have been handed down to them by past generations, is one which reflects honour upon its originator, but the result has on the whole proved disappointing. The enormous magnitude of the work has been too great for accomplishment even by the few who are able to think in a comprehensive manner of the details of a scheme for carrying into effect the intentions of the donor, but Mr. Westgarth's efforts have not been altogether wasted. One of the writers of the essays has pointed out that success could only result when London was sufficiently educated to approve the changes which are known to be necessary; and Mr. Westgarth may certainly be said to have accomplished one of his objects — that of making London think of the need for some larger method of dealing with the faults of construction of the older parts of the metropolis than is now provided by existing legislation or than can be accomplished by any existing authority. London is doubtless improving, but its improvement is carried out in so irregular and patchwork a manner that there is an absence of any uniformity in the steps which are taken for this purpose. To some extent the Metropolitan Board of Works has attempted to overcome this difficulty; but, nevertheless, so-called improvements are being effected and substantial buildings are being erected in localities which should be absolutely cleared of buildings altogether, if the making of roads and streets throughout the metropolis in relation to means of access from one part to another were more constantly kept in view. A work of such magnitude could, indeed, be only successfully undertaken by one mind having a fixed purpose. Such was the case in Paris, where one man, Haussmann, supported by the imperial rule of Napoleon, created the magnificent city of which every Frenchman is proud. But Haussmann left Paris involved in debt, although his intentions were far behind those of Mr. Westgarth, whose thought for London was not limited to the construction of a convenient and beautiful city, but of one which should essentially provide accommodation of a suitable character for the poorest as well as the richest of its inhabitants. He had hoped to have done all this, and yet to have so arranged his plans that the improved value of land and property that would result from these changes would compensate for the outlay. His aim was the establishment of a London reconstruction trust, which, by dealing in a more wholesale manner than is at present possible with London improvements, would prevent much of the expenditure which is now caused by the carrying out of a number of isolated schemes. The essays which are now published deal with different parts of this great subject. The sanitation and reconstruction of Central London is discussed by Mr. William Woodward; while Mr. Henry Hewitt Bridgman has written on street-realignment and reconstruction of Central London; the re-housing of the poorer classes of Central London is treated by Mr. J. Corbet's; and certainly each may claim to have added his share to the information which is required for the undertaking of the task. The committee of adjudication of Mr. Westgarth's prizes have reported to the effect that in their opinion none of the essays realise the requirements of the offer in such a manner as to justify them in recommending that the full amount of prizes should be awarded. The duty, however, has been no easy one, and it is pleasant to think that some contribution of a practical nature has been made to the knowledge which is necessary. Space will not enable us to discuss the essays in detail, but their perusal will amply repay those readers who are interested in the welfare of the metropolis, and they will probably pave the way for a more thorough understanding of the difficulties which have to be overcome.

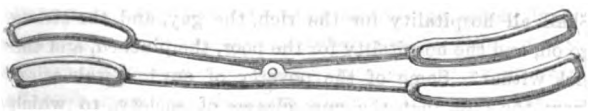
HOSPITAL FOR DISEASES OF THE THROAT.—The annual general meeting of the governors of this institution was held on the 17th inst., the President, Lord Caltherpe, in the chair. The report stated that during the past year the attendances of patients had amounted to 26,669, or 3000 more than in 1884, with an expenditure for the twelve months of £2838 only. The committee regretted to have to point out that donations and subscriptions showed a falling off, and they strongly urged upon the charitable the necessity for additional funds.

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New Inventions.

NEW NASAL SPECULUM.—NEW TONGUE-DEPRESSOR.

THE instruments figured below have been introduced by Staff Surgeon T. D. Gimlette, R.N., and are manufactured by Messrs. Arnold and Sons, West Smithfield. The first consists of two pairs of fenestrated blades of white metal joined in the middle by a hinge, so that when one pair of blades is open the other pair is closed. The following advantages are claimed for it over the ordinary nasal speculum at present in use. The fenestrated blades enable the surgeon



to inspect the mucous membrane of both ala and septum nasi at the same time, the whole nasal cavity on one side being exposed at once. It is more easily introduced, and causes less pain than the ordinary speculum, the curves of the blades being those of the ala and septum respectively. It lies flat against the face when introduced, and is very little in the way of any operative procedure. The advantage of having the instrument double is obvious. It is simple of construction, and its cost is moderate.

The other instrument is submitted as being more handy and portable than the ordinary tongue-depressor or spoon-handle. The curve of the instrument, the fenestrations of



the blade, and its shape fitting that of the root of the tongue, render the control of that organ by the observer more perfect and the examination of the fauces more easy. The small end is for use with children.

PAULSON'S PATENT PERPETUAL FILTER.

A STONEWARE filter of somewhat peculiar construction. The outer jar contains a second, which slips into it, leaving an open space at the bottom. The inner jar, which is perforated at the top and bottom with small holes, contains the metallic filtering agent, and into this the water is poured. The cover is hollow, and a mixture of carbonate of soda and tartaric acid introduced into it with a little water causes an evolution of carbonic acid, which is supposed to aerate the water. We followed these directions closely, but did not observe any alteration in the taste of the filtered water. One great advantage of the filter is the ease with which it can be made to renew its activity. For this purpose it is only necessary to lift out the inner jar and heat it for several hours in an oven. This filter has been designed by Mr. W. Paulson, L.R.C.P.L, of Loughborough.

PATENT AMBULANCE WAGGON.

MESSRS. LEE AND TAYLOR of Leicester have brought out a new hand ambulance waggon and stretcher, in which they claim to have combined lightness with great strength and smoothness of running. Underneath it is an "emergency box," containing a few simple medicines, with some splints and bandages. It has been favourably reported upon by several medical officers who have had an opportunity of testing it practically, and it seems well adapted for use in connexion with the police and town hospitals in cases of accident. It appears to us, however, to have a serious drawback in being constructed with four wheels, as it obviously cannot be turned in so limited a space as one which runs upon two wheels.

HYDROPHOBIA.

To the Editor of THE LANCET.

SIR,—I should like, with your permission, to offer a few remarks regarding Surgeon-Major Pringle's paper on the above subject, which appeared in your issue of April 24th, 1886. Is it not possible that the author attaches too much importance to the suction of the wound, and too little to the incisions which were made? It seems to me that free hæmorrhage is a very considerable safety-valve in the case of a bite by a rabid animal; so much so, indeed, that I believe it is good practice, in wounds that are punctures, to incise them, with a view to the encouragement of bleeding, which expels some of the virus, and to facilitate the application of a caustic. I believe it would be a most dangerous precept to condemn cauterisation in the bites of rabid animals. The procedure I have for some time advocated is the following: The wounds should be most thoroughly washed out—deep wounds by means of a syringe—with a warm weak solution of permanganate of potash; punctured wounds being first incised, and bleeding encouraged. After this has been done, each wound should be carefully wiped, and powdered permanganate of potash rubbed into it. When the wounds are deep, injections of a 5 per cent. solution of permanganate should be had recourse to. Now, what are the objects of this treatment? They are (*a*) to cause the expulsion of as much of the virus as possible; (*b*) to neutralise any virus that may remain; and (*c*) to cauterise the part so as to convert it into dead tissue, which, as we know, is incapable of performing the process of absorption. I advocate the use of the permanganate of potash, because I know from practical experience that it has the effect of rendering snake poison, —which appears to be allied to rabic slaver—quite inert. Under any circumstances, I hold that incision, and, in cases where the wounds are ragged, excision, the neutralisation of the virus, and the cauterisation of the parts are the measures which are best calculated to prevent the absorption of the virus into the general system.

I do not propose here entering into a discussion of the merits of M. Pasteur's method; but I cannot help saying that there appears to exist an unreasoning acceptance of assertions in its favour to the exclusion of facts which are unfavourable. So far as I can gather, the very essentials of proof on scientific grounds are wanting. There is nothing whatever to show that the numerous persons being inoculated at his laboratory were bitten by rabid animals, if we except the fatal cases; nor is there anything to show how far immunity from rabies may have been due to causes other than those claimed by M. Pasteur. Nor has sufficient time elapsed in any given case to warrant the assumption that the period of incubation has yet passed.

I remain, Sir, yours truly,

Goalundo, May 15th, 1886. VINCENT RICHARDS.

COLONIAL AND INDIAN EXHIBITION.—Arrangements have been made for the examination in the Indian Court of certain commercial products, which are believed to be insufficiently known or to be suitable for new purposes. Among the substances which will be examined are fibres, silk, and silk substitutes, drugs, tobacco, gums and resins, minerals, oils, oil-seeds and perfumery, dyes, mordants and pigments, timbers, tanning materials and leather, and food-stuffs. Any visitors to the Exhibition, who are interested in the subject, will be permitted to attend these examinations of products, which will take place in the Commercial Room, attached to the Economic Court, where all further information may be obtained.

NATIONAL DENTAL HOSPITAL.—The first dinner in aid of the funds of this hospital will be held on Tuesday, the 29th June, 1886, at "The Albion," Aldersgate-street, Alderman Sir Robert N. Fowler, Bart, M.P., in the chair.

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THE LANCET.

LONDON: SATURDAY, JUNE 26, 1886.

No arguments against general hospitals, or in favour of a merely stingy and critical support of them, will hold water. Hospitals are institutions for a generous treatment. Their open doors, their high skill and service, the poverty and sickness of the great majority of their inmates, and covering life itself with a cloud, ought to disarm criticism. When to this is added the remembrance of the work done in hospitals considered as schools of medicine, where the surgeon and the physician learn the art with which in after-time they are to save the life of the rich and the comfortable classes, their claim to generous help is indeed overwhelming.

The Christian arguments will be plied to-morrow with more force than ever. It is thought disadvantageous for the advocate of a great cause to have to acknowledge a favourable state of the finances or the existence of a balance at the bankers. On this occasion the ministers of religion will have all the advantages of a huge deficit. Our carefully drawn tables show that on last year's working alone the hospitals and dispensaries of the metropolis have a deficit of £40,335, and in some of the largest and best institutions of London the deficiency is painful. Take, for example, the London Hospital, contending with the hospital needs of the East-end. Its deficiency alone on common work is £8211, without including an extra expenditure on building of over £9000. King's College for the year has a deficit of £4000; University College of between £3000 and £4000; this without reference to the accumulating deficits of previous years.

HUME, in his account of Queen ELIZABETH, has a fine speculation on the decline of ancient hospitality among the nobility, and attributes it largely to habits of luxury, which dissipated the immense fortunes of the ancient barons. In the time to which we refer hospitality, in the ordinary sense, existed still on a princely scale. There were actually no hospitals, excepting St. Thomas's and St. Bartholomew's, in the kingdom. The provinces were without an institution where a poor man with a broken leg or a fever could be accommodated with a bed. Since then hospitals have become a feature of our civilisation. Every important town in the country has its hospital or infirmary, where the poor man, or his wife or child, in grave conditions of accident or disease, may have a physician and a nurse equal to those who minister to the wealthiest nobleman in the country, or to Royalty itself in the metropolis. This is true hospitality. Is it declining? and if so, what account shall we give of the fact? The hospitality of which HUME spoke is on the increase; it is no longer the exclusive privilege of the baron or the nobleman; it is diffused through society, and in the houses of many of our merchants we may see a more sumptuous dinner or a more gaily apparelled company than was seen in many of the halls of the ancient nobility. We shall be told that times are bad. So they are; but much luxury still survives. A superfluity of hospitality not only in the City companies, but in every rank of life, obtains. A month's—we will not say economy—a month's simplicity of living and entertainment in London would supply the deficit of the hospitals, and add £40,000 to the Hospital Sunday Fund. This is a simple prescription. It would not perceptibly diminish London trade; it would immensely reduce London ailment. Nobody would suffer—save, perhaps, London doctors; and it would redeem our society from the charge of frivolity and luxury, when want, disease, and emaciation cry in vain for admission—for a bed either to be cured on, or to die on, in a London hospital. Shall all hospitality for the rich, the gay, and the strong go on, and the hospitality for the poor, the pinched, and the sick wither? Some of the poverty of our hospitals arises from the fact that the new classes of society, to which wealth has been largely transferred, have not realised the case and the claims of hospitals. The middle class is blamed for using the hospitals and dispensaries, for sending their servants to them, and sometimes even going themselves, but forgetting to send their guineas to the treasurer. This is certainly largely true. But

> "Evil is wrought by want of thought,
> As well as want of heart."

And here, we really believe, it is largely want of thought. Men do not "think," do not "consider" the case of the poor man—short of money, short of breath, with little accommodation in his home when all goes well, and none when disabled by accident or illness. But the excuse of "want of thought" cannot much longer be made. Hospitals are being starved out of all proportion to the badness of the times, while millions are being squandered on luxury. The starvation of hospitals is published in every newspaper and from every pulpit. Patients in hospitals are not fed by manna from heaven; they depend on "good Samaritans" passing by, on their fellow-workmen, on merchants, and on men who are the proprietors of "heaps of gold." Our theory is that out of every such "heap" a hospital should be constructed, which should be maintained by the trained self-denial of people in the possession of ordinary health and means. Sir ANDREW CLARK has well told us that the entertainment of the poor in hospitals is not only a matter of divine charity, but of human prudence. Let to-morrow's collection show that we have taken his wise and warning words to heart.

A SHORT time since a paper was read at the Sanitary Convention of Ypsilanti, Michigan, by Dr. ERWIN F. SMITH, which sets forth in an exhaustive manner the influence of efficient sanitary measures in controlling and reducing mortality. Incidentally, our comments on the reports of medical officers of health are constantly pointing out how great this influence is, and how dependent national prosperity is on the saving of human life from the more preventable diseases. It may be a question whether financial gain accrues to a community by the adoption of measures which go to prolong an old age which is comparatively useless for State purposes, but no such question can arise as regards the control of many of the more preventable diseases, such as enteric fever and phthisis, which kill the breadwinners, leaving whole families dependent for

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support on public funds, and which, as regards the latter disease at least, go to enfeeble subsequent generations. We do not propose to follow Dr. ERWIN SMITH into the many details which he brings forward to show that well-designed works of sewerage and of water-supply have caused a reduction in the death-rates of the cities affected; but it is useful from time to time to give prominence to the general conclusions which are involved in records such as he has set out for the guidance of his fellow-workers.

Nature exacts the utmost penalty for breaches of the laws of health, and no amount of ignorance is ever accepted by her as a reason why infraction of those laws should not be followed by their natural consequences. In olden days, when a halo of superstition obscured all recognition of the laws relating to epidemic disease, nations were swept over and over again by disorders such as plague, sweating sickness, and the like, hundreds of thousands of human beings perishing miserably from affections which are now either altogether things of the past, or so limited in their area that this very limitation serves to indicate the causes of their prevalence by mere contrast of the sanitary circumstances which prevail within, and are absent and without, the affected zones. And so it still remains. Thus, notwithstanding the rites and processions carried out in Naples in 1884, the city remained as much scourged by cholera as if nothing had been done, and it was only when an attempt was made to cleanse the town of some of its more glaring sanitary defects, and when later on a pure and abundant supply of water was brought in to replace the polluted services, that some initial advance was made in the direction of preventing the disease. So also Paris, with its 80,000 cesspits and numerous shallow wells, is repeatedly the subject of typhoid fever epidemics; and Toulon, which is aptly described as "a plague spot from time immemorial," has hardly ever escaped from any epidemic coming within its range. At times some event, such as the great fire of London, which at first appears to be an unmingled national calamity, forcibly points out what are the conditions that need removal in the interests of health, and it may be hoped that the special localisations of cholera during the epidemic of the past two years may teach a similar lesson. We got rid of plague in the metropolis by the fire which consumed so much of the city; but the lesson was not fully appreciated, and we again began to aggregate houses on small areas, until, in almost all our large cities, we had constructed permanent typhus centres. Now we are endeavouring to undo this mischief, and it is doubtless in the main due to the vast demolitions of bad house property under the Artisans and Labourers' Dwellings Acts, and in connexion with other works, that London has now for so many years remained free from a typhus epidemic.

With cholera still persistent in certain parts of Europe, and with the knowledge that this same disease has with unerring certainty settled on our insanitary spots in the past, it is most important that we should remember the implacable claims of Nature, and the certainty with which she levies a death tax on those communities and spots that refuse to be taught by past experience. Intervals, and sometimes long ones, are granted in which to do away with the evils which have marked the past; and so far as cholera is concerned, we have in this country been favourably dealt with in this respect. But Toulon, Marseilles, Naples, Palermo, Paris, and many Spanish cities, also had their opportunity, and when the infection came near them, their sanitary administration was weighed and found wanting. There are places in this country of which the same may have to be said, but it will not be for want of warning. Improvement in England has, we believe, been very general in sanitary matters, but the causes of preventable disease will find their way through any weak points in the sanitary armour of our cities and villages that may be left exposed, and to these each sanitary authority and each responsible citizen should turn his attention whilst there is yet time.

ALPINE and athletic clubs are hardly less interested than the physiologist in the elaborate series of experiments recently made by Drs. MOSSO and MAGGIORA on the laws of fatigue, and described by them in the monograph just presented to the Accademia dei Lincei. These accomplished inquirers began their operations by constructing a mechanism by means of which they could observe the variations of the efforts put forth by a finger in lifting a weight until entire exhaustion had set in. The mechanism was then readjusted in such a way that the operator's whole arm remained motionless, with the one exception of the muscle corresponding to the finger in action. The variations of the muscular effort were graphically traced on blackened paper, and from these tracings it resulted that every individual under experiment gave a special characteristic trace, which at once distinguished his effort from those of the others. Resistance to fatigue was then seen to be different at different hours of the day, and the influence of food upon it was also found to vary. Further, a special study was made of the important problem of the disposing of pauses, so as to make the outlay of force as economical and as effective as possible. The practical importance of these inductions to pedestrians or soldiers on the march is obvious. According to Drs. MOSSO and MAGGIORA, the resulting fatigue is twofold—the fatigue of nervous failure and the fatigue of muscular failure. In certain cases the fatigue comes from the collapse of the muscular tissue only, while in others it happens that the brain suspends the supplies necessary to keep the muscles active. Some experiments showed that if a fatigued finger bore a weight with difficulty, the moment the weight was withdrawn the finger recoiled backwards with force—a proof that while the muscular energy had run out, the nervous energy was striving to compensate it by imposing on the muscle an effort much stronger than necessary. Professors MOSSO and MAGGIORA next describe a series of experiments on the influence of the weight to be lifted, as well as on that of anæmia. To ascertain the latter, they constricted the arteries of the arm under experiment by impeding the afflux of blood, or they rendered it totally bloodless by encasing it in strong ligatures of gutta-percha. In this condition the muscle was found capable of continuous effort, but only through nervous excitation, while it was observed in what manner the muscular energy revived gradually as the blood returned into the arm. The effects of fasting, and the duration of time that must elapse after

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the taking of food to re-establish the conditions of normal muscular labour, formed a further series of investigations, in connexion with which there was determined the influence of respiration and of those processes of training whereby the organism is inured to bear the heaviest fatigue, as in the case of Alpinists before undertaking a formidable ascent. Finally, Drs. MOSSO and MAGGIORA overhaul afresh the familiar experiments as to what and how great is the influence of certain aliments in the production of labour, whether their action is beneficial or not, confirming by novel methods the induction that alcohol, so far from augmenting muscular energy, positively diminishes it, while other ingesta increase the output of work by substantial reinforcement of the organism. The monograph, on its publication, will be found not to disappoint the expectations formed as to its merits from the previous researches of these eminent physiologists of the sub-Alpine school.

AT the time of our writing the Medical Bill has yet to become a Medical Act. At the last moment, and in the "hurry-skurry" of a premature dissolution, Parliament has been exercising its little power of altering the balance of parties (so to speak) in the Medical Council. Our readers will remember that the only serious attempt of Parliament in the House of Commons to modify this imperfect measure was in the matter of representation on the Medical Council. The friends of the Victoria University made a determined stand about two o'clock in the morning, when most of the members either were or should have been asleep, to get a representative on the Medical Council to themselves; and they succeeded. Then followed the similar attempt of the friends of Aberdeen and St. Andrews; but they failed. The House of Lords has been more propitious. Under the effective lead of the Chancellor of the Aberdeen University, the Duke of RICHMOND and GORDON, the Lords have granted what the Commons denied—a separate representative to Aberdeen and St. Andrews respectively. It is not easy to see how this plea is to be resisted after the privilege of separate representation has been conceded to Victoria University. But, for all that, it is inconvenient. As the Bill left the Commons, England had 14 representatives—i.e., direct representatives 3, Crown 3, University 5, Corporations 3; Scotland, 8—i.e., direct representatives 1, Crown 1, University 3, Corporations 3; Ireland, 7—i.e., direct representatives 1, Crown 1, University 2, Corporations 3. Nobody will say that England has more than her share here. But the numerical disproportion of representation between Scotland and Ireland was a matter of some delicacy, Scotland having one more member than Ireland. The Duke of ARGYLL said in the House of Lords that he had no objection to Ireland having a dozen members if she had as many universities. But the question is by no means so easy of solution as the Duke would imply by this off-handed speech. The whole system of representation of individual institutions is bad. It necessitates a large and costly Council, and every representative is tempted to look at every question of medical education or examination through the spectacles of his particular "body." This evil is notorious; it has tended and will tend to keep down the public respect for the Council. The Royal Commission recommended a smaller and differently constituted Council, as we have always done—one in which the bodies were collectively represented, not singly. No such improvement, however, has been made, and the time has gone for making the attempt. Before this reaches the majority of our readers the Bill will be either lost or passed. In the latter event it will be our duty next week to consider it in more detail.

Annotations.

"Ne quid nimis."

THE ACCESSION OF QUEEN VICTORIA.

THIS being the opening of the fiftieth year of Her Majesty's most happy reign, all classes of the Queen's subjects are eager to celebrate the jubilee with all the enthusiasm with which loyalty to the Throne and respect for the personal merits of the Sovereign inspire the nation. Already the opening notes of the thanksgiving festival have been sounded, and appropriately enough in the Hall-Chapel of the Temple, where the premier society of law interpreters held high carnival after the manner of olden times, and afterwards went to church on Saturday, the eve of the Accession Day. There will be ampler opportunity and more fitting occasion to revert to this subject later on; but we cannot let the week pass without placing on record the expression of a sentiment which pervades the population, and has no firmer hold anywhere than in the minds and hearts of the members of the profession of healing and health-preservation—a sentiment of respectful and earnest well-wishing for the health, happiness, and continued prosperity of the Queen of England, Victoria, whom God save.

THE COMING ELECTION AT THE COLLEGE OF SURGEONS.

BEFORE our next number appears the College election will be over. We must once again impress on Fellows the importance of the occasion and the great desirability of voting for men whose influence will be given in favour of that reform which is as widely demanded by the constituency as it is necessary to the advancement of the best interests of the College. We would especially hope that provincial Fellows will make an effort to be present, in order not only to secure an ample representation of their own body, but also to help in the election of the most enlightened of the remaining candidates. We reproduce the list of candidates published in our issue of the 12th inst. They are as follows:—Mr. Lund and Mr. B. Hill, who seek re-election; Messrs. Sibley, Couper, Willett, Rouse, Brudenell Carter, and Reginald Harrison. Among the metropolitan candidates, Mr. Sibley, Mr. Willett, and Mr. Couper are perhaps the most conspicuous. We could have wished that Mr. Holmes had allowed himself to be nominated; his outspoken views, his high professional standing, and his past experience on the Council would have secured for him a full vote. Among provincial Fellows, Mr. Lund and Mr. Harrison are so well known, and their respective claims on the constituency so well acknowledged, that they need no present commendation at our hands. This present election should be a memorable one, and should be the means of convincing the Council of the earnestness of the Fellows at large in the cause of reforms which, though advocated for many years past, have been persistently refused or ignored by the Council. We may hope, ere another election comes round, that personal voting will have been abolished, and that Members of the College will have been granted their legitimate corporate right of voting and of being directly represented on the Council.

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UNIVERSITY OF LONDON.

A MEETING of Convocation will take place on Tuesday, the 29th inst., for the purpose of nominating "a list of three persons to be submitted to Her Majesty for the selection therefrom of a Fellow of the University." Mr. William Thistleton Dyer, B.Sc., Mr. Philip Magnus, B.A., B.Sc., and Dr. Samuel Wilks, M.D., have been proposed. Mr. Dyer's nomination-paper is signed by 275 graduates, Mr. Magnus's by 450, and Dr. Wilks's by 659; so that if the voting-papers show a like return there will be no question as to the selection of the last-named physician. There is a large amount of business on the agenda paper, besides the further consideration of the report of the special committee upon the constitution of the University adjourned from the special meeting of May 25th. Mr. Newsom, LL.B., is to nominate a special committee of seven members to consider the regulations for the examinations for the degrees in laws. Mr. Tyler and Mr. Lynn are to move resolutions affecting the constitution of the University, which will, we imagine, hardly be entertained if the report of the special committee be adopted. Mr. Whitehead and Mr. Nesbitt revive the question of establishing a doctorate of literature or philosophy, in accordance with a resolution passed on Feb. 3rd, 1885. Mr. Cotton proposes that the University should appoint professors and tutors "to promote the progress of graduates to higher degrees." Mr. Whitehead has resolutions having reference to the proposed forthcoming Jubilee celebration. Mr. Round wishes to change the hour of meeting of Convocation, and will move to refer the question to the annual committee. Mr. Spratling gives notice that he will move a resolution in favour of the Senate being enabled to appoint joint committees of the Senate and Convocation or other recognised bodies within the University; he also intends to move that it is unconstitutional and inexpedient to suspend any standing order without due notice.

POISONING BY WOOD-SORREL.

ON June 15th an inquest was held at Gravelly Hill, touching the death of Edward Arthur Geary, aged five years. From the evidence, it appears that deceased ate a "large quantity" of green sorrel (sorrel dock, Rumex acetosa); that next morning, feeling dazed and thirsty, he drank some soap-and-water which stood at hand; and that shortly afterwards he became unconscious and died at five in the evening of the same day. Now, the active poisonous agent in sorrel is oxalic acid, but from personal knowledge and experience we can say that a very considerable quantity of the leaves may be ingested without producing unpleasant, much less dangerous, symptoms. The theory of the medical men engaged in the above case was that the alkali of the soap combined with the acid of the leaves and formed soluble salts of sorrel, which caused the fatal toxic symptoms. We are inclined to think that such combination may have occurred, but whether potassic or sodic oxalate was produced in quantity large enough to cause lethal effects we are somewhat sceptical. It may have been that the poisonous action, owing to slow absorption of oxalic acid from the partially digested leaves, had commenced, and that the symptoms were intensified by the alkaline oxalate. It is a question of toxicological significance, and one well worth working out in the laboratory. It is an instruction in cases of oxalic acid poisoning not to give alkalies on account of the highly poisonous action of the salts generated. Lime forms an insoluble oxalate, and is thus indicated. Theoretically the case seems on paper to be complete, but we should require to be assured that other and, as it seems to us, more probable causes of death had been eliminated before we accepted the verdict of the jury, although it was in accordance with the medical evidence. Neither Taylor nor Guy makes mention of poisoning by sorrel leaves, either alone or in combination with alkali. We should like to know whether the fluid the child drank was simply *soap-and-water*, or a solution of soap less, which might contain a fatally poisonous dose of carbonate of potash. Subject to correction, we are disposed to believe that the death was owing to the "soap-and-water," and that the sorrel leaves had but little to do with the unfortunate event.

THE NECROPSY OF THE LATE KING OF BAVARIA.

THE supplement to the *Allgemeine Zeitung* of Munich of June 16th contains the following account of the *sectio cadaveris* of the late King Louis II. of Bavaria. The necropsy began at 8 A.M. of June 15th, and ended at 1 P.M. It was performed by Professor Rüdinger, with the assistance of "privat docent" Dr. Rückert, the "protocol" being drawn up by Geheimerath von Ziemssen, in conjunction with the above-named professors, and the three alienists, Hofrath Hagen, Professor Grashey, and Director Hubrich. Among those who were present were Professor Kupffer and the body-surgeon of the late King, Dr. Schleiss von Löwenfeld The embalmment, which took place immediately after the necropsy, was performed by Professor Rüdinger and Dr. Rückert, and succeeded extraordinarily well, being finished at 8 P.M. The body had a length of 191 centimetres, the circumference of the chest being 103 centimetres. There was a pretty thick layer of subcutaneous fat, while the osseous and muscular structures were particularly strongly developed. The corpse was somewhat swollen in the face and neck, the skin of the head, especially about the ears being of a livid tint, while on the surface of the trunk and limbs there was diffuse cadaveric petechiæ. As for wounds, with the exception of some small cuticular excoriations on the knees, none were discoverable. The tongue was slightly clenched between the teeth, while the latter were in many places defective [carious?]. The skin of the scalp was very thick and enormously vascular. The skull, in proportion to the size of the body, was small and somewhat asymmetrical, the diagonal diameter from the forehead to the occiput, from left to right, being 17·2 centimetres, while that from right to left was 17·9 centimetres; and the wall of the skull was extraordinarily thin, the greatest thickness being 3 millimetres. The coronal and sagittal sutures were completely ossified on the inner aspect of the cranium, while a row of greater or smaller osseous growths existed on either side on the inner surface of the frontal bone. The superior longitudinal sinus was much dilated posteriorly, while, on the other hand, it contracted anteriorly towards the ethmoid bone in a remarkable degree; and Pacchionian bodies projected in groups into the channel of the sinus. The dura mater was in general considerably thickened, especially over the frontal lobe of the brain; it was vascular, rough, and villous on the outer surface. On the clinoid processes was an osseous outgrowth, projecting to the extent of 2 millimetres. On the left petrous bone was a prominence of 1 centimetre in basal diameter, corresponding to a depression on the temporal lobe of the cerebrum. The dorsum sellæ was asymmetrical, thickened to an important degree, porous, and brittle, as was also the floor of the anterior fossa of the skull. All the sinuses at the base of the skull were distended with dark fluid blood. The weight of the brain, without the dura mater, was 1349 grammes. The arachnoid membrane was thickened to a great extent on both hemispheres, and with milk-white opacities. At one spot—namely, over the mesial extremity of the left anterior central convolution [ascending frontal] and the commencement of the first frontal gyrus—the arachnoid and pia mater were adherent for the area of a mark-piece, and thickened to a tough callosity, while from the pressure

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of this latter the corresponding part of the cranial vault was reduced to a paper-like thinness. On the surface of the brain, pretty evenly distributed on either side, there were shrunken regions of the convolutions—namely, on the commencing portions of all three frontal gyri, on the mesial extremity of the anterior central convolution, and in the neighbourhood of the middle section of the post-central sulcus. The cerebral substance was vascular and somewhat soft. As regards the other organs of the body, the following was noted: The lungs, with the exception of the effects of the aspiration of water, were in a completely normal condition. There was no trace of pleural adhesion. The heart was somewhat larger than normal, but of strong muscular structure, and with but a moderate covering of fat. The stomach, which still retained some remains of undigested food, was in a state of chronic catarrh. The walls of the intestines and the liver were congested, and the spleen enlarged, being in a state of commencing decomposition. The kidneys were large and extremely cyanotic, but otherwise normal.

HUNTER'S HOME.

NOT long since we had occasion to draw attention to the impending destruction of John Hunter's House at Earl's-court. Now the work has been completed, and the place is being laid out as a square. A correspondent of a contemporary calls attention to the fact that the builders have obtained permission to name the new thoroughfare "Barkstone-gardens," and suggests that it should receive instead some appellation that would perpetuate the memory of Hunter. We heartily subscribe to this suggestion. The name fixed upon at present may not be inappropriate in itself, but the occasion surely warrants that the greatest person and circumstance connected with old Earl's-court House should be fixed upon to give the new nomenclature. It may not seem a matter of signal merit that here it was that John Hunter kept his caged lions and prepared the skeleton of O'Brien. When, however, we contemplate the prodigious labours of the great anatomist, we cannot help feeling that anything, however small, done in laying the foundation of the magnificent collection at Lincoln's-inn-fields is worth recording; and surely the most fitting place is the scene where Hunter devoted a part of his life's work. We have placed "Cleopatra's Needle" on the Thames Embankment to commemorate, as we suppose, the "dalliance and the wit" of the swarthy Egyptian Queen. Thousands of pounds were spent to bring and rear in our midst an obelisk of uncertain history. Why, then, should we from simple negligence fail to honour, if only by a name, one who has done a thousand times more to make the world healthful and happy than she who "rode on Fortune's neck" and "governed men by change."

SCARLET FEVER IN THE FERNDALE VALLEY.

THE epidemic of so-called "black fever" which was announced to be prevalent in the Rhondda Local Board of Health District turns out to be scarlet fever. But the epidemic is evidently on a wide scale, 350 cases and 24 deaths having occurred up to the 17th inst. According to a correspondent much reliance is being placed on disinfectants as a means of prevention, but although we would by no means undervalue the effect of really efficient means of disinfection by which such materials as bedding and clothing can be rapidly and thoroughly penetrated by a high temperature, it is obvious that in isolation the true remedy against scarlet fever must be found. When once the disease has gained the dimensions of an epidemic it is clear that the time has passed in which all cases can be isolated by the sanitary authority, and hence it is that it is so important to have in readiness beforehand means which will suffice for the isolation of the first cases, and which shall be of such a character as to attract the sick. The provision of hospital accommodation during an epidemic, and with a view of meeting it, is, as a rule, a mistake; but the occasion may well be used to inaugurate an efficient scheme by which the next appearance of the disease may be met in such a way as to prevent another epidemic.

HOSPITAL SUNDAY FUND AND THE THEATRES.

ALTHOUGH the managers of the London theatres have not apparently seen their way to give effect to our suggestion of a special "Hospital *Matinée*," it is pleasant to record the aid they are giving this week to the Hospital Sunday Fund. During the present "Hospitals week" collecting-boxes have been placed at the various entrances for the public as well as at the stage doors and in the "green-rooms" of the following theatres: Adelphi, Britannia, Criterion, Court, Gaiety, Globe, Grand, Haymarket, Her Majesty's, Lyceum, Pavilion, Prince's, Princess's, Prince of Wales (Greenwich), Opera Comique, Strand, Standard, Surrey, Sadler's Wells, Savoy, Toole's, and Vaudeville. It is announced that there will be no detailed statement as to the amount collected at each theatre, but that the money collected at all the various houses will be handed over to the Lord Mayor in the aggregate as their joint contribution. The theatrical profession is notoriously a generous one, and it is to be hoped that playgoers generally will appreciate the fact that a small addition to their expense this week for amusement and recreation, while not felt by them, will assist in doing incalculable good. A correspondent has written to the *Echo* to suggest the extension of the aid of secular places for the Hospital Sunday Fund. Urging the adoption of such a system as prevails in Paris, before the close of the Salon, he writes—"Surely, with us the governing bodies of the Royal Academy, Grosvenor, Royal Institute, and all other galleries could hardly refuse a day or more to appointed lady collectors outside their several turnstiles—days of promising harvest to a great and public need."

INTRA-OCULAR MUSCLES OF MAMMALS.

MANY problems of a difficult nature present themselves in the study of the physiology, histology, and anatomy of the intra-ocular muscles. To some of these Mr. W. H. Jessop has directed his attention, as a paper read before the last meeting of the session of the Royal Society shows. The relationship that evidently obtains between the different groups of muscles themselves as well as to other motor functions specially interests the physiologist; and in this field the aid that disease affords is certainly of considerable value; experimental investigation also promises to throw light on the subject. Mr. Jessop has brought forward arguments to show that the fifth nerve is concerned in some of the functions of the pupillary and ciliary muscles. The pupil contracts to its utmost under direct stimulation of its muscular tissue by eserine, whilst atropine is capable of producing the greatest amount of dilatation of this structure. It appears that the action of the antagonistic agents is the same on the ciliary muscle. The intra-ocular muscles are believed to have similar anatomical, histological, and physiological actions, which their associated action in the act of accommodation would tend to support. The pupil not only contracts when the ciliary muscle does so, but also dilates when the latter relaxes; the latter act, Mr. Jessop states, is carried out through the intermediation of the long ciliary nerves from the nasal branch of the fifth. The ordinary light-reflex of the pupil takes place through the agency of the third nerve; and the cervical sympathetic, as the inhibitory nerve, causes dilatation of the pupil. In mammals

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the two chief motor functions of the pupil are thus separated; whereas in birds, possessing voluntary control over the irides, this is not so, for the cervical sympathetic has no power over the pupil, the nerve causing dilatation being the fifth. Mr. Jessop draws a clear distinction between the modes of action of cocaine, eserine, and atropine on the neuro-muscular intra-ocular apparatus; the first of these agents acts on the terminations of the cervical sympathetic in the pupil, and probably of those of the fifth in the ciliary muscle; whilst, as above mentioned, the action of the other two drugs is on the muscular tissue directly. Hence it is that, even after section of all the nerves going to the intra-ocular muscles, atropine and eserine can cause further dilatation or relaxation and contraction respectively.

DR. OLIVER WENDELL HOLMES AT CAMBRIDGE UNIVERSITY.

ON the 17th inst., in the presence of a large and enthusiastic assembly in the Senate House at Cambridge, the honorary degree of Doctor of Letters was conferred upon Dr. Oliver Wendell Holmes. The public orator in presenting Dr. Holmes to the Vice-Chancellor, characterised him as one who combined enthusiasm for science with distinction in literature, one who "Phœbo ante alios dilectus" had received more than one gift of Apollo, the gift of skill in the healing art as well as the gifts of eloquence and soul. In allusion to the death of Addison, of which that day was the anniversary, the orator said that the language of eulogy once applied to that writer might appropriately be transferred to Dr. Holmes:—Haud ignobili poetæ, in oratione soluta contexenda summo artifici, censori morum gravi sane sed et perjucundo, levioribus in argumentis subridenti suaviter, res etiam serias lepore quodam suo contingenti." Addison, however, had died in the forty-seventh year of his age, whereas Dr. Holmes was nearly fifty when his fame as a writer burst out into a fresh brightness like that of the Indian summer—"ubi in ipso autumno novus refulget æstatis splendor." The orator concluded in these words:—"Videor mihi vatem quendam canentem audivisse, illum cujus in corde æstas æterna floreret, non vocandum esse senem. Equidem juventutis perpetuæ fontem illum quem trans æquor Atlanticum Hispanorum nautæ frustra quærebant, nautam hunc feliciorem, non fabulosas inter insulas sed Academicæ juventutis in amore perpetuo, in amore mutuo, invenisse crediderim. Trans occidentis amplum illum sinum, levi phaselo vectus, diu naviget; nautili illius ritu, quem versibus tam pulchris descripsit, indies 'per ampliora ad altiora' tendat. Suam Academiam, per tot sæcula feliciter conservatam, intra paucos menses carmine sæculari iterum celebret, diuque superstes ipse exornet; nostræ denique Academiæ honoris causâ adscriptus, diu et nostrum et totius litterarum reipublicæ ad fructum floreat, vigeat, valeat, litterarum doctor, Oliver Wendell Holmes."

SPECIALTIES IN PARISIAN HOSPITALS.

Le Progrès Médical (5th inst.) complains that, in consequence of inadequate recognition by the Faculty of Medicine, the practice and teaching of pediatrics, dermatology, laryngology, otology, and other special departments of medicine and surgery are very imperfectly provided for in the French capital—so much so, indeed, that French students who desire to perfect themselves in special subjects are compelled, at great expense and inconvenience, to cross the Rhine and study in Vienna or Berlin. The admission of German superiority is a proof of candour which, coming from a leading French journal, possesses the charm of novelty and bears the stamp of truth, which it is very creditable, but cannot be pleasant, to avow.

THE NIGHTINGALE FUND.

THE report of the fund of the Nightingale Home or School for Nurses at St. Thomas's Hospital, for the year 1885, has been recently published. From the opening of the school in June, 1860, to the end of 1885, a total of 833 candidates have been admitted, and 494 have left the school, after completing a year's training, as certified nurses. There were forty-five probationers admitted during the year, making, with thirty-two who remained from 1884, seventy-seven who received instruction. Twenty-seven probationer nurses were entered on the register as certified nurses after completing their year of training, and of these eleven were lady probationers and sixteen nurse probationers. Nineteen resigned or were discharged as unsuitable for the work, this number of failures being somewhat above the average; want of physical strength is said to be the principal cause of this failure. In the early part of the year an outbreak of an epidemic character occurred among the inmates of the home, traceable to some defects in the structural condition of the building; steps were taken by the governors to remedy this evil, which were successful, and no serious results ensued. Three nurses who had been trained in the school went out to Egypt, where they did valuable work. From the further experience there gained, the opinion is expressed that it is only in fixed hospitals (or hospital ships) used for severe cases, and under a superintendent of nurses, that trained female nurses can be advantageously employed. A note is also made as to the satisfactory progress of the training school at St. Marylebone New Infirmary, where there were twelve nurses undergoing training. From the fact that amongst the expenditure of the year £140 14*s.* is put down as a contribution to the expenses of this training school, it would appear to have a very close connexion with the St. Thomas's school, if it is not a direct offshoot. The fund shows a balance in hand amounting to £1829 19*s.*, after the payment of all expenses, including that of "training hospital nurses"—£1430 7*s.*, a large item. This school has done a great deal in the training of nurses who have joined the National Nursing Institution; the good work of these is well known and highly appreciated amongst the sick poor of many of the worst districts of London. We should like to see a home established in connexion with this hospital where trained nurses could be obtained for work amongst the upper and middle classes, similar to those formed in connexion with the nursing schools of St. Bartholomew's, Guy's, the London, and other hospitals.

OVARIOTOMY IN RUSSIA.

DR. MATVEEFF has published a large amount of information on the subject of ovariotomy in Russia. The first operation in the country was performed by Vantsetti in Kharkoff in 1848, but was attended with a fatal result, Professor Krassovich being the first to perform a successful case in 1862. Altogether the author has collected accounts of the work of ninety-six Russian surgeons. The total number of operations was 696, of which 213 ended fatally: this includes 98 double cases with 32 deaths, 16 pregnant cases with 2 deaths, 50 dermoid cyst cases, only one of which was unsuccessful, and 42 cases of malignant tumour of the ovary, of which 25 were fatal. The ages of the patients varied from fourteen to sixty-eight. Of the pregnant cases, one was as early as the second month and one as late as the ninth; of the 16, 6 miscarried, and 2, as stated above, died. Secondary ovariotomy was performed six times, only one of these cases being unsuccessful. Most of the fatal cases were due to peritonitis; of the total number of deaths (213), this accounted for 133, collapse for 14, exhaustion for 12, and internal hæmorrhage for 10. The general percentage of deaths was about 30. That of different operators who had a record

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of 25 or more cases varied from 42·9 to 8·8 (Slavianski) and 7·7 (Rein.) According to a letter by Prof. A. Y. Krassovski, which is published in Sir Spencer Wells's work on Ovarian and Uterine Tumours, it is stated that up to 1882 302 cases had been performed by Russian surgeons, with a mortality of 44 per cent. Dr. Matveëff is to be congratulated on his later and more extensive statistics, which show that Russian operators are becoming more and more successful in their ovariotomy results. As to the places in which the operations were performed, nearly all were done in university towns; thus, St. Petersburg claims 294, Moscow 110, Kieff 59, Warsaw 52, Kharkhoff 40, Kazan 28, Dorpat 25, and Helsingfors 4. Of the remaining 84, 46 were performed by Dr. Kuznetski in Nijni-Tagilski in the province of Perm, and 18 by Dr. Ikavitz in Tambova.

THE ANTI-FAT CRAZE.

THERE is inconceivable folly in the fear of fatness. We do not for a moment deny that it is possible the organism may be too heavily packed with adipose tissue, and that the action of its several parts may be hampered by this encumbrance, while as a whole it is needlessly burdened; but this is a totally different matter from the fatness against which the fears of the multitude are, for the most part, unreasonably directed. There is not the least physiological connexion between the accumulation of fat and fatty degeneration. As a matter of fact, what is known as "fatty degeneration" occurs more frequently in those who are lean than in those who are "fat" in a popular sense. It is therefore a misconception to suppose that fatness is in itself a disease. It only becomes morbid when, by mechanical pressure, fat impedes the functions of the organs, or by weight it unduly burdens the body so as to exhaust the strength or make too large a demand on the resources of force and vitality. Unfortunately the true nature of the objections to fatness are not explained, and misconception is rather confirmed than removed by the prevailing mode of urging arguments against "fat" and in favour of remedies by which it is proposed to get rid of it. Practically speaking, it is idle to suppose that fatness can be certainly prevented by dieting. There are many ways of fat-making, and those persons who have a tendency to its production will make fat however they are fed—in truth, almost as rapidly on one class of diet as on another. There are idiosyncrasies which may in a limited number of instances be taken advantage of to check the tendency to form fat, but these specialties of chemico-nutritive function are by no means common; and, speaking generally, it must be said that, except by starving the body as a whole, fatness cannot be prevented. The exceptions to this rule are chiefly such as may be explained on the principle of a special tissue appetite. Thus, for example, a man whose muscular system has been healthily developed somewhat in excess of the other parts of his organism may have what might be called a muscular-tissue appetite of such voracity that it will, so to say, seize upon the bulk of the nutriment supplied to the blood and make muscle regardless of what may be left for the nutrition of nerves, &c. Such a person will lose fat without growing thin, so far as muscle is concerned, by a mere reduction of diet, without reference to the kind of food cut off, so that the latter do not chance to be essential to muscle nutrition. In the same way, though with different results, a "nervous" person, in the popular sense—that is, an individual whose nervous system is in perpetual activity, working incessantly and feeding voraciously,—may consume so much of the food supplied for the body as a whole that only nervous tissue is nourished and the rest of the body languishes. This is an instance of growing thin while feeding well, and it is the converse of the process by which, in another class of persons, growth of muscle persists in spite of a reduced diet. There are, in this way, persons whose specialty it is to make adipose tissue, and they will wax fat even when muscles, nerves, and the higher parts of the organisation are relatively in a condition approaching starvation. These and a score of other matters have to be taken into account when calculating the probabilities—or rather the improbabilities—of success in the endeavour to diminish the fatness of any individual by a system of dieting. As regards the use of drugs against fats, setting aside such obvious modes as robbing the blood of its proper nutriment by purging and nauseating, we do not believe it is practicable to prevent the formation of adipose tissue or even to promote an elimination of fat by the use of medicines, unless it be by correcting some error in the chemico-vital processes of the organic economy, to which a particular remedy may, as a temporary expedient in, here and there, a suitable case, be intelligently directed. Measures against fatness are, from the very necessities of the enterprise and the conditions under which it must be carried out in the great majority of instances, predestined to failure. It would save a deal of disappointment, and a great many incidental injuries to health might be avoided, if these facts could be more generally understood; and we think medical practitioners generally may be fairly asked to state and explain them.

MASSAGE IN SCIATICA.

PROFESSOR MAX SCHÜLLER of Berlin is convinced (*Deutsche Med. Wochensch.*, No. 24) of the superiority of massage over other measures employed in the treatment of sciatica, and relates his experience of fifteen cases—all in males, and, except in one or two instances (which were traumatic), due to exposure to cold. Most of the cases were dealt with from the first by massage; but in a few instances electricity, vapour baths, &c., had been fruitlessly employed prior to coming under his care. The *modus operandi* is as follows. The patient lies on the unaffected side with knees and hips slightly flexed. The course of the sciatic nerve is rubbed from below upwards, partly with both thumbs, partly with the ball of the little finger or thumb; sometimes struck with the closed fist, sometimes the muscular mass over the nerve pressed and kneaded with both hands. The pain evoked by these manipulations soon passes away, and after a short time becomes less and less at each sitting. The neuralgic pains very soon abate, diminishing after a severe and painful massage, then recurring with less severity, and gradually disappearing entirely. The power of walking improves after each sitting. On an average the treatment lasts about two weeks and a half, but in one case nine days, and in several from ten to fourteen days sufficed. One patient abandoned the treatment after five days, owing to the pain caused by it, and tried without relief a fortnight's course of electricity and vapour baths; he then returned to the massage treatment, and was cured in two weeks and a half.

SMALL-POX v. VACCINATION.

DR. FAIRLIE and Dr. M'VAIL have very kindly entered into a newspaper controversy with the anti-vaccinationists in the *Glasgow Herald*. We are disposed to doubt whether such controversies ever convert the real anti-vaccinator; but those who are open to reason cannot fail to be convinced by the extraordinary facts showing the enormously reduced mortality of those vaccinated compared with that of those unvaccinated, and the practically absolute immunity of those who are successfully vaccinated and successfully revaccinated. Dr. Fairlie seems in this controversy to have given some sanction to the practice of making one vesicle, as against three or four. This is to be regretted. It is clear that the protection is in the ratio of the number of scars.

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The experience through which Zurich is passing might well make the anti-vaccination philosophers pause. In Switzerland, from very doubtful notions of liberty, the Federal Council made compulsory vaccination a cantonal affair instead of a federal one, as it had been before. Most of the cantons were wise, and kept to compulsory vaccination; but in Zurich they were extra-wise, and repealed the compulsory vaccination law. This was in May, 1883. In that year, as in 1882, the deaths were *nil;* in 1884 the deaths rose to eleven; in 1885 to seventy-three; in 1886, for only three months the deaths are eighty-five. *The Times* correspondent says the law will be re-enacted. Of course; the door will be locked again, but the steed has been stolen. We doubt, however, whether anything but small-pox will preserve the equilibrium of some minds on this subject. It is a great teacher. The correspondent, quoting statistics lately published by Professor Durrant, compares the mortality from small-pox in twenty-one German towns in 1885, having an aggregate population of 4,306,933, and under compulsory vaccination, amounting to twenty-seven, with the mortality in fifteen French towns, with a population of 4,200,840, for the same year, amounting to 806, or thirty-two times more than in the larger population.

RADICAL CURE OF VARICOCELE BY EXCISION.

Il Bullettino of the Royal Academy of Medicine of Genoa (No. I., 1886) reports a case in which Professor Ceci successfully treated a large left varicocele by excising the dilated spermatic venous plexus. The patient, aged twenty-two, suffered great inconvenience in consequence of the enlargement. Under chloroform, an incision two and a half inches long was made on the left outer side of the scrotum down to the vein, the distension of which was maintained by an assistant exercising pressure at the external abdominal ring. With a director, the vas deferens and the spermatic artery were carefully isolated from the vein, which was secured with two catgut ligatures at the abdominal ring and near the testicle. The varicose venous plexus was then excised. The skin wound was closed with a catgut suture, a drainage-tube having been placed in the lower angle. On the eighth day, when the dressing was changed, there was some œdema of the scrotum; this part as well as the inner surface of the thigh was the seat of carbolic eczema, and carbolic necrosis had attacked the edges and the bottom of the wound. These symptoms disappeared under borax and iodoform, and the patient made a perfect recovery. Professor Ceci considers that the technical progress in operations for varicocele due to the influence of aseptic and antiseptic precautions, justifies preference for excision of the vein over difficult and complicated methods.

POISONED BY WILD FLOWERS.

ABOUT a fortnight since a little girl, aged seven years, died at Glasgow, as alleged, from having sucked the bloom of some poisonous wild flower. The child had been taken on a Sunday-school excursion into the country. During their ramblings wild flowers were gathered, and posies were arranged and garlands woven, as is the wont with children set free from the care and discipline of schools and allowed to roam fancy free in meadows and by hedgerows. In their delight at nature's fairest gifts, little did the denizens of the big Scotch town dream of the poison that lurks within the spathe of the cuckoo-pint (Arum maculatum), or in the clusters of purple blossoms of the woody nightshade (Solanum dulcamara). In fact, the flower of this plant is so like in form and arrangement to that of its innocent first cousin, the esculent potato, that we can understand how a knowledge of the harmlessness of the culinary tuber may have suggested a riskless indulgence in the flowerets of the former. In these days of School Board exaction, is it too much to ask that our children should be instructed, if only in simple fashion, in the broad principles of botany and zoology, and taught how to recognise the plant that nourishes and the one that kills—the harmless snake and the poisonous adder? It is not necessary to go into technical details and to use harsh scientific words to instil into a child's mind that which may be of good service to it when brought in contact with the floral beauties of spring and early summer, or with the berry clusters of a later season. What could be more interesting to a hard-worked, brain-wearied little wanderer in God's garden than to learn the way to recognise the difference between the garnishing parsley and its deadly relative whose name is the antithesis of him that is wise, or its still more poisonous effigy, the classic hemlock, growing in shady nooks. We might mention a hundred other instances—e.g., the creeping hairy bryony, with its festooned wreaths of scarlet berries, hard by its rival, the common tamus, with leaves of shining green, growing bronzed and sombre as the autumn of its vegetative life approaches. We could tell that the simple dropwort, or spiræa, has no right to have its title disputed by the water dropwort or the hemlock water dropwort, with which it holds no natural affinity. We could warn against the perfidy of the gaudy foxglove and the sedate but deadly nightshade, and so on; but enough has been written to merit the sympathy of our Board of National Education, and to make them consider that the fields around us are the true fields of learning.

THE MARY WARDELL SCARLET FEVER HOME.

THE first annual meeting of the friends and subscribers of this Home took place on Friday, the 18th inst., at 32, Sackville-street, Piccadilly. Sir J. Risdon Bennett was in the chair. Sir Edward Sieveking, the Rev. J. F. Kittc, and others spoke in support of the institution. In the fifteen months during which it has been open 138 patients have been received—namely, 82 from their own homes, 34 from the London Fever Hospital, 12 from the Metropolitan Asylums Board Hospitals, and 10 from other hospitals. The patients included 16 children of the upper class. Mr. Kitto said that several of his own children had enjoyed the benefits of the Home; one servant, a kitchen-maid, contracted the disease in a mild form. All the cases have done well, and all have expressed a high sense of the comfort and care they received. The terms for ordinary patients are 15*s.* weekly, 10*s.* for children; the terms for ordinary patients are £3 3*s.* a week. More subscriptions and donations are urgently required to complete and maintain this most benevolent work.

RADICAL OPERATION FOR HERNIA.

AN improved operation for the radical cure of hernia has for some time past been practised by Drs. Svensson and Erdmann, surgeons to the Sabbatsberg Hospital at Stockholm. A ligature is applied to the neck of the hernia, and the sac is cut off below the ligature, the contents being previously examined by means of an incision into the sac and returned; or, if only omental, excised together with the sac. In congenital hernias the upper part of the sac only is removed, and where the large bowel is included in the hernia and adherent to the sac wall, this, after being separated from the surrounding tissue, is returned, together with the large intestine, and the rents of Poupart's ligament united by sutures. The dressing employed is iodoform and boracic acid, the wounds being washed with sublimate solution. Since this has been substituted for carbolic gauze, abscesses which used to occur frequently, have become rare. Of the forty-eight cases thus operated on, none of which were selected, thirty-eight were permanently cured—at least no return of the hernia occurred within six

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months; and in the cases where a return did take place, which amounted to 20 per cent., the condition was very much less painful and distressing than it had been previous to the operation. The Sabbatsberg Hospital has now been opened six years and a half, and during that time 300 cases of hernia have been admitted, about 200 of these being operated on with the knife; a milder procedure, consisting of alcoholic injections, being employed in most of the earlier cases. Not a single case proved fatal, though some of the hernias were very large, some reaching within three or four inches of the knee.

THE HYGIENE OF THEATRES.

GIVEN a spacious theatre, crowded during an evening performance for a period of hours, what is the difference of the effects on its atmosphere produced by the electric light or by gas, particularly as to the temperature and the generating of carbonic acid? Such is the problem which Dr. P. Renk, Professor of Hygiene at Munich, has just set himself to solve. Taking the Theatre Royal of that city, which is lighted by 1400 lamps on the Edison system, he tested the two kinds of illuminants, with the following results: During a representation which lasted from 5 30 P.M. to 10.15 P.M., and which was witnessed by 1790 people, he found that while the rise in temperature in the pit was 11·1° Centigrade with gas, it was only 7·7°, also Centigrade, with the electric light; and that in the upper gallery it was 10·7° with the former, and not more than 7·4° with the latter. As to the increase in the production of carbonic acid, the results were equally important. In the pit it was as 2176 with gas to 1221 with the electric light, and in the upper gallery as 2855 with the first to 1430 only with the second.

THE NEW YORK POST-GRADUATE SCHOOL.

THE Faculty of the New York Post-graduate Medical School have entered upon the fifth year of instruction with the record of a highly successful period behind them, and with increased facilities for the future. No undergraduates are admitted, and no degrees are conferred, but the school is open to all legalised practitioners, and it is available for the young graduate who wishes to acquaint himself with the practical duties of his profession, or for older practitioners who are desirous of taking up some special branch of medicine or who wish to familiarise themselves with modern advances in diagnosis and treatment. The instruction is given by means of clinics, subjects, and specimens. There are no lectures except clinical ones, and no demonstrations without subjects and specimens. It may be safely said that no institution in America designed for graduates in medicine is so completely organised in all its branches, has such accommodation for patients and for instruction, or is so fully equipped with the appliances requisite for each special course as this one; and it is to be hoped that the anticipations of the managers respecting the future prosperity of the school may be fully realised.

BRIGHT'S DISEASE WITHOUT ALBUMINURIA.

A SUBJECT which, it may be remembered, was brought prominently under notice by the late Dr. Mahomed—viz., the occurrence of renal disease without the symptom of albuminuria—was discussed by M. Dieulafoy at a meeting of the Paris Hospitals' Medical Society on the 11th inst. (*Le Progrès Médical*, No. 25). He described four cases, which exhibited for many weeks, or even months, some of the most marked symptoms of Bright's disease, such as vomiting, oppression, headache, œdema of the ankles, the *bruit de galop*, flushing, digital mortification, ocular and cutaneous derangements, and a new sign termed by M. Dieulafoy cryæsthesia—a sensation of extreme coldness limited to the extremities, especially the lower limbs, or to the knees. In not one of these cases was a trace of albumen found in the urine except during the last days of life. Such cases were contrasted with others of so-called "physiological albuminuria." As a means of diagnosis M. Dieulafoy suggests a test which is obviously inapplicable for clinical purposes. It is founded on Bouchard's observation that normal urine is a toxic agent to such a degree that, injected into a vein of a rabbit's ear, it will produce a fatal result when administered in the proportion of 50 cubic centimetres per kilogramme, whereas a much larger quantity (150 and even 285 cubic centimetres) of the urine of Bright's disease is required to produce the same result.

THE LATE PROFESSOR v. GUDDEN.

IN speaking of the melancholy event of the 13th inst., the *Münchener Medicinische Wochenschrift* of June 15th says:—"The death of v. Gudden is an irreparable loss to science as well as to the university; in him we lose one who indisputably ranked among the foremost of modern psychiatrics, one of the most brilliant ornaments of our medical faculty, who as a teacher was esteemed on all sides for his talent as well as for his amiability, and who was a most zealous and energetic associate of our medical societies." Dr. v. Gudden was born at Cleves in 1824, and studied at Berne, Berlin, and Haller. He took his doctorate in 1848, and was appointed superintendent of the Asylums for the Insane at Wemeck in 1855. In 1869 he was made Professor of Psychiatry at Zurich, and in 1872 was transferred in the same capacity to Munich.

CHOLERA INTELLIGENCE.

THE cholera intelligence from Italy is this week the reverse of reassuring. It is true that, though the disease is still maintained at Venice and at Bari, the daily number of cases and fatal attacks has undergone a diminution, but still the infection has now clung to those places for a lengthened period, and such sanitary precautions as may have been adopted have failed to get rid of a danger which steadily increases with the approach of the hotter months. And not only so, but some further extension of the area infected has taken place. To the north, cholera has appeared at Codigoro, in the province of Ferrara, on the low-lying flats to the south of the estuary of the river Po. So also, two cases and a death are reported from Udine, the frontier town between Austria and Italy. This is not the first appearance of the disease there this year, and the occurrence gives rise to some fear that there may be a tendency for a diffusion in the direction of Austria and Hungary. Trieste is also, in so far as the imposition of quarantine restrictions is concerned, still regarded as an infected port. As regards the south, no new locality is known to have been invaded, but the cholera returns, which had ceased as regards Brindisi, are again issued, two fatal attacks having been reported on the 20th and the 21st of June.

LYMPHADENOMA OF THE INTESTINE WITH LEUKÆMIA.

M. MATHIEU reported at the last meeting of the Paris Anatomical Society the case of a man, aged sixty, who had suffered from uncontrollable diarrhœa for five or six months, with glandular enlargements in the groin and axillæ. He was very cachectic, and anasarca was present. The blood was examined several times, without any signs of leukæmia being detected. At the necropsy the solitary glands were found much swollen and of a pearly white colour, Peyer's patches being healthy. The mesenteric glands were much enlarged, also the spleen, the liver and kidneys being healthy. No tubercle was found.

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THE DWELLINGS OF THE PEOPLE.

THE Mansion House Council on the Dwellings of the People have again, in their latest report, drawn attention to some of the defects in our municipal system, which, in spite of the ample exactitude of law, continue to impede the advance of sanitation in the more crowded parts of London. They have little to say against the law as it stands, much in its favour. The difficulty lies in the weakness of the executive as represented by the inspectors and medical officers, but, above all, in the personal and proprietary interest of vestrymen in the dwellings whose condition is in question. In spite of the hindrances which their work has thus encountered, the Council have been able, through their voluntary aid committees, to do much for the improvement of insanitary dwellings. In order to secure still further the accomplishment of this very desirable object by the official sanitary staff, they suggest that certain obvious reforms should be adopted in the organisation of that body. With regard to inspectors, the number of whom at present varies from 1 in 50,000 to 1 in 100,000 of the population, they rightly assert that they are absurdly few, that a stronger guarantee of special sanitary education than is now provided should be required of them, and that they should follow no other calling. In speaking of medical officers, they draw attention to the fact that the hands of these gentlemen, as well as of the inspectors, are apt to be tied, and their reforming zeal discouraged by the opposition of the vestrymen, to whom they are responsible. The Council accordingly advise, with much justice, that the Local Government Board should be required to confirm the appointment or removal of medical officers and inspectors, without, of course, prejudicing the right of the vestries to elect their own officers subject to that authority. Vestrymen, according to the report, are frequently found to be very indifferent guardians of the public health. Their fitness for office in other particulars, indeed, is in some, perhaps in many, cases but little regarded by their constituents. We are well aware that there are also many localities where public intelligence is more careful in its selection, but the fact that well-informed parochial oversight is apt to be most wanting where it is most required, in the poorer districts, is itself evidently suggestive of the need that the sanitary service should be under a higher central control.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

AT the approaching meeting at Birmingham, commencing on September 1st, the organising committee of Section A has arranged that a special discussion shall be held, jointly with Section D, on the physical and physiological theories of colour-vision. The discussion will be opened by Lord Rayleigh, and Dr. Michael Foster will also take part in it. Persons who wish to contribute papers bearing on the subject of discussion should send their names to the recorders of Sections A or D, at 22, Albemarle-street, W., not later than August 1st.

PROVISION AGAINST INFECTIOUS DISEASE.

A RECENT occurrence in Darlington should serve as a warning to all towns that are without a machinery sufficient for dealing with cases of infectious disease. Local authorities frequently neglect to make complete provision until disease has appeared, and even threatened to assume serious proportions. So in Darlington there was a hospital for the reception of infectious cases, an ambulance to remove the sick, but there was no horse to be used in connexion with it. A man who had been staying at several lodging-houses in the town was attacked with small-pox, and being practically turned out from the last of these places on the ground that he was "not all right," he wandered about until he fell down in the Skinnergate. There a crowd collected round him, and he remained until Dr. Manson was called, and under his instructions the ambulance was sent for; but owing to the difficulty of obtaining a horse the man remained for an hour and a half in the street, exposing many people to serious risk. It is more than likely that the economy which prevented a horse from being kept in readiness will cost a larger sum of money than would have been thus spent, and cause some loss of life. The subject was discussed at a meeting of the board of guardians on Monday, when a statement was made by the master of the workhouse that a nurse in this institution had contracted small-pox from another case of this disease which had been admitted some three weeks before.

HISTORY REPEATS ITSELF.

THE reputed discoverer of a new fact or idea is probably never the first to have made the discovery, or even to have formulated it. In the world of ideas, as in that of material, a continuity can be perceived by which new ideas are evolved from old ones, as new forms of life are the children of ancient forms. Hence it is not surprising to hear that to M. Pasteur does not belong the credit of discovering that zymotic diseases are due to germs. It appears that more than a century and a half ago Dr. Goiffon wrote a work on the origin of the Plague, in which he advanced the theory that the disease was dependent on minute insects or worms, which had none the less a real existence, though they were then beyond the powers of the microscope to reveal. Dr. Goiffon also had something to say on the process of infection, which he likewise considered to be the work of minute living creatures that conveyed infection in a latent condition from one place to break out afresh in another. Did not Goiffon get the idea from some still more ancient master?

SEWAGE FARMS NEAR PARIS.

ON former occasions we have pointed out the hostility with which all propositions to drain direct into the sewer have been met by the Parisian population. Custom and prejudice, united with the more scientific objection that the sewers of Paris are only fit to receive rain-water, have prevented the advocates of the "tout à l'égout" from realising their proposals. But now the opposition has extended to the districts outside Paris. One of the worse features of the drainage scheme is that the main sewer falls into the river Seine, which is already very foul. To avoid further pollution it is proposed to enlarge considerably the sewer farm of Gennevilliers, and to devote a portion of the forest of St. Germain to the purification and filtration of sewerage-water. For this purpose an official Commission, consisting of members of the Paris Municipal Council and engineers of the town, went to visit the districts in question. On landing from the river steamer at Bougival, the Commission was met by the mayors and municipal councillors of the communes of Rueil, Chatou, Croissy, Bougival, le Pecq, Marly, le Vésinet, and other places, who all energetically protested against any extension of the sewerage farms. When the Commission reached the forest of St. Germain they found a crowd of some 2000 persons waiting for them. These demonstrators had inscriptions written on sheets of paper or squares of cardboard, stating that they strongly objected to the project. Some demanded that the sewer should be prolonged to the sea. The greatest excitement was displayed, and many ladies participated in the manifestation; some even had their written protestations suspended from their necks. For five hours the crowd dogged the footsteps of the Technical Commission, who were only too glad, after

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this hostile reception, to return to Paris. It will now be more difficult than ever to bring the vexed problem of the disposal of sewage to a satisfactory conclusion. In spite of the reclamations made by the demonstrators, Paris is too far inland to drain into the sea; evidently the suburban inhabitants will not tolerate sewerage farms, and, of course, it is against every sanitary law to allow a compact population of 2,000,000 people to drain into a small river like the Seine. Under all these circumstances Paris seems indicated as a town which should have a double system of drainage. Rain-water might continue to flow through the present large and defective sewers into the Seine; but sewage proper should be collected in a small separate canalisation, conveyed out of town, and there treated in hermetically closed tanks and reservoirs. Such a solution of the difficulty would probably not occasion any popular outcry or opposition.

"FAITH-HEALING" DISCUSSED.

ANY who may be interested in "faith-healing," whatever their views, will do well to look through an article in the *Century* for this month, in which the subject is carefully and impartially examined. Other systems in which the influence of will plays a part, assisted by an element of faith in the medium of its action, receive due attention. Miracles reported to have occurred in recent times at the hands of faith-inspired persons are compared and contrasted with those recorded in Scripture. While we do not care to accept as proof every diagnosis of disease related by the author in cases of "mind-cure," we agree with him that this doctrine implies no real miracle, but the tonic influence of an awakened will and hope in the sufferer from functional disease, and such disease only. The discussion is conducted in a moderate and tolerant spirit, and its manner and matter are alike calculated to adjust the focus of public opinion on the topic in question.

WHAT IS COURAGE?

FROM time to time the notion crops up, and finds expression in many of our contemporaries, that death from hydrophobia is due to fright; that the victim of a bite from a rabid dog succumbs because he does not struggle against his fears. As a personal quality, courage may be well known to every individual, but what it is physiologically would certainly puzzle wiser heads than Bacon's to propound. One thing seems to be certain, that this emotional (or is it intellectual?) state has its chief seat in the highest parts of the brain. Probably, not even the advocates of the courage treatment of hydrophobia would gainsay the fact that the chief seat of the morbid process in hydrophobia is somewhere in the brain beneath the seat of courage. Now, it is notorious that the higher parts of the brain can in large measure resist or hinder the actions that take place in the lower. And there might be some reason for asking whether it is not possible for an action or state like courage to influence, either in repressing or augmenting an action, like that of hydrophobia, which takes place below it. Many epileptics are able at the onset of a fit, when this is attended by a warning, to stop the attack either by a mere effort of will, often aided by voluntary muscular contraction with its necessary attendant sensations, or by some direct powerful impression on one or other of the senses. But there is a limit to such powers. No man can permanently arrest the action of breathing, and the same may be said generally of the heart's action. And it is precisely in the neighbourhood of the centres that preside over the action of breathing, the heart, and deglutition, that the morbid process of hydrophobia goes on in its course. If hydrophobia can be checked [illegible] resulting from strychnia poisoning ought to be capable of voluntary control, for there is a close analogy between the two affections. No; courage is a powerful remedial agent, but it cannot prevail against a germ disease that directly attacks the immediate vicinity of the vital centres, the mere pin-pricking of which, as was shown years and years ago by Flourens, inevitably terminates in death.

THE MICROBE OF RABIES.

THE cause of rabies, which has long been regarded as a vital agent, has hitherto eluded the grasp of the microscopist. We say this notwithstanding the description of its microbe by M. Paul Gibier a few years ago and by M. Fol last year, for bacteriologists and others have not accepted their observations. But Mr. G. F. Dowdeswell has, it appears, distinctly discovered a micrococcus in the nervous tissues of rabid animals that will probably be found to be the cause of the disease (*vide* THE LANCET, p. 1112). There is some difficulty in staining the micrococcus, which is not nearly so minute as Fol made out. We believe that Mr. Dowdeswell is about to attempt its cultivation.

WHAT IS A TEETOTALER TO DO WITH HIS PORT?

THE papers have been all relating the troubles of a good man, Mr. Green, of Bishopswood House, Highgate, with 2500 bottles of port in his cellar, valued at £600, and who finally, and after considering the three courses open to him, as to all men, poured the wine into the sewers. We must all admire the motive that impelled to this action. But the action itself is not so clearly entitled to admiration. The wine should have been given to hospitals. It is allowed to be of use as medicine, and the course must be considered open to the charge of waste. The question in casuistry is not entirely new. A well-known physician is understood to be somewhat perplexed with it. There are instances where the offending alcohol is best thrown into the sewers, and that promptly; but the present is not one of these.

EPIDEMIC DISEASES IN PARIS.

Il Morgagni (June 5th) observes that, whereas in well-administered cities mortality from preventable diseases has been on the decrease in recent years, it has, on the contrary, steadily risen in Paris. This has specially been the case with diseases closely connected with drainage and drinking-water—diphtheria and typhus. Dr. Hertillon has tabulated the mortality per thousand inhabitants, and proved that within the last ten years the percental ratio of deaths from the two diseases named has nearly doubled. Without insular pride, English sanitarians may reasonably congratulate themselves that *all* things are not done better in France.

UNIVERSITIES OF EDINBURGH AND ST. ANDREWS.

WE understand that it is not the intention of Mr. Ericlsen to contest the representation of these universities at the coming election. Some months ago he was requested to stand again in the event of a dissolution or of a vacancy occurring, but with much regret declined to do so. There will consequently, we believe, be no opposition offered to the re-election of Mr. Macdonald, the present member.

THE isolation of cocaine, according to Professor Torretti in the *Raccoglitore Medico*, was first effected in the laboratory of the Botica y Drogueria Boliviana by Signor Pisani in 1857. The research was suggested to him by the celebrated Austrian traveller Tschudy, and Dr. Aquiles Reid of Valparaiso is said to be in possession of Pisani's confirmatory manuscripts.

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FROM the report of the examination made by Colonel Sir Francis Bolton of the water supplied by the several metropolitan water companies during the month of May, it appears that the Thames water sent out by the Chelsea, West Middlesex, Southwark, Grand Junction, and Lambeth Companies exhibited in every case a very marked diminution, as compared with the previous month, in the proportion of organic matter present. Of the water drawn from the Lea, that supplied by the New River Company contained less organic matter than any of the other river waters, whilst the East London Company's supply resembled in this respect the Thames-derived waters. All the waters were clear and bright on delivery.

IN reference to the excessive mortality amongst our troops in Egypt, to which we alluded in our last issue, the *Egyptian Gazette* publishes the following figures:—The Assouan garrison consists of about 3000 men, of whom 250 are under twenty years of age, 660 are from twenty to twenty-one, 1160 are from twenty-one to twenty-three, and 950 are over twenty-three. The deaths during May numbered fifty-two, mostly from enteric fever. Between the 13th and the 16th there were twenty-eight cases of heat apoplexy, from which malady five deaths occurred on the 16th.

THE sum of £2000 has been placed by Mr. George Holt in the hands of the treasurer of University College, Liverpool, to provide, for the next ten years, two scholarships annually, each of the value of £100, tenable for a year. To these the Medical Faculty of the College will nominate senior students who have been conspicuous for diligence and ability during the whole of their previous course, and who it is desirable should continue their studies for another year.

ON May 10th Professor Luigi Vella expired, after two years' disablement by nervous disease. Up to that time he had occupied the chair of physiology in the University of Bologna as a colleague and very intimate friend of the distinguished Ercolani.

THE death occurred last week at Cambridge, in the eighty-eighth year of his age, of Mr. Richard Potter, M.A., L.R.C.P., formerly Fellow of Queen's College, Cambridge, and Emeritus Professor of Natural Philosophy and Astronomy in University College, London.

PROFESSOR KAPOSI of Vienna has succeeded the late Professor Auspitz as joint editor (with Professor Pick) of the *Archiv für Dermatologie und Syphilis*.

TUBERCULOSIS IN CATTLE.

A VALUABLE report has been presented to the Parliament of Victoria by a "Board appointed to inquire relative to the existence and extent in Victoria of the disease in cattle known as tuberculosis, whether its existence is likely to be detrimental to the public health, and what preventive measures should be adopted." The report is fully exhaustive of the subject, comprising sections upon the prevalence of tuberculosis, its communicability, the doctrine of the bacillus, and Koch's investigations concerning it, with statements in support of and opposed to Koch's views, the question whether tuberculosis is a contagious disease, the limited nature of its infective power, the hereditary tendency to tuberculosis and hereditary transmission, the identity of human and bovine tuberculosis, and the question whether the flesh of tuberculous cattle or the milk of tuberculous cows is fit for food. The opinions at which the Board arrived are given in a summary, which, as the result of a prolonged and painstaking inquiry, is instructive and important, besides placing the question in a clear and definite light.

Bovine tuberculosis and human tuberculosis, though differing widely in the general appearance of the lesions which they present after death, and though differing also in a less degree in their history during life, are yet essentially allied to each other; they are produced by the action of the same low vegetable organism, the *bucillus tuberculosis*, which is found in all forms of tubercle, in whatever animal developed. These organisms may be cultivated in the pure state, generation after generation; if such pure cultures, far removed from their original source, be inoculated into susceptible animals, such as rabbits and guinea-pigs, disseminated tuberculosis is set up in the various organs and tissues of the animals operated upon; and in the tubercles so produced similar organisms are again found. These results are invariable; whether the pure cultures are introduced beneath the skin, into the abdominal cavity, or into the anterior chamber of the eye, tuberculosis follows with certainty in all susceptible animals; and even with animals usually insusceptible like results are obtained if a larger number of organisms be introduced, so as to overcome the resistance of the tissues. Moreover, when animals are fed with tubercular matter, whether derived from human or from bovine tuberculosis, a large proportion become tuberculous, and this result is not prevented if the animals be well housed and otherwise well fed. There is also evidence of no slight weight tending to prove that the milk of tuberculous animals, even when the udder is not affected, may induce tuberculosis in other animals to whom it is administered as food; and this, too, although abundance of sound milk or other suitable food is given at the same time. Other evidence, not quite so conclusive, but sufficiently cogent, indicates that the flesh of animals suffering from advanced and widespread tuberculosis may induce tuberculosis in animals fed upon it unless the flesh be thoroughly cooked. It has also been found that if tuberculous matter containing the specific vegetable organisms be suspended in water and repeatedly sprayed into the atmosphere of a chamber in which comparatively insusceptible animals, such as dogs, are kept, tubercles develop in the lungs and sometimes in other organs. Furthermore, when a large number of animals are kept in the same room, but in different cages, some being artificially infected with tuberculosis, and others being simply kept as "control" animals for the purpose of comparison, cases of apparently spontaneous tuberculosis appear from time to time among the "control" animals. The greater the number of tuberculous animals in the room, the more numerous will be the cases of spontaneous tuberculosis; but no "control" animal has been known to become tuberculous until it has been for some months in the infected apartment. The spontaneous tuberculosis so induced affects chiefly the lungs and bronchial glands, and bears a close resemblance to the ordinary phthisis of man.

The specific organisms, or bacilli of tubercle, are present in the sputa of phthisical patients, sometimes in great abundance; and they have been collected from the air issuing from wards containing large numbers of consumptive patients. Phthisical sputa may be dried and powdered and kept in this state for months without destroying the vitality of the bacilli.

Numerous cases are on record in which tuberculosis has apparently been communicated from one animal to another, and from one human being to another when living in close relations with each other. The insidious commencement and the long course of the disease render it difficult to trace such communication. But while the possibility of such direct communication has been sufficiently established, it is also true that exposure to contagion, even for considerable periods, is comparatively seldom followed by the development of tuberculosis. This fact is explained in two ways: Firstly, the specific organisms multiply very slowly, and only when protected from much mechanical disturbance; and they cannot, unless in very exceptional circumstances, multiply at all outside the living body, owing to the narrow limits of temperature within which they flourish. Secondly, they cannot with equal certainty attack all varieties of animals, or even all individuals of the same variety without distinction; thus, guinea-pigs and rabbits are very susceptible, ruminants and men are moderately susceptible, while dogs are comparatively insusceptible. The moderately susceptible animals appear to be secure against the inroads of small numbers of the bacilli

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unless they are specially predisposed. This predisposition may be general or local; a general predisposition consisting in some frailty of constitution, often inherited, and a local predisposition generally produced by the effects of inflammation in some organ, weakening its vitality and leaving within it some stagnant or semi-stagnant exudations or secretions, in which the bacilli find a congenial soil for their development. Above all, the occurrence of repeated catarrhal inflammations of the lungs appears to create the special predisposition which is necessary to enable the bacilli to maintain themselves and multiply within the body.

Lastly, heredity certainly plays a most important part in the propagation of this disease. Tuberculous parents often bequeath to their offspring an original frailty of constitution which renders them liable to be infected by the bacilli; and, in the second place, though the truth of this is not well established, it is possible that the germs of the disease may themselves be transmitted from parent to offspring, and, after lying latent in the system for a variable time, may subsequently, under favouring circumstances, wake into new activity.

Numerous experiments have proved that tuberculosis may be transmitted from man to lower animals, and from one lower animal to another. In the necessary absence of experiment, the evidence in favour of its transmission from lower animals to man may appear less cogent; but in the opinion of this Board the evidence is amply sufficient to justify legislative precautions.

These precautions, as embodied in the recommendations of the Board, include the declaration of tuberculosis as a contagious disease, and its introduction into the schedule of the Diseases of Stock Act, so that tuberculous animals may be seized and slaughtered; but it is not proposed to introduce any quarantine regulations. No compensation is to be allowed to owners for the compulsory slaughter of tuberculous cattle; and it is further recommended that a circular letter be addressed to owners of stock, requesting their active co-operation with the Government, so as to limit the prevalence of tuberculosis, and indicating the measures most effective to this end. Further recommendations are made respecting tuberculosis in reference to meat-supply, and dairies, which it is proposed to inspect. There can be no question that the Board have gone to the root of the matter, and it remains to be seen how far it is possible to carry their recommendations into effect in view of the great prevalence of bovine tuberculosis.

DR. RICHARDSON'S LECTURES ON ANIMAL OR VITAL MECHANICS.

LECTURE V.

MECHANISM OF THE HEART.

THE fifth and last lecture of the course delivered on Monday, May 31st, was devoted to the subject of the work of the heart. The circulation through the heart itself was first noticed, and the provision by which it is secured that the heart shall be fed with blood permanently, as the primary organ of the circulation, and in that sense the organ which requires to be served before any muscle of the body, voluntary or involuntary. In the second part of the lecture Dr. Richardson described the movements of the auricles and the ventricles, the diastoles and systoles, and the valvular actions during each series of movements. In this part he explained that he had seen the heart working under two distinct tensions, which he designated as the high or full vital tension and the low or syncopal tension. Under the high or full tension, the volume of the heart is large and the stroke so powerful as to distend the whole of the arterial trunks; under the low tension, the volume of the heart is reduced to fully half that of the high tension, and, although the motion of the auricles and ventricles is still in correct order as to time and method, the propulsion is so feeble that the arteries are not distended. In this minor condition of action the circulation is sustained, as during syncope and catalepsy, but in a passive or negative state, from which the revival is sometimes all but instantaneous, owing to a sudden return of the heart to its full power. In an experimental observation under anæsthesia, the lecturer had actually witnessed in a lower animal this transition in the work of the heart from the low to the high tension. It was the work of a moment, was attended with phenomena resembling a restoration from temporary death to active life, and was due probably to a restored balance of the nervous supplies by which the heart is naturally maintained in equilibrium of motion.

The observation on the equilibrium of motion led to a description of the nervous supplies of the heart: the propelling from the sympathetic source: the controlling, through the pneumogastric, from the cerebro-spinal source. Here Rudinger's dissections of the cardiac nerves formed on the screens beautiful illustrations, rendering the demonstration of a difficult subject extremely easy and practical. From this point the course of the lecture was more thoroughly mechanical. The number of the pulsations of the heart in different animals—in fish, frog, bird, rabbit, cat, dog, sheep, horse—was described, and a few comments made on the remarkable slowness of the heart—40 strokes per minute—in the horse. Then the number of pulsations in man at various periods of life, and at different levels, from the level of the sea up to four thousand feet above sea level, was brought under review, and was followed by a computation of the average work performed by the heart in a healthy adult man. The work was traced out by the minute, the hour, and the day, and was shown to equal the feat of raising 5 tons 4 cwts. one foot per hour, or 125 tons in twenty-four hours. The excess of this work under alcohol in varying quantities formed a corollary to the history of the work of the heart, Parkes' calculation showing an excess of 24 foot-tons from the imbibition of eight fluid ounces of alcohol. The facts relating to the work of the heart by the weight of work accomplished was supplemented by a new calculation, in which the course of the circulation was explained by mileage. Presuming that the blood was thrown out of the heart at each pulsation in the proportion of 69 strokes per minute, and at the assumed force of 9 feet, the mileage of the blood through the body might be taken at 207 yards per minute, 7 miles per hour, 168 miles per day, 61,320 miles per year, or 5,150,880 miles in a lifetime of 84 years. The number of *beats* of the heart in the same long life would reach the grand total of 2,869,776,000.

In the next part of the lecture the sounds of the heart were described and imitated, and the muscular construction, with special reference to the spiral character of the cardiac action, was illustrated on the screen by the electric light from Pettigrew's remarkable series of photographs of dissections of the heart. The effect of the ventricular contraction on the arterial pulses was also illustrated by a series of sphygmographic tracings thrown on the screen, showing the natural pulse tracings and the various deviations from the natural under the effects of alcohol, tobacco, opium, and exposure to extreme cold. The resistance produced by cold was illustrated from the tracing of the pulse of Mr. Fleuss after his immersion for an hour in water at 35° Fahrenheit.

The course was brought to a close with a short summary of a few of the leading topics which had formed the subjects of discourse, and with some practical hints deducible from them.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Harwich Urban District.—The birth and death rates for this district during 1885 were 39·5 and 15·9 per 1000 respectively, and there was a marked absence of any prevalence from infectious diseases; two cases were, however, admitted into the isolation hospital. Mr. Hardwicke, in speaking of disinfectants, places great confidence in one which for commercial purposes is sold under a special name: but something more than a chemical fluid, however trustworthy, is needed for the purposes of a sanitary authority who have bedding &c. to deal with. A new water-supply from borings in the chalk is expected to be delivered into the borough next October.

Hanley Urban District.—This district exhibited in 1885 a death-rate of 3·2 per 1000 below that of the mean for the

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preceding five years, the rate being 19·1. But there is room for still further improvement in this respect, for the infant mortality under one year of age still reaches as high a rate as 198 per 100 registered births. An attempt has been made to secure a voluntary notification of infectious diseases, and to a certain extent it has been successful; but it is added that three medical men have refused to accede to the request to notify, and since any such objection to report does away with the efficiency of the scheme, we fear that, as in other similar cases, the result may end in failure. Whether the refusal to co-operate was due to the inadequacy of the fee offered or to other causes is not stated. Dr. Walker points out that every district stands in need of a hospital for the isolation of first cases of infection, and it is to be hoped that Hanley will endeavour to deal, by isolation, with all the cases of the infectious fevers with which the authority will become acquainted, and with which it can properly so deal.

Tunbridge Wells Urban District.—From a statistical point of view, Tunbridge Wells has a high reputation. For five years past its annual rate of mortality has only varied between 14·0 and 15·7 per 1000, and in 1885 it was 15·4. The so-called zymotic rate also stood as low as 0·8 per 1000. The only fatal diseases coming directly within sanitary control which took place were 4 from continued fever and 2 from diphtheria. Not much is said as to the sanitary conditions prevailing in the town, but inspections are evidently carried out with care and regularity, and the isolation hospital is systematically used. Thus, 23 cases of mild scarlet fever, and 9 cases of small-pox, the result of imported infection, were all dealt with in this way.

Kendal Urban District.—Kendal, with a population of 13,800, has a death-rate of 18·5 per 1000; but it had not a single death from enteric or typhoid fever during the past year. This certainly affords a satisfactory comparison with previous years that are now well-nigh forgotten; for in five epidemics between 1838 and 1860 the deaths from "fever" ranged from 48 to 117. Since 1860 there has been an almost steady diminution in the mortality of epidemics that have ensued, and with sanitary progress it may be hoped that such mortalities will before long cease. Some of the diminution of death from infectious diseases has corresponded with the provision of the borough sanatorium, which is regularly used, the patients' friends in certain cases making payments towards the cost of maintenance. Indeed, the sanatorium has been so useful that, by Mr. Paget's advice, a second pavilion has been erected, and there are now, in full working order, means for the isolation of two diseases in both sexes. Disinfection is also regularly carried out, 380 articles having been so dealt with in 1885.

Wavertree Urban District.—Hitherto the means of isolation used for this district has been the Netherfield-road institution, but the intended acquisition of this building by the Liverpool Corporation should, as Dr. Harvey points out, lead to the provision of a local hospital belonging to the authority. That may, of course, be arranged jointly with one or other of the neighbouring districts, which need similar accommodation. During 1885, 19 cases of scarlet fever, 15 cases of diphtheria, and 5 of small-pox came under notice; and it needs little more than this record to prove the need that exists for some available means of isolation. General sanitary inspection of the district is evidently carried out, and some of the amendments which are called for are specified in the report. The death-rate for 1885 was 14·8 per 1000, and the birth-rate was 34·0. The children under one year of age died at the rate of 11·5 per cent. of the registered births.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5068 births and 2927 deaths were registered during the week ending June 19th. The annual death-rate in these towns, which had ranged in the preceding thirteen weeks from 29·3 to 17·0 per 1000, further declined last week to 16·8, and was lower than the rate in any week since the third of September, which was the lowest on record. During the first eleven weeks of the current quarter the death-rate in these towns averaged only 18·9 per 1000, and was 3·1 below the mean rate in the corresponding periods of the ten years 1876–85. The lowest rates in these towns last week were 10·9 in Birkenhead, 11·9 in Sunderland, 13·1 in Derby, and 13·4 in Brighton. The rates in the other towns ranged upwards to 21·8 in Plymouth, 22·0 in Oldham, 26·8 in Blackburn, and 39·6 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had in recent weeks declined from 430 to 265, rose again last week to 293; they included 89 from measles, 60 from whooping-cough, 59 from diarrhœa, 35 from scarlet fever, 29 from "fever" (principally enteric), 21 from diphtheria, and not one from small-pox. No death from any of these zymotic diseases was recorded last week in Norwich, Derby, or Birkenhead; whereas they caused the highest death-rates in Portsmouth, Blackburn, Bolton, and Preston, in each of which towns measles again showed epidemic prevalence. The greatest mortality from whooping-cough occurred in Oldham, Preston, and Wolverhampton; and from diarrhœa in Halifax, Blackburn, and Preston. The 21 deaths from diphtheria in the twenty-eight towns included 16 in London and 2 in Birmingham. Small-pox caused 1 death among the residents of London and its outer ring, and not one in any of the twenty-seven large provincial towns. The number of small-pox patients in the metropolitan hospitals situated in and around London, which had been 29 and 31 on the preceding two Saturdays, had declined to 21 at the end of last week; 2 cases of small-pox were admitted to these hospitals during the week, against 5 and 9 in the previous two weeks. The deaths referred to diseases of the respiratory organs in London, which had been 179 and 216 in the preceding two weeks, declined again last week to 184, and were 57 below the corrected average. The causes of 61, or 2·0 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Leicester, Nottingham, Sunderland, Brighton, and in seven other smaller towns. The largest proportions of uncertified deaths were registered in Oldham, Bristol, and Bradford.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had slowly declined in the preceding seven weeks from 23·1 to 20·9 per 1000, rose again to 21·7 in the week ending June 19th; this rate exceeded by no less than 4·9 the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 17·3 and 17·4 in Paisley and Greenock, to 20·8 in Edinburgh and Aberdeen and 24·4 in Glasgow. The 536 deaths in the eight towns showed an increase of 20 upon the number in the previous week, and included 18 which were referred to whooping-cough, 17 to measles, 8 to scarlet fever, 8 to diarrhœa, 5 to "fever," 1 to small-pox, and not one to diphtheria; in all, 57 deaths resulted from these principal zymotic diseases, against 68 and 49 in the preceding two weeks. These 57 deaths were equal to an annual rate of 2·3 per 1000, which exceeded by 0·6 the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 21 and 19 in the previous two weeks, further declined last week to 18, of which 15 occurred in Glasgow and 2 in Aberdeen. The deaths from measles rose again last week to 17, from 19 and 10 in the previous two weeks, and included 8 in Edinburgh and 7 in Leith. The mortality from measles in Edinburgh, which has been so excessive since the middle of February last, shows but slight sign of abatement. The 8 deaths from scarlet fever exceeded the numbers in the previous two weeks; 4 were returned in Glasgow and 2 in Dundee. The deaths attributed to diarrhœa, although slightly exceeding the number in the previous week, were 4 below the number in the corresponding week of last year, and they included 4 in Dundee. The 5 deaths referred to "fever," of which 2 occurred in Glasgow and 2 in Edinburgh, were considerably below the average. The death classed to small-pox occurred in Glasgow, and was certified as chicken-pox. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 90 in each of the previous two weeks, rose last week to 93, and were within one of the number in the corresponding week of last year. The causes of 73, or 14 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 26·2 and 20·8 per 1000 in the preceding two weeks, rose

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again to 22·9 in the week ending June 19th. During the first eleven weeks of the current quarter the death-rate in the city averaged 25·9 per 1000; the mean rate during the same period did not exceed 17·5 in London and 19·6 in Edinburgh. The 155 deaths in Dublin last week showed an increase of 14 upon the number in the previous week, and included 7 which were referred to the principal zymotic diseases, against 9 and 5 in the previous two weeks; 3 resulted from "fever" (typhus, enteric, or simple), 2 from diarrhœa, 1 from scarlet fever, 1 from whooping-cough, and not one either from small-pox, measles, or diphtheria. These 7 deaths were equal to an annual rate of 1·0 per 1000, the rates from the same diseases being 1·5 in London and 2·7 in Edinburgh. The 3 deaths from "fever" showed an increase upon the numbers in recent weeks, while the fatal cases of whooping-cough were fewer than in any previous week of this year. Six inquest cases and 9 deaths from violence were registered; and 63, or more than a third, of the deaths were recorded in public institutions. The deaths both of infants and of elderly persons showed an increase upon the numbers in the previous week. The causes of 14, or 9 per cent., of the deaths registered during the week were not certified.

CHOLERA IN SPAIN IN 1885.

An official statistical report on the cholera epidemic in Spain in 1885 has recently been issued in Madrid. It appears that the cases reported in the entire kingdom were 338,685, of which 119,620, or more than 35 per cent., proved fatal. These 119,620 deaths were equal to a rate of 7·0 per 1000 of the population of the kingdom, which is more than double the rate from the same cause in England and Wales during the epidemic of 1849, which was 3·0 per 1000. Spain for administrative purposes is divided into 9304 communes. The whole of the cholera epidemic was confined to 2247 of these communes, having an aggregate population of about 6,500,000 persons. The death-rate from cholora in the portion of the kingdom actually invaded by the epidemic was equal to 18·2 per 1000 of the population. It follows that 7067 communes, with an aggregate population of rather more than 10,000,000 persons, enjoyed complete immunity from the disease, so far as appears from the report just issued. No information is given as to the varying mortality from the disease in the large towns of Spain, the statistical unit in the return, so far as detailed figures are concerned, being the commune, the communes making *partidos judiciales*, or subdivisions of provinces. It is evident from the tables that the disease was most fatal in the urban portions of the population, while a large proportion of the rural population escaped attack. The death-rates exceeded 30 per 1000 of the population in the attacked portions of the provinces of Castellon, Valencia, Saragossa, and Ternel. It is worth noting, however, that, so far as the tables afford the means of judging, the largest towns of Spain did not suffer severely from the disease; in the commune of Madrid the cholera death-rate did not exceed 2·7 per 1000, in Barcelona 5·4, in Seville 0·0, and in Cadiz 9·2. The first cases of the disease appeared early in February in the province of Valencia, and the disease lingered in different localities until the close of the year; indeed, it is noted that the last cases of the epidemic were reported towards the end of March in the province of Cadiz. In addition to the proportions of deaths from cholera to the population in the various subdivisions of the country, the report also gives the proportions of deaths to the numbers attacked. Such statistics are generally of very doubtful statistical value, and it is improbable that in Spain the figures are more trustworthy than is usually the case. It has been noticed that the proportion of deaths to cases in the whole country is reported to have been 35 per cent.; it further appears from the tables that in the various provinces the recorded proportions varied from 21 and 23 per cent. in Zamora and Palencie, to 59 in Badajoz and Oviedo, and 100 per cent. in Lugo, where only 16 cases were reported, all of which proved fatal. Without information as to the nature of the machinery by which the statistics of attacks were collected, it would be unwise to base any conclusions on these figures with reference to the varying fatal intensity of the disease in different parts of the kingdom. The publication of this cholera report, with commendable promptness, encourages the hope that the Spanish Statistical Bureau will ere long resume its monthly reports upon the mortality statistics of the whole country, which have now been in abeyance for some time.

HEALTH OF CALCUTTA.

The report of the health officer of Calcutta for the quarter ending March 31st, 1886, shows a low rate of mortality compared with the corresponding period in any of the preceding ten years. The death-rate was 29·7 per 1000 of the population. The reduction has taken place chiefly in fevers, small-pox, cholera dysentery, and diarrhœa; in fevers and cholera the improvement was most marked in February, but the number of deaths began to rise again in March. The health officer considers the low rate from fever in February to have been probably due "to the exceptional dryness, and to the fact that no rain fell." Only four deaths from small-pox were recorded; one of the cases was unprotected, one had been inoculated, and two were not traced.

THE SERVICES.

THE RECENT CAMPAIGN IN BURMAH.

IN a general Order relative to the recent field operations in Burmah received from the Government of India, the Governor-General in Council states that the medical department under Deputy Surgeon-General J. Inch Donnelly, M.D., has proved its complete efficiency under circumstances of considerable difficulty.

The Government of Madras have fully acknowledged the services of the following officers as deserving of notice, and the Governor-General in Council now adds to these commendations an expression of his own appreciation of their services:—Surgeon-General J. Irvine, M.D., Medical Staff, and Surgeon-General M. C. Furnell, Indian Medical Department.

The thanks of the Government of India are given to the following officers and their subordinates for the energetic part taken by them in the equipment of the force:—Surgeon-General C. D. Madden, Medical Staff, and Surgeon-General B. Simpson, M.D., Indian Medical Department.

The name of Surgeon-Major C. Sibthorpe, who was in medical charge of the Headquarter Staff, is mentioned in despatches.

WAR OFFICE.—Army Medical Staff: Surgeon-Major Thos. Henry White, M.D., to be Brigade Surgeon, vice George Scott Davie, M.D., granted retired pay; Surgeon S. Lucas O'Neill resigns his commission.

INDIA OFFICE.—The Queen has approved of the retirement from the service of the undermentioned officers of Her Majesty's Indian Military Forces:—Deputy Surgeon-General William Henry Rean, M.D., Madras Medical Establishment; Brigade Surgeon Christopher Joynt, M.D., Bombay Medical Establishment; Surgeon-Major Richard Thos. Lyons, M.D., Bengal Medical Establishment; Surgeon-Major John Chas. Whishaw, M.D., Bengal Medical Establishment; Surgeon-Major Theophilus Bolton Wright Plunkett Johnston, half-pay, Bombay Medical Establishment. The undermentioned officers have been granted a step of honorary rank on retirement:—Brigade Surgeon John Houston, M.D., Madras Medical Establishment, and Brigade Surgeon Christopher Joynt, M.D., of the Bombay Medical Establishment, to be Deputy Surgeons-General; Surgeon-Major Richard Thomas Lyons, M.D., and Surgeon-Major John Charles Whishaw, M.D., both of the Bengal Medical Establishment, to be Brigade Surgeons.

RIFLE VOLUNTEERS.—3rd Lancashire: Surgeon and Honorary Surgeon-Major John Burns resigns his commission; also is permitted to retain his rank and to continue to wear the uniform of the Corps on his retirement.—3rd Volunteer Battalion, the South Staffordshire Regiment: The undermentioned officer resigns his commission, also is permitted to retain his rank and to continue to wear the uniform of the Battalion on his retirement—Surgeon and Honorary Surgeon-Major John Fraser, M.D.

UNIVERSITY COLLEGE HOSPITAL.—A grand bazaar in aid of the funds of this charity will be opened by the Princess Louise in the grounds of University College, Gower-street, on Friday (this day), and will be continued on the following day.

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Correspondence.

"Audi alteram partem."

ELECTION AT THE ROYAL COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—As the bye-laws of the Royal College of Surgeons require me to stand again for election into the Council on July 1st, after two years' tenure of office, I may be permitted to express my hope that the Fellows will continue their trust in me. The Council has met twenty-five times during my membership, and I have attended every meeting. Besides sharing in routine business, I have served on two important committees, one for widening the basis on which the Fellowship may be obtained, the other for considering the question of granting the title of M.D. to Members who have passed the conjoint examinations of the two Colleges. In joining in the work of these committees, I have striven to promote the acceptance of these proposals, which are in my opinion most desirable to bring into operation. By taking part in all discussions, where I believed I could do so usefully, I have endeavoured to instruct myself in the business of the College and to perform the duties entrusted to me. On these experiences I venture to rest my claim for a renewal of the confidence of the Fellows in the coming election. I am, Sir, yours truly,

Wimpole-street, June 22nd. BERKELEY HILL.

TUBERCLE BACILLI IN ADDISON'S DISEASE.

To the Editor of THE LANCET.

SIR,—With reference to Goldenblum's discovery, will you kindly allow me to add a confirmation of Professor Curnow's observation published in your last week's issue? About three years ago I examined the suprarenal capsule from a case of Addison's disease, which, although presenting no pigmentation of the skin, was in all other respects a typical case. One supra-renal capsule was atrophied; the other, the size of a turkey egg, was completely degenerated, except in one corner, where a little normal suprarenal tissue was seen. After examining a large number of sections, prepared by Ehrlich's method, neither I nor Dr. Dreschfeld, whose demonstrator I then was, could find any tubercle bacilli. At the same time, negative evidence such as this does not prove that the affection is non-tubercular, or that bacilli had not been present at a former period of the disease. Tubercle bacilli are usually found not in old degenerated parts, but at the borders where active changes are still going on. In a caseous giant cell, for instance, as Weigert has insisted on, the bacilli are numerous at the borders, where the nuclei are still proliferating, but few in number or entirely absent in the central degenerated portion. So, in the suprarenal capsule, the stage of activity may have already passed, and with it the tubercle bacilli.

I am, Sir, yours obediently,

Westbourne-terrace, W., June 21st, 1886. ROBERT MAGUIRE.

To the Editor of THE LANCET.

SIR,—While working in the laboratory of the late Professor Cohnheim, in Leipzig, in the summer of 1882, I had the opportunity of examining the suprarenal capsules in a case of Addison's disease. By means of the Ehrlich method I was able to discover numerous tubercle bacilli scattered throughout their substance. I regret that I had no opportunity at the same time of examining the other organs of the body in order to ascertain the presence or absence in them of bacilli. My observation, however, of the presence of the organisms in the suprarenal bodies, though hitherto unpublished, was communicated to the Royal Medical Society of Edinburgh in a paper on the "Bacillus of Tubercle," read by me before the Society in January, 1883. The microscopic preparations I have still, but the bacilli are now no longer visible, the gentian-violet with which they were stained having disappeared during the four years which have now elapsed since their preparation.

I am, Sir, yours faithfully,

ARTHUR H. CLEMOW, M.B.

Waterloo, near Liverpool, June, 1886.

INCUBATION OF TYPHOID FEVER.

To the Editor of THE LANCET.

SIR,—Two children left their home in the country to come to a London boarding-school on Jan. 11th. On Jan. 27th, the younger of the two sickened with typhoid fever. It was then discovered that at the village where they lived there was quite an epidemic of typhoid, and that the water-supply of the house had become contaminated. The schoolmaster at once wished to know at what date it could be definitely said that the elder boy had not contracted the disease. Wishing to be quite safe in my prognosis, I replied that, although it was impossible to say exactly, if he remained quite well at the end of three weeks and a half, dating from January 11th, he would probably escape. The younger boy was moved from the school to a house near, and the master kept a most careful watch over the elder one until the three weeks and a half had expired, at which date he seemed in perfect health. My disappointment was great to find that on February 7th, or twenty-seven days from Jan. 11th, he did not feel quite the thing, and his evening temperature was 100°. Up to this date he had taken his food heartily and was in capital spirits. He later on had troublesome constipation, and died of intestinal hæmorrhage. No other boy in the school contracted the disease.

The following is a list of the inmates of this country house who have caught the fever. Where known, I have stated the latest possible date on which the patient could have contracted the disease; of course it may have been contracted much earlier. 1. Younger boy came up to boarding-school on Jan. 11th; recovered; incubation sixteen days. 2. Elder boy came up with No. 1 on Jan. 11th; died of hæmorrhage; incubation twenty-seven days. 3. A sister left home on Jan. 21st to stay with friends; recovered; incubation nine days. 4. A brother left home on Jan. 14th to stay with friends; recovered; incubation sixteen days. 5. The nurse of No. 4; recovered. 6. Cook, who lived at the country house and stayed there throughout; recovered. 7. A servant, who came up from the country house, and being taken ill was sent to a cottage hospital near, where she was said to be suffering from scarlet fever and sent on to the fever hospital, but on inquiry I found it was a simple case of typhoid; recovered.

I am, Sir, yours truly,

J. LANGTON HEWER, M.B. Lond.

Highbury New Park, N., June, 1886.

WHOOPING-COUGH.

To the Editor of THE LANCET.

SIR,—I had no intention, nor have I now, of denying the accuracy of Dr. Donkin's history, but I wished to point out the acknowledged difficulty of isolation, especially in the convalescent stages, of the exanthematous fevers, and the possibility of infection from some external source, unknown and undreamt of by the medical attendant. I have known the contagion of pertussis to be apparently carried by foul linen, handkerchiefs, napkins, &c., and to result in whooping-cough after the usual period of incubation; and when we consider how easily contagion might be so conveyed, without a suspicion arising before the mind of the medical attendant, I am rather inclined to attribute these cases to some such unwholesome cause than to an exceptional deviation from the general law. With regard to the frequency of whooping-cough as a sequence of measles, I am quite at one with the writer, and have explained in my paper the manner in which this and probably other exanthemata act.

I am, Sir, yours &c.,

Manchester, June, 1886. W. H. BARLOW.

ELECTROLYSIS OF STRICTURE OF THE URETHRA.

To the Editor of THE LANCET.

SIR,—At the same time that I would acknowledge the importance of Mr. Bruce Clarke's courteous criticism of my letter upon the above subject in THE LANCET of June 5th, I would submit that he has not accurately guaged the careful wording of my first paragraph. He believes that it implies that he has used *strong* currents in the electrolysis of stricture. Now I had especially guarded against this inference being drawn, by using comparatives. I described the

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currents he employed (10 cells) as being *stronger*, in contrast to those which I had used (3 cells) as being *weaker*. This was my only method of comparison, for I had not the advantage of a galvanometer.

Mr. Clarke takes exception, and rightly, to the expression "burning through the cicatrix." That, I honestly confessed, was the false impression I started with. I began with crude ideas and rough instruments; through the liberality, however, of the Committee of St. Peter's Hospital and the kindness of Dr. Steavenson, these points have been rectified. I would cordially endorse what Mr. Clarke asserts about the strength and the effects of the currents; but I should not like to pass an opinion as yet upon the permanent efficacy of the treatment.—I remain, Sir, faithfully yours,

George-st., Hanover-sq., June, 1886. E. HURRY FENWICK.

LEICESTER AND ITS IMMUNITY FROM SMALL-POX.

To the Editor of THE LANCET.

SIR,—Omitting entirely the question of the value of the vaccination *cordon*, it seems to me that the isolation of small-pox cases pursued at Leicester is as much opposed to the anti-vaccination doctrine as is vaccination itself. A series of "Vaccination Tracts" by Dr. Garth Wilkinson and Mr. William Young, the secretary of the Anti-vaccination Society, has the following as the subject of Tract No. 12: "The imposture of the current small-pox lymph called vaccine, and the new imposture of calf-lymph. Also, the chaos of statute law, dealing with vaccine substance." The tract concludes by laying down seven "positions" which seem to form a kind of creed. The second "position" contains the following statement: "It [i.e., small-pox] is one of the least contagious of diseases ..... and its contagion is easily prevented by known means." The sixth "position" is: "Small-pox hospitals are the culminating mistake in the social treatment of the disease. They are sewers of death to their inmates. ..... The true policy with small-pox, *in itself* now an insignificant disease, is to let each case lie where it falls, and to treat it there as it ought to be treated." If, therefore, the immunity of Leicester from small-pox proves anything, it proves the value of what anti-vaccinators hold to be "the culminating mistake in the social treatment of the disease."

I am, Sir, yours truly,
JOHN C. M'VAIL, M.D.

Holmhead, Kilmarnock, N.B., June 16th, 1886.

BRITISH MEDICAL BENEVOLENT FUND JUBILEE.

To the Editor of THE LANCET.

SIR,—The following donations have been received or promised in connexion with this celebration:—

	£	s.		£	s.
Her Majesty the Queen (through Sir J. Paget) ...	100	0	Arthur Durham, Esq.....	21	0
Sir G. Burrows, President...	21	0	J. L. France, Esq.....	21	0
Sir James Paget	26	5	Dr. Frank	20	0
Lady Paget.....	10	10	John Morgan, Esq.....	25	0
Sir Wm. Gull.....	20	0	H. Veasey, Esq.....	20	0
A Provincial Physician (through Sir J. Paget).....1050		0	Dr. Wilks.....	10	10
A. B.....	10	0	Dr. Haviland	10	10
Messrs. Lucas Bros.....	50	0	A. E. Cumberbatch, Esq. ...	5	0
J. N. Winter, Esq., Brighton	200	0	Dr. E. L. Birkett	5	5
Dr. Matthews Duncan	100	0	Dr. Travers	5	5
Dr. Hare	100	0	Dr. Douglas Powell.....	5	5
Dr. Quain	52	10	Dr. Wilson Fox.....	5	5
			Barrow, Esq.	5	5
			Messrs. Morton and Burt ...	5	5

I am, Sir, yours faithfully,
34, Seymour-street, Portman-square, W. W. H. BROADBENT.

EDINBURGH.

(From our own Correspondent.)

ROYAL SOCIETY OF EDINBURGH.

At the fortnightly meeting of the Society held last Monday, amongst many valuable papers an important contribution to the study of the physiology of the blood was presented by Dr. William Hunter. Dr. Hunter has made a long series of experiments with a view to determining the usual duration of functional activity in the hæmocyte. To observe this with accuracy he made use of the method of transfusing the blood of one animal into the blood stream of another in which the microscopic character of the hæmocyte differed from that of the blood transfused. By this system of differential transfusion he has been led to the conclusion that the average life history of the red blood-corpuscle extends over a period of from two to three weeks.

POST-GRADUATE COURSES IN EDINBURGH.

A second meeting was held in connexion with this project in the hall of the Royal College of Physicians, on Tuesday the 22nd inst. Professor Sir Douglas Maclagan occupied the chair, and there were some thirty of the teachers in the Edinburgh School present. Considerable progress was made at this meeting towards a final settlement of the arrangements; the "clinical week" which was spoken of in the original proposal has been expanded to a course of three weeks' instruction. With the concurrence of the various boards of management, it has been arranged to throw open the various hospitals, dispensaries, and asylums, for the use of the practitioners who will attend, and courses of instruction will be carried on in each by teachers connected with the several institutions in question. After some discussion, it was decided that a fee of one guinea should be payable for a ticket giving admission to all or any of the courses of instruction. This fee is to be used in liquidating the expenses which will arise in connexion with carrying out satisfactory arrangements, and any surplus is to be divided proportionally between the public institutions in which the courses are held. The arrangements may thus be said to be already fairly under weigh, and there seems every prospect of the project having a complete realisation. During the last few days the suggestion has been largely canvassed amongst country practitioners, by whom it has been met with so warm an approbation that from their side at least the most cordial support is to be looked for. The meeting will occupy the last week in September and the first two weeks of October of the current year.

DR. WENDELL HOLMES.

Dr. Holmes has accepted an invitation from the Students' Representative Council to be present at a symposium to be held in the Oddfellows' Hall, Forest-road, on Friday night. It is expected that he will deliver a short address, and the evening will be enlivened by an enjoyable musical programme, carried out by the students themselves. In the afternoon of the same day Dr. Holmes is to receive the honorary degree of LL.D. Edin. at the hands of the Senatus and University officials at a private meeting in the Upper Library Hall.

Edinburgh, June 23rd.

IRELAND.

(From our own Correspondent.)

ROYAL COLLEGE OF SURGEONS: ANNUAL REPORT OF THE COUNCIL.

DURING the year ended April 5th last, eleven candidates were admitted to the Fellowship, ninety-one received the Letters Testimonial, six licentiates the diploma in Midwifery, and nine practising dentists the Dental diploma. The resolution of the College, that candidates should be classified at the examination for Letters Testimonial, was submitted to the Council at a special meeting, who confirmed the resolution, and arrangements have been made to carry it into effect. The conference with the College of Physicians in reference to a conjoint examination between the two Colleges came to an untimely end in October last, when the College of Physicians stated that they could not entertain the proposal as to the distribution of the surplus between the Colleges. I understand negotiations have recently been entered upon between the two Colleges for a conjoint examination; but the whole matter, in my opinion, depends upon whether the College of Physicians is willing to allow the Apothecaries' Hall to join the proposed scheme. If they do, all will, I believe, be amicably arranged; but if a refusal is insisted upon by the College of Physicians, the present conference will prove as abortive as its predecessors. The reason of this is, as stated in my last letter, that if the Apothecaries' Hall are prevented joining in the proposed scheme, they can

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claim the right of obtaining examiners on application to the Medical Council, and so could issue licences in medicine, surgery, and midwifery for very small fees; which arrangement the College of Surgeons, for obvious reasons, very properly object to. Certain changes have been adopted by the Council in reference to the answering of candidates at examinations, and candidates, in order to pass, must attain at each examination a certain standard mark in each subject. For example—in anatomy and surgery, 50 per cent. for each; physics, chemistry, and materia medica, 35 per cent. for each; medicine, histology, physiology, midwifery, and ophthalmology, 40 per cent. for each; botany, pharmacy, and medical jurisprudence, 25 per cent. In accordance with representations made by the President, Sir Charles Cameron, to the Commissioners of Valuation, a revaluation of the College premises took place, which resulted in the remission in future of a considerable portion of the very heavy taxation to which the College had heretofore been subjected. Other matters in the report have to a great extent been already referred to in these columns, and it is unnecessary to reproduce them.

LOCAL GOVERNMENT BOARD.

The annual report has been issued rather earlier this year than usual, and from it I find that the returns for the past year show a decline in the average daily number of persons relieved in the workhouses. There was, however, an increase in the average daily number of persons afforded relief out of the workhouses, the increase amounting to 1136 persons. These returns refer to October of last year; but since January last there has been considerable distress among the poorer classes, and the outdoor lists are in excess of the previous year by 6854. There has been a decrease of 867 in the total number of sick admitted to workhouses, and an increase of 22,218 in the number admitted who were not sick, thus showing an increase of 21,351 in the total number admitted during the year. The number suffering from fever or other contagious disease was less by 1151. The total number of deaths in the workhouses was 10,925, or a decrease of 313. Of these, deaths by fever were 371, as against 510; by lung disease, 1997, as against 1929; and deaths by small-pox, 2, as against 1 in the previous year. There were 17 cases of small-pox treated by dispensary medical officers during the year, being the lowest number recorded during the past 22 years. The total expenditure of poor-rates for poor relief, medical relief, sanitary measures, superannuation, &c., was £1,258,465, being a decrease of £28,270 as compared with the previous year.

Dublin, June 15th.

PARIS.

(From our own Correspondent.)

ELECTION OF DR. BROWN-SÉQUARD TO THE ACADEMY OF SCIENCES.

THE portals of the Paris Academy of Sciences have at last been opened to Dr. Brown-Séquard, as he was elected member at its last meeting on Monday, in the Section of Medicine and Surgery. The eminent biologist was elected by a large majority, and the victory was the more creditable as the competitors of Dr. Brown-Séquard were all men of note, in proof of which statement I have only to mention the names of Germain-Sée, Bouchard, Jaccoud, Hayem, and Richet.

REVACCINATION.

In a work lately published by Dr. Jules Besnier, entitled "Revaccination of Young Subjects, and particularly of Collegians, compared with that of Adults," the author, from his own experience at the College Rollin, of which he is physician, arrives at the following conclusions:—1. The success obtained by the revaccination of subjects revaccinated for the first time increases rapidly with age, notably in collegians, and attains its maximum from fifteen to twenty years of age—that is to say, in adolescence. In adult age, the success is less than in adolescents, and it increases with years, only very slowly and in a manner scarcely preceptible. 2. The elevation of the figure of successes, in adolescence, depends, on the one hand, on the age of the subjects—that is to say, the time that elapsed since vaccination; and on the other, on the divers conditions of soil or constitution, such as the period of growth, college life, regimen, &c. 3. Certain maladies favour the vaccinal receptivity at the different periods of life, and thus contribute to increase the number of successes; while others, on the contrary, would have no influence of this kind. Among the former are certain acute maladies, which have a profound influence on the economy, and notably typhoid fever; among the latter would be the ordinary eruptive fevers in young subjects, and chronic maladies in adults. 4. In subjects vaccinated at birth and not revaccinated, the variolic receptivity, like the vaccinal, attains its maximum in adolescents—that is to say, from fifteen to twenty years of age, and diminishes, on the contrary, in adults. 5. These are so many reasons which justify revaccination in young subjects, and in particular collegians. For the latter, the vaccine from the cow is preferable to the vaccine from the child, and, in the absence of an epidemic of small-pox, the time most opportune to practise this revaccination is that of the month of March or April, which would be after the Easter holidays.

INSANITARY CONDITION OF PARIS.

The Parisian authorities, and, indeed, the citizens themselves, are reminded of the insanitary condition of their great metropolis by the offensive odours which are almost permanently prevalent in it. These become more intolerable during the hot weather, and no wonder, when it is considered that this city contains no less than 80,000 cesspools, with a population of over 2,000,000. The Council of Hygiene and the Academy of Medicine of Paris have been frequently appealed to for suggestions as to how this nuisance may be removed. As usual, the members of these learned bodies are divided as to the real cause of the nuisance, some attributing it to the fermentation of the dejections stored up in the cesspools, while others ascribe them to the sewage farms which are established outside the city. Among the remedies proposed may be mentioned the abolition of the cesspools, the removal of the effete material at short intervals, or the emptying of it into the sewers, which in their turn are to be emptied into the Seine near its mouth. The latter idea was borrowed from the English, but the adversaries "tout à l'égout" remind the partisans of the English system of the bad smells lately complained of in the House of Commons, which were evidently due to defective sewerage. M. Pasteur was even consulted on the subject, and the adversaries to emptying all the refuse matter of this city into sewers laid the following proposition before the illustrious *savant* in the following terms:—"Here is a malady [charbon] which is characterised by germs which may persist; if this be the case with the germs of all contagious maladies (diphtheria, scarlatina, typhoid fever), it is certain that 'tout à l'égout' will constitute a great danger." To this M. Pasteur replied: "In fact, I must acknowledge that science is not complete on all these maladies. It is for charbon, but it is not yet for small-pox, diphtheria, scarlatina, nor for others. Their germs are not known; we do not know whether these maladies have germs." In reply to a question by a member of the Council of Hygiene, M. Pasteur stated the difference which exists between scientific solutions which are slow to be effected and practical solutions exacted by imperious circumstances. "The question to be determined, put before science as it is, cannot be solved at present. Science on this point is altogether incomplete. Put before engineers, it is a different thing. Often engineers and public men are held to solve certain questions, even when science is not completed on these questions. A man of the laboratory, I can only count with established principles. You engineers ought to arrive at practical solutions even in the presence of a science unachieved."

THE CHARGES AGAINST PROFESSOR CHATIN.

The Commission ordered by the Minister of Public Instruction, and composed of MM. Berthelot, Member of the Academy of Sciences, Béclard, Dean of the Faculty of Paris, and Greard, Dean of the University of France, to investigate the charges brought against Professor Chatin by the students of the School of Pharmacy, has exonerated him, as nothing was found to impeach his honour or to justify the complaints of the students. The ringleaders of the disturbances created at the School of Pharmacy, and which have been reported in THE LANCET, have been punished. Two of them were sent before the Correctional Police, by whom they were condemned to six and four days' imprisonment, and to a fine of 50 francs respectively.

Paris, June 23rd.

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EGYPT.

(From our own Correspondent.)

EXAMINATIONS AT THE MEDICAL SCHOOLS.

THE annual examinations at the Medical School have just taken place, and were honoured on the closing day by the presence of His Highness the Khedive, the two High Commissioners, and all the native Ministers. The examiners consisted of seven Europeans and seven natives, besides the twelve native professors of the school, all being under the presidency of Dr. Salem Pacha. The examination is entirely *viva voce*, but it is hoped that the system of writing papers on the most important questions will be introduced next year. In the first class, consisting of those who had completed five years' medical study, were nineteen youths, and of these only one was referred to his studies. The eighteen will now undergo a competitive examination at Kasr-el-Aini Hospital in practical subjects; the first six will be elected as house-surgeons there for a year, and will receive £72 and lodging, while the others will work for the same period without pay as dressers and clinical clerks. At the end of the year they will pass another examination, receive certificates to practise, and start fairly in the Government service. The six youths who are now emerging from their hospital work are much smarter and more useful than their predecessors, who under the old system never received any practical training, and they will now be temporarily attached to the Sanitary Department, to take the place of the hospital surgeons in the provinces, each of whom in turn is to come up to Cairo and work for three months at the central hospital here.

KASR-EL-AINI HOSPITAL.

Dr. Milton has just completed his second year of residence at this hospital. During the first year there were many cases of erysipelas and septicæmia; but during the second there has not been a single case of blood-poisoning in the surgical wards, though the average number of in-patients has been raised from 300 to 550, and the number of surgical operations has been largely increased. This salutary change is probably due to the care bestowed upon ventilation, cleanliness of patients, irrigation of wounds, and in the closing of a most obnoxious system of foul latrines and a network of cesspool catacombs opening into the Nile.

THE MILITARY HOSPITALS AT CAIRO AND ALEXANDRIA.

The English military hospitals in Cairo and Alexandria are unusually full of sick, most of the patients having come down from Upper Egypt. At Assouan there is at least one death daily, and sometimes more, among the four regiments now stationed there. The soldiers are young, they have no work and practically no amusement, and are struck down in numbers by enteric fever. The heat varies from a minimum of 100° just now to 116° in the tents, and has caused a few cases of sunstroke. Recently eight drummer-boys were sent out from England to a regiment stationed at Korosko, of whom three died, four were invalided, and the eighth was left behind when the regiment evacuated Korosko, only to die the following day.

NEW WATER-SUPPLY AT ROSETTA.

The ancient town of Rosetta, although situated on one of mouths of the Nile, has hitherto suffered from a complete dearth of fresh water at the time of low Nile, owing to the river being at that time slightly below sea-level. This town is notorious for the number of cases of elephantiasis, as well as other diseases, and Dr. Sandwith was fortunate enough to enlist the powerful aid of Colonel Scott Moncrieff in his endeavours, two years ago, to improve the water-supply. A fresh water canal of twenty-four miles from Atfeh to Rosetta has now been completed, and a daily supply of 650,000 gallons for the latter is established, besides the irrigation of some thousands of acres of waste land through which the canal passes—to the great delight of the neighbouring fellaheen. A dam 730 yards in length, further up the river, will also prevent the supply of drinking-water for Alexandria and the towns and villages along the Rosetta branch of the Nile and the Mahmoodeeyeh canal from being tainted by the inroad of sea-water, as has occasionally happened during former years.

TOURAH CONVICT PRISON.

An epidemic of relapsing and typhus fevers has broken out at the Tourah Convict Prison near Cairo, but it has been well combated by the Sanitary Department, and no cases have spread to the neighbouring villages, though many of the prison officials have contracted relapsing fever.

CAIRO LUNATIC ASYLUM.

This asylum, under the direction of a native doctor, sustains its reputation for cleanliness and usefulness. It now contains 250 men and sixty-two women. Three-fourths of the men are suffering from the effects of hasheesh (cannabis indica), besides about ten cases due to alcoholism. Nymphomania accounts for many cases among the younger women. A very successful garden has now been made, and mat-making and carpentry are carried on daily by the inmates. Quite lately a donkey boy was admitted as a patient, was taught mat-making, and now, cured of his insanity, he has adopted it as his trade in Cairo. At my last visit to the asylum I was accompanied by the resident physician to a large Scotch pauper asylum, who said that all the arrangements here compared favourably with those to which he was accustomed in Scotland. But much remains to be done, especially in the direction of making the lunatics do out-door work. I noticed fifteen criminal lunatics in the wards, one of whom was a notorious ferryman from Mansourah, who used to murder his passengers and throw their bodies into the fast-flowing Nile.

THE SANITARY DEPARTMENT.

One of the most recent additions to the Sanitary Department is a young sanitary engineer, with a varied experience of seven years in England. He has already been employed by one of the chief native house-builders, who wishes to alter a house recently completed, and also to build a new one on approved sanitary principles, by which means he hopes to ensure for himself a succession of English tenants.

Cairo, June 1st.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT an extraordinary meeting of the Council held on Thursday last, on the confirmation of the minutes of last meeting, the following resolution, slightly amended, was adopted in the case of Mr. Bryceson:—"That Mr. Bryceson be allowed to present himself for the final examination for the Diploma of Member on producing certificates of having attended anew at the London Hospital College of Medicine the several courses of lectures which were invalid in his Schedule—viz., the courses on Materia Medica, Midwifery, Chemistry, Practical Chemistry, Medicine, and Pathological Anatomy."

Mr. Alabone, a Member of the College, attended at the summons of the Council to answer questions in reference to certain notices of him which had appeared in various public journals, and, having made a verbal statement, was called upon to make a statement in writing for the further consideration of the Council.

MEDICAL NOTES IN PARLIAMENT.

Medical Acts Amendment Bill.

IN the House of Lords, on the 18th inst., Earl Spencer moved the second reading of the Medical Acts Amendment Bill, and briefly alluded to the necessity of legislation on this subject, and reviewed the main provisions of the Bill. The Duke of Richmond and Gordon said that he believed the provisions of the Bill had been carefully considered in the other House, and agreed in the opinion that it had been very skilfully managed by the Vice-President. He gave notice that he would move amendments in Committee which would have the effect of making the Universities of Aberdeen and St. Andrews each elect a member to the Council. The Duke of Argyll said he should support the proposition of his noble friend. It was the only case in the Bill in which two universities were tied together to make one appointment. As the Bill now stood, the Irish Universities would each appoint one member, making five in all, whereas in Scotland they would only have three members. After a few words from the Earl of Milltown, Earl Spencer said he would discuss the subject in Committee, but he was afraid there

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would be some considerable difficulty in re-arranging the matter. The Bill was then read a second time.

On the 21st the House went into Committee on the Bill, and the Duke of Richmond moved an amendment, giving the Universities of Aberdeen and St. Andrews separate representation on the Council to be formed under the Bill. The amendment was opposed by Earl Spencer, but on a division was carried by forty-four votes to forty-one. The Bill passed through Committee.

On the 22nd report of amendments to the Bill was received, and on the 23rd it was read a third time and passed.

The Contagious Diseases (Animals) Bill.

On the 21st inst. the Commons' amendments to this Bill were agreed to.

The Idiots Bill.

In the House of Commons, on the 18th inst., the Idiots Bill passed through Committee, was reported without amendments, and read a third time.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone all the necessary examinations, were admitted Licentiates in Dental Surgery at a meeting of the Board of Examiners on the 17th inst.:—

Barstow, Charles Albert, James-street, Harrogate.
Jones, Alfred Ernest, Stamford-hill.
Mansbridge, Josiah, West Hampstead.
Milot, Charles Frederick, Grange-park, Ealing.
Whittaker, George Oldham, Blackley, Manchester.
Wright, Charles Frederick, Edgware-road.
Wrighton, Thomas Henry Garland, Buckhurst-hill.

(Candidates referred, 7.)

The library of the College will be closed on Wednesday, June 30th, for the purposes of the examinations; on Thursday, July 1st, for the Council election, and on Friday, July 2nd, for the examinations.

UNIVERSITY OF CAMBRIDGE.—At a congregation held on the 18th inst., the degree of M.B. was conferred on

Keightley, Archibald, Pembroke. | Robb, Charles Edward, Caius.

ROYAL COLLEGE OF PHYSICIANS IN IRELAND.—At the June examinations the following obtained the licences in Medicine and Midwifery of the College:—

MEDICINE.—Edward Corcoran, James Corcoran, Thomas Crowe, Robert Vicars Fletcher, Edward Jonathan Goode, George E. Hughes, Richard Mandeville Hugo, Joseph Peter Kelly, John Fredk. Kennedy, Timothy Robert Killeen, John Edward Langan, Reginald Thomas Alexander Levinge, Charles Madders, William J. Peacocke, James Albert Frederick Sawyer, Arthur Ernest Switzer, William Joseph Taylor, Thomas Wilford Twinem, Thomas Verner.

MIDWIFERY.—Edward Corcoran, James Corcoran, Benjamin Devonsher Dickson, Edward Jonathan Goode, George E. Hughes, Richard Mandeville Hugo, John Frederick Kennedy, Reginald Thomas Alexander Levinge, Alfred Edward Thomson, Francis Edward Townsend, Thomas Verner.

Last month the undermentioned was admitted a Member:—

Myles Joseph Jordan.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on the 17th inst.:—

Birch, Charles Ormond, Harley-street.
Denman, Robert, Sydenham.
Freeman, Richard Austin, Caledonian-road.
Morris, Edward, Wharton-road, West Kensington-park.
Williams-Freeman, John Peere, Bursledon, Southampton.
Yolland, John Horatio, Hoylake, Birkenhead.

THE sum of 800,000 francs has been contributed from national and municipal sources for the erection of anatomical and chemical institutes in Nancy.

DENTAL HOSPITAL OF LONDON.—His Grace the Archbishop of Canterbury has accepted the office of a Vice-President of the above hospital.

THE CONDITION OF THE RIVER LEA.—The Select Committee appointed to inquire into and report upon this subject have reported upon the evidence they have had before them, and recommend that a committee be appointed on the assembling of next Parliament to consider their report, and, if desirable, to take further evidence. The committee trust that the Lea Conservancy Board will duly exercise their rights regarding the quantity of water they are entitled to pass through their locks in priority to either of the two water companies during the dry season of the coming summer.

NORTH LONDON CONSUMPTION HOSPITAL.—Sir Henry Holland presided at the annual festival of this charity, held on Wednesday, at Langham's Hotel. The contributions announced during the evening amounted to £1256.

THE AMERICAN EXHIBITION IN LONDON.—President Cleveland has accepted the honorary presidency of the American Exhibition to be held in London in 1887, and will perform the opening ceremony by telegraph from the White House.

A PRIVATE FEMALE UNIVERSITY is to be established in Moscow through the efforts of Mdme. Fischer, who has now a girls' gymnasium there. The university is to have three faculties—Philological, Mathematical, and Scientific. The last will probably ultimately be expanded into a medical faculty.

GUY'S HOSPITAL.—The annual distribution of prizes to successful students of the hospital will take place at 3.30 P.M. on Friday, July 2nd, in the grounds of the institution. The wards and museums will be open to visitors from 4 to 5 P.M., and ladies are invited to be present.

THE PASTEUR INOCULATION IN RUSSIA.—The Odessa correspondent of the *Daily News* telegraphs: "From the 24th inst., all persons in Russia bitten by rabid dogs and wolves will be treated in this city by Dr. Gamelei, for whose initiatory operations lymph has been supplied from M. Pasteur's laboratory."

PRESENTATIONS.—An address and two cases of surgical instruments have been presented to Mr. J. Shaw, M.B., C.M., by the members of the classes of the Sheerness centre of the St. John Ambulance Association, as a testimony of their appreciation of his services to the Association during the several courses of lectures and practical instruction which he has given.—A large and handsomely chased salver has been presented to Mr. David Davies, M.R.C.S., L.S.A., late medical officer of health to the Urban Sanitary Authority for the city and county of Bristol, by the local magistrates, members of the Town Council, and persons officially connected with him.

RABIES AND HYDROPHOBIA.—Sir Charles Warren, the Chief Commissioner of Police, has just issued some statistics with regard to mad dogs and deaths from hydrophobia which have come under the notice of the Metropolitan Police from January, 1885, to May, 1886. During this period the total number of mad dogs was 495. The lowest number was in January, 1885, when there were only 8. From this date the number of cases varied for each month as follows: February, 10; March, 22; April, 20; May, 34; June, 38; July, 47; August, 28; September, 31; October, 31; November, 58; December, 46; January, 1886, 27; February, 14; March and April, 29; and May, 23. The deaths from hydrophobia, which are taken from the Registrar-General's returns, numbered 26 up to December, 1885, the greatest number being in October and November, when there were 5 in each month. Between January and May, 1886, there were 7 deaths.

THE HAMILTON ASSOCIATION.—The annual meeting of this Association, for providing trained male nurses, was held on the 23rd inst., Sir Thomas Crawford, K.C.B., M.D., Director-General of the Army Medical Department, presiding. The report showed that great progress had been made during the year which had elapsed. A considerable number of male nurses had been employed under the Association, and in nearly every case those engaged had given satisfaction. The chairman said that the need of such an Association had been long known to him, and most keenly was it felt in the army. This Association seemed admirably adapted to meet the want long felt by the sick in cases in which male nurses would be preferred. He closed by moving the adoption of the report. Sir Joseph Fayrer seconded the motion, and said that nothing had delighted him more after a long absence from this country than to find on his arrival the admirable system of lady nursing which had been established, and which so greatly simplified the treatment of disease. Still, there were patients who, on account of the nature of their complaint, objected to be under the care of female nurses, and the want of male nurses this Association was admirably adapted to supply. The meeting was afterwards addressed by C. R. Van Lennep, Dr. Prosser James, Mr. Archibald C. Sim, Dr. Don, Mr. Smith (auditor), and Sir J. Danvers.

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Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BENNETT, FREDERICK WILLIAM, M.D. Lond., M.R.C.S., has been appointed Honorary Assistant Physician to the Leicester Infirmary and Fever House.

BULLEID, E. G., L.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Seventh District of the Hexham Union.

CHILD, HERBERT, M.R.C.S., L.S.A., has been appointed Medical Officer for the Fourth District of the North Bierley Union.

CLARK, FRANK W., L.R.C.P.Lond., M.R.C.S., has been appointed Assistant Medical Officer to the Croydon Infirmary, vice G. A. S. Gordon, L.R.C.P.Ed., L.R.C.S.Ed., resigned.

GIBB, WILLIAM, M.B., C.M., has been appointed Medical Officer of Health for the Burgh of Millport, Isle of Cumbrae.

HUTCHINSON, PROCTER S., M.R.C.S., has been appointed Resident Medical Officer to the Hospital for Diseases of the Throat, Golden-square.

MAHOMED, A. G. S., M.R.C.S., L.S.A., has been appointed Medical Officer for the Third District of the Christchurch Union.

MORLEY, THOMAS S., M.D.Lond., M.R.C.S., has been appointed Medical Officer for the Barton District of the Glandford Brigg Union.

MYLES, THOMAS, M.B., B.Ch.Dub., F.R.C.S.I., has been appointed Surgeon to the Jervis-street Hospital, Dublin, vice Chance, resigned.

NEALE, J. HEADLEY, M.B., C.M.Edin., M.R.C.P.Lond., has been appointed Honorary Assistant Physician to the Leicester Infirmary and Fever House.

RICHARDS, ROBERT C., M.R.C.S., has been appointed Medical Officer for the Third District of the Hexham Union.

ROUGHTON, B. WILKINSON, M.D.Lond., M.R.C.S., has been appointed Assistant Demonstrator of Anatomy to St. Bartholomew's Hospital.

SMITH, HORACE, L.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Parkham District of the Bideford Union.

Births, Marriages, and Deaths.

BIRTHS.

DRYSDALE.—On the 14th inst., at Château d'Oex, Switzerland, the wife of Alfred Drysdale, M.B.Lond., L.R.C.P., of Cannes, of a son.

DUNDAS.—On the 15th inst., at Fakenham, Norfolk, the wife of Mordaunt G. Dundas, M.R.C.S., L.S.A. of a daughter.

HOOKER.—On the 16th inst., at Gosport, the wife of Charles Hooker, L.R.C.S., L.R.C.P.Ed., of Cirencester, of a son.

JONES.—On the 22nd inst., at 6, Westbourne-street, Hyde-park-gardens, the wife of T. W. Carmalt Jones, M.A., F.R.C.S.Ed., of a son.

MARRIAGES.

BIGGER—WHITTARD.—On the 16th inst., at St. Matthew's Church, Brixton, William Grimshaw Bigger, M.B., M.R.C.S., to Emily Philadelphia, second daughter of John A. Whittard, of Rydal Mount, Streatham-hill.

DAVIES—DIXON.—On the 16th inst., at Holy Trinity Church, Stroud-green, N., William Thomas Frederick Davies, M.B., B.S.Lond., of Swansea, to Florence, daughter of Thomas Dixon, Esq., of Stroud-green, and Dutoits Pan, South Africa.

DOWSON—MORGAN.—On the 17th inst., at St. George's, Brandon-hill, Bristol, Walter Dowson, M.A., M.B.Cantab., of Great George street, Bristol, to Blanche, second daughter of George King Morgan, of Cherith Lodge, Clifton.

MACDONNELL—HOLMES.—On the 17th inst., at St. Michael's, Stoke, Henry MacDonnell, Fleet Surgeon, R.N., Royal Marine Depôt, Walmer, to Frances Alice, eldest daughter of the late Sir William Holmes, of Manor House, Kilrea, Ireland.

NANKIVELL—HULL.—On the 10th inst., at Holy Trinity, Bournemouth, Herbert Nankivell, M.D., of Pen-Mellyn, Bournemouth, to Constance Alice, fifth daughter of the late William Winstanley Hull, of The Knowle, Hazelwood, near Derby.

ROE—ROE.—On the 16th inst., at St. Mark's, Kennington, Francis Christian Roe, L.R.C.S.I., L.K.Q.C.P.I., &c., to Carrie, second daughter of Robert Roe, of Clifton House, Kennington-park-road.

WOOD—MADGEN.—On the 23rd inst., at St. Hilda's, South Shields, by the Rev. James McGrigor, John Cundell Wood, L.R.C.S., L.R.C.P.Ed., son of Peter Wood, of Sunderland, to Ellen Maude Madgen, second daughter of the late W. A. Madgen, of Greencroft, Haltwhistle.

DEATHS.

BENTHALL.—On the 14th inst., at Sherborne, Dorset, Alfred Elliott Benthall, F.R.C.P.Ed., fourth son of Edward Benthall, late Bengal Civil Service.

DIAMOND.—On the 21st inst., at Twickenham House, Middlesex (after a long illness), Hugh Welch Diamond, M.D., F.S.A.

GIRDLESTONE.—On the 14th inst., at Château Falaise, Biarritz (after a few days' illness), Charles Girdlestone, M.D., son of the late Rev. Harry Girdlestone, of Landford Rectory, near Salisbury, aged 64.

MURDOCH.—On the 20th inst., at Malta, Alexander Brown Murdoch, M.B., C.M., Surgeon, H.M.S. *Superb*, aged 26 years.

PARR.—On the 19th inst., at Ravenleigh, Betchworth, Surrey, Alfred Parr, M.D., aged 66.

RINGROSE.—On the 22nd inst., at Woodgreen, Basil Ringrose, M.R.C.S., in his 47th year.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, June 24th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
June 18	30·02	N.E.	53	49	72	55	49	...	Overcast
,, 19	29·83	N.W.	55	52	109	71	56	·07	Overcast
,, 20	30·03	N.W.	62	55	110	66	51	...	Cloudy
,, 21	30·08	N.	52	49	70	61	48	...	Overcast
,, 22	30·01	N.W.	57	53	97	67	52	...	Cloudy
,, 23	29·80	W.	62	55	112	71	55	...	Cloudy
,, 24	30·02	W.	59	62	...	...	50	...	Fine

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

Letters requiring notice must be authenticated by the name and address of the writer.

We cannot undertake to return MSS. not used.

THE APOTHECARIES' SOCIETY AND THE MEDICAL BILL.

L. S. A.—The Medical Bill will require the Apothecaries' Society either to combine with other Corporations, or to get assistant examiners from the Medical Council. In one of these ways it is intended to secure that the diploma shall be a registrable qualification in medicine, surgery, and midwifery.

B. S. (Huddersfield).—According to Dr. Salvatore de Renzis, in the Preface to his great edition of Celsus (two vols. 4to, Naples, 1851), the University of Edinburgh about the year 1770 was in treaty with Lupacchini to purchase the MS. of the edition of the Latin writer's "De Arte Medicinæ," on which he had long been engaged; but Lupacchini declined to come to terms. Not long afterwards he died of hydrophobia; but his valuable critical labours were not allowed to perish, having been incorporated in Targa's edition (Verona, 1810), and more recently in that of De Renzis's himself.

Aristarchus is referred to a general notice at the head of this column.

APPLICATION OF FORCEPS.

To the Editor of THE LANCET.

SIR,—From time to time one reads in the medical periodicals of the difficulty felt in introducing the upper blade of midwifery forceps, from the handle coming in contact with the bed. I also experienced this difficulty until I read in a contemporary an article written by a general practitioner whose ingenuity seemed only equalled by his common sense. He advised simply that the upper blade be introduced first as the lower and gently rotated into its final position, when the lower can be as easily introduced as if the other blade were not in position, provided the upper handle be kept well aside. I always now employ this method, and have experienced no difficulty since, and I here tender my thanks to the ingenious man who gave me such a practical "tip." This disposes of all complications, such as hinged upper blade handles, having the hips well over the edge of the bed, &c. Why the upper blade should be recommended to be passed last has always been a mystery to me, but so I have been taught and have read in text-books, and here I wish to enter my protest against such a difficult and unnecessary proceeding.

Where the excellent continental method of introducing the forceps can be employed, the patient being on her back, both blades are easily passed, the upper and lower becoming right and left lateral.

I am, Sir, yours faithfully,

Driffield, June 17th, 1886. A. T. BRAND, M.D

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THE CHOICE OF A MEDICAL ATTENDANT.

Z.—We do not profess to answer correspondents who are not members of the profession on questions of medical ethics, or to insert their communications. Anyone has an undoubted right to choose or to change his or her medical attendant, but this should not be done capriciously or unreasonably.

Ethics.—A seems to have been treated with scant justice and courtesy: so much so that we almost think B must have omitted—unintentionally, of course—some point in the case. To commence practice as a matter of retaliation would be a severe measure, but the provocation is certainly considerable. B should at least have paid all A's expenses after inducing him to go so far; and perhaps might be made to do so.

Mr. Snell.—Very soon.

SHIP SURGEONS.

To the Editor of THE LANCET.

SIR,—Will you allow space for a few words with reference to the present position of the medical service of Atlantic steamships. A ship's surgeon ranks below, and his name on the passenger list comes after, the purser—he who looks after the ship's accounts is reckoned of greater importance than he who looks after its health: I was assured a short time since by an officer that in a well-known Atlantic company the doctor was not allowed on the quarter-deck after the first day or two, when the ladies were supposed to have got over sea-sickness. Once, having to complain of the insanitary condition of a ship, before sending in my report I showed it to the captain, who, during its reading, ejaculated "You'll get yourself disliked, they'll take no notice of *you*, and it's no business of yours." The letter, however, was sent, and, I am glad to say, acted upon; but it might have been at the cost of my dismissal from the service. On the voyage out to New York every unvaccinated steerage passenger, unless protected (i.e., has had small-pox), must be vaccinated before he can land at Castle Garden. This means examining it may be 1000 people—not long ago I examined nearly 900,—and they are not always free from pediculi, or even clean. A fair fee should be allowed for each successful vaccination; and this would also be a sufficient safeguard against all slipshod inspections. In most ships the purser has the seating of the passengers at table; the tagrag and bobtail are generally, as a matter of course, placed at the doctor's end.

I am, Sir, your obedient servant,

London, June 15th, 1886. M. A. P.

"INFANTICIDE BY PERAMBULATORS."

A CORRESPONDENT writes from Belfast to enforce the suggestion, made last week in our columns, that children carried in perambulators should sit or lie with their faces towards the nurse.

G. N.—The question is discussed in another column of our present number.

Mr. J. T. Williams.—In an early number.

PRACTICE IN CANADA.

To the Editor of THE LANCET.

SIR,—In reply to your correspondent, "Colonist," whose letter appeared in your issue of May 29th, I may say that most of the appointments here—as to gaols, penitentiaries, lunatic asylums, &c.—are political in character, and are only obtained through Government influence. Hospital appointments yield little but experience. In the General Hospital here the medical superintendent receives £250, with rooms, &c., but the three house-surgeons receive nothing but their rooms and board. In the provinces of Ontario and Quebec a licence must be obtained from the College of Physicians and Surgeons of the province. In the other provinces a licence is granted by the respective provincial Governments. The fees are for the most part small, ranging from £1 to £6 in the different provinces. The profession in Canada is quite full enough. I have supposed that "Colonist" is a licentiate of one of the Royal Colleges; otherwise he will have an examination (in Ontario and Quebec) equal to theirs to pass, and the fees are consequently larger.

I am, Sir, yours faithfully,

Montreal, June 10th, 1886. L.C.P.S. QUE.

A Country Practitioner.—See Manual of Surgery, edited by Treves, vol. ii., p. 509; Holmes' System of Surgery, vol. ii., p. 636; Pye's Surgical Handicraft, p. 49. The instrument is made by Messrs. Arnold and Sons.

Mr. C. S. Jeaffreson.—Yes.

Mak is referred to the Medical Directory, published by Churchills.

"IODOFORM SPRAY."

To the Editor of THE LANCET.

SIR,—Would Mr. Alfred Leach, who wrote under the above heading in your issue of June 12th, p. 1148, have the goodness to give your readers a more detailed method of producing a *solution* of iodoform for spray. His prescription is rather lax. How are the terebene and iodoform made into a homogeneous solution? I have only succeeded in suspending the latter (which soon blocks the fine tube of the spray-producer), and the former floats on the top of the mixture. I think a *solution* of iodoform without ether would be a preferable application in many cases of inflamed or relaxed mucous membrane.—I am, Sir, yours truly.

June 23rd, 1886. INQUIRENS.

AN AVERTED SCARE.

LAST week Florence and its neighbouring townships were thrown into something very like panic by the announcement that three persons had died in the Via Pellicceria after a few hours' suffering from Asiatic cholera. The alarm was rapidly developing into a scare, and preparations for a stampede on the part of all who could get away were becoming general. But the Tuscan nature is less superstitious and impressionable than the Neapolitan, and there was still time for an appeal to the common-sense and the self-control of the Florentines. That fortunate interval was promptly utilised by the municipality. Medical authority of the highest kind was at once brought to bear on the seat of the supposed outbreak, and in a few hours the fatal cases were proved and published to have been due to violent gastro-enteritis caused by the drinking of contaminated water. The announcement was a calmative of the most effective kind; the city and suburbs resumed their wonted joyous animation; and now day has succeeded day without the slightest symptom among the inhabitants either of cholera or of its consequent scare.

Dr. C. F. Hutchinson.—The letter is very bad, but it is not worth notice.

AN APPEAL.

To the Editor of THE LANCET.

SIR,—May I beg space in your valuable journal to ask assistance for a most deserving case which calls for immediate help. It is that of the widow of a medical man who died a few years back without making any provision for his wife and four little children. She has used her utmost endeavours up to the present time, and worked very hard to provide for the welfare of her family, who are all dependent upon her for support. She is now very much out of health from continued anxiety and the many privations she has had to endure, and for the present is unable to pursue her previous occupations; in fact, is reduced to selling the few things she has gathered together for present maintenance. I propose therefore, through your kind assistance, to start a fund, which will, I hope, relieve her present distress, and afford the means for her embarking upon suitable and remunerative employment as soon as she is able. I trust that all readers of your journal will respond to my appeal by sending whatever small donation may be agreeable to them. These with larger amounts will be thankfully received and acknowledged by myself. I may add, that if any subscriber to the fund desires a more detailed account of the case I shall be pleased to give any further information that may be wished. Sir Andrew Clark has already subscribed, and Sir James Paget has promised to do so when a fund is started.

I am, Sir, yours, obediently,

R. FITZROY BENHAM.

Abercorn House, Baron's Court, June 15th, 1886.

R. Bonstead.—Twenty-three grains and a half of cocaine have been taken by an adult without fatal effects. We cannot, therefore, assume that it is dangerous to use a small quantity superficially or hypodermically on a child a month old. We should not, however, recommend its use with a view to the removal of "a rather superficial nævus;" for it would be practically inert applied to the surface of the nævus, and to inject it into its substance would be almost as painful as the operation chosen to destroy the growth. We have known it injected beneath the skin and mucous membranes in the adult in sufficient quantity to efficiently remove sensibility, and yet not cause toxic symptoms. In an adult it is not so much the actual pain of a minor operation which the surgeon has to consider as the mental and emotional state of the patient incidental to an operation. In a child a month old the personal equation is a much simpler one; so that at that age it is seldom advisable to administer a general or local anæsthetic for the cure of a nævus.

Mr. Holford (Jersey).—We regret there is no law to prevent it.

REMARKABLE CASE OF DEFORMITY.

To the Editor of THE LANCET.

SIR,—A child with the following congenital defects has been admitted into the Tottenham Hospital, under Dr. Lichtenberg:—Absence of globes of both eyes (palpebral fissures present); hare-lip, with slight anterior fissure in palate; slight talipes equino varus. Both fontanelles are open, and joined by separation of parietal bones. There is a flattening of one side of the head, with corresponding bulging of opposite side. The body of the child (a girl) is well nourished. There is no apparent cause; three older children are all healthy; no consanguinity between parents, but consumption in both their families; the mother received a fright while driving during the eighth month.—I am, Sir, yours truly,

LLOYD G. SMITH, M.B.

Training Hospital, Tottenham, June 21st, 1886.

ERRATA.—In Mr. Hartzhorne's letter, published in our issue of the 12th inst., p. 1148, speaking of the properties of cocaine, vaseline, and glycerine, vaseline should have been quoted as forming *seventy-four*, instead of "twenty-four" parts of the whole.—In our notice last week, page 1180, of the use of Indian hemp in dental operations, the name "Aarousin" should have been printed *Aarönson*.

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COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Wilks, London; Dr. O'Neill, Lincoln; Mr. B. Hill, London; Dr. Oswald Lane, Northampton; Rev. D. F. Wilson, Mitcham; Rev. Herman Adler, London; Dr. med. Hagena, Zetel; Rev. H. C. Green, Hammersmith; Rev. W. H. Langhorne, Hackney; Rev. W. G. Horder, Wood Green; Rev. A. C. Tarbolton, London; Mr. W. J. Benham, London; Dr. O'Neill, Belfast; Mr. Clutterbuck, London; Dr. Miller, Sowerby Bridge; Mr. Holford; Dr. Brand, Driffield; Mr. Plowright, King's Lynn; Dr. Hutchinson, Scarborough; Dr. Dudley, London; Rev. A. Robins, Windsor; Dr. Wiglesworth, Rainhill; Mr. J. W. W. Green, Portsmouth; Rev. C. H. Simpkinson; Dr. Koplik, Munich; Mr. A. Mickle, London; Rev. W. P. Pearce, London; Mr. Howe, Weston Vermont; Mr. Scudamore, London; Dr. Craster, Middlesbro'; Mr. F. Churchill, London; Mr. L. G. Smith, Tottenham; Mr. Knowsley Thornton, London; Rev. G. C. Williamson, London; Dr. Prosser James, London; Mr. M. Atkinson, London; Messrs. Cassell and Co., London; Dr. Barlow, Manchester; Mr. Mitchell; Mr. Hurry Fenwick, London; Dr. Wilson, Leytonstone; Dr. Chettle; Rev. D. Llewellyn, Tooting; Mr. De'Ath, Buckingham; Messrs. Condy and Co., London; Mr. Hodgson, London; Mr. Hyne, Jersey; Rev. A. Comford, Kingston; Mr. Smith, Hereford; Messrs. Debenham and Co., London; Mr. Mercier, London; Dr. Taylor, Notts; Dr. Drysdale, Cannes; Mr. Birchall, Liverpool; Mr. Antony, London; Mr. Osney, St. Albans; Dr. Harley, London; Mr. Pearson; Messrs. Cubbley and Co., Sheffield; Mr. Fisher, Kendal; Dr. Perry, Bordeaux; Rev. J. Fyson, Hendon; Mr. B. Walker, Spondon; Messrs. Maclachlan and Co., Edinburgh; Rev. J. Bowman, Southgate; Rev. H. Mason, London; Mr. Barnasconey, Plymouth; Messrs. Wood and Co., New York; Mr. Hoysted, Gibraltar; Mr. Silverlock; Messrs. Bennett and Co., London; Mr. Dawes, Wandsworth; Mr. Barnett; Mr. Colwell, Portsmouth; Dr. Eberle, Thirsk; Mr. Milne, Ladywell; Mr. Hunt, Clapton; Rev. T. Hill, N. Finchley; Mr. Meers, Chudleigh; Dr. Adam, West Malling; Mr. Keeting, Manchester; Messrs. Black and Co., Elgin; Mr. Johnson, Leicester; Mr. Atkinson, Toronto; Mr. Obern, London; Mr. T. Cook, London; Mr. Schofield; Messrs. Butterfield and Son, Northampton; Dr. Habgood, Eastbourne; Mr. Lancaster, London; Mr. Bell, London; Mr. Hammer, Crowborough; Young Practitioner; M.A.P.; C.C.; Matron; L.S.A. Lond.; M.D., Piccadilly.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Croke, Hull; Mr. Howard, Littleport; Dr. Thompson, Ampthill; Mr. Kuhn, London; Dr. Popham, Birmingham; Mr. Pethrick; Messrs. Read and Co., Bristol; Dr. Wright, Finedon; Dr. Metcalfe; Mr. Fox, Bishop Auckland; Mr. Edwards, Notts; Mr. Fisher, Kendal; Miss Meyer, Holloway; Mr. Charlton, Gainsboro'; Mr. Newton, South Brisbane; Mr. Bogle, Redcar; Mr. Woodhead, Huddersfield; Messrs. Boulton and Paul, Norwich; Mr. Forrest, Camberwell; Mrs. Turner, Arley Castle; Mr. Brown, Cobham; Mr. Furness, Wigton; Dr. Maskew, Fawley; Mr. Grier, Mevagissey; Mr. Guest, Nelsonby; Messrs. Ford and Co., London; Mr. Scott, Manchester; Messrs. Roberts and Co., London; Mr. Hughes, Ombersley; Mr. Davidson, Brighton; Mr. James, Pontypridd; Messrs. Beal and Son, Brighton; Mr. Wood, South Shields; Sister Geraldine, Cheltenham; Medicus, Surbiton; Alpha; W. F. C., Stoke-on-Trent; Vigilo, Exeter; Medicus, Hackney; Box, Uttoxeter; X. M. D.; M. R.; F. G.; F. H., Downham; Surgeon, Leicester; W., Paddington; Medical Officer, Orkney; H. P., Southport; M.D., Walsall; Doctor, Lewisham; J. D., Wakefield; L. B. B., London; W.; Y. Y.; R. J., Townhope; H.

Holloway Press, Advocate of India, Northern Echo, Govan Press, North Star, Cape Argus, European Mail, &c., have been received.

Medical Diary for the ensuing Week.

Monday, June 28.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

Tuesday, June 29.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, June 30.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.

Thursday, July 1.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, July 2.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8.30 P.M. Annual General Meeting. Dr. M. J. Symons (Adelaide): Double Symmetrical Corneal Changes.—Mr. W. A. Brailey and Mr. Simeon Snell: Nævus of Choroid with Secondary Glaucoma.—Mr. E. Nettleship: Case of Transverse Calcareous Film of Cornea after Operation.—Mr. W. A. Brailey: Case of Double Glaucoma (Microscopical Specimens).—Mr. W. J. Cant: Paralysis of both Sixth Nerves, with Morbus Brightii.—Mr. W. A. Brailey: (1) Tubercular Iritis; (2) Interstitial Keratitis (? tubercular).

Saturday, July 3.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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"THE LANCET"
SECOND SPECIAL SUPPLEMENT,
IN SUPPORT OF THE
METROPOLITAN HOSPITAL SUNDAY FUND.

MEDICINE, THE CHURCH, AND THE PEOPLE.

MEDICINE and the Church have been closely connected from the earliest times. There was a period, long anterior to the Middle Ages, when the healing art and religion were still more closely connected than ever before, and that was when the great Founder of Christianity himself was upon the earth. Christ was a teacher and preacher to the people, and he was also a healer of the sick. In the crude development of religion and the curative art, the offices of priest and physician were found associated in the same individual. The medicine man was the priest, and the wise man who cured the evil spirit was the doctor. Society follows the general law of the development of organisms—viz., the growth of special organs for special functions. We therefore find in higher civilizations doctors of disease distinct from priests, and in the highest and most complete civilization of all the priest making use of the doctor of medicine to help him do his work of charity. The hospital is the outcome of this development.

In London to-day, through the instrumentality of the Hospital Sunday Fund, every minister of religion who makes a collection for the hospitals on Hospital Sunday is enabled, quite apart from the amount collected and to the full extent of the requirements of the poorest of poor parishes and congregations, to secure admission for his sick parishioners to each or all of the scores of voluntary hospitals and medical charities working within the Metropolis. There is no difficulty or doubt in his case, and there need be no delay, for the passport provided through the agency of the Hospital Sunday Fund is certain to secure the fullest attention and the utmost dispatch. There should therefore be, and there probably is, no need that an urgent appeal should be addressed to the clergy and ministers of religion throughout London, to cause them to specially exert themselves on Hospital Sunday in behalf of all the hospitals.

We said last week that only 40,000 people can be shown to have ever given anything appreciable to the London Hospitals, although one million patients and upwards were relieved by the voluntary institutions, exclusive of the relief afforded by St. Thomas's, St. Bartholomew's, and Guy's Hospitals, in the year 1885 alone. If one only of the many friends of each of the one million patients who were benefited last year by the voluntary hospitals would make up his mind to give one shilling to the Hospital Sunday Fund, £50,000 would be thus contributed from this one source. Surely so small a sacrifice may be demanded in the cause of charity.

In former years the clergy of all the churches had to fight the battle of the hospitals single-handed, but this year they have the full weight of public opinion behind them, and their collections should be at least double what they have been before. The Hospitals week has aroused very great attention, notwithstanding the excitement of the political crisis and the attractions of the London season. Politicians, physicians, dramatists, authors, statesmen, and the press, have all worked hard and with a will during the Hospitals Week. Is it too much to hope, despite the depression in trade, the numerous other claimants for subscriptions, and the absence of many wealthy residents from London, that the actual results on Hospital Sunday will this year far exceed anything yet accomplished. Three million people, as there are still in London, who as yet have neither used nor taken any interest in the Hospitals, is an exceedingly great army to handle. This thought should, however, move the preacher to higher flights of forcible and telling language, because the work is worthy of the cause; and the cause, of the advocacy of the ablest and best of men. If there are any that shrink from so great an effort, let them at least determine to persuade their own congregations to give just twice as much this year as they gave last. In this way the £80,000 can be raised without any great sacrifice on the part of individual citizens, whilst all the people will be able to fee, that they have done their duty.

We earnestly ask the clergy and ministers of religion to resolve to exert themselves to the utmost. To merely announce a collection, to take no trouble to ascertain what are the needs and claims of the hospitals, to leave an expectant congregation without an appeal for aid based on the facts, will be not only to neglect a great opportunity for good, but to injure the hospitals, to be unjust to the poor who need hospitals, and to the congregations, who cannot be blamed for not giving if the shepherd will not trouble himself to inform his flock of the pressing personal claims it is their duty and privilege to meet. Our fathers established and built the hospitals, of which we all claim to be proud. Will the clergy not step forward, a resolute and united band, determined to spend and be spent in the grand cause of securing ample means for the permanent sustenance of all the hospitals and medical charities of London. The laity have laboured during the Hospitals Week. The medical profession are always waging a fierce warfare with disease and death, day by day, and year by year. To-morrow it will be the day of the churches and chapels of London, and of the clergy and ministers who serve them. Will they not arouse the people to their plain duty and see at the same time that they do it also? There is not a single person in the land, no matter how exalted his station or how extensive his wealth may be, who can live and die without having to rely at some period of life on the aid of the hospitals, nor can any such person live without deriving actual personal benefit from the hospitals' work. We charge the clergy of all the churches, therefore, in all earnestness, to co-operate with medicine to-day, and, following the steps of their blessed Master and ours, to exert the influence of a love which He caused to be extended to all mankind, and of an eloquence which must prove overpowering, because it will urge the people in the sweet name of Charity to give substantial evidence of the effect which brotherly love must always exercise over men's minds. Let there be no re-enactment of the Parable of the Talents in any church or chapel throughout London to-morrow; for of clergy and people alike it may be said by the Hospitals, with truth, "Freely ye have received; freely give."

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THE ORATION AT THE MANSION HOUSE.

MR. BRUDENELL CARTER said: As President of the Medical Society of London, at once the oldest and the most comprehensive of the various voluntary associations which have been established for the cultivation of medical science, I have been asked to lay before this meeting a summary of the conviction entertained by medical men with regard to the importance to the community at large of the efficient maintenance of hospitals. Before this audience, my Lord Mayor, it is, I hope, superfluous for me to dwell upon what the medical profession, the outcome and offspring of hospitals, has done, say only in the last fifty years, to promote the general welfare of the community. Lord Macaulay, in a well-known passage of his comparison of the England of the Stuarts with that of his own day, says: "Every bricklayer who falls from a scaffold, every sweeper of a crossing who is run over by a carriage, may have his wounds dressed and his limbs set with a skill such as, a hundred and sixty years ago, all the wealth of a great lord like Ormond, or of a merchant prince like Clayton, could not have purchased. Some frightful diseases have been extirpated by science, and some have been banished by police. The term of human life has been lengthened over the whole kingdom, and especially in the towns. The year 1685 was not accounted sickly, yet in the year 1685 more than one in twenty-three of the inhabitants of the capital died. At present only one out of every fifty inhabitants of the capital dies annually. The difference in salubrity between the London of the nineteenth century and the London of the seventeenth century is very far greater than the difference between London in an ordinary year and London in a year of cholera."

FORTY YEARS OF HOSPITAL PROGRESS.

Forty years have passed away since the passage which I have quoted was written; and the mortality among Londoners, last year, was reduced to one in every fifty-one of the inhabitants. This reduction has been partly due to the diffusion of sanitary knowledge, partly to the better treatment of occurring disease, and in both respects has been the direct outcome of hospitals. The great discovery of Dr. Budd, of the conveyance of the poison of typhoid fever by water, has shown us how to arrest its ravages; and the scientific researches of even the last few months point to the high probability that the source of scarlet fever will speedily be made known to us, and the ravages of that disease also will be checked (applause).

HOSPITALS AND THE ARMY.

A well-known physician, in an admirable address which he delivered this year to the students at Netley, sketched for them the histories of the Walcheran and Crimean campaigns, and drew a contrast between these and the recent campaigns in Egypt. In Walcheran, out of a garrison of 18,000 men, more than half died from disease within three months, so that the place was evacuated. In the Crimea, the total mortality among the British troops was 18,058, exclusive of those killed in action. Of this number 16,297 deaths were the result of disease alone, and only 1761 of wounds or injuries; and it is recorded that in the month of January, in the year 1855, nearly ten per cent. of the troops succumbed to disease. In 1882, out of 13,000 men serving in Egypt, nearly half of whom passed through the hospital, the total number of deaths, including 93 killed in action, was only 172. In the Suakim force, in 1885, with an approximate strength of ten thousand men, there were only 17 deaths out of 2047 cases admitted into hospital; and in the first Suakim expedition, out of 4000 men, with 314 admissions to hospital, there were no deaths at all (applause). In earlier Egyptian warfare, ophthalmia has been the great scourge of armies, and the French, in 1804, are said to have sent home 1000 men absolutely deprived of sight; while in our own recent campaigns in this country not a single man was blinded, although nearly 1500 cases of inflammatory affections of the eyes were admitted into hospital (applause).

THE EFFECTS OF HOSPITALS ON THE FAMILY.

While such have been the practical results of the teaching given in hospitals, when regarded from the most comprehensive point of view, I may be permitted to point out that the value of this teaching is not less conspicuous if we look at its effects upon the narrower circle afforded by every medical practitioner and his patients. Let us say that a labouring man breaks his leg. He is taken into one of the great London hospitals, and remains there for some weeks, tenderly nursed and cared for. At length he is discharged cured, and able shortly to resume his occupation. His earnings continue as before; and so a good work is done, the effects of which end, so far, with the benefit conferred upon the man, and upon his wife and family. But consider how greatly this good work is extended, and how much larger are its proportions, if the case affords the means of teaching, to each of fifty or a hundred students, something about the way in which such injuries should be treated; and thus enables each one of them to go forth into the world to encounter similar injuries in his turn, better prepared to deal with them than would otherwise be the case. Nor is it only the general or family practitioner, and the patients who are compelled to rely upon his skill, who are the gainers.

RICH AND POOR EQUALLY BENEFITED.

The teaching power is exercised over a much wider and more important area, in the influence which it has in furnishing the experience and skill which render the possessors of them the trusted advisers not only of the poor, but also of the rich. Without efficient hospitals as schools for students, we should have no capable general practitioners; and without them as schools for physicians and surgeons, we should have no men capable of performing difficult and delicate operations, or of investigating the most obscure conditions of disease. The circumstances which enable hospitals to become the centres of medical progress, and the great promoters of the growth of medical science, must on no account be misunderstood or misinterpreted. These circumstances are, mainly, the facilities which they afford for observation, whether of the natural history and events of disease, or of the action of remedies. Suppose, for example, that a physician wishes a certain observation, say of pulse, or of temperature, or of any other bodily phenomenon, to be taken with minute accuracy every half-hour. In private practice this would be almost impossible of accomplishment; in a hospital it at once becomes the duty of one of the clinical assistants. Suppose that the physician wishes the same observation to be made in the case of a large number of patients suffering from the same disease, and living within the same environment, but in other respects differing from one another. The hospital affords him at once the patients, the similarity of environment, and the skilled observers.

HOSPITAL PRACTICE EXPLAINED.

On various other occasions, when I have contended that the greatest use of hospitals is to promote the advancement of medical science, and to afford us improved methods of recognizing and of treating disease, I have been met by the well-meaning objection, "Oh, but it cannot be right to try experiments on patients," and I think it is worth while to look at this phrase more closely. Much turns, of course, on what we mean by the word "experiment," for, in one sense, it is an "experiment" to do anything which in any degree departs from precedent. But I may say, first, that what I may call the sacredness of the patient is a feeling which underlies the whole course of medical training and practice in this country, far more, I think, than in any other; and that no medical practitioner, certainly none whose previous career entitles him to be entrusted with the responsibilities of a hospital appointment, would ever either do, or sanction the doing, to a patient, of anything to which he would not himself submit in like circumstances, or which was

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not, in his judgment, calculated to be beneficial (hear, hear). Experiment, in this sense of the word, is merely the application of previously acquired knowledge one step further, and hospitals allow such further applications to be made under the most favourable conditions. Sir James Paget once remarked to me, that when a new method of treatment was being put in practice at a hospital, the patients selected for it had always a better chance than others. Every one concerned, from the head physician or surgeon to the dresser or the nurse, was so anxious that the new method should be tried fairly, that, as a matter of fact, it was generally tried unfairly; the patients receiving from everybody something more than their share of watchfulness and attention.

Hospitals as Centres of Knowledge.

And now, returning to my original contention, that hospitals are more valuable to the community on account of the knowledge which radiates from them than on account of the actual relief which is afforded within their walls, considerable as this may be, I think it follows that I cannot call any form of hospital maintenance efficient which does not adequately provide for the accomplishment of this radiation. In order so to provide, it is necessary, first, that the physicians and surgeons should be selected on some principle which affords a guarantee of their skill and character; and, secondly, that the hospital should be freely open and accessible as a place of instruction, either for students or for practitioners. Such conditions, it is manifest, can scarcely be completely fulfilled in any but what are called "general" hospitals; and the ideal arrangement of hospital accommodation for London would be to place a sufficient number of general hospitals at proper intervals of distance, and to attach to them as many "special" departments as the interests of medical science might from time to time require. The hospitals should be large enough to keep down excessive establishment charges, and numerous enough to prevent the sick from being called upon to travel long distances (hear, hear). By way of contrast to this ideal arrangement, we have now in London eleven general hospitals, with very imperfect arrangements for the opening or variation of special departments, and placed very irregularly, some of them too near together and others too far apart; and we have seventy-one special hospitals, some large, some small, by which, whatever else may be done, establishment charges are almost indefinitely multiplied.

The Support of Hospitals a Matter of National Concern.

It follows, my Lord Mayor, if we must admit that the support of efficient hospitals is a matter of national concern, and not merely a matter of benevolence or almsgiving, that the public must be in want of guidance with regard to the directions in which their support should be extended. We have, in London, eighty-two real or so-called hospitals, most of them engaged, more or less, in a struggle for existence, and with every one of which the pecuniary and personal interest of many officials and servants are bound up. The tendency to survival does not appear to be in proportion to usefulness, but rather dependent upon the exertions and upon the qualities of the secretary and of the canvassers. It is certain that the money wasted by the multiplication of institutions, and by the machinery of appeals, would go a long way towards the supply of the real hospital needs of the metropolis. Is it possible, by any form of organization, to control hospital development in such a way as to obtain the maximum of good from the minimum of expenditure? An attempt in this direction was made some years ago by the Council of the Hospital Sunday Fund. I always disapproved of this attempt, which rested, in the first instance, upon a necessarily imperfect and misleading comparison between the expenditure of the several participating institutions; and at length I withdrew from the Council, on account of a decision to withhold the grant from a particular hospital on the score of certain alleged irregularities in its management. I thought then, and I think now, that the Council had not the means of discharging judicial functions, and that it was a mistake to take any step in the direction of entering upon them. There has, however, for some time past, been a prospect of legislation by which hospitals will be relieved from the burden of local rates; and if any such measure were passed, hospitals would have to be defined. Might it not be possible, in pursuance of a suggestion which I made several years ago, and which has been made independently by Mr. Burford Rawlings, to establish a sort of Board, containing both medical and non-medical members, to which the claim of any institution to be so relieved might be submitted, and by which such claim should be adjudicated upon? Might not the law require a sanction or licence from such a body as a condition precedent to the acceptance of legacies? There is yet one point more on which, by the indulgence of the meeting, I would dwell for a moment, and it is the question of out-patients.

The Out-patient System.

We have all seen written, and heard spoken, a great deal of elegant English in condemnation of what has been called the "out-patient system," and we have been told that out-patients are pauperized, and much more. Well, my Lord Mayor, all this reminds me of that book by Sir William Temple which was described by Macaulay as the best ever written by any man upon the wrong side of a question of which he was entirely ignorant (laughter). Out-patients, and plenty of them, are absolutely indispensable for medical teaching; and, if they failed to come willingly, it would be profitable to the community to pay them for coming (laughter). They consist of people who, at least apparently, are not very ill, and who, at all events, are not disabled. They enable physicians and surgeons to teach students to distinguish between trivial maladies and the beginnings of serious ones, and to treat both; and I need hardly say that a doctor is consulted about a trivial case much more often than about a grave one. If I were asked to define my ideal of a perfect family doctor, I should say it was furnished by the man whose habitual patients, coming to him about all small matters, were the least prone to severe diseases. A young practitioner would fail lamentably in his duties if he were able to recognize and to treat typhoid fever or profound organic disease, and yet could neither recognize nor cure some slight and common ailment. For the attainment of the latter kind of knowledge, and, therefore, for the attainment of practical usefulness in daily life, the study of the maladies of out-patients is a matter of imperative necessity (applause).

THANKS TO THE LORD MAYOR AND DR. WAKLEY.

At the Mansion House on Thursday the Rev. Dr. Rigg moved: "That this meeting is anxious to record a cordial vote of thanks to Dr. Wakley, the editor of THE LANCET, who, in his letter of the 22nd of March 1886, started this movement, and at the same time promised a further contribution of £1000 on condition that four other similar contributions were promised to the Hospital Sunday Fund before the end of July." He said this was one of those metropolitan subjects which were, of all subjects that came before the public, the most difficult to get hold of and to treat effectively. They were so vast, so varied, and involved so many relations and particulars which could not be reduced to any category, that to understand them in all their bearings was always a question of the most careful study, which every one was not able to give. The result was that there was inadequate information in regard to matters which of all subjects required the most perfect and particular attention. That was the reason why this movement had halted as it had done in past years. He hoped that the proceedings of that afternoon and of the coming Hospitals Week would lead to some suggestions in regard to co-organization and the means of bringing agencies to bear upon the subject which had not yet been heard of. London was one of the most philanthropic and generous cities in the world, and there must be underlying the whole of the metropolitan area a vast untouched fund of philanthropy which wanted to be reached. He hoped that the response to Dr. Wakley's generous offer would be large, and that the fund might by this means be raised from £30,000 to at least £60,000.

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Captain PALLISER seconded the resolution, and hoped that they would soon have the pleasure of informing Dr. Wakley that his conditions had been complied with.

The resolution was unanimously adopted.

The DUKE of NORFOLK moved: "That a cordial vote of thanks be and is hereby given to the Right Hon. John Staples, Lord Mayor, President and Treasurer of the Metropolitan Hospital Sunday Fund, for the great energy and interest he has shown, not only in convening this meeting, but by devoting a large amount of time and thought to the organization of the Hospitals Week, and for his courteous and able conduct in the chair this day."

The resolution was carried by acclamation, and the proceedings terminated.

SIR ANDREW CLARK, BART., M.D., ON THE USE OF HOSPITALS.

THE following is an abstract of the address delivered by Sir Andrew Clark at Lambeth Palace on Monday, a full report of which will appear next week.

As Chairman of the Lambeth Palace meeting, Sir Andrew Clark said there was a happy congruity between the place and the purpose of the meeting. The place was the outward and visible symbol of the great work being carried on for the healing of the souls of men; and the purpose was the promotion of the work carried on in all the hospitals of London for the healing of the bodies of men. And he knew no two works between which so close a relationship subsisted. In the year just ended the London hospitals had given relief to a million of persons suffering from accident, injury, deformity, or disease; and they had been restored to health in such proportions as justified some pride in their work. But that did not represent the entire work done. Each person made several visits to the hospital, and the number he had mentioned might safely be multiplied by ten. Besides, Guy's, St. Thomas's, and St. Bartholomew's Hospitals and the work they did, were not included in this total (cheers). The work, too, was carried out under such a vigilant supervision as was not possible in the houses of the rich. He would confine himself to general hospitals. The men who did the work were picked men, and they exercised their functions not only in the face of the patients but under the eyes of the students, the sharpest of critics, and in the presence of the nurses; and they held themselves responsible to the public for seeing that the work was regularly, faithfully, and thoroughly done (cheers). It was for the sick poor, too, that the work was done. When they fell ill it was not only desirable, it was necessary, that they should have immediate admission to the wards of the hospitals where they were to obtain relief, and he was quite justified in saying, as far as the general hospitals were concerned, that their doors were always open whenever there was a case of sickness that needed assistance.

THE HOSPITALS ARE FREE TO ALL.

There was no difficulty about recommendation or about letters from governors; there was no condition required, except that the patient was ill and needed immediate admission to the wards. The patient was at once placed in the position most favourable to his disease, whatever it might be; he was put into a comfortable bed and was watched by skilled nurses, and whatever was found necessary for his relief was immediately provided for him. And still further, in most of these general hospitals, when a disease ended in recovery, and the patient was not left in such a complete state of restoration as to enable him to return to his family, he was taken away from the city to one of the pleasant convalescent homes in the country among the green fields, or to the sea, until his health was perfectly restored (cheers). Who were the recipients of this important work? Some of them had doubtless heard how much the general hospitals were abused, because their benefits were monopolized by those who had no right to them. He had been, he was afraid to say how many years, connected with the largest hospital in this country, for which Sir Edmund Hay Currie had done so much, and he did not remember an occasion when it was proved that a solitary person had passed through the London Hospital who was not sick and in need. The nearest approach to it was one case which he had vividly in his recollection. It was brought before him by one of those crotchet-mongers who, because they could not have the hospitals managed just as they would like, abused the way in which they were managed by others. He said it was a shame that they should have in their hospital a man who wore a tall hat and a frock-coat. The person he alluded to happened to be a poor clerk with 28*s.* a week, on which to keep a wife and a large family. Could anybody think that such a case was an abuse of charity? Those who were helped were the poor and the sick. They came from the slums of London, many dwelling in houses utterly unfit for human habitation. That was the work that was being done for over a million persons annually, and that was the work which he would still say was well done. And it was a work which he would show them bore enormous and important relation to the whole of society.

THE COST OF THE WORK.

What did it cost? He learned the cost from the pages of THE LANCET, and he must encroach upon their kindness to make some allusion to that journal. It had in years past done great service to hospital work. He was not sure, but he rather suspected that one of its proprietors was the originator of this work: of this at least he was certain, that from the day of its starting until the present time he had given it a very cordial support. He had hoped that their indefatigable supporter, Dr. Wakley, would have been amongst them to-day; but, alas! he was seriously ill; and he (the Chairman) was sure that he might, on behalf of all present, offer Dr. Wakley their warmest sympathy, and express the hope that he might be restored to health. He had learned from the pages of THE LANCET that the cost of the work to which he had referred was upwards of £490,000; but he regretted to say that it had not all been paid for. There was scarcely a London hospital that was not in debt for the work done for the sick and for the general public; and if the Divine function of charity was not to be extinguished amongst them, that debt ought at once to be paid.

THE IMPORTANCE OF HOSPITALS TO THE PUBLIC.

It had been said that the hospital patients were many of them improvident and vicious, and had brought their trouble upon themselves; that when they were healed they would soon go back again; and that the best thing to do was to leave them to fight their sickness at home. That might be good political economy, but it was not morality: it did not answer to the supreme moral obligation which told him, with an authority that he could not gainsay, that when a man was suffering and sick they should take care of him and succour him. But the work of hospitals was of still more importance to the public than to the hospital patients themselves. There was not an age or condition of life, there was not a disease or deformity, that was not favourably influenced by the work done in hospitals. It was not only that at present it benefited every member of society from the highest to the lowest, but it had been shown by figures which could not be disproved that hospital work had greatly lengthened the duration of life. It had strengthened the quality of mental work and made it more vigorous. It had reduced the mortality of London from one in twenty-three in the seventeenth century

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to one in fifty-two or fifty-one, which was the rate at the present time; and it had made operations for diseases, which only twenty years ago were declared impracticable, the most successful in surgery.

THE HOSPITALS BENEFIT THE PUBLIC.

He had said that hospital work was more advantageous to society than to the sick poor. He would tell them why. Supposing a man was brought into a general hospital suffering from inflammation of the lungs. The physician would come into the ward and examine him in the presence of the pupils and of the nurses. The first object would be to learn what was the matter with the patient, and he would carefully examine him for that end. He would come to the conclusion that the patient had inflammation of the lungs, and then explain to the pupils the grounds on which he had arrived at that conclusion. Then he would proceed to point out what should be done for the man's relief or cure, and to explain the probable issue of the disease. From such work as that both the physician and the pupils derived benefit. Thus, the chief doctor, by discharging his duty in the presence of the pupils, was disciplined and trained to the highest possible capacity for undertaking the guidance and the treatment of the most difficult cases; and, in the second place, the pupils who stood around saw what was done, and so were steadily qualified for general practitioners, carrying away with them knowledge for the purpose, not only of supplying it to the sick poor, but also to the well-to-do and wealthy. And then as to the nurses: no one who had had any illness in his home could undervalue the enormous advantage of having a person of quiet demeanour and of well-disciplined knowledge, who understood that her duty was silently to observe what the doctor commanded her to do. He would repeat that perhaps the very greatest advantage that the hospitals conferred was not upon the sick, but upon those who stood aside and who only sometimes grudgingly gave to their support. They received all the benefit, but they did not pay for it. The hospitals were seriously in debt, and not only so, but year by year, almost month by month, the contributions that used to come in by hundreds of pounds were only coming in by pounds; and the contributions that used to come in by pounds were gradually being reduced to pence.

THE GREAT WORK PROCEEDS, BUT FUNDS DIMINISH.

The great work was going on, but the means by which they were to carry it out were almost daily diminishing. What was to be done in this conjuncture? There was only one thing which he knew of, unless the conscience of this great city could be awakened—that was that the hospitals must be closed or handed over to the State, and if any of them knew what handing over the hospitals to the State would mean—how it would deprive them of their inheritance, how it would fetter them, how it would turn living into dead hands—they would deny themselves some little indulgence rather than see such a disaster occur. Why did they not give? There were two answers to the question. First, it was said that hospitals were badly managed. He repeated, advisedly, that the general hospitals of London (he did not speak of the special hospitals) were well and economically managed. The other answer was, that times were bad and people could not give. True, trade was bad; but there were still in London crowds of costly equipages; receptions were more numerous than ever, and enough money was sometimes spent in flowers at a single reception to keep a hospital ward for a week.

ENGLAND'S CREDIT IN DANGER.

He did not believe in bad times. There was no lack of means; but there was a lack of charity, a lack of courage to live within one's means, so as to leave something for hospitals. It was not possible that such a state of affairs should continue, nor was it possible that the hospitals should be handed over to the State. What, then, were they to do? Of late they had shown themselves on one subject to be greatly patriotic; let them be patriotic in the desire that England should not lose her place in the modern hierarchy of nations. Was not that worth fighting for? Unless the mind of the country was aroused to its duty, it would, he feared, lose its rank, and be known as the country that did the least for the sick of any country in the world. That would indeed be a terrible humiliation. The strength of a nation was righteousness, and the strength of righteousness was charity. Let them give themselves to the discharge of that divine function, and so gain the strength that would carry them to the height of existence, where the life they would lead would be life indeed (cheers).

HOSPITALS WEEK MEETINGS.

THE MANSION HOUSE MEETING.

A MEETING to inaugurate the Hospitals Week was held at the Mansion House on the 17th inst., presided over by the Right Hon. the Lord Mayor. His lordship was supported by the Duke of Norfolk, Cardinal Manning, Sir Wm. McArthur, Sir E. Currie, Hon. and Rev. Canon Leigh, Col. Haygarth, Capt. Palliser, Rev. Canon Nisbet, Rev. Dr. Herman Adler, Mr. Brudenell Carter, Mr. Henry C. Burdett, Rev. R. C. Billing, Rev. Dr. Allon, and many other friends of the movement.

The LORD MAYOR, in opening the proceedings, said the origin of this special effort was to be found in a suggestion made by Dr. Wakley as far back as the 22nd of March. London had been divided into six districts, and arrangements made for meetings to take place daily during the week preceding Hospital Sunday. The present meeting was for the purpose, if he might so say, of commencing the inauguration of the grand movement for putting the Hospital Sunday Fund in the position which it ought to occupy in the city (applause). Up to the present it had not quite fulfilled the desires which they all entertained respecting it. When the Hospital Sunday Fund was commenced it was a novelty: the results at the time were satisfactory, but they did not show that continued improvement which they had a right to expect. Undoubtedly there was always a great difficulty in obtaining a sympathetic movement over the whole of London, no matter what the object might be: the inhabitants were different in their manners and customs; their feelings were occupied in different directions; in fact, they were so many distinct and different cities. By the means proposed it was hoped to promote the bond of sympathy which the very mention of the Hospital Sunday Fund ought to excite in the breast of every thinking man. He concluded by expressing his earnest and sincere hope that the movement thus commenced would be productive of thoroughly beneficial results on the extended scale that everybody must desire (applause).

Cardinal MANNING moved the first resolution: "That this meeting, to inaugurate the series of public meetings to be held in various parts of London during the six days immediately preceding Hospital Sunday, June 27, desires to arouse a far greater feeling of sympathy and co-operation in support of the hospitals and medical charities of the metropolis. The co-operation of the clergy and ministers of all churches and chapels, and of those eminent public men who have generously consented to speak at the meetings in the Hospitals Week, having been already obtained, the success of this combined movement will now largely depend upon the support extended to it by the editors of the metropolitan daily press, who can secure full reports of the proceedings at the meetings, so as to enlist the sympathies of all classes of the people throughout London, and thus add to the already numerous favours which they have conferred by ably advocating the cause of

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Hospital Sunday since its establishment in 1873." He said the Hospital Sunday Fund had been in existence thirteen or fourteen years, but the result year by year had not in any degree corresponded with the measure of increase which might justly have been looked for, and therefore a new effort, as the Lord Mayor had stated, was absolutely necessary. The mortality of London was from 70,000 to 80,000 every year, and the amount of sickness that that number of deaths would represent must be very large. It was to meet not only the mortal cases, but cases of sickness of all kinds, that the extension of their hospital system was absolutely required. The London hospitals, many and large as they were, would not contain more year by year than about 50,000 or 60,000 in-patients, assuming that there was a continual succession in the beds, and that they were occupied for something like an average period. Comparing this with the mortality and sickness, and also with the vast population of London, for which provision must be made, it seemed that as yet they had no adequate provision for the sickness and the suffering of that population. That point being established, he hoped they would not content themselves by saying that they had a very large and efficient system of hospitals. A great many people had lulled themselves to sleep with the notion that provision was already made. It was not already made; and that must be fixed as the first axiom in dealing with this question. When they considered the enormous increase of the wealth of London, and compared it with the amount collected for the Hospital Sunday Fund—about £30,000 or £32,000 every year—they must all feel that there was some defect, some want of motive power, some deficiency, he would not say of good will, on the part of those who had assisted in this movement—for that he was confident was not the fact—but that in some way they had not reached the consciences and the hearts of the people of London sufficiently. That being so, it would seem that this resolution required no further justification. It, first of all, appealed to the ministers of all denominations; it, secondly, appealed to all laymen; and, thirdly, to the press, and to all those who were able to give publicity to and enforce by comment the proceedings which would take place at the meetings about to be held. As yet they had not reached the hearths and the homes of the people at large, and the Hospital Sunday Fund was the best possible means of securing such a result. He had great pleasure in moving the resolution.

Mr. HENRY C. BURDETT said that, so far as could be ascertained from the published reports of the Hospitals and Medical Charities of London, the names of only 40,000 separate individuals were to be found within their pages—that was to say, that not more than one person out of every 100 in London contributed anything definitely to the hospitals. The Hospital Sunday Fund up to that time had been mainly, so far as the organization in London was concerned, the work of the clergy and ministers of all denominations. They were now met to inaugurate a new departure, the success of which would be largely due to the devotion, the time and the energy that the Lord Mayor had thrown into the matter (applause). It was a new departure on the part of the laity, who felt that the clergy ought to have behind them, and to be encouraged by feeling that they had behind them, the support of public opinion (applause). Notwithstanding the political crisis through which they were passing, leaders of political parties on both sides would be found on their platforms at the district meetings, and not only politicians, but other leaders of public opinion, showing that really and truly the laity desired to co-operate with the clergy, and to show by combined action the importance which they attached to the financial straits in which many hospitals of London were placed. He wished to state that in connection with this movement the proprietors of THE LANCET, to whom the hospitals were under great obligation, had sent a special commissioner, a trained correspondent, who had been in many countries and had seen many things, to visit the hospitals, and he came back with this conclusion. Having visited all the leading hospitals, both special and general, he maintains that the reason that there is not more financial support at the present time from the majority of the people of the metropolis is solely due to the one fact that they are ignorant of the work done within the hospital walls. If that statement was correct, as he believed it to be, he felt that this Hospitals Week, this new departure, by attracting the attention of all classes of the community to the needs of the hospitals, would do a real service—indirectly by increasing the amounts collected on Hospital Sunday, and also directly by arousing people in all parts of London to the fact that the medical charities which were to be found in their midst required further support. No doubt if this awakening be secured, all classes would then give further support, especially if the managers of the various medical charities approached them individually after Hospital Sunday was past and over.

The resolution was unanimously adopted.

MEETING AT LAMBETH PALACE.

THE first of the six district meetings was held on Monday afternoon in the library of Lambeth Palace, under the presidency of Sir Andrew Clark, M.D., F.R.S.

Mr. R. KESKIN (by whom the meeting was organized) read a letter from Lord Sandhurst, expressing regret at his inability to attend; and another from Dr. Oliver Wendell Holmes, expressing sympathy with the movement, and his regret that he could not multiply himself so as to be in London and Oxford at the same time, it being absolutely necessary that he should be in the latter place.

Mr. OCTAVIUS MORGAN, M.P., moved the first resolution: "That this meeting pledges itself to use every endeavour to arouse the inhabitants of this district of London to the importance of maintaining the hospitals and medical charities in the utmost efficiency; and in furtherance of this object it urges the clergy and the ministers of religion to make an earnest appeal to the people to so increase their contributions on Hospital Sunday as shall secure that the whole sum collected shall not be less than £80,000." The hon. member urged all the electors present to do their utmost to return such members to Parliament as would be indefatigable in their efforts to pass the Bill for the relief of hospitals from local taxation.

Sir EDMUND HAY CURRIE, in seconding the resolution, said he could not help thinking that if the mind of London could be once made to grasp the fact that the hospitals were falling into debt to the extent of £40,000, that amount would be quickly forthcoming. He then suggested that appeals should be made to the country towns, which sent so many patients up to the London hospitals for relief.

The Rev. CANON CLARKE said that from practical experience he could testify to the valuable work done in London by the hospitals. He was very much afraid that if they were ever handed over to the State, all the religious element which was so indissolubly connected with them as a charity would disappear. He was sure that all clergymen would do their very best to further the work.

The Rev. Dr. LEE having made a few remarks in support of the resolution, it was put and carried.

General C. FRASER, M.P., moved the next resolution: "That this meeting regrets to learn that the expenditure and liabilities of the hospitals and medical charities of this district in the year 1885 exceeded the income by £2000, and pledges itself to increased exertion, with a view of preventing any like deficiency during the current year." He said he believed that the people only wanted a thorough awakening to a sense of their duties towards hospitals to lead them to give a more liberal support.

The Rev. NEWMAN HALL seconded the resolution, and the Rev. F. G. PELHAM supported it. It was then put and unanimously adopted.

On the motion of the Rev. W. EDWARDS, a vote of thanks to the Archbishop of Canterbury, for granting the use of the library of Lambeth Palace for the meeting, was unanimously agreed to.

A vote of thanks to Sir Andrew Clark for presiding was also carried.

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WORK FOR ALL—A GOOD IDEA.

Sir ANDREW CLARK, in returning thanks, said he had attended with the greatest pleasure, and he deemed it a privilege to be allowed to join in the work. He had one suggestion to make. As women enjoyed much less vigorous health than men, which was to a great extent to be accounted for by the want of a definite purpose in life, his suggestion was that a Hospital Sunday Society might be formed in every parish, which should put on a permanent basis the work they had established. In the operations of these societies employment might be found for women, who would thus be kept in constant healthy work, and at the same time would be adding to the funds of the hospitals. He commended this proposal to the clergy and ministers of religion throughout the metropolis, who could easily arrange for a body of gentlemen to act as joint Honorary Secretaries to this Congregational Hospital Society. Each society might then communicate with the Hospitals Association, Norfolk House, Norfolk Street, W.C., which would guide the societies in the right way to make the Hospital Sunday Fund a continuous and abiding success.

MEETING AT BLACKHEATH.

THE second district meeting was held at the Rink Hall, Blackheath, on Tuesday evening, the chair being taken by the Earl of Dartmouth.

Lord DARTMOUTH, in opening the proceedings, said that on Sunday next there would be collections in aid of hospitals in every place of worship within the metropolitan area. In the particular district in which the meeting was held interest would especially centre in two well-known and deserving institutions—the Seamen's Hospital and the Miller Memorial Hospital at Greenwich. Foreign Governments took immense interest in the Seamen's Hospital, and as a proof of that he might mention that the German Consul-General and the Austrian Vice-Consul were both present at the annual meeting in March last. Canon Miller was one of the first who founded the Hospital Sunday at Birmingham in 1859, and therefore it was appropriate to give the institution his name. He hoped that many people would take the trouble to read the story, which he believed was entirely founded on fact, in THE LANCET Special Supplement, entitled "Within the Hospital Walls," because he was sure that if they began to read it, they would not only feel interested, but intensely touched by what they read. He himself had been greatly affected by the account, which appeared in the Supplement of THE LANCET of last Saturday, of the old bird-catcher who met with an accident in the street, and was brought to the hospital to die, and who left his birds to the hospital. If such stories were generally known, all classes of the community would be encouraged to support liberally the hospital funds. Even those classes who were not obliged to seek shelter in hospitals derived benefit from the fact that efficient medical men and nurses were trained there. It was sometimes said that the more opulent classes of society used the hospitals in order to have their domestic servants relieved when they were struck down by accidents; but if there was one class in the community more than another that required the help of a hospital it was domestic servants. The late Mr. Robert Grimstone met with a serious accident in the hunting-field, became an in-patient of a London hospital for some time, and with his usual generosity he took care never to forget the benefits that he received there. An accident in the streets might happen to any one, and if that person had no indication about him as to his residence or personality, where could he be taken to except to the nearest hospital? Hospitals, therefore, were useful to all classes of the community. In that district it was right that they should remember what the needs and necessities of the various hospitals and dispensaries were. During the year 1885, in the hospitals and dispensaries of No. 2 district, there were 2505 in-patients and 45,785 out-patients, making a total of 48,290 patients treated. Of these, 40,383 were district, and 7,907 non-local cases. The gross income of the institutions was £25,306, and the gross expenditure £35,004, leaving a deficiency of £9689. He hoped that ministers of all denominations would vie with one another in honourable rivalry as regards the collections next Sunday. This was an occasion when people of various creeds and of different politics, and of all ranks and stations, were called upon to take their part in providing for their fellow-creatures.

Baron HENRY DE WORMS proposed the first resolution: "That this meeting pledges itself to use every endeavour to arouse the inhabitants of this district of London to the importance of maintaining the Hospitals and Medical Charities in the utmost efficiency; and in furtherance of this object it urges the clergy and ministers of religion to make an earnest appeal to the people to so increase their contributions on Hospital Sunday as to secure that the whole sum collected shall not be less than £80,000." He said that the income of the London Hospitals had materially diminished during the past year. If he wished to find the reason for that diminution he would seek it not in any wish or idea on the part of the general public to withhold their subscriptions, but in the fact that there unfortunately existed at the present time in England a terrible depression of trade. He could not agree with an eminent physician, who sought the reason for the diminution in the subscriptions to hospitals in excessive extravagance in other directions. He quite agreed that a man or woman who indulged in luxury beyond his or her means did a reprehensible act, but it should not be forgotten that if those who had the means did not indulge in such expenses commensurate with their income, those who were not so wealthy would suffer. No doubt Sir Andrew Clark's object was a good one, but he (Baron de Worms) regretted that the reasons given by that eminent physician did not commend themselves to the minds of some of the public. Still, the point to be considered was not the abstract opinions of the advocates of the cause, but how the good cause could be best forwarded. No less than an additional £80,000 a year was required for the hospitals of London. At the Ophthalmic Hospital, in Moorfields, there were about ten operations a day, or 3,650 in a year, and nearly £300 worth of spectacles were distributed to the poorer classes. In another hospital there were 8,000 accident cases dealt with last year. Of that number, 2,000 were in-patients, and the expenses of the hospital were £50,000 a year, while its certain income was only £15,000. It was to cover the deficit in various hospitals that these meetings had been inaugurated, and he hoped that they would be attended with material success. There were many, who called themselves philanthropists and reformers, who conceived that they had a panacea for every ill which existed, but were too ready to set class against class, and to forget that the great object was to assist men in the hour of need. Carlyle had very well described the action of those loud-mouthed philanthropists who simply did good in word but not in deed, when he said, "England has, I am persuaded, in it many kings; they are among the silent, I believe, mostly far away from platforms and public palaverings, not speaking forth the image of their nobleness in transitory words, but imprinting it, each in his own little section of the world, in modest, kindly actions that will endure for evermore." Those words contained the true spirit of philanthropy. Those who thought that the more prosperous classes in England neglected the less prosperous should bear in mind this great fact, that England was the only country in the world where nearly every hospital was supported by voluntary contributions. The hospitals were the silent, true tribute of the generous men and women who freely, for their suffering fellow-creatures, were willing to give according to their means to help those who were less fortunate than themselves. The helping hand of the rich was the safeguard of the poor. Perhaps many people had never seriously considered what the great hospitals in London did. There were in the metropolis four and a half millions of people. It was difficult to imagine what suffering must be endured by that great mass of humanity. Poverty itself was hard enough to endure; but how much harder was it when it was coupled with disease! No person who considered what it must mean to the poor, living in hovels, to have a child stricken down by fever, without the means of obtaining the precious aid of science, would hesitate to give according to his ability to maintain the great

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charitable hospitals of London. He well recollected the marvellous description of the Children's Hospital which was given by Dickens. It appealed to the "one touch of nature which made the whole world kin;" and mentioned how the child was taken to the hospital with its toys, and how the doctor, knowing by instinct what the child thought, transferred the toys from the table in front of its bed to the next cot; and then the little child, having bequeathed everything it had to leave in this world, left it. Similar scenes were enacted every hour and minute in the great hospitals of London. It was on behalf of such sufferers that he invoked the charity of the public.

Mr. STRONG, M.P., seconded the resolution. He said that the fact that over one million persons were annually relieved by the voluntary hospitals showed that at least one quarter of the inhabitants of the metropolis were directly interested in those institutions. Hospitals were too often regarded merely as places entirely devoted to rendering aid in case of accident, but there were surgical cases which it was almost impossible to treat in private houses. He also wished to mention the dispensaries, where the working classes, on payment of a small weekly sum, could obtain efficient medical assistance. Such institutions inculcated habits of thrift and self-reliance. It was the opinion of many practitioners that one out of every ten of the adult population of London used surgical appliances, and such appliances were distributed in thousands among the poor. Modern Londoners had not done their part in this great work, but he trusted that the time had now arrived when it would be brought home to the minds of all, that if they did not assist in supporting the hospitals, they would be neglecting a great duty.

The Rev. C. WILSON supported the resolution. The public, he said, were under obligation to hospitals because they were the means of training nurses, who, besides serving in the hospitals, were of the greatest value as auxiliaries to medical skill in the nursing of private patients. Every donor of ten shillings would have the satisfaction of knowing that he paid for one patient for one year at the rate of the average cost. An important element omitted from the hospital statistics was the amount of pauperism prevented by the medical relief afforded by the hospitals.

The resolution was unanimously agreed to.

Baron F. DE ROTHSCHILD moved the next resolution—"That this meeting regrets to learn that the expenditure of the hospitals and medical charities of this district in the year 1885 exceeded the income by £9698, and pledges itself to increased exertion with the view of preventing any like deficiency during the current year." He said that the rapidly increasing population of London necessarily increased the expenditure of the hospitals, while the advance of medical science increased the means of dealing with the diseases attending overcrowding and accidents in busy towns. The support of hospitals did not meet the demands upon them; and it was feared that some of the smaller ones would have to be closed, and the larger ones diminished in usefulness, unless their funds were increased. Some of the smaller hospitals were not managed with due economy. They had expensive officials and boards, with a small number of patients. He hoped that public attention would be called to the matter, and that such institutions would consent to become merged into larger and more useful ones. One of the reasons for the serious diminution in the contributions was no doubt due to the fact that recently so much had been done for the labouring classes that philanthropists were no longer able to continue their large subscriptions to other objects. He sincerely hoped, however that on Saturday and Sunday the wealthy would come forward with their gold, and the working-classes with their silver and copper, for the hospitals by which they so largely benefited.

The Hon. and Rev. CANON LEGGE seconded the resolution, which was supported by Mr. H. C. BURDETT, and agreed to.

The proceedings closed with a vote of thanks to the Earl of Dartmouth for presiding.

HOSPITAL SUNDAY SUBJECTS AND PREACHERS.

THE following is a list of the subjects of sermons to be delivered in the respective places of worship to-morrow, on behalf of the Hospital Sunday Fund:—

St. Jude's, South Kensington.—By the Rev. R. W. Forrest, D.D. At 11 a.m. and 7 p.m.

St. Luke's, West Holloway (Rev. Richard Glover).—At 11 a.m.: "Wrath and Mercy as seen in Sickness." At 7 p.m.: "The Good Samaritan as an Example."

St. Martin in the Fields.—Sermons will be preached at 11 a.m. and 3.30 p.m. by the Vicar; at 7 p.m. by the Rev. W. P. Pearce.

Parish Church, Mitcham.—By the Revs. D. F. Wilson and J. M. Braithwaite.

Congregational Church, North Finchley (Rev. T. Hill).—Morning: "And Jesus went forth, and saw a great multitude, and was moved with compassion towards them, and he healed their sick." Evening: "Bear ye one another's burdens, and so fulfil the law of Christ."

Wood-green Congregational Church (Rev. W. G. Horden).—At 11 a.m.: "The Influence of the Christian Religion on the Healing Art." At 6.30 p.m.: "The Connection between Disease and Sin."

Congregational Church, Park Road, West Dulwich, S.E. (Rev. A. C. Tarbolton).—At 11 a.m.: "The Christian's Debt to the Hospital" (Matt. x. 8). Afternoon at 3. Evening at 7: "Philanthropy by Proxy" (Luke x. 35).

Trinity Road Congregational Baptist Church, Upper Tooting (Rev. D. Llewellyn).—"The claims of the Hospitals upon the Church."

Islington Presbyterian Church, Colebrooke Row (Rev. T. Davidson, D.D.).—At 11 a.m.: "The solitary case of a Deaf and Dumb Man Cured by Christ."

Agricultural Hall, Islington.—At 3.30 p.m.: "The Right Sort of Sympathy."

Bayswater Synagogue.—On the 26th inst., at 10.15 a.m., a sermon will be delivered by the Delegate Chief Rabbi—"A Plea for the Sick and Suffering."

St. Paul's, Great Portland Street.—By the Revs. H. Bickersteth Ottley and C. J. Williamson.

St. Luke's, Hackney.—By the Rev. W. H. Langhorne.

Holy Innocents' Mission, Hammersmith, W.—By Revs. H. C. Eden and J. H. Cardwell.

Bloomsbury Chapel, W.C.—By the Revs. W. J. Benham and J. P. Chown.

St. Stephen's, Southwark.—By the Rev. William Dodge—"The Good Samaritan."

The *Hospital Chapel* (*St. Mary and St. Thomas of Canterbury*), *High Street, Ilford.*—At 11 a.m. and 6.30 p.m. by the Rev. W. H. Penney, M.A.; at 4 p.m. by the Rev. A. Ingleby, M.A.

West Norwood Congregational Church, Chapel Road, S.E. (Rev. S. King).—Morning, at 11: "Brotherly Kindness the Evidence of Indwelling Love." Evening, at 6.30: "Society Weighed in the Balance."

THE HOSPITALS WEEK.

The following Meetings have yet to be held:—

FRIDAY, 25th June.—*Highbury Athenæum*, 8 P.M.
President—The Duke of Westminster, K.G.
Speakers—Mr. R. Chamberlain, M.P.; Mr. Ince, Q.C.; Mr. Waddy, Q.C.; Mr. Bartley, M.P.; Mr. Cowley Lambert; Dr. Buchanan; Sir Dyce Duckworth, M.D.; Mr. Murdock, M.P.; Mr. Bigwood, M.P.

SATURDAY, 26th June—*Stratford Town Hall*, 4 P.M.
President—H.R.H. the Duke of Cambridge.
Speaker—The Marquis of Salisbury, K.G.

SPECIAL NOTICE.

IT is requested that a statement of the total amount of each collection made on Hospital Sunday, together with the names of all individual donors of £5 and upwards, may be forwarded to THE LANCET Office, Strand, W.C., by Tuesday next at latest.

NOTICES TO THE CLERGY AND MINISTERS OF RELIGION.

Free copies of this Special Supplement may be had on application by any clergyman or minister of religion who may require them for distribution amongst the more wealthy members of his congregation.

It is requested that an abstract of special sermons to be preached in aid of the Hospitals at any of the services on Hospital Sunday, June 27th, may be sent to the Editor of THE LANCET, 423, Strand, W.C. All such notices should reach this Office not later than Tuesday, June 29th, in time to appear in the Third Special Supplement, which will be issued with THE LANCET of July 3rd.

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